

**FEASTING AND FOOD SECURITY: NEGOTIATING INFANT AND CHILD FEEDING
IN URBAN AND PERI-URBAN VANUATU**

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FEASTING AND FOOD SECURITY: NEGOTIATING INFANT AND CHILD

FEEDING IN URBAN AND PERI-URBAN VANUATU

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This research analyzes how feasting has become a widespread coping mechanism for addressing food insecurity in urban and peri-urban Vanuatu. By examining hunger and food security in cultural context (including how these health-related issues are defined, diagnosed, treated and managed), a detailed assessment of the social and structural factors that influence mothers' decisions about appropriate infant and child feeding is presented. Responding to 1) biomedically driven pressures from health care workers and 2) familial and community pressures about appropriate childcare and nutritional practices, mothers create syncretic meanings of “good” and “bad” foods, hunger and satiety, and childhood malnutrition. However, mothers' mechanisms for identifying and treating malnutrition satisfy neither health care practitioners nor extended kin networks.

Based on 12 months of anthropological fieldwork in 2010 and 2012-13 in Port Vila, Vanuatu, and its peri-urban areas, this research employed semi-structured interviews (N=83), dietary journals (N=32), surveys (N=71), visual-cognitive elicitation (a photography project N=28) and extensive participant observation. Participants with at least one child under age five were drawn from: 1) women living in Port Vila and the peri-urban areas with some full-time employment, 2) women living in Port Vila and the peri-urban areas with intermittent access to the cash economy, and 3) women from rural Efate who have little access to commercial food and lack the economic opportunities of families living in Port Vila.

Concepts of “malnutrition,” “food security,” “good” foods, and “feasting” are problematized. As health care practitioners and caregivers define malnutrition and food security in cultural context, results exemplify how children’s foodways have become a negotiation between nutrition and customary practice. Results illustrate that customary feasts in modern times and urban places create new patterns of resource distribution, gifting, and appropriate feast foods, and as a consequence increase food security for children. The research has significance in two primary domains: 1) it contributes theoretically to medical anthropology by linking the two previously disparate concepts of feasting and food security, and 2) it has practical applications for the problem of hunger in urban areas by revealing the importance of community networks and *kastom* practice on coping mechanisms for food insecurity.

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DEDICATION

“If you have someone that you think is the one...Buy a plane ticket for the two of you and travel all around the world and go to places that are hard to go to and hard to get out of. And if when you come back...you’re still in love with that person, get married at the airport.” ~Bill Murray

To John Fournier,
For adventures past and future
With all my love

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Mi wantem mekem wan bigfala tank yu blong Julie. Yu bin lavem mi olsem wan sista, be tu, hemia minim se yu bin mekem mi lernem ol ting olsem wan woman Pango. Yu bin mekem Bislama blong mi i kam antap, talem mi taem we mi bin mekem wan mistake long toktok o taem we praktis blong mi i no olsem kastom blong Pango. Yu bin sarem pikinini blong yu wetem mi

olsem wan tru antie. Long ol dei we mi bin mekem wok long hospital mo mi bin lukluk mo storian long saed blong ol pikinini we i stap sik bigwan, taem we mi kam bak long haos mi sad lelebit. Be yu givim ol hapi helti pikinini blong yu long mi blong hug mo laf mo pleplei mo hemia mekem hart blong mi i glad tumas. Yu bin karem mi long plante lafet, mo talem mi evrisamting long saed blong kastom blong lafet. Taem we mi ting se lafet emi wan samting we mi wantem mekem wok long mi, yu stap storian plante long saed blong olsem wanem mi save toktok long ol narafala woman long saed blong kastem blong lafet blong olgeta. Yu bin ridim evri samting mi bin raetem long jekem Bislama blong mi, mo yu bin praktis ol interview mo kwestin wetem mi, mo afta yu save talem mi ol tingting blong yu olsem wanem mi save mekem wok blong mi i kam antap. Sipos mi no kat yu, wok blong mi i no strong tumas olsem naoia. Tank yu blong evrisamting ia, be tu tank yu blong ol leta we yu bin sendem long mi long US, mo talem mi ol ting we evriwan i stap mekem long Pango taem we mi no stap wetem yufala. Tank yu blong ol lav yu givim long mi. Mi glad tumas mi kat yu blong fren mo sista blong mi! Mi sendem ol lav blong mi i kasem yu wetem ol famli blong Pango!

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A NOTE ON PHOTOGRAPHS

The author took all the photographs except where otherwise noted. Chapters six, seven and eight have a significant number of photographs taken by participants as part of the visual-cognitive elicitation component of this project. While the photographs of many different individuals are presented, to protect anonymity the photo credits all in these cases are generally attributed to “visual-cognitive elicitation participant.” More detail on this methodology is presented in chapter five.

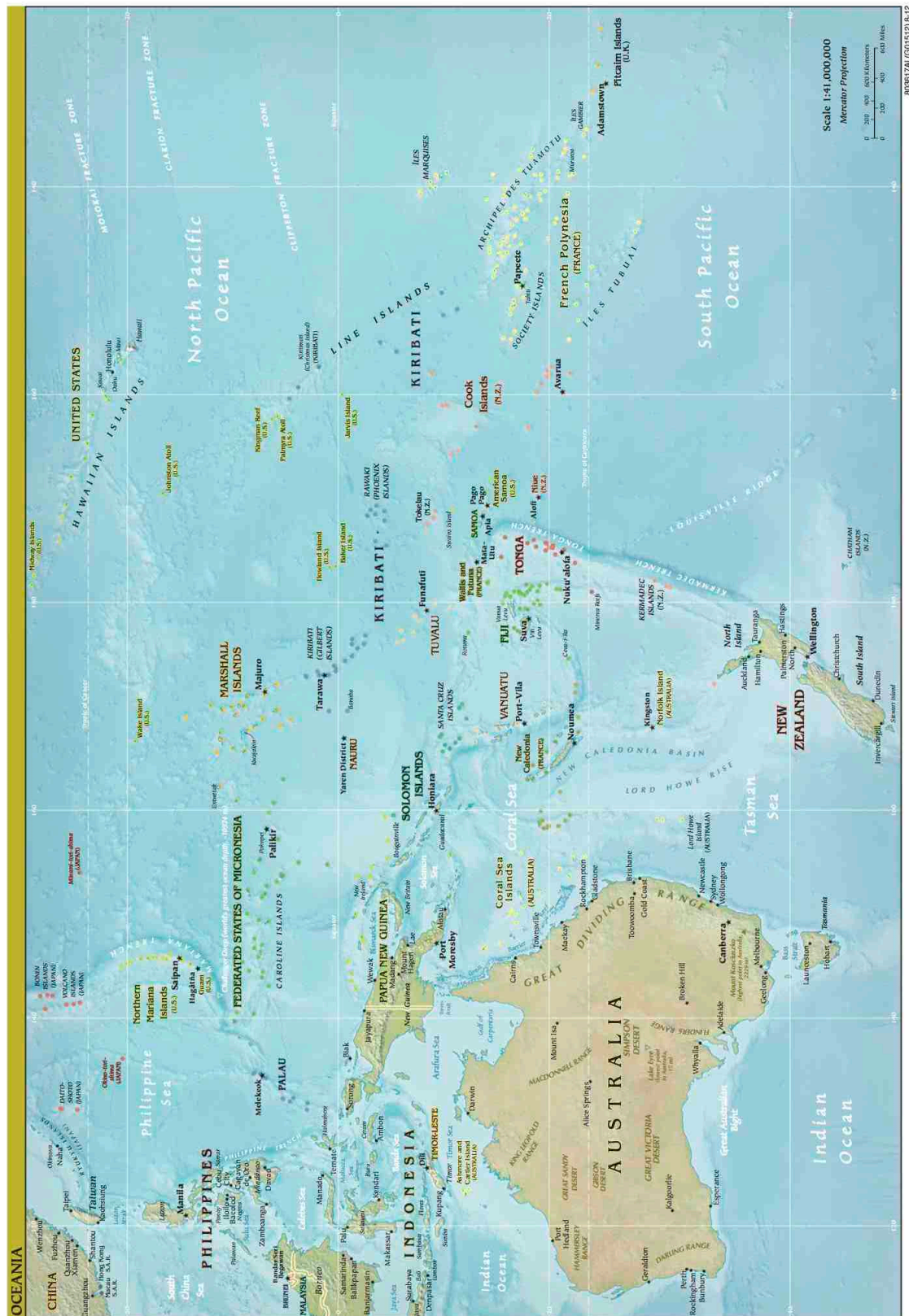


Figure 0-1: Map of the South Pacific
 (2012) Courtesy of the University of Texas Libraries, The University of Texas at Austin.

1.0 INTRODUCTION

“Sit down here, and I’ll teach you how to cook like a woman from Pango.” Patting the woven pandanus mat, the woman I called Aita (mother) motioned for me to sit next to her and the other women from the peri-urban village of Pango who had arrived at their neighbor’s house happily ready to help prepare food for a feast. In front of me Aita placed a peach colored plastic basin that held some large chunks of peeled yams. “Be careful! It’s really very sharp!” she cautioned as she passed a grater, a piece of tin anchored to two wooden dowels that was about a foot and a half long. The tin was bowed in a half circle, and had nail holes punctured throughout the entire front leaving torn metal teeth, the sharp edges that would grate the starchy root vegetables. She seemed surprised that I could grate the yams, each gushing out the back of the grater as a purplish doughy pudding rather than in the distinct shreds I had expected. I was helping to prepare food for a *lafet*¹, a special occasion of community feasting, which includes events like weddings, funerals, public holidays, birthdays, fundraisers and church celebrations. This was a wedding that would officially start in three days, but with food preparation in full swing there were nearly a hundred people mingling and working around the giant cookhouse. With the music of a string band crackling through an old stereo, and a swarm of activity around the earth oven, it seemed to me as though things had already started.

¹ All Bislama terms are written in Italics. Terms are defined for reference in the glossary, Appendix A.

I observed my first wedding as an anthropologist three months into my fieldwork, before I realized that April starts the “wedding season” that runs through September as it corresponds with the yam harvest. As a result of my good fortune, I could see the house of the bride’s parents from the house where my husband, John, and I were living in a village just outside of Port Vila on the island of Efate. We had been invited to participate in all the upcoming wedding events. That night, I wrote in my fieldnotes how excited I was to learn from this experience, as I had not expected to participate in a wedding when I began fieldwork. Unaware of how participating in the wedding celebrations themselves would shape my research, I thought it would be an excellent opportunity to meet people and set up future interviews. I had no idea at the beginning of this first wedding that so much of my research would focus on feasting, and that indeed the ways in which feasting is linked to the concept of food security would become the focus of my work.

It was at this very first wedding that I noticed the sheer number of children who were fed, particularly at lunchtime, and how much that number grew throughout the week. Over a hundred children arrived at mealtimes for food, with the number nearly doubling by the end of the week. These numbers were always estimated—as children played and chased each other around the outdoor cooking areas, and the pigpens, and under the rain/sun shelters where people sat to eat, it was impossible to get an actual count. By the end of the week of the wedding I felt the weight and exhaustion of eating so much starchy food topped with fresh beef and pork, a tiredness that I came to learn signifies a successful feast.

The amount and types of food consumed were different from what I had observed and eaten during my fieldwork thus far. Everyone at a *lafet* consumes plate after plate of *laplap*, the pudding-like dish baked in an earth oven, which is served alongside a mound of white rice

topped with a stew of meat and vegetables. Roasted root vegetables, large chunks of stew meat, cabbage salad—the food was delicious, but different from even the special Sunday meals we had previously consumed, and certainly presented in quantities I had never seen before. Beyond simply feeding a larger number of families, the portions were bigger and people returned to the buffet to refill their plates. Over the course of the week, and to my complete surprise, I began to hear about a number of upcoming weddings. Aita explained that meetings of extended family members who assembled to plan this wedding began months in advance. I realized there would need to be a significant amount of planning to produce so many feasts of this size. Constructing shelters and large earth ovens, storing both live pigs and processed beef, decorating the tables, sorting the gifts, cooking platter after platter of food—*lafet* are a production that require the collective efforts of extended families to produce (see Figure 1-1). The contrast between food at a feast and the types of food consumed on a daily basis was significant, but never addressed by health care practitioners as an important source of data about the practice of child feeding. And so, quite by accident, yet like so many ethnographic studies, the research presented in the following chapters emerged and grew from what I learned at this initial feast—when I first realized there was a link between feasting and food security.



Figure 1-1: Chelsea Wentworth cooking with women at a *lafet* Photo Credit: John Fournier

1.1 RESEARCH PROBLEM

This research investigates how feasting has become a widespread coping mechanism for addressing food insecurity in urban and peri-urban Vanuatu. Beginning with an analysis of how cultural factors, including the influence of kin and health care practitioners, access to local and imported food, and the economic situation of mothers, all impact infant and child feeding practices in Vanuatu, I present an ethnographic account of a country grappling with problems of food insecurity and malnutrition. In contrast to biomedical approaches that focus solely on the

body, this holistic approach examines how social factors influencing food choice and access, in conjunction with biomedical, environmental and economic variables, affect childhood malnutrition. As part of that inquiry, this research scrutinizes definitions of malnutrition as articulated by public health practitioners, medical professionals, mothers, and kin in Port Vila and the peri-urban areas around the city. By examining hunger and food insecurity in cultural context, including how these concepts are defined, diagnosed, treated, and the mechanisms families and children employ to cope, a detailed assessment of the social and structural factors that influence mothers' decisions about appropriate infant and child nutrition is presented.

In the past, researchers have focused on gathering biomedical data on the rates of childhood malnutrition in the provinces and cities of Vanuatu. Educational campaigns targeted at addressing under-nutrition have been implemented, although the content of these nutrition education programs has not been significantly altered since 1996 when the first methodologically sound study measuring childhood malnutrition was completed. Countrywide studies on childhood malnutrition were conducted in 1996 and 2007, and by mid-2013, the Ministry of Health was preparing to collect data for a new report it intended to publish in 2015. However, examination of the 1996 and 2007 surveys revealed no statistically significant change in the rates of childhood malnutrition. Comprehensive studies detailing levels of food security, which is an important predictor of malnutrition, are missing from these reports. Rates of childhood malnutrition are generally higher in cities, and this is true in Vanuatu, particularly in Port Vila, the capital and largest city. Furthermore, there is a dearth of qualitative research assessing the numerous factors that influence child-feeding practices, as the focus has been on counting, establishing, and monitoring rates of malnutrition, rather than on examining underlying causes or

coping mechanisms, or expanding methods for reducing these percentages (Evans, et al. 2001; Knowles 2007).

Since independence in 1980, Vanuatu has experienced several shifts in the local economy and social structure, particularly in the urban center of Port Vila. While birth rates remain high, many women are seeking new economic opportunities in the capital city of Port Vila. Most employed women must return to work soon after giving birth, and those who receive maternity leave have a maximum of three months of paid leave both pre- and postpartum. This means that women return to work well before their babies reach six months in age, the World Health Organization's (WHO) recommended duration of exclusive breastfeeding. Local foods are available at markets, but at a much higher cost than prepackaged, heavily processed convenience foods available in urban stores. Opportunities to own land are limited due to the influx of young people from outer islands to the capital, and land use and ownership remains an extremely contentious issue, particularly in the cities. Many small landholders in the city have lost access to lands through family divisions or illegal sub-divisions of plots; were unjustly evicted from rented lands; or have rented and leased their land so that they no longer have access to enough traditional garden land to produce all of the food their families need. The restricted ability of families to grow all their food forces many to purchase most of their foodstuffs, frequently imported canned food and refined white rice with poor nutritional value. As mothers face economic, social, and environmental pressures from kin and community networks, decision-making processes about child feeding become a negotiation between biomedically-driven pressures from health care workers at well-baby visits and social pressures from kin networks regarding appropriate childcare and nutritional practices. As a result, mothers' food choices are

based on syncretic meanings of “good” and “bad” foods, hunger and satiety, and childhood malnutrition.

Shifts in economic structure that result from increased modernization, urbanization and development impact families at the household level, and simultaneously impact communities and how they enact *kastom*² feasts. In the densely populated areas of Port Vila, where inter-island marriage is increasingly common, occasions of marriage, death, community, and church functions have increased to the point where people talk about “wedding season,” and a growing number of events they need to “keep up with.” As the number of feasting events increases, community members find themselves enmeshed in exchange systems that blend village *kastom* with new urban traditions. Modern gifts of imported foods, and household goods are mixed with *kastom* gifts of mats and island food including yams and pigs. During weddings, detailed gift lists are produced and saved so that appropriate reciprocity can be demonstrated at weddings to be held at future dates five to ten years after the original exchange. Reciprocal exchange is vital to *kastom* practice, and also necessary for the success of the feast—most gifts of food are cooked within a few days and served to guests, which helps explain why guests are expected to contribute a gift of food before they eat a meal at a wedding celebration. Women who participate in the wage economy have difficulty finding the time to produce *kastom* gifts, and those who do not have access to garden land are unable to harvest food to offer as gifts. Therefore, additional monetary worries are borne by those in urban areas as they struggle to stretch their finances and purchase the necessary gifts for feasts. These additional monetary obligations can be burdensome for families as they attempt to keep pace with the social obligations required of urban life.

² “*Kastom*” is used very broadly in Vanuatu to describe any number of different types of traditional, non-western practices. It is often glossed with custom; however, there is a much stronger historical significance associated with the word *kastom*, which is discussed in more detail in chapters two and three.

Furthermore, mothers' decisions about infant and child feeding satisfy neither health care practitioners nor extended kin networks and community members. Faced with limited resources, mothers must consider how they will feed their families. Posters and discussions with health care workers outline a colorful balanced diet of vegetables, fruits, proteins, and starches, but those posters do not help mothers to factor in less healthy, but significantly cheaper options of canned food, instant noodles and white rice. Fixated on their inability to produce meat several times a week, let alone the recommended three times per day, as instructed by nurses during nutrition education campaigns, overwhelmed mothers fall back on imported foods. Many mothers abandon the lofty idea of following the advice found on the posters depicting the recommended diet, as replicating those meals proves too difficult. Left to produce their own definitions of a balanced diet, mothers utilize both local and imported foods, creating a diet they can afford, and hope it will nourish healthy children. When mothers and children know there is a communal feast, it is an opportunity for children to access a variety of local foods, and fresh rather than canned meat so as to create a satisfying meal. Knowing their children will be safe with community elders and receive a balanced meal of more food than they can eat, mothers often send their children to feasts without participating in *kastom* gift exchanges. Falling into a liminal space between infancy and adulthood, children are able to skirt gifting practices and are never turned away with an empty plate. It is through these patterns that feasting becomes a coping mechanism for children experiencing food insecurity at home.

The overarching research question that framed this project was: How do economic, environmental, and social factors combine to affect mothers' decision-making processes and create pluralistic understandings of appropriate infant and child feeding? The research was designed around this broad question and a series of more specific objectives described in chapter

five. However, one finding emerging from this work is that children use community feasts as a coping mechanism for food insecurity with the help and support of sympathetic mothers. As this was not an anticipated finding, I began to incorporate specific questions about the role of feasting into my interview schedule, and added this as a topic in the survey. Consequently, the central argument of this dissertation is that mothers and children respond to food insecurity in part through increased participation in community feasts, which has altered the meaning of customary feasting in urban and peri-urban areas of Vanuatu. *Kastom* practices surrounding feasting and exchange have altered—they now serve to benefit the entire community by helping children cope with household food insecurity.

The remainder of this dissertation is devoted to expanding upon these arguments, explaining the new structure of urban and peri-urban feasts in the context of rising rates of food insecurity, and documenting ethnographic examples of how these practices unfold in Port Vila and the areas around the city. This research has important implications for understanding childhood malnutrition in stable developing countries where people are not experiencing additional burdens of disease exacerbated by prolonged war, economic distress, or excessive environmental degradation. Describing the methods individuals employ to interpret, define, and respond to food insecurity, both physically and emotionally, provides an avenue for evaluating the effectiveness of interventions and for proposing creative alternatives for reducing the rates of childhood malnutrition. Highlighting the broader significance of the synergistic effects of biomedical, cultural, and environmental factors that influence malnutrition, this research can be used to develop effective health care strategies for combating childhood malnutrition in Vanuatu, and more broadly, in the context of island economies, and throughout the developing world. This research proposes advances to the analysis of feasting and food insecurity by linking two

seemingly disparate phenomena, which is exemplified in the ethnographic examples of *lafet* in Vanuatu. Results illustrate that *kastom* feasts in modern times and urban and peri-urban places create new patterns of resource distribution, gifting, and appropriate feast foods as a consequence of increased food insecurity.

1.2 FIELDWORK

1.2.1 Preliminary Preparations

This research is informed by over twelve months of fieldwork conducted in Port Vila and the peri-urban areas around the city. During the summers of 2009 and 2010, I conducted preliminary research over seven weeks with the approval of the Vanuatu Ministry of Health, the National Cultural Council and the University of Pittsburgh IRB, which paved the way for subsequent research for ten months in 2012 and six weeks in 2013. Establishing a network of contacts and participants in preliminary fieldwork proved immensely helpful in overcoming barriers to access that delay many beginning fieldworkers, as I had established rapport with a core network prior to beginning my primary stage of fieldwork.

Language training is a critical component to dissertation research, and Bislama, the creole spoken in Vanuatu, is not taught in academic settings in Pittsburgh. Thus, preliminary research was crucial in allowing for intensive language training, as several hours each day were devoted to formal and informal language development. When I began research in 2012, I required only limited language courses to achieve fluency, which allowed me to conduct full interviews with non-English speakers in just the second month of my primary fieldwork.

As part of the joint program at the University of Pittsburgh between the Graduate School of Public Health Master of Public Health program and the Kenneth P. Dietrich Graduate School of Arts and Sciences PhD program, preliminary fieldwork in 2010 formed the basis of my Master's essay for the department of Behavioral and Community Health Sciences. My Master's essay on the influence of kin networks on infant feeding practices in Port Vila, Vanuatu, was completed in 2011, but held for release until 2014, the time when I also completed my dissertation per University of Pittsburgh regulations. Entering fieldwork in 2012 having completed all of the requirements for the MPH degree gave me additional credibility and legitimacy among public health practitioners with whom I worked closely throughout my primary term of fieldwork.

The Master's essay draws on data collected on a topic related to this dissertation. It described a distinct finding focused on the influence of grandmothers on child feeding, providing another example of why cultural context and the lived experiences of caregivers are critical to the implementation of effective nutrition education programs. I explained that while grandmothers are not the targets of nutrition education campaigns, they do affect child-feeding practices, especially when multiple generations of families live together or close by. Mothers are likely to follow the advice of grandmothers even when it contrasts with the advice of health care practitioners because grandmothers carefully observe the behaviors of their daughters and daughters-in-law and exert the authority of their social status to pressure mothers to conform to the feeding behaviors they believe are best. Grandmothers speak from their experiences, which are valued; however, often they are repeating advice they received from nurses after the birth of their own children decades prior. Nutrition education and recommended practices for infant care have changed since they were new mothers. Now working mothers face additional challenges, as

grandmothers are often the caregivers when the mother is at work. Thus child feeding becomes a balance of multiple obligations, not merely the enactment of nutritional advice. One significant finding from that research was the importance of considering the perspectives and opinions of multiple stakeholders, including grandmothers and the broader community when delivering nutrition education. The research and findings presented in the Master's essay provide ethnographic data, in addition to what is presented here, on child feeding practices, which further illustrate that social context and lived experience are critical informative components to the study of childhood nutrition and feeding patterns (Wentworth 2014).

During preliminary research in 2010, I conducted 23 in-depth interviews. Beyond informing the study of the influence of grandmothers on child feeding, these interviews were critical in providing the foundation for this work, since I used them to develop the objectives and methodology for the primary research conducted in 2012-13. Coding and identifying key markers in preliminary interviews expanded the breadth and depth of my knowledge of the cultural values and practice that affect nutritional decision-making, preparing me for long-term fieldwork. Additionally, this multi-stage approach to fieldwork allowed me to respond to questions that arose in the field by providing time for data analysis, library research, and writing during times that I was not in Vanuatu. This proved critical to the development of my research questions, interview protocol, and in identifying areas that needed further development in subsequent field trips, which ultimately led to more thorough and detailed data collection and analysis.

1.2.2 Primary Research 2012-13

This research emphasizes the identification of the variables women encounter in making food choices and accessing food for themselves and their families, and argues that increased participation in feasts has become a coping mechanism for persistent food insecurity. At its foundation, this study hypothesized that multiple factors influence mothers' food choices, including mothers' employment status, changing employment patterns, access to and attitudes toward formula as a substitute for breast milk, access to and attitudes toward local and imported foodstuffs, and access to land for subsistence gardening. Differing definitions of health and malnourishment, "good" and "bad" foods for children of various ages, and hunger and satiety by mothers, kin and health care practitioners are key concepts that shape food behaviors. To further analyze the diversity of opinion among these groups, primary research took a multi-sited, multi-method approach.

Given these objectives, my informants were drawn from the following populations: 1) women living in Port Vila and the peri-urban areas who have seized new economic opportunities and are employed full-time, 2) women living in Port Vila and the peri-urban areas who are not working outside of the home, and 3) women from rural Efate island who have little access to commercial food and lack the economic opportunities of women living in Port Vila. The daily lives of women who live in these distinctive areas of Efate are impacted by these social and environmental circumstances, which create differential access to the types and variety of foods they can feed their children. Women living in rural areas have limited access to the primary hospital, and to the economic advantages that come with working outside of the home. However, these women have access to land to grow food, while the majority of families living in Port Vila do not own enough land to meet all their food needs. Economic opportunities of employment

provide increased access to money, but frequently require that mothers spend more time away from their children, who are then commonly cared for by older siblings and grandmothers. Women who live in peri-urban areas who are not employed outside the home enjoy greater access to medical care available in the city, but often struggle more economically than those who have paid employment. Due to this range of factors influenced by region, this research design was critical as it allowed for an examination of the influence of geographic and economic factors on food choice and access. It also highlighted varying feast structures, including frequency, duration and the physical space that influenced how many people could attend and how easily these individuals could access these events.

Additionally, I worked with health practitioners, including nurses, nutrition educators and doctors who routinely diagnose children as malnourished. Drawing on their expertise and diagnoses, I invited mothers from each of the three categories described above who also have a child diagnosed as malnourished by a medical professional to participate. Therefore, I worked closely with nurses and doctors in identifying families with malnourished children to diversify the sample population. I also asked mothers if a medical professional has ever diagnosed their child as malnourished. Recruiting participants in this manner helped to bring an anthropological perspective to the biomedical definition of malnutrition, and allowed me to compare biomedical diagnoses with cultural diagnoses of malnutrition. It became evident early in the research process that malnutrition lacks a definition that is accepted and understood by both health care practitioners and mothers. Throughout this process, I problematized malnutrition as a concept that is frequently used in public health discourse without a consensus definition.

To accomplish my objectives, this project utilizes the triangulation of multiple methods, and involves engaged research with individuals and groups as well as library research. Data were

collected using six research methods: open-ended interviews, participant observation, visual-cognitive elicitation (a new visual method that employs photographs), archival research, surveys, and dietary journals, all of which are described in more detail in chapter five.

1.2.3 Communication: Research Languages

Ni-Vanuatu, as the citizens of Vanuatu decided to call themselves after independence, have diversity in language use to match their cultural diversity. Ni-Vanuatu speak over 110 different languages, and nearly all of these languages have Austronesian roots (Feinberg and Scaglione 2012). Often these indigenous languages are delineated at the village level, and on outer islands that have a smaller number of distinct villages, one will find fewer distinct languages per capita (see chapter three for a more detailed discussion of Austronesian influence in Vanuatu). However, on Efate, where people from all over Vanuatu have gathered in the capital, one can experience the great diversity in language in a very small geographical range. Because this research purposefully samples people based on socio-economic status in urban, peri-urban and rural areas of Efate, the participants spoke a wide range of distinct indigenous languages. Therefore, it was not possible (nor was it necessary) for me to learn all of these languages to conduct this research.

The lingua franca of Vanuatu is Bislama, a language that developed out of the practice of “blackbirding” or the slave trade among the Pacific Islands. Bislama is a creole language that is widely spoken across Vanuatu. While I have heard of cases where elders living on outer islands are not able to speak Bislama, I never encountered an individual during this research who was not able to communicate with ease in Bislama. Thus, it became the primary language of this fieldwork. Drawing on the colonial history, English and French are the languages of school.

Beginning with Class 1 (and in some *Kindis* or preschools), all instruction takes place in either English or French. I have basic French language skills, but found that I rarely needed to use French. Francophone ni-Vanuatu tend to be clustered together. For example, if French missionaries settled a village, then French was likely to be the primary Western language of that village. For the majority of ni-Vanuatu on Efate, English is the language of school instruction, so many of the participants I met who could speak French, could also speak English, Bislama, and an indigenous language. General practice is for children to learn Bislama from family and friends, in addition to learning an indigenous language from their parents. Indeed, most children I observed would easily switch among an indigenous language, Bislama and either French or English while at play with their friends. While it was not a priority of this research to document language fluency, an overwhelming majority of children were fluent in three languages by the age of six or seven. For these reasons, there was no need to become fluent in a language beyond Bislama for research purposes. I did, however, learn some basic words and phrases in the Pango language during my time in Pango village.

Throughout this dissertation, terms in Bislama are written in italics. Because not all of the Bislama terms have direct English translations, as is commonly a problem in translation work, Appendix A provides a glossary of frequently used Bislama terms. To differentiate and avoid confusion, when I wanted to emphasize a point I underlined the words of emphasis to distinguish between Bislama terms and phrases.

1.3 OUTLINE

Throughout this work concepts of “malnutrition,” “food security,” “good” and “bad” foods, and “feasting” are problematized and contextualized within the urban, peri-urban, and rural settings of present day Vanuatu. Drawing on a rich cultural heritage that is highly valued, ni-Vanuatu take great pride in the significant effort required to host and contribute to a successful feast. Additionally, the ethic of supporting community values and caring for all the members of one’s community, particularly the children, remains strong. With 29.5% of children under age five in Port Vila suffering from growth stunting, it should be of no surprise that ni-Vanuatu draw on these values as they face a crisis of childhood malnutrition (Knowles 2007). Responding to values of kin and community, as well as the biomedical advice provided to them by public health practitioners, caregivers help children negotiate the precarious problems of infant and child nutrition and food insecurity.

Beginning in the second chapter, I outline the theoretical influences that frame the subsequent analysis of children’s foodways in Vanuatu. Parallel to the study of childhood malnutrition is the study of feasting. While much of the focus of feasting research has been on the redistribution of wealth and the ways in which power is gained, displayed and lost through the presentation and sharing of large quantities of food, this dissertation calls for a new component to the study of feasting, one that also incorporates the study of urban and peri-urban food insecurity. Children are socialized to partake in the system of community values, which helps perpetuate this ethic of sharing food over time. Historical studies in anthropology on the practice of feasting help illuminate that food sharing was a strategy for promoting community values, helping to care for and support a wider population. This practice was much easier to maintain in less populated, rural villages where food insecurity was not marked with income

inequality. Thus there is much similarity between the study of food security and feasting that has not been comprehensively explored in the literature. In an analysis of the research on nutritionism (the reductionist study of food which privileges the micro and macronutrient components over the whole food in cultural context), and syndemics (an approach that considers the synergistic effects of disease, economics, environment, and other socio-cultural factors on health and illness) chapter two helps to draw new frameworks for the study of feasting and food security in the context of critical medical anthropology.

Chapter three outlines the history of Vanuatu, illustrating that the history of a place is critical to interpreting its ethnography, since cultural events are a product of the combined historical events that preceded them. Settled relatively recently, just an estimated 3500 years BP, the vast majority of Vanuatu's population today is comprised of descendants of these first settlers. As a result, patterns of hierarchy and social structure, and feasting as a ritual must be contextualized within this early history. Details provided in chapters two and three form the basis for comparison between discussions of "traditional" feasts in Vanuatu and new emergent patterns in feasting behavior. Chapter three presents the argument that understanding the historical implications of social structure and hierarchy, missionization, and colonialism all impact how women create and enact gender roles, while negotiating social status and class. This analysis of current medical systems, food behaviors, and changes in *kastom* patterns for gifting and eating at a *lafet* in Vanuatu is rooted in this discussion of Austronesian traditions and missionary and colonial training, because this history contributes to cultural values and understandings of *kastom* practice today.

Chapter four builds on the historical discussion of the settling, missionization and colonization of Vanuatu presented in chapter three, and offers a depiction of present day living

conditions in urban, peri-urban and rural Efate. It also provides epidemiological details about the state of maternal and child health in Vanuatu. Chapter four analyzes the structural factors that contribute to how people access shelter, land for subsistence farming, food, and water in the various research locales, as these impact food security. In addition to allowing me to draw conclusions about life in Vanuatu, I argue that this research could be applied more broadly across the Pacific and the developing world. Providing this foundation is important to any applied anthropology that draws on this work, as I argue that the variations of cultural patterns are critical to understanding the broader linkages between patterns of feasting and food security. Future research should consider the types of details provided in chapter four, and how conclusions from these data can be applied successfully to other regions.

This study employed the use of multiple methods of data collection, which are described in chapter five. Along with outlining all the research questions and objectives, chapter five discusses my use of interviews, participant observation, surveys, a visual-cognitive elicitation project, and dietary journals, as well as archival research conducted at the Vanuatu National Library. Participants were selected using quota sampling in an effort to garner a range of perspectives and life experiences from women who are employed earning a wage and those who are unemployed, living across the urban, peri-urban, and rural areas of the study site. Data were analyzed using MAXQDA software for qualitative data analysis, and SPSS for the survey data. The triangulation of research methods ultimately proved extremely beneficial to this project as it was a means to focus on various aspects of feasting and food security, providing nuance to the data that could not have been collected using interviews and participant observation alone.

Mothers negotiate child feeding practice and their understandings of malnutrition by interpreting the advice of both health care practitioners and their kin networks. Occasionally,

these groups offer mothers conflicting ideas about whether or not a child is sick and how best to care for her/him when illness strikes. In order to better understand the cultural context of caregivers' decisions about infant and child nutrition and feeding, chapter six begins with a discussion of daily food patterns and the practice of *kakae blong holem bel nomo*, or “eat just enough to stop your hunger pains.” The types of foodstuffs consumed on a daily basis and patterns for cooking and serving meals is presented. How urban and peri-urban families are able to procure foods at stores and markets helps contextualize the impact of cost and accessibility on everyday food consumption. Chapter six also provides a description of maternal and child health care delivery in urban, peri-urban and rural areas of Efate. The range of experiences caregivers have with health care providers, sometimes in very crowded and busy clinic locations, influences how mothers understand and interpret the advice offered to them from health care practitioners. Finally, the discourse of malnutrition and the Bislama translation, *sik bunbun*, is analyzed to comprehend how and why caregivers and health care practitioners come to different interpretations of these concepts, while highlighting the disconnect in the language used to navigate the health care system. All of this results in mothers developing syncretic understandings of appropriate infant and child feeding practice. Ultimately, this framework also depicts processes of daily life, ordinary patterns of child feeding, and routine health care delivery, which must be established before any distinctions can be made between feasting and daily life.

Chapter seven details the practice of *lafet*, or special occasions of community feasting in Vanuatu, and contrasts descriptions of everyday food consumption presented in chapter six. A description of the protocol and etiquette of feasts is presented along with definitions of community feasting in urban and peri-urban areas. Examining how feast foods differ in quantity

and quality from the “everyday” foods that ni-Vanuatu children are accustomed to at home illustrates the appeal that feasts have for children. At a *lafet* children know that they will get “good” island foods, fresh meat, and can eat until they are sufficiently full, all aspects of the foods found at feasts that are distinct from daily eating patterns. The lengthy duration of *lafet* in Vanuatu allows the feast to have a more significant impact on food security than in areas where a feast lasts a single day or comprises only a single meal. By outlining *kastom* practices of gifting and the subsequent redistribution of gifts, the material and moral means by which ni-Vanuatu contribute to feasting events, and methods for maintaining familial social status through the production of feasting events, this chapter presents a modern ethnographic description of feasts in Port Vila, and peri-urban villages.

Chapter eight reveals that children are dealing with their parent’s financial insecurities when parents do not have access to enough money for food, school fees, rent, water, electricity, and transportation. This is exacerbated by the fact that in urban areas, many families do not have regular or reliable access to garden land, and are forced to purchase most of their foodstuffs. Children understand these difficulties, and they seek out feasts, following their friends to a *lafet*. Difficult financial times put pressure on families, and many parents also contribute to the problem of children eating at feasts by permitting them to attend without presenting a gift. Parents encourage their children to go eat at a *lafet* when they are food insecure, knowing that the child will not be questioned, but will instead be served a full hot meal with fresh island food and fresh meat. However, the fact that children occupy a liminal space of acceptable non-compliance to the *kastom* rules of feasting does not mean that these transgressions go unnoticed. Chapter eight describes how women and other community members also exercise agency by helping children negotiate *lafet* to access food. This results in additional but not openly discussed

meaning associated with feasting—*lafet* strengthens the broader community by helping food insecure children access food. In modern times and urban and peri-urban places, *lafet* are now for the benefit of everyone.

Chapter nine concludes this dissertation by discussing how children's need to access enough food is changing cultural patterns of feasting. In this way, studies of food insecurity and feasting are intimately linked. Mothers who actively deviate from *kastom* practice to enable children to eat at feasts without contributing a gift to the *lafet* are at the forefront of addressing food security among children. Through their own agency and deliberate behavior women are providing the most effective means currently available for children to cope with food security by permitting children to breach *kastom* practice of gifting and eating at feasts. This is not without consequence, as the meanings of *kastom lafet* are changing, and many people delay marriage because they cannot afford the cost of the wedding. Through the lens of syndemics that highlights the synergistic effects of disease, economic, environmental and socio-cultural factors that intersect to influence health and illness within a population, this research reveals patterns in social life that directly impact biomedical health care delivery. Syndemics provides researchers the opportunity to investigate how local knowledge is shaped by biomedical health interventions, revealing new interpretations of malnutrition and appropriate child feeding practice.

This research has significance in two primary domains. First, data contribute theoretically to critical medical anthropology by linking the two previously disparate concepts of feasting and food security. Additionally, this research has practical applications for the problem of hunger in urban areas by revealing the importance of community networks and *kastom* practices on coping mechanisms for food insecurity. When children eat at *lafet* without contributing a gift it changes the meanings of *lafet* and should change the ways that medical anthropologists analyze food

security, and biomedical health care practitioners deliver services. These cultural patterns need to be accounted for in nutrition education interventions by expanding the programming to discuss the rationale for why a diverse diet is beneficial to child development, but also address how mothers will act upon these recommendations. To achieve meaningful change, both of these issues must be confronted.

Currently health practitioners in Vanuatu follow the example of their colleagues across the world by advancing the biomedical approach to nutritionism. Nutritionism is a reductionist paradigm, which privileges individual nutrients, disassembling whole foods and shifting the unit of analysis to their component parts (Kimura 2013; Scrinis 2013). This approach benefits corporate food producers who promote nutrient fortified cookies and other heavily processed foods as a healthy part of a balanced diet, drawing on nutritionism's emphasis on individual nutrients. These reductionist analyses of malnutrition intentionally conceal the lived realities of individuals—mothers who are making choices between paying school fees and paying the water bill, who serve their children first and feed themselves only what is left over, who value their cultural heritage yet cannot afford to present a gift at a *lafet*—in an attempt to promote a “silver bullet” solution that is for sale by multinational corporations. They argue that health is achieved by how many vitamins and minerals are consumed each day, rather than promoting food security and ensuring that families have access to enough safe, affordable and culturally appropriate foods each day. Ethnographic data presented herein exemplify the pitfalls of this reductionist approach by illustrating how children's foodways have become a negotiation between meeting nutritional needs and fulfilling *kastom* practice. Child feeding is ultimately a cultural practice.

Drawing on the work of Farmer (2001; 2004), this research also reveals problems of structural violence, an approach that considers the material and social impediments to achieving

health by presenting an ethnographic account rooted in the intricate history of an area. I argue that what is needed most is consideration of how nutrition education programs can be bolstered in their informative and educational aspects while simultaneously accounting for the lived experiences of women who hold the most intimate understanding of the political, environmental and economic barriers to acting upon the biomedical advice provided by nutrition educators. Ethnographic data that illustrate the complex social history and prehistory of a cultural region from the perspectives of multiple stakeholders can serve to bridge the gap between policy and the practicalities of human experience. In fact, these ethnographic data reveal that mothers are helping children manage their food insecurity through community feasts, subsequently changing the meaning of these feasts. As families work together to provide substantial amounts of “good” food to children, feasts become an effective coping mechanism for food insecurity. Today, feasts benefit the whole community through collective support of those children in need. The following chapters describe these foodways, presenting the ethnographic evidence required for the creation of effective policy and interventions to promote food security and health in Vanuatu and beyond.

2.0 LINKING FOOD SECURITY AND FEASTING

Issues of child health and nutrition continue to be of global concern and the source of much research in public health and anthropology (e.g. (Breslin, et al. 2003; Cooper 2013; Fildes, et al. 1992; Kickbusch, et al. 2005; Ram and Jolly 1998; von Grebmer, et al. 2010). The reality is that most of the problems with maternal and child mortality occur in the developing world, which is one reason the Millennium Development Goals (MDG) seek to specifically address these problems. Malnutrition is intimately linked with poverty, and social status and has a significant impact on an individual's susceptibility to, and recovery time from biomedical diseases, a perspective that social scientists, and anthropologists in particular, are well poised to discuss given the holistic nature of the discipline (Farmer 2005; Turshen 2007). Drawing on these concepts, this chapter provides an overview of some of the theoretical influences toward the systemic study of systems of food and illness. Particularly, I draw on the concepts of syndemics and nutritionism, pointing to the ways in which these approaches remind us of the integrated nature of cultural patterns and how important larger cultural context is to accurately understanding children's foodways. Additionally, I consider the ways that kin networks work together to help raise and care for children, which subsequent chapters will show is very important to how children negotiate feasting and food security. The theoretical frameworks outlined here, and the research examples from Vanuatu that follow demonstrate a need for new frameworks for the analysis of malnutrition by linking the previously separately analyzed

concepts of food insecurity and feasting. Examining frameworks that scholars have utilized to take a holistic approach to understanding the social, environmental and economic factors that influence health, illness and disease, this chapter focuses in particular on theories that support the systemic study of both illness and foodways. Ultimately, I conclude that a new theoretical approach, which I term nutritional syndemics, is necessary to accurately articulate these intersecting theories of food, feasting, and illness.

2.1 THEORETICAL INFLUENCES FROM MEDICAL ANTHROPOLOGY

Individuals interpret and experience disease differently, and cultural factors play a fundamental role in how individuals define and understand health, illness and disease (Kirch 2010b:169). Biological homogeneity across cultures is assumed in much medical and public health research; however, anthropologists trained in a four-fields approach can offer a more comprehensive perspective. Lock and Nguyen (2010)

draw on the concept of biosocial differentiation to illustrate the dynamic process of embodiment—the lived entanglement—of local biologies, social relations, politics, and culture....[and] signal the limits of the approach commonly upheld in biomedicine that the human body is, for all intents and purposes, universal and amenable to intervention through standardized approaches to medical management and care. (13)

Therefore analyzing the ways in which mothers and their kin networks define malnutrition is essential to comprehending the experiences that individuals have with biomedically trained health care practitioners (Scheper-Hughes and Lock 1987). Comparing and contrasting various definitions of and beliefs about malnutrition as held by mothers, grandmothers, fathers, and public health practitioners will emphasize areas in which beliefs about health and illness

influence behavioral patterns (Aubel 2010), and ultimately reveal that discourse on the concept of food security is likely the more appropriate and applicable approach than a focus only on malnutrition.

Critical medical anthropology seeks to understand health and medical practice in cultural context, and biomedicine is no exception to this. More ethnographic research on both western and non-western medical systems is needed, as well as research that offers a better understanding of how cultural systems of medicine reflect larger societal practices (Hahn and Kleinman 1983). Much of this research draws on the anthropological field method of participant observation, a method Hahn and Kleinman argue is particularly well suited to the study of medicine in cultural context, as they explain:

we believe that comprehensive participant-observation in the variety of biomedical settings couples recognition of the powers of nature and culture and their interactions. *We consider the dialectic of nature and culture to be one of the primary theoretical problematics of medical anthropology.* Medical anthropology acts at a vital intersection of body, mind, and community. It thus embraces a range of anthropological concerns, biological and ecological, cultural and symbolic, personal and social. It does so, moreover, at a point of widespread human concerns, commonly of daily import, often of cosmological significance health and well-being, pathology and suffering. (Hahn and Kleinman 1983:321)

Thus, medical anthropology can play an important role in developing better understandings of cultural systems and practices both in daily life and those of ritual significance. This sub-discipline offers an avenue for a more fundamental comprehension of the intersection between symbolic and biological interpretations of cultural practice and as such is a well-suited framework for the study of feasting and food security.

Medical anthropology can also help researchers understand the blends of various belief systems as ‘traditional,’ non-western medical practices traverse biomedical practices. Commenting on this intersection of medical practices or belief systems, Worsley (1982) writes,

Melanesians look upon our belief in the existence of immensely potent, but quite invisible agents of disease call *jermes*—which we admit we cannot see with our eyes—with the same skepticism with which Europeans look upon belief in witches or ancestral spirits....Western conceptions of health, illness, and treatment badly need the infusion of a social theory that the study and use of other medical systems could provide.” (emphasis in the original Worsley 1982:345)

With the increasing complexity of cultural systems of medicine as a result of globalization, it is imperative that medical anthropologists consider new syncretic meanings that have been developing as non-western and biomedical approaches collide. While researchers have begun to examine these processes, more ethnographic examples and analyses are needed to enhance our understandings of these changing medical systems in an increasingly interconnected world.

2.1.1 Nutritionism

Much work in food studies, particularly that which overlaps with public health, focuses on food quality, and while this might sound more innovative than the narrow approach of simply increasing food quantities for the hungry, it is in fact extremely reductionist when the approach is “nutritionism” (Kimura 2013). Nutritionism draws on scientists’ work on micronutrients and macronutrients as they parse foods into component parts, and assign a value to those “scientific” components. This model has become more popular in recent years. It is the basis for much of the research in food and nutritional science, and is used to determine dietary advice promoted by the government in the form of nutritional guidelines. However, the food industry also uses the principles of nutritionism, which:

has become a powerful means of marketing their products. At the same time, nutritionism has moved from the margins to the center of the public’s understanding of food and health, and has thereby increased the susceptibility of nutrition-conscious individuals to the food industry’s marketing strategies. Nutritionism has become a contemporary certainty, one that is taken for granted and mostly unchallenged, even among food and nutrition experts and institutions.

While there is much contestation over the way nutrient-level knowledge is used and abused, few have questioned the reductive focus on nutrients per se. (Scrinis 2008b:39)

Nutritionism highlights the ways in which food is discussed in terms of the individual nutrients rather than as part of meals full of cultural values that signify a sense of place, community and familial network.

Within the framework of nutritionism, foods are divided into micronutrients, and the focus moves away from the food itself to the parts of the food and whether those are “good” or “bad.” This transition to a focus on the “good” and “bad” component parts of food is evidenced in the example of margarine. Margarine is hailed as a “low in saturated fat” substitute for butter, despite the fact that it is highly processed vegetable oil that includes new chemicals and added colors, vitamins and flavors through the process of solidifying the oil, which is overlooked when the focus is on a type of fat rather than the food as a whole (Scrinis 2013). This practice continues today as the United States Food and Drug Administration (FDA) and the American Heart Association among others have actively been involved in the labeling of foodstuffs as “heart healthy” or “a good source of calcium/vitamin A, C, D,” just to list some examples of this type of promotion. To many people a discussion focused on the types of nutrients contained in one’s food instead of the food itself has become so ubiquitous that this discussion hardly seems unusual. Nearly every package of food in the grocery store has some additional label that describes the nutritional function of something inside the package. “Functional nutritionism” as Scrinis (2013) explains, takes this discourse a step further as now:

Rather than just avoiding the bad nutrients, the dominant nutritional discourse has now shifted to the goal of optimizing your consumption of beneficial nutrients. Rather than just aiming to be healthy, some of the imperatives of functional nutritionism are that you enhance your health and target particular bodily functions and processes. (4)

This shift in how food is discussed results in a focus on “good” and “bad” nutrients, and a new trend of “super foods” for increased health, rather than a discussion of whole foods and diets in cultural context.

The scientific approach of nutritionism implies that the recommendations and results of all this scientific study of micronutrients in food is objective. Objectivity is, after all, often touted to be the central tenet of rigorous scientific practice. However, the reality is that dietary recommendations are deeply political. One early example from 1977 stems from the McGovern report, or the report on “Dietary Goals for the United States”, produced by the Senate Select Committee on Nutrition and Health in response to hearings on increasing rates of heart disease and diabetes. Based on these Senate hearings, and:

As epidemiologic data indicated that meat and dairy consumption contributed to heart disease, the Committee’s draft recommendations included advice to reduce dietary intakes of red meat and dairy products. Pressure from industry lobbyists led to the statement that Americans should “reduce consumption of meat” being rewritten as “Choose meats, poultry and fish that will reduce saturated fat intake.” This change led to a focus on saturated fat and subsequently on other nutrients, rather than whole foods, and the development of nutritionism founded on ideology, not science.” (Hanauer 2007:175)

This led nutritionism to be used as a type of marketing scheme to promote foods as “good” based on the quantity of specific nutrients they contain. But beyond marketing, this concept of promoting the consumption of nutrients as though they are not stored inside the foods that people actually consume has been used as part of larger public health campaigns for healthy diets.

With the increasingly scientific and reductionist approach to foods, a lot of confusion has developed about what it really means to be a “good” food or a “bad” food. New terms are added to the discourse like functional foods and “super-foods,” but what these terms actually mean is not clear. The idea that some nutrients can fight cancer or lower cholesterol, and that fortified foods can provide additional benefits to those who eat them is presented to consumers in ways

that eliminate the related discourse on the benefits of culturally appropriate, accessible, and less processed foods. The reality is that, “Many discussions of ‘functional foods’ include the observation that just about all foods—both processed and unprocessed—are potentially ‘functional’ in some way if they contain nutrients which can be linked to specific beneficial health outcomes” (Scribis 2008a:542). Foods are comprised of different nutrients, and with processed foods and the ability of food companies to “add in” nutrients that would not be present otherwise, a case could be made that practically any food is beneficial in serving some function, a task made easier if the focus remains on the nutrients rather than on the whole food or food product being consumed.

This discourse that focuses on nutrients over whole foods results in more confusing messages and an increased burden on consumers as they attempt to sort through all of the nutrition education information presented. Often this appears confusing and contradictory to consumers as they are sold on the idea of Kellogg’s Honey Smacks, a “good source of Vitamin D” on the front the box, and 15 grams of sugar in a $\frac{3}{4}$ cup serving, which is 55.6% sugar by weight (Undurraga, et al. 2014). Thus foods can be full of both “good” and “bad” nutrients, but advertisements highlight only those aspects of a food that will help sell it as a ‘health’ food. Unfortunately the effects that ‘functional foods’ have on health and whether or not they are any better than whole foods that contain the same nutrients is not clear: “the degree of precision of scientists’ understanding of the relationship between nutrients, foods and the body at the biochemical level is greatly exaggerated, and the limitations and imprecisions of nutrition science are concealed or ignored” (Scribis 2008a:543). Nutritional scientists even debate this within the context of the discipline’s continued research on the effects of various nutrients on the body. Many scientists are also calling for studies of whole foods in addition to the standard study

of nutrients in isolation, as researchers realize that, “Food itself is important: it is not an empty vessel carrying single nutrients such as calcium, it is the ultimate source of all nutrients...much attention should also be paid to foods themselves, as packages of nutrients, and to food patterns” (Jacobs and Murtaugh 2000:900). Despite recognition among nutritional scientists for over a decade that the study of whole foods and food patterns is also important, discourse and research continues to focus on nutritionism.

Amidst all the mixed messages about what foods are healthy, a new genre of journalists and writers has emerged to work on translating this scientific information so that it is understandable to a lay audience. Books written for popular audiences have attempted to take biomedical and scientific studies of food and nutrition to the public. However, many of these works fail to account for the cultural nuance required in the study of food and nutrition, particularly in instances where providing nutritional “advice” is one of the book’s objectives (Nestle 2007; Pollan 2009). Rarely are these texts effective at educating health care practitioners involved in developing new and successful nutrition interventions. Undoubtedly because of the precarious nature of cultural patterns, many authors may stick to generalizations, or find the reductionist approach of nutritionism and the biomedical model appealing because it is easy to ignore the larger cultural framework that impacts nutrition and health when focusing on the minutia. Simultaneously, approaches that prioritize nutritionism can attempt to address injustices in health, environmental and food systems, while still failing to recognize the ways in which broad advice on “what to eat” marginalizes both the social study of food, and the deeply meaningful ways in which food choices are a negotiation of multiple biomedical and cultural factors (Guthman 2007).

The importance of studying food in cultural context is on the periphery of many of these

discourses, and begins to become more important as some scholars attempt to shift the focus from the nutrients to the whole foods. However, the rich culinary traditions, and ideas about flavor, taste, and quality still are not major components of the discourse of malnutrition. The idea of getting nutrient-dense foods to those who are hungry regardless of the cultural appropriateness is pervasive, leaving taste and traditions largely to food studies of affluent areas. This focus on nutritionism, and the seemingly “irrational” behavior of individuals who do not subscribe to this genre of dietary advice are linked, as the cultural context and rationale for individual food behaviors are deeply imbedded in the ways communities and individuals value food. Processes of sharing and eating food are important, and must be brought back into the discourses of nutritional and dietary guidelines to help individuals understand the rationale behind these biomedical recommendations and health care practitioners learn culturally appropriate ways to incorporate dietary recommendations into daily food patterns.

2.1.2 Syndemics

Similar to how the study of nutrition has become focused on the micronutrients in foods, often the study of health from a biomedical perspective is an examination of one disease absent of the context in which the disease itself has manifest. Many physicians and public health officials are interested in treating disease as quickly and directly as possible and do not concentrate on the larger social and economic framework in which the disease manifests itself (Baer, et al. 1997; Farmer 2004). That is, they focus on the quantitative biomedical aspects to the detriment of social factors (Brown, et al. 2006; Castro and Singer 2004; Turshen 2007). This has been a persistent problem critiqued by critical medical anthropologists who have been arguing for decades that the problem with “most analyses [is that they] separate ecological change from

malnutrition, political struggle from epidemics, and social upheaval from health and healing. None consider the relation of ecological, political, and social aspects of disease to...economic transformations...” (Turshen 1984:xi). These problems must be approached holistically, as it is likely that both new barriers and new solutions will present themselves when a more comprehensive model is utilized (Kloos and Zein 1993).

Working to create a model that accounts for the variables that combine to impact illness and disease, Singer proposes that syndemics as a new mode of analysis. Singer explains that a syndemic is:

defined as *the concentration and deleterious interaction of two or more diseases or other health conditions in a population, especially as a consequence of social inequality and the unjust exercise of power*[.] Syndemics appear to have played an important role in human disease history (and hence in human history generally), are having a significant impact on diverse populations currently, and are likely to have consequential influence on the emergent health profile of the twenty-first century. (Singer 2009:XV)

The theoretical approach of syndemics helps us better understand the synergistic effects of disease, economics, environment and other socio-cultural factors that, combined, all play a significant role in health (Baer and Singer 2009; Singer and Clair 2003). In particular, syndemics can help highlight social factors that have a substantial impact on health. Baer and Singer (2009) write, “In syndemics, interface among diseases or other health-related problems reflects in no small measure the impact of a configuration of adverse social factors including poverty, stigmatization, oppressive social relationships, and health care disparities” (141). Thus syndemics provides a productive frame in which researchers can begin to examine the social and environmental factors influencing biomedical problems such as malnutrition.

Syndemics was first developed during research that examined groups of people who suffered from HIV/AIDS and another simultaneous co-infections. Specifically, researchers

considered the interactions of HIV/AIDS in drug users and victims of physical violence (Singer 1996a). During the course of this research, it became evident that in cases where people suffer from multiple diseases, the symptoms they experienced produce a combined effect greater than the sum of their separate effects. People who suffer from co-infection experience conjoined symptoms between the diseases they simultaneously carry that are worse than what they would experience from either of the individual diseases. The concept of syndemics was developed as a new means to consider the effects of multiple disease events within a group, and is designed to consider population level data.

Syndemics began at the nexus of anthropological and public health research, and is relevant to both disciplines. Because syndemics can be a beneficial way to study diseases as they spread through populations, the term was quickly adopted into work conducted at the Center for Disease Control (CDC), which also considers syndemics as a series of linked epidemics. The CDC states, “a syndemic orientation is defined as a way of thinking about public health work that focuses on connections among health-related problems, considers those connections when developing health policies, and aligns with other avenues of social change to assure the conditions in which all people can be healthy” (Syndemics Prevention Network 2008). The CDC has adopted this action-oriented framework into the Syndemics Prevention Network, a group that scholars, community leaders, and public health practitioners who are interested in developing new community-wide prevention opportunities can apply to join.

The CDC stresses that syndemics is not a replacement for epidemiological research; rather as a theoretical approach it shifts the emphasis away from analyses of individual diseases toward a new approach that studies the interactions of multiple diseases and health problems. There is a need for both of these types of research (Syndemics Prevention Network 2008).

Following the leadership of the CDC, many public health scholars have launched projects that utilize the theory of syndemics (for examples see, Gonzalez-Guarda, et al. 2011a; Gonzalez-Guarda, et al. 2011b; Operario and Nemoto 2010; Ribera and Hausmann-Muela 2011; Singer, et al. 2006). Following the research trajectory that Singer began when he first wrote about syndemics, much of this public health research analyzes co-infections with HIV/AIDS.

As the theory of syndemics began to be more broadly applied in research, the analysis expanded beyond considerations of multiple biomedical diseases. Now, co-infection is not limited to traditional definitions where one individual suffers from two biomedical diseases. The syndemics approach also considers the deleterious effects of poor living and environmental conditions that can have a negative impact on disease progression. For example:

diseases do not exist in a social vacuum nor solely within the bodies of those they inflict, thus their transmission and impact is never merely a biological process. Ultimately, social factors, like poverty, stigmatization, racism, sexism, ostracism, and structural violence may be of far greater importance than the nature of pathogens or the bodily systems they infect. (Singer and Clair 2003:428)

Syndemics provides an opportunity for researchers to consider the full range of factors, and the combined effects of those factors as they contribute to the health and illness of a population.

In addition, the concept of syndemics provides researchers an opportunity to investigate the space of local or traditional knowledge, and how it impacts larger health discourses. Local or traditional knowledge refers to the ideas and understandings of indigenous peoples regarding their living environment, common diseases and cures. According to Singer, “Western” knowledge refers to the biomedical knowledge of diseases that is frequently “evidence based” and devoid of the context critical to understanding health issues holistically, and can sometimes contrast with local knowledge (Singer 2009). While biomedical analyses may be interjected into the dialogue, this does not mean that local knowledge is removed. Rather, due to the integrated

nature of culture, it is likely that syncretism plays a role in new definitions of illness that are a blend of both traditional and Western knowledge. In recognizing the pluralistic understandings of disease, we can better comprehend the roles these types of knowledge play in decision-making processes, and in helping alleviate or exacerbate illness (Castro and Singer 2004).

Notably, however, the concept of syndemics has not been widely applied to food studies. The primary application of syndemics theory to food studies has been through discussions of decreasing food security as a result of climate change. Baer and Singer created a branch of syndemic theory specifically to highlight the environmental component, which they call ecosyndemics. They explain that, “The term ecosyndemic was developed...to label the specific facilitative roles of global warming on environmental change, disease movement, disease clustering, and biological interaction among diseases and other health conditions, and the impact of these exchanges on disease burdens and global health trends” (Baer and Singer 2009:146). Ecosyndemic models were created specifically as a tool to help analyze the effects of global warming and anthropogenic climate changes on the spread of health and disease. It is likely that global climate change will have a significant impact on food insecurity and the spread of “neglected tropical diseases” in the coming years, and will probably disadvantage marginalized groups and the poor more than those living in the developed world (Baer and Singer 2009). While diseases associated with climate change are likely to contribute to global health problems in the near future, researchers can aptly apply syndemics theory to this work. Nevertheless, the link between ecosyndemics and food security is not clear, and food security has not been a primary focus of analyses that utilize syndemic or ecosyndemic theory. The research presented in this dissertation makes such a link.

2.1.3 Food Security and Malnutrition

One avenue for convergence of the theoretical approaches of nutritionism and syndemics is through the study of food security and malnutrition. While these concepts, food security and malnutrition, are often conflated or used interchangeably, they are quite different even though they are related. Food Security was first officially defined in 1996 at the World Food Summit, and is explained as, “existing ‘when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life’....including both physical and economic access to food that meets people’s dietary needs as well as their food preferences” (World Health Organization 2012). According to the WHO there are three pillars of food security: availability—“sufficient quantities of food available on a consistent basis”; access—“having sufficient resources to obtain appropriate foods for a nutritious diet”; and use— “appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation” (World Health Organization 2012). The pillars of food security are particularly important because they can better inform researchers about both the study of feasting and malnutrition as they point to the range of factors that impact these patterns. Drawing attention to availability, access and use of food reveals the larger social milieu that influences food patterns and behaviors—economic conditions that prevent mothers from purchasing enough food, social stressors that produce fear and anxiety over where a child will find her next meal, environmental factors that allow women to prepare food in clean kitchens, cultural values to promote healthy and familiar foods over imported or unpalatable foods. The language of food security also frames this research in a way that highlights how interconnected all of these factors truly are; it simultaneously reveals how nutritionism and syndemics can be applied to the study of food security and feasting, while pointing out some of the flaws and limitations of such arguments.

It is important to point out here that the WHO provides a definition of food security, but does not provide any concrete description of food insecurity. Choosing only to define food security vaguely implies that food insecurity is simply the opposite. This lets descriptions of areas where the criteria or pillars of food security are not met serve as examples that will cumulatively define food insecurity. In this way the concept of food insecurity becomes even more ambiguous because there are myriad ways in which individuals can struggle to achieve these very broad objectives, and this definition implies that failing to meet the standards of even one of the pillars is enough to classify individuals as food insecure, which may very well be hugely significant in the life of the individual affected. But how this actually manifests in the lived experience of individuals can vary greatly; how a child feels and conceptualizes food insecurity can be different based on the region of the world or the household structure in which she lives. Helpful to the promotion of systemic study of food security, the broad definition encompasses research on a range of topics on the factors that lead to food insecurity; however, the breadth also leads to difficulty in understanding the consequences of food insecurity.

In considering how to link food security to the status of maternal and child health and nutrition of any region, it is helpful to understand the implications of food insecurity as they relate to malnutrition. Renzaho (2005) explains this a bit more succinctly, defining food insecurity:

as the inability of 'individuals, households and communities to acquire appropriate and nutritious food on a regular and reliable basis, using socially acceptable means', [and] is a serious problem threatening the lives of millions of people worldwide. The end product of food insecurity is malnutrition. (Renzaho 2005:798)

At this point the link between food insecurity and malnutrition is made, and according to Renzaho (2005) there is a causal link between the two with food insecurity leading to malnutrition. Definitions of malnutrition, equally as problematic as those of food security, are

both less clear and more specific in terms of biomedical claims. Malnutrition tends to be defined as insufficient protein-calorie intake; however the exact marker of what a poor protein-calorie intake is has not been universally defined. Even more problematic is that there does not seem to be an identifiable cause for this protein-calorie deficiency. The National Institutes of Health define malnutrition as “the condition that occurs when your body does not get enough nutrients,” and declares that it can be caused by a variety of factors including an “inadequate or unbalanced diet, problems with digestion or absorption, and certain medical conditions” (National Institutes of Health 2014). Listing such precise yet open-ended causes reveals the ways in which the study of malnutrition can easily be connected to discourses of nutritionism and syndemics where multiple diseases or illnesses can interact to yield different results. Malnutrition can also be directly a result of diet, or can persist despite interventions to improve diet, for example as a result of illness from contracting another disease at the same time, making the concept even more ambiguous. Unlike malnutrition, food security is specifically achieved through access to enough quality food. While malnutrition can be the end result of food insecurity, this is not necessarily the case, and malnutrition can be caused by factors other than food insecurity. It is no wonder that it is so hard to measure, identify and quantify malnutrition and food security. The biomedical definitions are imprecise, and the concepts are clearly interwoven with cultural, economic and environmental patterns as well as biomedical processes.

2.1.4 Malnutrition and Maternal and Child Health

There are increasing rates of both communicable and non-communicable diseases in south Pacific countries, including Vanuatu (Gani 2009). The health and survival of children in developing countries is of particular concern across the globe, and the south Pacific is no

exception. Gani (2009) argues that economic status has an important influence on child mortality, and this is demonstrated by higher mortality rates for children in poor countries. Poor economic status has an influence on health, and we see a direct connection between economic status and health, nutrition, and ultimately child survival emerging in the Pacific and in Vanuatu. This is exacerbated by high fertility rates and an increasing population of young people who put an even greater strain on education and health systems of developing countries, which has been a trend for over 20 years (for older examples see Ahlburg 1989). Thus there are multiple socio-cultural, economic and environmental factors that influence the health systems of developing countries in the Pacific.

The study of malnutrition is often discussed in the context of maternal and child health. In examining under-five mortality, “nutritional deficiencies are thought to be one of the contributors...Malnutrition hits particularly hard at women and when undernourished, women give birth to underweight children” (Gani 2009:174-175). This is acutely damaging as children of low birth weight have a more difficult time surviving childhood illnesses and are more likely to get sick. Thus, access to food and understanding the biological and biomedical implications of food insecurity are imperative to our understandings of malnutrition globally and in the Pacific region (Thaman 1995). Understanding the multiple ways that diseases intersect, and how one disease can affect another synergistically, is the central concept of syndemics, which manifests in these biomedical examples.

While malnutrition is a problem for infants, children and some young mothers, many Pacific island countries are seeing concurrent rises in “diseases of modernization” such as obesity, cardiovascular disease, and metabolic disease among individuals over the age of 25 (Capstick, et al. 2009). This is most common in areas of greater urbanization and development

and is significant to any health study of Port Vila, Vanuatu, which simultaneously has the highest rates in the country for both under-nourishment of children under the age of five *and* obesity of adults (Knowles 2007).

Other problems that plague Vanuatu and many other Pacific island countries are the scale and fragmentation of government prioritized health services (Lewis and Rapaport 1995). Because the health systems do not have the resources to provide all of the health and preventative care necessary, nor many of the services required for care and treatment of diseases and illnesses, we see the syndemic effects of multiple diseases compounding and exacerbating the health problems of individuals (Connell 2009; Lewis 1998). As Lewis and Rapaport (1995) note, “acute respiratory infections are common causes of morbidity and mortality in the Pacific, caused by numerous bacterial and viral infections, especially when respiratory defenses are weakened by chilling, alcohol and malnutrition” (218). Health care and services for women are largely inadequate, which significantly contributes to health problems; for, there are “strong correlations...between maternal education and child survival, as well as maternal education and fertility” (Lewis and Rapaport 1995:220). This further illustrates the complex and integrated nature of problems of maternal and child health in the Pacific (Connell 2009; Lewis 1998).

Breastfeeding is known to be a critical component of child survival, particularly in developing countries; this is yet another area in which Pacific islands health systems are not prepared to provide maternal and child health services to the extent required. While breastfeeding is typically promoted to women who deliver in the hospital, rates of breastfeeding exclusively remain low, as in many other developing countries in the world (Nankunda, et al. 2010; Schluter, et al. 2006). Breastfeeding rates in the Pacific have been declining since 1990. This led Schluter et al. (2006) to suggest that understanding barriers to breastfeeding from a

cultural context is crucial for successful public health interventions, therefore illustrating the importance of understanding disease and illness from both a biomedical and cultural perspective (Nankunda, et al. 2010).

2.1.5 Kin and Community Influences on Infant and Child Feeding

A critical consideration is evidence that kin play a significant role in caring for children despite the fact that the focus is often on the role of the mother. Husbands, grandmothers and other kin, including consanguinial, affinal and fictive (those extremely meaningful relationships drawn between people outside of standard definitions of family, but who behave as family), have vast influence on the decision-making processes of young women (Aubel 2006; Aubel, et al. 2001; Douglass and McGadney-Douglass 2008; Hadley 2004; Satzinger, et al. 2009; Stansbury, et al. 2000). Malnutrition is more than a lack of food, and researchers such as Patrice Engle (2002) place malnutrition in the larger social context of family and caregiver behavior regarding infant and child feeding. Engle (2002) explains, “A common belief is that lack of food is the reason for malnutrition; however, it is only one contributing factor. Equally important are caregiving practices, such as infant and young child feeding, and the family resources needed to provide that care” (S109). Those include the social resources of extended kin networks.

Using particularly broad language, Sahlins (2013) describes kinship as a “mutuality of being,” calling attention to the multidirectionality of caregiving, service, and exchange that are imbedded within kin networks. While simultaneously explaining that these are bonds of mutual benefit and/or mutual hardship, bonds that link people together through larger cultural systems, Sahlins emphasizes that in analyzing kinship, we must also analyze identity inasmuch as it is understood to be relational through the “dividual person” (Sahlins 2013; Strathern 1988).

Furthermore, beyond an interpersonal ethos of caregiving, the societal benefits that individuals receive via kin network caregiving are significant. In many Pacific island societies, caregiving is one method through which social obligations associated with reciprocity can be fulfilled; in fact, this research reveals how this is central to the practice of feasting.

Numerous social factors are important to consider in understanding the influence of kin, including that “circumstances surrounding caregivers’ ability to provide adequate complementary foods include work demands, the caregiver’s own health status, social support from others, and availability of resources” (Fouts and Brookshire 2009:286). All of these factors can be influenced by any number of different members of a kin network, including fathers, aunts and uncles, and grandparents in addition to mothers. In fact, all the members of a mother’s social network have the potential to have a positive impact on child nutrition when beneficial knowledge and resources are shared (Moestue, et al. 2007). Men also play an important role in the distribution of family resources; “because men mediate women’s access to economic resources in many parts of the world, women’s nutritional status, especially during pregnancy, may depend heavily on male partners and relatives” (Dudgeon and Inhorn 2004:1387). This influence can extend to children through the type, amount and quality of food they receive once they are born.

By providing assistance to mothers, childcare kin networks fulfill basic economic, social and physiological needs of children. Ultimately, childcare has many dimensions, for, “providing good care requires resources from the caregivers—knowledge and skills, time, economic resources, and control of decision-making....Feeding is one of the most time-consuming and least well-understood caring practices, with critical effects on child nutrition status” (Engle 2002:S110). Childcare is one of many services that kin networks can provide, and of that, infant

and child feeding is one aspect. Beyond social obligation, social and economic resources and education dictate the quality of care that kin are able to provide for children in their care.

Biological anthropological research also highlights the importance of kin caregivers, as “human kinship and family systems are likely to be anciently rooted in the behavioral ecology of sharing food, and further interdependencies evolved to include cooperative breeding, pair bonds, and other sociopolitical alliances” (Leonetti 2008:227). This research is tied to the concept in biocultural anthropology of alloparenting, or individuals other than the biological parents providing for the child (Hrdy 2005). This theory proposes that our human ancestors were cooperative breeders and shared the responsibility for caring for children among many members of a kin network (Gibson and Mace 2005; Pashos and McBurney 2008). Research clearly illustrates that kin members play a central role in both feeding and socializing children, as documented in both biological and cultural anthropology.

Writing about the circulation of children in Yap and Kosrae in Micronesia, Burton, et al. (2001) explain that in “Micronesia senior women may have considerable economic power...Hence, compared to residents in nuclear households, residence in a three-generation household may present children with different cultural content, different social practices, and a different picture of gender roles and of the life course of women” (330). It becomes clear that the influence of kin permeates all aspects of life as elders teach children about appropriate behaviors within a household and community. Thus, grandmothers from both sides of the family can be influential in various types of caregiving. In fact, “one specific and decisive facet of non-western cultures that is rarely even dealt with in discussion on culture and development is the central role played by elders in socializing younger generations, passing on indigenous knowledge and cultural values” (Aubel 2010:42). In addition it has been demonstrated that grandmothers play a

role in shaping young children's behaviors and consumption patterns (Speirs, et al. 2009) that can have an impact on feeding behavior throughout the child's life. While this connection between the feeding and socialization of children focuses on women, certainly all kin participate. Particular attention to the role of women is beneficial; however, as this research demonstrates women are the central actors in the feeding of children.

Beyond the close family networks involved in the practice of everyday feeding are wider community networks that support an ethic of communal responsibility. It is in this context that community members beyond kin are involved in the protection, development, and feeding of children. Because the practice of child feeding is very gendered, particularly in Vanuatu, women expend a lot of energy and time in feeding their children as well as children in a village beyond the confines of their kin network. In urban and peri-urban areas the understanding of which child "belongs" to your community network is much more difficult to delineate; however, this research shows that in practice, creating these distinctions between children is not important. Several participants expressed the exact same sentiment, that "children are a gift from God." In that vein, helping all children through mutual care and the practice of feeding, is a way to demonstrate a commitment to the Christian values on which the independent nation of Vanuatu was founded. Therefore, particularly in the urban and peri-urban areas around Port Vila, this work of feeding a larger community of children takes place at feasts.

Of particular concern to this project is how caregivers identify syncretic understandings of quality care, blending traditional medicine and biomedical practice. It is through an assessment of the quality of interactions with kin and community members, and particularly the quality of feeding practice, that the relationship between kin networks and child nutrition and health is best understood. But how, and by whom quality care is defined raises further questions.

Medical pluralism plays a role as biomedical standards and indigenous medicine intersect with the economic and social realities of daily life (Janes 1999; Janes and Corbett 2009; Pelto and Pelto 1997). Thus it is critical to acknowledge the important role that the “biological standardization of hunger” plays in identifying and defining notions of quality childcare and feeding practice (Lock and Nguyen 2010). In this way there are clear links that can be drawn between nutritionism and the extremely scientific approach to understanding the relationships between food and health, and the way that biomedicine also divides illness into specific diseases studied in isolation from the larger context of the social life of the ill individual. Emphasizing the biological standardization of disease, food, and nutrition divorces the larger social context from the biological component. An approach that prioritizes biology separates the social value of food from the nutrients, the cultural life of an individual from the disease; ultimately, both approaches are extremely reductionist. This understanding of the critical social role that kin networks play in feeding and caring for children provides yet another example of how the broader cultural context in which a child grows and develops is central to understanding food choices, access to food and coping mechanisms for food security.

2.2 THEORETICAL INFLUENCES FROM THE STUDY OF FEASTING IN ANTHROPOLOGY

The word “feast” is defined in the Oxford English Dictionaries Online as “a large meal, typically a celebratory one; a plentiful supply of something enjoyable; or to eat and drink sumptuously” (Oxford English Dictionaries Online 2012). For the purposes of this discussion, I define feasting as the communal consumption of large quantities of food, indulgence in calorie rich foods or

both. The acts and social processes surrounding feasting have long been studied by anthropologists, particularly in the context of Pacific islands studies (Bolton 2001; Kahn 1986; Manderson 1986; Mauss 2000 [1954]; Rappaport 2000 [1968]; Strathern 1988; Whitehead 2000; Young 1971).

Feasting has been defined broadly by a number of different scholars. Hayden and Villeneuve (2011) define feasting as “as any sharing of special food (in quality, preparation, or quantity) by two or more people for a special (not everyday) event” (434). Kirch (2010b) expands upon this while citing Oliver (1989) as he explains that:

First, feasts are quantitatively distinguished by larger numbers of participants, incorporating consumers from more than a single household unit. Second, feasts involve “larger amounts of food per intended eater.” Third, there are important qualitative differences, such as the inclusion of delicacies or ritually marked foods in feasts. In Polynesian societies, these special foods include, for example, pork, dog, or fowl, prized species of fish (such as pelagic game fish), sea turtle, “fancy puddings” (usually incorporating an emollient such as coconut oil), or “well-aged fermented breadfruit”. In some Polynesian societies, human flesh was also a component of feasts. Fourth there are spatial differences in the ways and places in which feast foods were consumed, further differentiating them from domestic eating. In many Polynesian societies there were spatially defined feasting places, although these vary in the extent to which they were architectonically marked by permanent structures. Finally, the disposal of the remnants of feasts sometimes differed from the ways in which ordinary household food remains were disposed of. (169)

Here Kirch outlines a specific definition of feasting in the context of Pacific island societies, particularly in Polynesia in the context of archaeological study. This definition could be expanded to studies of non-Pacific societies and focuses on material culture, particularly aspects of feasting that could be apparent in the archaeological record. However, the details and

examples Kirch provides to describe Polynesian societies is applicable to Austronesian societies as a whole, and thus is of particular relevance to any study of Vanuatu³.

Oliver (1989) argues that in the ethnography of Pacific Island cultures, feasting dominates the discussion due to the social and political structures that are revealed in the behaviors. He also adds to our definition of the study of feasting in anthropology, writing:

What most ethnographers writing about Islanders have called feasts usually involved larger numbers of eaters than did ordinary domestic meals, and they ordinarily consisted of larger amounts of food per intended eater than the latter. In addition, in most societies (but certainly not all) feasts usually consisted of certain foods—delicacies, as locally defined—not ordinarily included in domestic meals: for example, pork, fowl, fancy puddings, well-aged fermented breadfruit, or mountain pandanus. (Oliver 1989:291)

In particular, the study of feasting emphasizes the ways that foodstuffs were distributed and consumed amongst participants and noted that there are differences in whether or not they are consumed at the place of the feast or given away, redistributed amongst the attendees to be consumed at a later date. The consistency in these definitions and the ways in which they have been applied to the study of feasting over long periods of time helps researchers to develop a rigorous list of activities that can be used to identify feasting activities—a useful tool as new types of feasts and *lafet* have emerged in contemporary urban Vanuatu⁴.

Anthropologists have been interested in the practice of feasting since nearly the advent of the discipline, with, for example, Franz Boas participating in and writing about feasts as central to his research topic in the late nineteenth century (Rohner 1969). This has been the case in the anthropology of Oceania as well. Thus it becomes clear that feasting can be a productive lens through which we can study a number of other social constructs within society. Gender relations,

³ For a more detailed discussion of Austronesian and non-Austronesian societies and the study of feasting as evidenced in the archaeological record, please refer to Chapter 3 of this dissertation.

⁴ See Chapter Seven for a description of all of the types of feasting activities included in this research.

ideas of “good” mothers, systems of hierarchy, power dynamics, religious systems, identity creation, birthing, naming, marriage, death, systems of resource distribution and redistribution, can all be associated with aspects of feasting.

There have been numerous theories as to the function or reason that feasting plays such a significant role in so many societies across the globe. Sahlins (1972) discusses redistribution of food as a practical function in that it:

...sustains the community, or community effort, in a material sense. At the same time, or alternatively, it has an instrumental function: as a ritual of communion and of subordination to central authority, redistribution sustains the corporate structure itself, that is in a social sense. The practical benefits may be critical, but whatever the practical benefits, chiefly pooling generates the spirit of unity and centrality, codifies the structure, stipulates the centralized organization of social order and social action...” (190)

The study of feasting in anthropology frequently focuses on understanding practices of exchange, gender, social status, and hierarchy within society, particularly the redistribution of wealth as directly linked to social status (Bascom 1970; Friedman and Rowlands 2008; Strathern 1971). Additionally, the ways in which certain foods, particularly yams, circulate within society have also been explored at length, and is an important social dimension of the study of feasting and social status (Oliver 1970; Scaglione 1999; Scaglione 2007; Weiner 1988; Young 1971). Among Polynesian societies, often the focus is on the development and reinforcement of hierarchy and substantial displays of wealth (Kirch 2010b; McMullin 2010; Small 1997). Among Melanesian societies, the focus is on the ways in which power is achieved through negotiation and large displays of wealth that ultimately reveal power relations (Rappaport 2000 [1968]; Strathern 1971; Young 1971). Discussions in chapter three of this dissertation distinguish between Austronesian and non-Austronesian speaking peoples, highlighting the importance of considering ni-Vanuatu people, particularly those involved in this study on the island of Efate as

Austronesians, distinct from their Papuan, non-Austronesian, Melanesian neighbors. This is particularly important to the study of feasting, as ascribed status and the redistribution of wealth are important cultural components of the processes of feasts in Vanuatu even in urban areas of Port Vila today.

Additionally, there are a number of characteristics of feasting behaviors listed here that are emblematic of *lafet* in Vanuatu today, including the gathering of larger numbers of people, eating larger quantities of foods, eating special local foods, and celebrating at a specific and meaningful location. There are a series of behaviors and practices that mark the occasion as a *lafet*, as distinct from other daily practices of food consumption and sharing. The exchange of goods and the practice of feasting are central to marriage and funeral ceremonies across Vanuatu today. This has been written about extensively in the context of contemporary marriage practice in Vanuatu:

Marriage, whether civil, religious or customary, is a contract between not only the parties to the marriage but their families and kin groups. However, this contract is a social, not a commercial one. There are mutual benefits derived from the transfer of the movable property that marks the occasion of marriage. The property exchanged, prepared and received by the various people who participate in the marriage binds them, and any children of the marriage and later generations into a complex web of reciprocal relations. In a country where social security or provision by the state is non-existent and where access to land is vital, the importance of these links should not be underestimated. The material and public commitment of families on both sides on the occasion of a marriage makes a public statement about the relationship of the couple and the two kin groups. It becomes part of the oral history and genealogy of the people and the place.... Marriage and the present and future reciprocal obligations incurred bind together kin groups and communities, thereby providing stability and mutual support networks in addition to reproduction of social groups. (Farran 2004:268-9)

Connecting families and developing and reinforcing involvement in complex reciprocal relationships is helpful for the teaching and reproduction of *kastom* identity and promoting traditional culture, an aspect of ni-Vanuatu society that is particularly valued. This illustrates

how interconnected the practice of feasting is with the *kastom* valuation of community relationships and kin networks.

There are a number of additional ways in which the study of feasting can contribute to our larger understanding of cultural patterns, and a full examination of all of these is not relevant to our discussions here. Aspects most critical to framing the analysis of the ethnographic data on feasting presented in this dissertation include the criteria used to define new examples of feasting activity, the importance of promoting *kastom* practice, and the patterns of feasting behaviors such as consuming special foods and eating large quantities of food in large groups. Therefore, this part of the discussion of feasting serves as just the introduction to the concept and anthropological study of feasting practice. More nuanced details will unfold as the historical and modern cultural patterns of Vanuatu and the Pacific Islands are illustrated in subsequent chapters.

2.3 CONNECTING FOOD SECURITY AND FEASTING

As the field of medical anthropology has developed over the past 45 years, scholars have taken several different approaches in their efforts to better comprehend health systems and the variety of cultural beliefs and practices regarding health, illness and disease. At the intersection of these approaches is a body of literature that seeks to meld theories of critical medical anthropology and political ecology. The result of this synthesis has been the emergence of several different, yet analogous theoretical approaches including the concept of syndemics, the analysis of how two or more illnesses combine to have synergistic effects on an individual's health. Syndemics

emphasizes the reality that disease occurs within the lived experience of an individual, revealing how ineffective it can be to promote health policy devoid of any consideration of cultural factors.

Simultaneously, food studies scholars have begun to examine the ways in which the study of food, particularly in medical contexts, has moved away from an acknowledgement of the larger cultural framework of food preparation and consumption and toward the isolated component parts—nutrients devoid of larger meaning. This reductive framework that divorces foods from their cultural context has been coined nutritionism. This theoretical approach corresponds to the ways that diseases are studied outside the context in which the illness occurs. Therefore, by applying the theoretical frameworks of both syndemics and nutritionism to this research in Vanuatu I reveal the ways that malnutrition, food security, and feasting are intertwined.

The research on feasting is generally divided into those studies that examine ritual very broadly defined and those studies that examine obesity. Historically, the study of feasting in anthropology has examined ritual practice and the ways in which feasts are emblematic of how wealth is redistributed (Mauss 2000 [1954]). In Melanesia, the study of feasting has focused on achieved status within society, particularly the rise of the “Big Man” in a specific region (Sahlins 1963; Strathern 1971) or ritual exchange (Jolly 1992; Scaglione 2007; Young 1971). Furthermore, that focus has been on the role of men in feasts, and much less research has been produced on the role of women and feasts as it relates to child feeding (Kahn 1986; Weiner 1988). Particularly popular in contemporary Pacific Island Studies is the topic of obesity. Much of the newer research on feasting and health in the Pacific has looked at embodiment and obesity as an increasing portion of the population faces epidemic levels of obesity (Evans, et al. 2001; Falconer, et al. 2009; Hardin 2014; Lewis and Rapaport 1995; McMullin 2010). While these are

both compelling and vital topics, neither really addresses ways in which feasting might be linked with food security.

One additional component relevant to the study of food sharing is the research anthropologists have been conducting on theories of kinship, and the ways in which kin networks work together to feed children. Studies of kinship as it pertains to the circulation of children among systems of community and kin caregivers have revealed what many anthropologists have known for decades: that communities work together to help raise children. Nuclear families are important but are merely one aspect of a child's social interaction. They are just one of many ways in which a child meets his or her needs, needs that include both dietary requirements and the social support that are provided through the process of sharing a meal.

Considerable data on the biomedical aspects of health, nutrition and food behaviors in the Pacific are publically available (Pollock 1992), and research on various biomedical causes for childhood malnutrition has been conducted (Pollock 2007). The specific measures of malnutrition in the rural and urban areas of Vanuatu have been described in this chapter. These biomedical systems are complicated by the social and cultural systems of understanding health that are also outlined in this chapter. However, qualitative research on the significance of contributing social factors is lacking. Much of the literature on child malnutrition focuses on child growth standards and micro and macro nutrient deficiency. One result of this is the misconception that children are malnourished because they do not eat enough calories, a reductionist approach that is devoid of the cultural patterns and values of appropriate access to foods and feeding patterns that exist in a larger community framework. In the 2007 Vanuatu Nutrition Survey, the assessors state, "it may be necessary to conduct... in-depth qualitative research to obtain a true understanding of how women make decisions regarding their infant's

nutrition and feeding and what may be needed to enact a change in any non-recommended behaviours” (Knowles 2007:43).

Linking research on food security with research on food abundance and feasting is rare, as few if any scholars have attempted to make these connections. I argue for a new framework that merges the theoretical approaches outlined in this chapter, which I call nutritional syndemics. While syndemics has been used to examine the role of food and nutrition on disease that has largely been through an examination of how poor nutrition exacerbates the symptoms of another co-existing infection or biomedical disease. This plays in to discourses of nutritionism that take a reductive approach to how individual nutrients affect health and illness. However, malnutrition is not explicitly defined. It can be measured through body-mass-index, but there are limitations to the accuracy of that measure (Brewis 2011). Nutritionism has contributed to this problem of defining malnutrition to by again focusing on individual nutrients rather than larger systemic problems of poverty, access to food and gardening land, and culturally based food values. Thus there is a clear need for a new theoretical approach that can begin to address problems of food security more holistically—an approach I call nutritional syndemics.

Throughout this dissertation, I argue that, particularly in urban spaces and modern times in Vanuatu, malnutrition should be examined within this broader framework of nutritional syndemics that acknowledges the local context of food security and feasting. The ways in which kin and community networks work together to provide food for all children, and in doing so knowingly help children cope with food insecurity is important to the discussion of childhood malnutrition in urban and peri-urban contexts. It is evident that there is a real lack of qualitative research on the cultural factors that contribute to childhood malnutrition. Even less explored are coping strategies employed by children in response to food insecurity. The research presented in

the remaining chapters of this dissertation demonstrate the link between feasting and food security, suggesting that nutritional syndemics is a new and effective way to examine these seemingly disparate, yet strikingly interwoven components of the study of foodways.

3.0 BACKGROUND

The prehistory including the early migration and settling, and the later expansion and development of ancient Pacific societies can be understood through archaeological research. Historical documents and archives help us comprehend the cultural impacts of first contact, and the processes of missionization, colonization, decolonization and independence. With such a range of historical events that impact current cultural patterns, it is imperative that a thorough evaluation of the historical position of this region be contextualized with current research and analysis.

Beginning with the prehistoric settling and early history, and moving on to the history of Western colonization, this chapter outlines the nature of leadership, hierarchy, and the legacy of colonial domination in the area. Emphasis is placed on the geographic region of Melanesia, and the nation of Vanuatu as situated in the broader Pacific context. This history provides the foundation for connecting historical influences to present day problems. Ideas of identity creation and hierarchy and the nature of leadership all have historical influences, and contribute to current decision-making processes on a range of issues including health care, infant and young child feeding, and in particular, cultural patterns of feasting.

3.1 PREHISTORIC SETTLING AND EARLY HISTORY

3.1.1 Early Migration into the Pacific Islands

Scholars have been fascinated with the peopling of the Pacific islands since the expeditions of Captain Cook first began to document the widespread distribution of people across the vast expanses of the Pacific Ocean. The archaeological record now shows that people migrated into the Pacific region as early as the Pleistocene, between 45,000 and 60,000 BP. Differences in these dates stem from differences in dating techniques, where luminescence techniques date early settlement from 50,000-60,000 years ago, and radiocarbon dates suggest people arrived 45,000 years ago (Lilley 2006). While archaeologists have yet to settle debates on the range of this timeline, we can be confident that people were in the region at least 45,000 years ago. This is significant as it certainly involved crossing the water that separated the super continents of Sunda (present day Malaysia and part of Indonesia) and Sahul (present day New Guinea and Australia) in some sort of raft (Kirch 2000; Smith, et al. 1993). Notable archaeological sites in this region that illustrate the time depth of the settlement of this region include: Jo's Creek in the Huon Peninsula, New Guinea, 40,000 BP; Lachitu Cave near the Indonesian border in New Guinea 35,000 BP (Lilley 2006); and the oldest Australian site of Devil's Lair south of Perth which is between 44,500 and 47,000 years old (O'Connor and Veth 2006). There is evidence that about 10,000 years later people moved from coastal regions into highland New Guinea (Lilley 2006) and then into New Britain and New Ireland about 36,000 BP (Wickler and Spriggs 1988). This early settling and migration has resulted in extreme diversity in linguistic and cultural practices in the region (Scaglione 2004).

A second “wave” of migration occurred much later with people moving from island Southeast Asia and Taiwan into the Lapita region, which includes the present day countries of Vanuatu, Fiji, New Caledonia, the Solomon Islands, Tonga, Samoa and Papua New Guinea in the area of the Bismark Archipelago. The settling of this region occurred about 3500 BP.⁵ After the Lapita region was settled, there was a period of expansion into a number of the small coral atolls in the Caroline Islands and Marshall Islands about 2000 BP, although there is evidence for several different periods of settlement in Micronesia over the past 2000 years (Kirch 2010a). Finally, there was rapid expansion into the rest of the eastern Pacific islands which includes islands in the range from Hawaii in the north, Easter Island in the east, New Zealand in the south beginning about 1400 BP (Lilley 2006).

Early theories about cultural divisions in this region depended largely on comparative ethnology, such as W.H.R. Rivers’s distinction between “Kava” and “Betel people” (Rivers 1914). The partitioning of the Pacific into the regions Melanesia, Micronesia and Polynesia was popularized by the French botanist and navigator Dumont D’Urville in 1832; however, his “...paper clearly shows the intention to contribute to the racial theories of human variation, and not simply to add to the cartographic collection of the French Navy” (Tcherkezoff 2003:176). D’Urville’s naming scheme was based on many other explorers’ writings on the racial distinctions of the region (for map see Figure 3-1).

While the name Polynesia describes historically and culturally related peoples, the category Melanesia tends to serve as an overly simplistic “catch all” category amassing a multiplicity of Pacific Islanders into a group of people who really do not share a collective cultural history (Clark 2003). After World War II, there was a great surge in archaeological and

⁵ For a more detailed discussion of the Lapita region see the following section on the The Lapita Cultural Complex.

linguistic work in the Pacific (Clark 2003). As a result, theories about the peopling of the Pacific region began to expand greatly as they were now informed by research in all four subfields of anthropology, with biological anthropologists and archaeologists comparing their data with linguistic and cultural anthropologists (Kirch 2010a).



Figure 3-1: Melanesia, Micronesia, Polynesia Map

Note that map does not include Easter Island further to the East that is also included in Polynesia. Base Map (2012) Courtesy of the University of Texas Libraries at the University of Texas at Austin, with edits made by John Fournier.

While the categories Polynesia, Melanesia and Micronesia are still widely and productively used today, some scholars argue that a more appropriate and accurate division is between either Austronesian and non-Austronesian speaking peoples (Scaglion 1996) or between Near Oceania and Remote Oceania (Green 1991). Divisions among Austronesian and non-

Austronesians are based largely on linguistic similarities between Austronesian speakers. Divisions between Near Oceania and Remote Oceania are based largely on the archaeological record and the migration of people into the Pacific in two distinct time periods (see Figure 3-2). Therefore, "...Near Oceania has a significantly greater time depth of human settlement, extending back into the Pleistocene, whereas human incursions into Remote Oceania did not begin until around 4000 BP (in western Micronesia) and were not completed until as recently as 1000 BP" (Kirch 2010a:133). Ultimately the linguistic similarities among Austronesians are a result of migration patterns as people began to populate Remote Oceania. In an effort to recognize that non-Austronesian peoples do not share a common linguistic history, and that most of these people live in New Guinea and to some extent in the Solomon Islands, this group is sometimes referred to by the term Papuan (Friedlaender 2007). These categories align with the early settlement of the region, and in the case of Remote Oceania and the Austronesian speaking peoples, reflect a cultural history that is seen in the archaeological record as well as in current cultural patterns of behavior.



Figure 3-2: Near and Remote Oceania Map

Map of the Pacific islands illustrating distinctions between Near Oceania and Remote Oceania and the known Lapita distribution. While the map depicts the overlap between Near Oceania and evidence from the Lapita tradition, Vanuatu is clearly categorized as Remote Oceania and in the center of the Lapita distribution. Base Map (2012) Courtesy of the University of Texas Libraries at the University of Texas at Austin, with edits made by John Fournier inspired by the work of Lilley (2006).

3.1.2 The Lapita Cultural Complex

Along with the regions of the Bismarck Archipelago, the Solomon Islands, New Caledonia, Tonga, Samoa, and Fiji, Vanuatu was originally settled by people of the Lapita Cultural Complex (Galipaud 2006). This occurred much later than the initial settling of Near Oceania; for, “The initial colonization of Remote Oceania occurred in the interval 3200-2800 BP by bearers of the Lapita culture...” (Petchey, et al. 2011:29), or possibly as early as 4000 BP (Kirch 2010a). The Lapita Cultural Complex raises a number of questions for archaeologists and anthropologists of Oceania, and “The mystery and exoticism of Lapita stems from its sudden appearance, marked

by a fully developed elaborate ceramic technology and decorative system, with no obvious immediate precursors and also by the relatively sudden disappearance of that same system” (Sheppard 2009:1).

Because of the sudden appearance of a fully developed style of ceramics, archaeologists have been seeking connections between Lapita and regions in Southeast Asia, where some scholars argue the Lapita people originated. At the Teouma site in Vanuatu archaeologists found “...that certain aspects of the burial practices at Teouma, such as the placement of skulls and other bones in pots and the use of pots in burial ceremony, have close parallels with burial practices in Neolithic Island Southeast Asia, including Taiwan, during contemporary and slightly earlier periods” (Bedford, et al. 2009:230). This parallels discoveries in genetic research and biological anthropology, and suggests that Lapita expansion from Southeast Asia might have originated from Taiwan (Chow, et al. 2005).

The Lapita culture is named for its distinctive ceramics style that can be found throughout the region (see Figure 3-3). Lapita is an archaeological construct that has both a horizon (in that it is found across a large geographic space in the same time period) and a tradition (in that it demonstrates a series of changes over time) (Kirch 1997). Lapita ceramic design is very standardized throughout the region:

...the dominant feature of the Lapita style is the repetitive combination of sets of dentate or “toothed” stamps pressed into the clay prior to firing. These stamps were applied in a regular and highly consistent manner, usually in bands or zones encircling the upper parts of pots, largely on the exterior but in some cases including the rims and extending into the interior surfaces. The patterned manner in which the stamped “design elements” were combined to form particular motifs, and with which the motifs were then applied across vessel surfaces, is so consistent that Sidney Mead and others have subsequently been able to write “grammatical rules” underlying the decorative system. (Kirch 1997:12-3)

Characterized by highly decorative and elaborate designs that cover much of the pot surface, Lapita ceramics are found in a range of sizes, shapes and were used for a number of different purposes.



Figure 3-3: Lapita Pottery

Lapita pottery found in Vanuatu, dating to 3,500 BP. Housed at the Vanuatu Cultural Centre and Museum.

However, Lapita culture represents much more than just a style of pottery (Sheppard, et al. 2009; Valentin, et al. 2010). Innovations associated with Lapita culture include:

(1) Lapita pottery and its distinctive decorative system using dentate-stamping (i.e., using a toothed tool), incising, and probably painting...(2) a distinctive stone-adze kit not known in earlier assemblages from the Bismarcks, (3) a distinctive range of shell ornaments, and...(4) the spread of Bismarcks obsidian east into Remote Oceania and back west into Southeast Asia. (Galipaud 2006:229)

In addition, Lapita culture is also characterized by similarities in linguistic structure (Blust 2008; Donohue and Denham 2008), and the technological achievement of the sailing outrigger canoe (Kirch 2010a).

There is much debate about how Lapita first expanded into the region (for map see Figure 3-4), and whether this was a rapid or slow expansion, but there is now general agreement that it was intrusive, and not an indigenous development (Denham 2006; Kirch 1997). The most likely theory is the “slow-boat” model, “...in which the intrusive populations not only interacted with pre-existing Papuan-speaking communities in the Bismarcks, but intermarried with them as well” (Kirch 2010a:137), before colonizing the rest of Remote Oceania (Kayser, et al. 2008). This accounts for linguistic and genetic changes that have been documented by research in biological anthropology (Friedlaender 2007; Petchey, et al. 2011). During the time of Lapita, there was likely trade and contact between groups throughout the region (Bedford, et al. 2009). One example of this can be seen in Kolombangara in the Solomon Islands, where there is evidence from some Lapita sites that Lapita pottery was produced locally and traded with other distant locations (Findlater, et al. 2009).

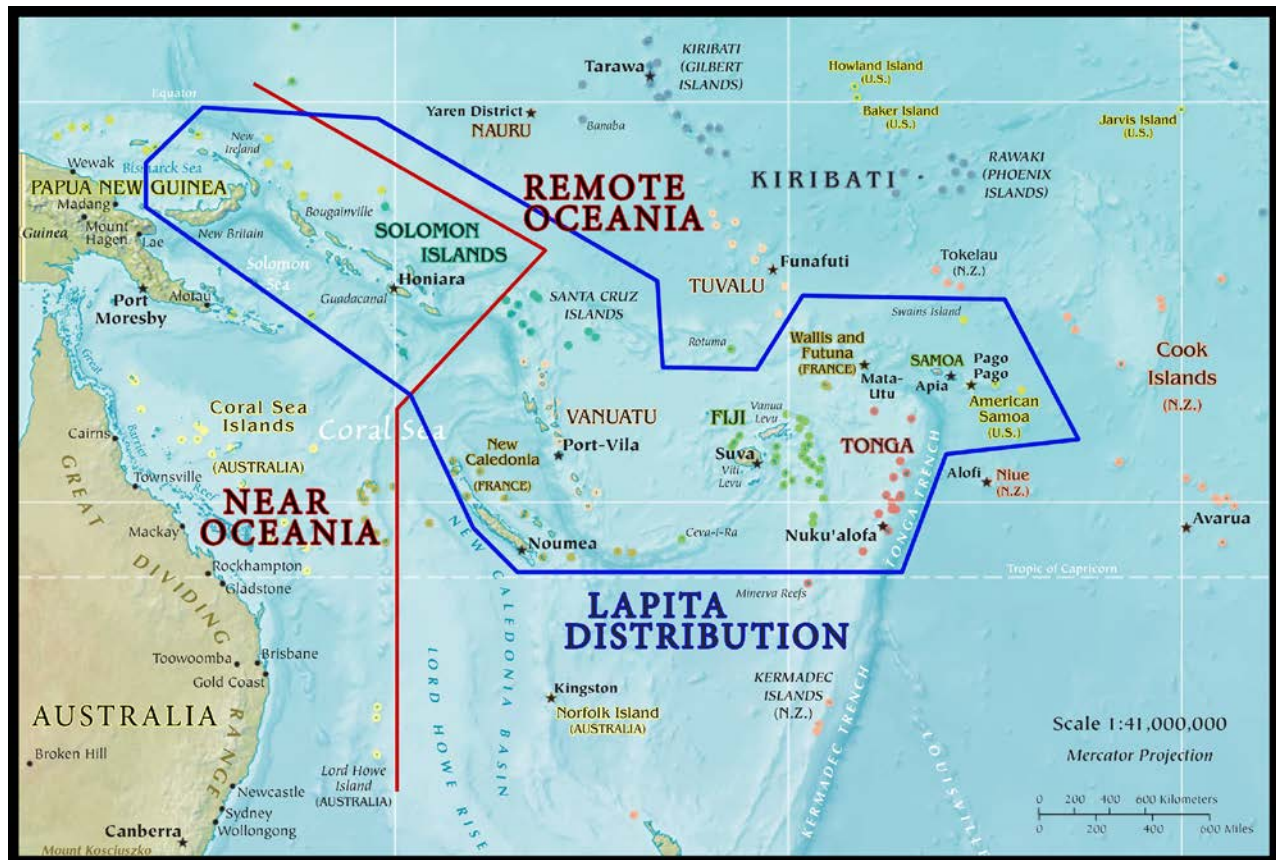


Figure 3-4: Lapita Distribution

Map illustrates the range of the Lapita Cultural Complex as well as the division between Near Oceania and Remote Oceania. Base map (2012) Courtesy of the University of Texas Libraries at the University of Texas at Austin, with edits made by John Fournier and inspired by the work of Kirch (2010a).

Much research has been conducted comparing Lapita pottery found throughout the region, and analyzing changes in the styles through time (Burley 2007; Kirch and Rallu 2007; Sheppard, et al. 2009). Over time, “Lapita [pottery] evolved into Polynesian Plainware by about 2600 BP....Plainware ended throughout Fiji about 1,500 years ago, to be replaced by decorated wares suggesting connections with northern Vanuatu” (Lilley 2006:17). Another distinctive style of pottery is that “of incised and applied-relief Mangaasi ceramics” (Lilley 2006:17) found in northern Vanuatu (for map of Vanuatu see Figure 3-5). However, recent evidence suggests that Mangaasi ceramics developed out of post-Lapita ceramics about 2000 BP. Similarities between

ceramics found in Fiji and the Mangaasi ceramics in Vanuatu, as well as obsidian from Vanuatu found in Fiji demonstrate continued traded in the Lapita region (Spriggs 2003). The Lapita Cultural Complex existed for a couple millennia before people expanded north and east into Micronesia and Polynesia.

3.1.3 Hierarchy and the Nature of Leadership in Prehistoric Vanuatu

Archaeological research in Vanuatu was very limited until the late 1970s and 1980s, and as a result the archaeological history of the country has only recently begun to expand (Kirch 1986). Furthermore, it is difficult to reconstruct the exact nature and extent to which a society employed a system of hierarchy in its political structure based on the archaeological record (Scaglione 1996). However, in comparing archaeological data with linguistic and cultural anthropological research, we see similarities between groups in the southern Tafea region of Vanuatu and Polynesian culture, including similar spiritual figures, the notion of both sacred and talking chiefs, and the occurrence of Polynesian loan words in languages throughout the Tafea region (Spriggs 1986). Much of this similarity is related to distinction between Austronesian and non-Austronesian-speaking peoples, where Austronesians have a heritage linked to that of the Lapita (as well as other peoples), dating back approximately 6000 years ago (Foley 1986), and the geographic region of the Lapita culture lies within the expansive geographic region of the Austronesian-speaking peoples (Bellwood, et al. 1995). While there is debate as to when Austronesian cultures first populated Melanesia, the Lapita culture “...is the first generally agreed upon Austronesian prehistoric culture recognizable in Melanesia” (Scaglione 1996:2). In fact there is linguistic and archaeological evidence that Austronesians settled throughout Vanuatu, not just in the Tafea region, which is illustrated through the presence of proto-Austronesian languages in indigenous village languages on Efate, Malakula, Espiritu Santo, and Erromango (Lightner and Naupa 2005).

The cultural history of Vanuatu is varied, and in the pre-colonial era, there were more than 113 different Austronesian languages and a huge diversity in political styles and leadership throughout the archipelago. Leadership was hereditary in Aneityum in the south, while on neighboring Tanna island it was “...situational and contextual, diffused and dependent on acknowledged access to and control of ritual knowledge” (Douglas 1998:228). On Tanna, those with access to knowledge of traditions and ritual practice held power. However, on Efate and:

...central Vanuatu there were titled positions of community leadership, transmitted on a hereditary basis, similar to those found in western Polynesia. In the northern region, into which Ambrym falls, leadership was rarely hereditary, but instead associated with participation in a series of rituals concerned with status alteration [known as graded societies]. (Bolton 1998:181)

In these ‘graded societies’ men and women advanced in the hierarchy, earning a new title at each stage (Deacon 1934; Jolly 1994; Lindstrom 1997; Speiser 1996). Thus, styles and systems of leadership have not followed a consistent style throughout the region.

While there are variations between islands, a consistent pattern of some form of hierarchical system is present in throughout the country; many of the village cultures of Vanuatu were characterized by a number of different small chieftainships. This evidence supports the theory that there are clear parallels between Austronesian-speaking peoples and hierarchical systems and chiefs (Scaglione 1996). Drawing on linguistic data, a number of researchers have studied the proto-Austronesian term *datu* (chief), finding that the term has a complex series of meanings. In fact, there are:

...at least four components of meaning in the definition of *datu*: (1) political leader, chief; (2) priest, custodian and administrator of customary law, medical practitioner (hence religious, legal and medical authority = traditional scholar); (3) aristocrat, noble; and (4) ancestor, grandfather, elder. (Blust 1980:217)

The range of meanings outlined here helps scholars understand how hierarchical systems might develop in this region. In fact, the examples described above in Vanuatu illustrate that power and

authority can be managed in all four of these different ways. Of central concern to this research is the ways in which hierarchy is measured in central Vanuatu, and on Efate in particular, which manifests most regularly through a political leader, chief, priest, administrator of customary law and medical practitioner.

As ni-Vanuatu⁶ are of Austronesian heritage, it is not surprising to find a number of hierarchical systems of varying degrees throughout Vanuatu. For example, on Aneityum:

All early accounts agree as to the presence on the island of patrilineal hereditary chieftainship. It is often stressed in the missionary accounts that the 'civil' role of chiefs was inextricably bound up with their 'sacred' role. Chiefly power was based, as in many small-scale chiefdoms...on ritual rather than physically coercive powers—power of sorcery against enemies, power over the elements to control success in agriculture and fishing, and so on. (Spriggs 1986:12)

Chiefly power was also displayed through the practice of feasting and the redistribution of surplus foods, a practice chiefs engaged in with other chiefs from neighboring regions or areas. As such, there is some evidence that chiefly power expanded in many regions with the development and expansion of irrigation systems for increased agricultural production (Spriggs 1986). While we do see variations of the 'Big Man' system that is widespread in Papua New Guinea (Lindstrom 1990; Sahlins 1963) in Vanuatu, it is likely that they were relatively new, appearing around the time of first contact with Europeans (Spriggs 1986). This fits well with other studies of Austronesian cultures which find that it is not uncommon to see shifts toward more egalitarian models among Austronesian-speakers, but conversely it is extremely rare for a non-Austronesian society to adopt a hierarchical system (Scaglione 1996). To put this in larger, regional context, Austronesian societies can weaken and diffuse, taking less hierarchical forms,

⁶ The term ni-Vanuatu refers to the indigenous people of Vanuatu as a whole, and indicates that the person is 'born' in, or 'from' Vanuatu. It does not distinguish people as from different islands or cultural groups. The term was developed at the time of independence, when the name of the country changed from the New Hebrides to Vanuatu. Development of this term was in part an effort to work toward a national sense of unity among groups of people who had not previously been united except through colonial rule. Ni-Vanuatu is both singular and plural.

but there are arguably only two examples of non-Austronesian societies coalescing into larger hierarchical groups. This evidence further exemplifies the need to analyze Vanuatu prehistory in the context of Austronesian and non-Austronesian cultural groups.

In a more detailed analysis, it can be productive to discuss examples of weaker hierarchy or hierarchical patterns that appeared to be in flux. What is of importance to Efate in particular is the distinction between indigenous systems of power and those systems that were a result of back migration from Polynesian islands into Vanuatu late in the archipelago's history but prior to European contact, for example in the fifteenth century. The villages of Ifira and Mele on Efate, important sites for this research, are Polynesian outlier settlements. While we see evidence of Polynesian back migration on several islands of Vanuatu, this should not suggest a resulting replacement of previous cultural practices. Spriggs (1986) explains this case for the Tafea region in southern Vanuatu writing:

While the outward trappings of chiefly rank on Aneityum and Tanna may owe a lot to Polynesian models, the basis for political power was indigenous. Indeed, instead of seeing Aneityum as an evolutionary transformation of a Tannese-style system it is possible to view Tanna as a 'devolution' in political power from a formerly more hierarchical system...Chiefly titles therefore may have been declining in importance on Tanna rather than being recent 'diffusions' from Polynesia which failed to take hold, whereas on Aneityum the basis for chiefship had shifted but chiefly status was maintained. (18).

Understanding how systems of power have shifted and changed in Vanuatu is therefore rooted in analyses of hierarchy in Austronesian societies. With the relatively short history of human occupation of the islands of Vanuatu, the prehistory has direct links to discussions of traditional practice, particularly in the context of hierarchy and leadership.

3.1.4 Legacy of Chiefs on Modern Values and Authority

While the role of the chief has changed dramatically as a result of colonialism and missionary influence, chiefs remain important to societies across the Pacific (Carrier 1992; James 1997; White and Lindstrom 1997). A common thread between Pacific societies is the changing role of the chief in a time of increasing globalization. White and Lindstrom explain:

Positioned between local (ethnic, tribal) constituencies and the apparatus of nation-states, the “chief” stands at the intersection of local, national, and global political cultures. Just as the “chief” once occupied a strategic position in colonial systems of indirect rule, so today he finds himself mediating local realities and larger spheres of national and transnational interaction. Far from premodern relics, the chiefs of modern Pacific states increasingly figure in the rhetoric and reality of national political development. It is our contention that the renewed significance of chiefs, and the debates and disagreements that surround them, emerge from a collision of discourses of identity and power circulating in the Pacific today. In some cases these collisions produce demands for the revitalization and reempowerment of traditional chiefs; in others they evoke attempts to constrict or regulate their power. Either way, the controversies and contestations provide a window onto the course of social and political transformation in the Pacific today. (1997:3)

It is becoming increasingly common for chiefs to reposition themselves politically as they grapple with new problems, including a rise in the number of chiefly titles, and therefore, a rise in the number of people in positions of power. Frequently chiefs must negotiate a place of traditional leadership within new western styles of government installed in countries after colonial rule.

Just prior to independence, Vanuatu established the National Council of Chiefs in 1977, as a way to help with the transition from colonial rule to independence. However, “Like the political identity of *jif*⁷ itself, the National Council was rooted in both colonial and indigenous practices” (Lindstrom 1997:214), and therefore has been blending ideas of *kastom* and tradition

⁷ *Jif* is the Bislama term for Chief.

since its inception. At its first meeting, the National Council of Chiefs changed its name, instead giving itself the *kastom* name of *Malvatumauri*. *Malvatumauri* is a combination of three words central to the ideas of chiefs in Vanuatu: “*Mal* means *jif*. *Vatu* means stone, or island, since all land rests upon stone. *Mauri* is something that grows and expands in the light” (Lindstrom 1997:217). The *Malvatumauri* has 22 slots for chiefs appointed from all of the regions of the country. In an effort to expand participation of *kastom jifs* throughout Vanuatu in decision-making processes, there is also a National Conference of Chiefs held every two years, which is open to all *jifs*.

Jifs in Vanuatu are particularly interested in the role of land ownership and leasing, and constitutionally *ni-Vanuatu* can own land, while foreigners cannot (Miles 1998). There are serious problems with 99-year leases to expatriate landowners, arguments as to who profits from those leases when the land is ‘owned’ by a number of different individuals within a family group, and arguments over who has rights to lands that were taken away generations ago by colonial powers. Land disputes are becoming increasingly common, and the slow pace at which the government responds to these problems continues to frustrate the *ni-Vanuatu* (Rodman 1987). In fact, access to land for subsistence gardening is directly linked to food security, which is discussed in greater detail in chapter four, making the role *kastom jifs* play in land use claims important to future policy implications of food security issues in Vanuatu.

Article 74 of the Vanuatu constitution states that the government should consult with the *Malvatumauri* in regards to land law; however, that has happened only once since independence in 1980 (Lindstrom 1997). Ralph Regenvanu, an anthropologist, former director of the Vanuatu National Cultural Council and former Minister for Justice and Social Affairs, has worked closely with the *Malvatumauri* for many years and is a strong supporter of customary law and land

ownership. At the time of writing, Regenvanu serves as Minister of Lands and Natural Resources, having been appointed to this post March 23, 2013. In this capacity he is focused on encouraging an agricultural economy, supporting customary landowners, and reforming procedures for land leases, particularly in Port Vila and on Efate, where growing population and increasing tourism have placed an extra strain on land resources. In November and December of 2013, the current government coalition achieved the required two-thirds majority to make changes to the Vanuatu constitution. Led by Regenvanu, new land reforms were introduced into law, and the role of the local *jifs* in arbitrating land conflict was more clearly outlined to help streamline the review and settlement of land disputes (Graon mo Jastis Pati 2014). It is likely that *jifs* and the *Malvatumarui* will play an increasing role in helping to settle land use issues in the future if Regenvanu remains as Minister.

Jifs have other limited roles in the government in Vanuatu. For example, they can issue “*kastom* marriage certificates” for individuals who do not marry within the Christian church. In addition, they serve important roles in local judiciary and policing systems in towns. This is particularly true in the case of Port Vila, Santo and other more urban settlements (Lindstrom 1997). As crime in these urban areas, particularly in Port Vila, increases with the influx of people moving to the city who do not own land or have jobs (Mitchell 2004), the role of *jifs* in the legal system has growing importance. Vanuatu continues to grapple with a system of government that simultaneously wants to incorporate *jifs* into government decision-making while ensuring that *jifs* remain separate from state politicians.

In addition, “Today’s talk of *kastom* takes place in a broader context, and addresses a wider audience than it did back in the 1970s. Once largely centered on problems of new national identity, *kastom* nowadays speaks to new problems that emerged following Melanesia’s ongoing

incorporation into global, political and economic structures” (Lindstrom 2008:174). *Kastom* was originally a missionary term used in a negative context to illustrate heathen practices that stood in opposition to Christianity (Bolton 2003). Ideas of *kastom* then shifted toward anti-colonial sentiments, and the promotion of independence (Bolton 2003; Bonnemaïson 1986).

In the present context, *kastom* represents new ideas about how to preserve tradition and respond to problems associated with globalization, and it now has a positive connotation. The term *kastom* is used pervasively throughout Vanuatu and can refer to a wide range of objects and ideas. For example, less often *kastom* is used to refer to things like “*kastom* toilets” (outhouses), which are not associated with traditional practices or meaning, but refer to non-modern items. But more frequently, *kastom* refers to specific ‘traditional’ practices (Bolton 2003). Lindstrom and White (1993) explain: “...constructions of tradition are, at some level, always (1) about the present, (2) historically contingent, and (3) oppositional...separating the indigenous and the Western” (470). Ultimately, “...*kastom* came to indicate the practices and characteristics that distinguish ni-Vanuatu from other people....*Kastom* in Vanuatu developed as an indigenous concept quite distinct from anthropological notions of culture or tradition. It became a marker of difference, a means of making distinctions” (Bolton 2003:25). This distinction should inform any discussion of traditional practices in a modern context in Vanuatu. In fact, this research will illustrate how the language of *kastom* is used to describe feasting practice in urban, peri-urban and rural areas. As feasting is tied to systems of hierarchy and traditional cultural practice, the historical context of *jifs* and *kastom* is critical to our understandings of modern feasting patterns and the deviations that women permit for children who are food insecure.

3.1.5 Prehistory and the Study of Feasting

Food and feasting are important to the study of social and political systems both in modern ethnography and in archaeology. The archaeological study of chiefdoms and plays a key role in our understanding of hierarchy in society, and this can be understood by the study of feasting. There is a vast range of hierarchy displayed prehistorically across the Austronesian speaking islands in the Pacific, and the study of feasting can contribute to, among other things, our understanding of social stratification, regardless of whether the society is loosely or highly stratified.

To a limited extent, some evidence of Austronesian feasting has been unearthed, and often this is linked to the expansion of agricultural land. Increased production of surplus goods, particularly food items indicates more complex social organization, and as Kirch (2000) explains, "...[feasting], tribute offerings to chiefs, taro and pigs for religious ceremonies, production for external exchange—all of these combine to create an economy of surplus, or perhaps we should say, of ceaseless extraction of surplus from individual households that otherwise might be thought of as intrinsically antisurplus" (319). The intensification of agriculture in Austronesian societies indicates the ability of household units to contribute to and participate in feasting activity. More intensive agriculture covering larger geographic areas can indicate more complex stratification within the society and potentially a more powerful paramount leader. Complex agricultural systems and an intricate network of feasting events tends to be most robust in parts of Polynesia with very complex chiefdoms, or kingdoms like in Hawai'i, and with the Maori of New Zealand.

However, these are also seen in the relatively smaller chiefly systems of Vanuatu. Archaeologically this can be documented through the development of extensive irrigation

systems and canals (Kirch 2000). The large-scale transportation of water is important both for intensive agriculture and to support larger communities of people in areas where access to drinking water could be limited. Such complex irrigation systems indicate that the land connected by the network of canals was all under the control of a central ruler, not because the chief would need to organize the labor to create them, but because water supplies in these large canals are very susceptible to an array of factors that could disrupt the flow. A political leader who could be aware of and manage potential and likely disruptions would be needed to coordinate canal systems like those found on Aneityum, where the canals cross district boundaries and cover nearly 69 hectares (Spriggs 1986). It is also possible to draw links between the expansion of the canal system and patterns of feasting. Spriggs (1986) explains the link between agricultural intensification and political structure on Aneityum, writing, “It was the chief’s power to appropriate surplus production for feasts in order to maintain his prestige which required the expansion of the irrigation systems. An expansion in one district or dominion would necessitate expansion in the others to match food presentation, taro for taro, up to the limits of the productive capacity of the island” (16).

Often in Austronesian societies the expansion of agricultural systems is associated with political systems of hierarchy, rather than egalitarian systems common among non-Austronesian speaking peoples, where power is still achieved through competitive feasting, but that power is achieved without regard to lineage. Thus distinguishing between Austronesian and non-Austronesian speaking peoples can be helpful for cultural analysis. However, due to the nature of feasting and the types of materials that can be preserved in the archaeological record, prehistoric evidence of feasting is very difficult to obtain and measure, and it is best preserved in societies that show stronger evidence of high stratification. Nevertheless, archaeologists continue to

progress in the examination of feasting patterns, often drawing on ethnographic data and ethnology to help with the restrictions of the archaeological record.

Even in societies with less extensive forms of stratification, evidence of feasting can manifest archaeologically. Marquesas feasting could be marked both by a difference in the type and amount of food, as well as the physical place in which it was consumed. Archaeological work in the Marquesas has revealed the remains of feasting places marked by physical structures called *tohua*. The spaces marked for *tohua* could be quite substantial with central plazas surrounded by terraces for chiefly houses and for spectators to watch dancing, and separate structures erected to house the food preparation activities (Kirch 2010b).

In Hawai'i clear class distinctions are documented, and the ruling class placed a heavy demand on the working classes to keep up with the feasting demands of the elite (Kirch and Sahlins 1992). The longevity of the Hawai'ian kingdom post western contact has certainly contributed to our knowledge and understanding of systems of feasting and food sharing in Polynesia, among Austronesian speaking peoples. This provides an advantage to the study of feasting within strong chiefdoms in Austronesia. However, an examination of the archaeological record continues to play an important role as, "...chiefly residences ought to be differentially marked from commoner habitations by the presence of prestige food items, especially the bones of pigs, dogs, and certain kinds of fish (such as pelagic game fish)" (Kirch 2010b:180). This example illustrates how ethnographic descriptions of the structure of feasting practice inform archaeological practice, and likewise ethnoarchaeology can continue to provide productive forms of comparison and analysis for cultural anthropologists working with Austronesian speaking peoples. It is notable that hierarchical distinctions in Polynesia and Austronesian societies are based on class, rather than gender. Many examples demonstrate how women were able to gain

very high status, and were more socially prestigious than men in lower ranks. This is important to changing patterns of feasting, as this research demonstrates ethnographically how women enact changes to the customary practice of feasting as they help children to cope with food insecurity.

As another method of marking class distinction, feasting also plays an important role in body size. The parallel between physical size and class is evident in several Polynesian societies, and was often documented at first contact by European explorers, who would remark at the large bodies of leaders, and at the feasting events they witnessed. This has been documented in Tahiti, the Marquesas, among the Maori, and in Hawai'i (Oliver 1989). Making explicit this link, Kirch (2010b) writes, "... the Hawaiian chiefs had carried to an extreme the widespread Polynesian cultural logic that chiefs should naturally be bigger than their subjects, but it appears they had also co-opted the feast as a distinctly chiefly form of consumption..." (178). With the extremely stratified societies in the Hawai'ian Islands, the distinction between elites and non-elites was much more marked both in physical space and in physical bodies than in other areas. Nonetheless, this type of distinction in physical size cannot be discounted in analyses of feasting among Austronesian speaking peoples.

3.2 EXPRESSIONS OF GENDER

Expressions of gender in the Pacific are incredibly diverse, which makes analysis and summary generalizations extremely difficult. Like other cultural markers, gender roles in remote Oceania among Austronesian speaking peoples in Micronesia, Polynesia and Island Melanesia are much more homogenous when compared to non-Austronesian speaking peoples. In this region much of

the gendered structures in society are a reflection of hierarchy within chiefly systems rather than gender domination. Both women and men occupy differing levels within the social structure of a society, which are a reflection of kin ties. For example, a chiefly woman can hold more power and prestige than a man of a lower rank. In many societies, with the last Hawaiian Queen Liliuokalani as the most famous example, women were able to achieve extremely high social status (Kirch and Rallu 2007; McMullin 2010). Consequently, using the archaeological record and linguistic studies as further justification, it is productive to also analyze gender roles in the context of Austronesian and non-Austronesian speaking peoples. For the purposes of this study, patterns of Austronesian culture are most relevant; therefore, non-Austronesian regions are excluded to allow a more complete presentation of Austronesian culture, with examples stemming primarily from Vanuatu.

Men and women of the same rank often perform separate tasks, but all contribute important societal roles. Explained in the context of Pohnpeian society, “a man can be the male head of household and a woman can be the female head of household—for the same household. Pohnpeians say a wife is the outrigger for her husband’s canoe, steadying him for their shared journey—without her, the vessel will go nowhere” (Ward 2005 [1989]:149). Thus, gender roles among Austronesian speaking peoples are probably best described as a type of power sharing, where male and female roles do not reflect an ultimate equality but a complementary balance (Keating 1998; Kihleng 1996). Men and women will have more or less power in a given situation as determined by activity rather than one gender exerting absolute dominance over the other. For example, in Pango Village, on Efate, Vanuatu, land is inherited through the male line; however, totemic clan membership passes through the female line. As men and women participate in ritual within their clan, decision-making processes involve men and women. Both

men and women can hold leadership roles within their clans and can be called upon to represent their clan at the chiefly council or in other village wide activities. In some totemic clans, women are specifically encouraged to take on leadership roles in an effort to diversify the representation on the chiefly council. In addition, some argue that women leaders within clans are critical to giving voice to “women’s issues,” reinforcing the idea of multiple heads of households. Participants in this research explained that women are better able to understand issues of childrearing, that other women may feel more comfortable bringing their concerns to a fellow woman, and for these reasons it is important to include women in leadership roles within totemic clans. These examples illustrate that members of the same social rank will work together to support each other in maintaining social status and fulfilling the social obligations of their rank.

While both women and men often have the ability to achieve high social status, the work of daily life is frequently gender segregated. Women and men have distinct roles in the production of food and wealth, and women rely heavily on other women to help and support them with their tasks, just as men rely on other men. This is common among Austronesian speaking peoples as in Pohnpei:

groups of sisters-in-law cooperate in labor exchanges particularly for feasting and farm work. When a woman has obligations or troubles, her sisters-in-law are her best allies...They form the organizing committee for family-centered celebrations; the primary ones are marriage proposal feasts, “tied by the church” or wedding feasts, “mother’s milk” feasts for first births, and first-year anniversaries of family members’ deaths. (Ward 2005 [1989]:147)

This example illustrates that women’s work is closely associated with tasks of food production, childrearing, and preparing textiles for celebrations. Therefore, a closer examination of gender roles can be made through a study of material culture, which allows researchers to make connections between archaeological, early historic, and modern studies of gender and material culture. This frames subsequent discussions, particularly in chapter six, of the gender-segregated

practice of child feeding. Women are the primary caregivers of children in Vanuatu and both in daily practice and during community feasts. It is women who complete the work of cooking traditional foods and directly serving children, women who weave mats and sew cloths that contribute to familial gifting practices, and women who permit children to breach *kastom* practices and eat at community feasts when they are food insecure.

3.2.1 Food Production

One way that gender is marked in material culture is through food production, preparation and consumption. Gendered division of labor through gardening, hunting and fishing is an extremely popular topic among ethnographers. One detailed ethnographic example comes from Kahn's (1986) work in Wamira, in the Milne Bay Province of southeastern Papua New Guinea among Austronesian speaking peoples of Island Melanesia. Kahn explains that Wamirans are constantly discussing their condition as a state of famine, "*gomara*," and perpetual hunger; however Kahn demonstrates that they are not nutritionally lacking, and they are all getting enough food. Wamirans also note that generosity is the highest of all virtues and that, particularly with regard to food, people must always share and never be greedy. When an individual claims there is "no food" more accurately they are articulating that there is not enough to share.

Women work regularly in their gardens, and they have crafted elaborate mechanisms for concealing food in an effort to avoid sharing. There are multiple layers to baskets, and foods may be wrapped in several layers of leaves or cloth to prevent others from seeing it. Taro, Wamira's staple crop for both domestic consumption and export, is also gendered. Men plant and exchange taro, and it symbolizes personal status, virility, power, wealth and the extent to which men can demonstrate power through magic skills related to gardening. Women also work in the taro

gardens weeding. Women's work in taro gardens is considered communal, while men's contributions are primarily individual, except when they need help to clear large areas. Men keep the stalks of the taro to replant, and these are passed down as a way for men to control regenerative abilities (Kahn 1986).

Pigs and the distribution of pork is another important example of food-based gender roles and sexuality in Wamira society. Kahn asserts:

Men do not have female reproductive powers, but adopt them through symbol and metaphor in the realm of the pig. In this way men can escape the "double bind" of their male existence: Men are dependent upon women's fertility to reproduce themselves and achieve immortality, yet these children perpetuate their mother's, not their father's, lineage....The exchange of piglets for domestication is tied into the existing relationship between a woman's husband and her lineage "brothers." The exchange signifies the positive, nurturing aspects of female sexuality. The exchange of pork for consumption, which also occurs between affinally related men, emphasizes the negative feelings of the relationship. ...During the exchanges of both piglets for domestication and pork for ingestion, pigs are female surrogates that are separable from physical female sexuality and, as such, can be manipulated and controlled by men to escape their "double bind" (1986:89).

Thus it is clear that social relationships and gender roles are expressed through the production and distribution of food. When linking back to Kahn's original questions and analysis about hunger amongst a people who are not nutritionally deprived, we now see that what Wamirans are really expressing are gendered social relationships. Kahn (1986) concludes, "Whereas "hunger" implies need, neglect, and antagonism, "enough food" indicates cooperation, sharing, and amity. In either case, the statement is about social relationships and emotional feelings, not about nutritional deprivation" (34). Kahn's ethnographic example directly parallels data presented of ni-Vanuatu women's support of community systems of sharing and supporting the broader community evidenced in community feasts. Symbolic representations of food and feeding practice as a means of communication and in establishing and maintaining social and

hierarchical relationships is of far greater consequence to the ni-Vanuatu, and to *kastom* than nutritional values and balance. Also important is women's agency in permitting breaches to these important *kastom* practices so that through community feasts, women can help feed food insecure children, as described in chapter eight. Wamiran and ni-Vanuatu practices are also parallel in the context of gendered divisions of labor in garden work and child feeding.

3.2.2 Textile Production

The production of textiles is important to many Pacific cultures, and similar to food, is divided by gender. Typically women are charged with the production of the textile, while the design or imprint represents a clan or kin relationship. The type of textile that is produced varies regionally, with tapa bark cloth the most common type of textile among the Austronesians in Polynesia. Producing tapa is a labor-intensive project, and as a result, many women work together to produce the textile. Historically, a commoner woman produced tapa for a chiefly woman; however, that practice has diminished significantly since the turn of the twentieth century. Now, women generally work in groups to help each other with the laborious task of producing a number of tapa cloths for use in weddings and ceremonies (Small 1997).

In Vanuatu, the most common type of textile production is the plaiting of pandanus mats. The analysis of textile production in Vanuatu, particularly in Ambae provides a clear example of textiles as they are used to express gender relationships. Frequently museologists examine food and textile production as separate endeavors. However, Bolton helps to illustrate that they are actually inextricably linked through ceremony and status alteration systems, a link that is seen throughout Vanuatu and the Austronesian-speaking region.

Textile and food production are both important aspects of women's gender roles in Ambae, but the textiles are not permanently associated with an individual as one might assume. Rather, textile and food production are joined through a women's status-alteration system called *huhuru*, which is contrasted with men's status-alteration system called *huge*. In describing textile production in Ambae, Vanuatu, Bolton (2003) explains:

Women's production of textiles is not only communal in that women plait together. It is also communal in that a woman, in making a *maraha* or a *qana*, is not making an object with which her name and labor will continue to be associated after it is exchanged. A textile is not more valuable because of who has owned it or made it (though the quality of manufacture may be recognized and admired)...it is textile types that are important, not individual textiles (122).

It is not surprising that textile type is so important as it determines social rank for women as they seek to gain social status through the production and exchange of particular types of pandanus mats. Today, the importance of particular types of textiles is still evident in ceremonial exchange. For example, on Efate, Vanuatu, during weddings and funerals, gifted mats are sorted by type, those that are relatively plain, those with various colored patterns woven into the design, those with yarn fringe, and those with feathered fringe, and there is a different value associated with each type.

Status-alteration procedures vary widely across Vanuatu and the rest of the Pacific. Most research on status-alteration systems focuses on men. For example, "Men's status-alteration systems most usually revolve around pigs, although there were and are systems which at least at some point involve other animals such as fowls....The achievement of status can express greater social, economic, spiritual or political power and authority" (Bolton 2001:254-5). However, there are well-established systems dominated by women, particularly in Northern Vanuatu. Bolton (2001) explains that in some areas these systems produce aristocrats (as in north Pentecost, Vanuatu), while in others it is a rite of passage for all women (Central Maewo, Vanuatu). In the

case study of *huhuru*, all of the married women of Ambae participate, with women achieving various levels of social status through enacting specific rituals. Bolton argues that in Vanuatu, there is a need to differentiate between people of different status, but that there is a desire that the differences between status not be too great so as to prevent jealousy and sorcery that could result from significant hierarchical differences.

The *hururu* of Ambae is based on the "display and exchange of pandanus textiles" (Bolton 2001:256). This is closely linked to *singo*, a special type of textile that exhibits one's social status. There are two types of *singo* that are divided along gendered lines—*singo tuvegi*, or small textiles that men wear from a belt at the front, and *singo maraha*, which is a piece of textile that is attached to other textiles used in exchange. Those individuals who are able to produce these textiles are also the only people who are able to produce the types of food that are associated with these textiles; thus, food and textiles are linked as important parts of gendered material culture. This example illustrates that the classification of materials needs to be completed within cultural context, not through Western terms or cultural ideals. Examining pandanus textile production within the cultural context of Vanuatu society allows anthropologists to realize that textiles and foods should sometimes belong in the same category, and are linked in ways that they are not in other societies. This example shows that understanding material culture through food and textile classifications can be as important to anthropological understandings of culture as comprehending kinship systems (Bolton 2001).

3.3 WESTERN COLONIZATION AND MISSIONARIES

3.3.1 Conceptual Background

Colonialism continues to impact cultures long after the colonial government has left the country. Along with colonialism, missionaries have also played a significant role in cultural changes of colonial territories. In Vanuatu missionaries were proselytizing before the beginning of colonial rule, and furthermore, they were not forced to leave the country at the end of the colonial rule. Thus, the influence of missionaries in the Pacific often spans a longer period of time than the influence of colonial rule on its own, which is the case in Vanuatu.

Exploring power and resistance is a critical component in any analysis of colonialism. It is productive to examine the impacts of missionaries and colonial governments side by side as they operated simultaneously. Christian missionaries and colonists entered countries and attempted to convert and control the people and the space they occupied—both groups had nationalist agendas.

Part of the colonial nationalist goal was for missionaries to go forth on behalf of their country and god to convert indigenous peoples around the world to Christianity. The intertwined goals of both colonials and missionaries can be described as a desire to obtain natural resources, strategic land holdings as well as ‘native souls’ through conversion to Christianity (Dirks 1992). As different countries had allegiances to differing branches of Christianity, primarily manifest in divisions between Catholicism and Protestantism, claiming ‘native souls’ for a particular religion was nearly as important as claiming land for that same country. Missionaries played a powerful role in the colonial project by directly influencing the daily lives of indigenous peoples in the colonized world. This becomes very evident in Pedersen’s (1991) case study of female genital

cutting in east Africa, as she explains how missionaries gained power and influenced cultural practice through a ban on clitoridectomy, preventing those who disobeyed from accessing the worship and educational services they provided. As indigenous peoples converted to Christianity, the missionaries would use the fear of sin and hell, or threaten to revoke rites such as communion in an effort to persuade people to change cultural practices. The power that was wielded by missionaries in providing or denying access to religious practice was very strong, particularly in Pacific island societies, where Christianity has now been widely and fervently adopted.

The gender segregated structure of many Pacific island societies paralleled the gender segregated structure of missionary and colonial societies in the 19th and 20th centuries, providing a space for women missionaries and colonials to dialogue with indigenous women in an effort to construct new gendered identities. Because gender segregation was already present in Pacific societies, missionaries were able to work within existing gendered social structures. In an examination of women missionaries and colonials it is imperative to recognize different and shared interests these women had in indigenous women (Jolly 1991). Women missionaries and colonials had a strong influence on moral values and were instrumental in promoting the moral values of both the religion and the state, therefore contributing to the nationalist agenda. Missionaries also held strong sway and power over individuals' behavior and decision-making processes; therefore, it is productive to examine how power was wielded and the impact past actions have on current cultural perceptions.

Interested in promoting moral values, both the state and the missionaries worked diligently to shape the important role of mothers, children and the process of reproduction. While missionaries often focused on promoting good mothers and children of God, governments were

concerned about declining fertility and the need for a strong and healthy workforce for future labor (Manderson 1996). The morality promoted by women missionaries and colonials was often racist, which is noted by Stoler as she writes, “Applied to European colonials, eugenic statements pronounced what kind of people should represent Dutch or French rule, how they should bring up their children and with whom they should socialize” (Stoler 1989:644). Thus this gendered dynamic was classist and racist, and women were charged with leading the implementation and demonstrating social reinforcement of these policies and social expectations.

At the heart of the nationalist arguments that missionaries and colonial governments construct is a strong belief in the need for modernization. Both missionaries and colonizers saw the promotion of modern and Western ways of living as a critical component of their work in the colonies, although each group had different ideas for how to proceed toward achieving this goal.

Elaborating upon this, van der Veer writes:

This debate was a real one, and we would be wrong to think that the missionaries were backward-looking conservatives while the secularists were progressive forces in the liberation of mankind. In fact, in this very period [the nineteenth century] missionary societies were extremely active in the struggle for the abolition of slavery, while utilitarians were equivocal on the subject. Nevertheless, beyond the complexities of this conflict we may see a fundamental agreement of both parties to the effect that the colonized had to be converted to modernity. (van der Veer 1996:4)

While they did have fundamental disagreements on many political issues, ultimately both missionaries and colonialists were working toward the same goal of modernization—they wanted people to conform to their European modern ideals. Therefore, both groups were striving to change an array of indigenous values in the process of modernization. It is important for anthropologists to understand the points of conversion and the points of resistance to these colonialist efforts; for, “The project of modernity that is crucial to the spread of colonial power over the world provides new forms of language in which subjects understand themselves and

their actions” (van der Veer 1996:6). It is through this new understanding of collective and individual identity that we see the impacts of cultural change. Closer examination of these historical culture changes reveals that they form the basis, in many cases, of the cultural values of society today. For example, hierarchy in Austronesian society displayed much more gender equality, and the present day sexism in Vanuatu derives primarily from the missionary and colonial treatment that devalued women’s social status, knowledge and agency.

However, it is also important to understand the role of missionaries and colonialism on indigenous culture as a multisided, dynamic process. Frequently all missionaries and colonials are treated as a homogenous group, and are thought to have a standard, predictable impact on indigenous society. In their work on the influence of missionaries and colonialism in Africa, Comaroff and Comaroff (1991) describe missionary encounters as multidimensional, emphasizing the dialectical processes that have benefits and consequences for all parties, missionaries and Africans alike. Therefore, it is imperative that we consider the impact colonials and missionaries had on indigenous peoples, *as well as* the impact indigenous peoples had on colonials and missionaries. These interactions vary from culture to culture, from colony to colony, and these dynamic processes are important to consider if we are to achieve a holistic understanding of these lasting impacts of cultural change on all societies involved in this colonial process. This is especially true in the case of access to land, and the role of mothers in the family and in child rearing practices. Bryant (1998) explains the relevance of this history in contemporary anthropological analyses, writing, “...the colonial legacy is alive and well in many parts of the third world today where political and economic elites accumulate wealth and power based on tenure arrangements and management practices bequeathed to them by the departing colonial authorities” (85).

3.3.2 Missionary Presence and Colonization of the New Hebrides

Colonization is of particular importance to cultural change, as missionaries have been in the country for over a century, and Vanuatu only recently gained independence, as it was a condominium colony jointly administered by both the British and the French until July 30, 1980. In examining the various religious groups that moved into Vanuatu (called the New Hebrides during colonial rule⁸), Jolly (1996) writes:

The Marist mission moved into the northern islands of Vanuatu in 1887, expressly at the invitation of French settlers and commercial interests, to combat the northward expansion of the Protestants from Scotland, Nova Scotia, New Zealand, and Australia. The rivalry between Catholic and Protestant missionaries “to gain souls” was inseparable from the struggle between the imperial powers of France and Britain for land, labor, trade, and strategic interests in the group. (232)

As missionaries began to gain control in the region they also played a role in disrupting local systems of leadership. For example, “In central Vanuatu, where traditional leaders most closely approximated to European expectations, the match was still not effective, as missionaries identified converts, instead of local hereditary leaders, as chiefs, and undercut the local system” (Bolton 1998:182). This problem was made worse as missionaries gave increasing amounts of

⁸ Prior to colonization, the 83 islands that make up the current national boundaries did not comprise any type of unified sociopolitical construct. Rather, a number of disparate small-scale chiefdoms were scattered throughout islands or among small groupings of islands. In 1606, Spanish explorer Captain Pedro Fernández de Quirós discovered the islands and named them *Terra Australis del Espiritu Santo*, and the largest island in the archipelago is still called Espiritu Santo (or Santo conversationally) today. The name New Hebrides was given by Captain James Cook when he landed on the present day island of Maewo on July 17, 1774, and he continued to sail through the archipelago for the next six weeks (Edwards 1999). Cook is reported to have given the islands the name New Hebrides because they reminded him of another small group of islands in coastal Scotland (Peck and Gregory 2005). From 1906 to 1980 the islands were jointly ruled as a colony of both Great Britain and France. Upon achieving independence in 1980, the name New Hebrides was replaced with Vanuatu. In an effort to maintain consistency and to establish clear time references within this dissertation, I use the terms New Hebrides and indigenous New Hebridians when referring to the islands and their indigenous populations during the time of European exploration, missionization and colonial rule, and the term Vanuatu and ni-Vanuatu when referring to the islands and their inhabitants’ prehistory and independence. This shift in naming will help orient the reader to the various time periods discussed throughout the dissertation.

power to converts within communities by allowing them to access Western material goods, refusing to supply other members of the community, and by allowing converts status within church hierarchy.

While missionaries first arrived in the 1840s, before the 1880s there was very limited colonial government activity in the New Hebrides. In fact, "...the only land-based activity, except for punitive expeditions, had been the occupation of Port Sandwich, Malakula, and Havannah Harbour, Efate, by French troops in 1886" (Rodman 2001:25). During this time expatriates began to buy up large tracts of land throughout the New Hebrides. They started planting copra and built cattle ranches many of which still exist today.

Colonial governments became more frequently and formally established in the late 1800's, with the Hugh Hastings Romilly appointed as "...Her British Majesty's first consul for the New Hebrides in June 1888, but he didn't receive his commission until five months later. Then, at the end of December 1889...his position was suddenly abolished" (Rodman 2001:24). This type of inconsistent pattern of colonial leadership was characteristic of early colonial government practice in the New Hebrides. While the British and French continued to argue and posture militarily over the control of the New Hebrides (Jolly 1992), the lack of many colonial officials on the ground in the country resulted in relatively little indigenous New Hebridian contact with the government. There was much more interaction between indigenous New Hebridians and expatriate land holders, store owners and missionaries (Bolton 1998). After the Anglo-French Convention, eventually the French and the British entered a treatise of joint colonial rule, signing an agreement on February 27, 1906 (Jolly 1992).

This began the joint French and British government in the New Hebrides known as the Condominium. In practice, this joint government was full of wasteful spending on duplicate

services, petty arguments over the establishment of colonial headquarters and homes that would allow one government to fly its flag higher than the other, and disputes over which government should pay for various buildings and their maintenance (Rodman 1985; Rodman 2001). The Condominium government was characterized by establishing two of nearly everything: two commissioners, two mail delivery systems, two languages, two brands of Christianity, two currencies, and two residences. As a result of this chaotic and inefficient organizational system, the colonial operations in the New Hebrides were frequently referred to as the Pandemonium government rather than the Condominium government (Peck and Gregory 2005).

Despite the establishment of two governments, indigenous New Hebrideans were not permitted citizenship from either government. The Condominium government suffered from lack of infrastructure, housing shortages, and complaints and arguments about pay for colonial officials. The British often argued that they received far less pay than their French counterparts, which in some cases turned out to be true (Rodman 2001). Throughout the entirety of the Condominium government, the British and French continued to focus on their disputes and ignore the indigenous population. Ultimately, “France looked after Frenchmen and British after British, but only the...missionaries looked after the forty thousand natives” (Oliver 1962:251).

Today in Vanuatu, Christianity is embraced as part of ni-Vanuatu identity and independence, and the Vanuatu constitution explicitly states that Vanuatu is a Christian country founded on Christian principles. Christian doctrine is part of public school education, and prayer is a critical part of all government and official ceremonies, as well as small departmental meetings, and any size meeting that involves a guest. Nearly every meeting I attended, whether at a school, a community group, or a government organization began and ended with a prayer. In contrast, colonialism has been completely rejected. While perceptions of Christianity and

colonialism have changed over time, they both have had, and continue to have significant impacts on current cultural practices (Eriksen 2009b).

3.3.3 Colonialism, Missionaries and Gender in the Creation of “Good” Mothers

Notions of gender, sexuality, class and race are cultural constructs, and as such are reinforced by specific actions. As Cooper writes, “Colonial power, like any other, was an object of struggle and depended on the material, social, and cultural resources of those involved. Colonizer and colonized are themselves far from immutable constructs, and such categories had to be reproduced by specific actions” (Cooper 2005:17). Women and men living in the colonies reproduced and almost ‘performed’ behaviors that were expected of them while living in the colonies (Rodman 2001). Those behaviors reinforced specific actions and influenced future behavior of other colonialists, as well as indigenous peoples. This is significant, because it emphasizes that while there is a standard manner in which an individual is expected to present him or her self in the colony, the actual ‘performance’ on the ground and the actions people take in their daily lives, can vary from place to place. While there is a standard, it certainly does not indicate that all people conform to it. Importantly, the socially approved standard of action is not static. To the contrary, beliefs about the proper way to act and reproduce European culture are dynamic and change over time (Rodman, et al. 2007b). Therefore, we must recognize that the colonial experience has variance, and that in each geographical location it will be produced and reproduced with deviations.

The role of women in promoting nationalism and reinforcing colonial ideals was extremely significant, and as Stoler explains, “The political etymology of colonizer and colonized was gender and class specific. The exclusionary politics of colonialism demarcated not

just external boundaries but interior frontiers, specifying internal conformity and order among Europeans themselves” (Stoler 1989:651). Women’s roles in the colonies were designed to reinforce European social and racial status, *and* just as importantly, to impose social and racial morality among the colonized. Women’s lives were to serve as the example of the European ideal both in making a morally acceptable ‘home’ for their husbands and families in the colony, as well as in illustrating the ‘proper’ lifestyle and behavior for indigenous women (Rodman 2004; Rodman 2001).

Missionary wives represented a European ideal of the domestic, supporting wife and mother, and worked to promote the domestic behaviors of childrearing, sewing, proper laundering, cooking and homemaking among indigenous populations. Traditionally in Vanuatu, the ni-Vanuatu women worked very hard at a number of domestic and economic tasks including gardening, raising pigs, and caring for children. However, one task of missionary wives was to reorient ni-Vanuatu women’s work toward the creation of a good home, “...refocusing women’s work on childcare, cooking and cleaning and particularly, on the new textile arts of sewing clothes from imported fabrics and doing the novel large laundry this generated...” (Jolly 2010:157). Many missionary wives formed ‘schools’ for women where they would teach them sewing and ironing (Douglas 2002).

The legacy of this practice is starkly illustrated today in Vanuatu in the Mother Hubbard dress or *aelan dres*. This baggy dress hides the female figure, has a high neck, sleeves to cover the shoulders to the mid arm, and extends in length to cover the legs to the mid-calf, thus conforming to the modest dress required of women by missionaries. These dresses have been adopted into *kastom* practice today, for example through their exchange during wedding ceremonies alongside pandanus mats, pigs, and local foods. They are also used as identity

markers as women's groups frequently communally make dresses in matching fabrics and colors to wear on group outings. Knowing how to properly sew an *aelan dres*, skills in decorating these dresses with lace embellishments, and talent in painting and dying an *aelan dres* made of white fabric are all cultivated among young women today, but are vestiges of the missionary heritage in Vanuatu that sought to create a culture of good mothers. This is illustrated in Figure 3-6, which depicts a group of women from Pango Village, Efate participate in an *aelan dres* fashion show to demonstrate their skills in sewing craftsmanship, design and painting. A panel of judges bestows an award each year to the woman who created the best dress as part of the village Independence Day festivities.



Figure 3-6: Island Dress competition shown here on July 30, 2012.

Missionary wives' opinions of indigenous New Hebridian women and their abilities as mothers, "...oscillated between two contradictory views of ni-Vanuatu mothers—the first that they were callous and indifferent, the second that they were indulgent and lacking in discipline" (Jolly 1991:40). As is common in this type of cultural intervention, missionary wives were

successful in changing some behaviors, and unsuccessful in changing others. As Jolly explains, “...the result of Presbyterian missions was not a simple and successful domestication of local women. The missionary couple provided an idealized model of a world divided into gendered domains—the domestic and the public. But local people emulated this model in a partial way” (Jolly 1991:46). By and large, most people in the New Hebrides adopted Christianity (although many resisted conversion for the first several attempts and the first few years that missionaries were in the New Hebrides), and most adopted a more covered, clothed, European style of dress. However, many never gave up some of their traditional beliefs, gardening practices, and construction styles of homes. Cultural changes as a result of interventions by missionaries and colonials vary from village to village, and to achieve the most comprehensive view of the effects these groups had on indigenous populations requires a more careful look at the types of changes that occurred within a specific place (Douglas 2002; Macintyre 1989). Ultimately this served to increase the amount of domestic labor required of ni-Vanuatu women. Ni-Vanuatu women maintain the female work of growing taro, tending gardens, making traditional textiles, collecting food from reefs, “But, the good work of being a Christian mother has been added: the sewing, the laundry, the cooking, the cleaning and regular attendance at church and Mothers’ Clubs or Christian Women’s Fellowships” (Jolly 2010:158).

These colonial systems often stand in contrast with the social lives of indigenous people before they were subjected to colonial rule. Manderson explains that in Malaysia, “...women’s authority in agriculture and within the household pre-colonially enabled them to control their own and their children’s health and nutrition. This was compromised by social and economic transformations following the establishment of colonial rule” (1996:17). The status and roles of women in the pre-colonial systems obviously differ from the roles colonial governments

encouraged or required women to take after they took power, often invoking a patriarchal structure that mirrored that of the colonizing power. It is important to note that some indigenous practices are not particularly conducive to promoting health, and just because a practice is indigenous, does not necessarily mean that it is the healthiest practice. Overall food patterns were of less concern, and child feeding was the focus of interventions in instances of “...great concern, namely the practice of feeding new born babies with pre-masticated food—tubers and fish....infants on Aneityum had in the past been fed ‘all kinds of trash’, but...[after missionary intervention] infants were getting only their proper nourishment (i.e. breast milk) and were much healthier than before” (Jolly 1991:40). Throughout this dissertation research, I observed numerous women serving pre-masticated food to infants, which from a public health perspective is discouraged both because many mothers introduce foods prior to six months of age, and because of worries over the spread of illness through shared saliva. The health benefits of breastfeeding exclusively for the first six months of life have been demonstrated, and future research must be conducted to better understand the impetus for the shift away from breastfeeding in a country like Vanuatu (Bartick and Reinhold 2010). Nevertheless, some traditional maternal practices were not helpful in promoting biomedical ideals of health, and “intervening in infant feeding was part of a wider process of reforming the relation of parents and children, and in particular mothering” (Jolly 1991:40). Missionaries were able to gain some influence over individuals’ behavior, particularly if they lived in the villages for years or decades, and spent time learning the local language.

Conversely, there is evidence of missionary practices that were adopted by indigenous populations that are now considered harmful to children’s health. In some instances this stems from changing biomedical knowledge as Western medicine has advanced in the past decades, so

too has nutritional advice. For example, in some instances today, mothers feed infants with sweetened condensed milk and sugar water because this knowledge, originally imparted by missionaries, has been passed from generation to generation. Regardless of whether or not the nutrition information is considered to be harmful or helpful to child health by current biomedical standards, it is critical to recognize the role and influence of colonial and missionary women on current behavioral patterns, particularly in the context of nutrition education programs.

3.3.4 Legacy of the British and French Condominium in Vanuatu

Dirks explains that “Nationalism was recognized both to have constituted the single most important site of resistance to colonialism, at the same time that it provides the most salient demonstration of the power of colonialism to reproduce itself, spawning myriad clones in new nations throughout the postcolonial world that have often been as repressive as the worst colonial regime” (Dirks 1992:15). Nationalist goals were promoted by and against colonialist governments. A number of actors play a role in this process, including colonial administrators and politicians, nationalist resistance leaders, researchers, academics and missionaries, and all of these, past and present, contribute to the shaping and reshaping current cultural constructions.

The process of decolonization in Vanuatu took a long time, and there was a period of social unrest for more than a decade after independence (MacDonald 1986). Vanuatu continues to struggle, as many independent Pacific island countries do, with the economic challenges of being a small island nation competing in a globalized world (MacDonald 1986). Just prior to decolonization, the British worked to establish Vanuatu as a ‘tax haven,’ as “The British party to the condominium was able to script company and fiduciary law to attract tax free funds managed by trust companies, banks and accountants who established offices in the capital, Port Vila

between 1970 and 1973” (Rawlings 2004:341). To this day, Vanuatu remains a ‘tax haven’ for foreign investors, although the government does not really benefit from this status in any significant way. Today, Vanuatu remains dependent on foreign aid, much of it from Australia and New Zealand (Overton 1998). While foreign aid contributes to improving the lives of many ni-Vanuatu today, it is unstable revenue, particularly in the global political context today in which the governments of Australia and the United States are cutting spending on foreign aid as they enact even more stringent austerity measures each year.

Divisions established by the British and French Condominium government are still reflected in daily life. For example, there are separate French and English schools, which creates divisions between ni-Vanuatu who are Francophone or Anglophone (Miles 1994; Peck and Gregory 2005). Although the local creole language Bislama tends to unite people under a common language, many jobs in Port Vila and Santo require either English or French fluency. Due to the strong aid presence of Anglophone countries like Australia and New Zealand, and the English language branch of the University of the South Pacific (USP), which is the only institution of higher education in Vanuatu, the number of English speakers is on the rise, while the number of French speakers is on the decline. Government documents are produced in three languages, English, French and Bislama, and in many cases health education documents are also produced in all three languages, which perpetuates the redundancy that was established during the colonial administration. It also perpetuates rifts between the Francophone and Anglophone contingencies, giving Vanuatu a legacy of language division parallel to that seen in Canada today.

In modern Vanuatu, religious organizations play an important role in women’s lives, and the role of the church has continued to expand since independence (Eriksen 2009a). While there

are some national groups that represent women's interests such as the Vanuatu National Council of Women and the Vanuatu Women's Center, most of the groups that support women's interests are church or religious groups. Christian religious groups are an integral part of women's communal projects, and Douglas writes that, "...it is church women's groups and gatherings that provide ambivalently valued opportunities for collective assembly and production beyond the immediate family. These slippery intersections of *kastom*, Christianity, community and modernity again elude simplistic binary categorization" (Douglas 2002:13). Ni-Vanuatu women work to negotiate their communal and individual identities in the context of Christian societal values, and church women's groups are important to this process. While they are remolded and shaped from colonial times to reflect new values of national independence, unity in Christianity remains strong, reflecting the powerful impact missionaries had on culture change in Vanuatu.

Furthermore, in Vanuatu 'feminism' is largely considered to be a western or European concept; feminists are considered pro-divorce, anti-men and are generally looked down upon (Douglas 2002). Women in Vanuatu have developed their own type of feminism that works to celebrate their domestic work, and many women speak of gender very carefully, and not of 'feminism.' Therefore, much of the focus of women's activities remains on the church women's groups, and away from nationalist feminist groups and movements which are very weak and have been plagued with infighting in the past (Douglas 2002). Douglas paints a clear picture of femininity and the church in rural Vanuatu:

For rural ni-Vanuatu women, as for village women in Melanesia generally, the local face of modernity, such as it is, is usually found in the church women's groups that women themselves create and organize and that men often praise for probity and efficiency. Such groups and their members are increasingly acknowledged for their moral authority and economic contributions, but in Vanuatu, as elsewhere in the region, the skills and qualities that women exercise locally are conspicuously missing from wider settings." (Douglas 2002:23)

Therefore, women's groups on the smaller, local level are the most active spaces for women to engage in communal activities, and significantly these are Christian groups, typically affiliated with a variety of church denominations.

While the focus of the study of the impact of Christian groups has been in rural areas, similar patterns emerge in urban and peri-urban areas where these groups are just as common, well attended, and influential. This is not a unique pattern to Vanuatu, and has been written about in other Austronesian speaking contexts. For example,

..indigenous Fijians were a community-minded people whose "wealth," as a common line in ceremonial speeches asserted, lay in "loving each other and serving the Lord." Villagers took great pride in the idea that indigenous Fijians had a special culture, given to them by God, which gave life a kind of value that money could not provide. They contrasted themselves in this respect to people such as Indo-Fijians, urban relatives, and Western tourists, who often had much greater wealth and power. Individuals worked hard in church and in everyday life to subdue willful selves and live up to higher ideas of commitment to community. And many people experienced this as a fulfilling way of life. (Brison 2007:8)

Through syncretic understandings of traditional and Christian practices, Brison details how indigenous Fijians have come to new cultural identities. Accounting for differences in urban and rural populations, there are important ways in which patterns of behavior become more meaningful when analyzed in the historical context of the region; often the significance of these critical differences would be missed if the historical background were not included in the analysis. The influence of missionaries on culture in Vanuatu has had long-term impacts across the country, and this is most notably demonstrated in the high participation of women in these local church groups throughout the islands. Thus it is clear that the impact of missionaries on society in Vanuatu has been pervasive, and any study of the conceptions of motherhood and women's roles must recognize the importance of these historical and colonial influences on the society and conceptions of female domesticity and being a 'good' mother today. In fact, it was

through these women's religious organizations that I was able to gain entrée into several of the communities with which I worked for this research.

3.4 HISTORY AND CONTEMPORARY SIGNIFICANCE

Analyses of the influence of the colonial governments and missionary proselytizing reveal that much time was devoted to promoting a morally correct way for women to live in the colonies. In addition to moral concerns, the public health concerns of infection, disease and long-term debilitation as a result of living in the tropics were of real concern to colonial administrators. Maintaining health also falls into the female, domestic sphere, and colonial and missionary emphasis on women's roles in maintaining and enhancing these duties do much to shape gender roles today. In describing the responsibilities of women living in the colonies, Stoler writes:

The debilitating influences of climate could be surmounted by regular diet and meticulous personal hygiene over which European women were to take full charge. Manuals on how to run a European household in the tropics provided detailed instructions in domestic science, moral upbringing and employer-servant relations. Adherence to strict conventions of cleanliness and cooking occupied an inordinate amount of women's time....Both activities entailed a constant surveillance of native nursemaids, laundrymen and live-in servants, while reinforcing the domestication of European women themselves. (Stoler 1989:649)

Thus, the duties of colonial women are strictly outlined and explicitly stated: women are to maintain homes suitable for familial life that mirrors life in Europe, and in doing so they will also promote health and hygiene in part through maintaining a regular diet for their families (Rodman 2001). However, these are specific and weighty tasks, and there was scrutiny and pressure for ni-Vanuatu women to also perform these tasks in a manner deemed most appropriate by missionary and colonial women.

Conceptions of motherhood currently envisioned by ni-Vanuatu women today are deeply rooted in missionary and colonial culture and discourse, as women were often the vehicle through which colonial governments and missionaries attempted to demonstrate the ideal, proper way to construct a home and care for a family. Proper motherhood was important to the colonial endeavor as it is the role of the woman to birth and raise healthy children. As Davin explains, “Middle-class convention of the time took for granted that the proper context of childhood was the family, and the person most responsible was the mother. So if the survival of infants and the health of children was in question, it must be the fault of the mothers; and if the nation needed healthy future citizens (and soldiers and workers), then mothers must improve” (Davin 1978:12). Therefore, a lot of scrutiny and blame were placed on mothers for problems in maternal and child health, even though many of those problems were reflective of larger economic and environmental problems beyond their control (Jolly and Macintyre 1989).

Davin (1997) comments on this concept of ‘mother blaming’ arguing that it was the easiest way for colonial governments to address the abysmal situation of maternal and child health—instructing missionary women and colonial wives to teach classes on proper hygiene and infant care is much less expensive than actually providing adequate biomedical care. This is represented in current medical practice; for example in chapter six, I describe how emphasis is placed on nutrition education, and poor nutritional status of children is attributed to mothers. The discourse of health care practitioners reveals that blame for malnutrition lies with mothers, not with the larger structural problems with access to land for subsistence agriculture, clean water, or comprehensive biomedical health care, systemic problems that are much more difficult to fix. While colonial governments knew of the problems mothers faced in achieving health and hygiene standards, they were political problems and it was easier to continue to ignore the public

health, environmental and economic problems that colonizers and indigenous people faced in the colonies, and instead suggest that the problem was with the women. They just needed to learn to be better mothers. Thus much time was devoted to molding women into ideals via prescribed domestic roles. Meanwhile any problems with the health of the family were attributed to poor mothering, causing mothers to be used as scapegoats for larger political and governmental problems. The formations of these ideal domestic roles, and the mother blaming that follows poor child health outcomes continue to be heavily influenced by historic, gender segregated cultural patterns, as well as by missionary and colonial agents.

Many colonial governments developed a strong concern about the high rate of infant death in the colonies (Davin 1997; Manderson 1996; Manderson 1998). However, this was not because they felt badly about individual deaths, but because they were nervous about the depleted, unhealthy labor force that resulted in high infant mortality and poor childhood health (Manderson 1998). The colonial government was somewhat attentive to women's health only in the context of maternal health, but not necessarily for women who were not, or were no longer able to produce children. Manderson (1998) writes, "Maternal and child health care programmes were developed on the basis of understandings of the role of women in biological, social, and daily reproduction, which assumed that some women, by virtue of class and race, were able to undertake these roles 'naturally'" (Manderson 1998:43). Therefore, there was an increased need for women in the colonial government to act as midwives; for, the wives of officers and administrators, were 'good' and 'natural' mothers, and they could teach the 'unnatural' indigenous mothers how to properly care for their children (Manderson 1998). In a discussion of maternal and child health practices using political economic theory, Manderson outlines the

hegemonic and gendered discourses at play between women in the colonial government, and the discourses involving indigenous women.

As a whole, indigenous systems of birthing and motherhood were considered vastly inadequate compared to ‘modern’ European methods, and many indigenous mothers were considered incompetent because they believed in a variety of traditional medicinal practices (Jolly 1998; Lukere and Jolly 2002). The colonial government worked to fix this problem, and, “‘Improving’ or modernizing maternity thus not only meant the medicalization of pregnancy, birth and postpartum period but also the discipline of mother love itself” (Jolly 1998:4). Colonial women were considered good examples for indigenous women, and many were encouraged to work as midwives, and later to train indigenous women in this work so that it could continue—indigenous midwives with traditional medical knowledge were considered vastly inadequate for their jobs (Jolly 1998; Manderson 1996; Manderson 1998).

Colonial governments administered a number of different medical programs aimed at promoting maternal and child health, although frequently these were limited in scope and access to indigenous peoples, and were rarely well-funded. Colonial governmental programs ranged from promoting general maternal and child health and breastfeeding, to programs for sanitation and access to potable water (Manderson 1996). However, many of these projects were unrealistic, particularly when the living conditions of women were not adequately addressed, rendering the programs largely ineffective (Davin 1997), problems that continue to plague international health interventions even today.

Missionaries supported changes to maternal and child health programs as well, and were significant players during the colonial era. Jolly writes, “In both Vanuatu and Fiji, the colonial state aspired to survey and police mothers, but given the weak and divided character of the state

in Vanuatu (conjointly administered by England and France) this remained a rather pious hope and attempts at remoulding maternity remained preeminently a mission concern” (Jolly 1998:8). Ironically, for much of the early period of colonial rule in the New Hebrides, missionaries took charge of all medical care, as the state was too disjointed to provide any meaningful, regular services (Rodman 2001). It is clear that missionaries and colonials were actively engaged in critiquing and attempting to change the traditional practices of indigenous women as they cared for their infants and children.

For those women living near Port Vila, hospital access became a key feature in shaping ideas of birthing and mothering. Paton Memorial Hospital (PMH) was opened in 1910, and was located on Iririki Island, in Port Vila Bay. Run by the Presbyterian mission, a number of doctors and nurses provided medical care for ni-Vanuatu patients (Freeman 2006). Despite the logistical problems with a hospital located on a tiny offshore island, (many women recount stories of babies born at the wharf while waiting for the transport boat), overall women recount positive recollections of the quality care they received at PMH. One informant explained that she rested for a week at PMH after the birth of her children under the doting care of the nurses, which she explained in stark contrast to the quick manner in which women are forced to leave the current Vila Central Hospital in 24 hours or less. Examples such as this have been recounted by a number of anthropologists and scholars, where mothers describe affectionate care from white missionary nurses at PMH, despite archival records that describe difficulties including overcrowding in the hospital (Widmer 2011).

As the time of independence approached, new problems arose regarding the continuation of medical and public health programs. Manderson writes, “The foreshadowed end of colonialism pushed government awareness of the need for ‘social’ development, and for social

services that addressed the inequalities created by economic development” (Manderson 1996:xvii). Examining how the colonial medical system was established is important to consider, when working with indigenous people living in former colonies on health related projects today. Often colonial medical systems reinforced the colonial power’s dominance, which is in contrast to practices that supported the best interest of the indigenous population. Traditional medicine was devalued, and existed in a liminal space where biomedical practitioners shunned its use, but it had value as an indigenous symbol of resistance to colonial rule. Turshen writes, “The clinical medical model is imbued with the ideals of classical liberal philosophy which emphasizes individual enterprise and the self-regulation of the economic system. A medical philosophy that put the concerns of the collectivity above those of the individual was potentially subversive” (Turshen 1977:49). In the shift toward independent rule, biomedical models needed to be reevaluated in the context of indigenous values, a shift that was often contentious and delicate even among the ni-Vanuatu themselves.

Thus, it is clear that understanding the historical implications of social structure and hierarchy, missionization, and colonialism all impact women’s creation and practice of gender roles and negotiation social status and class. Analyzing the growing urban middle class in Vanuatu, Jolly (2010) describes the direct linkages between colonial domestic workers and the domestic workers now employed by ni-Vanuatu themselves. While the poor treatment of domestic laborers by missionaries and colonials has been documented in the past (Rodman, et al. 2007a), domestic workers today face new challenges that arise from the legacy of this system:

Finally, and perhaps most disturbingly, the risks of economic, emotional and sexual exploitation in the present seems greatest for those *haosgels* who are the poor rural relatives of the families of Vanuatu’s urban middle class. The ‘stratified reproduction’ of motherhood in contemporary Vanuatu thus engages not just transnational inequalities, reinscribing past colonial patterns but

inequalities emergent *between* ni-Vanuatu, albeit in a small, poor and aid-dependent Pacific archipelago (Jolly 2010:164 emphasis in the original)

Colonial and missionary legacies are not just important factors when analyzing relationships between ni-Vanuatu and expatriates or ni-Vanuatu and the global marketplace. These legacies shape current interactions and inequalities between ni-Vanuatu.

In a country just over 30 years post-independence, many people have lived both the colonial and post-independence experiences, and the merging of these two structures contributes to syncretic ideas of gender and motherhood. Situating ethnographic stories within this larger context is key to a comprehensive understanding of what the ethnographic data from Vanuatu as a whole, as well as the data presented in subsequent chapters, truly mean. As Widmer explains,

Considering these women's stories in their greater social and historical context illuminates that becoming a mother puts people in material struggles to acquire resources and that mothers are at the heart of moral debates over who should get pregnant and who should care for pregnant and birthing women. These stories show how birth and child nurturance are embedded in the hierarchies of gender, generation, and kinship. These struggles are part of the expansion of wage labour, Christian practices, and the attempted proliferation of colonial and post colonial forms of state governance....these fieldwork encounters...[are significant as they illustrate] how ni-Vanuatu women imagined both "western mothering practices" and their own cultural ideals of child nurturance." (Widmer 2011:105-6)

Ultimately, the data presented in this dissertation reveal the complex interplay of tradition, *kastom*, and modernity in the creation of motherhood, and the shaping of ideal notions of child feeding. A resurgence of pride in the pre-colonial cultural and *kastom* practices in Vanuatu emphasizes food production and feasting traditions in modern context, which is particularly true in the urban and peri-urban areas. Today discussions of "good" mothers and "bad" or "stupid" mothers are common, and in chapter six they are used to describe mothers who do not adhere to biomedical nutritional advice, regardless of whether or not mothers have the environmental or economic resources to implement that advice. Often these descriptions indicate how well, or how

poorly, women have been able to manage the negotiation of traditional and biomedical practices in infant and child feeding and care.

Analysis of prehistory in Vanuatu among Austronesian speaking peoples illustrates a relatively shallow time depth of human occupation of this geographic area. This makes links between the prehistoric periods evidenced through archaeological data, historical documentation, and current ethnographic research among Austronesian speaking peoples particularly strong. Archaeological, genetic, and linguistic connections between prehistoric Austronesians and Austronesians alive today allow researchers to make unique associations between groups of people that are simply not possible to make in most other regions of the world. Nevertheless there are certainly limitations to the types of linkages researchers can make. For example, middens rarely offer direct evidence of social status in weakly stratified societies, and historical accounts are riddled with biases and misinterpretations of native practices (Leach 2003). However, with the triangulation of all of these sources and a close eye toward areas of significant overlap, it becomes extremely productive to make these comparisons.

Most significantly, distinguishing ni-Vanuatu as Austronesian speaking peoples, rather than non-Austronesians allows for more accurate connections to the practices and cultural patterns of other Austronesian societies. This distinction is particularly critical to the study of feasting as described in chapter seven; for the patterns of feasting behavior associated with Big Men and achieved social status in non-Austronesian societies are distinctly different from the feasting patterns in societies with ascribed status, even if that status is not extremely stratified. This is particularly true among Austronesian speaking peoples, as opposed to the artificial relationships created by the term “Melanesian,” which does not actually indicate a cohesive cultural grouping of peoples. In making practical applications of this research, readers should not

apply these models to non-Austronesian peoples in Papua New Guinea, for example, simply because the both societies are “Melanesian.” Furthermore, as Austronesians, ni-Vanuatu express particular attitudes about and approaches to hierarchy. In section 6.3.1, I describe women’s encounters with nurses during well-baby check-ups. The power imbalance is palpable as mothers are passive in the face of the authority of the nurse, politely responding to questions, while never asserting their own. Once mothers leave the biomedical health care setting however, they reevaluate the nurses’ advice accounting for the realities of their economic situation and their access to land for subsistence agriculture. Relationships between health care practitioners and mothers are reflective of the hierarchical structure of Austronesian societies where those in positions of authority are not openly questioned.

This chapter serves in part to make clear material, linguistic, historical and archaeological arguments for how Austronesian societies are structured, and why Vanuatu is best analyzed in this context rather than in the context of Melanesian societies, particularly when discussing the social role of feasts. In addition to prehistoric connections, a critical review of colonial and missionary history is necessary for any analysis of motherhood, feeding practice, and interactions with the health care system today; for the divided social history has left a mark on current practice and beliefs. In this examination of changing feasting patterns, the syncretic notions of *kastom* feasts in modern times and urban places are heavily shaped by both traditional *kastom* practices and by biomedical encounters with public health programs during the colonial period as well as today. If an accurate analysis of current medical systems and food behaviors in Vanuatu is to be achieved, it must be rooted in this discussion of Austronesian traditions and missionary and colonial training, all of which have been passed along and contribute to cultural values and understandings of *kastom* practice today.

4.0 VANUATU: PEOPLES AND PLACES

Drawing on the historical context that frames ni-Vanuatu experiences of health and illness presented in Chapter 3, this chapter is devoted to a description of the contemporary, culturally rich places in which this research was carried out. While this dissertation draws conclusions about life in Vanuatu that can be applied broadly across the Pacific, as well as in other areas of the developing world, a detailed description of this research setting is required in order to orient the reader. More importantly, however, specific details of the health and educational structure in Vanuatu and the important differences between urban and rural households lay the foundations for effective comparisons and analogies to be made in future research and by other researchers, public health practitioners and policy experts. This is particularly important in the context of housing structures and land use, as there are key links between housing patterns and food security.

4.1 COUNTRY PROFILE

Vanuatu is listed by the United Nations as one of the least developed countries in the world. Its remote location in the south Pacific impacts how ni-Vanuatu access goods and services, and how people are able to travel and participate in global economies that impact national and regional development. With a landmass of 12,189 square kilometers, roughly the size of Connecticut,

spread out among 83 islands, Vanuatu is a country of lush tropical islands, a number of active volcanoes, and diverse cultural patterns with over 100 indigenous languages spoken. Development is not spread evenly throughout the country, and residents of the capital city of Port Vila and the island of Efate have significantly more access to Western goods and services than those on the outer islands. Cell phone service and limited Internet availability are good examples of this distinction. There are sporadic bouts of development throughout the islands, for example a new tower constructed on the island of Malekula providing Internet service to part of the island, and upgrades to airports in popular tourist destinations near the volcano on Tanna, and near the site of the *nagol* land diving on Pentecost. Other villages remain extremely remote, accessed only after a boat ride followed by a long hike through the tropical bush. Diversity in landscape and resources contribute to Vanuatu's allure to outsiders, expatriates, anthropologists, and tourists alike, as well as to the complexity of describing the islands and the various lived experiences of ni-Vanuatu. This research was located on the island of Efate, in and around the capital city of Port Vila, which is the focus of this chapter on the regional setting. Whenever possible this research makes comparisons between urban, peri-urban and rural locations, and Efate with outer islands in an effort to highlight the significance of location as it impacts how ni-Vanuatu access goods and services. Peri-urban is not a widely used category, and in the case of government statistics most of what I consider peri-urban areas in this research are considered rural in government accounting. However, because there are some distinct differences and advantages to peri-urban lifestyles, I describe and separate out these data whenever possible.

Officially, Vanuatu has three national languages, Bislama, English and French. However, as part of maintaining and promoting *kastom* identity and practice great effort is made to teach children their indigenous languages (sometimes referred to as the *kastom* or village languages) in

addition to the lingua franca, Bislama. It was the practice of many of the participants in this research to primarily speak the indigenous language at home beginning at birth, and let children learn Bislama from their friends and other adults. Because there are so many indigenous languages, when people congregate in urban areas they tend to use one of the three national languages, primarily Bislama. This results in stronger knowledge of an indigenous language in rural areas, reflected in recent data showing a slight urban rural discrepancy with 86% of urban residents and 94% of rural residents learning an indigenous language as their first language (Malvatumauri National Council of Chiefs 2012).

Overall there is concern about indigenous language loss, and the Vanuatu Cultural Centre is devoted to recording and teaching these languages to children as part of its preservation efforts. While some language skills are lost as children reach adulthood if they do not regularly use their indigenous language, the majority of ni-Vanuatu report retaining the ability to speak their indigenous language (Malvatumauri National Council of Chiefs 2012). School is taught in either English or French, and proficiency rates in these languages parallel the length of time that people have attended. Rates of English or French speaking are concentrated by region; if a village has one school and it is taught only in French, then there will be few villagers who can speak English in that area. Countrywide, of those who speak either English or French, more ni-Vanuatu speak English. Because this research was conducted in Port Vila and the surrounding areas, where there is great intermixing of people from a variety of islands, nearly all of this research was conducted in Bislama as it was a true unifier. I never encountered a participant who could not communicate in Bislama.

Educational programming is divided into pre-primary, primary and secondary schools. Pre-primary, also called *kindi*, is for students three to five years-old; primary includes class one

through class six for students aged six to 11 years, with secondary school divided into two sub-sections, junior secondary, classes seven to ten with students aged 12-15 years, and senior secondary classes running for five years for students 16-20 years-old. Primary schools are quite common, and there are a number of these schools populated throughout the country. However, this research supports other government data sources that demonstrate low *kindi* attendance, adequate primary school attendance, and a significant drop off between those attending primary and secondary school. Data from the Multiple Indicator Cluster Survey illustrate that about 23% of children attend *kindi*, about 80% of children attend primary school with no significant differences between urban and rural areas in terms of attendance at this level. However, differences emerge in the secondary school beginning with students age 12, where data illustrate a distinction between urban and rural attendance in addition, with only about 65% of urban students and 40% of rural students attending secondary school (Government of the Republic of Vanuatu Ministry of Health 2008).

There could be a number of causes for this, but most respondents in this research cited the vast cost increase from primary to secondary school as the reasons they or their children stopped attending school. In fact, the cost of school fees was the primary reason given for the absence from school of children at any age. While students are encouraged to attend *kindi*, prior to attending class one, this is not required nationally, and is significantly more expensive than the costs of classes one through six as it is not subsidized by the government. Frustrated class one teachers explained to me that some children would arrive at school prepared with foundations of English learned in *kindi*, while others would have no schooling or English proficiency, posing a real pedagogical challenge of great diversity within the classroom. Data from Vanuatu show

correlations between level of school attendance of children, and socio-economic status and mother's education level (Government of the Republic of Vanuatu Ministry of Health 2008).

Fertility is high, and the country has a young population. The total fertility rate is 3.36 children born per woman, with a maternal mortality rate of 110 deaths per 100,000 live births, and an infant mortality rate of 16.41 deaths per 1,000 live births. These are countrywide data, and there is a significant difference in the health services, and numbers of doctors and skilled nurses available to mothers who experience an emergency during the birthing process when delivering in rural areas as compared to delivering in Port Vila. On the island of Efate, there is an ambulance at the northern health center of Paonangisu, which is able to transport women to Vila Central Hospital (VCH) as needed. Overall health services are vastly underfunded with only 4.1% of GDP dedicated to health expenditures, and only 1.7 hospital beds available per 1,000 people (Central Intelligence Agency 2014).

Demographically, Vanuatu has a very young population with an estimated 59% of the population under the age of 24 years (Vanuatu Young People's Project 2008) and nearly 40% of the population under the age of 15 (Government of the Republic of Vanuatu Ministry of Health 2008). Therefore, paid employment among this group in urban areas is a vital concern, and has a stark influence on the ability of people to purchase adequate food, both in terms of quantity and preference, for their families. The Vanuatu Young People's Project's second survey of urban youth revealed that 54.4% of youth under the age of 24 who were *not* in school were also unemployed. Furthermore, of those young people who are employed, 68% earn less than 20,000vt \$211.20 US per month (Vanuatu Young People's Project 2008). This was below the minimum monthly wage of 25,000vt at the time. The inability of people in urban areas to rely on

garden land to supplement their diet and maintain food security and the increasing need for cash become more clear when contextualized with these employment statistics.

In Port Vila where rent, water, school fees, electricity, bus fare and food are common expenditures, it is not surprising that obtaining adequate income to maintain food security is increasingly difficult. Many women are working as *haosgels*, or female domestic laborers, and while this was common in the colonial era, this work has taken on new significance today. As Jolly (2010) explains:

An important shift in the post-independence period (after 1980) is the emergence of an indigenous middle class who also employ *haosgels*. Despite expatriates paying better wages, 75 percent of *haosgels* who worked for expatriates felt mistreated compared to only 38 percent who worked for ni-Vanuatu employers who, in general, were perceived as kinder and less prone to harsh treatment. Yet, paradoxically perhaps, such ni-Vanuatu employers were also seen as potentially the worst bosses, often because they were poorer than expatriates, and thus could not afford decent wages or expensive, time-saving domestic appliances. Complaints to the Department of Labour rarely resulted in significant action; many government bureaucrats and policymakers were themselves employers of *haosgels* and reluctant to raise the minimum wage." (161)

Many of the working mothers who participated in this study discussed their reliance on *haosgels* in order maintain their homes, and, most importantly, care for their children while they are at work. However, ni-Vanuatu women do not make as much money as their expatriate counterparts in many business industries. Discourse about a "local wage" indicating a lower price paid to ni-Vanuatu employees because they presumably have fewer educational skills and less training, perpetuates this problem as many ni-Vanuatu employees do not earn much more than the minimum wage themselves. Subsequently, they cannot possibly pay their *haosgels* minimum wage and also meet other financial needs like rent, water, electricity, school fees, and buy food, perpetuating the cycle of low wages.

The government has conducted a census every ten years beginning in 1979, with the most recent census in 2009. Since the inception of the census, Vanuatu has seen steady growth rates, and between 1999 and 2009 the growth was approximately 2.3% per annum for a total population of 234,023. About 75% of the total population lives in rural areas (down from about 79% in the 1999 census), which indicates steady increases in the urban population at rates faster than those documented in rural areas. There were approximately 40,000 urban dwellers in the 1999 census, but that number increased to 57,207 in the 2009 census. Of those current urban dwellers, 44,040 reside in Port Vila, making the capital city the clear urban center of the country. Luganville on the island of Espiritu Santo is a distant second with a population of 13,167. In fact, the annual growth rate for Port Vila is 4.1%, for Luganville 2.0% and for the rural areas only 1.9% (Vanuatu National Statistics Office 2009).

Port Vila, the capital and largest city in Vanuatu is located on the island of Efate, the third largest island in the archipelago (see Figure 4-1). Migration from the outer islands to the cities, particularly Port Vila, creates a unique set of circumstances which affects how people interact with and access food, health services and how they participate in *kastom* practices and events including feasts. This research was located on the island of Efate, in and around the capital city of Port Vila.



Figure 4-1: Topographical Map of Efate, Vanuatu

(Переход Артыр 2008) Map in Creative Commons—Share Alike license.

4.2 FIELD SETTING ON EFATE ISLAND: PORT VILA, PERI-URBAN AND RURAL VILLAGES

Port Vila is the commercial hub of the country, and its residents enjoy the benefits of the city including commercial grocery stores, access to the hospital and government, regular mobile phone service, and a range of restaurants, businesses and services for entertainment, education and employment opportunities (see Figure 4-2). The naturally deep harbor of Vila Bay brings container ships with overseas goods, and cruise ships that flood the city with tourists wearing

matching lanyards and nametags usually two to three days a week. Increasing tourism is growing the economy, and this sector of the economy is the primary method for individuals in Port Vila to make money either working as tour guides, in businesses that tourists visit, or selling handcrafts and souvenirs at markets (see Figure 4-3).



Figure 4-2: View of Port Vila and Iririki Island

However, living in the city also has drawbacks. Land is a scarce resource across Vanuatu, and in urban areas houses are often situated close together, leaving little if any space for growing subsistence crops. This results in increasing dependency on imported or purchased foodstuffs to meet the needs of daily consumption. Dreams of fantastic jobs and steady income of city life are often thwarted as a flooded job market yields high unemployment and fairly quick turnover within jobs. The pressures of living in the city came up in discussions that reached far beyond my research participants, as idle chatter on busses and while waiting in line often focused on how expensive goods and services are, as well how hard life in the city truly is. On several occasions, bus drivers commented on life in town as compared to life they had in villages on

outer islands before moving to Port Vila. One driver explained, “Life in Vila is hard. Here I have to work every day just for food. At least in the village I knew that I could still eat even if I didn’t work that day.” This mixed desire to engage in the cash economy, while not becoming entirely dependent upon cash for survival is a common theme among residents of Port Vila.



Figure 4-3: View of Port Vila Harbor

Illustrating Vila Bay with a departing cruise ship and shipping containers lining the harbor. Ifira Island is to the left and Iririki Island is to the right.

Port Vila was created as the seat of the colonial government because of the deep, protected harbor, and the fact that it was not a site of a preexisting traditional village (Rodman 2001). However, a number of villages ring the city: Mele to the north, Pango to the south and Eratap to the east. The villagers of Ifira live the closest to the center of what is now Port Vila on

parts of the peninsulas that ring the north and south arms of Vila Bay and on one of the small island in the middle of Vila Bay that bears the village name. The other island, Iririki, has been rented by the people of Ifira to a resort that currently occupies the entire small island, and predating the resort, Iririki was used by the colonial government and was the location of Paton Memorial Hospital before Vila Central Hospital was constructed. Due to the proximity of Ifira Island to Port Vila, which makes residents dependent on Port Vila's economy and resources for subsistence patterns, Ifira will be considered an urban location for the purposes of this study. During this research, I lived in Pango village, and as a result the vast majority of my time and in peri-urban areas was spent in Pango. However, I spent time conducting research employing several different methods at the other peri-urban villages including Mele and Erakor.

Residents of peri-urban villages around Port Vila have unique access to resources as a result of their location. Many of these villagers either work in Port Vila or have family members who work in town. Their proximity to town permits steady, reliable access to the wage economy, and the benefits they are able to reap as a result of their wage labor. Those who live in peri-urban villages and work in town must spend bus money to get to and from work every day. Busses from Mele or Pango to town are 150vt per person one-way, or about \$1.60 US, which is the same price for a shorter bus trip within town. Longer bus trips to Eratap village cost 200vt per person one-way, or about \$2.13 US. Further trips to the rural area of Teoma are harder to arrange, and prices are often negotiated with the drivers, but can cost about 500vt per person one way, or \$5.33 US. However, living in peri-urban villages often means that people return home to houses nestled on land owned by their families. Thus, typically they are not subject to rent that those in the city nearly always have to pay. Without the fear associated with corrupt landlords who could toss you out of a rented house at any moment, due to political corruption and extremely poor

enforcement of laws that prevent this, those living on family owned land have additional incentives to invest in building quality, long-lasting housing structures they could pass down to their children. Without the costs of rent, they also have more resources to invest in permanent housing, thus the overall quality of housing in peri-urban areas tends to be better than most of the ni-Vanuatu housing stock in Port Vila. Obviously there are exceptions to this, and those with higher incomes can afford to rent or purchase better quality homes with amenities like indoor plumbing and hot and cold water in Port Vila. However, this research indicates that the overall the housing quality in peri-urban villages is better than that of most ni-Vanuatu residents of Port Vila.

Individuals living in rural areas have less regular access to town than those living in peri-urban villages. While regular transportation from virtually anywhere on Efate into Port Vila is available, it is not as timely and reliable, and it comes at a price that makes this travel out of reach for many individuals to frequently access. Overall transportation on the island of Efate has greatly improved since my first field trip in 2009 because Ring Road, which follows the circumference of the island, has been completely paved. Now, four-wheel-drive vehicles are not necessary, which greatly reduces the time required to make this trip. Nevertheless, rural areas have less regular access to the municipal water supply, there are no supermarkets, hardware or clothing stores outside of Port Vila, and there are few opportunities to participate in the wage economy. However, people living in rural areas most likely live on family land, do not pay rent for housing, and have ample space for subsistence gardening.

4.3 MATERNAL AND CHILD HEALTH AND NUTRITION

The Vanuatu Ministry of Health recognizes that malnutrition is an ongoing problem that has been documented for at least 15 years, since it conducted small scale National Nutrition Surveys, including one in 1996 (Government of the Republic of Vanuatu Ministry of Health 2008; Health 2004; Vanuatu 2004). Current data on malnutrition, however, were lacking, which was a major reason for conducting another survey in 2007 (Knowles 2007). The Ministry of Health hoped that this survey would provide sound baseline data and suggestions that it could use to achieve the Millennium Development Goals and support initiatives “on strategies to prevent under-nutrition, including micronutrient deficiencies, among both women of reproductive age and pre-school children” (Knowles 2007:4). In this study, researchers were primarily looking at the nutrition of children under the age of five.

The 2007 nutrition survey referenced above and conducted with children under age five reveals that 15.9% were underweight (low weight for age), up from 12.1% in 1996 (Government of the Republic of Vanuatu Ministry of Health 2008; Knowles 2007; Vanuatu 2004). In addition, 20% were stunted (low height for age) with only 0.1% increase from 1996, and 7% were wasted (low weight for height), up from 6% in 1996 (Government of the Republic of Vanuatu Ministry of Health 2008; Knowles 2007; Vanuatu 2004). These numbers are based on the National Center for Health Statistics (NCHS) reference, which is an older standard, but is used here for comparison purposes as both sets of numbers were gathered using the same standard. Considering all of these numbers creates cause for concern, because they indicate that rates show no statistically significant improvement in the years between the surveys.

The 2007 survey presents the data in the new WHO standard, released in April 2006. According to de Onis et al. (2006), “the new standards adopt a fundamentally prescriptive

approach designed to describe how all children should grow rather than merely describing how children grew at a specified time and place” (942). Working to expound upon the differences between the two measures, it becomes clear that “differences are particularly important during infancy, likely due to the inclusion of only breast-fed infants in the WHO sample and the predominance of formula-fed infants in the NCHS references” (de Onis, et al. 2006:944). Other differences include extensions at both ends of the weight for height curve to accommodate taller children and to better assess stunted infants (de Onis, et al. 2006). The new WHO reference is applicable to all children despite the type of feeding they received as infants and has been standardized among a diverse population, “indicat[ing] that we should expect the same potential for growth in any country” (de Onis, et al. 2006:945). For purposes of comparison across the two studies it is better to use the NCHS reference as that is the reference used in the 1996 and 2007 studies. However, the 2007 study also gathered data following the new WHO reference, so those can serve as an updated reference measure for future studies. When attempting to compare rates in Vanuatu more broadly the WHO standard is better as countries have been using this new standard since 2006, so these comparisons employ the most current research. After using the NCHS reference to establish that there has not been any improvement between 1996 and 2007, moving forward I use the WHO reference. This will help readers utilize these data to make effective international comparisons and ensures the data presented here are timely.

At 29% Port Vila, Vanuatu’s capital and largest city, has the highest rates of growth stunting in children in the country, which is significant because stunting is an indicator of long-term chronic malnutrition (see Table 4-1). In Luganville, Vanuatu’s other city, meanwhile, the percentage of children with stunting is 22% *lower* than in Sanma Province, where it is located. However, the percentage of children with stunting in Port Vila is actually 26.1% *higher* than that

of Shefa Province, where it is located. This indicates that children in Port Vila are experiencing malnutrition through a unique set of circumstances that distinguishes them both from other children in the city of Luganville and in Shefa Province. In order to better understand this phenomenon, this research has been conducted in Port Vila and the peri-urban areas surrounding the city.

Birth to Age Five Child Malnourishment in Vanuatu

	Region	Weight for age: % below - 2 SD	Weight for age: % below - 3 SD	Height for age: % below - 2 SD	Height for age: % below - 3 SD	Weight for height: % below -2 SD	Weight for height: % below - 3 SD	Weight for height: % above +2 SD
Region	Tafea	6.7	1.7	25.8	9	1.1	1.1	6.2
	Shefa	8.9	0.6	23.4	5.7	4.4	0	3.2
	Malampa	11.6	1.8	26.8	7.1	2.7	0.9	3.6
	Penama	14.4	0.8	27.1	5.1	7.6	2.5	4.2
	Sanma	13.4	3.6	28.6	9.8	10.7	1.8	1.8
	Torba	14.6	4.1	17.1	4.1	6.5	2.4	1.6
Cities	Port Vila	10	3.6	29.5	12.8	8.9	5.3	8.5
	Luganville	18.2	1.7	22.3	9.1	8.3	0.8	6.6
Area	Urban	11.4	3.2	28.2	12.1	8.8	4.5	8.2
	Rural	11	1.8	25.9	7.3	5.2	1.2	3.7
Vanuatu Country Total		11	2.1	26.3	8.2	5.8	1.8	4.5
Percentages reported using the 2006 WHO Child Growth Standard (Knowles 2007).								

Table 4-1: Birth to Age Five Child Malnourishment in Vanuatu

As a country, Vanuatu's percentages of stunted children are slightly better than global averages for developing countries, in which 27% are stunted; however, it has the same rate of underweight as the global average of 16%, and it has not reached the Millennium Development Goals (MDG) targets. In addition, the rates in Vanuatu are higher than nearby countries such as the Solomon Islands and Tuvalu (United Nations 2010; World Health Organization 2010). Additionally, only 10% of infants in Vanuatu are breastfed exclusively for the first six months, which the WHO argues is essential to infant health (Vanuatu 2004).

The data garnered from the 2007 survey are framed in the context of global health standards and explain some of the long-term repercussions for malnutrition of women and children physically and cognitively, which illustrate the importance of the survey and of future interventions to correct these public health problems. The assessors outline the reasons they believe that malnutrition is still a problem in Vanuatu and their recommendations for improvement:

expert opinion is that this double burden of malnutrition often has common causes of: poverty; inequity; inadequate pre-natal, fetal and infant and young child nutrition followed by exposure to high-fat, energy dense micronutrient-poor foods and lack of physical activity as the child gets older. Eliminating these causes requires political and social action of which nutritional programmes can be only one aspect (Knowles 2007:46).

Vanuatu's problem with malnourishment is already a local concern. The Ministry of Health recognizes and acknowledges the multiple factors contributing to malnutrition problems in Vanuatu, which makes it an appropriate place for this study of the problem of maternal and child health and nutrition in the Pacific.

Grace and Everad (2004) conducted a study looking at the perinatal mortality rates over a 19-year timespan from 1982 to 2001 at Vila Central Hospital, the primary hospital in the

country. While the rates are for this hospital only and therefore not reflective of the whole country, it is likely that the perinatal mortality rates for the rest of the country are higher than the rates at Vanuatu's primary hospital. Grace and Everad (2004) found that the average perinatal mortality rate was 27/1,000 and the small-for-gestational-age average was 45/1,000. This reflects perinatal mortality levels at least 30 years behind that of Australia. One crucial method for improving these rates is to direct public health programs toward improving nutrition and therefore the health of young women of childbearing age (Grace and Everad 2004). These recommendations parallel the results and recommendations of the National Nutrition Survey.

Dietary habits of young adults are also of concern (Knowles 2007; Li, et al. 2009; Phongsavan, et al. 2005; Renzaho 2005). In a survey of 13- and 15-year-old boys and girls in Vanuatu, researchers found that between 12% and 18% of respondents had at least one cola or carbonated beverage daily (Phongsavan, et al. 2005). Even more significant however, between 14% and 21% of respondents reported eating canned mutton daily, and between 39% and 42% of respondents reported eating canned fish daily (Phongsavan, et al. 2005). These foods, particularly canned mutton, are high in fat and are not healthy food choices. The eating habits of children in this age group are important as they start them on a pattern of food behavior and set them on a track toward increasing adult obesity (Gewertz and Errington 2010). This is of particular concern as many of these girls will start having children in the next five years, so their health as adolescents is also important in the context of their future reproductive roles (Knowles 2007). The data gathered here are of significant importance to our understanding of health and nutrition because they "provide evidence of dietary transitions among youth in these countries that are consistent with documented international trends of a nutrition shift away from traditional

diets considered to be high in nutritional qualities to diets low in nutrients” (Phongsavan, et al. 2005:245).

4.4 HOUSING STYLES, HOME GARDENS AND ACCESSING WATER

Housing in urban, peri-urban and rural areas can be placed in three general categories: 1) bush house, 2) corrugated tin or hardboard paneling house, and 3) cinderblock house. “Bush” houses as research participants call them, are made predominantly of traditional materials. Often these structures have *natanggora*, or thatched roofs made from sago palm leaves. Occasionally the *natanggora* is used on the sides as well. Often the sides are raw, un-milled wooden boards, and the flooring is dead coral gathered from the beach or dirt and covered in a few layers of mats. Siding can also be made of hardboard paneling. Reused materials such as corrugated iron, hardboard paneling, and tarps supplement the natural materials, especially on Efate where these materials do not have the added costs of shipping from another island. A blend of materials that can be easily accessed is more common than a house of exclusively natural materials, even though the structure is still given the label “bush” house. Because this type of home requires access to local materials including the sago palm thatch, wood and coral, this is not a common housing style in urban areas of Port Vila. These structures are seen in peri-urban villages and are very common in rural areas (see Figure 4-4).



Figure 4-4: Houses in rural areas making use of wood and thatch harvested in the area.

Corrugated iron and hardboard paneling structures are seen in urban, peri-urban and in rural areas, but is the predominant style of housing construction in urban areas. These structures are assembled in a number of different ways, including with hardboard paneling siding and corrugated iron roofs, or with a composition of smaller pieces of hardboard paneling and corrugated iron pieced together to form the sides and roof of the house. Boxy and small, these homes are not typically level. The more pieces that are strung together during construction, the less stable the home is as a whole, resulting in generally unsafe living conditions as the structures often collapse in the earthquakes and cyclones that frequent the region, which was the case in the recent past for the homes pictured in Figure 4-5. Similar to “bush” houses, these often have coral floors covered with mats, or simply dirt floors covered with mats.



Figure 4-5: Pieced Hardboard Paneling and Corrugated Iron Home

Children pose outside homes in a densely populated urban area. Home construction reveals a mixture of sizes and pieces of corrugated iron and hardboard paneling with dirt foundations. Parts of three different homes are shown in this photo. The path on the right of the photo leads further into the settlement, and the exposed pipe connects residents to the municipal water supply where there is a spigot outside for shared use by a number of households.

Homes that are made entirely of hardboard paneling with cinderblock and tile foundations and flooring are much more stable than those houses that are more or less cobbled together with smaller pieces of materials (see Figure 4-6). This style of house is safer and much more likely to survive the perils of major weather and geologic events. Homes with foundations can last quite a long time and are common in peri-urban areas. When pouring concrete foundations, typically the construction style utilizes full sheets of hardboard paneling, rather than

reused, smaller pieces of the same material. Full new sheets of hardboard paneling coupled with poured concrete foundations also improves the overall stability of the dwelling and permits the use of a more stable window construction. While less expensive than cinderblock homes, this style of construction is still costly.



Figure 4-6: Hardboard Paneling Home in Peri-urban Village

This home has a poured concrete foundation, tile flooring indoors, and a corrugated iron roof. The windows are “louvers”, and the peri-urban setting reveals manicured land around the perimeter.

Cinderblock homes are the most desirable style, and are most commonly seen in the peri-urban villages as people have more money to invest in structures on their own land, and do not have the extra expense of transporting building materials too far away from the center of town.

The materials are significantly more expensive than corrugated iron or hardboard paneling, which is the largest barrier to acquiring this type of home. Due to their expense, people regularly purchase the building materials in stages, and stacks of cinderblocks and half finished homes dot the village landscape as people purchase only what they can afford at the time and work for years in the construction of their home. The home in Figure 4-7 is owned by our ni-Vanuatu family in Pango Village, and was our residence during fieldwork. They had rented the house out twice before as a means of earning income, living in a smaller hardboard paneling home with a poured concrete foundation on the same property, but otherwise lived full time in this home.



Figure 4-7: Cinderblock Home in Peri-urban Village

This cinderblock home has tile floors and a corrugated tin roof. The windows are the same as those in Figure 4-8, but screens were added to the exterior. This home is in Pango Village and was the rented residence of the author and her family during fieldwork. In the back right the thatched roof cookhouse is visible.

Regardless of the style of structure used in home building, much of the cooking work is done in a separate dwelling or covered area often called a cookhouse. Much like kitchens in the

United States are referred to as the “heart” of the home, cookhouses play a central role in the daily lives of ni-Vanuatu. Beyond serving as the location for the preparation and consumption of food, cookhouses are areas for casual conversation and relaxation, especially in the evenings. The space of the cookhouse is important for promoting social interaction, providing warmth on cool evenings, and for the practicality of keeping food away from sleeping areas in a region with disease carrying insects and rats.

I conducted interviews in the cookhouses regularly, where people could keep an eye on the fire, or serve me tea during the interview. Two to four households, even in peri-urban or rural areas, usually share cookhouses, and there is nearly always a tea kettle near the hearth ready to make hot water for a child’s bath or tea for a visitor. Typically constructed with *natanggora* thatch or corrugated iron roofs, cookhouses often have open sides, or numerous doors and windows to allow for airflow and to prevent overheating during the day. The smoke from cooking is a health concern as people spend so much time near the fires, but the smoke also serves to “seal” the *natanggora* roof and the black and dry underside of the thatch keeps the roof dry in the humidity and rain, helping it to last longer before it needs to be replaced. In dense urban areas, where *natanggora* is hard to access for homes and cookhouses, corrugated tin is a commonly used material.

In urban settings, more families make use of the same large cookhouse, such as in communities like Seaside Futuna where the primary kitchen area is an estimated 30x50 feet and serves nearly the whole community for both cooking, accessing shared water, and for community meetings and events. This large community space for daily activities fosters social cohesion and communal sharing. However, with more people preparing food, eating, and washing dishes, the

space can get muddy with water, and large piles of food scraps like banana peels attract more pests, a recognized problem without an obvious or immediate solution.

Conversely, in some urban areas the individual cookhouses are significantly smaller in size, like in Ohlen, where due to space constraints people may have a kitchen area nearly equal in size to their living area. While there is great variation in size, the cookhouses shared among a small number of households that I visited in this research in urban areas ranged from an estimated 8x8 feet to 12x16 feet. In some peri-urban areas that are still densely populated, such as Mele, a cookhouse will be nestled between two homes (for an example see Figure 4-8). In these cases, the houses have the added benefit of forming a covered connector between the home and the cookhouse that keeps people out of the rain when moving between buildings. With connected cookhouses there is less direct benefit of keeping smoke and insects out of the living areas, but the benefits of shared space for social gatherings are still realized.



Figure 4-8: Cook house in Mele Village

This cookhouse links two houses and protects people from walking in the rain when moving between the cookhouse and their home. It has makeshift lower walls to prevent pigs from entering the space. Photo Credit: John Fournier

In peri-urban and rural areas, wood usually fuels the hearth, and in urban areas where there is a lack of wood and fires need to be more contained, people often purchase small stoves made in concrete molds, which can be fueled either by wood if it is available or by charcoal briquettes. Both firewood and charcoal can be purchased in the main market house in Port Vila as well as numerous smaller neighborhood markets around town. Even if firewood needs to be purchased, the cost is far less than the cost of propane tanks that are used to fuel Western-style stove burners in homes, which is one reason the cookhouses remain so common throughout Vanuatu. Ni-Vanuatu who own cinderblock homes with small kitchens inside still make regular use of a cookhouse because of the cost and for the social cohesion. On special occasions, such as Sunday brunch, or for celebrations and feasts, a small area is cleared to make room for an earth oven where women slow cook traditional foods in the middle of a pile of hot stones (this style of cooking and its importance to feasting will be elaborated upon more in subsequent chapters).

As noted in the differences between the houses in Figure 4-5, Figure 4-6, and Figure 4-8, houses in peri-urban villages are situated further apart than those in town, leaving space for smaller gardens of flowering plants as well as coconuts, papayas, bananas and island cabbage that contribute to daily food intake. While participants do not consider these spaces to be true gardens, and one needs to be extremely careful to specify the type of space on which food crops are grown in order to capture the ways people use land and space differently, there is a small amount of food that can be produced on land near one's home. The ability to use land for growing fruits and coconuts, however, is directly related to the density of the housing in the area. In Seaside Futuna, houses are literally built connected to each other, sharing walls and support beams, and creating a maze-like environment for outsiders attempting to navigate the neighborhood. I often relied on young children to help me find individuals and their homes, and

there were many times when the only way to access the home of the family I was scheduled to interview was to walk through the home of another family. With worn and compacted dirt in between the dwellings of other densely populated areas, the homes are close enough together to prevent the possibility of growing any type of fruit tree or crop. Thus, particularly in urban settings most families do not have the option of growing any type of foods near their home, which greatly distinguishes these homes from those of peri-urban and rural families.

Access to fresh water supply for cooking, bathing and drinking is extremely important to understanding food preparation and consumption. While questions about water usage and access were not initially part of my research protocol, mothers regularly discussed the relationship between water security and food security, leading me to incorporate questions on this into my semi-structured interviews and surveys.

However, after discussing the expenses associated with accessing food, participants were quick to mention the expenses associated with accessing water. While not everyone in peri-urban villages has access to the municipal water supply, the supply does reach from Port Vila into several villages. Logistically this is extremely helpful in ensuring that people do not need to walk long distances or spend time and energy carrying water from other sources. This puts people at a distinct advantage, and I never heard anyone lament the time and spatial problem of transporting water for daily use. Some families have running water in their homes, and most have running water on their property or a neighboring property in the urban and peri-urban areas. In many areas I observed four to six families sharing the same water spigot in a central yard. Rural areas of Efate depend much more on rainwater catchment and, in some cases, wells for water procurement, although in recent years access to the municipal water supply has increased to a limited extent. Individuals are responsible for paying for the expansion of waterlines into their

homes, and we attended several fundraisers over the course of fieldwork designed to help families achieve this goal.

Reliable and clean, the city water supply is also extremely costly. Despite the availability of the municipal water supply in urban and peri-urban Vanuatu, due to the expense of water bills, most people also use rainwater catchment for drinking, cooking and washing, turning only to tap water for specific tasks, or if the rain collection barrel is dry. UNELCO, the water supplier, collects payment quarterly; families face a substantial bill for water. Commonly, I heard stories of a family's water being shut off temporarily as they worked to gather enough money to pay their bill and have the water reinstated. In some densely crowded areas, one family with access to water will charge others to fill up water storage containers via long hoses they drag from house to house. For those families with the lowest income, this is a preferable option as they pay a smaller amount at a time as they use the water, rather than a quarterly lump sum. It is also a means for families to make a little money on the sale of their water.

Examining the type of dwelling, the ability to grow small amounts of food outside the home, and how people access water are all critical context for the study of household food security. Location either in an urban, peri-urban or rural setting impacts housing type, small garden availability, and access to water, and helps to distinguish similarities and differences within the data among the three settings examined in this research. Housing, home gardens and water type are also indicators that can be used to help understand socio-economic status. Government officials, as part of larger studies, regularly collect data on these indicators of health and well-being, so there is larger value in understanding setting as contextualization for this project in relation to other government and Ministry of Health studies (Government of the Republic of Vanuatu Ministry of Health 2008). Housing style and household resource access

and use also directly impact the health of the occupants, particularly children, and therefore are important framing for subsequent analyses.

4.5 LAND USE CHANGE AND SUBSISTENCE PATTERNS

Customary lands are of critical importance to ni-Vanuatu, and people's ability to provide shelter, medicine, and food for themselves and their families. Thus, it is not surprising that within a small island setting where land is a limited resource, discussions of land use and access to land are extremely contentious. With the influx of people moving from the outer islands to Port Vila, with more expatriates seeking to open business and cater to the increasing number of tourists, with the growing need for more government provided services in the capital city, how land is allocated and used on the island of Efate indeed has been the subject of entire theses and dissertations (Bolton 2009; Hill 2013; Wilson 2011). Government studies document patterns of access to land, and the social value of land as described by ni-Vanuatu (Malvatumauri National Council of Chiefs 2012). Although these quantitative data do have limitations in that they cannot reflect nuanced descriptions and rationale for land use changes. Nevertheless, a very brief overview of how land is used in Efate strictly as it relates to distinguishing subsistence patterns in urban, peri-urban and rural areas aids in a critical understanding of how individuals access foods (Hill 2013). This section will provide this brief overview as it serves to frame the subsequent discussion of feasting and food insecurity, while acknowledging that the larger issues of land use and access to customary lands are much more complicated, rooted as they are in colonial annexation of traditional lands, 99-year land leases to foreign hotel and tourism chains, and family disputes over communal land tenure, than what is presented here.

It is widely documented across the Pacific that an ethic of supporting community well-being is prioritized over the rights of the individual (Brison 2007; Chambers and Chambers 2001; Strathern 1988), and community and group ownership of land provide a good understanding of the practicalities of this concept. For example:

Ni-Vanuatu society treats land not as a personal commodity, but as a public good. According to Joel Simo of the Vanuatu Cultural Centre, “research throughout Vanuatu has clearly demonstrated that [customary] land does not belong to individual men or women, and that there is no concept of [individual] ‘ownership’. Land belongs to a family, clan or tribe and it is considered ‘ours’ [or the group’s].” Indeed, the argument is often made by ni-Vanuatu cultural experts that no one ‘owns’ land in Vanuatu and that families and the individuals within the family unit are better described as custodians of the land. (Malvatumauri National Council of Chiefs 2012:20).

Access to land is a critical indicator of food security in Vanuatu both in urban and in rural areas. In a recent study on social well-being in Vanuatu, nearly everyone indicated that they used the customary lands they had access to at least in part to generate food for their families. This was true in both urban and rural areas, with 91.46% of respondents in urban areas and 99.09% of rural respondents stating they use their customary lands to feed their families (Malvatumauri National Council of Chiefs 2012). My data suggest that these figures could be misleading to those who do not account for the ethic of group ownership of land in Vanuatu, particularly for those living in urban areas.

My interlocutors regularly mentioned that they “had access to customary land”; however, follow-up questions revealed that in many cases that land was far away and not easily accessible, and/or was under the direct stewardship of another family member. For example, one participant explained that she had land back on the island of Epi where some of her family lived, but she was born in Vila and had never actually been to visit this land. However, she did identify herself as “having land” and felt strongly about this even though she had never physically seen it, and

she does not directly reap the benefits of owning a stake in this land when it comes to the daily work of feeding her family. However, her extended family members who live on Epi is fed from the gardens on this land. Additionally, some participants explained they had land in rural areas of Efate that other family members lived on; however, they had not been to this land in months because of the time and costs associated with hiring a bus to travel there. Teoma, a rural area in Efate, is a very common place for residents of Port Vila to purchase or rent garden land, but it is difficult in terms of time and money to regularly work the land for subsistence agricultural purposes.

Gardens vary widely in size, structure and the types of foodstuffs produced in them; however, there are some common characteristics (see Figure 4-9). Foods of high cultural value and foods that grow easily receive priority space. Yams are important ceremonial foods, and are needed for weddings, funerals and other celebrations. They are also a preferred food, and so whenever possible people work to plant and grow at least one variety of yam. Manioc or cassava easily grows with extremely minimal effort, and as a result this is a staple food that is nearly always planted. Other root crops including sweet potatoes and taro are intermixed with bananas, plantains, cabbage, cucumbers and coconuts. One benefit of the climate in Vanuatu is that foods grow easily in these gardens, and I never met a person who spent any time or money irrigating their crops.



Figure 4-9: Learning to Garden

Here a father teaches his young son to plant bananas. Notice the charred earth, particularly to the left of the father revealing the land had been burned in the past months as part of tending the soil.

Particularly in the peri-urban areas, I observed numerous homes surrounded with small gardens. People use hibiscus flowers to edge their property, and place coconuts, papaya and citrus fruits in small gardens near their homes (for example see Figure 4-7). While I first assumed that these could be considered and called gardens in addition to larger plots of land for more serious agricultural pursuits, I soon learned that this was not the case. I never observed yams or sweet potatoes grown close to homes, and major subsistence crops were not located in these areas. When discussing gardens with participants, I found people whom I knew to have

these small plantings near their homes, would lament the fact that they did not have garden land, or responded to my questions about subsistence agriculture by stating they did not grow *any* of their own food. After inquiring about this, and mentioning that I had witnessed them eating papaya or avocados harvested from land near their homes, I learned that these small plots around homes are never referred to as “gardens.”

Some urban areas literally lacked the space for this type of small planting, preventing individuals from supplementing their diet with any crops grown outside their homes. Even when this space was available, participants explained that the land near a home was not suitable for any serious gardening, and root crops in particular were not considered to be viable options for planting in these locations. While soil sampling was not a component of this research project, it was not readily evident that the quality of land near homes was any less viable, and indeed, a number of decorative plants and edible fruits were prolifically populating these properties. Although I saw only a handful of examples of root crops growing in the soil around homes, it is possible that these crops do not grow well in home gardens. One explanation I heard as to why the land near homes was unsuitable for gardening was that garden land needs to be regularly burned. This swidden practice not only helps to clear the dense tropical foliage to make room for subsistence crops, but it is also reported to kill insects that live in the upper layers of the soil and damage crops, which would be particularly problematic for root vegetables. Swidden agriculture could add nutrients to the soil and help with the proliferation of root crops, and it is reasonable that ni-Vanuatu would not want to practice this near homes to protect them from any potential damage from a fire that raged out of control, or the smoke associated with this type of burning.

These explanations reveal a distinction described by participants in the categorization of these two types of land: small areas surrounding a home where food is sometimes grown, and

larger plots of land dedicated to the production of subsistence crops. When discussing ‘gardens’ in this dissertation, I am specifically referring to plots of land somehow distinguished by participants from housing areas that are devoted to the production of crops. These are never the smaller areas surrounding a home, even if some foodstuffs are produced in those areas. Because participants never discuss what could be referred to as household plantings as “gardens,” I too will not use that label in this dissertation to draw a distinction between the two types of plantings. While some might argue that as the researcher, I should take an etic perspective and refer to all land that produces any amount of food as garden land, that stance contrasts syndemics, the theoretical approach to this research as outlined in detail in chapter two. From the perspective of syndemics, a comprehensive analysis of the synergistic effects of economics, environment, social value, and disease is required for an accurate understanding of illness (Nichter 2008; Singer 1996b; Singer 2009). Syndemics calls for researchers to investigate how traditional knowledge and individuals’ perceptions of the physical and social environments influences health discourses, structural violence, and self-efficacy in responding to health care advice and interventions (Singer and Clair 2003). From this perspective, it is misleading to refer to gardens as including these small plots near homes that may or may not contain food crops, because participants do not consider these a reliable or viable source of food, nor do they include these spaces in their discussions of garden land. While I indicate times that access to household plantings are significant enough to influence patterns of food consumption, these cases are extremely rare. Therefore, I use participants’ terminology to reflect that the perception of access to land for subsistence agriculture must be analyzed in concert with descriptions of the geophysical space.

The report cited above that highlights the high rates of access to customary land stands in contrast to the lived experiences of most participants in this research. The reality of this distinction needs to be made explicit in order to accurately understand how land use affects access to foods (Malvatumauri National Council of Chiefs 2012). In rural areas, the distinction between the two areas is less noticeable, especially to outsiders, as it is often in close proximity to the home. Regardless, there is still a division in areas of land reserved primarily for housing and related activities, and areas of land reserved for subsistence agriculture, which ni-Vanuatu can clearly delineate.

Distinguishing between these two types of land and their associated usage is critical for understanding how people interpret their available resources. Because the discourse surrounding land use access and land use change often defines gardens as any type of land upon which crops are planted, it is easy to see how discrepancies arise in the ways people respond to questions about access to garden land, and why it is so critical to make these distinctions in discussions of the variety of types of land and their various and multiple uses. Therefore, in practice, not many of the people living in urban Vanuatu have access to garden land on which they can rely for subsistence, exemplifying the difficulty in understanding ni-Vanuatu reports of having a stake in the communal ownership of customary land, while simultaneously not being able to directly rely on this land for subsistence and food security.

Research across the developing world suggests that there is a clear link between access to garden land and food security. Superficially, there are two types of gardens on Efate: 1) household gardens and 2) subsistence gardens. However, emic descriptions account for individuals' perceptions of their environment along with the geophysical space. Through the lens of syndemics, a much more complex interplay reveals that from the perspectives of ni-Vanuatu

there is one type of garden, subsistence gardens. Household plantings are accessible only to a smaller part of the population, and not considered suitable for important subsistence crops. Ultimately, the reliability and regularity of access to garden land is a nuanced distinction that proves critical to practical understandings of household food security, particularly on the island of Efate where the urban, peri-urban and rural distinctions are more pronounced than on any other island.

4.6 BOUNDARIES: DEFINING THE LOCATIONS OF THE RESEARCH

Housing construction, access to small or larger plots of land for subsistence agriculture, and access to water all have an impact on the health and well-being of children, and can reflect socio-economic status that help to place child feeding patterns within a larger household and community context. While the descriptions provided in this chapter explain some trends in urban, peri-urban and rural living conditions, there is overlap between the types of housing and land uses across these three categories. Furthermore, politically drawn boundaries, such as those defining city limits, often lag behind the lived growth of a place. As more people move into an area, suburban places become more densely crowded, stores open up to serve an expanding customer base, and bus patterns grow and extend as a result of this sprawl. In Port Vila, people from outer islands move in with extended kin, and when houses become crowded, people erect new temporary structures on neighboring land. The growth of squatter settlements, particularly around the periphery of the city, and the increasing density of housing as plots of land are subdivided to make room for new families changes at a much quicker pace than political neighborhood and city boundaries can be readjusted. Thus, it becomes difficult to clearly

delineate urban, peri-urban and rural space, and there is no official document or hard list that distinguishes all these places that I could simply apply to this study, although I did consider the categories that the government created between urban areas and rural areas as defined by Shefa Province, where Efate is located, and Shefa Provincial Health as they operate the MCH clinics with whom I worked. Ultimately, political boundaries are never completely representative of the cultural borders created through housing and patterned behavior. Nevertheless, it is important to make these distinctions in this research for purposes of the subsequent analysis.

Defining the location of this research into three clear categories proved to be extremely difficult. How people identify their own community boundaries was considered but did not always make this easier given the tension over *kastom* land boundaries. Ultimately in categorizing these places, I considered factors outlined in this chapter including: 1) geographical proximity to the center of Port Vila, 2) the ease and cost of traveling between home and town for the purposes of participating in the wage economy, 3) the types of housing construction that were available in the area in terms of cost, ability or need to transport building materials, and willingness or ability to invest in infrastructure improvements on the land, 4) housing density and estimated size of lot on which a house is situated as measured through observation and experience, 5) access to enough land to participate in subsistence agriculture, and 6) whether people identify as part of distinct cultural groups that are currently intermixed, or as part of a more unified cultural group that follows the authority of a local chief.

The map of Port Vila (see Figure 4-10) indicates some of the neighborhoods in which participants of this research reside. Because there are not clear political boundaries based on designated street names, it is nearly impossible to create a map that everyone would agree delineates perfect neighborhood boundaries. However, the map provides a close approximation

of the urban regions in the city where people reside. Significant places to note, such as Vila Central Hospital (VCH), are indicated on the map. The Freswota neighborhoods (Freswota 1 through 5) are not politically located within the city limits, however, they are considered urban for this research and are fairly densely populated, and residents regularly and easily travel into town from this area. Additional areas that are politically outside of the boundary of Port Vila but are still considered urban in this research include Tagabe, Malapoa and Selime, as they are considered urban areas by Shefa Provincial Health, and exhibit many characteristics expected in an urban residential area. Like Freswota, these neighborhoods are subject to increasing urban sprawl. Areas within the city of extremely dense housing include Ohlen and Seaside, and are designated as neighborhoods with predominately low socio-economic status residents. Ifira is a unique location in this context because it is an established cultural village with a chief and a distinct indigenous language grouping. Residents of Ifira have been residing on this land, which includes Ifira Island and on land on the north and south shores of the peninsulas that ring Vila Bay, since before colonial and missionary contact. However, due to the nature of the regular and easy interaction people have with the economy of Port Vila, the increasingly dense housing patterns, and their limited access to garden land, I have chosen to include Ifira as an urban location for this purposes of this project.

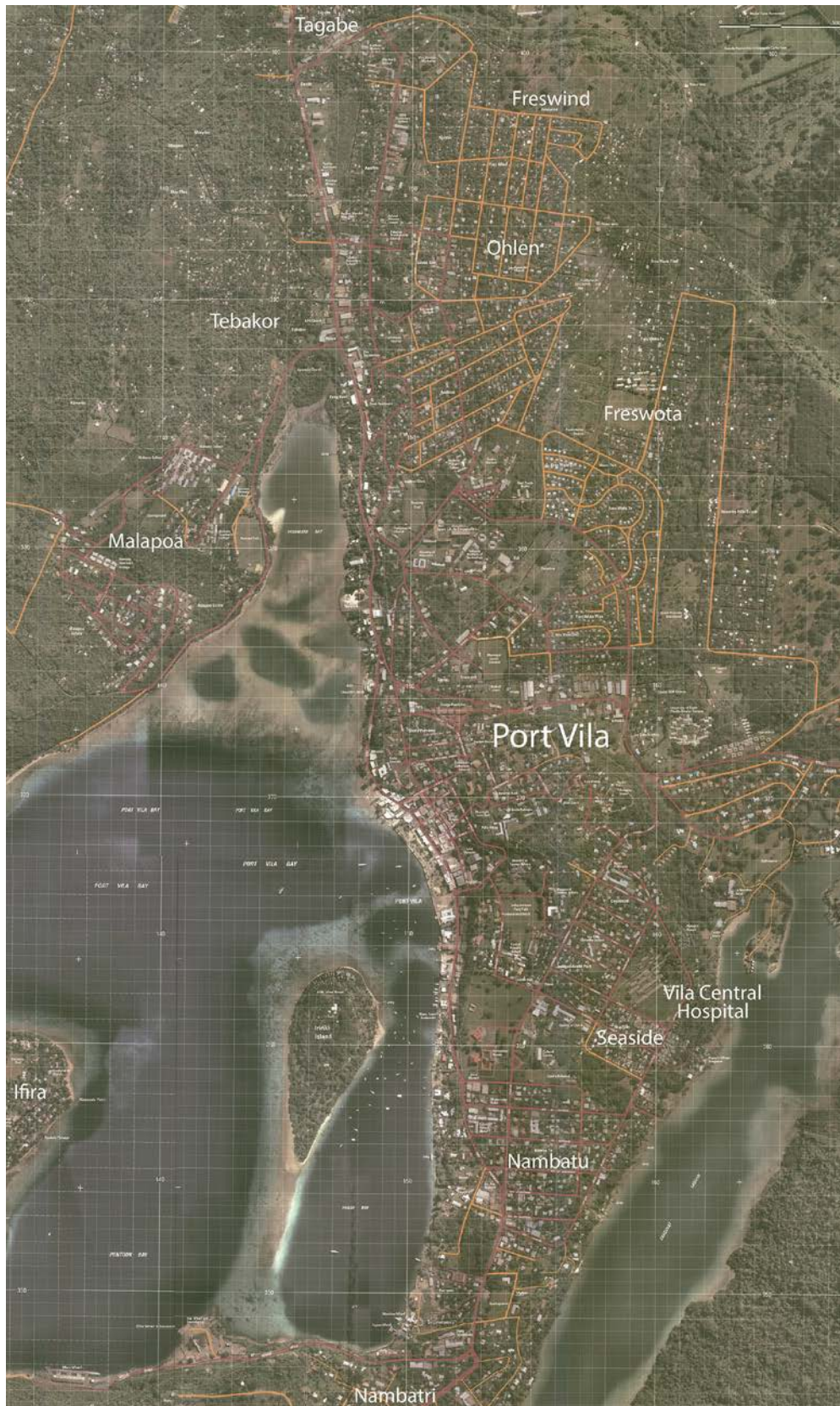


Figure 4-10: Port Vila map

Peri-urban areas are included in the slightly broader map that includes the southwestern region of Efate (see Figure 4-11). The primary peri-urban site of this research was Pango Village to the south of Port Vila, largely because this was the neighborhood where I lived with my husband, John, while conducting this research. Pango is considered the first Christian village in Vanuatu, with many residents converting to Presbyterianism in the mid nineteenth century. The village officially relocated from Epangtuei to the current site of Pango village so they would all reside on land consecrated as Christian. However, many people still retain land in Epangtuei that they use as their garden land. It is just a short 15-minute bus ride into Port Vila from Pango village, and the cost is the same as travel within town. There are approximately 2,000 residents of Pango village. While there is a growing number of people renting houses in Pango village who do not own any land, a majority of people live on customary land, speak the Pango language, and partake in village community life.

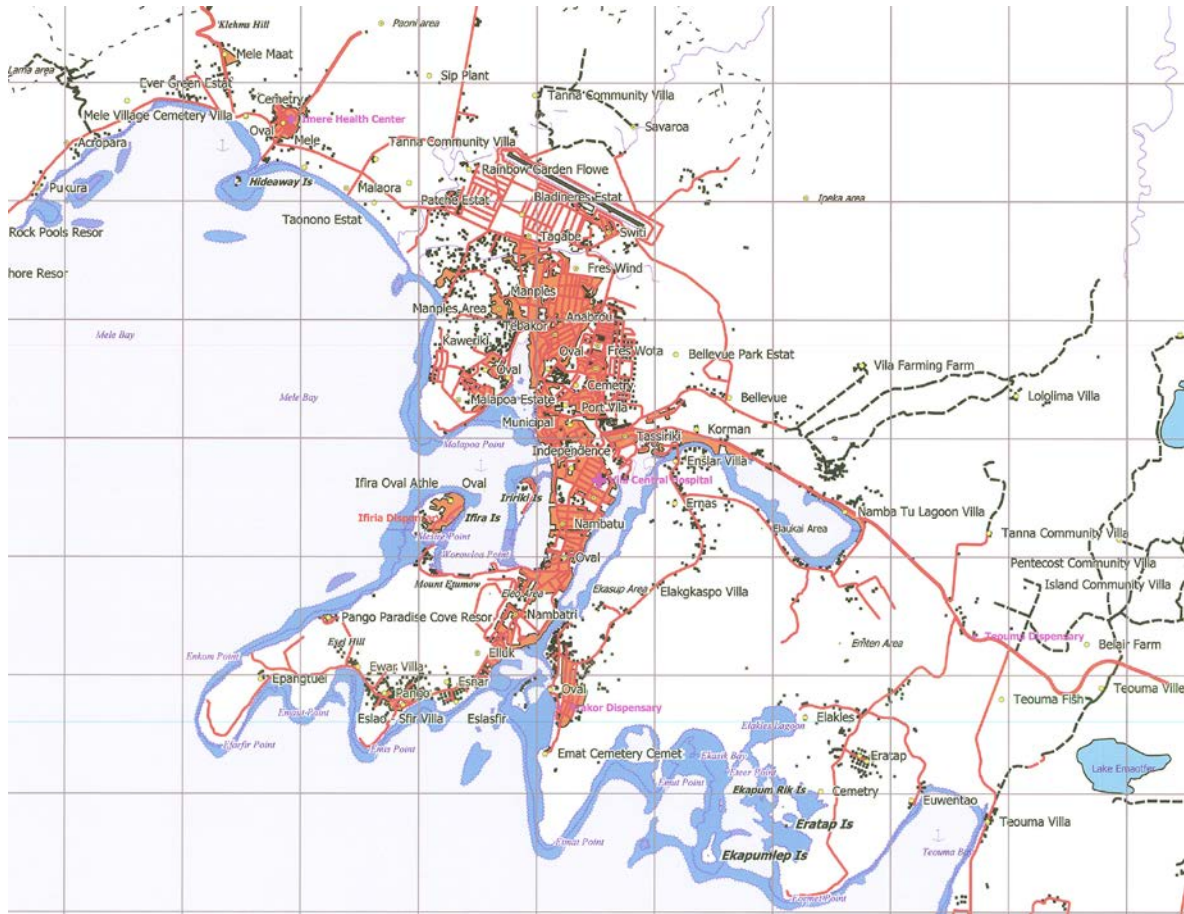


Figure 4-11: Map of Port Vila and the peri-urban areas

Other peri-urban areas in this research are Mele village and Erakor village. Mele is the largest village in all of Vanuatu with a population estimated at approximately 6,000 people. Mele, like Ifira, is the site of an original Polynesian outlier settlement (Feinberg and Scagliion 2012) that intermixed with the existing population of ni-Vanuatu Austronesians. In fact, Ifira and Mele share a Polynesian language dialect (Early 2012). This is further complicated by the relocation of Maat village to the area after it was evacuated and subsequently lost its village land to a volcanic eruption. While technically two discrete geographical places, Mele and Mele Maat, in practice people have spread to occupy most of the space between the villages. While maintaining village language and cultural practices of both Mele and Maat *kastom*, numerous

people who do not “belong” to either village rent homes in Mele as the price is slightly lower than in neighborhoods in Port Vila. Coupled with its close proximity to Port Vila, linguistic and cultural intermixing complicates the study of cultural practice in this area. Many people seek to make money by building small rental houses on their land, endeavors that push the population and housing density of the area ever higher. The distance to town is a little longer, about 20-25 minutes, but the cost remains the same as traveling within town, at 150vt. Erakor village is the third peri-urban village that is close enough to town not to warrant an increased bus fee. Similar to Pango, Erakor villagers have a distinct language, a village chief and access to customary lands for gardening.

Any of the areas beyond Mele to the north and Erakor to the east are considered rural areas in this research; for a full list see Table 4-2. Transport beyond these peri-urban villages, either to the north or the east is much more difficult to arrange, and is significantly more costly. Some of these areas are still covered by the MCH clinic based in Vila Central Hospital, and some are covered by the health clinic in Paonangisu. Rural areas in which participants of this research reside include: Eratap, Teoma, Rentapao, Etas, Eton, Erangorango, Forari, Pang Pang, Ekipe, Paonangisu, Emua, Nguna, and Mangaliliu. Most of these are detailed on the map of Efate (see Figure 4-1).

Locations of this Research

Urban Areas	Peri-Urban Areas	Rural Areas
Airport	Blacksands	Club Hippique
Manples	East Bridge	Erangorango
Beverly Hills	Erakor	Eratap
Ifira	Mele	Eton
Joint Court	Pango	Klem's Hill
Malapoa		Pakaroa
Nambaru		Pangpang
Freswin		Paonangisu
Nambatri		Rantapao
Nambatu		Salili
Freswota		Teouma
Ohlen		
Seaside		
Sileme		
Stade		
Tagabe		
Tebakor		

Table 4-2: Locations of research divided by urban, peri-urban and rural areas

The setting of this research as presented in this chapter helps to outline the broader context in which this study of malnutrition and feasting among children operates. Central to the approach of this research is an acknowledgement of the integral ways in which the larger cultural environment impacts how children access food. This chapter reveals how the setting, including housing structure, access to garden land, and access to water are important background in the study of health systems, as opposed to the isolated study of diseases in component parts. Also drawing on an integrated approach, McElroy and Townsend (2004) have written extensively about this from the theoretical framework of medical ecology. They argue that this theoretical perspective rests on several premises:

First, there is no single cause of disease....disease itself is ultimately due to a chain of factors related to ecosystem imbalances. Second, health and disease

develop within a set of physical, biological, and cultural subsystems that continually affect one another. Third, environment is not merely the physical habitat, the soil, air, water, and terrain in which we live and work, but also the culturally constructed environments—streets and buildings, farms and gardens, slums and suburbs. Further, people also create and live within social and psychological environments, and their perception of the physical habitat and of their proper role is influenced by social values and worldview. Thus our model linking environment and health fully acknowledges the impact of human behavior on environment. (McElroy and Townsend 2004:30)

This theory is built on the ecology of health and disease, and looks at the biomedical concept of disease, rather than the cultural concepts of illness or sickness (Kleinman 1981; Young 1982), examining how disease interacts with both the natural and cultural environments. Comparisons between the urban, peri-urban and rural locations where participants live reveal parallels between housing structure and style, access to garden land, and access to water. This part of the physical environment has implications for health and must be considered in the larger framework of the study and illness, and food security. Particularly important to research on the links between feasting and food security are the descriptions of both the biological and culturally constructed environments. The detailed accounts of the locations presented in this chapter highlight how the physical and social environment in which people live influences health. Equally important to the physical space are the social environments and participants' opinions of the acceptable types of land that can be cultivated for food. This examination of the places of research provides more than a geographic setting; it also illustrates that the geophysical and built environments contribute to people's perceptions of their living situation, their self-efficacy, and the larger social context that contributes to their access to food to feed their families.

5.0 RESEARCH METHODS

This chapter is devoted to a description of the research methods employed during this research. As this is a multi-sited project, and I was seeking the answers to a range of questions in order to understand the larger problem of persistent childhood malnutrition in Vanuatu, the project was well suited for the triangulation of multiple research methods in order to assess and compare the cultural context of food insecurity in these different places. Furthermore, the social factors that influence the decision-making processes of mothers vary by place for reasons explained in chapter three, and can be studied holistically only after eliciting information from a variety of methods in a variety of places.

5.1 RESEARCH QUESTIONS AND OBJECTIVES

This research examines hunger and food insecurity in a cultural context, including how people define these concepts, how they diagnose them, how they are treated, and how people cope with the negative consequences related to them. In order to do this, a detailed evaluation of the sociocultural and structural factors that influence mothers' decisions about appropriate infant and young child feeding and care must be completed. Responding to both biomedically driven pressures from health care workers and familial and cultural pressures from their communities, this study hypothesizes that mothers achieve syncretic meanings of “good” and “bad” foods,

hunger and satiety, malnutrition, food insecurity and feasting. Therefore, the overarching research question that framed this project is as follows: How do economic, environmental and social factors combine to affect mothers' decision-making processes and create pluralistic understandings of appropriate infant and child feeding? To effectively address this broad question, six secondary questions were developed with corresponding research objectives and activities. This aided in tailoring data collection around specific aspects of this larger research question. These secondary thematic questions are listed below in bold with the research objectives and activities following each question.

First, I asked to what extent do urban employment opportunities and the economic conditions of mothers impact food choice and access. My objectives for addressing my first research sub-question included, to: 1) determine the range of employment opportunities that are available to women, 2) survey the variety of the economic circumstances of women who are employed and not employed outside the home, and 3) assess the how these circumstances impact food choices and why.

Second, I sought to determine which factors influence mothers' decisions to breastfeed or use formula. In considering this second frame I: 1) appraised the variety of formula options and costs available to mothers, 2) established how mothers feel about the safety and/or health benefits of both formula and breast milk, 3) discerned the factors that influence breastfeeding duration, and 4) learned what other supplemental foods and drinks are provided to infants and why.

Third, I enquired about how differential degrees of access to local foods influence mothers' choices to consume local and/or imported foods. Objectives for this third probe included, to: 1) explore whether residential distance from Port Vila is a factor in accessing foods,

2) ascertain what cultural values are associated with both local and imported foods, 3) deduce if any of these values negatively impact food choices and why, 4) evaluate how costs vary regionally for various staple foodstuffs, and 5) gauge the extent to which cost influences food choice and access in the context of local versus imported foods.

Fourth, I examined the content of the advice kin networks and health care practitioners provided to mothers, and how women prioritize that advice. My fourth query objectives included, to: 1) identify the individuals who influence mothers' processes in making food choices, 2) appraise the relative influence of each of those individuals and whose advice is most frequently followed and/or disregarded, and 3) examine the content of the advice that is offered from this range of individuals.

Fifth, I studied how mothers, their kin, and the health practitioners with whom they interact define nutrition and malnutrition. Goals to support my the study of these categories included: 1) gather definitions of good and poor nutrition from all participants to help illuminate the range of definitions employed by the various participants in the study, 2) problematize the concepts of nutrition and health as well as malnutrition and illness to identify differences and similarities in these concepts and how healthy and ill individuals are identified by each population, 3) distinguish potential gender-based differences in definitions of nutrition and malnutrition, 4) compare and contrast mothers' and kin members' methods for determining when children are healthy and when they are malnourished with the methods health practitioners employ to categorize healthy and malnourished children.

Finally, I investigated the ways both children and their parents attempt to cope with the problem of food insecurity. My objectives for this sixth line of inquiry included, to: 1) identify what measures children take to deal with household food insecurity, 2) determine the

extent to which parents know about and/or encourage their food insecure children to engage in these coping mechanisms, 3) examine the ways food-secure parents and community members interact with and help food-insecure children to cope, 4) analyze parents' and community members' understandings of the perceived benefits and drawbacks of various methods of helping children cope with food insecurity, and 5) compare and contrast various community members', mothers' and caregivers' perceptions of the appropriateness and/or effects of children engaging in these coping mechanisms.

The questions and objectives outlined above yielded data that cover a great breadth of topics and issues. A significant factor in food choice and access to foods emerging from that wealth of data is the practice of children using feasts as a coping mechanism for dealing with food insecurity. By examining hunger and food insecurity in cultural context, and how caregivers' decisions about appropriate infant and young child nutrition are shaped by entangled definitions of malnutrition and health, community feasting as a means of coping becomes central to how caregivers and children experience food insecurity. Responding to both biomedically driven pressures from health care workers and familial and cultural pressures from their communities about appropriate childcare and nutritional practice, mothers achieve syncretic meanings of "good" and "bad" foods, hunger and satiety, and childhood malnutrition, leading them to identify and treat food insecurity in ways that satisfy neither health care practitioners nor extended kin networks. While informed by this breadth of data, this dissertation focuses only on the data that are most critical to understanding the changing role of *kastom* feasts in modern times and urban places in urban and peri-urban Vanuatu. As children use feasts as a coping mechanism for food insecurity, new patterns of resource distribution, gifting, and appropriate feast foods are created.

5.2 METHODS OF DATA COLLECTION

Based on the diverse research questions and objectives and the variety of participants included in this study as outlined above, it was critical to triangulate multiple methods as a data collection strategy. Data were collected using six research methods: open-ended interviews, participant observation, a visual-cognitive elicitation project, archival research, a survey, and dietary journals.

I conducted in-depth interviews with mothers (n=56) to provide context for their experiences and behaviors regarding infant and child feeding from birth to age five (see Appendix C for examples of the semi-structured question guide). This method also allowed women to discuss work experiences, the types of food they purchase and grow, and the influence of economics on food choice. It provided an opportunity for mothers to discuss factors that influenced any changes in their behaviors over time as well. Extensive semi-structured interviews are important, as this method proved beneficial in providing answers to all the research questions and objectives outlined for this study. While I had the question guide, I merely used it as a way to ensure I covered all of the topical themes and did not omit any topics of discussion. If there was a lull in the conversation or if a topic seemed to be exhausted, I used the question guide to help direct the conversation toward a new topic. However, to ensure that conversation flowed smoothly, and as part of building and maintaining rapport, interviews covered the topics in the order that the conversation naturally took, rather than forcing dialogue into a prescribed pattern. In this sense the interviews were semi-structured in that they covered the predetermined topical themes, but they did not rigidly follow a protocol. Often various interviews would yield additional data on themes not outlined in my question guide. These data were recorded and often provided additional anecdotal evidence. This helped me identify

emerging issues not previously considered so that I could expand the types of questions I asked in subsequent interviews as well as in other research methods.

I also interviewed husbands and grandmothers about their roles in child feeding, drawing on individuals living in Port Vila and the peri-urban areas, and from rural Efate (see Appendix C for examples of questions). First I interviewed mothers and mothers-in-law (n=5) of women in my study population who were willing to make themselves available, later expanding to interview others who wanted to participate. My research suggests that extended kin networks have a significant impact on mothers' feeding practices. Therefore, interviewing grandmothers about their knowledge of child feeding, how they choose to share that knowledge, and the degree to which they seek to convince mothers to follow these practices, or implement them themselves as they care for children, was critical to this research. While the semi-structured interview guide was used in for interviews with grandmothers, it was particularly helpful to gather data from grandmothers during participant observation, as they liked to talk more informally while completing small group tasks like weaving and cooking for a feast. Therefore, most of the information gathered from grandmothers did not come from semi-structured interviews, but from extended conversations during participant observation. Data from grandmothers was significant in my understanding of how child-feeding practices have changed over time. This was an important topic of conversation among mothers as they compared the foodways of older and younger children, as well as differences between recollections of their childhood in comparison to the foodways of their own children.

I also attempted to interview fathers about their children, but despite a goal of interviewing 15 fathers, I was unable to gather a significant population of fathers willing to participate. The total population of fathers interviewed was 12; six of those were interviews with

fathers who were also Health Care Practitioners; three of those were interviews with both a mother and father together; the remaining three were with individual, non-healthcare practitioner fathers. Cross culturally, feeding work tends to be a very gendered form of domestic labor (Douglass and McGadney-Douglass 2008), and this is extremely evident in Vanuatu, particularly on the island of Efate. While fathers actively participate in gardening and cooking, it is far less common for fathers to directly feed children. Typically, men prepare and cook food that will be consumed by a larger group of people or an extended family unit, for example, working to prepare food at a feast. Often this takes place in a separate area that does not allow them to directly observe child food consumption. Rarely are men involved in preparing a plate of food for children or directly aiding small children in eating. Even when I was able to observe fathers participating in child feeding work, they would explain that this was outside of their typical practice, and argue they could not really answer my questions on child feeding because they would “not know the answers” to my questions. Despite reassurances that my questions did not have “right” and “wrong” answers, and that I valued their opinions and knowledge too, they often declined to participate in a full interview, telling me “not to worry” because their partner or wife would be able to help me. Similar to my approach with grandmothers, I talked with fathers informally during participant observation, and was able to gather their thoughts on child feeding and nutrition in that way beyond the 12 interviewees.

Being a woman researcher also contributed to this problem, as it would not be appropriate for me as a married woman to have a very private conversation with a man who was also in a domestic relationship. As a cultural outsider, I was exempt from some of these restrictions, and I further attempted to alleviate this problem by offering to conduct interviews outside in public spaces so that our behavior was on display, and not secretive or suggestive of

any type of impropriety. My husband, John Fournier, who was viewed very positively as a type of chaperone, also regularly accompanied me. John's presence visibly sanctioned my behavior, acknowledging the legitimacy of my work since my behavior and request to conduct confidential interviews with men was outside of the traditional gender norms. Despite these attempts, it was still extremely difficult get fathers to participate, which explains the low number of fathers interviewed in this study. Nevertheless, the information I was able to gather from the small number of fathers who were interviewed, and the rationale of fathers who respectfully declined to participate in an interview, was enlightening. Ultimately my extensive participant observation that included fathers and grandfathers proved informative to this research and bolstered this component of my work.

Participant observation is the cornerstone of this research. Living and participating in village life in Pango, Efate, in communities that I visited throughout town and in other peri-urban areas, and actively working with nurses, doctors, health educators, and public health practitioners, provided access to and critical understanding of children's foodways in Vanuatu. I conducted participant observation with mothers in their daily lives, through routine child feeding, as well as during feasting events, and during their interactions with health care professionals regarding child nutrition, both in and outside of the hospital context. I conducted participant observation with teachers and children during school snack breaks and lunches. Following children's foodways and patterned behaviors for accessing food provided insight as to how and from what sources children seek food, in addition to the types of food that were most and least desired. Participating in routine practices that mothers and grandmothers engage in as they care for and conduct feeding work provided insight, training and knowledge on cultural values of feeding work and caregiver perceptions of children's foodways.

Participant observation was a crucial method for my engagement in informal unstructured interviews with grandmothers. Often grandmothers wanted to *storian* with me while they were working. Grandmothers complete time-consuming tasks that involve sitting for extended periods, such as weaving pandanus mats, sewing clothing, cooking for feasts, and washing clothes by hand. During these times, they were eager to have someone to talk with while they worked, and often I would help and work alongside them (although admittedly, the quality of my work was subpar in comparison). Patiently they taught me how to sew a dress, and how to peel and grate vegetables using iron and sometimes shell tools. This provided opportunities for me to gather the best quality data from grandmothers, and often this was impromptu. Thus the number of semi-structured interviews conducted with grandmothers was low, but their perspectives were still a prominent part of this research via data obtained through *storian* while conducting participant observation.

Participating in the planning and implementation of feasts provided critical insight to the central role of food in major life events. It also allowed me to witness children's behavior at feasts, and the gossiping of women as they shared thoughts on the success of the event and the food behaviors of the attendees. I was able to catalogue how resources are distributed, particularly at several of the weddings where gifts were catalogued, organized and redistributed to the bride, the spouse's family, and to guests (see Figure 5-1). For example, this figure shows the author sitting with two other women among a pile of pandanus mats that were given to the bride's family as part of the wedding celebration. At this point all of the gifts are sorted and counted, and the extended family network helps determine which of the gifts will be set aside for the bride to take with her to her new home, and which will be redistributed to those who contributed in some way to the feast.



Figure 5-1: Conducting Participant Observation

**The author participates in the preparation of a marriage box for a bride while recording notes.
Photo Credit: John Fournier**

One strategy I employed as a means to include families from a variety of different neighborhoods throughout Port Vila and peri-urban and rural Efate was to travel with the Maternal and Child Health (MCH) clinic as it visited neighborhoods to immunize and weigh children, and provide basic health care services (see Figure 5-2). Additional participant observation was conducted while volunteering alongside health care practitioners, and conducting interviews and surveys with mothers in health care settings allowed me to garner the perspectives of health care providers on infant and child feeding practice, as well as mothers' perceptions of the health care system and the services they were offered. This was done at the

MCH clinic, the antenatal clinic, and the pediatrics and maternity wards of Vila Central Hospital. I observed nutrition counseling and education initiatives, women's reactions to these programs, and in some cases how they chose to respond to that information once they left the health services setting. Participant observation proved to be a crucial method and played an important role in shaping the reevaluation and redevelopment of my research questions and the structure of interview and survey questions as this research progressed (Carrington 2013).



Figure 5-2: MCH Clinic makes a visit in Teouma

MCH Clinic serves a small cluster of rural households. The white truck in the background serves as a mobile clinic.

The MCH clinic based in Vila Central Hospital and administered through Shefa Provincial Health is open for walk-in services all day Thursdays and Friday mornings at the

hospital. Monday through Wednesday staff travel to communities in both urban Port Vila and rural Efate, rotating through a schedule of additional locations that repeats monthly. In these cases, they rotate through 13 urban, and 17 peri-urban and rural locations (see Table 5-1). They classify all peri-urban and rural areas together in one broad category labeled rural. For a more detailed description of the health care services provided at the MCH clinics see chapter six.

MCH Coverage Areas		
	Urban	Rural
1	VCH	Eratap
2	Nambatri	Klem's Hill
3	Manples	Devil's Point
4	Tagabe	Teouma
5	Freswind	Rentapao
6	Malapoa	Eton
7	Pakarua	East Bridge
8	Freswota	Waisisi
9	Namburu	Airport
10	Selime	Blacksands
11	Stade	Nambatu Lagoon
12	Korman	Etas
13	Nambatu	Whitesands
14	Tebakor	Blue Water
15		Salili
16		Erangorango
17		Pango
<i>Urban and rural classification as outlined by Shefa Provincial Health</i>		

Table 5-1: Vila Central Hospital MCH Coverage Areas

Because there was not always time for in-depth interviews at these locations, I developed a survey to assess a variety of anthropometric, environmental, economic and cultural factors that

are associated with infant and young child feeding, as well as 24-hour dietary recall and questions on feeding behaviors. The survey instrument was written in Bislama (see Appendix D for both Bislama and the English translation); however, in all cases the survey was read to the participant, and I filled out the survey form for the participant. This allowed me to move through the survey instrument quickly, in a more conversational manner, and it eliminated any potential problems with low literacy rates by not requiring the participant to read or complete the survey herself.

In the process of developing the survey instrument⁹, I created an initial survey and piloted that version with mothers from urban areas in Vila and in the peri-urban villages of Ifira and Pango. Other prominent surveys, including the Centers for Disease Control and Prevention's Nutrition Health and Nutrition Examination Survey (NHANES), the USDA's Continuing Survey of Food Intakes by Individuals, and the Diet and Health Knowledge Survey, the Farm Worker Survey (DeWalt and DeWalt 2011), the California Maternal, Child, and Adolescent Health Community Health Assessment Survey, the International Food Policy Research Institute's (IFPRI) Honduras IFAD Technical Assistance Grant, and the Ghana Savelugu-Nanton Household Survey Dataset, were consulted during the development of the pilot survey (Kresge and Eastman 2010). I took time in the field to conduct a literature review on the development of nutritional and dietary surveys, which greatly enhanced the quality of the both the survey instrument and the method of delivery (Becker and Welten 2001; De Keyzer, et al. 2011; Kumar 2006; Lennernäs 1998; Nzefa Dapi, et al. 2005; Paolisso and Hames 2010; York-Crowe, et al. 2006). Creating a new survey specific to my usage in Vanuatu was important because the broad

⁹ The author would like to acknowledge Richard Scaglione and Nora Colleen Bridges for their help in developing the survey instrument, particularly in editing drafts and in sharing unpublished survey instruments that were consulted during the development of this survey.

application of large scale surveys without adjustment to account for cultural variation has led to significant errors in survey results in the past (Ferro-Luzzi 2003).

The pilot sample was small with nine participants completing the pilot survey. This proved a sufficient number of participants to determine areas where the survey needed to be adjusted before it could be implemented on a larger scale. The pilot was designed to obtain basic feedback on the survey from the participants, determine how long the survey would take to administer, and whether questions could be reworked for clarification. Knowing the final survey would have a relatively small sample of less than 100 participants, sufficient feedback on the pilot version was obtained through a three-week period. During the pilot phase I also conducted interviews, or had participants complete a dietary journal so that I could compare the accuracy and validity of the survey questions with other research methods. Based on participant feedback, further participant observation, and after comparing survey results with responses garnered through other research methods addressing the same questions, I altered the pilot survey to decrease the length of time it took to complete, and to clarify and improve some of the questions.

One significant change made to the survey was the exclusion of three-day and seven-day recalls of food consumption on the final version of the survey. The pilot version had a section that asked mothers to reflect on the past three days or the past seven days and record the number of times their children consumed a variety of specific food items including: twisties, lolis, ice cream, instant noodles, canned meat, manioc, yam, sweet potato, taro, plantains, fresh fish or seafood; fresh beef, pork, or chicken; rice, island cabbage and other vegetables, peanut butter, eggs, as well as the number of times the child was given money to purchase a food item for herself. This list was divided into a number of different questions with similar foods grouped together. Studies comparing surveys with dietary journaling suggest that dietary journaling is

less accurate and prone to under-reporting (Berdanier, et al. 2008; Ruel and Menon 2002; York-Crowe, et al. 2006). However, this research demonstrated that dietary journaling was much more reliable than the three and seven-day recall methods employed in the survey. Participants were more honest and accurate in their dietary journaling than they were in face-to-face survey responses about the quantities and frequencies of food intake that required retrospective recall. This has been noted before in studies involving children, where under-reporting occurred when participants were asked about frequency of consumption of *unhealthy* foods as compared to logging those same foods in a dietary journal (Lillegaard, et al. 2012). Diaries are also proven to be more accurate than retrospective recall methods in studies of water security (Wutich 2009). In this study there was virtually no difference in the reporting of food intake using a 24-hour recall method and dietary journaling method, particularly with primary meals. When differences did occur between the 24-hour recall and dietary journal, commonly participants would forget to list some snacks in the 24-hour recall that they would remember to jot down in the dietary journal. The literature suggests that when individuals recall information that is part of their regular daily routine the reliability of these data is better than when asked to report uncommon events or behaviors (Paolisso and Hames 2010). This indicates that the 24-hour dietary recall for children's feeding work is a good method as it is regular consistent work.

The 24-hour dietary recall method has proven problematic in the United States and other developed countries and is commonly associated with significant under-reporting, specifically with foods participants believe are unhealthy (Lillegaard, et al. 2012). Under-reporting in this context can be defined as "...general under-reporting of the food intake, selective under-reporting of certain foods, or both" (Becker and Welten 2001:683). In an analysis of under-reporting, Becker and Welten (2001) explain that, "Certain meals such as snacks and in-between-

meals might be under-reported leading to systematic underestimation of the consumption of foods regarded as less 'healthy'. On the other hand, consumption of foods regarded as healthy might be overestimated among certain individuals" (683). However, Harrison et al. (2001) emphasize that the problem of under-reporting has not been adequately studied in developing or transitioning countries, and that there is no reason to believe that the phenomenon of under-reporting would be universal. In a study to establish if there are any cross-cultural differences in under-reporting on 24-hour dietary recall between Egyptian and American women, researchers found that in cases where there were strictly segregated gender roles associated with the feeding work of purchasing, cooking and serving meals, and where more cooking is done from scratch, women tend to produce a more accurate reflection of dietary intake in a 24-hour recall (2000). These characteristics describing Egyptian households are similar to those found in ni-Vanuatu households, where it is predominantly women who complete the feeding work and most meals are homemade using a rather simple list of ingredients. These findings run parallel to my conclusions that the accuracy of 24-hour dietary recall allows it to be a rather effective method in Vanuatu.

The consistency between the 24-hour recall method and the dietary journaling method was significant in shaping the number of participants who took part in dietary journaling for this study. It also lends enhanced credibility to findings from the dietary journals employed in this research, and led me to increase the number of participants in the dietary journaling project beyond what I had initially planned. Based on these findings, more emphasis was placed on dietary journaling, and the three-day and seven-day food item recall questions were eliminated from the survey.

Other changes made between the pilot version of the survey and the final version included changes to questions that were too detailed or specific to yield reliable answers from participants. For example, the pilot survey had questions about how much of each type of food grown in a garden was sold at market, as compared to how much was consumed by the family. Participants really struggled with this question, explaining that this varies widely from week to week, and participants stated they could not answer that question because this variation was too great. Participants were uncomfortable with providing generalizations here, because “it just wouldn't be right” or accurate from week to week. They also expressed that without accounting for seasonal variation, this question made it seem like they ate the same foods with relatively little variety. Furthermore, a detailed household composition table was eliminated because that information could be assessed based on the participant’s answers to other survey questions, and was not needed in that level of detail. Removing it also decreased the amount of time it took to complete the survey, which was approximately 15-20 minutes.

In addition, it was clear that some important themes were not addressed in the pilot version of the study, and were added to the final version. Questions on feasting behavior was missing in the pilot survey. Questions on the types and quality of foods served at feasts, and frequency of attendance of parents and children were added to the final version. Measures of food insecurity were not prominent in the pilot survey, and based on interviews and participant observation conducted prior to the implementation of the survey, it was apparent that more specific measures of food insecurity were required. Questions about children’s experiences of hunger, priority listing of spending and meeting financial obligations, frequency of feeding ‘hunger foods’ like plain white rice or white rice with a small amount of island cabbage as previously defined by a range of participants in interviews were all added. Additionally questions

that addressed the level of worry parents experienced at the prospect of having enough money for food were added to the final version of the survey.

Ultimately, the final survey was deployed in a variety of communities with participants from urban, peri-urban and rural villages. The final survey was attempted with 75 participants and had a 94.7% full survey completion rate (n=71). This high completion rate is due to the fact that the survey was administered verbally, one-on-one with the researcher and the participant, and so had the feel of a shorter structured interview. There was no distribution of surveys and hopes that they would be returned. I verbally explained my research, the survey topic, and the IRB approved informed consent protocol to the participant. If she provided verbal consent, then I began the survey. In the few cases where the survey was not completed, it never was a result of the participant requesting to withdraw from the research project. Typically it was because the participant's child was ready to be seen by the nurse, and the participant failed to come back and complete the demographic portion of the survey after the visit with the nurse was completed (the case for three of the four incomplete surveys). This could be due to the fact that in some locations literally hundreds of children and parents are in attendance, and the mother could not find the researcher after the child had finished the visit, or because the mother forgot, did not want to spend any more time answering questions, or because the child was crying and upset after receiving a vaccination, and the mother wanted to attend to the child without distraction from the researcher.

Another method I employed in an effort to gather insight from the perspective of caregivers themselves was a new method, which I term visual-cognitive elicitation. This project was designed to help me garner information from participants in a way that allowed them to document their concerns firsthand (see Appendix E for project protocol and sample discussion

group questions used with the visual-cognitive elicitation project). Photographic methods have been used in anthropological research almost since the advent of the discipline including by Boas, Malinowski in the Trobriand Islands and Mead in Bali (Poole 2005). Variations in the use of photographs have led to the emergence of a number of different methodologies aimed at engaging participants in research with a goal of richer descriptions of research themes. Photo-interviewing and photo-elicitation methodologies are among the most widely used photo methods, and have proven particularly effective as they can set a more casual yet immensely informative tone for an interview, particularly effective for research that involves children (Cappello 2005; Johnson, et al. 2012). In early research on the viability of using photographs as a research method, Collier (1957) explains that data “obtained with photographs was precise and at times even encyclopedic; [while] the control [group] interviews were less structured, rambling, and freer in association” (856). Photo-elicitation asks participants to use photos to evoke memories and encourage an informal discourse that eases the participant through the interview process (Hurworth 2003).

There are a number of other similar research methods that employ photographs to enhance and guide interview discussions and to involve participants in data collection (Lovejoy and Steele 2004). The method of Autodriving has been heavily used in marketing and anthropology of work and consumer behavior (Warren 2002). Autodriving involves participants taking their own photos and the resulting interview is ‘driven’ by the participants who see, critique and analyze their experiences and behavior (Heisley and Levy 1991:261). Reflexive photography also calls for participants to take their own photographs that detail their experiences (Pink 2003). The photos are referred to later during interviews where “...participants reported this technique promoted deeper levels of reflective thinking than interviews alone would have

done” (Hurworth 2003). Photo novella method involves informants crafting visual stories through a set or series of photographs. These sets of photographs are often used to show change over time, a repeated injustice, or perspectives of marginalized groups, which can then be used as a way to tell the public and lawmakers their stories and experiences (Wang and Burris 1994).

Because photo novella has also been used to describe programs that teach literacy or simply as a method of storytelling distinct from anthropological research, Wang and Burris (1997a) coined the term photovoice as a community-based participatory research method. This method strives to empower participants in their goals of positive change, and is rooted in feminist theory (Wang and Pies 2004). Wang and Burris (1997) explain that “Photovoice has three main goals: (1) to enable people to record and reflect their community’s strengths and concerns, (2) to promote critical dialogue and knowledge about important community issues through large and small group discussion of photographs, and (3) to reach policymakers” (Wang and Burris 1997a:370). Often there is an emphasis on helping women and marginalized groups, but the method explicitly encourages the use of the photographs by participants to help call for and enact change in their communities (McIntyre 2003; Wang 1999).

Photographic methods are also useful for group interviews, and “studies suggest that in group viewings, photographs elicit extended personal narratives which illuminate viewers’ lives and experiences...Instead of responding to an encoded message, most viewers’ responses reflect their own social realities. Thus, the social interactions surrounding the activity of looking at photographs provide an arena for studying the meanings viewers attribute to aspects of their everyday lives” (Schwartz 1989:122). Photographic methods offer participants the opportunity to speak for themselves in ways that are not guided by interview questions (Wang and Burris 1997a; Wang 1999). In fact many visual anthropologists, “see value in moving photographs and

other visual media from the sidelines to center stage, where photographs *become* data, rather than illustrate it,” and food studies are particularly well suited for the development of visual research methods as photographing and sharing images of food becomes increasingly popular (Salazar 2012:322).

It is within this context that I designed a new framework for engaging participants in visual methods in the study of child feeding—a method I call visual-cognitive elicitation. There are several parts to this visual method and all of the activities prove vital to the success of the method as the steps encourage cumulative conversation and group discourse. For the first step in this process, cameras were distributed to groups of three to five participants within the same community who were interested in participating in this project. In total, 28 individuals participated. The project first involved training people to use cameras. Many had some experience with point-and-shoot digital cameras and they did not need much instruction, but most of the older participants needed some basic training. I approached groups of four to five individuals who live or work in the same community and asked them if they were interested in joining this project. Participants kept the cameras for one week and took photos of everything they wanted to teach me, the researcher, about child feeding. They were asked to take photographs of the foods they feed their children, as well as the resources and barriers they encounter in accessing foods. I intentionally left the topic and instructions broad so as not to limit or influence the type or quantity of photographs produced by the participants.

After a week I returned, collected the cameras and printed hard copies of the photographs in Port Vila. Then I coded each photograph with a number on the back and created a worksheet for participants to caption each of their photos. This process enabled both the participants and the researcher to mix sets of photos yet still ensure that the photos could be reordered so that the

captions were correctly aligned with the corresponding photo. The captioning worksheet I distributed listed the photograph code and provided two columns of boxes for answering questions. The first column was a place for a description of what the photo illustrated specifically and where it was taken. Many photos were close-ups of plates of food. Sometimes cooked yam and taro can be difficult to distinguish, and it is not always easy to discern the ingredients in a bowl of soup, so it proved important to have participants list precisely what they had cooked for their families. The second box was for the participant to indicate the rationale for why she/he took the photo, or to describe the meaning of the photo.

It was the details disclosed in this column that encouraged a type of storytelling I found unique to this method. For example, in one photo a young boy eats rice with island cabbage on top, but in the caption his mother writes, “My young son, he accepts all of the leftover foods from anyone in the family who doesn’t finish all the food on their plate. We never have leftovers in this house.” In the subsequent discussion group, she explains that she wishes she could keep leftovers for an afternoon snack or for breakfast, but her children are always so hungry they eat all she has to offer. What alone could be interpreted as simply a child eating lunch, is in fact a much more personal image of food insecurity and the problem of having enough food. The ability to caption the photographs presented participants with the opportunity to write concise and poignant statements about how they feed their children, and the worry, fears and joy they experience through this daily activity.

Participants had about a week or so to complete the captioning activity, and afterwards they brought their photographs and captioning worksheets with them to our discussion group meeting. At the beginning of each discussion group, I asked participants to choose three to five photos they felt illustrated the most important thing that I should know as a researcher about food

in Vanuatu. As they shared these photos with the group, participants began to dialogue with each other about what photographs they took, became immensely interested in looking through the photos their peers produced, asking their own questions about what they saw and commenting on the similarities and differences among their sets of photos.

After working through my list of discussion group questions, in the final activity, I asked participants to mix the photos together and sort them into piles of similar photographs. Here, I wanted to learn what types of piles or categories people would create. As participants placed all the photographs into categories, discussions yielded data not only about the categories, but also about the rationale for why the participants decided to categorize the photographs as they did. This process—the dialogue among participants as to how they would organize and develop categories for the photographs—yielded just as much valuable data as the final sorted groupings of photos. This led to new understandings of barriers women face in accessing food that did not arise in individual interviews. For example, through this project, it became clear that food security is intimately linked to water security for the participants. Discussions of access to water and the uses of clean water for washing hands, drinking, preparing and cooking foods ensued. Visual-cognitive elicitation revealed problems caregivers faced in accessing clean water.

While the use of photographs as a participatory research method is not new (Clark-IbaNez 2004; Gotschi, et al. 2009), these methods can be helpful in discovering factors not previously understood or presupposed by the researcher and have been particularly effective in public health research (Rolph, et al. 2009). In this dissertation I present a new visual method, visual-cognitive elicitation, that is distinct from other visual methods. Unlike photo-elicitation, visual-cognitive elicitation requires participants to take their own photographs, and subsequently analyze their work through multiple activities including writing, discussion groups and pile

sorting. Unlike photovoice, there is no activist component to visual-cognitive elicitation. Participants can feel empowered through the process of creating and discussing photographs, while also feeling free to depict their own food insecurity knowing the photos will only be shared with their peers or anonymously in my writings. Visual-cognitive elicitation can encourage the production of photographs that illustrate sensitive, personal topics, enabling participants to still have fun with the method without the constraints of knowing their work will be presented to government leaders.

Ultimately, visual-cognitive elicitation yielded nuanced understandings of how caregivers value the various foods they feed their children. The use of visual-cognitive elicitation encourages a richer perspective of child feeding to emerge (Cappello 2005), which can have practical applications for the development of more holistic nutrition education and public health interventions in the context of child feeding patterns.

Additionally, I conducted some basic archival research at the Vanuatu National Library in Port Vila, Vanuatu. Many grandmothers who participated in this research can recall missionaries and colonial administrators instructing mothers on infant and child feeding. Some ideas from this time persist in present day practices of mothers and grandmothers who are caring for young children, as explained in chapter 2. Archival research helped me address my research objectives, as I examined the influence of kin networks and colonial and missionary health workers, and how advice has changed over time. While this library does not have a comprehensive collection of colonial documents, they do house some original documents that are not readily available in the U.S. or online. Comparing archival data with interview and visual-cognitive elicitation data facilitated an understanding of the extent to which past ideas persist in influencing infant and child feeding practices today.

Finally, I invited participants to complete dietary journals for their children in order to obtain a specific record of food intake over time rather than just one day via 24-hour recall. For this project, I asked participants to keep a detailed log of everything their children ate and drank for a two-week period. After an initial pilot of this project with five women, three of the women completed the journals, and I refined the directions and scope of the project after discussing their process. It was clear that I needed to record detailed instructions at the front of the journal I provided. Mothers in the pilot study explained that they forgot exactly what they were asked to do and there was variation in how they each completed the logs. Also, I added photographs to the end of the booklet along with an explanation and example of how to document the amount of food the mothers fed their children (Ferro-Luzzi 2003). Ultimately, only two mothers referenced the photographs I provided for size comparison. But participants reported the descriptions of food amounts I provided in the written example proved a helpful model to follow. The introductory text to the dietary journals and the photographs provided at the end of the journals are listed in Appendix F.

In total, I distributed 46 dietary journals to mothers, five of whom were part of the pilot of this project, and requested they log food for either all of their children, or their youngest children. Children who were exclusively breastfeeding were not included in this part of the study. Several participants had three or more children five years old or younger who were eligible to participate in this study. However, due to the time commitment involved in this activity, and the difficulty of keeping track of older children who likely eat with friends when they are playing away from mothers, I requested dietary journaling for only the youngest or youngest two children. This was based in part on what the mother felt she would be able to record and complete. Of the 41 dietary journals distributed to participants 29 books were

returned for a completion rate of 70.7%. Not all of them included a complete two-week food log, because: 1) the mother was not home when I returned for the journal and continued to keep the log until I returned next, 2) a child was sick and did not eat well, or traveled away from home temporarily so the mother asked to continue the log for a more comprehensive “healthy” or “typical” food log. Of the 29 dietary journals returned, 21 recorded the child’s diet for two full weeks, or for 13 or more days. Thirteen days was counted as representative of two weeks if the mother had not recorded a full day’s worth of meals on day 14 when the journal was collected. Three mothers recorded their children’s diet for between eight and 12 days. Five of the dietary journals included children’s diets for seven days or fewer. This time period is critical as it indicates enough days were recorded to ensure accurate understandings of average food intake. In fact, ten days or fewer is sufficient to garner enough information to estimate some nutrients to be within $\pm 10\%$ of the average nutrient intake for the individual. Those nutrients include: total energy, carbohydrates, protein, fat, dietary fiber and calcium (Ferro-Luzzi 2003), meaning that for the purposes of this research where micronutrient intakes were not calculated, the number of days recorded was sufficient.

Follow-up interviews were conducted with most of the mothers who completed the food journals, and often this was a time for them to expound upon the entries. Comparisons between what individuals claim they eat and what they actually consume are important to note, and this method was important to realizing any such differences. As noted above, the dietary journals proved to be more detailed and comprehensive, particularly of snacks, than were three or seven day food recalls, and they were fairly consistent with 24-hour dietary recalls. Participant observation with these families also allowed for comparison between written records and observed behaviors, and there were times when the mother was busy and did not have the time

for a full follow-up interview, but did permit me to chat with her while she was completing domestic tasks. In a few instances, I was able to observe children eating at other events, such as cricket matches, waiting to see a nurse at a MCH clinic, and at church, which could supplement and serve as comparison for data in dietary journals, again particularly in the case of how accurately or thoroughly recorded the intake of snacks.

5.3 SELECTION OF RESEARCH PARTICIPANTS

Given the research questions, objectives and methods outlined above, my informants were drawn from populations including women living in Port Vila and the peri-urban areas who have seized new economic opportunities and are employed, women living in Port Vila and the peri-urban areas not working outside of the home, and women from rural Efate whose access to commercial food and economic opportunities are more limited than that of women living in Port Vila. Women who live in these different areas of Efate have significantly different experiences in their daily lives and through the routine care of their children. Women living in rural areas utilize clinics and health centers rather than the national hospital utilized by those in town, and have limited access to the cash economy and wage labor from working outside the home. However, these women have access to land to grow food, while many families living in Port Vila do not own any land. Economic opportunities of employment provide increased access to money, but frequently require that mothers spend more money on food, housing and basic supplies, and more time apart from their children, who are commonly cared for by older siblings and grandmothers. Women who live in peri-urban areas who are not employed outside the home enjoy greater access to medical care available in the city, particularly in the form of the Maternal

and Child Health (MCH) clinic that travels to the peri-urban areas monthly. But these women sometimes struggle more economically with limited access to cash. While women who live in peri-urban areas who are employed or who have family members who are employed enjoy the communal benefits of village life and access to land, this also comes with the economic pressures of gifting and sharing, particularly at times of feasts, in a larger village setting. Due to this range of factors influenced by region, this multi-sited research design is critical as it allows for an examination of the influence of geographic and subsequent associated economic factors on food choice and access.

Additionally, I worked with health practitioners including nurses, nurse aides, midwives, nutrition educators, public health officials, and doctors who routinely diagnose children as malnourished, provide advice to mothers about infant and young child feeding, and/or work to develop and implement nutrition education and intervention projects. Drawing on their expertise and diagnoses, I invited individuals to participate from each of the three population categories described above who also have a child who was diagnosed as malnourished by a medical professional. Therefore, I worked closely with health care practitioners as they helped identify families with malnourished children whom I then invited to participate in this study. The logistics of this meant that I was primarily able to access the mothers of malnourished children in the context of the health care setting. Mothers whose children had been admitted to the pediatric ward of the hospital with a diagnosis of Failure to Thrive, Marasmus, and/or Kwashiorkor, as well as mothers who attended MCH clinics and whose children were diagnosed as underweight (the only measure taken at these clinics) were the primary source of data gathered from women who had a child with a biomedical diagnosis of malnutrition. As a result, most of the mothers in this study who had a child with a clear biomedical diagnosis of malnutrition participated in either

the survey or interview methods employed in this research. I also asked all the participant mothers if a medical professional had ever diagnosed their child as malnourished. Recruiting participants in this manner brought an anthropological perspective to the biomedical definition of malnutrition and allowed me to compare biomedical diagnoses with cultural diagnoses, and determine how mothers interpret and understand these biomedical diagnoses. I problematize malnutrition as a concept that is frequently used in public health discourse yet lacks a definition that is accepted and understood cross-culturally.

In an effort to determine the biomedical diagnoses of all of the children who participated in this study, I asked every mother if I could see the child's "Blue Card". Mothers and health professionals use the term "Blue Card" to refer to the health record that every child in Vanuatu is issued at birth, which is provided in Appendix B. The card indicates the child's name, date of birth, island of origin, and all of the statistics about the birth process and health of the child at birth. It also serves as the child's immunization record, growth chart as measured in weight-for-age, and the place where nurses, nurse aides, and doctors record notes on the health of the child at regular check-ups and in cases when the child is brought to the clinic or hospital because of an illness. This Blue Card¹⁰ provides a wealth of information about the child's health, and as a

¹⁰ At the end of this research, the Ministry of Health was in the process of replacing the Blue Cards with a new more expansive Maternal and Child Health Booklet. The new booklet was launched in December 2012 in a special ceremony at Vila Central Hospital at the same time that they celebrated the hospital's certification in the Mother and Baby Friendly Hospital Initiative. The booklet was developed in conjunction with AUSAID, New Zealand AID, the US Peace Corps, UNICEF and the WHO. There has been much controversy about this new booklet and problems or errors in the booklet itself. For example, the goal was to distribute the booklets in the Antenatal ward, as it has information about proper diet and care for mothers during pregnancy, and a list of signs for when a woman should come to the hospital or clinic to deliver her baby. However, there are two booklets, a pink and blue book for girls and for boys respectively, but there is no ultrasound screening for sex in Vanuatu. Therefore, it is impossible for antenatal nurses to know whether to provide pink or blue books to mothers when they arrive for their visits. In June of 2013, the booklets were still sitting in a storage facility and none had been used; however, in anticipation of these new books, a reprint of the Blue Cards was not ordered, and in May 2013 Vila Central Hospital ran out of Blue Cards and had to issue birth records to new infants from photocopies of the Blue Cards on flimsy white copy paper. Limited accounting of other birthing clinics in rural areas, including at Paonangisu Health Centre, indicate that the Blue Cards were still in stock and in use in these areas, and just Vila Central Hospital had run out. A temporary

helpful tool in understanding how mothers interpret the biomedical information about their children that is provided on the card.

While I requested to see the Blue Cards of the children of all the mothers in this study, I was often not able to access this information. In interview and discussion group settings and when discussing the food diaries, often mothers would forget to bring the blue cards to our meetings. There were additional cases when I asked to review the Blue Cards and mothers said they had lost it or they were packed away in a place that was difficult to access. Often this was the case with mothers of slightly older children. There is a widespread belief that children need to regularly attend the MCH clinic every month until the child is one year old and has received all its vaccinations. After that, the Blue Card is stored away because it is not considered necessary, although it is typically saved for the rest of the child's life. Blue Cards are also one way that ni-Vanuatu can prove their citizenship, and during the October 2012 election, which occurred during my fieldwork, ni-Vanuatu were permitted to bring their Blue Cards as one option of providing proof of citizenship when registering to vote. This indicates the real value that ni-Vanuatu place on this card, the necessity of saving it, and of storing the flimsy cardstock document in a place safe from the high humidity that so frequently ages and destroys documents like this in the South Pacific.

Thus, mothers of children who were three, four and five years old often had packed away Blue Cards and were unsure as to why I would be interested in looking at them at this point.

reprint of approximately 1000 cards was run, but subsequently ran out. In an effort to help the Ministry of Health rectify this problem, I led the development of a training program for MCH and Maternity Ward nurses on reading, understanding and using the new booklets designed to replace the Blue Cards. This first wave of training was conducted in mid June, with booklets beginning to be used by the end of June 2013. Now these booklets are considered part of a "pilot" program for nurses to begin to use with mothers in an effort to determine all of the potential errors with the booklets so they can all be rectified in subsequent versions. Concurrently, UNICEF and the Ministry of Health began a process of redesigning the booklets with the help of multiple stakeholders to address the errors with the hope of distributing this second version in 2015.

Some argued it was too much of a hassle to bring them out, they do not regularly look at them and would forget to bring them to meetings, and some explained that they stored Blue Cards at other houses (for example, with their mothers or mother-in-laws on north Efate where they were living when children were born and when the child was in need of the card during health visits). However, mothers did need to bring the Blue Card to the hospital and the MCH clinic in order to be seen by a medical professional, so in these settings, I had far greater access to these data.

Participants were selected by quota sampling categories established during preliminary research to gain perspectives from mothers across different socio-economic statuses, with different employment statuses, and mothers with children who have been diagnosed as malnourished, and based on where they lived (Bernard 2006). Numbers of mothers who participated in this research were quota sampled by whether they lived in urban, peri-urban, or rural areas, and whether or not they participated in the wage economy either through formal business work or through informal work selling food or souvenirs at a market. A full breakdown of the demographics of the participants included is listed in Table 5-2. It is important to note that some individuals participated in more than one data collection activity; for example, several mothers completed dietary journals and participated in semi-structured interviews. There were also some mothers who participated in individual interviews and also participated in the visual-cognitive elicitation activity. Therefore, the total number of unique participants in this study is fewer than the sum of the totals for each method in the table.

Quota Sample of Mothers Participating in this Research

Research Method	Total Participants for Each Activity*	Mothers** in Wage Economy in Urban Areas***	Mothers Working at Home in Urban Areas	Mothers in Wage Economy in peri-urban areas	Mothers Working at Home in peri-urban areas	Mothers in Wage Economy in rural areas	Mothers Working at Home in rural areas
Interviews	83	24	15	8	4	5	3
Dietary Journals	29	7	11	2	8	1	0
Photo-Elicitation	28	2	7	5	7	0	0
Survey****	81	20	31	9	12	3	6

*Some individuals participated in more than one data collection technique (i.e. completed an interview and a dietary journal). Therefore, columns cannot be summed to determine total participants as they would not reflect unique participants. Many people would be counted twice in that case.

**This table only documents mothers, not grandmothers who are primary caregivers or health care practitioners by employment and living area. The column listing "Total Participants for each Activity" does include grandmothers, fathers and health care practitioners.

***The location (urban, peri-urban and rural) refers to the place where the participant lives. In some cases the individual lives in a rural or peri-urban area but works in Port Vila. In those cases, the data are recorded in the column that corresponds to the location of the home of the participant.

****As the all of the information for this table, and used in this dissertation was asked in both the pilot and final versions of the survey, all the completed surveys (pilot and final form) were included in this data.

Table 5-2: Quota sample of mothers participating in this research by method

Mothers who participated ranged in age from 18 and to approximately sixty. Some mothers were unable to remember their exact age, or reported ages that were likely incorrect based on visual cues and ages of children, for example a mother who reported her age as 24 but discussed her first child who was 16 and attending high school. However, it was not easily evident that any participant who was unsure of her exact age fell outside of this age range. Mothers report the birthdates of their children fairly accurately, particularly when the child was small, under age five. But mothers do not keep particular track of their own birthday. Birthdates were not something that was particularly critical, especially for adults, within ni-Vanuatu society, and have only become more widely celebrated in recent decades. Still, most celebration is reserved for children, and few adults celebrate their birthdays publically, although this is changing as noted in one feasting example provided in this dissertation. All mothers had at least one child less than five years of age, or were pregnant. Pregnant mothers were included regardless of whether they were pregnant with their first or eighth child. I intentionally sampled to include the

perspectives of first time mothers, mothers with several children, and mothers of various ages, as these are influential factors and could contribute to differing cultural perceptions and experiences.

Beyond mothers, participants included grandmothers and fathers to garner perspectives of other influential members of the child's family and support structure. In some cases, mothers who work have extended kin networks help them care for their children while they are away. This is also the case with young mothers who are attending vocational or university level schooling and need to rely on the help of other caregivers. Because of the cultural value of communal ethics in Vanuatu, as described in chapters two and three of this dissertation, the role of extended kin in childrearing is commonplace and considered a positive aspect of *kastom* in Vanuatu. Additionally, elder women have significant influence over the caring practices young mothers employ (for additional information on the role of grandmothers in child feeding see Wentworth 2014). For the purposes of comparison, the same criteria for child age were applied to grandmothers who participated in this study; therefore, grandmothers who were the primary caregiver to a grandchild between birth and age five were included to garner their experiences, values and definitions of malnutrition, "good" and "bad" foods.

I planned to include the perspectives of fathers, who also play an important role in child feeding, ranging from contributions that include activities such as gardening to provide local foods for household consumption, or managing finances and determining how much money can be allocated to the purchase of food, water, and child medical visits, to some cases of literally feeding children. However, in practice, it proved extremely difficult to interview fathers in this study. This is reflected in only 12 men participating in interviews, and two men participating in the visual-cognitive elicitation project. The two men who participated in the visual-cognitive

elicitation project did so in their capacity as authority figures within their profession: one was a male nurse and one was a male teacher at a local school. This was also the case in with majority of the men whom I interviewed—six of the men participated in their capacity as nurses, doctors, or professionals working in the context of health and nutrition related projects relevant to this study. Many of these men were also able to speak about their personal experience as fathers, but from their perspective, their primary contribution was via their professional expertise. Only six men were interviewed specifically because of their role as fathers or caregivers to young children. In three of the six cases, their wives or female partners were also interviewed. No men participated in completing dietary journals or surveys in their final form; only one male participated in the pilot survey.

There are a number of reasons for fathers' reluctance to participate in this study. First, childrearing is considered to be within the female domain. Culturally in Vanuatu feeding and caring for children is "women's work," and while fathers often contribute to this work they feel (or want to be perceived) as unknowing figures in the case of child feeding to maintain a masculine gender expression. In some cases I began to interview fathers, and they would respond, "I don't know. You'll have to ask my wife." In response, I rephrased questions or reassured fathers that they do important work, and had good thoughts about child feeding that I really wanted to understand from their perspective. However, this was generally met with an attitude that they really wished they could help, but they knew they did not hold the "answers" I was seeking. I attribute part of this reluctance as a desire to express masculinity, and to not appear weak in front of a foreign researcher. Ultimately this is a reflection of the gender roles assigned to ni-Vanuatu men as a result of colonial and missionary presence and the resulting cultural changes from this prolonged contact, as described in detail in chapter two of this

dissertation.

The other aspect of this reluctance of men to participate in this research is careful consideration of their interactions with me as a female researcher. Regardless of where the participant was from (urban, peri-urban or rural area), I conducted all of the extended interviews in a private setting to allow the participant freedom to discuss any sensitive topic with full honesty. As a female researcher, it would be culturally inappropriate for me to spend time alone, especially in an enclosed space such as a home, with a man who was married or in a relationship with another woman. Furthermore, this would have tarnished my reputation as a married woman. Any behavior along these lines would be considered very inappropriate. Even when interviewing people whom I came to know well, people who lived nearby, I had to be in an open space so that the interactions and behaviors were 'on display' rather than hidden from view in a house. In one instance, I conducted an interview in my front yard, and in another instance, I met a participant at a coffee shop in town. I also talked with fathers in the Vila Central Hospital. These types of public settings helped demonstrate that neither the participant nor I had any illicit or taboo intentions. However, despite these efforts, I still had difficulty gathering male participants.

One way that I addressed this problem was to conduct extensive participant observation with men. In large group settings where both men and women were present, I was able to observe the behaviors that men engaged in that contributed to child feeding practice. This included participant observation in garden settings, in cookhouses (dwellings separate from houses built as a place for both cooking and eating and often shared by two or three families), and at community gatherings and events. One of the best places for this type of participant observation was while men were working together during feasts. Men play an active role in cooking for feasts, and they have culinary responsibilities that are distinct from those of women

at feasts. Men take lead roles in butchering animals and cooking large pots of *sup*, “soup,” which is a thick stew usually consisting of a mixture of meat, starchy root vegetables, and greens. In these public settings, it was easy for me to move between the areas where women and men were preparing food for feasts. As a researcher, people viewed my curiosity in both the role of men and women at feasts as a sign of “good” research—I was committed to understanding feasts and all the component rituals, and I was actively contributing to the event as demonstrated in my willingness to participate and help with any type of work. While I primarily worked with the other women, regularly moving throughout the entire space to chat with men about their work proved extremely enlightening.

Finally, my husband, John Fournier, played a significant role in helping me gather data about the role of men in child feeding, particularly at feasts. Fully committed to supporting my research endeavors, John lived with me in Vanuatu for ten months of this research from February through December 2012. My presence as a married woman, as evidenced by people meeting and talking with my husband, legitimized my role as an “established” woman from a cultural perspective. Often foreign visitors claim to be married, but whether or not that is true is debatable and the subject of local gossip when the spouse is not physically present. John’s presence, participation in community events, and willingness to learn and speak with people in Bislama proved crucial to my ability to collect data for this project. For example, John traveled with me to neighborhoods where it was unsafe for me to travel alone, and patiently read books for hours at a time outside of peoples’ homes when I was inside conducting an interview. As it is unsafe for women to travel alone at night, he accompanied me to many evening events. It is rare to see a ni-Vanuatu woman traveling alone at night as well, so John’s accompaniment was both culturally appropriate as well as a safety measure. Additionally, John helped with data collection,

taking many photographs and videos, particularly at feasts, to help me document other activities while I was interviewing or participating in cooking and preparing food. Within our community in Pango Village, John attended community events that were exclusively for men, subsequently talking to me about the meeting's structure and topics. Not only was John's presence logistically helpful, but also the ni-Vanuatu I lived and worked with considered it a critical way for me to demonstrate smart behavior and commitment to my research in Vanuatu, and a true understanding of ni-Vanuatu lifeways, as my family to this field site together.

5.4 DATA ANALYSIS TECHNIQUES

Data analysis was ongoing throughout this field research as is important to reflexive anthropology and ethnography. Throughout the course of this project, I critically examined and adjusted the research framework as it was informed by data collection. This led to the expansion and refocus of some of the research methodologies. This is best illustrated with the addition of the survey to the research methods deployed in this project. I did not initially intend to conduct a survey; however, upon arrival and my first visits traveling with the MCH clinic based in Port Vila, I realized that in most cases nurses did not stop in one place for a long enough period of time for me to conduct interviews with mothers attending the clinic. This meant that I needed to develop a more systematic and time efficient method for accessing the life experiences and opinions of these participants. Thus, I developed the survey instrument while in the field. Furthermore, before conducting extensive participant observation, I was unaware of the vastly significant role of community feasting as a coping mechanism for children's food insecurity, the very focus of this dissertation. After attending my first few feasting events, and beginning to

interview mothers and caregivers on this subject, I realized how critical this is to understanding food security in Vanuatu. Subsequently I sought out new feast events and attempted to attend and conduct participant observation at as many feasts as possible. This type of reevaluation and critical reflection of field experiences shaped the development and success of this research as a whole, ultimately strengthening the entire project.

The use of technology also played an important role in the data collection and analysis. As many interviews as possible and all of the discussion groups associated with the visual-cognitive elicitation component of this research were digitally recorded. It was difficult to get all of the interviews audio recorded, as the technology is unfamiliar to many participants, and some individuals preferred just to talk without any recording. I used both a Panasonic RR-US591 Digital Voice Recorder and a Livescribe Echo SmartPen to record audio materials. To ensure quality recording in small group settings, both the recorder and the SmartPen were used to record discussion groups. A plethora of digital photographs were taken at various events to help visually document gardening, cooking, and feeding practices both during typical days and during special events. These digital photographs were uploaded to iPhoto and linked by date and time to my field notes to help form a more comprehensive record of participant observation events. Then field notes and photographs of the same events could be analyzed simultaneously. Interviews that were particularly data rich for my purposes were transcribed either in their entirety or only the parts that were most relevant. Several of the longer interviews that were between an hour and a half and two and a half hours included much discussion on various aspects of maternal and child health. However, significant interview time was not directly related to the topic of this dissertation, so due to time and logistical constraints, only those parts that were directly related to the topic were transcribed. Most of the interviews were conducted in Bislama, with a few in

English. A couple of ni-Vanuatu transcription assistants, Lauren Ojeda, an undergraduate anthropology student at the University of Pittsburgh, and I completed transcription work. Ms. Ojeda was also vital in digitizing all paper materials including food diaries, visual-cognitive elicitation worksheets, and survey forms, in addition to entering survey data.

Data were analyzed with the help of SPSS and MAXQDA software that allows for coding on transcripts and audio for recorded interviews. SPSS was used to analyze all of the survey data, as the software works well for both qualitative and quantitative data. With the MAXQDA software, I was able to import digital copies of all of the dietary journals, as well as all of the photographs taken as part of the visual-cognitive elicitation project and digital copies of the photo elicitation worksheets, and all of the 512 photographs taken by participants for the visual-cognitive elicitation project were coded for analysis. All field notes taken during participant observation, interviews, and as daily logs were written with the Livescribe Echo SmartPen and were imported to Livescribe Desktop software where they were digitally displayed as a searchable data set so they could be backed up electronically, and analyzed digitally. Sets of notes on feasting and food security were imported to MAXQDA for coding and analysis. Codes assigned to segments of the interviews and observational notes helped identify emergent themes of the research as is a critical part of successful analysis (Wang 1999; Wang and Burris 1997b). While not all the codes and emergent themes were applicable and thus used here, the additional data speak to the larger research question that framed this fieldwork and that information has been used in related papers and presentations.

6.0 MALNUTRITION, FOOD SECURITY, AND CHILD HEALTH

My research explores how ni-Vanuatu caregivers and health care practitioners and children manage problems with childhood malnutrition and food security. While this research is primarily concerned with how feasting has become a coping mechanism to deal with food insecurity, how participants understand everyday foodways as different from feasting practices is critical to addressing the central research question. Furthermore, in order to understand malnutrition and food security in cultural context, including how people define these concepts, how they are treated, and how people cope with these illnesses, a detailed assessment of the social and structural factors that influence decisions about appropriate infant and child nutrition is required. This chapter presents an overview of the types of foods consumed on a daily basis, analyzes participants' approaches to typical child feeding practices, and situates this within a cultural discussion of "good" and "bad" foods and nutrition education programs.

Additionally, a description of maternal and child health care delivery on Efate is presented. By describing urban, peri-urban and rural health care delivery a detailed analysis of the range of experiences caregivers have with biomedical health care providers is revealed. Finally, a discussion of the language used to describe, explain and diagnose malnutrition is provided. Analyzing malnutrition from the perspectives of both caregivers and health care divulges larger problems with providing meaningful diagnoses and nutritional advice for

mothers. Data illustrate that a discussion of food security could be much more productive in addressing these health and nutritional problems than using the current discourse of malnutrition.

6.1 EVERYDAY FOODS

6.1.1 Participants' philosophies about food consumption and feeding

Looking down at my green and pink plastic plate, with the remaining rice and partial piece of *simboro* (grated manioc or plantain wrapped in island cabbage and boiled), I considered my palate now successfully retrained for the consumption of island food. While *simboro* was an acquired taste, the stew served over rice was much more familiar to my palate, and this stew had included fresh ground beef from local cattle, a special treat left over from a feast that concluded the day before. The juicy grass-fed organic beef is all that is available here, and I learned to enjoy beef in ways I had not in the U.S. Smiling, I complimented my host, who had graciously offered me an evening meal after we had finished talking about her children and life in Vanuatu, emphasizing that the flavor of the soup was wonderful and inquiring as to how she made the dish. Thanking me politely, she responded with a list of ingredients rather unenthusiastically, and then changed the subject, quite bored with the topic. Negotiating compliments, using the space as a point of transition to delve into the specifics of food regularly failed me. Notes in my field journal reflect my frustration that delivering compliments on taste and flavor of foodstuffs were regularly falling flat. I needed a new approach. Recipe cards are nonexistent, and often women cook in groups, dividing chopping and stirring and grating tasks, while singing and gossiping

about the day. There was no apparent secrecy in the ways in which food was prepared. Still, my compliments did not seem to be very meaningful to people.

Weeks later after a particularly long day of interviews in town I returned to Pango and my adoptive mother was just finishing cooking an evening meal. Beckoning me inside the cookhouse she lamented over my working too much and encouraged me to sit, rest, and *storian* with her while she finished cooking. Calling in her five grandchildren, who bounced around the cookhouse hugging my legs and singing my name, she wiped their noses and corralled them around a square of blue and pink floral cloth placed on top of the mat designed to catch all the food that managed to miss their little mouths, tumbling sideways off awkwardly held spoons. Handing me a plate, I ate ravenously and asked if I could have a little bit more. Thrilled, she refilled my plate, and commented on how I should gain a little weight, and that she was glad I enjoyed her food. “You’re learning to eat like a woman from Pango now,” she laughed.

Reflecting on this exchange, I thought about how asking for more was received as a compliment rather than a burden or an indication of taking more than one’s fair share, something I had worried about. This was a food secure family so there was plenty of food for everyone, which certainly distinguishes it from other families that do not have any extra food to share. Strategizing future interactions based on this experience, the next time a participant offered me a plate of food, I took a very small portion, and then asked for more, which was met with similar enthusiasm. I stopped offering compliments on the taste and preparation of the food I was offered and switched to comments on how full I was after eating, emphasizing that I would need to rest now that my stomach was so full of food. Every time this was met with smiles of approval and satisfaction, the type of response I had hoped for with my compliments on flavor. Feeling full was the real compliment; good flavor was nice, but what people really wanted to provide

was abundance, enough food to leave you satisfied, full and ready to rest at the end of the day. To ensure that the people you fed were full was to demonstrate real compassion and success as a cook and provider, which reflects community ethos of responsibility in caring for others. Learning to give proper compliments not only reveals appropriate manners, but also how values are assigned to food and patterns of food consumption.

On a daily basis food preparation is not an endeavor of displaying culinary skill and expertise. It is preferable that meals be prepared quickly and easily, and family finances often dictate that the meal be inexpensive, even for those families that are food secure. One participant explained, “There is not a lot of effort put into food preparation here [on a daily basis]”. Daily food consumption focuses on eliminating hunger, rather than adventures in taste. Several interviewees explained this via an expression about everyday food in Vanuatu: *kakae blong holem bel nomo* or eat just enough not to feel hungry. The emphasis here is on not feeling hungry, not necessarily about feeling full and satisfied—that proves a feat too difficult to achieve every day for most people. Each day, one should eat enough to not feel pains of hunger, enough to last through the night, or if it is morning until a late afternoon or evening meal. Enough. But not so much that you feel full. Eat enough to get you through until you can eat again. Being full then becomes a privilege, something that you should not expect at every meal.

Concurrently, fullness symbolizes success and wealth, something out of the ordinary, special occasion foods that one can offer to guests. It signifies a good caregiver, someone who has demonstrated she is cognizant of the needs of others in the community and is actively working to fulfill those needs. This care goes beyond simply feeding children, but speaks to a larger ethic of people caring for one another, something particularly important in many Pacific

island communities (Brison 2007). Thus exclaiming to my hosts how full I was and how happy I felt to be full indicates the success of the host at facilitating my experience of a ‘good’ meal.

Secondary to the quantity of food is the kind of food you eat to satiate your hunger. *Kakae blong holem bel nomo* really has two meanings—not just about the quantity of food that you eat on a daily basis but also about the quality. Eat enough to alleviate hunger, but how this is achieved is not particularly important to the goal of staying the rumblings of one’s stomach. Not particularly surprising among people who experience food insecurity, logically one would want to prevent hunger by any means. But even those who are food secure discuss this, indicating the larger economic system in which the discourse of food security in Vanuatu is settled. Even participants who I knew had regular access to garden land which provided reliable food sources and most of their intake, those who had steady jobs with reliable income for years in the non-profit sector, those who admitted never having to change their eating patterns due to lack of food, still consistently reported *worrying* about having enough food. A surprising finding, this indicates the closeness to and awareness of poverty and hunger that many people in urban and peri-urban areas feel. Likely this is due to an acute awareness of those whose children ask for food when there is none—a closeness achieved through being able to name children who face this problem, to “see their [the children’s] faces and know,” as one participant explained. Proximity to hunger thus results in a generalized worry about that same problem affecting your family.

How hunger is alleviated then is less important than ensuring that it stays at bay. If a large portion of rice is more filling than a grapefruit or cabbage, then that is an acceptable choice. Filling food regardless of whether or not it is considered the “best” food or if it meets the dietary recommendations of a balanced meal tends to be the choice. This does not negate strong

food preferences among children and adults, for those do exist. However, as one participant reflected, “Being full is really what is most important.” Any analysis of food choice and behavior must be rooted in this comprehension of hunger and satiety enacted on a daily basis.

6.1.2 Common Foods and Drinks

Even on days when I rose and it was still dark outside, I knew that there would be hot water over the fire in the cookhouse. My mother would want tea before heading to the morning devotion with the women’s group at the church. During weeks that had been particularly rainy or cool, I found tea made the night before, boiling hot water poured into large thermoses and sealed tightly to keep the liquid warm until dawn. Advanced preparation like this could help with busy mornings or cold nights. Common foods in the morning include a carbohydrate rich food served with a hot, sugar sweetened beverage (see Table 6-1 for daily meal patterns). Normally, people in urban, peri-urban and rural areas alike drink tea first thing in the morning. Black Lipton tea is preferred. However, when this imported tea is not available, a tea is made from boiling lemon, lime or orange leaves and adding sugar. Tea is the most important part of the breakfast meal. The idea of drinking a hot liquid is so central to the meal that if neither bagged tea nor the leaves needed to make a tea of local products are on hand, people will simply drink hot water.

Common Foods and Drinks Consumed in Vanuatu

Time of Consumption	Common Foods	Common Drinks
Breakfast	Breakfast Crackers, bread (served dry, with butter or jam, occasionally with peanut butter), <i>kato</i> (doughnut), biscuits (shortbread or plain or cream-filled cookies), banana, pancake (made with self-rising flour, sugar and milk or coconut milk)	Leaf lemon tea (boiled water and lemon tree leaves, this can also be made with leaves of orange trees or lime trees and called leaf orange or leaf lime)
Lunch	Rice, canned tuna, ramen noodles, manioc, <i>simboro</i> (traditional food of manioc and island cabbage), egg, <i>kato</i> (doughnut), occasionally a small amount of soup over the rice	Water, juice (usually made from concentrate or powders)
Dinner	Rice, manioc, <i>simboro</i> (traditional food of manioc and island cabbage), island cabbage, canned corned beef, potato /sweet potato, chicken wing, minced or ground beef, <i>laplap</i> , (traditional food cooked in an earth oven, primarily starch with cabbage, coconut milk and occasionally meat) soup (mixture of vegetables in thick broth and occasionally includes canned or fresh meat, similar to stew)	Water, leaf lemon, leaf orange, leaf lime, Milo, juice
Snacks (eaten in the morning and/or afternoon)	Twisties (baked flavored snack product), lolis (suckers), ice blocks (sweetened flavored ice), ice cream, local peanuts, local fruits (papaya, grapefruits, bananas), boiled eggs, ramen noodles (often eaten uncooked as snacks), apples, chewing gum.	Water, juice, coconut water

These foods are listed by meal and snack. These data were compiled from food diaries, 24-hour recalls in interviews, and participant observation. This was also visually documented in the photo-elicitation project, as many participants took photos of their kids' meals and snacks. This simply lists the most common foods not all of the variation that was documented in this project.

Table 6-1: Common Foods and Drinks Consumed in Vanuatu

Whenever possible sugar is added to the tea. As I watched women prepare tea for me, assuring them that I did not need any more mounds of white sugar spooned into my cup and feeling the sweet warm liquid on my teeth, I realized counting sugar intake in tea would be important to understanding larger nutritional patterns. During interviews and in the dietary journal recordings, I always asked women to relate to me how many teaspoons of sugar they usually put into their children's drinks. In part children look forward to their morning meal because of the sugary sweetness of morning tea. I watched countless children dunk bread and crackers into their tea, fishing soggy bits of cracker out of their cups with their spoons.

The importance of this hot beverage in the morning is reflective of the naming of the meal; breakfast time in Bislama is called *dring ti*, or the time for drinking tea. Data showed that infants as young as six weeks may be given lemon tea as a supplemental food, and it is a

common substitute for breast milk during weaning. Many women reported that tea was the first thing their child ate after breast milk. While younger children often receive just one heaping teaspoon of sugar added to their drinks, even infants drink the beverages only after they have been sweetened.

Preferably, breakfast is also served with a starch. Long white bread loaves are baked fresh daily in the supermarkets and bakeries around Port Vila, and even in the early morning, fresh bread has been delivered to the small independent markets that dot the urban and peri-urban neighborhoods. The widespread availability and the low cost of 55vt or about .58 cents US per loaf makes it widely consumed, and is an immediately filling breakfast food. If the cupboard is stocked with butter, jam or peanut butter, then slices of white baguette will be topped with these, but most frequently they are eaten plain. Equally as popular are breakfast crackers. Also made of refined white flour, these hard, thick crackers are unsalted and very dry, making them a good accompaniment to tea. Drinking tea with this starch allows people to eat bread a day or two old that has started to harden, or crackers that have gone stale in the humidity without revealing this condition. Biscuits, or what we would consider cookies in the U.S., are also common foods eaten in the morning. Chocolatey cookies or ginger cookies with frosting in the middle are a favorite of children, making the day's first meal is laden with sugar.

Sugar sweetened tea, or warm sugary water and bread or breakfast crackers are an ideal example of *kakae blong holem bel nomo*. Particularly in urban areas where foodstuffs need to be purchased, these are among the least expensive foods. Additionally, these starchy foods will fill the stomach quickly and easily. The food diaries that mothers completed in this project revealed that every child had this for breakfast at some point during the time they filled out the diary, and often every day. There were several instances when children also had a repeat of this meal in the

evening for supper. It is an inexpensive and easy way to achieve satiety while following the ideas behind *kakae blong holem bel nomo* in that hunger is alleviated without real regard to how this is achieved in terms of whether or not there is diversity or nutritional quality in the meal.

Lunch and dinner ordinarily consist of rice with “soup.” “Soup” is sometimes jokingly referred to as a catch—all term; there is no set list of ingredients, and it is eaten so regularly that the dish consists of whatever foods are on hand at the time of cooking. Soup can be just boiled island cabbage (*Abelmoschus manihot*), and sometimes includes canned meat (tuna in oil or corned beef). Fancier versions of more diverse soups with carrots, potatoes, sweet potatoes, manioc (*Manihot esculenta*), and green beans added to the pot are created for special occasions and in families with more money available for the purchase of food or larger plots of garden land. Packets of ramen noodles are often part of soup, and the seasoning packet from the ramen along with the starchy water root vegetables are cooked in form the basis of the soup broth. Manioc flour can be added as a thickening agent, for the broth of the soup is either akin to a thicker stew or merely the water foods were prepared with, and the soup is ladled over rice and served on a plate rather than in a bowl. Boiling remains the most common food preparation method in urban and peri-urban areas as it is significantly quicker and does not require the space needed for cooking with hot stones in an earth oven.

Simboro is a popular “island food” normally made with manioc or banana (plantain), which has been grated and rolled into an island cabbage leaf so that it looks like the size and shape of an egg roll or spring roll. It is then boiled in salted water until cooked through. If available, fresh coconut milk will be squeezed over the top as a seasoning. Unlike most “traditional” foods, *simboro* is frequently boiled, which cuts down on cooking time. Island cabbage and manioc are amongst the two cheapest types of fresh local food one can buy at

market and therefore serve as the foundation for many of the meals served in the urban and peri-urban areas. There is also no specific season for manioc or island cabbage; it can be grown and harvested at any point in the calendar year, contributing to its commonality. *Simboro* parallels the consistency of *laplap* but can be prepared in less time and without an earth oven.

Snacks between meals are common if families can afford them, and are eaten both in the morning before lunch and in the afternoon before dinner. Snacks fall into two general categories, sweets and fruits. Local fruits such as papaya and grapefruit, and/or locally grown peanuts and cucumber are regular snacks, and papaya is the most common fruit snack for children. Available all year like manioc and island cabbage, it is also inexpensive and the soft juicy flesh is easy for infants and young children to mash in gummy mouths with few teeth. The word “snack” is not commonly used in Bislama although it is gaining in popularity in urban areas. MCH nurses use the term to describe small foods served between meals when making public health overtures on proper child feeding. Their recommendations are for five “meals a day,” just smaller meals, and particularly smaller “meals/snacks” in between breakfast and lunch as well as between lunch and dinner.

Because this is such a common time for people to consume sweets many people just refer to “eating snack” as “eating sweets.” Early in this research I asked participants what term they used for “snack,” and was told repeated “sweets.” When asking questions about snacks and requesting that people include snacks in their recording of food diaries, I had to be specific to mention that this included anything that was eaten between meals, not just sweets. Otherwise, I realized early on, caregivers would report that no snack was eaten because the snack was local fruits rather than imported foods, and I had to clarify that any of these foods were considered snacks in this research. Still, sweets were the overwhelming majority of snacks consumed.

The most frequently reported snack based on interviews, surveys and participant observation, however, are Twisties¹¹, a very cheap and easily accessible snack food product. Sold predominately in single-serving sized packets, Twisties typically come with flavors like “cheese” and “chicken.” Twisties are an imported snack food manufactured by Frito-Lay. At just 10-50¢ per bag Twisties as a brand name have become synonymous with all prepackaged chips and puffed snacks, the way in which Americans might use the term Kleenex when indicating any brand of facial tissue. Still, Twisties brand is widely available, and children clamor for the packets. Bright orange salty powder smears the faces and fingers of children, and when they finish the morning break in school or are running around in play before dinner the neon orange dust serves as a reminder of their widespread consumption. The toddler in Figure 6-1 is eating an off-brand called Wheels, but holds up the bright orange circle to show my camera. Both during interviews and particularly in the dietary journaling exercise, it was not uncommon for a mother to report her child consuming several packets of Twisties in one day or Twisties as the snack between breakfast and lunch as well as between lunch and dinner. The very low price, long shelf life, and no need for preparation contribute to the widespread consumption despite the fact that they are considered unhealthy, *rabis* (junk) food. Twisties are also reported to be a good *kakae blong holem bel*, a snack to tide children over until the next meal. The allure of bright packaging, the salty taste, the no-cooking convenience all contribute to parents passing bags of Twisties to their children when children are hungry or when parents are busy and want to occupy children with special treats.

¹¹ The nutrition facts for cheese Twisties indicate that a single 50 gram serving has: 265 calories (53.3% of calories from fat), 14.9 grams of fat (22% of a daily value), 7.3 grams of saturated fat (36% of a daily value), 503 milligrams of sodium (20% of a daily value). Percent daily values listed are from a 2,000 calorie diet.



Figure 6-1: Eating imported snack foods.

6.1.3 Purchasing Foods

Residents of Port Vila and the surrounding villages have a range of purchasing options when shopping for food. Of these, participants discuss two distinct categories: the market and the store. Market foods are predominately locally grown or locally processed from ni-Vanuatu vendors. Situated on the seafront of Vila Bay stands the permanent and primary market house. The square structure has an opening in the metal roof for an uncovered center courtyard. Only walled on the side that faces the sea as it provides part of an enclosure for the restrooms, the remaining sides are open, permitting visitors to enter from three sides with no real door. Tile flooring, slick in the rain, is cleaned off every Saturday afternoon or Sunday when the market is closed. Otherwise the vendors of the open-air market conduct business 24 hours a day. Vendors pay to rent stalls that

consist of a series of wooden tables for three days at a time. Figure 6-2 depicts a portion of the large venue, aisles made narrow as vendors place large bundles of coconuts and root crops in front of their tables. Because the stalls are rented out for three days at a time, with most vendors traveling in trucks with their goods from rural Efate, the predominantly female vendors sleep at night on mats rolled out next to their tables, snuggling up with their small children. Usually the tables are arranged to form small U shapes or squares, and women sleep in the center of these, storing buckets for washing, clothes and other personal belongings in tubs tucked under the tables.



Figure 6-2: Port Vila Market House. Photo Credit: Cindy McMellen

In the typical pattern vendors to set up their stalls Monday morning and stay through

Wednesday with new groups coming in on Thursday and leaving Saturday afternoon. Located right next to a main bus stop a grocery store, the post office, and the dock for the Big Sista, which takes passengers to outer islands, the central location makes the market a popular meeting spot. Nearly always busy, the space is loud with crying babies, playing children, women laughing as they catch up and *storian* with their friends. The sounds of commerce are friendly, as bartering is not practiced.

Shoppers can find both prepared island foods and raw island foods as well as live chickens, birds crabs, and eggs and fresh fish at the market. Non-food items sold include traditionally woven pandanus baskets and mats, fresh flowers and plants, coconut oil, *laplap* leaves used for cooking food in an earth oven, firewood and charcoal. Lively and colorful, the market and its contents change with the seasons, people *storian* about crops, children, village life, and life in town. Raw foods are sold in bundles, often quite large quantities that will feed groups of people or last several days. Figure 6-3 depicts these large woven palm leaf baskets of sweet potatoes and manioc with rolled bundles of *laplap* leaves leaning up against stacks of coconuts in the background. Cardboard signs on top of the baskets show the sweet potato baskets selling for 500vt or \$5.32 US. While fruits like papaya, pineapple, grapefruit, mango and avocado are sold individually; the vendors set their own prices, placing small cardboard signs on top of produce or writing on the peels of fruit in black marker. Everyone tends to be quite aware of the prices and products of other vendors in the market, so prices from vendor to vendor are quite comparable. When someone has sold out of an item or senses a customer looking for a particular item no longer available, the vendor will point shoppers in the direction of another table where that good is displayed. Expense and availability limit access to pesticides, so nearly all the market produce is organic, although it is not certified or marked as such.



Figure 6-3: Baskets of root vegetables sold at the Port Vila Market House Photo Credit: Jane Wentworth

As midday approaches, women unwrap their prepared island foods, spreading the generous portions of *laplap*, *tuluk*, whole roasted taro and sweet potatoes across the tables and sitting down to fan the tops of the food to prevent any flies from attempting to land near their goods. This prepared food section is an important place for people to access island food cooked in an earth oven, as many urban residents do not have the space, time or all the local produce needed to prepare this type of food. Prepared foods are usually cut into large servings and most include some type of protein, fresh fish, chicken, shellfish or beef. As foods cooked in an earth oven are wrapped in *laplap* leaves and banana leaves during cooking, the food is displayed in these leaf wrappings (see Figure 6-4). There are also vendors selling local bread, and meals of rice and various types of soup. Fresh made potato, sweet potato, plantain and taro chips line tables in clear plastic bags, their colorful and salty contents a visible advertisement to shoppers who are hungry for a snack. People purchase green drinking coconuts, and fresh fruit too, sitting at the courtyard picnic tables or in the seafront park nearby to enjoy them.



Figure 6-4: Prepared Market Foods

In addition to the main market house downtown, there are several smaller neighborhood markets around town. Notably, Freshwota 3 and Manples have pretty sizable markets, with dozens of ni-Vanuatu producers assembling with tubs and baskets full of sweet potatoes, passion fruit, oranges, grapefruits and manioc that they spread across blankets and woven mats. Some vendors even bring along display tables. But there are smaller, more informal gatherings of vendors in most neighborhoods and in the peri-urban villages with a handful of vendors selling the most common fruits and vegetables, papayas, island cabbage, manioc. Smaller markets tend to have slightly lower prices than the main market house at the center of town, but noticeably far

less diversity in offerings. Most small markets do not have large displays of prepared foods like in the market house, but occasionally, a woman will bring along a Styrofoam box of fresh *laplap* for sale. The benefits of these small markets though is that people can walk there from home and purchase foods, saving the time and money, usually 300vt \$3.19 US that would go toward round trip bus travel. Instead they can devote that to the purchase of food.

In contrast to the market, the other broad category participants indicated as where they purchase food is from a store. The word *stor*, (store) is broadly applied to any place where goods are purchased that is not a market setting where ni-Vanuatu sell their own locally grown or produced goods. The quality of goods and service, the size of the store, and prices of the goods vary widely across the types of stores. The higher end stores include the Western style Au Bon Marche supermarket chain with locations across town, and in some of the first ring urban suburbs of Port Vila. Au Bon Marche has had several counterparts over the years, including Spar and Leader Price, but persists in dominating the market, with more locations, and more ni-Vanuatu customers than the other stores that tend to draw more expatriate patrons. These stores have small produce sections as well as large selections of packaged and canned foods, with aisle after aisle of neatly stacked cans and boxes pushed to the front of six-foot shelves, their brightly colored labels and competing packaging designed to entice the buyer, or child to purchase one brand of canned corn beef over the others. Walking inside the larger chain stores feels like walking through a door that leads from humid Port Vila into a Pittsburgh grocer, the air conditioning and layout mimicking the shopping experience of US or Australian consumers, the familiar brands, the coolers of ice cream and soda near the front of the store. Because of the quality of the fresh food markets in Port Vila where produce tends to be less expensive than at the supermarket, most people purchase processed foods at the store and fresh produce at the

market. Due to price and storage constraints, many ni-Vanuatu stop by the market and the store regularly to procure only what they plan to consume that day, returning again the next day.

Importing packaged foods to Vanuatu is much cheaper when the products are shipped by boat. Thus shelf-stable foods in cans and bags of rice are pervasive and preferred over their more expensive counterparts. Additionally, because products are subject to import fees, even heavily processed foods with inexpensive ingredients have high prices. Shoppers examine shockingly high prices, finding a box of Corn Flakes that might sell for \$3.50 US, selling for nearly \$9.00 US in Vanuatu. The diversity of foods available varies with the reliability of the shipping industry, and occasionally there are shortages of products as container ships are delayed.

Supermarkets have the most variety, with a subset of popular products including rice, canned tuna, canned corn beef, sugar and Twisties found in smaller independent stores that seem to pop out of the landscape everywhere. More affordable, but with lower quality products, are smaller businesses often called “Chinese stores” due to the fact that they are typically owned by Chinese expatriates. Chinese stores are widely distributed in Port Vila and the suburbs, so prevalent, it appears on the surface to be an unstable business market. The stores tend to focus on the sale of either foodstuffs or other goods, such as clothing and shoes, or household goods. Most of these stores are cash-only and do not allow for any return or exchange of merchandise. Additionally, ni-Vanuatu almost exclusively purchase goods with cash. Most of the foods sold in Chinese stores are processed, with perishable goods usually limited to eggs and bread. The convenience of location and the lower prices they offer over many of their supermarket chain competitors lead to the heavy use of these stores by ni-Vanuatu.

Within peri-urban and rural villages, smaller ni-Vanuatu owned stores serve the immediate neighbors. Typically, storeowners travel to Port Vila and purchase wholesale bulk items, bring

them back to the village, divide them into single servings, and sell them for a small mark-up. Brimming with *lolis*, Twisties, chewing gum, ramen packets, sugar, one-kilogram bags of rice, canned tuna, and regular household supplies including dish soap, toilet paper, and mosquito repellent, these stores serve very basic purposes, and are not meant to meet all needs. While popular and fairly easy to find, they tend to be irregularly operated, as owners set hours around other daily activities, like traveling to work in the garden, or church women's groups. Some stores operate out of homes with vendors selling off merchandise and closing their doors for a few months at a time in order to devote their time and energy to other endeavors as they see fit. The income generated from these activities is not particularly significant, justifying people's unenthusiastic efforts into maintaining a store and clientele permanently. However, in peri-urban and especially in rural areas, these stores serve an important link to imported goods that would otherwise be accessed only with less frequent trips into Port Vila.

Food purchased from the market is typically bundled or sold in groups like large bundles of bananas, or woven baskets of manioc, taro, or sweet potatoes. Larger bundled foods constitute most of the primary preferred foodstuffs—the foundations of traditional meals (Pollock 1992). However, baskets of island foods also cost more than sacks of rice and ramen noodles. Even though root crops feed a large number of people, at the end of the day, a basket of taro is 500 vatu (5.44 USD) while a kilogram of rice is 120 vatu (1.31 USD). The lower price of processed foods coupled with participants' explanations that spending on food is usually a lower priority than other financial obligations results in overall higher consumption of processed foods despite many people stating their preference would be to eat local produce. One kilogram of rice is *kakae blong holem bel* with less total cost than fresh sweet potatoes or yams. Additionally, imported food does not require refrigeration and people can trust that it will not go bad quickly.

Because local foods are sold in larger, more expensive bundles, without refrigeration and plastic or metal packaging to keep out insects and rodents, worry about spoiled food also contributes to the preferential purchase of imported foods. Thus for many ni-Vanuatu who must purchase most of their foodstuffs due to a lack of gardening land to produce their own food, managing a budget requires the purchase of imported foods rather than locally grown market produce.

Residents of Efate have options for how they access foods, from the market house and supermarkets in Port Vila to peri-urban and rural stores and gardens. While there are benefits and drawbacks to each place of procurement, they are not equivalent in the minds of the ni-Vanuatu. In large part finances dictate where and what people purchase to feed their families, and often people purchase the cheapest products to help stretch their *vatu*, even when they are food secure. Additionally, spending money on food is often a lower priority than spending money on other things including school fees, rent and transportation, and cheaper food options are chosen to ensure that families can afford all of these things. Thus when making decisions about how to divide their food budget, participants report that in practice they do not have much food choice, seeking ways to satisfy their stomachs with the smallest expenditure, to *kakae blong holem bel nomo*.

6.2 TYPES OF FOOD AND NUTRITIONAL ADVICE

6.2.1 “Good” Food and “Bad” Food

Often participants lament that economic factors shift food consumption toward low quality imported foods that cost less than many of the island foods sold at market. A surprising turn is

that despite the import taxes and the high prices of imported food compared to what one would expect to pay in Australia or the US, white rice, canned tuna and corned beef are less expensive than fresh bundles of taro, sweet potatoes and coconuts. Many participants in this study asserted that they would prefer to only purchase locally grown food, *aelan kakae*, but could not afford it, settling for rice and canned meat instead.

It is not just price that dictates purchased food patterns; time is another consideration, particularly for families that are working. When individuals talk about foods that involve the least preparation, they reference heavily processed imported foods. Peeling, grating, and cooking local foods requires much more time and energy than boiling rice and opening a can of tuna. If the end goal is just to satiate hunger, *kakae blong holem bel nomo*, rather than to focus on flavor and cuisine, then the cheaper, easier choice of imported foods makes much more sense.

Nevertheless, children, who sometimes place a higher value on purchasing lunch than on purchasing bus fare to help them get to school each morning, reprioritize the financial expenditures that their parents make for them. One participant explained this situation stating, “Parents give a small amount of money [in the morning] to kids. So you know as a kid, if you want food, then you have to get up early and walk [to school].” Thus when a child is told to spend money on the bus fare, the children actively choose to save their money for lunch instead.

The same is true for money given to children expressly for the purchase of lunch, when children use that money to purchase sweets. Almost every urban and peri-urban school has a small store situated in close proximity to the school building. At morning break, often it is already sticky and humid outside, making the temptation for a cool, creamy ice cream cone irresistible. At schools I visited, I saw lots of children eating sweet treats at morning break, and playing games through lunch because they spent 100vt on ice cream and have no money left for

a plate of food for lunch. This is such a common complaint among teachers that several schools have started implementing a plan where a school representative visits each classroom in the morning, collects the 100vt fee that children pay to a woman who makes a living preparing plates of soup and rice to sell at school. At lunchtime the children line up, and when their name is checked off the list as paid, a serving of rice and soup is passed out. The morning break temptation and ability of children to spend lunch money on sweets is removed.

Interestingly, despite the financial limitations, participants across locations and access to cash define “good” food as island food rather than processed food, stressing the importance of balanced meals, which consists of a starch protein and vegetable. “Good” food for children also generally means that they eat a variety of different foods, rather than the same thing day after day. One mother took two pictures that exemplify this, with one depicting her son eating a doughnut (see Figure 6-5) and the other eating a leftover piece of banana *laplap* (see Figure 6-6) that was baked in a saucepan due to lack of space and time required to cook in an earth oven. This *laplap* was consumed over the course of two days, for dinner and then breakfast, the mother writes, “Most of the time we eat the same thing every day, especially children. I took these pictures to show that it’s good for children not to eat the same thing every day.” Both diversity and a preference for island foods contribute to mothers’ understandings of “good” food.



Figure 6-5: Breakfast Doughnut Photo Credit: Visual-cognitive Elicitation Participant



Figure 6-6: *Laplap* breakfast illustrates that dietary diversity is a good thing. Photo Credit: Visual-cognitive Elicitation Participant

Participants place heavy emphasis on island food as far superior in quality to processed foods, and island food as a category is generally considered to be the best food one can feed a child. This is one way that the recommendations of public health practitioners matched those of mothers. Broadly speaking, island food has been deemed good food across the Pacific, while:

“Good food” is a very subjective assessment. Local food plants may be more advantageous in their home environment than global foods. With nutrition support and education about their advantages, backed by anthropological concerns about dabbling in the world market, the message “Eat More Local Foods” seems the best path ahead. Well-being through “good food” is best secured through reliance on local foods, especially when cash sources are ephemeral. The notion of well-being combines the physical with social and ideological outcomes, drawing on global and local knowledge. (Pollock 2007:258)

In some contexts local food is cheaper than imported food, particularly if you practice subsistence farming. This is the case for most of the rural areas of Vanuatu, particularly in the outer islands. Many families in peri-urban areas are able to produce nearly all of the food they need as well. However, this is not the case for urban families where local foods are much more expensive than the cheapest imported foods. However, the role that *kastom* plays in the larger discourse in urban areas, and the repeated emphasis on promoting *kastom* practices in any form, including through the production and consumption of traditional foods helps to promote local foods as “good” food.

So why is it that, despite these preferences, a steady repetition of processed foods dominate the daily diet? Clearly economic and time pressures contribute to these decision-making processes. The everyday feeling that *kakae blong holem bel nomo* can be achieved with any foods regardless of flavor overshadows decisions about the “best” foods. Ultimately this situation is not unique. There are people all around the world who ignore the advice health care practitioners provide to them in both developed and developing countries. Nevertheless, this discourse of “good” and “bad” foods is situated in a larger context of the nutrition education

information that mothers receive from health care providers, particularly the *tri kaen kakae* program.

6.2.2 “Three Kinds of Food” and Nutrition Education Programs

In Vanuatu, nutrition education is provided to mothers via a program called *tri kaen kakae*, or literally “three kinds of foods.” This program has been in use for decades, making it widely familiar to most ni-Vanuatu. Only one participant in this study had never heard of the program and therefore could not explain to me how it works. *Tri kaen kakae* is a division of foodstuffs in Vanuatu, where foods are placed in three groups or categories, *kakae blong bildimap bodi*, or foods that help you grow or keep you strong; *kakae blong blokem sik*, or protective foods that provide the nutrients to keep you healthy; and *kakae blong givim paoa*, or foods to give you energy.

The first group of foods, those that are bodybuilding (*bildimap bodi*), include all major protein sources. Meat, beans, nuts and dairy milk fall into this category. The protective foods category combines both fruits and vegetables with an emphasis on the wide array of greens including varieties of island cabbage (*aelan kabis*) and seasonal tropical fruits. While ladyfinger and other sweet banana varieties are included in the protective foods category, plantains are placed in the energy, *givim paoa* category along with other starches. This category contains all of the staple root crops so important to Pacific Islander foodways including yams, sweet potatoes, taro and manioc as well as the highly starchy crops breadfruit and plantain. In addition, rice, ramen noodles, and all imported breads and crackers are added to this category.

With only three food groups, a category or subcategory to deal with the high sugar, high fat and high salt foods, which are largely imported, is notably absent. Increasing prevalence of

these foods, especially in Port Vila and the peri-urban areas, means that these foods are regular parts of diets. Participants still process and assign those foods into the one of the three categories, providing the first glimpse at how mothers redefine health and nutritional categories so they can apply this to their lived experience. Added to the yams, sweet potatoes, and taro in the category *givim paoa* is rice, bread, crackers, ramen noodles, cake, cookies, Twisties, suckers and ice cream. This yields a category of foods that are divergent in health and nutritional outcomes from a biomedical perspective, yet all in the same food group according to mothers' interpretations of the nutritional program. In fact none of the programmatic materials studied in this research depict a hierarchy of foods within that system. For example, there is no indication that a piece of cake, a breakfast cracker, or a piece of taro is better or worse for the child to consume; any of those foods are foods that *givim paoa*, and any of them are healthy when eaten in the context of *tri kaen kakae* for achieving child dietary nutrition. Similar problems arise with the category of foods that *bildimap bodi*, the protein rich foods. In addition to fresh meat and fish, eggs, milk and beans, are foods like fried chicken with the skin left covering the meat, canned tuna in oil and canned corned beef are lumped into the *bildimap bodi* category, and these foods have significantly higher fat and salt content than their fresh counterparts.

Recently, refinements to materials used in the *tri kaen kakae* program have subdivided these categories, indicating foods that should be eaten regularly, foods that should be eaten sometimes, and foods that should rarely be eaten. Distinctions between what it means to eat regularly, sometimes and rarely are not clearly articulated, making these messages hard to internalize. Changes were made to the *tri kaen kakae* program as imported foods were assigned to categories without explanation of how the salt, fat and sugar levels compare with local foods. Imported foods with added salt, fat and sugar, which contribute to chronic health problems

including diabetes, heart disease and metabolic syndrome never were assigned their own categories leaving mothers to incorporate them into diets without sufficient dietary education. Efforts to address these issues are being implemented now with the hope that ni-Vanuatu will not encounter the severe health conditions and significant rates of obesity facing many other Pacific Islands countries today (Brewis 2011). However, while participants were overwhelmingly aware of the *tri kaen kakaē* program, they were not aware of the changes to the program and why some foods high in fat, salt or sugar should not be regularly consumed.

Either approach, however, emphasizes the focus on nutrition and the division of foods into their nutrient component parts. The omission of fatty, sugary, salty foods from the *tri kaen kakaē* program emphasizes the evaluation of “good” and “bad” food as based on nutritional value, rather than cultural, economic or ecological value. This is common among healthy eating campaigns in developed and developing countries:

Such food-based dietary guidelines typically make little or no reference to processed and convenience foods, even though such foods constitute a significant portion of many people’s diets. They thereby imply that the problem with contemporary eating patterns lies primarily in an imbalance among those wholefood groups, rather than with the high levels of consumption of processed and convenience foods. Food-based dietary guidelines therefore tend to conceal the level and types of processing that these whole foods typically undergo in the contemporary food supply, and in this sense they are complicit with nutritionism’s tendency to evade or conceal the increasingly processed character of contemporary foods and diets. (Scrinis 2008b:44)

While the *tri kaen kakaē* program has an agenda that nurses, nurse aides and public health workers promote to women during antenatal visits, at the time of labor and delivery, and at MCH visits, in addition to the school curriculum that delivers this message to all elementary school children, *tri kaen kakaē* as a program is interpreted differently in part due to ambiguity in the language. The Bislama term *kakaē*, is both the noun food, and the verb to eat, so as a slogan, many mothers take away slight variations of what this means in terms of educational advice. As

part of my semi-structured and informal interviews, I asked all the participants if they could explain to me what *tri kaen kakaē* means. In this way of informally and briefly teaching me the program, I was able to determine what participants highlight as primary points of the program, as well as how they interpret these maternal and child health messages. Many participants explain that *tri kaen kakaē* means that you should eat three kinds of food every day, for example, eating one type in the morning, another a lunch and a third at dinner would be achieving the goal of the program and providing adequate nutrition. A minority of mothers explained that this meant that children should eat three meals every day, regardless of what comprised each meal. In these instances, participants are clearly focused on *kakaē* as a verb, emphasizing the active work of eating. In this interpretation, one should eat three times per day. In this case the term “food” is omitted and the focus is eating—and the idea of consuming three clearly defined meals throughout the day. Eating three kinds of foods at every meal was another popular answer, and this explanation most closely parallels the goals of the nutrition educators—diversity across diet present at every meal.

These descriptions reveal that mothers comprehend the messages and thus apply the teachings differently based on their own understandings and experiences. This is only compounded by the ethos of *kakaē blong holem bel nomo*, which deemphasizes the role of specific food choices and categories, instead focusing on keeping your stomach satisfied until the next meal. It is at this nexus that *tri kaen kakaē* and *kakaē blong holem bel nomo* come together to create new interpretations and problems for people in the health care workforce.

6.3 MATERNAL AND CHILD HEALTH CARE DELIVERY

Maternal and child health care delivery is presented via a diverse array of sources on Efate, which has the most variety and the most biomedically advanced types of health care services in the country. This is due to the location of Vila Central Hospital (VCH), the primary national hospital, not far from the center of the city of Port Vila. Complicated procedures and patients in need of more invasive treatment plans are transferred from the outer islands to VCH. As a result, patients on Efate have much easier access to more complex medical care than those living anywhere else in the country because of their proximity to the hospital. In addition to the main hospital, the traveling MCH clinic and a range of aid posts and small clinics staffed by Shefa Provincial Health provides standard medical services to those living on the southern half of the island. Ni-Vanuatu living in rural north Efate access a larger clinic at Paonangisu staffed by several nurses and nurse aides, with a lead nurse practitioner overseeing the entire clinic. To link those on north Efate with quick and easy access to VCH, the clinic at Paonangisu has an ambulance that can be used to transfer patients from either their homes, the place of an accident, or from the clinic itself to VCH when more advanced medical care is required.

6.3.1 Hospital Care in the Capital: Vila Central Hospital

When I arrived at the MCH clinic located in VCH a little before 8:00 am, there was already a long line of mothers cradling babies and fanning themselves with woven pandanus fans. Many mothers told me they liked to arrive at around 6:00 am, even though the clinic does not open until 8:00 so they could get in line and be seen quickly. I was happy that it was not raining this day. The hospital has an open-air design, much like high schools built in the 1950s and 60s in the

US, with a series of smaller, one-story buildings connected in large part by covered sidewalks. Sandwiched between Ear, Nose, and Throat and Physical Therapy, MCH has by far the largest number of visitors, and nearly all of those waiting outside are in line for MCH rather than either of the other services. This concrete building is at the bottom of a hill and is one of the buildings closer to the road. The covered sidewalk that runs in front of the building parallel to the road is walled on one side by the building itself, and on the other side by a poured concrete half-wall that serves as a berm to hold up the hillside, making it feel almost like a half basement room.

Next to the door that serves as the entrance to the clinic is a long wooden bench, which fills up with the first women in line, but holds only about ten seated mothers with their children. That is all the designated seating available. The nearly 60 additional mothers sit on the half wall until that space fills, and others walk around rocking their babies, or head off to visit friends in other wards if they know they have a long wait. On rainy days, water runs off the roof of the covered sidewalk onto the ground, pooling on the wall, and then no one will sit there. Mothers know this, and fewer come to the MCH clinic on rainy days. When the clinic opens, mothers take numbered pieces of cardboard to hold their place in line, which eases the burden of standing in an ordered line, permitting the women and children to walk around. Groups of approximately ten women are called in at a time, moving through three stations set up inside the clinic—weighing, consultation and immunization.

Once inside, the mother must first present the nurse with her child's health care record, the Blue Card—so named because it is printed on light blue cardstock (see Appendix B). No one will be seen without the card, although if lost a new card can be obtained after paying a 500vt (\$5.31 USD) fee. If a replacement card is needed, the child's medical records are located in the stacks of paper files, and a new card is filled out by hand. Blue Cards are highly valued, and

mothers know to take good care of the card, keep it safe from water and spills, and bring it every time the child encounters a biomedical health care provider. The front cover lists the child's birth information, and vaccination record. The inside is a child growth chart as measured in weight-for-age, and the back is a beginning of a record for dates and notes made by the health care provider at each visit. A glance at the Blue Card by the nurse determines if the child needs a vaccination that day.

The first process after mothers offer up the Blue Card is the weighing of all children. There is a long, table with a green, slightly padded top, like an immobile examination table, where women lay their children and remove diapers to help ensure a more accurate weight. Then the child is laid down in a creamy colored plastic dish that sits on top of the scale. Startled by the cold, many children, especially the younger infants being to cry. The nurse records weight as the baby is re-diapered and soothed.

Next the mother proceeds to one of two small cubicles furthest from the door to talk with either a nurse or nurse aide about her baby, usually very briefly, two to three minutes. The nurse takes the Blue Card, notes the weight today, and enquires about the baby's health. Has she been soiling her diaper normally? Has she been eating regularly? Are you breastfeeding or using formula? Has she been sick? Women who were boisterous and laughing outside, easily talking with neighbors while waiting become demure inside, answering quietly, often with simple yes or no responses, a nod or shake of the head. The power imbalance is clear here, with women becoming passive to the authority of the nurse or nurse aide, politely answering questions, but without much feeling that she can ask a question or begin a dialogue on her child's health. These relationships are reflective of a hierarchical structure characteristic of Austronesian speaking peoples where the authority is not directly questioned. Typically there is no deeply meaningful

exchange here, and a quick note is jotted on the back of the Blue Card, along the lines of, “child breastfeeding, weight increased, return on [date].” If there is a problem or question, this time is used to address it. For example a mother who is formula feeding is encouraged to breast feed, and asked why she stopped breastfeeding, and whether or not she is capable of resuming breastfeeding. If the child must continue with formula feeding, then the health care worker lists brief instructions on the importance of following the directions on the can regarding the number of scoops of powder per bottle, and keeping the bottle clean. If the child’s weight decreased since the last visit, then the mother is questioned about why. The standard nurse or nurse aide response is a reminder to “feed *tri kaen kakae*” in the morning, at lunch and in the evening with snacks in between meals, and lots of local fruit. Increased breastfeeding is recommended when applicable. I never observed a discussion of barriers to feeding, or problems to achieving these recommendations, and the mother always nods in acceptance. If the child is due for a vaccination, they move around the circular set-up of the interior of the clinic and sit on a wooden bench to wait for the injection. If no vaccination is required, the mother simply leaves at this point.

Vaccination is a high priority for the Vanuatu Ministry of Health, and it participates in the UNICEF Expanded Program for Immunization (EPI). Just like these MCH visits, the vaccines are given free of charge, (the vaccine schedule is listed in Table 6-2). The MCH team ensures that all children who are in need of a vaccination receive one at each visit, especially if the child is late in the schedule. They also devote some of their time to visiting schools around Port Vila to provide students in Classes 1 and 6 with measles boosters, Vitamin A and deworming pills. Rates of intestinal worms are so high, and many children play barefoot or with flip-flops that permit their feet to regularly touch the ground, that the approach is to provide de-

worming pills en mass rather than test each child and then provide treatment. For infants at the MCH clinics, the polio vaccine is given as orally administered drops, and the remaining vaccines are given via injection in the thigh or arm. In the MCH clinic, when it is her turn, the child is laid down on a grey padded mat, with her mother soothing and holding her leg in place. After wiping the injection site with an alcohol wipe, the nurse administers the injection, and as the baby starts to wail, the nurse pats the baby saying, “sorry, sorry.” Turning to the mother, the nurse reminds her to give Panadol for pain. “If the child has a fever the first day, don’t worry,” the nurse explains, “this means the medicine is working, but if it continues bring the child back here.” The nurse hands back the Blue Card, and sends the crying child and her mother on their way.

Vaccine Schedule

Name of Vaccine	Number of Doses	Age when Administered
BCG	1 Dose	Birth
Vitamin K	1 Dose	Birth
Hepatitis B	2 Doses	Birth; 1 Day
Penta (Includes: Diphtheria, Tetanus, Whooping Cough, Hepatitis B and Haemophilus Influenza Type B)	3 Doses	6 Weeks; 10 Weeks; 14 Weeks; Follow-up in Class 1 and Class 6
Polio	3 Doses	6 Weeks; 10 Weeks; 14 Weeks; Occasionally Follow-up in Class 1 and Class 6
Measles	1 Dose	1 Year

Table 6-2: Vaccine Schedule for ni-Vanuatu Children

Often this entire process of moving between nurses and nurse aides to have a child weighed and vaccinated takes approximately five to ten minutes, yet women could wait for upwards of three hours to be seen. With a ready audience of women waiting, it was easy to find women willing to participate in interviews or surveys to pass the time while they waited. Having

an opportunity to *storian* with me about their experiences and children was often a welcome distraction from the long wait time. Women valued the opportunity for health care and vaccinations; indeed they thought it a required service that Vanuatu should offer its citizens. The wait, the feeling of rapid service, the lack of space to sit comfortably for such a long duration, were all seen as problems with the health care system in Vanuatu.

6.3.2 The Traveling Maternal and Child Health Clinic

Mondays, Tuesdays and Wednesdays, the staff of the VCH MCH clinic head out “into the community” to deliver services (see Figure 6-7). The primary services of weighing children, administering vaccinations and filling out the Blue Cards that take place in VCH receive the same focus by the staff when they travel to the various locations, but the practice on the ground looks slightly different. While there is a pattern and routine to these trips, how the day is spent varies widely based on the location of the clinic. The staff has divided the clinics into two locations, rural and urban, although for the purposes of this research, I divide this into the three categories outlined for this project; urban, peri-urban and rural.

My first rural trip was to Teouma. I met the staff at the clinic in VCH, where the nurses change into their uniforms before heading out for the day. They pack vaccines into coolers, and check the stock of supplies in the boxes, pack the appropriate three-ring binders so they can add to their register of children and their vaccinations. Then we wait for the driver to arrive. He should be there by 8:00, but he drops the boss’ kids off at school first, and there is traffic sometimes, and we are on island time. So we arrive at 8:00, and he arrives usually between 8:30 and 9:30. The truck is shared with the EPI clinic, which needs the truck to distribute medicine, so sometimes we are delayed by these deliveries.



Figure 6-7: MCH Team poses with their truck and supplies

When he arrives, the driver pulls the white extended cab Toyota up underneath the covered walkway and stops right outside the entrance to the clinic. The traveling scale, the syringes, the vials of vaccines, and all the supplies are loaded into the back of the truck. Three people, myself included on the lead nurse's insistence, climb into the cab of the truck, and the other two climb into the bed of the truck. Perched on the side of the truck bed, using it as a chair, the nurse and nurse aide in the back of the truck are confident, easy and relaxed in their posture. No need to hang on to the side. I cannot help but think I would have fallen out right away if I were sitting there. As we bounce along, I think that the nurses also suspect that about me.

The listing on the schedule indicates Teouma, but that is a rather large area in central Efate, and the reality is that we drive in that direction and in total make eleven stops in about six and a half hours. During the first stop we see just two children. The staff glances at the three-ring binder that holds all the Teouma child records and knows exactly who they are looking for. While I struggled to get my bearings, writing sloppy notes about where we were turning while the truck was moving, the staff knew exactly which two-track roads to take, and where to find these rural families. The driver also tells me that they can look for signs when new babies are registered and they are adding to their regular stop or routine. On a subsequent trip, the driver slows before making a turn and points out the window at a white plastic bag tied to a fence post. He explains this is the sign for him to stop—people know what date they should expect the team, and they post the white plastic shopping bag as a sign (see Figure 6-8). Blowing in the breeze, the bag indicates to the team that we should stop there, and sure enough, when we pull into the front yard a small baby is waiting.



Figure 6-8: Plastic bag signaling for the MCH team to stop

While some families live in particularly remote areas, and we stop to see just one or two children, typically we stop at a central location where a small group of people with gather and wait. The first of these places in the Teouma route is the Teouma Shopping Center, a small store right off of the newly paved Ring Road that circles the island; no need for off road travel for this stop. Next to the store is a small shelter, wooden posts holding up a corrugated tin roof. This stop serves the largest group of mothers we see on the Teouma route, and on my first trip there were 24 children waiting to be seen by the nurses. Accustomed to the larger number of patients at VCH, the team moves through this bunch quickly, unloading the truck, weighing, vaccinating, marking all the cards, and repacking the equipment in the back of the truck in 45 minutes. The rest of the stops are shorter, ten to 25 minutes in duration, with the MCH team examining one to

seven children per location. When the truck pulls off and stops, the mothers are typically ready and waiting; if we stop for only ten minutes and they were not there waiting, it would be easy to miss the clinic all together, and they would have to wait another month for the next visit. So mothers tend to wait in advance so they do not worry about missing the clinic.

Instead of the cold plastic dish scale that needs to be on a flat, level surface, during the mobile clinic the nurses have a hanging scale with a rope that allows it to be tied to nearly any type of support. A nurse aide attaches the scale to anything strong and sturdy enough to help them complete their task, usually a tree branch (see Figure 6-9). A large blue canvas bag dangles from the scale and envelopes the child like a cocoon. Some children think of it as a swing and happily sit inside, but many cry in uncertainty about the sudden darkness. On busier stops, the driver attempts to make children laugh and smile and encourages them to think of the scale as fun so they will not cry. While one group weighs the children, another nurse administers the vaccinations. Rural mothers often bring fruits including papaya, cucumber, oranges, grapefruits, green coconuts to the MCH team as a thank you for their work. Some fruits go home with nurses at the end of the day, but the driver regularly cuts up fruit with a bush knife and distributes pieces to the team as they work, a welcome boost in energy, as there is no stopping or break for lunch.



Figure 6-9: Weighing Children at the Teouma MCH clinic

I learn from my subsequent trips that work Pangpang, Eratap, Etas and all the other rural locations all follow this pattern. Bouncing along dirt roads, making good use of the truck's four wheel drive capabilities, the MCH staff essentially makes "house calls" in many of these locations. When there is a central meeting location, it is a smaller group of approximately seven to 25 mothers with their children waiting in the same general area. Otherwise, we stop at a small clearing of a couple of homes and see just a handful of children. Families in these rural areas view the MCH clinic as a primary point of access for biomedical health care service. Therefore, the MCH team also distributes antibiotics to sick children or young adults, examines cuts and recent wounds, distributes Panadol pain reliever. When members of the team pass out medicine,

they charge the patient 100vt for the pills. Otherwise, the services are free of charge, even for older children and young adults. I observed the team administer one field malaria test to a young father who was feverish and sick, but the test came back negative. Thus in rural areas the MCH team serves a much wider age range of children and adults than those who travel to VCH for the clinic, and provides a wider variety of services. Typically, at VCH the children are less than one year old—mothers bring their children until the child receives the measles vaccine and then feels she is finished with this task. But out in rural areas, the MCH clinic is viewed as more of an open resource to the community, and families look to the staff for any biomedical needs or questions they might have. While very few children visit the clinic until age five as is recommended by the Vanuatu Ministry of Health and indicated on the growth chart inside the Blue Card, there are many more two and three year-old toddlers who are weighed and monitored in the rural areas than in Port Vila.

Distinct from these rural visits are the peri-urban and urban settings for the traveling MCH clinic. Just as some rural families are so isolated there is a need for the traveling clinic in order to achieve high rates of vaccination on the island. Additionally, there are some more densely populated urban and peri-urban areas where it is more efficient for the clinic to come and service that specific location. In these half-day, one location clinics, the driver drops us off at the meeting point, usually a church that permits the MCH team to use their space, and he comes back later to pick everyone up. On these days there is an hour or so lunch break before the team reassembles for an afternoon trip to another location.

Pango is a good example of a half-day peri-urban stop with the clinic held in a single location. All the Pango mothers bring their children to the Presbyterian Women's Meeting House. The scale is hung from a frangipani tree outside and the vaccination portion of the clinic

is set up inside. Mothers wait on benches in the building, or sit on mats, and *storian* with friends as they are all from the same community. Nurses spend about an hour and a half to two hours examining between 40 and 60 children who arrive with their mothers for the clinic. Those Pango mothers could take a bus into the VCH clinic, and in fact they will often do this if they miss the clinic for some reason. However, there are enough children in Pango that establishing a separate location increases the coverage rates, helping with the time and expense of traveling to the hospital.

The same is true for a few of the more densely populated urban areas. Some of the poorer urban areas are crowded with hundreds of children less than age one who need to be seen by the MCH staff. The costs of bus fare to bring children to the hospital are really prohibitive for many urban families who, when faced with financial shortages, will spend their money on food and rent before spending it to come into the hospital for a well-baby visit at the MCH clinic. Thus the mobile clinic is truly vital to these families' regular access to MCH care and vaccinations. Because these are densely populated urban areas, and the vaccinations prevent communicable diseases, the services provided by the MCH staff are critical to achieving the overall public health goals for Vanuatu. One of the largest urban stops the clinic makes is in Selime, and it takes over four straight hours for the nurses and nurse aides to weigh and vaccinate over 200 children. Selime is the MCH location for the families living in Ohlen, and the nurses encouraged me to come with them to this clinic. They wanted me to see just how many mothers there are here, and they knew that there were more underweight children at this site than at any other. There is not much shade in this area, so mothers crowd along the edges of the yard and the couple of trees that can shelter them for the hours they will wait here. Some open the bright red, yellow, blue and green stripe umbrellas sold at all the Chinese shops and use them to

shade themselves and their babies. Working as fast as they can, it is no wonder the team does not have time for meaningful individual counseling with mothers about their children; they barely have enough time to weigh all the children and provide them with vaccinations. It did, however, afford me longer periods of time for surveying and interviewing mothers while they waited for the nurse or nurse aide.

These portraits provide the context necessary to understand health care delivery in the southern half of Efate. Faced with limited time and resources, the small staff of four to six nurses and nurse aides provides critical public health services to children. With such a high volume of children, most of whom are between two weeks and one year in age, there simply is not the time or staffing to provide individualized health services. The monitoring and evaluation programming at the Ministry of Health emphasizes the Expanded Program on Immunization (EPI) program, so the delivery of vaccinations is of primary importance. The staff is required to update the child's Blue Card, so weighing each child also becomes another critical component of the visit. These two goals are easily quantifiably measurable by the monitoring and evaluation team at the Ministry of Health, thus they are the focus of health care delivery. The implementation of nutrition education programming, and the effects this has on child growth and development requires extremely complicated evaluation techniques in order to measure and to track progress and change in the statistics over time. There simply is not enough time and staffing at the Ministry of Health to conduct a full evaluation of the effectiveness of these programs on a wide scale, nor is there enough time or staffing to implement nutritional and health consulting for each child. During one clinic I attend at Selime, 219 children were seen by the MCH staff, a typical number for this location. If each child got just 15 minutes of attention for a more detailed health care discussion with a nurse—while acknowledging that 15 minutes is

not a particularly long time for a detailed medical exam, nutrition education, and a question and answer session with the mother—the clinic would need to last 11 hours! Yet this clinic is scheduled as just a half-day session. With the number of children that need to be seen, the low staffing numbers, and the large coverage area it is difficult for the MCH clinic to provide the level and amount of medical services needed in Southern Efate.

6.3.3 Rural Health Care Delivery: Paonangisu Health Center

The rural health center at Paonangisu services the northern half of Efate and a few northern offshore islands. The mobile MCH clinic staffed by the nurses at VCH travels only about halfway up the island when it brings biomedical services into the communities; driving time for a staff based in town is an important consideration. The Paonangisu Health Center then serves as the central spot for the northern rural villages. Still administered by and part of the Shefa Provincial Health system, Paonangisu has its own staff and program established for these northern Efate communities. Similar to the VCH staff, it has days when it conducts MCH clinics at the main health center in Paonangisu and days when it travels out into the communities. This is particularly important for those villages on small islands just offshore, as otherwise mothers would have to bring their infants by boat and truck to get to the clinic. Each week the staff spends Tuesday, Wednesday and Thursday conducting MCH clinics and other health care clinics in rural villages, and they service 13 total rural villages on the mainland of Efate every month. Additionally they service two offshore islands, Pele and Emao. Pele has four villages and Emao has six villages, and the staff visits each village to provide biomedical services.

In reality these clinics are much more than just MCH service delivery. They do vaccinate and weigh children, marking the health progress of each child on the Blue Card. But in addition, they provide all types of needed medical services. One nurse explained to me:

Because it's hard for these individuals to make it to our health center here [at Paonangisu], due to the cost of travel we make an outpatient clinic when we visit the villages. We conduct outpatient services, MCH, antenatal checks, family planning visits, NCD [non-communicable disease] check-ups. So it's like five things altogether that we have to carry out plus the home visit...at the home visits the health workers provide general health advice to the family. We also check water sanitation and the environment, in case they need to clean up the area in order to prevent malaria. Really anything to do with the houses to ensure proper ventilation and that they dispose of trash in the correct place. They [rural villagers] know all of this [the advice the nurses provide] but sometimes they get lazy or just ignore the advice so illness becomes a problem in the area again. So we go and remind everyone regularly about these practices to prevent illness...and we give plenty of advice on diet.

Population density in northern Efate is much less relative to Port Vila and the peri-urban areas. It is possible for this small team of one to two nurses with a nurse aide and a driver to provide all of the necessary activities, a much greater diversity of public health services than offered by the VCH MCH team, in a single day. They too have a three-ring binder with the listings of all the children and households they need to regularly visit, and keep careful records of medications and services they distribute. While there is variation village to village in the number of people who receive advice or treatment during a visit, the nurses estimate a range from 15-30 households.

On Mondays and Fridays the staff provides MCH clinics and the other basic services at the Paonangisu Health Center; however, there is staff available there all the time, 24 hours a day, seven days a week. If an individual experiences an emergency, he/she can arrive in the middle of the night assured there will be staff available to help (see Figure 6-10). While they encourage routine visits during business hours, the nursing staff lives in housing on the clinic's campus so they are available for emergencies. The staff rotates through a schedule of who is on duty at

night, and if there is a nighttime emergency, or a mother arrives at 2:00 am in labor, the staff is there, and can be awakened to provide help. There are approximately 15 patients who come to the Paonangisu Health Center each day for a variety of medical services. Nurses feel that the regular health education campaigns they administer in the villages have decreased the number of visits per day patients make to the health center because now people know about sanitation, healthy foods and what to do when children have mild fevers. Overall they believe that the health education is working. When women have normal healthy pregnancies and do not present any risk factors such as diabetes, hypertension, a multiple birth pregnancy, or bearing her fifth (or beyond) child, they all come to Paonangisu to give birth. If the mother presents at an antenatal checkup with any of these risk factors, she is sent to VCH for delivery in a more fully equipped hospital.



Figure 6-10: Paonangisu Health Center

Covered waiting area in front of the main outpatient building at the Paonangisu Health Center. A nurse in a white uniform talks with a mother who has brought her child for the MCH clinic.

The context of health care delivery at Paonangisu stands in stark contrast to that of health care delivery provided by the MCH team at VCH. While they do not have access to as much advanced medical technology, the basic medications, vaccinations and materials are available. The biggest difference then in MCH programming comes in the patient intake load, which affects the time and educational services nurses and nurse aides are able to provide each patient. During participant observation at both locations, the atmosphere was noticeably different. Rather than the overcrowding of 200 children and their mothers and young siblings, the dread of an overwhelmingly long wait time, and congested and uncomfortable waiting areas, the clinic at Paonangisu is relaxed and informal. The nurses and nurse aides do not face lengthy lines so they are able to converse with patients about their health. Smaller caseloads mean that nurses are able to remember children from month to month, and develop more meaningful relationships with parents and children. This also provides time for nutrition and health education discussions.

While I spoke with far fewer mothers at the Paonangisu clinic than at VCH, there was a noticeable distinction between the details mothers were able to provide me with when I asked about *Tri Kaen Kakae* and the other types of educational programming they had encountered. Mothers at the Paonangisu clinic consistently described the *Tri Kaen Kakae* program in greater detail than mothers who visited the VCH team. When prompted to explain the program to me, every participant could recite the three food groups, discuss mealtimes and snacks, and had a basic understanding that different foods contained different nutritional components, which is why the variety in food is important. There was no discussed or observed confusion as to what exactly the nurses mean by feed *tri kaen kakae* among mothers at the Paonangisu clinic. This indicates that the time Paonangisu nurses spend with their patients results in a more comprehensive knowledge of the health and nutrition educational programming by mothers, and

suggests a more successful outcome of this type of programming. From a biomedical perspective, the nurses estimated a smaller percentage of malnourished children in their coverage area than the VCH nurses, which supports the findings of the National Nutrition Survey (Knowles 2007).

6.4 CONTEXTUALIZING MALNUTRITION

The Bislama term, *sik bunbun*, is translated as malnutrition, and both caregivers (i.e. mothers, grandmothers, aunts) and health care practitioners frequently employ it. However, as described in detail below, there are a number of problems with using *sik bunbun* that prevent health care practitioners and caregivers from discussing the illness of malnutrition with the same degree of detailed understanding. These discourses and disconnects between the terms frame ni-Vanuatu understandings of the concepts of malnutrition and ultimately food security, shaping patterns of food consumption every day (as discussed in this chapter) and on special occasions (which will be discussed in chapters seven and eight). Both health care practitioners and caregivers interpret and respond to diagnoses of malnutrition, but because these responses vary, they have different ramifications. The following sections describe the measures for evaluating and identifying malnutrition and *sik bunbun* in various contexts.

6.4.1 English and Bislama: Malnutrition and Illness

All of the health practitioners who participated in this study reported that *sik bunbun* is translated into English as ‘malnutrition’ and is the term they use when discussing malnutrition with

patients; however, the use of this term is practiced slightly differently. The translation from the English and the Bislama is not as direct and obvious. In English malnutrition signifies not only a possible lack of food, but also a lack of the right kind of food, indicating an overall micronutrient or macronutrient deficiency or surplus. The reason for this deficiency is undetermined—it could be due to poor food choices, lack of access to the appropriate foods, or because of another disease that prevents the body from synthesizing the food in the ways necessary to obtain all of the nutrients required for health. In all of these instances there is a direct link to biomedical understandings of health and disease, and a clear link to eating behaviors.

Sik bunbun, however, has a different set of meanings and applications in Bislama, complicated by the fact that it is a compound word. *Sik* refers to any kind of illness—from mental illness to the physical manifestation of illness; from biomedical disease to those caused by *kastom* sorcery; from a specific identifiable source of pain to a general feeling of malaise. *Bun*, without the added emphasis of the reduplication, means thin, and I regularly heard the term used when describing a young girl who needs to gain weight to be considered a well-fed woman fit for marriage and childrearing. *Bunbun* describes something that is too thin, and together with *sik bunbun* it indicates illness resulting in thinness due to a variety of circumstances, from a premature baby struggling for life, to a woman dying of old age; from an emaciated man with tuberculosis, to a starving child depicted in posters from health campaigns in Africa. In contrast to the public health practitioners who knew of the problems Vanuatu faces with malnutrition, most mothers thought that *sik bunbun* really was not a problem facing ni-Vanuatu, but instead was a common problem facing African children.

This disassociation between children with *sik bunbun* and mother's experiences with children reflect the severity implied in the Bislama word. Generally *sik bunbun* is used to

describe extreme emaciation. Participants described this to me in the context of malnutrition by listing a variety of associated symptoms. When asked to define what *sik bunbun* means, mothers most commonly described the physical manifestations and results of *sik bunbun* as they would recognize it through the display of symptoms in a child. Responses to my request for them to explain *sik bunbun* indicated that this refers to a child: “that doesn’t eat well and is too thin,” “whose body is slack and weak,” “who can’t stand up or support [him or] herself,” “who is too weak to play with other children,” “who was not breastfeed properly,” “who eats too many sweets and food from the store and not enough island food,” “who lives in the bush and doesn’t have a civilized life,” “whose mother smoked and drank kava or alcohol while pregnant,” and “whose skin is loose like an old man.” These descriptions point to a number of factors and considerations that mothers are making when evaluating “malnutrition” among children. Food is an important part to many of these explanations, and not eating enough food, or eating store bought rather than garden grown local food, is credited with causing malnutrition. Mixed in with the discussions of food are descriptions of children that would require hospitalization to overcome such severe bouts of under-nutrition—a child who is too weak to support herself describes illness far beyond a child who is underweight for her age. When considering these vivid portraits, it is not surprising that mothers reported never seeing a child with *sik bunbun*. The depictions provided here describe only the most severe results of malnutrition, rather than a reflection of the breadth of the English definition of malnutrition.

Interestingly public health practitioners also listed many of the same characteristics that mothers did when describing the physical manifestations of malnutrition. During an interview one health practitioner explained that you can recognize a child with *sik bunbun* because the child is:

thin and weak with skin that hangs off the bones like an old man. Sometimes they have a mouth rash so they don't eat. They don't have any energy, not even to swat away flies, and they have high pitched cries [she weakly squeaks 'eek eek']....Too they swell up, their legs, it's just water, but they swell up and their hair [on their heads] is scarce."

There is some significant overlap here in how mothers and health care practitioners are defining *sik bunbun* as an extreme form of severe malnutrition. In both cases visual cues are important for determining the diagnosis.

Ineptitude for following health care advice was a common thread underlying most of the reasons health care practitioners provided as the causes of malnutrition. When prompted further to explain the reasons why children experienced *sik bunbun* in Vanuatu, respondents repeatedly indicated that mothers are "ignorant," "lazy," "they are single parents and they give their babies up to the child's grandparents," "the babies are spaced too close together," and "they don't follow feeding directions for formula." Because the advice had been provided, regardless of the level of detail and whether or not a rationale for the requested behavior change was provided, health care workers were frustrated with mothers who did not immediately change their child's feeding pattern to address the malnutrition. Thus laziness on behalf of the mother became the most cited reason that children in Vanuatu became malnourished. I never heard a health practitioner provide an explanation of additional circumstances such as poverty or socioeconomic status that might lead to this "patient non-compliance." I even heard mothers describe other mothers of malnourished children as "too lazy" to feed their children properly.

According to both caregivers and health care practitioners, the causes of *sik bunbun* stem from a number of problems, revealing the difficulty of discussing this topic. The reality that the Bislama term *sik bunbun* describes a much more severe disease than what is implied with malnourishment or more specifically with low weight-for-age, the measure that is used in the

Blue Cards, was important to the public health practitioners who participated in this study. In fact, many health care practitioners reported that they do not use the term directly with mothers because it is too alarming. Additionally, many of the health practitioners explained that *sik bunbun* is generally more serious than low weight-for-age, thus they did not consider *sik bunbun* an accurate translation for the full range of meaning of the English term malnourished. These deviations from their original definitions stand in contrast to their earlier explanation that *sik bunbun* is the Bislama equivalent of malnutrition; when moving to a discussion of the particularities of the language use, they modified their answer slightly. Primarily they simply wanted a more detailed classification between malnutrition that they thought to be mild and malnutrition they thought to be severe. This resulted in health practitioners talking to mothers about how their child's "*skel i lo wan tumas*" (weight is too low), or "*skel i ko daon*" (weight has decreased), or sometimes even "*pikinini i bunbun lelbit*" (child is just a little too thin), phrases that I both heard in observations and that were reported to me during interviews. The motives to refrain from unnecessarily scaring a parent, or to discourage a parent from trusting the nurse by describing a child as malnourished when the parent does not see the child displaying any of these features is understandable. However, this results in the language used in describing malnutrition to become even more confusing to parents, perpetuating the problem of identifying and diagnosing malnutrition. The disconnect in the language and translation of problems of malnutrition and underweight reveals the need for specific explanations in order to understand the implications for each participant.

When asked for additional reasons beyond laziness that caused *sik bunbun*, participants easily list a number of other contributing factors. Health care practitioners also understand the economic and social stresses of living in town and can also list other contributing factors, despite

reporting laziness as their default answer. One health care practitioner points to working mothers as a significant cause of malnutrition in Port Vila, explaining, “because they go to work they start to bottle feed and because it’s [infant formula] expensive, the family feels it’s expensive, so instead of four scoops they only put one scoop in the bottle!” In reality, both health care practitioners and mothers revealed that cutting the amount of milk powder or infant formula added to a child’s bottle was a common way to stretch the formula, to make it last until the next payday, a practice I also observed.

Directly related to this, both mothers and health care practitioners pointed to finances and money as common contributors to malnutrition for families in Port Vila. Traveling to all of the primary stores in Port Vila that sell infant formula and surveying the costs, I found that a 900 gram can of formula can range from 1700vt (\$18.15US) to 4900vt (\$52.32US) depending on the store and whether or not the milk was a special formula. For example, soy-based and otherwise specialty formulas such as “digestive support” or “lactose free” are the most expensive. While I saw two pharmacies stocking these formulas, I never saw anyone purchasing or using these specialty and very expensive types of formula. SMA, the most commonly used brand of formula for infants birth through six months, was about 1900vt (\$20.29US) per 900 gram can. Less expensive is the regular powdered milk such as Anchor Milk or Sunshine Milk, and at only 1500vt (\$16.02US) per can, and widely available in cheaper 400-gram cans, many mothers chose regular powdered milk over infant formula as a means of saving money. Sweetened condensed milk is very inexpensive at only 130vt (\$1.39US) for a 300-gram can, and the thick liquid can be watered down. While I did hear examples of mothers giving sweetened condensed milk to infants instead of formula, this was not widely practiced. However, I regularly saw mothers’ feed Sunshine or Anchor milk to their infants.

Interestingly, neither health care practitioners nor mothers referenced the Blue Card and the growth chart inside as a measure of malnutrition, a further example of the separation between the concept of malnutrition and the concept of *sik bunbun*. Even though the Ministry of Health and the nurses emphasize the importance of the chart and the card, not even nurses deferred to it as the means for determining or recognizing malnutrition without my follow-up question about their use of the chart. After I recorded their initial answers, I asked participants whether or not they consulted the growth chart when determining or diagnosing malnutrition. The nurses all said yes, and began to explain how they track and understand slow growth rates or weight loss using the chart. But it is significant that they did not bring up the chart as a tool for determining this without prompting from me.

Based on these discussions, it was not surprising that most of the mothers indicated that they did not know how to read the chart. When I asked if they could explain the chart to me, some had a basic idea, but most had misconceptions. The growth chart, provided on the inside of the Blue Card, measures weight-for age (see Appendix B). Counter intuitively, it only has two lines, connected by a shaded area, that mark the growth trajectory. The upper line is black, and indicates the 50th percentile of child growth, and the lower line is red and indicates weight-for-age two standard deviations below the mean, or bottom 2.5% of children. Most growth charts also include an upper boundary line two standard deviations above the mean to mark the top 2.5% of children to indicate overweightness, but this chart does not display that line. Most participants understood the red line to be a bad thing, and that children under the red line should gain weight. However, none of the mothers indicated that a weight under the red line is indicative of *sik bunbun*. Some mothers who spoke English fluently suggested that weights under

the red line showed that the child was malnourished, but using the term ‘malnourished’ to discuss this chart was extremely rare.

Displaying only two lines causes some confusion among both mothers and nurses, and I observed nurse aides telling mothers their child was overweight and needed to lose weight because the recorded weight was above the black line. In fact, that merely indicates the child is above the mean, but not that the child is overweight, a critical distinction. As part of my interviews, I asked all mothers if I could look at their children’s Blue Cards. Often I found that the child’s weight from each visit was recorded on the back of the card, but that information was not transcribed onto the growth chart inside. Without recording the weight on the growth chart, it would be nearly impossible for any nurse or health aid to determine if the child was underweight. On many of these cards, I found that the comments on the back of the card just listed that the child’s weight increased and was healthy despite the fact that the child’s growth was slow and in fact under the red line. Because the weight was not plotted on the chart, the health care practitioner missed the diagnosis completely. Additionally, I found several mistakes where the age and weight were plotted incorrectly. I checked the record on the back of the card and matched it to the record on the growth chart on the interior of the card, and found discrepancies fairly regularly, and in some cases this led to missed diagnoses of malnutrition.

6.4.2 Discourses of Malnutrition and Illness and the Context of Caregiver and Health Practitioner Interaction

Within the pediatric ward of VCH, as is common in advanced medical facilities, health care practitioners do not use the term malnutrition because it is too vague for detailed medical interventions. Malnutrition could indicate under-nutrition or over-nutrition, and the severity of

the problem is not revealed in the term at all. Therefore, more precise discourse is required, so health care professionals use the diagnosis of Failure to Thrive (FTT). As one VCH staffer explained, FTT is used when a child is suffering from under-nourishment that is not the result of another medical condition. For example, one infant whose mother I saw in the hospital was born with a cleft palate, preventing her from latching to the mother's breast and therefore eating. The infant lost weight, and after just a few weeks was transferred from an outer island health clinic to VCH for more intensive treatment. Upon arrival, a detailed feeding plan using a syringe and the mother's expressed breast milk was created. While this child was also underweight and wasted (low weight-for-height), she was not diagnosed with FTT because the cause of her low weight was clearly the result of a different biomedical illness—the cleft palate. What FTT really indicates is a child who should be achieving developmental and health milestones but is failing to meet those benchmarks despite no identifiable confounding disease.

Extreme malnutrition can sometimes result from severe protein deficiency and is given a more precise diagnosis of Kwashiorkor. One health care provider, who formerly worked in pediatrics but has moved on to another specialty, explained that Kwashiorkor really is not a problem and that ten to 15 years ago, “we saw maybe, at most, a handful of cases per year.” He was surprised when I told him that month I had visited three. While some children in VCH pediatrics with Kwashiorkor were brought in for treatment from outer islands, the majority of the cases I observed were from Efate. This is a particularly dangerous disease because the presenting edema, the swelling of legs, arms, feet, makes the child look fat and healthy. In these instances, mothers struggle to understand that the child is malnourished because he looks “*fatfat gud*” (healthy chubby weight). This then is another example of how disconnected biomedical practitioners' and caregivers' understandings of diagnoses can be.

In addition to different visual cues of illness and disease that both health care practitioners and caregivers rely upon when making diagnoses, the type of personalized treatment available and how mothers interact with the nurses is also important contextual information that contributes to mothers' interpretations of the value of their experiences with health care practitioners. Generally nurses and health care practitioners are considered to be in positions of authority. Beyond mothers conversationally supporting the work of nurses, their behavior changes during their interactions with the nurses, becoming more demure and passive. While the position is respected, a full understanding or agreement with the diagnosis of the nurse might not be. Where this lack of agreement occurs is important when contextualizing how interaction with health care providers shapes patient responses to this advice. This is best illustrated in the following two examples.

During an interview with a mother whose child was hospitalized with FTT, the mother reported the reason her child was in the hospital was because he had malaria. Initially surprised because the nurse told me that the child had been diagnosed with FTT, I asked the mother to discuss the diagnosis. She revealed that the child had been diagnosed on the day he arrived to VCH. In a follow-up conversation with the doctor, I learned that the child had been tested for malaria along with a number of other diagnostic tests, but that the test had come back negative, and the child was diagnosed with FTT. Because I did not observe the initial diagnosis conversation between the doctor and the mother, I cannot report what actually was said. Nevertheless, the mother had no understanding of FTT and was convinced her child was hospitalized for malaria. There could be a number of cultural and emotional factors contributing to this misunderstanding; however, it is important to note that the concept of FTT was foreign, and the mother reported never having seen a child with *sik bunbun*. The fact that this disconnect

exists contributes to the overall picture of the multiple understandings or misunderstandings of *sik bunbun* and is another example of the misalignment of biomedical and caregiver diagnoses.

While traveling with the MCH clinic, a nurse handed me a child's Blue Card, and pointed to the line indicating stagnant growth that was well underneath the red line, saying, "I thought you might like to talk to the mother for your research." I found the mother sitting in the shade, *storian* with her friends while she waited, and she agreed to participate in my survey. Afterwards, I observed her conversations with the nurse about her child's troubling growth. When the nurse moved on to the next patient, I asked her what she thought of his comments. She put her child down and he walked off to play with a friend. Pointing to him, she said, "Look, he's playing and happy! And he eats too! He's not sick!" Because the idea of *sik bunbun* conjures images of emaciated, deathly ill children, and because many underweight and growth-stunted children still eat when food is available and play with their friends just as healthy children do, mothers often do not view these children as sick. Underweight and stunted children often do not have visible symptoms of severe illness, other than that they are thin, an attribute that visually alone cannot lead to a biomedical diagnosis.

Based on participant observation and recognizing these differences in understanding between the definitions that caregivers and nurses provided, I asked each group about the thought processes of the other group. This helped me to understand the perceptions the nurses have of mothers, and the perceptions mothers have of nurses. When asking a nurse about how mothers think a child gets *sik bunbun*, she replied:

Many mothers think that *sik bunbun* is caused by *blak majik* (black magic or sorcery). Because in Vanuatu most of our culture has an understanding of *blak majik* so they think "oh somebody has done something to me that's why my baby is like this." But we [the nurses] tell them "this is your belief and we respect your beliefs, but you must continue to feed your baby. And you must bring your child down to the clinic every month so that we can monitor his weight because this is

very important.” This is the main thinking of most mothers. They [the mothers] think that this [malnutrition from black magic] is a normal thing that happens to many children, but it’s not! The mothers are the ones who can prevent this—first hand prevention, right!

While this nurse did clarify that this belief in sorcery was more common among rural mothers than among urban or peri-urban mothers, she still reported this as a primary rationale that mothers have for their children’s illness. However, despite my specific requests, mothers almost never attributed *sik bunbun* to sorcery. They never hesitated around the topic as though that was their first thought, but they did not want to express this to me so they needed to think of another answer. Typically, mothers had clear answers that were not related to sorcery. Only one interviewee in this study reported sorcery as the primary cause of *sik bunbun*. Furthermore, when it was not listed, I asked about *blak majik*. However, that was met with much skepticism, with participants acknowledging that some mothers may think this, particularly rural or “uneducated” mothers, but the vast majority do not.

Primarily nurses mentioned that mothers just do not understand nutrition and health and the reasons why they should feed their children healthy food. Often this was attributed to ineptitude on the part of the mother, with general comments that “she’s lazy” summing up why the mother does not follow health advice or why the child has become malnourished, as was discussed earlier. One health care worker stated:

All the mothers think that children cough and cough and then become *bunbun*. Sometimes they think the cause is the cough, or they’ll [the children] have a convulsion, fits [seizure]. They [mothers] have this mentality, that the cough is why they became *bunbun*. But it’s not that, it’s just food and eating.

This confusion reinforces the problems with the term *sik bunbun* applying to many different kinds of illnesses and disease. Furthermore, mothers report that *sik bunbun* is not a problem in Vanuatu, or not something their child could ever succumb to.

Similarly, I talked to mothers about their perceptions of nurses, how they view the standard of care, and what mothers think nurses think when treating their children. Most of the responses I received here noted the brief time in which the nurse and child interact as the underlying problem with the attitude of the nurses. When asked her opinion of the medical care her children receive at MCH clinics, one mother explained:

“Sometimes they help a lot, but sometimes, well, sometimes when my children are sick and I take them, the nurses say the same thing every time, and they don’t check them. Like when I took her [points to child] for her fever, every time they give us Panadol¹², Panadol, nothing changes, no check-up or exam, just drink Panadol and come back later...They don’t examine them [the children] they just look them over quickly and say “Drink Panadol three times a day”

Other participants echoed the frustration that nurses just quickly pass them over without carefully examining their children, and just encourage taking an over-the-counter medication that is used so widely; participants question if it really works or is a meaningful medication. They interpret this rapid care and routine advice and medication as an indication that the nursing staff does not particularly care about them or their children, and that creates a distrust and breakdown of communication between the mothers and the health care practitioner. Several mothers mentioned that they stopped going unless it was a real emergency because they felt it was a waste of time and money.

The fact that the VCH-based MCH team sees children for such short periods of time, further complicates mothers’ reactions to their diagnoses. Mothers live with their children, they see them play and eat every day. In contrast to this, the MCH staff sees children for about five minutes once a month, and there is no guarantee that the same nurse or nurse aide will see that same mother and child during the following visit. Mothers view this as a severe challenge to

¹² Panadol is a brand name over the counter medication used as a general pain reliever and fever reducing medication. The generic name for this is paracetamol. The Panadol brand widely used in the Pacific including in Australia and New Zealand the way that Tylenol is used in the US.

understanding the health of their child, particularly when discussing something that is not easily conceptualized as an illness or disease like malnutrition. If a mother has reservations about the health care practitioner's diagnosis, then this will be further complicated by her relationship and the quality of her interactions with the team. Thus the ethnographic descriptions of the work the MCH team completes, and the variation between the types of services that the VCH team and the Paonangisu team provide become critical context for understanding how mothers interpret and respond to the biomedical advice they receive. Within this framework, the rationale for mothers' response that they have never seen a child with *sik bunbun*, and why mothers hesitate to trust the advice of nurses seems much more rational.

6.5 CONCEPTS OF MALNUTRITION AND FOOD SECURITY

In terms of nutrition education, and the dissemination of the *tri kaen kakae* program, mothers are presented this information during antenatal check-ups, occasionally in the maternity ward (where they primarily focus on breastfeeding rather than food for children older than six months), and at MCH visits. The ethnographic sketches provided in this chapter distinguish the variety of maternal and child health care service delivery methods employed by nurses and nursing staff on Efate. Clearly there is a major distinction between a half-day clinic in an urban center where nurses see over 200 children in four hours, and the approximately 15 patients per day who visit the health care center in Paonangisu. Nurses value the *tri kaen kakae* program and work hard to provide patients with the best services possible. However, the nurse-to-patient ratio and the fact that in some cases there is barely enough time to record the services rendered let alone provide

in-depth counseling, illustrate the context in which the biomedical problem of malnutrition is discussed and understood on Efate.

Logistically it is not possible for nutrition education to be the primary focus of the MCH clinic at VCH, or with the VCH nurses who travel and provide service to hundreds of children in urban, peri-urban and rural mobile clinics. Instead, they focus on weighing children and providing vaccinations, properly carrying out the EPI procedures. Conversely, the nurses at Paonangisu have more time to deliver detailed health care education that is tailored for their patients. Covering a variety of subjects beyond *tri kean kakae*, nurses disseminate advice on everything from hand washing to malaria prevention. They have time to use the posters and charts provided by the Ministry of Health during their programming, and are able to tailor discussions to directly address the problems or question of that particular patient. When the VCH MCH clinic visits schools to provide de-worming pills and Pentavalent booster vaccinations, the nurse aides display the posters to children in line and talk about proper hand washing and nutrition. One nurse took a photo of this during the visual-cognitive elicitation project and captioned the photo, “I took this photo to show that you must explain the reason that children should not be afraid and that they need vaccinations. It protects them from catching all kinds of bad diseases” (see Figure 6-9). But in the other settings, the nurse aides are busy helping with weighing children and there is not the time for this type of educational programming from the VCH team. However, health care practitioners do value this educational programming, and wished that they could provide more of it to mothers.

During interviews, both health care practitioners and mothers articulated that the primary goal of the MCH clinic is vaccination, and many mothers in this study find that service extremely valuable. This is even demonstrated in the types of photos of educational

programming that participants of the visual-cognitive elicitation project chose to include in this project. All the photos of educational programming showed discussions of vaccinations and hand washing (see Figure 6-11). Children are also weighed at every visit, but do not necessarily need a vaccination at every visit. Despite this fact, there is not really a strong association between the MCH visits and nutrition education. This focus is a reflection of the fact that there is not much explanation or discussion of the significance of weighing children; therefore, mothers interpret vaccination as what is most important about these visits. The significance of weighing children is never meaningfully explained to the participants.

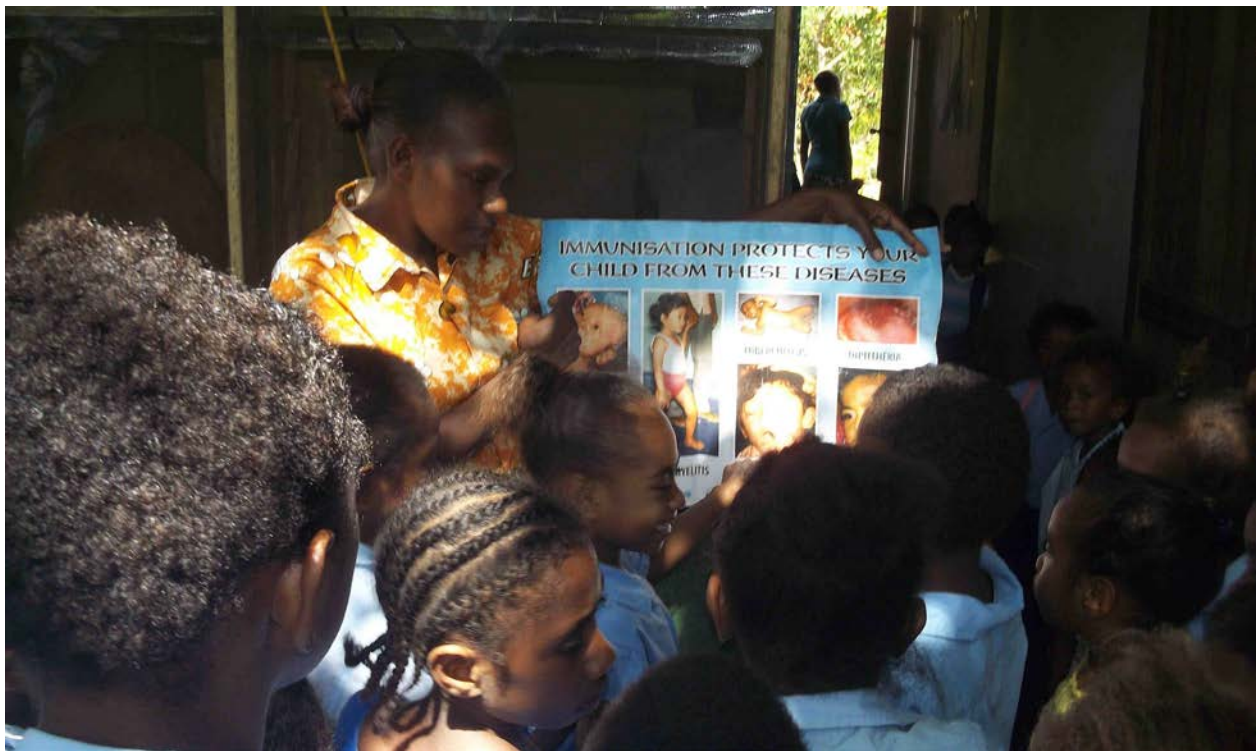


Figure 6-11: Nurse aide provides health education to children during a school visit Photo Credit: Visual-cognitive Elicitation Participant

Mothers consider nurses to be in positions of authority, and do not question that hierarchy during their interactions, deferring to the nurses' requests. However, once outside of the nurses' gaze, often mothers largely consider nurses' recommendations as advice that should be evaluated

alongside other advice and information they receive. The ethnographic descriptions included in this chapter illustrate how mothers interpret their interactions with health care providers. Occasionally mothers find it hard to prioritize the information garnered in these extremely brief conversations with health care practitioners. Some mothers even commented, “She didn’t really look at [my baby], so how can she know?” This distance and lack of deeply attentive care from nurses and nurse aides is evaluated in the context of the time consuming and loving care provided by grandmothers and other lay practitioners who “know” the child better than the biomedical health care providers. Both formal training in biomedical care and time spent interacting with the child are valued, but since mothers often do not perceive that they are receiving both of these at the MCH clinics, the advice is reevaluated within the larger contextual framework.

Even outside of the population of women whom I interviewed in the health care setting, women related the importance of and problems with MCH health care delivery. Very rarely did women have experience crossing the boundaries of health care settings; for example, they did not attend the clinic in a rural area one month and the clinic at VCH the next month. Thus, participants did not readily provide comparisons of the diversity of their experiences. However, in comparing interview and participant observation data from the two groups these issues can be more broadly interpreted. Generally, women thought it good that they could come directly to the hospital for service and that the hospital was better than a more remote clinic, but lamented the very long lines, and also the bus fare, 150vt each way. Mother’s in Paonangisu thought that they had friendly MCH staff who answered their questions well, but thought that they were at a disadvantage because they could not attend the clinic from VCH—that these clinics might be better because it was in town and served more patients.

Numerous factors are at play here that must be considered in the analysis of how children and parents understand and respond to malnutrition and food insecurity. How should mothers reconcile a diagnosis of chronic under-nutrition from a nurse with children who do not appear sick? Can hunger and under-nutrition manifest themselves in the growth charts provided by the health care teams, even if that hunger is intermittent? How should mothers interpret and respond to confounding variables such as calorie rich foods that could keep weight up, but leave children undernourished in macro- and micronutrients? While my research attempts to consider all of these questions, this dissertation evaluates how malnutrition relates to food security and how food security is resulting in changing feasting patterns in urban and peri-urban areas.

7.0 TRADITIONAL FEASTS IN MODERN TIMES: THE *LAFET*

A complex understanding of food insecurity as it intersects with feasting practice remains a largely unexamined field in the Pacific and in other geographical regions of the world. Routinely, food insecurity and feasting are treated as separate concepts. This dissertation begins to make these connections through ethnographic research of children's foodways in Vanuatu. Specifically, this chapter will define community feasting in urban and peri-urban areas of Vanuatu today. Examining how feast foods differ in quantity and quality from the "everyday" foods that ni-Vanuatu children are accustomed to consuming at home illustrates the appeal that feasts have for children. Additionally, a description of the current protocol and etiquette of feasts is presented. Most commonly, *lafet* is associated with a wedding or a funeral. In these instances, the feasting and celebration continues for anywhere between three and ten days, with most lasting five days. The lengthy duration of *lafet* in Vanuatu allows the feasts to have a more significant impact on food security than in areas where a feast lasts a single day or comprises only a single meal. In addition, there is an increasing number of instances of *lafet* where feasting foods are for sale, changing how and when people can access them. While acknowledging all of the variation in the types of *lafet*, there is specific *kastom* practice regarding gifting that should be observed. This chapter concludes with a discussion of gifting, *kastom* and manners at *lafet*, and how children are taught these practices from a young age.

7.1 LAFET AND SPECIAL OCCASIONS OF COMMUNITY FEASTING

7.1.1 Types of *Lafet* in Urban and Peri-Urban Areas

Lafet, or communal celebrations involving feasts, occur quite regularly in Port Vila and the peri-urban areas around the city. For the purposes of this research, I broadly define *lafet* to include any type of feast that involves the preparation of traditional or imported foods shared with a wider group of individuals beyond immediate family who would typically prepare and consume food together. Occasions for feasts include weddings, funerals, public holidays, school events, church celebrations and community fundraisers. Weddings and funerals are commonly associated with feasting in many cultures, and in Vanuatu, typically these events are marked by a designated three to five day celebration. On these days, the festivities are continuous, with visitors flowing to and from the family's home, and the music of string bands blaring around the clock. While the family will announce that the wedding or funeral will be anywhere from three to five days, if the family can afford it the preference is for five days. It is standard, however, for visitors to come a day or two earlier to help with preparations and stay a few additional days to help with cleanup and sorting and the redistribution of gifts. This duration accentuates weddings as extremely expensive events for the hosts, as they are feeding huge numbers of people for about a week.

While there is an "official" length of time set during family meetings in advance of the *lafet*, the preparations required for this type of event generally result in an extension of the time that people are gathered and eating. People gather in the days and weeks prior to the "official" start to construct a *selta* or *kappa*, an open-air dwelling made of bamboo with a corrugated iron roof or *natanggura* (traditional thatched roof made of sago or pandanas leaves). This structure

will shelter attendees from the rain and sun while they are cooking and eating, and creates a focal point where attendees will gather and where people walking down the road can see the space of celebration and feasting. Creating a large earth oven with stones for cooking, building a temporary pen to hold pigs given as gifts, and generally helping to organize the event in the days leading up to the “official” start all bring people to the host’s home. Scores of people can arrive early to help; and then they are also present for lunch and an evening meal before the “first day” of a wedding. In this way the reality that a larger number of people are fed for more than the allotted days of the wedding is revealed. During this time attendees, those working to prepare the home, and their families are fed. Practically speaking this means an extension of the total days of the feast when one considers the amount of food that is needed to feed such a large number of people for that many days.

Hosts know that they need help, and they do request that people come and help with preparations. Even when watching and helping to cook pots of curried soup so large that they were stirred with a long wooden stick, I was surprised that these preparatory days are not considered part of the wedding (see Figure 7-1). “Doesn’t this count as day one?” I asked an elder woman as we cooked soup, “because there are so many people here!” But she responded, “No, no. It starts on Monday; we’re just getting ready. These people are just here to help.” I pressed the point, “Doesn’t this seem like the same foods, and a lot of the same activities that occur during the wedding?” Patiently, she explains further, “We need to feed people who are here to help, but you’ll see on Monday—that is when we will start the wedding.” She gave me a smile that suggested I be patient, and that I would see the difference two days from now when Monday arrived. I tried to get a head count, but there were so many people, and the children especially were running around so much that I could not keep track of who had been counted and

who had not, so I gave up. I estimated that there were about 80 people who would eat, and excluding the children who were playing, nearly everyone was helping with a project, building, cooking, cleaning, and sewing. The large pot of soup was not the only massive pot of food prepared that day. There was food baked in the earth oven too, and all of this was needed in order to feed everyone in attendance during these “preparation” days. While they may not be considered part of the official days of the *lafet*, they are certainly days filled with quality feast foods, which can have an impact on overall nutrition of those participating in the feasts and living nearby.



Figure 7-1: Cooking soup before a wedding

The Saturday before a wedding that would “start” on Monday a woman stirs a large vat of stew with sweet potato, onion, Chinese cabbage and beef. Photo Credit: John Fournier

What became clear is there is a pattern to ritual events associated with the wedding—the day to gather to prepare the bedding, mats, and clothes the bride will take with her to her new home, the day of the bride price ceremony, the day to purchase shoes and rings, the last day the bride eats with her family, the day of the actual ceremony—all of these events took place during the week of the wedding. It was not the food that distinguished days that were part of the wedding week from days that were not; rather it was the series of ritual activities. And preparing the setting, building a shelter and a pigpen, were not part of those activities. Nevertheless during these preliminary and post wedding days, the food was feasting food.

Beyond weddings and funerals, other occasions of community celebration involve feasts. Those included in this research were church events, public holidays, and birthdays. As Western practices and values become adopted into ni-Vanuatu culture, there are additional occasions for feasts, and the adaptation of these celebrations as regular practice is more common in urban areas than in rural areas. Therefore, now in urban and peri-urban areas, events including a church event to host a visiting missionary, the celebration of Mother's Day, Father's Day, Children's Day, and other such holidays are occasions for feasts.

Many churches have areas outside that include a covered shelter that can be used for cooking. In the case of church feasts, the process is much more like a potluck, where individual families contribute foods that they have available. Once all of the foodstuffs are assembled, individuals will work to cook communally with all the ingredients. This process allows people who have cash but no garden to contribute a store-bought food like a bag of rice, while people with gardens but no income can contribute plantains they have harvested. Typically those who are very active in the church and the associated ministry clubs—bible studies, women's groups, men's fellowship—will bring and prepare food. In every instance I observed *laplap*, a traditional

‘pudding’ that has a root vegetable base and is cooked in the earth oven, was served. In addition, rice and soup and local fruits are also provided for attendees. Usually these feasts take place on Sundays, and since people are not working more time is available for cooking dishes like *laplap*. Predominantly only those people who attend that church will attend the feast once it is prepared. However, children occasionally follow their friends to these feasts.

Increasingly in urban and peri-urban areas the birthday of a child or an adult is an occasion for a feast. Communities are more likely to celebrate public holidays and religious ceremonies than individual birthdays, although this is becoming more and more popular among families with any disposable income. For children, birthdays are an abundance of sweets. Cake, Twisties, *lolies*, and cookies fill children’s plates (see Figure 7-2). For adults who come to celebrate there is usually *laplap*, rice, and soup with meat in it served up as well. This is available to children, but not surprisingly, they would much rather eat only sweet and salty treats, which they are permitted to do. Fried chicken wings are a favorite birthday treat for children and adults. While invitations for birthdays are usually distributed to guests in advance, those who receive an invitation feel able to bring along friends, which is completely acceptable in small numbers.



Figure 7-2: Children's plates filled with candy, cookies, cake and Twisties at a birthday party

Many of the smaller less formal events like birthdays and community feasts involve a “potluck” aspect in which individual families prepare food or bring raw foodstuffs to contribute to the meal. This could involve cooking a stew of beef, chicken or fish to be served over a mound of white rice, baking a cake for dessert, buying a large bag of rice or packets of cookies, Twisties and juice, preparing a platter of local fruits or making *laplap*. These events are typically the smallest types of feasts, with about twenty-five to fifty people in attendance. Adult birthday parties are less common than those for children, but when they are celebrated they tend to be larger. Sometimes two or more adults and/or children who have birthdays near each other will team up to have one larger party, which helps with the costs of the party, and makes all the work of hosting and slow cooking in an earth oven more feasible. One adult feast I attended even included the harvesting of a pig that was slow cooked on the earth oven. An expensive traditional

food usually associated with larger *lafet* like a wedding, the fact that a pig is harvested for a birthday is a display of wealth and status, and a special treat.

Public holidays are also cause for *lafet*; for example, potluck style feasts during the midday meal marked Children's Day, followed by lots of free sweets and candy for the children. While Children's Day is a public holiday, the feasts tend to be associated with a church or with another smaller group that organizes the gathering for a specific subset of the community—a church congregation, parents whose children all attend the same school, or members of the same youth group. Typically, there would not be one giant celebration of the public holiday, but rather, many smaller groups of people coming together to *lafet* in urban and peri-urban areas. But at Chief's *nakamals* and other central gathering places that are open to the broader community, I watched as elders tossed handfuls of candy and *lolies* into the air for children to playfully catch in a game. Here, children access candy and packaged store foods in public gatherings that are open to everyone.

A characteristic common to all these community feasts is that all the foods are combined and presented on a communal table for everyone to share. Attendees either serve themselves buffet style or they walk through a line where women pile foods onto plates and pass them out to each guest. In contrast to weddings and funerals, these birthday, church gathering, and holiday feasts are one day, and except on rare occasions last through just one large meal. Organizers of these events serve a much smaller population of people and children than the feasts associated with weddings and funerals. Nevertheless, these are another opportunity for children to access food.

7.1.2 *Lafet* at a Price: Urban Feasts and Foods for Sale

Distinct from the feasts in which individuals participate as part of ritual celebration, such as weddings and funerals, and those that are associated with a smaller grouping of people, like church feasts and birthdays, are events that are called *lafet* but involve the purchase of feast foods. With increasing numbers of people in town, and the growing public celebrations of national holidays like Independence Day and Chief's Day, a new type of urban *lafet* has developed—feasts at a price. More people in town are accustomed to purchasing their foods and lack the time and resources to make their own *laplap* in an earth oven, and more people are seeking creative ways to enter the cash economy through small entrepreneurial ventures, creating a nexus ripe for the sale of feast foods. This practice is quite unique to the urban areas, particularly in how widespread and popular the sale of feast foods has become.

The most prominent example of this is Independence Day celebrations, which last a full week, with special vendor stalls erected in neighborhood communities throughout town as well as in the peri-urban villages (see Figure 7-3). Vendor stalls sell some island dresses and small toys, but the vast majority of sales are in foods. Local foods are prepared for meal times along with rice and soup, but snack foods, Twisties, popcorn, soft drinks, and candy are available all the time. Music plays on high volume for people to hear for blocks, and an “announcer” usually calls out special bargains and advertises food that has just finished cooking to encourage people who are at home to come out and purchase food. The announcer also rallies children and tosses free candy into the crowds. Sporting competitions in soccer and cricket are held nearby, and evenings are filled with dancing and singing that rings throughout the neighborhood. Foods cooked in earth ovens with hot stones, such as *laplap*, are specially announced, as they take hours to prepare so cannot be easily “restocked” in the stalls. These prepared foods also cost

more and vendors are more eager to sell these foods quickly as they will not store for later the way that packaged foods will. *Laplap* can serve as a full meal, especially for a child, as it is dense and filling. Typically *laplap* is topped with cabbage and a piece of meat or seafood. While the diet may not be fully nutritionally balanced, it does include all three food groups that are part of the *tri kaen kakae* program, and both caregivers and public health practitioners considered it one of the “best” foods for children and adults both in terms of taste and health.



Figure 7-3: Vendor stall at Independence Day celebrations. Photo Credit: John Fournier

For families with less money to spend on food, 10 and 20 vatu (~15 cents) is all the money required to procure *lolies* and other packaged sweets. Kids clamor for the sweets and a package of Twisties might be all a parent can afford, and serve as *kakae blong holem bel nomo*—it can be enough to satisfy the child’s hunger if even temporarily. In urban and peri-urban Vanuatu, these *lafet* at a price events attempt to encourage participation for all by serving up

foods from *lolies* to whole fish over rice, in a way that everyone can afford to purchase something. Or in instances where children have no money at all, they can usually grab some candy distributed by the elder villagers for free. In this way these *lafet* at a price are places where everyone can participate and have fun, however, money is required in order to actually consume feasting foods as opposed to everyday foods.

Community fundraisers are another important types of *lafet*, because, while people have to pay for the food, it is cheaper for that individual to purchase dinner portions for their family than purchasing all the ingredients in bulk at the market and cooking it themselves. It is also much less time consuming. Families fundraise for any number of reasons including to pay for school fees, to contribute to the building of a house, to pay for water line extensions, to help pay for medical bills from a private doctor, to pay for new uniforms and school supplies, or to support a church missionary travel. Fundraisers have become so prominent in urban and peri-urban areas that their frequency became the subject of jokes. One participant joked, “You’re hungry? Someone’s fundraising!” Another, disparagingly commenting on how often fundraisers are held, quipped, “You want something, anything? Just fundraise. You don’t need a job—just fundraise for everything!” Despite the jokes, this is another means for people to access culturally appropriate food, and “good” food, or the “best kind” of food from the perspective of participants, as these fundraisers also highlight local dishes such as *laplap* and fresh fish and meat. Additionally, because the food is consumed at a *lafet*, the status of the foodstuff is elevated, and it is considered “good” and healthy food because it is a meal consumed at a *lafet*. For example (see Figure 7-4), one participant took a photo of fried fish, white rice with ketchup and a couple of leaves of lettuce on top and wrote in the caption, “This food is a balanced meal where all three kinds of food are eaten. It is a healthy lunch.” During follow-up discussion she

explained that *lafet* were a place for “good” food as long as you did not consume Twisties or *lolies*, and that you almost always got a balanced meal with *tri kaen kakae* at a *lafet*.



Figure 7-4: "Healthy Lunch" at a *Lafet* Photo Credit: Visual-cognitive Elicitation Participant

Cakes, sweets, cookies, sandwiches, and local fruits are plentiful at sports days and in celebration of the end of the school term. These school events are also often fundraisers, with Twisties and *lolies* sold in abundance, sometimes for as little as 10 vatu per *loli*. Local food, particularly *laplap*, is at the center of church celebrations such as the ordination of a new minister or welcoming visiting guests from other islands for a church conference. Elders from the church and family members of a newly ordained minister are expected to provide much of the food for these celebrations, and all of this food is distributed for free. Occasionally, a women’s group at a church will hold a fundraiser where all the food is prepared and donated by members of the group, and sold to the wider community. Church fundraisers rarely occur on Sundays, as Sundays are reserved for communal feasts where food is shared potluck-style and

free-of-charge. Public holidays, school events and church celebrations are all times and places where food is offered both free and for sale depending on the circumstance, type of event, and monetary standing of the community organizers. Kids in particular are given lots of sweets for free as prizes at all these types of events. The food at weddings and funerals is free, although many guests contribute wedding gifts of raw foods that can be prepared at upcoming meals later during the week of the celebration. Therefore, the rationale is that everyone contributes so everyone can share in the consumption of that food, which distinguishes it from food for sale.

7.2 “BETTER THAN HOME”—QUALITY AND QUANTITY OF FOODS AT *LAFET*

The food at feasts has a high cultural value, because unlike daily food preparation, in large part at *lafet* women cook island food in a traditional earth oven with hot stones. *Kukum long ston* or baking with a hot stone earth oven is a food preparation style that requires both a great deal of time in terms of preparation and actual cooking time. Outside of *lafet*, cooking in an earth oven is commonly reserved for Sundays, if the family has space for cooking with stones and money or access to local root crops. Because time, money and access to the foods and preparation methods necessary for the types of food cooked in an earth oven are all required for *lafet*, they are set apart from daily food patterns. These are special and less commonly consumed foods, which elevates their status. One participant explained, “food at *lafet* is better than home. You get the kind of food you don’t get to eat all the time.”

In cataloging what children seek out at feasts, participants listed, in order of importance: 1) beef, especially fresh beef, 2) fresh food that is not processed or from a can, and 3) free food

in unlimited supply. The fact that food was free and also served in large quantities seemed to highlight two separate issues; however, participants always listed these two together. First, access to meat and food that is not processed creates a link to *kastom* foods and distinguishes foods at *lafet* from everyday foodstuffs. Second, the high costs of food, especially in relation to the monthly minimum wage of just 26,000 vatu (USD 283)¹³, is a struggle for many families who seize opportunities to access large quantities of free food. While in line at a buffet style *lafet*, it is not uncommon to see individuals serving themselves several pieces of *laplap* stacked on top of each other, next to rice with soup, and surrounded by side dishes on laden and sagging disposable plates.

7.2.1 Finally Full—of Meat

Regardless of the duration of the *lafet* or the reason for the celebration, participants associate *lafet* with specific foods. As has been reported in other Pacific Island cultures, feasting is associated with local foods, great diversity in food offerings, and an abundance of food available for consumption (Jones 2009; von Poser 2013). In her research in Lau village in Fiji, Jones (2009) reports:

When asked to characterize the differences between everyday cooking and foods prepared and served for feasts, these women consistently made reference to “big foods.” Big foods include cow, pig, chicken, large offshore fish, soup, curry, and chop suey. Pigs are frequently eaten on weekends, baked in the Sunday *lovo* [earth oven], but cow is rarely eaten except for feasts associated with weddings, funerals, or other important events that are celebrated by the entire village. In terms of starch foods, yams and *dalo* are fundamental components of feasts. Lauans always make an effort to present many different root crops together with a variety of meats for feasts or celebrations (76).

¹³ While the Vanuatu minimum wage was just increased to 30,000 vatu per month (USD 326.60) in August 2012, this change has yet to be implemented.

There are a number of similarities in the description of the types of foods that are found at feasts in Lau and in Vanuatu, particularly the emphasis on beef and pork and also yams. When in season, yams can be boiled and consumed more regularly; however, they are required for a successful feast. When describing the food at a *lafet* in Vanuatu, all participants in this research agreed that it includes fresh meat, traditional foods that are cooked in an earth oven, and an abundance of food where attendees receive a substantial serving (see Figure 7-5). The assumption that the food at a *lafet* will be better than the food that one can typically expect to consume leads people, particularly children, to prefer the food at a *lafet* over the food they consume on a daily basis. Thus children who are food insecure can identify that not only might there not be food, or not be enough food at home, but the quality of that food will also be inferior to the food served at a *lafet*. These factors, coupled with children's enjoyment in playing with their friends, encourage children to seek food at a *lafet*.



Figure 7-5: Young boy with his plate at a *lafet*

Here a boy holds up his plate after passing through the buffet line. He has pork, noodles, cabbage salad, rice, soup and a sugary juice drink. Photo Credit: John Fournier

In both surveys and in interviews I asked participants to discuss the foods that are different at feasts compared to what a person might eat every day. Almost always the first response was fresh meat. Fresh beef, pork, chicken and fish were all listed as “good” foods that you find at feasts, but otherwise rarely eat. While I observed some families eating quite a bit of seafood in areas where they had access to fish, on a daily basis people consume canned tuna and canned corn beef. However, I never observed or heard of canned meat served at a feast. One participant laughingly reported that if a family served canned meat at a feast it would be embarrassing, everyone would laugh, and no one would come back to celebrate! In particular participants listed fresh beef and fresh pork as the most preferred meats, and the types of meat least likely to be consumed outside of the context of *lafet*. In contrast, I observed weddings

where six to twelve pigs were exchanged and kept in a large pigpen nearby for eating and for redistributing after the event. In addition whole cows were brought as part of large family gifts, although for ease of transport, the cows were slaughtered before they were brought to the *lafet* (see Figure 7-6). One participant explained this stating:

There is more meat at wedding feasts. Some families come and bring a whole cow as a gift to the wedding. When you're home you don't eat fresh meat every day. You eat canned meat and canned tuna because that is what we can afford in our budget. But when it's time for a wedding, you know you will eat fresh meat every day.

Therefore, while a meal of soup over rice might be served for a regular weeknight dinner and at a *lafet*, the quality of the ingredients and the use of fresh meat instead of canned meat marks a significant difference for the consumer. Not only will the fresh meat be used in soup, but it will also be placed on top of the *laplap*. Describing feasting foods, one informant responded, "There are large pieces of meat cooked in *laplap* or served on rice, and you know you will get a bigger portion of meat than you would at home—if meat was even served [at home]." Slow cooked in the earth oven and covered in coconut cream, the fresh meat cooked in the *laplap* is tender and listed as a favorite food by many research participants.



Figure 7-6: Presentation of gifts at a *lafet*

A man makes a speech to the host family while presenting a gift. Here two separate gifts are display on mats, and both a live pig in the foreground and slaughtered cow next to a live pig in the background are included in the foods provided. The families who contributed to the gift are lined up along the right while the receiving family is pictured, in part on the left.

Also in contrast to everyday eating, *lafet* is a time for the consumption of large quantities of foods. There is an understanding at a *lafet* that there are money and gift contributions to permit the host family to pay for everyone to eat his or her fill. As weddings and funerals last for an extended period of time from three to ten days, families cook and serve a lot of food. Not only is all the work of cooking so much food exhausting, but eating so much food can be tiring too. Taking a deep breath and reflecting on the feast of the previous week, one participant explained:

After you eat so much meat you are full and tired. You can eat four or more times in a day. You eat breakfast, then you have morning tea [served with buttered bread and cookies], then you eat lunch, then you have afternoon tea [again with

buttered bread and cookies], then you have dinner! You eat, eat, eat nonstop! Afterwards everyone looks full with big bellies, [she laughs]. When someone tells you there is a *lafet*, you know this is your chance to eat well!

In truth people are always working to prepare foods, and at any given moment, you can find someone eating. For very young children, about two years-old or younger, it is common for mothers and caregivers to set aside pieces of *laplap*, cookies and fruit to feed children throughout the day, as children that young do not often want to sit still and eat amidst that much excitement. But even children as old as ten will hang around and snack whenever they see food available or feel hungry. Soup and rice are also stored in large saucepans so that if someone arrives mid-afternoon, a full meal is ready at a moment's notice.

Preparing such large quantities of food and for such a long time is also exhausting. Eating that much fresh meat is also attributed to the exhaustion people feel by the end of the week. Asking questions of a mother who had just finished working every day at a *lafet*, we sat at her house, and she took a deep breath and explained how she loved the quiet again. Patting her stomach, she said:

You eat meat every day at a feast, and after a week of this you're full, and you're tired! [Laughing] All the mothers come to the house [of the bride or groom] and make *laplap* for everyone to eat. The hosts of the wedding will come and give meat to the mothers as they prepare the *laplap*, so all the *laplap* has meat cooked in with it too. Later in the week, the host will kill pigs and we will have pork in the *laplap*, and roast pig too. Then at the end of the week, after the ceremony is finished on Friday, everyone will make *tuluk* with roast pork on Saturday.

Still tired from that work, she takes another deep breath as though just thinking about eating all that meat is exhausting her. *Tuluk* consists of small pieces of meat, onion and garlic stuffed in the middle of grated manioc, which is wrapped in leaves and roasted in the earth oven. While the practice of making *tuluk* is more frequently associated with the Polynesian outlier villages of Mele and Ifira, it is considered particularly delicious, and other urban and peri-urban villages are

beginning to serve *tuluk* at weddings, although sometimes it is served at the main wedding feast after the ceremony as opposed to the next day. Again participants make the link between eating lots of fresh meat and being very full and subsequently tired.

The biggest of all the types of *lafet* is the last meal of the official wedding week. Long tables hold bowls of different kinds of soups and curries, trays of roast beef, whole roast pigs, bins of white rice, platters of *laplap* and dishes full of sweet potatoes, yams, taro and bananas that were roasted whole in coconut milk in the earth oven. These foods are set out for the primary meal the evening after the marriage ceremony (see Figure 7-7). Typically held on a Friday night, many of these feasts feed a staggering 300 to 600 people! It is no wonder marriage *lafet* are so exhausting—I interviewed numerous women who described working through the night to produce all the food needed for the final meal on Friday evening.

In contrast to *kakae blong holem bel nomo*, at feasts you eat as much as you are able. Eating large quantities of foods at feasts has been reported in other Pacific Island contexts as well, for example in Fiji:

During feasts, people make an effort to eat considerably more than they normally do, and there is much encouragement by the participants to this end. One constantly hears the phrase, “*kana vakalevu!*” (eat big) when sitting at a feast. The presence of big foods, a large variety, and copious amounts of food were key characteristics that the interview respondents and other informants used to describe the fare associated with special events. (Jones 2009:76)

This description parallels the feasting patterns found in Vanuatu, where people are expected to eat large quantities at feasts. At home for a typical meal, a plate would never be piled as high as it is when passing through the buffet line at a *lafet*. Part of showing the hosts they are successful in their feast is to have overflowing plates—consumers are happy and the hosts display how much they were able to amass and produce for the event. At a successful feast guests know there will be enough food, it will be better than what you expect to eat at home, and there is dietary

diversity in the variety of meat and vegetables offered in both the soups and the *laplap*. Given that daily food consumption is centered on achieving satiety, it is easy to see why individuals get excited about celebrations and feasts. As one participant exclaimed, “weddings, funerals, birthdays, these are eating times.”



Figure 7-7: Full plates in a long buffet at a wedding *lafet* Photo Credit: John Fournier

7.2.2 Sweets, Sweets and More Sweets

Interestingly, the topic of sweets came up as frequently in discussions of feasts as it did during discussions of everyday foods. In addition to participant observation, the dietary journals revealed that many children eat sweets as snacks every day, or a packet of Twisties for lunch. *Lolies*, ice cream, Twisties, chocolate cookies, and flavored ice blocks were the most common sweets reported in the journals. Several mothers reported feeding sweet cookies for breakfast almost daily, and some children had three or four *lolies* for their snacks throughout each day. This was also reported in the visual-cognitive elicitation project. One participant lived near a peri-urban village store and reported that she sees children stop at the store on the way to school for breakfast. The photo in Figure 7-8 depicts this, and during the photo captioning activity the participant wrote, “This photo shows two students ready to go to school with their packet of Twisties in their hand. I made this photo to show that Twisties will not help their bodies grow.” In subsequent discussions of the photographs, the participant indicated that while people know sweets are “bad,” she sees many children like this every day stop for sweets on their way to school. It will serve as *kakae blong holem bel nomo*.



Figure 7-8: Stopping for Twisties on the way to school. Photo Credit: Visual-cognitive Elicitation Participant

At the same time, feasts are frequently associated with high quantities of sweets, particularly at the type of *lafet* where food is for sale. During the visual-cognitive elicitation project one participant took a photo of kids holding up a handful of *lolis*, and captioned the photo, "Shows that during big celebrations parents usually buy junk food for their children" (see Figure 7-9). This behavior is described as typical, and children expect to eat their fill of sweets during *lafet*, knowingly looking forward to these feasts. Participant observation revealed that feasts are full of sweets for children, and because these products are by far the most inexpensive treat one can purchase for a child, they are passed out lovingly to children with the idea that they are a special treat. In all the discussions about sweets, none of the participants drew a parallel

between the amount of sweets consumed every day as compared to a *lafet*. This is simply not a topic that many people have considered before, and typically people responded with surprise to my inquiries about the number of sweets consumed daily versus at a *lafet*. Several caregivers who completed dietary journals also reported surprise at the experience, explaining that they had no idea how many times a day their children ate *lolis* before they saw it written down. It was not something they had thought about. However, people do think about sweets as an appropriate treat for *lafet* and shower children with candy during special occasions.



Figure 7-9: Children pose with *lolis* Photo Credit: Visual-cognitive Elicitation Participant

One distinction that participants did make about the availability of sweets was that children in rural areas ate fewer sweets. Participants recognized that, particularly on the outer

islands, all imported foods are harder to access and more costly than in urban and peri-urban areas. Even rural areas of Efate benefit from the newly paved “ring road” that encircles the island, making the transport of goods by truck from Port Vila to rural villages much easier, and thus imported foods more accessible. This research did not include participants currently residing outside of Efate, and as I did not travel to the rural islands to research *lafet*, I cannot report on this. However, independent of each other, most respondents to both the survey and interview questions noted that those people who live on outer islands do not eat as much imported food and ate far fewer sweets. They also described a higher frequency of consumption of *laplap* and local foods cooked on hot stones outside of *lafet*, reportedly because people have more garden land, and the space and time to cook with hot stones.

7.3 GIFTING, TRADITION AND MANNERS AT LAFET

Studies on the importance of gifting, *kastom* and exchange in Vanuatu and Melanesian society are extensive, and have been the subject of much anthropological research (Bolton 2001; Bolton 2003; Carrier 1992; Jolly 1994; Kahn 1986; Kihleng 1996; Lindstrom 2008; Mauss 2000 [1954]; Scaglione 1999; Scaglione 2007; Sillitoe 1998; Strathern 1988; Taylor 2008; Thomas 1991; Thomas 1992; Young 1971). A full examination of how these practices vary across the Pacific Islands is beyond the scope of this research; however, an overview of how these practices operate on Efate will help contextualize changes in *kastom* practice in urban areas. Social obligations regarding *kastom* practices of gifting on Efate are critical to understanding feast attendance and feasting in relation to food insecurity in Port Vila and the peri-urban areas of Vanuatu.

7.3.1 Presenting a Gift at a *Lafet*

Because I brought a digital camera to Vanuatu, a device not many ni-Vanuatu have access to, I thought photographs from the wedding week could be a special present we could offer. I was charged with coming up with some items we could add to the gift our family would make to an upcoming wedding. Our ni-Vanuatu family explained the process to help John and me get ready to present our gift alongside the rest of our family to the bride's family. In this case, the bride was a cousin. As we had a family member who worked in town, we decided together on a time when we would all be home and could present our family gift. Together, we had amassed garden yams, plantains and coconuts, several woven pandanus mats, a couple of colorful handmade *aelan dres* with men's shirts in matching fabric, a 25 kilogram bag of rice, a 12 kilogram flat of sugar, and an envelope of cash, to which John and I added some ceramic plates and bowls, a photo album, and a promise to compile into a DVD the photos we would take throughout the week for the family after the wedding was finished.

Fortunately, some other families had presented gifts before the official start of the *lafet*. This gave me a chance to watch other families go through this process so I had an idea of what would happen. Before walking over to the *lafet*, our family met outside the cookhouse and put all of our goods together. Picking up the mats and clothing, our mother passed out the items so everyone, even the children, had something to carry. With the children in tow, we walked over to the home of the bride's family. When we arrived, the bride's brother unfolded a new mat, and another child was sent to fetch the bride's parents, siblings and uncles. One by one we placed the gift we were carrying in the center of the new mat, building a pile of goods. I noticed an elder auntie sitting to the side with a notebook of lined paper, writing down the items as they were added to the pile.

With all the gifts on the mat at the feet of the bride's family, the eldest son, my adoptive older brother, stepped forward to make a speech. I was happy to hear him speak in Bislama rather than in the Pango village language so that John and I could understand. Over the course of this research I noticed that about half of the speeches I observed were in a village language and half were in Bislama. Our brother explained that we were happy to celebrate this special occasion, and wanted to mark the marriage with our humble family gift. He indicated the gift was from our whole family, and recited the names of everyone in the family who contributed to this gift, including John and me, and each of the children. My adoptive mother wiped away tears from her eyes, as the father of the bride thanked us, saying indeed our gift was substantial. The rest of the family members stood quietly, heads slightly bowed. I watched as the father of the bride stepped forward and placed a hand on each item that was piled on the mat before him, acknowledging every single part of the gift. The mother of the bride, followed by the rest of her family that was present at this ceremony, stepped forward and completed the same process of touching each item, almost in blessing. We concluded by taking turns shaking hands and hugging each member of their family.

While the whole process took only about five minutes, it stood out to me as one of the first times I felt like I truly belonged, both to our ni-Vanuatu family and also as accepted and capable adults in the Pango community. John and I wanted to make a good impression as we prepared to present our first wedding gift along with our ni-Vanuatu family, and it was very helpful to have them to guide us, and help prevent us from making any mistakes in manners and *kastom* practice. The gift was well received, and for subsequent weddings families asked us if we could provide photo DVDs for their wedding *lafet* as part of our gift. In the days leading up to the *lafet*, and during the course of the week, I watched as each family group repeated this same

process, presenting their gifts to the family of the bride. This same practice of presenting gifts takes place for the family of the groom, who holds a parallel ceremony at the home of the groom's parents over the same period of time leading up to the wedding. After the solemn ceremony of the presentation of gifts is complete, the visiting family is welcomed into the space of the *lafet*, and offered food. It is then a jovial time of celebration.

Kastom dictates that a gift needs to be presented on behalf of the family group attending the feast to the family hosting the feast, and after this the family who presented the gift can come and eat on any of the subsequent days of the *lafet*. Social obligations surrounding the *kastom* practices of *lafet* are designed to help make feasts communal events that are not overly burdensome for the host family. All feast attendees must present a gift on behalf of their family group to the family hosting the feast (see Figure 7-10). Along with mats, cloth and cash, gifts typically include food items such as yams, taro, coconuts, bananas, fresh beef and pigs; large 25 kilogram bags of rice and 12 kilogram flats of sugar becoming more popular in the urban and peri-urban areas. After the *kastom* ceremony involving the presentation and acknowledgment of each item has been performed, a guest family can attend the feast and eat on any and all of the subsequent days. Gifts of food are particularly important as they enable the host family, supported by extended kin networks, to prepare and serve large quantities of food to attendees.

There can be exceptions to this. As a respondent explained, "This is really determined by the individual and how people were raised—whether their parents always made a point to give gifts first [before eating] or not. Or whether they thought they were entitled to food without a gift because they are family." General dissatisfaction with current cultural changes in gifting at feasts was expressed, with participants arguing that more frequently people come to eat after merely bringing a small gift, or distant relations come without a gift claiming they are entitled to eat

simply because they are family. Participant observation with family members at weddings and funerals revealed the opposite, that close relatives commit a significant amount of resources and labor to these events. Many close relatives reported putting in a lot of time, work, money and garden foods to the *lafet* as a whole as well, so there is a general expectation that close family members will contribute, particularly in labor and the production of food.

Figure 7-10: A family gift at a *lafet* with mats and *aelan dres* on the left and both local and imported foods on the right

Kastom practices surrounding gifting at *lafet* remains strong, with meticulous records and lists of individuals and the gifts they contributed written down and saved creating a record of future obligations. A respondent explained, “In five years time people are still using [these] lists to say what they need to give in other cousins’ weddings.” Several participants indicated these lists are saved and referenced for even longer periods of time. Thus, the gift presented at a wedding is meaningful beyond that initial *lafet*, and is situated in a larger context of gifting and reciprocity. Gifts need to be reciprocated in a way that reflects the efforts devoted to the previous exchange; for example, if a gift involved garden food, mats, clothing, and a pig, it would be inappropriate for the family that received the gift to simply bring a pile of bananas and coconuts

to a subsequent wedding. Gifts need to have similar value, as they are not singular but part of a chain of exchanges between families.

There can be some adjustments to this, and the value should be equivalent, not exact. It is not necessary for a family to reciprocate precisely the same items, and in fact that almost never happens. Families who have garden land or who have a wage earner, are expected to contribute accordingly, based on what resources they have access to. However, the feasts are still a drain on familial resources as the gifts are significantly costly. Participants explained that at the height of the wedding season, people struggle to meet all of their exchange obligations both in terms of financial and *kastom* goods. During an interview one mother explained, “May, June, July—that is the time when your pockets are empty!” Yet another participant discussed *kastom* obligations stating, “We make weddings according to the time to harvest yams. We know that we will have lots of weddings and we will need lots of yams.” In this way people plan very far in advance, knowing that they need to grow enough yams both to feed their families and for their obligations toward weddings and funerals. They also plan in advance to save up money to purchase cloth to make *aelan dres* and to purchase foods like rice and sugar, or mats if they are unable to weave the mats themselves. While deaths are unpredictable and cannot be planned for in the same way, families still have to plant enough to know that they will be able to meet all of their needs, and anticipate attending some funerals each year.

7.3.2 Children, *Kastom* and *Lafet*

Kastom, as a cultural practice, is not intuitive, it must be learned. As women are the primary caregivers and typically in charge of feeding children, much of the instruction regarding proper

manners at a *lafet* is left to them. When asked how women teach this to children, one participant responded:

We should teach our kids to stick with their mothers, and tell them “If there is a *lafet*, you look for your mama. If you don’t see her than you should not eat at the *lafet*, you must go home.” But [my] kids, they never go to a *lafet* where we haven’t contributed! I tell them where I will be and they come with me to the *lafet*. If they say something about a *lafet* to which I haven’t contributed to, I tell them, “No. You must stay here, you cannot go to the *lafet* with your friends, and you must come home for lunch.”

Many people take this very seriously, and often at gifting ceremonies you see very small children present, and participating in putting clothes, mats and other lightweight items on to the pile of gifts. Taking an active role at an early age is one way for people to help teach their children about *kastom*. Nearly every gifting ceremony I observed had at least one child in attendance. Many parents and several children told me that they knew that they would be punished if they attended a *lafet* without their parent’s permission. There were a couple of adults who recounted stories from their childhood of being “whipped” when their parents heard they had attended a *lafet* without permission and where the parents had not presented a gift. In some cases parents had to “make up” for the transgressions of their children by presenting a small gift in atonement for the breach of *kastom* of the child, or adding a little more to a gift they had already planned to give later in the week.

Nevertheless, numerous children transgress this cultural norm, attending feasts where their family did not present a gift, predominantly children who are food insecure. Despite an emphasis on teaching children *kastom* and manners for a *lafet*, one participant explained:

All the kids know they can have food [at a *lafet*]. If you’re an adult you should know better, and you shouldn’t go to a *lafet* where you have not contributed a gift. You should be afraid that people will know you didn’t contribute and might tell you to leave. But if you’re a child you can come. Most kids just go with their friends and eat.

Due to the very public display of presenting the gift, and the meticulous records that families keep about the items that were presented, it is quite hard to “sneak in” as an adult, mingling as though you belong. It is not the same as bringing a wrapped box and somewhat anonymously placing it on a table where no one will really inquire publicly as to what is inside. To the contrary, the process of gifting and what items were given is very much on display, which makes subverting these practices all the more difficult for adults.

Conversely, children are not held to these rigid practices. “At a *lafet*, all children are fed, no questions,” one participant emphasized. They will never be turned away and children are well aware of this. In some cases, participants explained that younger children do not always follow the *kastom* practices because they are too young to understand: “Kids, when they’re smaller, less than ten, they just walk around the village. They just think about getting food. They don’t think about gifts or family. At age ten they start to think about *kastom* and gifts, but before they just don’t understand *kastom*.” In this participant’s description, age ten was described as about the time that children generally become aware of social constructions, but this age does not indicate a reference to any specific rite of passage. I pressed this issue, asking “How old will children be when they know *kastom*, when you expect them to follow *kastom*?” Retrospectively, it is a somewhat ironic question given that I was older than several of the mothers in this study, and still learning about *kastom* myself, which further exemplifies the fluidity of the type of responses that mothers provided. As expected, participants gave a different range of ages, arguing again that parents need to teach this behavior to children starting around ages four and five, but that children will take years to fully understand, and they will make mistakes along the way. The age at which children should understand and practice *kastom* giving at a *lafet*, was much more difficult for women to explain than the age at which mothers should begin this

training with their children. Leaving the age of expected compliance with these *kastom* practices open turns out to be particularly important, for it allows for women to permit children they know to be food insecure to breach *kastom* practice.

7.4 CONCLUSIONS: GIFTING AND *KASTOM* AT *LAFET*

This chapter outlines the processes for *kastom* practices of gifting, the material and moral means by which ni-Vanuatu contribute to feasting events, and the ways that familial social status is maintained through the production of feasting events. Through ethnographic vignettes of the current practice of feasting in Port Vila, and peri-urban villages, the distinctions between feasting foods and the daily production of food become clear. Data reveal the types and quantities of foods found at *lafet* are significantly better than those available to children at home.

However, young children operate in a liminal space in which it is generally acknowledged that they do not fully understand the processes of gifting at a *lafet*. Proper manners and correct navigation of *kastom* practice are things that must be acquired. Acceptance that children learn this process over time and acknowledgement that they will make mistakes creates a space for children to breach *kastom* practice without getting publically shamed at the *lafet*. Participants emphasized that *kastom* is learned from parents and society over time and thus not something children will always understand or follow. Not having a definitive age at which all children should understand this practice allows women to make discretionary decisions about child feeding without specifically naming the child or family to the larger group of attendees. This does not mean however, that these transgressions go unnoticed by the mothers who serve food at a *lafet*. Rather it is in this liminal space that children carry private household food

insecurity into the open, presenting familial struggle to the community as they hold up an empty plate in line for food. It is in these transgressions that children use *lafet* as a coping mechanism for food insecurity. Chapter eight will build on this chapter with a focus on how children and mothers negotiate the boundaries and *kastom* practices described in this chapter in an effort to allow feasts to be used as a coping mechanism for food security.

8.0 FEASTING AS A COPING MECHANISM FOR FOOD INSECURITY

The ritual and structure surrounding *lafet* is strong, and ni-Vanuatu generally place high value on the maintenance of *kastom* practice. The process of gifting at a *lafet*, and the types quality food that is served in large quantities that guests find was outlined in chapter seven. While there is a neatly prescribed pattern for presenting gifts, attending *lafet*, eating, and helping with the work of cooking for hundreds of people for more than a week, there is also deviation from this system—particularly from children. Adults are held accountable for their behaviors in ways that children are not. Because children know they can circumvent the process of gifting and attend a *lafet* just to eat, they occupy an acceptable space of non-compliance within *kastom* practice. It is through this liminal space that children are able to use feasts as a coping mechanism for food insecurity that they face within their households.

This chapter describes the ways children navigate the space of the *lafet* without gifting when they are hungry. Just as important, however, this chapter describes the ways that adults know about and respond to children's deviance. This research reveals that mothers, particularly those who serve food at feasts, have become arbiters of *kastom* practice, helping to redefine what is acceptable behavior for hungry children. Mothers help children negotiate the space of the *lafet* in an effort to alleviate children's food insecurity. Thus in modern times and urban places, mothers are redefining *lafet*, so it is truly in the benefit of everybody.

8.1 LET'S "GO LAFET"

In the face of food insecurity, children seek out methods to cope with and manage their hunger. In urban and peri-urban Vanuatu, one of the primary methods among children for addressing food insecurity is eating at a *lafet*—a place they know will have plenty of “good” food, island food and fresh meat. Several reasons were provided for why children go *lafet*. One reason is that kids follow their friends. There is no school lunch in Vanuatu, and children either bring their own lunch, go home to eat, or some schools have an outside person who sells lunch at the school. Typically this is an entrepreneurial woman who makes large pots of rice and soup to sell to children at lunch time. Because children are free to leave the school grounds at lunch, and there is no accounting for where they go, it is easy for children to find a *lafet* to eat at for lunch when they are hungry. Some children know where a *lafet* is taking place because their families have contributed a gift, and their parents have told them to come to the *lafet* for lunch. In these cases, food insecure children will often follow their friends at lunch and “go *lafet*.”

In all of my discussions and preparations I made with family members for the first *lafet* I attended, no one ever mentioned the huge number of children that I should expect to see. As it was still early in my fieldwork, I assumed there would be a large number of children since so many families seem to have at least three children, there are always a lot of kids playing nearby while mothers cook and wash. I worked and talked alongside other women, grating yams to make *laplap*, a type of pudding baked in an earth oven, and serving up food to long lines of kids and guests.

As the week of my first *lafet* progressed it seemed that each day more and more kids were in line for food. Thursday, I looked up to see nearly 100 children eating lunch or in line, all wearing the matching shirts and shorts or skirts that make up the school uniform (see Figure 8-1

for a glimpse at part of the line for food). I commented to the mother next to me in this assembly line, “It seems like every day there are more kids than the day before! All these kids can’t be family, can they?” Ladling a spoon full of beef stew over rice, the mother smiled and sighed, “Well, they follow their friends when they’re hungry.”



Figure 8-1: Children in matching school uniforms in line for lunch at a *lafet*.

During lunch, when children come from school to eat at the *lafet*, it is easy to identify which children came from which schools because they are wearing their school uniforms. The number of children in attendance at lunch increases throughout the week as more and more children hear about the *lafet*, where it is located and the foods their friends are eating. “Kids go with their friends from school to eat at lunch. Then after school they go home and bathe and go back to the *lafet* to eat dinner,” explains one respondent. As the numbers of children grow

throughout the week, it is amazing to see what a significant proportion of the attendees, particularly those who are present during mealtime, are children. Children always walk around in groups, and are keen to keep pace with their older siblings and the bigger kids. One participant noted, “Where the elder child goes, the younger will follow.”

When interviewing people and discussing the large number of children who attend *lafet*, the topic of household food insecurity quickly arose. While there is no Bislama term for food insecurity, and people were not using that English term in their conversations, the discussions clearly included the three pillars of food insecurity as defined by the World Health Organization¹⁴: 1) availability, “sufficient quantities of food available on a consistent basis”; 2) access, “having sufficient resources to obtain appropriate foods for a nutritious diet”; and 3) use, “appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation” (World Health Organization 2012).

When women talk about the reasons some children seek out food at a *lafet*, a topic frequently discussed at length by participants is the pressure of food insecurity at home from the children’s perspective. While participants never mentioned the formal definition for the term “food insecurity,” respondents did discuss various aspects of food insecurity when conversing about why children go *lafet* seeking food. For example, a respondent expounded, “Kids go *lafet* when they know that there is not enough food at home, or when the food is not very good.” “Good” food at home meant that children could expect a balanced meal, that the meal was not the same meal they had eaten several times earlier that week or the same meal they had for breakfast, and that there was enough food at the meal for them to feel sufficiently satisfied.

¹⁴ For more detail on how food security is defined and interpreted in the broader literature see Chapter Two of this dissertation.

These discussions of the types of food insecurity children face encompassed common topics during interviews and with the visual-cognitive elicitation projects. One mother took a photo of her son eating rice with island cabbage on top (see Figure 8-2), and wrote the caption, “I took this photo because my son will accept the leftover food from anyone in the house who doesn’t eat all of their food. He eats so much we never have leftovers.” During a follow-up interview, the mother explained that she seems to never have enough food, that he always complains that he is hungry. Because food is unaffordable, and they do not have access to garden land, they purchase all their food. Often this means that they eat a lot of rice, although she tries to serve small amounts of island cabbage and occasionally canned meat on top of the rice. She discussed both having difficulty affording all of the food she needs for her family and the resulting problem of ensuring that there is always food available to feed her family.

During surveys, many respondents talked about their anxiety associated with planning for meals and food for their children, revealing their struggles with food insecurity. They discussed worry about having enough food and concerns about running out of food, particularly toward the end of the month before they knew they could access their (or their partners) next paycheck. Food insecurity was largely linked to financial struggles; in general food is extremely expensive, island food is more expensive than processed foods, and food is not always a monetary priority with school fees, rent and transportation needs met prior to the purchase of food.

Many mothers told me that they try to explain this to their children—they want their children to understand why there is not enough food. Largely this is associated with demonstrating how much a mother cares for her child. She takes strides to ensure that her children know that she loves them, and that she is not just choosing not to feed them or buy the types of foods that they want. Several mothers explained that you need to teach children to like

bread with no butter and tea with no sugar because there will be times when you cannot afford these things. In those instances, mothers do not want their children to complain about not having the sweets or staple foods to which they had grown accustomed. Women blame the rising costs of life in the urban and peri-urban areas for food, rent, school fees, transportation, water, electricity, and their family obligations to *lafet*, explaining why it is so hard for them to meet all their needs. They want their children to understand this too, so it is not surprising that children follow their friends and go *lafet*—they are acutely aware of their parents struggles to afford food, and know the type and quality of food they can expect at home in times when money is scarce.



Figure 8-2: Eating all the leftover rice and cabbage Photo Credit: Visual-cognitive Elicitation Participant

8.2 FOLLOW YOUR FRIENDS AND “GO LAFET”

Linked to current trends of children attending *lafet* by following their friends to the feast is parents' encouragement of their children to attend *lafet*. Participants reported that parents send their children to a *lafet* for multiple meals when they know there is not enough food at home. Participants all explained that kids are encouraged to go eat at a *lafet*. “‘There is a *lafet*, go and eat’, and then they [parents] remind kids they will get good food and meat there and encourage them to go,” one respondent stated. However, this can be an uncomfortable topic, as another participant explained: “This is something that happens but people don’t want to talk about it too much.” Participants mentioned that there are several reasons why people do not want to openly discuss how parents send their children to *lafet* without gifting, including a disrespect of *kastom*, but most frequently they cited a lack of food at home the embarrassment that would be caused for some community members by discussing the issue.

Caregivers and community members worry about the problem of food insecurity within their communities. While ni-Vanuatu mothers, like most mothers, obviously do not use the term food insecurity to describe their own struggle or the struggles of other community members, the depictions they put forth are clear examples of unreliable stocks of food for children in the home. They are absolutely describing the principle descriptors of food insecurity. Community members recognize this is a problem; even if they do not worry about food security for their own children, they recognize it as a growing problem within the community. This becomes an internal ethical struggle as caregivers want to help and support children, but they know that they are living within their own stringent boundaries of what they can afford for their own families. There is very little that could be considered excess in ni-Vanuatu families, but despite this people share whatever they can.

One participant explained that parents rationalize *lafet* as a good place for children to access foods precisely because it is a place of abundance. There is a thought that the hosts would never run out of food, and indeed, I never saw a family come close to running out of food. In this way, *lafet* becomes the perfect place for children to access food when experiencing food insecurity. As opposed to children heading over to the home of a friend they know has food for supper, if parents encourage children to eat at a *lafet*, the burden of feeding the children is spread amongst a larger group of people rather than placed on one specific family.

While it seems more reasonable to have children eat at a *lafet* instead of at the house of a friend, the number of children who attend feasts without contributions is significant, magnifying the problem of food insecurity within a community. Several participants also discussed the burden this places on the hosts of the *lafet* and the other community members. One mother explained:

It's their [parents who send their kids to *lafet* without gifting] mentality. They think it's okay because they know there is food at the *lafet*. They [the other parents] say, "I know they have plenty of food, too much food at the *lafet*, so it doesn't matter who comes and holds up a plate for food. You just go." But this is not good because maybe you're not really family, or you're very distantly related, or the parents haven't contributed and paid respect. So it is not okay to send your kids to go and eat at another person's house when you have not contributed and shown respect. It's about respect. You must teach kids respect.

Participants who talked about the importance of teaching respect and upholding *kastom* values also reported struggling with finances. This is not simply an issue where some people can afford to stand back and berate those who are less fortunate and cannot afford to offer a gift—in fact they are struggling to afford to meet their basic needs of feeding their families too. Rather, all participants reported struggling in some way to make ends meet and to afford to fulfill all of their obligations.

Still, many parents know that they simply cannot provide a good meal at home. After completing her dietary journal, one participant explained, “Here at the end of the month we didn’t have enough money and so we just ate dry rice.” In this case the rice was cooked in water, but there was no soup or even fresh coconut milk to put on top, a meal that truly is a hunger meal, and exemplifies when there is no other choice but *kakae blong holem bel nomo*. When faced with difficulties such as this, it seems quite reasonable that parents would want to send their hungry children to feasts. As one participant lamented, “There are plenty of parents who do this [send their kids to eat a *lafet* without contributing] because there isn’t enough food at home.” In this way there are many parents who feel they have no choice—they send their child to *lafet* or their child goes hungry, or eats a plate of ‘dry rice’ for supper.

Women are aware of and empathetic about the problems children face in accessing enough fresh and local food at home, and all respondents discussed this, but it is a sensitive topic. Sending kids to *lafet* for food was also a reported strategy used by parents to cope with financial difficulties within their family. Elaborating upon this, a respondent remarked, “Parents send their kids to eat lunch and dinner every day for the week of a *lafet* because they think it’s a good time to save money, and they don’t have to buy food by sending their kids to eat there [at a *lafet*].” For some, knowing that a *lafet* will take place provides an opportunity to devote limited financial resources to other needs such as an upcoming school fee payment, rent, or other bills. Parents know that their kids will eat well for a week without their needing to spend money on food. However, this also adds to the tensions that are already present in that it is so difficult to feed all of the children who attend the *lafet*. It is a real ethical struggle in trying to support the community as a whole, while also facing personal problems with affording all of the costs of

living in urban and peri-urban areas. As one participant bemoaned the situation, “It comes down to money.”

Participants were careful to explain that just because parents encourage their kids to go *lafet* without bringing a gift does not necessarily mean people who send their kids to *lafet* without a gift are bad parents. There is widespread sympathy for children who experience food insecurity, and for parents who do not have enough money to provide food for their children. While some respondents will complain that too many men waste money on kava and beer instead of feeding their families first, there remains broad recognition that food insecurity would persist due to the strained financial situation of many families, and limited access to subsistence agriculture in town. Parents in Port Vila and the peri-urban areas around the city face numerous challenges in food security; as one interviewee noted, “There is food everywhere in a village setting [indicating rural villages], but it is different in town.”

8.3 WOMEN AS ARBITERS OF *KASTOM*

8.3.1 Learning about the Transgressions of Children

It took months of participant observation for me to learn how to appropriately approach this topic in interviews, so that I was able to uncover the more personal, private truths about the public act of children’s feasting. One participant began our discussion by joking, “You look at those kids who are self invited,” she laughed and gestured with her finger to an empty corner, “Who are you again?” However, after this entrée into the discussion, she became more serious, and continued:

We just had a *lafet* for a man who died here. At lunch, I was serving food, and serving food, and there were just more and more kids holding up plates for food! I just kept serving, and one young woman nudged me and said, “Hey, these kids are not part of this *lafet*. Their mother didn’t contribute to this!” I said [to her], “It doesn’t matter if they belong here. We are close to the school and so we will have more kids. We need to serve these kids food.”

This exchange illustrates that it is not just children who need to learn about *kastom* patterns of gifting, but young women who need to learn about acceptable forms of “deviance” among children, and the importance of *lafet* in supporting children who are food insecure. Discourse on gifting and those who are able or unable to contribute to these feasts shapes cultural identities, requiring etiquette for parents, children and other members of the community who essentially support those children in need.

This participant’s story also illustrates that while all children are fed without question at a *lafet*, women serving food regularly gossip about which parents have sent their child to eat without presenting a gift. This creates public discourse that reflects poorly on the parents—children themselves are not subjected to social pressure to conform to these *kastoms*. Some parents who adhere strictly to *kastom* practices of gifting instruct their own children not to attend a *lafet* before a family gift is presented. Most likely, these are families who are *not* experiencing food insecurity. Reflecting back on childhood, one respondent explained that his mother heard from other mothers that he had eaten lunch at a *lafet* the day before the family presented their gift and when he came home his mother scolded him. This type of discipline is conducted in private, with parents taking the opportunity to emphasize the importance of adhering to *kastom* practices, teaching children the values associated with gifting at a *lafet* and subjecting children to familial pressure rather than larger social pressure or embarrassment. Ultimately, his parents slightly increased their planned food contribution to help atone for his youthful indiscretion.

Still, women who serve food at a *lafet* are also aware that an increasing number of children are specifically told to eat at a *lafet* by parents who cannot feed them adequately. Many of these children are not closely monitored at home, wandering off with other kids at meal times in search of food. One participant reflected, “There may be grumbling on the side by mamas who know that a child is just there for the food [and whose parents won’t contribute] but they *never* take it out on the kids.” It is expected that children learn these lessons from their own families, and women at a *lafet* take care not to embarrass or ostracize other children. Childhood becomes a guise that allows children to eat at feasts without following *kastom* practice, even in cases when their parents purposefully send them to the feast because there is not enough food at home.

After these nuanced conversations about transgressions in *kastom*, conversation turned to reflection on the underlying cause of these transgressions. Women express profound concern at what they identify as the growing problem of chronic hunger among children, or what is labeled food insecurity. Strong community ethics that permit children to avoid *kastom* merge with Western values that promote individualism, creating syncretic understandings of the role of parents in their responsibility to care for and raise their children. Referencing her peri-urban community, one participant explains:

Here, if you look at a child, you know if they have food at home. You know when you look at the face of a child if he is hungry. If he can talk, he will tell you. When the kids come you know, you can tell by looking at the, by their face, or even because the child tells you that he is hungry. Then we give him food, but I think about his father, and why this child is hungry.

This kind of visual description is largely based on children’s public appearances at feasts, facts that other women in the community remember and share through gossip, not because the children appear visually emaciated.

But the faces of these children signal more than hunger, they also indicate parental failures from the perspective of the larger community. Informants described challenges today that could lead to food insecurity, including whether the parents are unable to find work, do not have access to garden land, have too many children, or have not been able to manage finances with fathers wasting food money on kava drinking. Nevertheless, providing food, water, shelter and school fees are considered basic responsibilities of parents. When the community intervenes by feeding children at feasts, it is an indication of parental floundering. Thus, there is acknowledgement that food insecurity is a personal family issue resulting from parental failures, which has become pervasive enough to cross boundaries into wider public discourse.

Simultaneously, and equally as important, is the critical role of the wider community in understanding childhood malnutrition and food security, linking these problems in critically important ways. Another participant affirms, “Here we know which households are struggling, we know who doesn’t have enough food in their home. You know which kids don’t get enough food.” Identifying private food insecurity and hunger in public discourse highlights the role the wider community plays in what is often identified by health professionals only as household food insecurity. Engle (2002) describes the importance of these linkages, writing, “A common belief is that lack of food is the reason for malnutrition; however, it is only one contributing factor. Equally important are caring practices, such as infant and young child feeding, and the family resources needed to provide that care” (S109). When children make private food insecurity public, they demonstrate the critical role that community feasts play in helping prevent what could otherwise lead to an increase in the already high number of cases of childhood malnutrition.

8.3.2 Women Helping Children Negotiate *Lafet* in Modern Times and Urban Places

With a strong underlying notion of shared responsibility within the community (Strathern 1988), participants needed to demonstrate the importance of their efforts to address this private problem of household food insecurity. It is critical that women are acknowledged for their roles in caring for the children of their community, and that they are not seen as insensitive to those struggling with food insecurity. In this way, feeding children outside of *kastom* rules and practices is considered a positive role of feasts. While there is some complaining about the increase in people who attend *lafet* without gifts, there is also an understanding that many children do not have a lot of good food at home. One participant reflected, “Mamas who serve food [at a *lafet*] know that kids are just there to eat, but they ask every kid if they have had a plate yet. That’s the good thing about mamas in Vanuatu—they always give food to kids.” The reference to “mamas” indicates that the vast majority of women who prepare and serve food at a *lafet* are mothers themselves. Other participants echoed this sentiment that mothers are sympathetic to issues of food insecurity, describing communal ethics and efforts to care for one another so that they were apparent to me as a researcher, as well as to young people in the community learning *kastom* values.

The role that women play in feeding children at home and at *lafet* is an important part of reifying their identity within the community as knowledgeable about *kastom*, and as authorities on child feeding. Within this role, women exercise power and agency within society, and are not merely passive members of society. Counihan (2012) asserts that crossing this private/ public boundary can be a way for women to access power, explaining “...researchers are increasingly looking at ways that women gain power by taking food public, i.e. by using food to cross the boundaries between the home and the outside world, and between reproduction and production.

By doing so, they become public actors and create social value for their work” (2012:496). Often this research examines how women gain economic autonomy by finding ways to earn income from domestic work.

In addition to women, researchers have demonstrated that children can also be agents who take food issues public (Cooper 2013). When children cross the boundaries between public and private food consumption and sharing they satisfy hunger at that moment. However, this comes at the expense of the social standing of their parents. What was a private family matter is now a public matter about which the wider community is aware. While there are often no direct repercussions to the parents in terms of explicit public shaming or loss of power in community organizations or groups, there are indirect repercussions in that community members know about parental struggles. If the community members witness a parent spending most of the family money at a local *nakamal* (kava bar), and subsequently sending their children to eat at a *lafet*, elders in the community may talk to the parent. However, largely families experience food insecurity despite their best efforts—between school fees, transportation, water and electric bills there often just is not enough money to purchase food. This indicates why this is a particular problem in the urban and peri-urban areas where many people do not own gardening land. Therefore, when children cross these boundaries, taking private struggles out into public discourse, they are drawing attention to parental insufficiency and diminishing parents’ autonomy, status and power within the community. Children are agents that make these families recipients of charity, which can be problematic among communities that take great pride in reciprocity.

8.3.3 Community Responses to Children's Food Insecurity

“I have an announcement to make—for all the children!” calls a village elder and member of the chief’s council who is serving as the emcee for this *lafet*. He smiles, as he holds up the microphone in his long thin hands to continue talk. Some of the older children slow down, look up from their plates, or glance over while keeping an eye on the buffet line where they wait for lunch. The smaller children, four and five-year-olds keep running in play, and a grandmother reaches a hand down to grab a couple as they run by, holding them still for a minute and pointing to the elder with the microphone who is preparing to speak again. The elder man begins to speak, his voice authoritative yet kind in a tone meant for children, but not condescending, “I have noticed this week, that you children in particular have been sending a lot of food to the pigs.” He gestures over to the pig pen that was constructed specially for this wedding; six pigs of varying sizes are rooting around and busily eating in the slop of vegetable and yam peels, grated coconut that had already had the milk squeezed out of it, and discarded rice and lunch food. He continues, “We want you to eat plenty. But we don’t want to waste lots of food—our pigs have enough!” He smiles in a half laugh at his joke about the pigs, then instructs, “So our mamas are going to serve you a little bit less from now on. But don’t worry! There is plenty of food!” Emphasizing the next part, he explains, “If you eat all your food, and your plate is empty, but you want more, you just come back to the line. The mamas are happy to fill up your plate again! We want everyone to eat plenty, and we have plenty of food for everyone. We just want to cut down on how much has been going to the pigs this week because you had too much and didn’t finish it all.” Smiling again, “Thank you very much,” he announces, and then switches off the microphone and lays it down on a wooden bench. The kids pick right back up in their games and

running, and the noise volume of the event is elevated as the music of a string band from a radio is turned on again for guests' enjoyment.

It is more than mothers who are aware of the increasing numbers of children who attend *lafet* because they are food insecure, fathers and community elders see this shift as well. While it is the mothers who are directly feeding children, men also play important roles in the management of the resources contributed to the *lafet* and they too are aware of the problems associated with needing to feed so many children. It is a difficult situation to accommodate. There is a need to provide sufficient food for the attendees of the *lafet* to show that the host family has properly planned and can afford to hold a *kastom lafet*. Simultaneously there is a need to manage the increase in children who attend the *lafet* without gifting.

The example of the emcee stating that they would serve smaller portions to children is particularly interesting. There had been a problem of children failing to finish all of the food on their plates. Typically that leftover food is rice—the soup and meat and *laplap* are gone. But the pigs were rooting around happily in a lot of leftovers, and I too observed a lot of children scraping plates off to hungry dogs that were always lurking around feasts, following around the children in particular. But the hosts of the feast also need to be careful not to appear stingy, even to children. They need to clearly provide enough food for everyone in attendance regardless of whether or not everyone contributed to the *lafet*. The emcee is attempting to mitigate this problem by explaining the rationale for serving up smaller portions, while also encouraging children to come back for seconds if they were still hungry. This did appear to work, and on subsequent days there was much less leftover food going to the pigs.

Beyond the practice of *lafet*, communities work together to try and support and care for children. They realize that children experience hunger on a regular basis, not just at times of

lafet. Many mothers reported wanting to help children whenever possible. However, within individual households this is not always possible. In describing a common situation with a neighbor child who always seems to be over playing with the other children in the late afternoon and early evening one mother explained:

If you have enough food, you share your food. But you comprehend the situation. Sometimes you see the child is just hanging around, and you know that he is hungry and wants to eat. So you just sit him down with your kids [to eat supper]. But if you don't have enough, then you can say, "I think it's good for you to go back home now." It depends on your circumstances.

Parents do their best to accommodate and support other children. I often saw families feeding children I knew did not belong to them. It became evident over time which children were always at other people's homes when it was time for a meal. It is not hard to recognize food insecurity among children who seem to appear every day around suppertime, playing with their friends, and then scurrying into line with other children as soon as the food is ready to be plated. Parents reported feeling that taking care of children is part of sharing and the ethic of caring for each other.

Additionally, parents reported that this problem was likely larger than most people were willing to admit. Filled with sadness, mothers would often find themselves recalling other moments when they encountered hungry children. During an interview with two mothers in a peri-urban village, they expounded:

It's not just when there is a death or a wedding, it happens when kids go to school too. We see this at the school and we learn about it from our kids too. Sometimes we go down to the school and there are kids who just went to school without even having breakfast. They just go to school in the morning. We go down to the school at lunch and bring our kids lunch every day. But I know there are kids who don't have any lunch, and sometimes my kids tell me about that too. I tell them [my kids], "You eat, and when you're full you share the rest of your lunch. Give it to kids who are hungry when you're done." Sometimes they share their lunch with one other kid and then more kids come wanting to share too, but there isn't enough food—it's gone! This is when we realized that it's not just at *lafet* or

weddings and funerals. It happens at school too. It happens because there is no food at home.

Here mothers reveal that they know there is a larger problem with hunger—a problem children within their communities face every day, not just around times of *lafet*. Because it is much easier to work as a community to feed food insecure children, rather than individual families attempting to take on the work of feeding additional children, and because of the types and quantities of foods that are found at *lafet*, feasts have become the primary place for children to access foods when there are insufficient quantities or qualities at home. And because urban and peri-urban areas have such an increase in the number of *lafet* due to significant rises in the population, they have become an easy place for children to find and use as a coping mechanism for food insecurity.

8.4 CONCLUSION: REDEFINING FEASTS “FOR THE BENEFIT OF EVERYBODY”

During participant observation and ethnographic interviews, community members, particularly women who serve food at feasts, expressed concern with the rising number of hungry children attending feasts. Women raised concerns about the effects of this increase in the number of children in attendance, and how this corresponds to an increase in the number of mouths to feed, an increase in the amount of food that needs to be purchased or gifted to the host family, and increased fluidity in the ways children enact *kastom* at feasts—all of which indicate that the problem of food insecurity among children is becoming too large to ignore or hide. One of the important lessons from these descriptions is the message of food insecurity. While parents never

use this language—there is no Bislama term for food insecurity—they talk about the sentiment often. The reality that a significant number of children are faced with insufficient quantities of food and a lack of nutritional diversity is a growing problem in urban and peri-urban areas where there is not sufficient access to garden land to supplement all of a family’s dietary needs coupled with insufficient funds to afford all of the requirements of urban living.

While there are multiple reasons why children face food insecurity, there are also important behaviors they employ in response to the crisis. This does not go without notice in the larger community, and many people, particularly women who regularly complete the feeding work, help children negotiate the *kastom* rules of gifting at a *lafet* so that children can manage food insecurity. Therefore it is critical to remember that:

Economic and food insecurity is firmly grounded in structured conditions and relations, yet human agency is also at work—admittedly mostly within the realm of the ‘permissible’—to overcome constraining conditions, and change them if possible. Put differently, talk of ‘passive victims’ must be avoided, but not at the expense of encouraging blindness to the structural parameters that constrain life chances and options. (Pottier 1999:196)

The active role of women helping children to navigate the space of *lafet* in a way that is socially acceptable is a deliberate endeavor. Indeed examples of how older women teach younger women to be accepting of this deviance further illustrates that their actions are deliberate.

Women value their role in teaching younger generations about *kastom* practices, but their role in permitting transgressions of these practices are also crucial. Ultimately women engage in a delicate system of balancing community values with a moral obligation to care for young children. Feeding uninvited children at a *lafet* is then a method for women to exercise their agency in addressing the problem of food insecurity among children. Observing a similar community ethic in Peru, Stone (2011) writes, “Andean mothering begins with understanding we are all interrelated—we are one big family; we all care for each other,” and feeding work is a

critical part of demonstrating this nurturance” (187). Similarly, ni-Vanuatu women become the arbiters of *kastom* practice—teaching and enforcing proper behavior while permitting transgressions they see necessary to maintaining a strong ethic of social well being of children.

Larger questions of the long-term effects of boundary negotiation remain. Indeed future research on the precise ways that this alters the systems of gifting and the accounting for gifts at *lafet* is needed, as there are likely new and important changes to the system of accounting as well. Sustainability of the system of *kastom* feasting is called into question in urban areas where more and more children feast without contributing to the expense of meeting the *kastom* obligations. Future research is necessary to determine how exactly this will change feasting patterns over the long term in the urban and peri-urban areas that experience the most transgressions in *kastom* practice.

Ultimately, feasting has taken on new meaning as children use feasts as a coping mechanism for food insecurity. A family’s ability to feed a large number of people remains important, and this is taken “to mean that the family is strong,” one participant clarified. But in facing food insecure children, community members feel an immense responsibility and obligation to care for each other, particularly children. How children seek out feasts when experiencing household food insecurity, and the response of mothers and community members in welcoming these children with heavy plates of hot food have changed the meaning and significance of *lafet* in urban and peri-urban Vanuatu. In fact, feeding children outside of *kastom* rules and practices is now considered a positive role of feasts. As one participant aptly noted, now “weddings are for the benefit of everybody—to feed the entire community for a week.”

9.0 CONCLUSION: LESSONS FROM VANUATU

Research in other cultural contexts has demonstrated that for the food insecure, "...the search for food takes precedence over previously held [personal] values" (Hamelin, et al. 1999:527S). My research in Vanuatu indicates that the broader community has adjusted *kastom* practice to account for growing food insecurity, especially to help the more vulnerable members of the community—children—cope. In partial recognition of the problem of increased food insecurity, adults exempt children from adhering to social norms, feeding all children who attend *lafet*, with both children and parents acutely aware of and relying on this new pattern.

Women at a *lafet* take care not to publically embarrass or ostracize other children when they evade *kastom* practice, by seeking food at feasts. Blame remains with parents, but since they are not present, they avoid direct public scrutiny. While the gossip may return to parents, avoiding direct confrontation allows children access to food in a complex negotiation between the *kastom* practice and the reality that many children require additional sources of nourishment from outside of their home. Therefore this research has significant implications for the changing role of *kastom* feasts in modern times and urban places in Vanuatu both theoretically and practically. First, this research contributes theoretically to medical anthropology by linking the two previously disparate concepts of feasting and food security. Second, this ethnographic account of how children use feasts to manage their hunger yields practical recommendations for improving the work of maternal and child health nutrition programs. Arguments for merging

analyses of feasting and food security in future research both theoretically and in applied anthropology and public policy are presented in this chapter.

9.1 RETHINKING FOOD INSECURITY AND FEASTING: NEW DIRECTIONS

Anthropologists and public health professionals have studied occasions of feasting and food insecurity for decades. However, rarely are these aspects of the study of food and culture examined for the ways they overlap and intersect. “Traditional” foodways in Vanuatu have changed, in part due to rapid urbanization, increased unemployment, lack of money, high cost of living, loss of subsistence farming land, and cheap global foodstuffs flooding urban markets. Many participants explained that in the past, villages were small so it was easier to feed everyone in the village during a *lafet*. Furthermore, with a smaller population *lafet* occurred less frequently, more people could rely on their gardens, and it was more common that everyone in the village would be able to participate in gifting and exchange. In a village setting even today, participants argue that access to garden land makes it much easier to host a feast in small villages on the outer islands because people have the land and are able to grow all the food required. Additionally they do not face the burden of feeding hungry children whose parents do not contribute to the *lafet*—in remote outer islands there is not a problem with large numbers of children who would otherwise have no relationship to the family hosting the *lafet*. In these small communities of a few hundred people, no one is a stranger, and everyone is invited to and supports the production of a *lafet*. There also are far fewer feasting events in these settings—a smaller population means fewer marriages, deaths and other large celebrations. Instances of food

insecurity are different as well, occurring more frequently due to natural disasters such as cyclones that destroy gardens, rather than from the problems associated with urbanization.

Today, children's foodways in Vanuatu are being redefined with increased consumption of inexpensive imported sweets and the growing price and difficulty in accessing local foods. As this is coupled with the ethic of *kakae blong holem bel nomo* for daily eating practice, many children are not eating quality food regularly in any real quantity at home. Community fundraisers and public holidays can be an inexpensive and easy means for parents to serve their children island foods when they cannot grow their own, nor afford the more expensive island food at markets. More significantly, weddings, funerals and celebrations where food is offered free of charge have become important opportunities for children to access food when experiencing household food insecurity. While there is a strong *kastom* practice of gifting at a *lafet* that in part helps families to mitigate the costs of *lafet*, research results indicate that both children and parents utilize times of feasting when grappling with household food insecurity. Some children are encouraged by their parents and friends to eat at a *lafet* without gifting. Parents use *lafet* as an opportunity to save money by not purchasing food for children, or simply feel secure knowing their children will eat well for a week. There is comfort in sending children to a *lafet* where they will eat have the opportunity to supplement their diets with large helpings of *laplap*, meat and fresh foods when parents and children both know there is not enough food at home, or when the food is of poor quality.

Frequently, research on food insecurity and research on feasting are conducted in isolation of each other, with researchers considering these as unrelated subjects. However, this project reveals the benefits of studying these topics in conjunction for a more comprehensive understanding of how children in particular use feasts when confronting household food

insecurity. The ethnographic examples presented here illustrate how feasting is a coping mechanism for food insecurity among children in urban and peri-urban areas of Port Vila, Vanuatu. Attending a *lafet* becomes a method for kids and parents alike to address the problem of food insecurity in children. In partial recognition of the problem of increased food insecurity, adults, particularly women, exempt children from adhering to social norms by feeding all children who attend *lafet*. Both children and parents are acutely aware of this pattern. Therefore, food insecurity feeds feasting by influencing *kastom* patterns of feasting attendance, bolstering the number of children who attend feasts, and changing children's foodways.

In analyzing the link between feasting and food security, it is important to note that it is not a causal link. It is incorrect to state that food insecurity causes feasting. Rather, experiences of household food insecurity foster an environment in which children seek out foods to supplement their diets; this research indicates that feasting is one important coping mechanism for food insecurity. Likely there are other additional coping mechanisms for children to address their food insecurity, and more research needs to be completed in order to produce a more comprehensive understanding of all of the methods children employ to manage hunger. In urban and peri-urban areas of Vanuatu, feasting happens to be an effective coping mechanism for children's food insecurity because of the increases in the number of feasts in these regions with rapidly growing populations. Particularly in the "wedding season" of April through September, the string of feasts seems endless; week after week there are more celebrations. *Lafet* are easy to find, and it is entirely possible for children to transition from one *lafet* to another for months at a time without a week where there was not a feast taking place where they can eat.

Nevertheless, many participants are also discussing how difficult it is for people to afford to get married today. Knowing that there will be a large number of guests, and that many

children will attend the *lafet* without a family contribution, has increased the costs that families must plan for when thinking about getting married. In this research a majority of women reported having between one and five children with their partner before marriage, if they were even married. About half of the women in the study had long-term partners and children, and would answer my questions about whether or not they were married with, “Not yet—it’s so expensive!” In every case where the participant was an unwed woman living with her partner and children, the reason for the delay was the cost of the wedding. Even women in this study who were married would lovingly present photos of their infants and young children at their marriage celebrations, naming the children they had before they were married and those they delivered after the wedding. Interestingly there seems to be no shame about these children born out of wedlock—a surprise given the extremely strong conservative Christian values that dominate the country. More research needs to be completed in order to understand the changes in the timing of marriages and new marriage and long-term relationship patterns influenced by the increasing costs of the *lafet*. Delays in the timing of marriage create syncretic views of conservative Christianity to account for the children born out of wedlock, and additional research on these new perspectives would also greatly add to our understanding of familial and religious patterns as they relate to feasting practice in Vanuatu.

The situation described herein might be different than what families in rural areas of Vanuatu experience due to the increased population, and the higher numbers of weddings and funerals in these more densely populated areas. In larger communities such as Mele, the largest village in Vanuatu, participants emphasized that there are weddings almost every week at this time of year—indeed, I witnessed occasions where there were two or three wedding *lafet* happening in Mele the very same week. Therefore, the practice of children using *lafet* as a

method for increasing access to food might be disproportionately higher in cities than in rural areas simply due to their frequency. In addition, the rates of food insecurity and malnutrition in children are higher in Port Vila than in other areas of the country, which could impact children's need to react to experiences of household food insecurity. Because this research did not take place on outer islands beyond Efate, future research is required to determine if this pattern also occurs in rural areas in Vanuatu. Additional research is also required to determine if this pattern occurs in the urban centers of other developing countries struggling with malnutrition and food insecurity.

Data on which this paper is based elucidate a link between food insecurity and feasting, which calls for a reexamination of these two seemingly disparate phenomena. Disciplines including anthropology, biomedicine and public health are all involved in the study of food insecurity and feasting, and together stand to contribute to the development of a more comprehensive social theory, which can lead to more appropriate and effective nutrition interventions. This research demonstrates that linking the research foci on food insecurity and feasting in future research in the Pacific and other geographic areas can change the role of feasting in the study of malnutrition and food insecurity. Therefore, it is beneficial to consider feasting and food insecurity in conjunction with each other rather than as two discrete parts of food studies in anthropology.

9.2 RECOMMENDATIONS FOR APPLIED RESEARCH AND INTERVENTIONS

Anthropological approaches to research have much to offer the public health sector, and can help positively influence global health policy (Pfeiffer and Nichter 2008). It is clear that global health

initiatives are gaining in complexity, and “Practicing global health will increasingly demand some political sophistication, particularly in terms of arguing the health implications of trade policies, the role of health in human security, and the importance of health as a human right” (Pfeiffer and Nichter 2008). Because critical medical anthropology considers the historical implications of the region, examines the political economy of the situation, and analyzes the discourses involved in health issues, it is well suited to help inform further research in public health and other disciplines that seek to inform public health policy in the developing world. McGarvey (2009) further explains this:

Our intellectual mission as anthropologists is to attempt to observe and measure human biocultural phenomena as they are in all their fundamental heterogeneities and employ complex webs of many causal factors operating at different levels in our interpretations. The view of life we derive may be bleak considering history, ecology, adaptations, politics, poverty, and seemingly ineradicable health inequalities. But if we adopt an explicit interdisciplinary mission with public health and other scholarly areas such as nutrition, which are dedicated to improving life and health and reducing differences, then we can contend with the challenge to derive anthropologically informed questions, concepts, and measures that work with these more applied fields. (McGarvey 2009:235)

Despite the negative frameworks of structural violence and the hard realities many people face when suffering from treatable diseases, there is a positive role for applied medical anthropology (Farmer 2004; Farmer 2005; Turshen 1984). As Paul Farmer explained in a National Public Radio interview, “There are real insights that these implementers [physicians and researchers] have that should be shared in policy circles. So I think it’s unacceptable to say, ‘well we just love taking care of patients and working on specific areas and we can’t be bothered to think about policy. Because if we do that the policy won’t be informed by the insights that one gets from implementation” (National Public Radio 2011). Applied health research is poised to contribute to global health interventions and advance health policy in a joint effort with other disciplines to alleviate health disparities and diseases.

Thus, situating research on food security in larger cultural contexts is important to the development of more robust interventions. In fact, for more than a decade, researchers have been calling for this, to little avail. For example, (Pottier 1999) raises the question:

Will social scientists investigating aspects of food (in)security ever reach the point where they manage to combine a full analysis of the structured impediments to food security (various types of inequality in production, distribution and consumption) with an equally full analysis of the differential experiences of that insecurity and of the myriad ways in which food-insecure people attempt to overcome constraints? (190).

In this vein, Pottier raises the question about the fragmented study of human health and nutrition. The concepts of nutritionism and syndemics are particularly important frameworks for this dissertation, as they highlight the ways that studying components of feasting practice, components of food security, or components of nutrition education leave us with partial findings. These isolated approaches lead to inadequate understandings of the complexity of the lived reality of the people who are struggling with food security. Anthropology in particular is poised to contribute meaningful discussions of cultural patterns, and is critical to revealing how customary practices, like those surrounding *lafet*, significantly influence the changing patterns of children's foodways. Consideration of cultural patterns is critical to comprehending all of the ways that policy and programs developed out of isolationist approaches to the study of malnutrition fail to meet their goals, and could be significantly enhanced by a more holistic approach. This research responds directly to the call made by Pottier (1999), by simultaneously investigating food security and the primary coping mechanism children and women use to mitigate this problem.

In addition, it is important to frame this research within the context of developing practical policy recommendations. Recognizing that public policy recommendations can be a critical contribution of research could help anthropologists design more effective research

projects from the outset, linking agricultural and development programs with culturally acceptable and nutritionally supportive interventions that reach those most in need (DeWalt 1991). As a work of applied anthropology, this research suggests conclusions and recommendations that can help inform policy decisions: namely using the lens of syndemics to understand food security and child feeding practice holistically, mitigating the role of nutritionism in future nutrition education programs, and working with larger community networks to support women's existing efforts to combat food insecurity.

9.2.1 Nutritionism and the Context of Nutrition Advice

Globally, there is now a focus on improving food quality, not just food quantity. This is a welcome shift, as ensuring quality and appropriate foods is important to achieving food security as defined by the World Health Organization. However, parallel to this has been a reductionist view of foods as merely a vehicle for the body to receive its required nutrients. The food becomes devoid of cultural and social value and instead is considered only in how well it supplies the consumer with the minerals and vitamins required for survival. Nutritionism has serious effects on the power relations of public health practitioners, NGOs, government entities, and families. Focusing on the biomedical and scientific aspects of food security creates a lens through which we see malnutrition and health as distinct from the cultural and gendered patterns of food production and consumption. This approach of nutritionism strips foods of much of their cultural value and meaning, emphasizing the nutrient components rather than the production and communal consumption of food. As a type of nutrition education, nutritionism has the potential to cause misconceptions of what health professionals are promoting as “good” food. Without cultural context this essentialism can cause unintended consequences for food patterns and the

cultural values associated with foodstuffs. The reality is that food is much more than the sum of its nutrients.

Many countries, including the US, have regulations about foodstuffs like iodized salt and grains fortified with other vitamins and minerals, which are designed to help eliminate micronutrient deficiencies, particularly among children. Fortification and biofortification are both methods of increasing the nutrient loads of foods—fortification occurs during the processing stage, and biofortification occurs within the actual plant, with Vitamin A enriched Golden Rice serving as a prime example of biofortification. Currently government officials in Vanuatu are poised to make decisions about food fortification as a method of boosting childhood health. The Vanuatu Ministry of Health is considering only permitting the importation of iodized salt, and enriched flour and grain products, banning the non-fortified counterparts. On the surface this appears to be a productive step toward improving the food system in Vanuatu. However, drawing on the conclusions of this research, it is clear that children's foodways are much more complex than they appear, and these interventions may have unintended consequences.

This research shows that generally foods are classified as *aelan kakae* (local or traditional foods) or *kakae blong stor* (imported processed foods). Currently, most caregivers consider local foods to be healthier, more culturally rich, and better foods for children, pregnant women and adults. While processed foods are tasty, they are not considered to be particularly healthy. Adding fortified cookies and other types of processed foods marketed toward children to dietary food programs is likely to cause great confusion about what it means to make choices about healthy eating. If people hear from health workers that some cookies are “good” and healthy foods for children, it will contradict and undermine the current health education programs that have been promoting local foods over processed foods. Likely people who cannot afford the

fortified versions of a food will purchase non-fortified versions without a comprehensive understanding of the differences. The influence of nutritionism in confounding values of “good” and “bad” food choices will deepen existing misunderstandings of the current nutrition education programs.

Already there is confusion about why different foods are needed to achieve a balanced diet. Much effort has been expended on the *tri kaen kakae* nutrition education program and encouraging the consumption of a diversity of foods to achieve health. Modification and expansions of the nutrition education programs alone will not eliminate the misconceptions associated with *tri kaen kakae*, nor will this alone be enough to change behavior. The next step to bolstering *tri kaen kakae* is expanding the educational programming to offer a rationale for why this variety in food is required, and ensuring that mothers are able to enact these recommendations. Both aspects need to be addressed concurrently for any meaningful change to occur.

While much of this will need to center on a discussion of the reality that different foods offer different nutritional benefit, this must be balanced with a discussion of consuming meals, and the reality that whole foods comprise meals. In the end it is much more productive to teach people to build on their knowledge of different types of food and bolster that with an understanding of the benefits of eating a varied diet, than taking the approach of nutritionism. If fortified cookies are promoted because of their nutritional value in supplying macronutrients, this will undermine the value of *kastom* foods and the promotion of community feasting, which now serves to help support the food security and health of children. Currently, cultural patterns of children attending feasts to cope with food insecurity are the most effective means used in addressing food insecurity. Without careful consideration of how these cultural practices are

intertwined with discourses and coping mechanisms for food insecurity, the paradigm of nutritionism has the potential to undermine the benefit of feasts to children's food security.

While there are problems with people accessing local foods due in part to lack of financial security and access to gardening land, mixing messages and encouraging caregivers to serve packaged cookies instead of local foods is likely to cause further problems. Just as providing nutrition education to mothers alone is insufficient given that children are seeking food from other sources, importing fortified foods does not necessarily mean that most children will access these new foodstuffs. The context in which these new fortified foods will arrive on the shelf, is a situation in which caregivers emphasize *kakae blong holem bel nomo* on a daily basis, while thinking local foods are the healthiest choices that should be consumed whenever possible. Looking to stop the pains of hunger by consuming any food is what leads people to poor quality imported foods in the first place, particularly for daily meals. Prioritizing local foods as rich in *kastom* value and the healthiest option leads local foods to be held in highest esteem and critical for feasts. Nutrition education programs need to look at the intersection of feasting and food security and consider how their programming could be designed to support the work of communities rather than ignore this important, positive influence on children's diets. The ethnographic accounts presented in the previous chapters illustrate the agency of mothers and caregivers as important actors in alleviating food insecurity for children, which should be incorporated and valued in nutrition interventions.

There is room in the nexus of these beliefs to promote fortified foods to supplement the diet, but this would need to be done carefully so as to not undermine the nutritional value and cultural significance of local foods. Leaving the educational component up to food companies to convey their messages via their packaging and advertising is likely to cause more problems. The

government should take control of the regulation of any new imported products to ensure that people are able to access fortified foods but not at a much greater expense in either cost per unit of food, or in the social cost of diminishing the cultural value of local foods. Permitting only the sale of iodized salt is one way to deliver fortified staple foods at little to no cost or taste change, and this product does not displace another local food. Salt is used in the preparation of both local and imported foods. However, the nutrition education programming that iodized salt is not “better for you” because it is fortified, has to be balanced against the increased rates of hypertension and metabolic syndrome found in Vanuatu. Salt still needs to be used sparingly. Other fortified staple foods like rice could be promoted as the best option when purchasing imported food, making the message clear that local foods should remain the first choice. Controlling the marketing to ensure that there is not confusion about what constitutes “good” food is important to alleviating the potential for mixed messages.

Nutrition educators do teach mothers about fat, salt and sugar intake in the context of non-communicable diseases and obesity, which is a common health concern for middle age and older women living in Port Vila and the peri-urban environs. Typically this information is provided as separate from the *tri kaen kakae* program—the sugary sodas, salty and fatty French fries shown on this separate poster are not good for you. This “bad” food, or *rabis kakae*, should be avoided. But discussions of portion size or frequency of consumption are absent. These sweet, salty and fatty foods taste good, and in many cases are very inexpensive, and will be consumed, just as they are in the rest of the world. Offering advice on how to incorporate some of these foods into the diet, and specific, yet realistic examples of what this might look like in practice could help mothers to assign imported foods to these categories in more healthful ways, and consume them as part of a balanced diet rather than replacing healthier food. Alternatively,

creating a program that had four food groups with a category for fatty greasy foods is another method for helping mothers to contextualize nutrition education in urban and peri-urban dietary patterns.

However productive these changes are to the system of nutrition education, these improvements alone are insufficient. They must also consider how mothers will enact these changes. In many cases, food insecurity is a result of larger problems of structural violence that must consider the material and social obstacles. Farmer (2004) outlines a metaphor of this materiality that is worth quoting at length. He writes:

I find it helpful to think of the “materiality of the social,” a term that underlines my conviction that social life in general and structural violence in particular will not be understood without a deeply materialist approach to whatever surfaces in the participant-observer’s field of vision—the ethnographically visible. By “materialist” I do not mean “economic” as if economic structures were not socially constructed. I do not mean “biological” as if biology were likewise somehow immune from social construction. I am not trying to establish a bedrock category of reality or engage worn-out or false debates—for example, trying to persuade old-school materialists that social life matters or to convince hardline culturalists that the material (from the corporeal to modes of economic production) is the very stuff of social construction. To push the metaphor, any social project requires construction materials, while the building process is itself inevitably social and thus cultural....An anthropology of structural violence necessarily draws on history and biology, just as it necessarily draws on political economy. To tally body counts correctly requires epidemiology, forensic and clinical medicine, and demography. The erasure of these broad bodies of knowledge may be seen as the central problematic of a robust anthropology of structural violence. (308)

As a medical doctor and anthropologist, Farmer incorporates both the biomedical and the cultural in his analyses and policy recommendations, arguing that any portrait that privileges one view at the expense of the other is further contributing to the problem rather than working to alleviate it. Hence, an approach that considers how nutrition education programs can be bolstered in their informative and educational aspects is beneficial only if the realities of lived experience and an understanding of the political, environmental and economic barriers to enacting this educational

advice are concurrently evaluated. This is achieved through the consideration of rich social context in the form of ethnography. It requires ethnography built upon a complex social history that is inclusive of prehistoric patterns of hierarchy and authority, inclusive of the legacies of colonial rule, inclusive of the moral shift in values imposed by missionaries, inclusive of modern models of land tenure, access to gardens and the practice of feasting. Integrated in cultural practice are biomedical models, and syncretic understandings of malnutrition and appropriate child feeding patterns through the gendered perspective of the mothers who serve as primary caregivers. While overwhelming to approach a problem with such a significant and complex history, accounting for all of this diversity that is the cultural context, it is naive to believe that ignoring these aspects will generate effective health policy. In the preceding chapters, I brought forth the perspectives of the multiple stakeholders who are experiencing and responding to the problem of food security in Vanuatu, illustrating the complexity of the problem in a way that allows these perspectives to be woven into future discourse about potential solutions.

9.2.2 Community Networks and Support Structures

Anthropology and other ethnographically focused studies reveal the cultural context that surrounds larger biomedical and nutritional “problems” that are identified and prescribed by outside groups and experts onto indigenous communities. Kimura (2013) beautifully captures the result of ignoring ethnography and privileging the hard sciences in the further marginalization of indigenous groups writing:

This is particularly evident with “hidden hunger,” where “patients” may not be aware that they have a problem. By legitimizing the domination of experts, nutritionism circumvents democratic processes in contemporary food politics. Nutritionism closes rather than expands avenues for citizen dialogue and participation in the making of better food systems. In the world of nutritionism,

people credentialed as experts—not the poor women who are mainly responsible for feeding families and who also suffer from micronutrient deficiencies—are the ones who “know” the problem and hence can prescribe solutions for the malnourished. Conversations about food and food security in the Third World are filled with the claims and counterclaims of experts, but the silence of women who make food every day is a serious issue. It is precisely the voices of these women, who can describe the lived realities of malnutrition and hunger, that we need to make audible if we are to understand food’s political and social, not simply is nutrition and medical, meanings. (17)

Throughout this dissertation I have brought forth the voices of participants, primarily women who are responsible for the work of feeding children, and attempted to relate vivid images of the lived experiences of ni-Vanuatu women, children and families as they grapple with food security. The practice of feeding is extremely gendered, and this research reveals that feeding in Vanuatu is no different in that respect. But more importantly, feeding is an active task where women demonstrate their purposeful responses to all of the advice from health care practitioners, community members and their families.

Ni-Vanuatu women face food insecurity every day, and they too have developed “expert” opinions. More importantly however, they have identified a partial solution to the problem of food insecurity. Actively recognizing childhood hunger, women are responding to these children by changing the “rules” and *kastom* practices of gifting during feasts to permit children access to food. These are not alterations to *kastom* based on acculturation, increasing Westernization, or because outside groups instructed women to change their behaviors. Ni-Vanuatu women, exercising their own agency in the face of increased food insecurity among children, purposefully feed hungry children. This research describes the actions of women who have come forward as a group, across urban and peri-urban areas, to modify *kastom* practice and begin to manage the problem of childhood malnutrition by providing a meal to every child who attends a feast—no questions asked.

It is important to contextualize ni-Vanuatu women's choice to respond to children's food insecurity through breaching *kastom* practice and permitting children to eat at *lafet*. Sanctioning children's access to feasts is strategically important for three reasons: 1) access to quality food, 2) access to sufficient quantity of food, and 3) a community ethos that shares in this new burden while allowing children and their families to "save face." When discussing quality foods, both caregivers and health care practitioners agreed that local *aelan kakae* are the "best" foods for kids. Local foods are fresh and healthy, have less sugar, fats and salt than most of their processed counterparts. Equally important though, local foods are culturally appropriate. Serving local foods is a way for families to teach children *kastom* gardening, food preparation, cooking techniques, and food sharing. It strengthens cultural identity and helps to pass traditional knowledge and an appreciation of traditional practices to younger generations. Since the most important and central foods at feasts are fresh local foods, and there is always plenty of *laplap*, feeding hungry children at feasts is a way for children to access quality food.

Second, feeding children at feasts provides them with a sufficient quantity of foods. Because the ethos of daily eating is *kakae blong holem bel nomo*, where eating should just stave off hunger pains by any means, the quantity of food eaten is minimal. However, during *lafet*, the ethos is opposite that of daily food consumption, and large quantities of food are consumed at every meal. If children are experiencing food insecurity and hunger, and are not getting enough food on a daily basis, eating at feasts provides them with a culturally appropriate time to consume a significant amount of food. All attendees will happily be served a plate heavy with rice, soup of fresh beef or pork, sweet potatoes, carrots and green cabbage, and a piece of yam *laplap*. And, if an attendee is capable of eating more, then seconds are encouraged. Typically, the first serving is so large one could not possibly eat any more, and there are many instances when

children and adults cannot finish their meal. Dogs sit under tables and lurk near children and adults waiting for the food scraps of what the guest was unable to finish. Feeding children at feasts means that they can eat their fill to help supplement lean periods, at a time when eating in abundance is the “normal” behavior.

Finally, feeding children at feasts is a way for women to promote *kastom* values of community sharing efficiently while families “hide” food insecurity amongst the crowd. The value of communal relationships is very high in Vanuatu, as has been documented in other Pacific Island societies (Brison 2007; Hardin 2014; Kahn 1986). Providing food for children who experience food insecurity, women tangibly give back to their community, demonstrating how much they value this ethic. Simultaneously, they are able to manage supporting a large number of food insecure children because the burden is not placed all on one family or individual. Communally, people support this ethic and communally they are able to afford both monetarily and with garden resources to collectively feed food insecure children—a feat unachievable by single families alone. In addition, because this is not a case of one individual child asking for food from another specific individual, the group setting allows children to “hide,” mixed in with the other children. While people know the child was not invited and her family will not contribute a gift, operating in a group setting allows the transgression to be less blatant for the individual transgressors, and allows children’s families to “save face” by not having to be singled out for their transgression. Even though it is not truly “hidden,” because they are known, it becomes a less obvious problem when it is a topic that remains unspoken, and less individually stigmatized as there is no public rebuke of children’s transgressions.

Not only are children fed as a result of women’s renegotiation of *kastom* practice at feasts, but children are fed quality food in sufficient quantity in what is now a culturally

appropriate way—when the practice is framed in this manner it is clearly addressing the principles of food security in a more productive manner than any other nutrition interventions active in the country. In this regard, there is much that health practitioners and government officials can learn from ni-Vanuatu women.

Ultimately there must be a way to merge the cultural expertise of ni-Vanuatu women with the biomedical expertise of health care practitioners to develop more appropriate and effective nutrition education programs. Both groups are working diligently in an attempt to alleviate this problem, yet they are not working together. This dissertation has presented an analysis of how community networks have become a support structure for food insecure children in ways that reify *kastom* values of sharing and caring for the entire village community. The role of ni-Vanuatu women as they identify food insecurity and actively work to help alleviate children's hunger is significant. The efforts of health care practitioners, despite operating in an underfunded system, are also vital to promoting health and nutrition among children. From the perspective of syndemics, this ethnographic account considers the social and structural factors alongside the biomedical framework that all contribute to the problem of food insecurity and the coping mechanisms employed to address this problem. Ethnography can serve as a bridge between policy and the practicalities of the human experience. Therefore, the ethnographic evidence presented here should inform policy in Vanuatu, and this model can shape research in other areas addressing similar problems. Recognizing the support structures of community feasting, the role of comprehensive nutrition education, and the ways that they can be strengthened together is critical to understanding feasting and food insecurity as a whole, and to promoting a healthy food secure future for all.

APPENDIX A

GLOSSARY OF TERMS AND ACRONYMS

Aelan dres: The *aelan dres* or Mother Hubbard as it is called colloquially is the term for the most popular style of women's dress in Vanuatu. Frequently brightly colored, the dresses are conservative in that they cover the shoulders, are not too low cut, and cover the knees. They are very loosely fitting, and often the same dress can be worn by a young woman and later throughout this woman's pregnancy. While missionaries first taught women to sew these conservative dresses, now the dresses have been adopted as part of Vanuatu culture and identity.

Austronesian: Describes a language family of peoples who first populated much of the eastern Pacific Islands that encompasses Polynesia and parts of Island Melanesia including Vanuatu. For a more detailed discussion see chapter three of this dissertation.

Bislama: Creole language, largely based on English, with French influence, that is the lingua franca of Vanuatu. It is one of three official national languages (along with English and French). The language emerged during the period of blackbirding, or the slave trade, that brought individuals from different islands with different indigenous languages together as they suddenly needed a new way to easily communicate with each other.

EPI: Expanded Program for Immunization

FTT: Failure To Thrive

Haosgel: Literally ‘house girl’, refers to a female domestic worker, serving as a paid laborer that cleans, cooks, and cares for children. While domestic workers have been employed since the colonial era, Port Vila’s new and growing middle class is creating an expanding market for women to work in this capacity. Problems remain in ensuring that they are treated fairly, and get paid a reliable income that meets the requirements of the nationally set minimum wage.

Jif: Bislama term for Chief.

Kakae: Bislama term for food. It is also the Bislama verb “to eat”. This double meaning causes some confusion about what the *Tri Kaen Kakae* program means to mothers. See chapter 6.2.2 of this dissertation for detailed description of this program.

Kastom: Bislama term for customary practices. Colloquially this term is used to refer to old practices and beliefs prior to conversion to Christianity and colonization, and as well as to objects that are not considered modern or updated, (i.e. outhouses as opposed to flush toilets, woven mats as opposed to mattresses). Overwhelmingly however, this term has a very positive connotation, and ni-Vanuatu highly value and work to preserve their traditional practices, stories, languages and artwork.

Kato: Bislama term for a type of doughnut. A type fried bread that is typically served in the morning with breakfast.

Lafet: The Bislama term for feast. This includes a variety of celebrations that involve specialty foods. For a more detailed discussion see chapter seven of this dissertation.

Lapita: A prehistoric cultural group that settled in the Western central Pacific Islands including Vanuatu. They are noted for a style of pottery characterized by a distinctive toothed stamped edging. For a more detailed discussion see chapter 3.1.2 of this dissertation.

Laplap: National dish of Vanuatu, which is made from grated or shredded root or high starch vegetables (typically yam, manioc, taro, banana, plantain). The starch is seasoned with coconut milk and may have onions, island cabbage, and a variety of meat and seafood placed on the top. A labor and time-intensive dish, it is typically cooked in an earth oven with hot stones for several hours. Sometimes compared to a bread pudding, the finished product is often eaten with one's hands and has a dense, gummy consistency. In modern context, this dish is associated with Sunday meals, as well as all types of feasts. This food has high social value, is associated with *kastom*, and is widely considered one of the best foods one can eat.

Loli: A Bislama term for any type of hard candy. There are lots of flavors, colors, and sizes of these candies, which are cheap and widely available in Port Vila and the peri-urban areas.

Malvatumarui: The Vanuatu National Council of Chiefs is formally called the *Malvatumarui*, which is a Bislama term.

MCH: Maternal and Child Health

Mother Hubbard: See *aelan dres*.

Nakamal: Generally refers to a structure, which serves as the meetinghouse or central place for meeting with a village chief. Also refers to a place to purchase and drink kava, especially in Port Vila, which in this case has nothing to do with meeting with a chief.

Natanggura: Thatch sections woven from the leaves of the sago palm and commonly used as roofing material. Occasionally used as siding materials in some houses. (From Crowley 2003: 185).

New Hebrides: The archipelago received this name in 1774 from Captain Cook. This name was used during the period of European exploration, missionization and colonization. It was replaced with the name Vanuatu when the country gained independence 30 July 1980. All use of the term New Hebrides in this dissertation refer to the time period between 1774 and 1980. Exceptions may exist within direct quotes from outside sources, which were not changed from the original text. See also, Vanuatu.

Ni-Vanuatu: Indigenous people of Vanuatu. This term is both singular and plural.

Pandanus: A tree with long thin leaves that are dried, and used in the creation of traditional textiles including mats, fans, and clothing.

Paonangisu: Rural village on the north side of the island of Efate. Location of a small regional medical center that services the northern half of the island for routine care. An ambulance is based in the Paonangisu medical facility for transporting patients to Vila Central Hospital.

PMH: Paton Memorial Hospital

Pikinini: The Bislama term for children. While this term has derogatory meaning in English, it is viewed positively without the negative connotation when used in Bislama.

Sik Bunbun: Bislama term that roughly translates as malnutrition, but generally has a much deeper imbedding meaning that is discussed in detail in chapter 6.5 of this dissertation.

Simboro: a popular “island food” normally made with manioc or banana (plantain), which has been grated and rolled into an island cabbage leaf so that it looks like the size and shape of an egg roll or spring roll. It is then boiled in salted water until cooked through. If available, fresh coconut milk will be squeezed over the top as a seasoning. It is a very common way for children and adults in urban and peri-urban areas to eat local foods, but is not considered appropriate for feasts.

Skel: In Bislama this term has two distinct meanings. Primarily it is used to describe a person's weight, which is measured in kilograms. Additionally, it is the term for scale, indicated any device used to measure people or other goods.

Storian: Bislama term which translates as “talking story” or engaging in long, informal conversations.

Sup: Soup, a common dinner meal where all the foods consumed in the evening are boiled together in a pot, and the resulting food is called sup. Usually there is some broth with this, but generally the *sup* is ladeled over rice, and is very rarely eaten in a bowl with a spoon. Often infants are given the broth, or the water in which the food was boiled, as a weaning food.

Tuluk: A local food that consists of small pieces of meat, onion and garlic stuffed in the middle of grated manioc, which is wrapped in leaves and roasted in the earth oven. While the practice of making *tuluk*, is more frequently associated with Mele and Ifira villages, it is considered particularly delicious, and other urban and peri-urban villages are beginning to serve *tuluk* at weddings. Typically it is served on the Saturday after the wedding has concluded.

Twisti: While this is the name brand of a type artificially flavored chips; the word is used conversationally to describe all brands of these snacks that are high in sugar, salt, and fat.

UNICEF: United Nations Children's Fund

Vanuatu: The ni-Vanuatu chose this as their country's name, and it came into use at independence 30 July 1980. All use of the term Vanuatu in this dissertation refer to either the prehistory or period of independence. Exceptions may exist within direct quotes from outside sources, which were not changed from the original text. See also, New Hebrides.

Vatu: The unit of currency in Vanuatu abbreviated with vt. Conversationally, in Bislama, this can be used as a general term for money.

VCH: Vila Central Hospital

APPENDIX B

BLUE CARD: CHILDRENS HEALTH RECORDS IN VANUATU

The following pages are a scanned copy of what mothers and health practitioners alike refer to as the “Blue Card.” Printed on light blue cardstock, this document is provided to a child’s mother at birth, and is a record of the birth and all of the associated biomedical statistics about the child. Subsequently, mothers bring this card each time the child visits an MCH clinic or hospital for both routine and non-routine medical care. Health care workers use the card to record the child’s visit dates, weight-for-age scores, and notes about the health of the child and advice and/or medication provided. It also serves as the child’s official immunization record. While new MCH booklets are being designed and redesigned, and currently initial pilot trials of these new booklets beginning at Vila Central Hospital in June 2013, the vast majority of mothers continue to use the Blue Card.

Child Health Record Fiche Médicale pour Enfant

CENTRE

Code 05

Child's name
Nom de l'enfant

Date of birth
Date de naissance

Sex
Sexe

Reference No
No. de Référence

Family name
Nom de famille

Village
Village

Birth Information
Information sur la naissance

Birth weight
Poids à la naissance

Type of Delivery
Type de présentation

Length
Taille

Delivery
Accouchement

APGAR SCORE

Normal / Abnormal
Normal / Anormal

Hospital / Dispensary / Home
Hopital / Dispensaire / Domicile

1 minute....
10 minutes....

Birth Attendant
Accoucheur

Medical / Non medical
Médical / Non médical

Immunization schedule - Calendrier de vaccination

BCG/Hepatitis: at birth / à la naissance

1st Penta/Polio: 6 weeks after birth / 6 semaines (1 mois et demi) après la naissance

2nd Penta/Polio: one month after 1st dose / un mois après la 1ère dose

3rd Penta/Polio: one month after 2nd dose / un mois après la 2ème dose

Measles: From 12 months to 18 months / entre l'âge de 12 mois à 18 mois

Date	Birth	1	2	3	1 Booster/Rappel	2 Booster/Rappel
BCG						
Hep.B 0	<24 hrs	>24 hrs				
VIT-K						
Penta		1 st	1 st	1 st		
Polio		6 weeks	10 weeks	14 weeks		
Measles/ Rougeole		1 year				

measles in French measles only

Reasons for special care
Raisons justifiant une surveillance particulière

- ☐ Birthweight less than 2.5 kg / Poids à la naissance inférieur à 2.5 kg
- ☐ Fourth child or more / Quatrième enfant ou plus
- ☐ Environmental Problems / Problèmes d'environnement
- ☐ Both less than 2 years from last birth / Espacement rapproché des naissances (moins de 2 ans)
- ☐ Multiple pregnancy / Grossesses multiples
- ☐ One or more children died / un ou plusieurs décès d'enfants
- ☐ Single parent / Parent célibataire
- ☐ Pregnancy complications / Complications durant la grossesse
- ☐ Neonatal problems / Problèmes néonataux
- ☐ Congenital anomalies / Anomalies congénitales
- ☐ Not Breastfed / Pas d'allaitement maternel

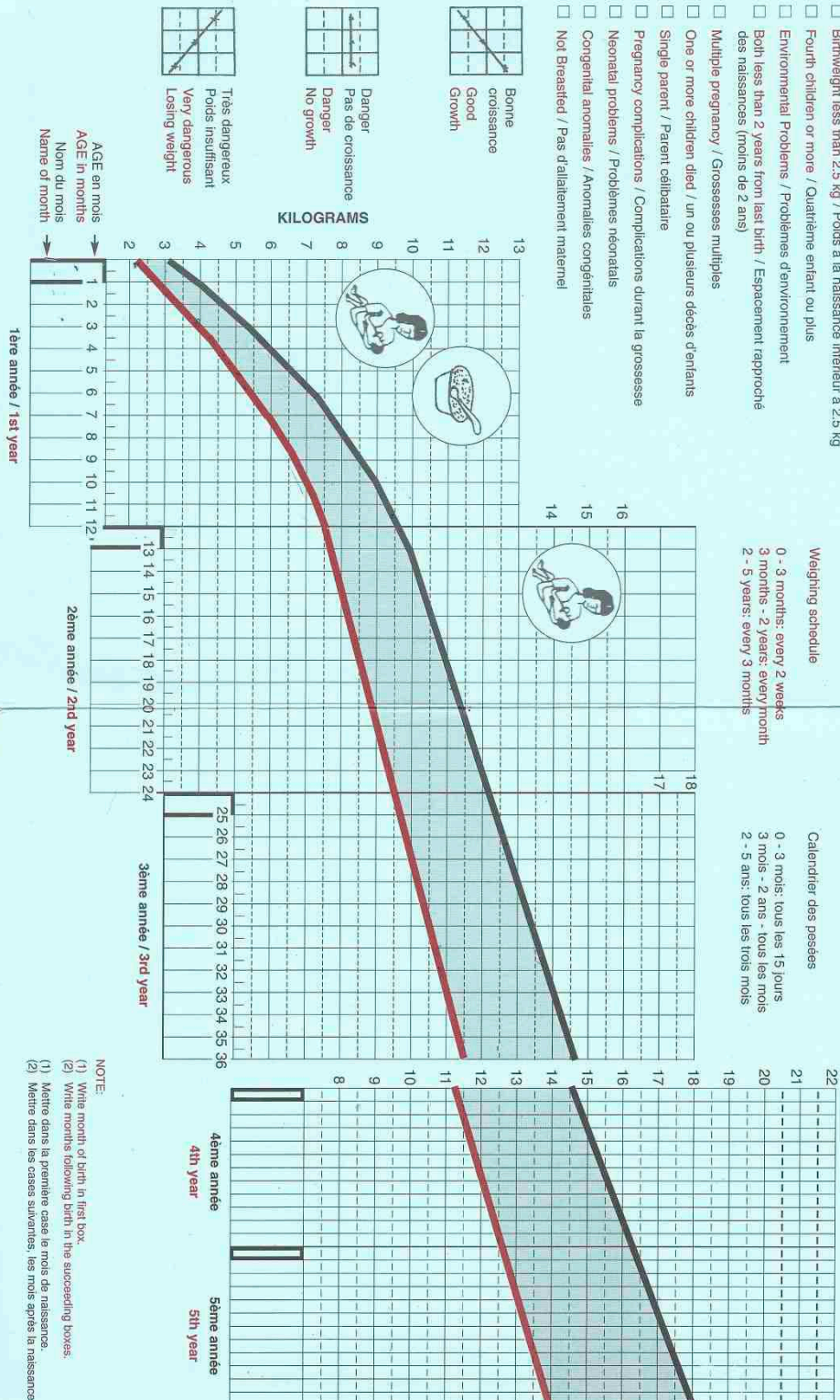
Weight Chart - Courbe de poids

Weighing schedule

- 0 - 3 months: every 2 weeks
- 3 months - 2 years: every month
- 2 - 5 years: every 3 months

Calendrier des pesées

- 0 - 3 mois: tous les 15 jours
- 3 mois - 2 ans: tous les mois
- 2 - 5 ans: tous les trois mois



APPENDIX C

INTERVIEW PROTOCOL FOR MOTHERS IN BISLAMA AND ENGLISH

The following list of questions was used in the semi-structured interviews. The text is provided in Bislama first, followed by the English translation, however the vast majority of interviews took place solely in Bislama. While the questions are numbered, interview topics were dictated by the natural flow of each individual interview; therefore, while all the topics were covered, they were not necessarily addressed in the order presented in this list. This design was chosen because it helped to build rapport and encourage additional topics to develop beyond what is describe here for more nuanced data collection.

C.1.1 Semi Structured Interview Questions: Bislama

- 1) Long lukluk blong yu, wan pikinini wea hemi gat gudfala helt, pikinini ia hemi luk olsem wanem?
- 2) Yu save storian long mi long saed blong wanem kaen kakae yu stap pem long ol pikinini blong yu:
 - a. long market haos
 - b. long stor
- 3) Yu bin kasem sam ting-ting long narafala man long saed blong wanem yu mas fidim long pikinini blong yu?
 - a. Huia bin givim advaes long yu?
 - b. Yu stap harem olsem wanem taem wea yu harem ting-ting blong narafala man long saed blong wanem kaen kakae yu mas givim long ol pikinini blong yu?
- 4) Mi wantem sam eksampol long ol kaen kakae ol pikinini oli stap kakae. Traem talem long mi evri samting ol pikinini blong yu bin kakae yestedei.
 - a. If needed prompt: long moning, snak, etc.
- 5) Hao nao yu luk save se wanem taem blong takem pikinini blong yu i go long hospital?
 - a. Hamas team yu bin karem pikinini blong yu i go long hospital o klinik?
- 6) Yu gat Blu Kard blong pikinini blong yu? Hemi oreat sipos mi save lukluk long hem?
- 7) Taem bebe blong yu hemi smol, yu bin givim titi long hem?
 - a. Yu bin givim hem melek blong tin olsem SMA? Hamas tam?
 - b. Yu bin givim hem melek bling tin olsem Anchor Milk?
 - c. Long saed blong wanem taem yu bin luk se bebe hemi redi blong lego titi?
- 8) Yu mekem sam wok bong yu?

If needed probe with: Olsem long market o long resot...

 - a. Taem wea yu bin go bak long wok blong yu, yu bin jenisem olsem wanem yu i stap fidim bebe blong yu?
 - b. Hemi lego titi?
- 9) Yu bin luk wan pikinini wea emi gat sik bunbun?
 - a. From wanem yu ting se wan pikinini emi kasem sik bunbun?
 - b. Yu ting se hemi wan bigfala problem long Vanuatu o no?
 - c. Yu ting se sam pikinini i save kasem sik bunbun blong blak magik?
- 10) Taem we bebe blong yu i stap kakae firs kakae blong hem, emi bin kakae wanem?
 - a. Emi gat hamas manis?

- b. Emi kasem hamas manis fistaem we yu bin fidim hem:
 - i. jus blong popo
 - ii. lemon ti o lif lemon
 - iii. raes
 - iv. raef banana
 - v. twisti
 - vi. loli

11) Ol pikinini blong yu oli stap karem kakae long narafala ples? Olsem haos blong narafala man o skul?

- a. Wanem ples?
- b. Hamas taem long wan wik?
- c. Wanem kaen kakae?
- d. Emi go kakae long ples blong lafet?

12) Sipos yu gat fulap mani mo y u no nidim tingting long praes blong enisamting, mo yu save pem mo gru eni samting yu wantem, yu ting se bae yu fidim wanem kaen kakae long pikinini blong yu? Bae yu, yu wantem kakae wanem? *(I thought this question would yield discussion about ideal foods and food preferences. However, it proved to be confusing to participants, and they were unsure of this type of “dream situation” exercise. They just asked me a lot of questions about why they got so much money, and indicated that they would buy other things besides food such as a new house, a new phone, or new clothes. Which might indicate a priority of these other desires over diversifying food choices. Ultimately this question did not work because they were not able to think about a time when they could have unlimited money for everything, and I eventually omitted this question. Culturally it was not an appropriate exercise.)*

13) I bin got wan man wea i talem long yu se pikinini blong yu emi gat: sik bunbun? Skel i go daon?

- a. Huia i bin talem hemia long yu?
- b. Yu harem olsem wanem?
- c. Afta, yu bin jenisem sam samting we yu bin stap mekem?

14) Yu bin bornem namba wan pikinini blong yu bifo we yu bin marit?

- a. Huia i bin givim fulap help wetem bebe? Huia giv han long yu wetem bebe blong yu plante taem?
- b. After yu bin merit huia i bin givim yu fulap help wetem babe?
- c. Haos blong yu i stap klosap long mama blog yu? o mama blong man blong yu?
- d. Mama o mama blong man blong yu i stap wetem yufala?

15) Yu gat wan karin?

- a. Karin i stap wea? Emi big wan olsen wanem?
- b. Wanem kaen kakae yu stap gru long karin blong yu?
- c. Yu gat wan smol smol karin, o ples we yu stap planem sam kaen frut klosap long haos blog yu?
 - i. wanem kaen kakae i stap long karin klosap long haos?

ii. Yu gat sam tri blong frut?

16) Sipos yu talem long mi, long lukluk blong yu wanem oli lin long jart ia i stap minim?
(Reference Blue Card).

- a. Wanem nem blong ol kaen sik we weit/ skel blong pikinini emi go down smol?
Olsem taem we i go andanit long red lin blong jart blong Blu Kard.
- b. Wanem hemi nem blong kaen sik taem we skel emi lo wan tumas blong aj blong pikinini?

17) Taem we bodi blong pikinini i stap go daon smolsmol, yufala i kalem wanem, o yufala i talem wanem?

- a. Wanwan taem ol pikinini oli luk gud be taem we nes i skelem olgeta skel i go daon long aj blog olgeta. Wanem nem blong kaen sik olsem ia?
- b. Yu save luk long wan pikinini mo save skel i go daon o no?

18) Long lukluk blong yu, wanem yu ting se emi bes kaen kakae long ol pikinini?

19) Abu blong pikinini blong yu i stop go long klinik wetem pikinini blong yu?

20) Taem we yu nidim mani blong pem kakae o pem dokta, o merisen, plante taem huia givim mani long pem ol ting ia?

21) Sipos wan taem yu no gat plante mani, wanem kaen kakae yu givim long pikinini blong yu?

- a. Pikinini blong yu i stap go long wan narafala haos?
- b. Taem we wan man i stap marit o wan man i stop ded finis, pikinimi blong yu i stap kakae long lafet?
 - i. Hamas taem long wan manis yu ting se pikmini blog yu i stap kakae long lafet?

22) Taem we pikinini blong yu i stap sik, yu usum sam *kastem* merisen?

- a. Taem we pikinini blong yu i gat flu yu givim sam spesel kaen kakae?
- b. Taem we pikinini blong yu i sitsit wota yu givim sam spesel kaen kakae?

23) Taem we wan mama i stap givim titi long bebe blong hem, be emi save i gat bel bakagen, yu ting se mama mas mekem bebe blong hem lego titi from se hemi gat bel o no? From wanem?

24) Wanem tingting blong yu long saed blong wan pikinini we hemi no kakae gud?

- a. Wanem tingting blong yu hemi kos blong taem we wan pikinini emi no kakae gud?
- b. Sipos wan pikmini hemi no kakae plante, wanem nem blog kaen sik?
- c. Yufala i talem olsem wanem long wan pikinini we i no stap kakae gud?
- d. Yu ting se hemi wan narafala saen blong sik taem we pikinini i no kakae gud?

25) Long haos blong yu, huia i stap kukum ol kakae blong pikinini?

- a. Wanwan taem yu kasem sam kaen kakae long narafala famli o frend blong yu?

- b. Yu stap givim sam kaen kakae long narafala famli o fren blong yu?
- 26) Mi bin askem plante kweston long ples ia, yu ting se emi wan narafala samting long saed blong kakae blong pikinini we i stap big wan o we i impotan tumas be mi no bin askem long yu? Emi wan samting we yumitu i no bin kaveremap?
- 27) Yu gat eni kweston blong mi long saed blong risej blong mi o long saed blong kakae blong pikinini?

C.1.2 Semi Structured Interview Questions: English

- 1) Based on your opinion, can you describe a child with good health?
- 2) Tell me about what types of food you buy for your children:
 - a. At the market
 - b. At the store
- 3) Have you received any advice about what or how you should feed your children?
 - a. Who gives you advice most frequently?
 - b. When you receive advice about feeding your children, how does this make you feel?
- 4) I would like to collect examples of the types of foods that children eat. Can you complete a 24-hour recall of what your child ate yesterday?
 - a. If needed prompt: in the morning, snacks, etc.
- 5) What do you look for in your child when deciding when to take him/her to the hospital?
 - a. How many times have you taken your child to the hospital or clinic?
- 6) Do you have your child's Blue Card? Could I look at it?
- 7) Did you breastfeed your child?
 - a. Did you give your child infant formula such as SMA? How frequently?
 - b. Did you give your child powered milk such as Anchor Milk?
 - c. How did you know your child was ready to wean away from breastfeeding?
- 8) Do you engage in work?

If needed probe with: such as selling food or goods at a market, or at a business like a resort

 - a. When you went back to work after giving birth, did you change your child's feeding patterns?
 - b. Did your child stop breastfeeding?
- 9) Have you ever seen a child who is malnourished?
 - a. Why/how do you think children get malnourished?
 - b. Do you think that malnourishment in children is a significant problem in Vanuatu or not?
 - c. Is it possible for children to get malnourished because of black magic or *kastom* magic?
- 10) When your child first started eating solid foods, what types of foods did you feed him/her?

- a. How many months old was your child when she/he first ate solid foods?
 - b. How many months old was your child the first time she/he ate the following foods:
 - i. Papaya juice
 - ii. Lemon tea
 - iii. Rice
 - iv. Ripe banana
 - v. Twist (salty, imported foodstuff similar to chips/cheese puffs)
 - vi. Sucker
- 11) Do your children ever eat at other people's homes? Such as a friend's house or at school?
- a. What places?
 - b. How many times in one week?
 - c. What types of food do they eat at these places?
 - d. Does your child go eat at a *lafer*?
- 12) If you had unlimited money and could buy or grow anything you wanted, what types of foods would you feed your children? What types of food would you want to eat? *(I thought this question would yield discussion about ideal foods and food preferences. However, it proved to be confusing to participants, and they were unsure of this type of "dream situation" exercise. They just asked me a lot of questions about why they got so much money, and indicated that they would buy other things besides food such as a new house, a new phone, or new clothes. Which might indicate a priority of these other desires over diversifying food choices. Ultimately this question did not work because they were not able to think about a time when they could have unlimited money for everything, and I eventually omitted this question. Culturally it was not an appropriate exercise.)*
- 13) Has anyone ever told you your child is malnourished, or that his/her weight has decreased?
- a. Who told you this?
 - b. How did this make you feel?
 - c. After you heard this, did you change any of your behaviors?
- 14) Were you married when you had your first child?
- a. Who helped you the most with your new baby?
 - b. After you were married, who helped you the most with your baby/children?
 - c. Is your house near your mother's house? Or near your mother-in-law's house?
 - d. Do you live with your mother or mother-in-law?
- 15) Do you have a garden?
- a. Where is your garden located? About what size is your garden?
 - b. What types of food do you grow in your garden?
 - c. Do you have a small area outside of your house where you plant some food?
 - i. What types of food do you grow right near your home?
 - ii. Do you grow any fruit trees there?

- 16) Looking at the growth chart inside of the Blue Card, can you tell me what all the lines mean?
- What do you call it if the child's weight decreases a little?
 - What do you call it if the child's weight goes below the red line on the chart?
 - Do you have a name for the illness associated with a child's weight being too low for his/her age?
- 17) If the child seems to look a little thinner, what words do you use to describe this?
- Sometimes a child looks good, but the nurse says that the child's weight has decreased for his/her age. Do you have a name for this phenomena?
 - Have you ever seen a child that has lost weight or has been losing weight?
- 18) In your opinion what is the best type of food you can feed children?
- 19) Does your mother or mother-in-law ever go with you and your child to the MCH clinic?
- 20) When you need money for food, or to take your child to the doctor, or to purchase medicine, most frequently, who gives you money for this?
- 21) At times where you are short on money, what types of food do you feed your children?
- At these times do your children go eat at other people's houses?
 - When there are weddings or funerals do your children go eat at these *lafet*?
 - How many times a month do you think that your children eat at a *lafet*?
- 22) When your children are sick do you ever give them *kastom* medicine?
- When your children have a cold or flu, do you give them any special foods?
 - When your children have diarrhea, do you give them any special foods?
- 23) If a mother is breastfeeding, but learns that she is pregnant, in your opinion, should the mother stop breastfeeding? Why or why not?
- 24) Tell me about children who don't eat well.
- What do you think causes a child not to eat well?
 - Is there a name for the illness a child has if a child will not eat well?
 - What do you say to children who will not eat well?
 - When a child has an illness that leads them to not eat well, are there any other symptoms of this type of illness?
- 25) In your household, who cooks the food for the children?
- Sometimes do you get some foods from other friends or family?
 - Do you ever give foods to your friends and family?
- 26) I have asked a lot of questions, is there anything important about child feeding that I forgot to ask? Is there another topic you think is important that we did not discuss?

27) Do you have any questions for me about my research or about feeding children?

APPENDIX D

SURVEY INSTRUMENTS IN ENGLISH AND BISLAMA

Survey Instrument translated into English is provided on the following pages for reference. The survey was only ever delivered to participants in Bislama. The Bislama translation follows the English version. Pages 5 and 6 of the survey were only written in English and were solely for the purposes of note taking and gathering anthropometric data from the Blue Cards of children. Because they were in English and were not translated into Bislama, they are omitted from the Bislama translation of the survey provided in this dissertation to avoid repetition.

Survey Code: _____

Background Data (BD)

BD0. Name: _____ BD1. You are: ¹ ☐ Female ² ☐ Male

BD2. When were you born? _____ BD3. What is the highest level of formal schooling you completed? _____

BD4. What is your marital status?

¹ ☐ Single

⁴ ☐ Widow(er)

² ☐ Married

⁵ ☐ Separated

⁸⁸ ☐ Don't know

³ ☐ Unwed Domestic
Partner

⁶ ☐ Divorced

⁹⁸ ☐ No response

BD5a. How many children do you have? _____ BD5b. How many children have you given birth to? _____

BD5c. Have any of your children passed away? ⁰ ☐ No ¹ ☐ Yes ⁹⁸ ☐ No response

BD5ci. If yes, from what? _____

BD6. What is the name of the village/area where you live now? _____ Island: _____

BD7a. Do you pay rent for the land you live on now? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

BD7b. How much rent do you pay per month or year? _____

Access to Foods (AF)

AF1a. Do you have a garden for food crops? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF1b. Do you grow food to eat at home? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF1c. Do you grow food to sell at a market? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF1d. How frequently do you go to the garden to harvest food to eat?

_____ times per week, or _____ times per month.

AF1e. What things prevent you from going to the garden? _____

AF1f. Who owns this land? _____

AF1g. Do you pay rent to use this land? How much? _____

AF2a. Do you have a small garden near your house? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF2b. If yes, what types of food crops or trees? _____

AF3a. Do you grow any medicinal plants? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF3b. If yes, what kinds? _____

AF4a. When your children eat all their food, do they ever ask for more, but you don't have any more to give them? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF4b. If yes, how often? _____

AF4c. How many times per month or week do you eat the following as your entire meal:

AF4ci. Dry rice _____ AF4cii. Rice with cabbage _____

AF4ciii. Simboro Manioc _____ AF4civ. Rice with ramen _____

AF5. Do you purchase iodized salt? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF6. Did you breastfeed your children? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF7a. Did you give infant formula to your children?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF7b. How old was your child when you first gave him/her infant formula?

AF7c. Where did you usually purchase infant formula? _____

AF8a. How old was your child when you first gave him/her lemon tea: _____

AF8b. How old was your child when you first gave him/her Papaya juice: _____

AF9a. How do you access the water you need for drinking, cooking, washing and cleaning?

¹ ☐ UNELCO Water Service

⁵ ☐ Well pump

² ☐ Improved Rain barrel (covered top)

⁶ ☐ Stream or river

³ ☐ Rain barrel (without covered top)

⁸⁸ ☐ Don't know

⁴ ☐ Drum, List type: _____

⁹⁸ ☐ No response

AF9b. How much do you pay for water every month? _____

AF9c. Do you ever run out of water or have your water turned off due to lack of money?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AF10. Have any of your children ever had worms? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

Socioeconomic Data (SE)

SE1a. Do you have a job outside your home? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

SE1b. If yes, what type of work? _____

SE1c. If sells food/handicrafts, how often do you take your goods to the market to sell?

_____ times per week, or _____ times per month.

SE2a. Does your partner have a job outside your home? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

SE2b. If yes, what type of work? _____

SE2d. If sells food/handicrafts, how often do you take your goods to the market to sell?

_____ times per week, or _____ times per month.

SE3. When you or your partner earns money, who decides how you spend the money?

¹ ☐ Self ² ☐ Partner ³ ☐ I spend my money only ⁴ ☐ Shared decision

⁵ ☐ Another family member: _____ ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

SE4a. Does another relative give you money regularly?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

SE4b. If yes, from whom? _____ SE4c. How often? _____

SE5a. Do you ever worry about not having enough money for food for all your children?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

SE5b. If yes, how often? _____

SE6a. Do you ever worry about not having enough money for school fees for all your children?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

SE6b. Have any of your children missed a year or term of school because of fees? _____

SE7. Please rank the order in which you prioritize how you spend your money.

¹Clothing _____ ²Electricity _____ ³Water _____ ⁴ School Fees _____ ⁵Food _____

⁶Transportation _____ ⁷Housing, Rent _____ ⁷Savings _____ ⁸Other _____

Nutrition and Food Behaviors (NFB)

NFB1a. Do you receive any regular advice from a family member about feeding your children?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

NFB1b. If yes, who gives you this advice most frequently?

¹ ☐ Partner ² ☐ Mother ³ ☐ Mother-in-law ⁴ ☐ Father

⁵ ☐ Father-in-law ⁶ ☐ Aunt/Uncle ⁷ ☐ Sister/Brother ⁸ ☐ Other: _____

NFB1c. How often do you follow this advice?

¹ ☐ Always ² ☐ Most of the time ³ ☐ Sometimes ⁴ ☐ Rarely ⁵ ☐ Never

⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

NFB1d. Does the person who gives you this advice live in your house, or next door?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

NFB2a. Do you give your children specific special foods if they are ill?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

NFB2b. What foods would you feed your child if it had a cough/flu? _____

NFB2c. What foods would you feed your child if it had diarrhea? _____

NFB2d. What foods would you feed your child if it had a fever? _____

NFB3a. How often do your kids go eat at a lafet? _____

NFB3b. How often do your kids eat at a lafet when you're not with them?

NFB3c. What types of things do your children do while at a lafet? _____

NFB3d. What kinds of foods do your kids eat at a lafet that are different from what they eat

everyday? _____

NFB3e. How is food at a lafet in town different from food at a lafet in the village? _____

NFB3f. How is kids attendance at lafet in town different from in the village? _____

Survey Code: _____

Anthropometric Data (AD)

Content below to be filled out by Interviewer after referencing the child's Blue Health Card.

AD1a. Child's Name: _____ AD1b. Child's Weight Today: _____

AD1c. Date of Birth (D/M/Y): _____ AD1d. Child's Age: _____

AD1e. Child's Weight at Birth: _____ AD1f. Child's Height at Birth: _____

AD1g. Did the child's weight measure ever touch or go beneath the red line on the growth chart?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AD1h. If yes, at what age, and for how long? _____

AD1i. Child's eligible vaccinations are current? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AD2a. Child's Name: _____ AD2b. Child's Weight Today: _____

AD2c. Date of Birth (D/M/Y): _____ AD2d. Child's Age: _____

AD2e. Child's Weight at Birth: _____ AD2f. Child's Height at Birth: _____

AD2g. Did the child's weight measure ever touch or go beneath the red line on the growth chart?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AD2h. If yes, at what age, and for how long? _____

AD2i. Child's eligible vaccinations are current? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AD3a. Child's Name: _____ AD3b. Child's Weight Today: _____

AD3c. Date of Birth (D/M/Y): _____ AD3d. Child's Age: _____

AD3e. Child's Weight at Birth: _____ AD3f. Child's Height at Birth: _____

AD3g. Did the child's weight measure ever touch or go beneath the red line on the growth chart?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

AD3h. If yes, at what age, and for how long? _____

AD3i. Child's eligible vaccinations are current? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Don't know ⁹⁸ ☐ No response

Survey Code: _____

INTERVIEWER NOTES:

Date: _____ Time at Start: _____

Length of interview: _____

Was this interview conducted at a health clinic? Where? _____

Was this interview audio recorded?: _____

Were photographs taken during this interview?: _____

Were jot notes taken during this interview?: _____

Language of the interview: _____

People present (beyond the interviewer and participant): _____

Description of surroundings: _____

Observations (e.g., factors affecting responses; impressions of participant's honesty, cooperation, openness; other information):

Survey Code: _____

Blong Yu (BD)

BD0. Nem: _____ BD1. Yu wan: ¹ ☐ Woman ² ☐ Man

BD2. Yu bin bon long wanem yia? _____ BD3. Yu bin go long skul kasem wanem class? _____

BD4. Naoia, yu mared finis o no iet?

¹ ☐ Single, mi nomo

⁴ ☐ Wido

² ☐ Mared

⁵ ☐ Seperet

⁸⁸ ☐ Mi no save

³ ☐ Mi no mared be mi stap
wetem man/ woman blong mi

⁶ ☐ Divose

⁹⁸ ☐ Nogat ansa

BD5a. Yu gat hamas pikinini? _____ BD5b. Yu gat hamas stret pikinini blong yu? _____

BD5c. Yu gat eni pikinini we i ded finis? ⁰ ☐ No ¹ ☐ Yes ⁹⁸ ☐ Nogat ansa

BD5ci. Sipos yes, from wanem? _____

BD6. Wanem nem blong vilej or ples we haos blong yu i stap? _____ Aelan: _____

BD7a. Yu rentem ples we haos blong yu i stap? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

BD7b. Yu pem hamas blong rentem haos blong yu evri manis o yia? _____

Kasem Kakae (AF)

AF1a. Yu gat wan karen blong kakae? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

AF1b. Yu planem kakae we famli blong yu i kakae? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

AF1c. Yu planem kakae we yu salem long maket? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

AF1d. Hamas taem yu go long karen long karem kakae blong kakae long haos?

_____ taem long wan wik, o _____ taem long wan manis.

AF1e. Wanem kaen samting i stopem yu blong no go long karen? _____

AF1f. Graon blong karen i blong hu? _____

AF1g. Yu rentem graon blong karen blong yu? Yu pem hamas? _____

AF2a. Yu gat wan smol karen klosap long haos blong yu? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

AF2b. Wanem kaen kakae o tri yu gat klosap long haos blong yu? _____

Survey Code: _____

AF3a. Yu planem eni kastom meressin? ⁰ / No ¹ / Yes ⁸⁸ / Mi no save ⁹⁸ / Nogat ansa

AF3b. Sipos yes, wanem kaen? _____

AF4a. Taem we pikinini blong yu i flatem kakae blong hem, wan wan taem oli wantem kakae bakagan be yu no gat kakae from se evri samting i finis? ⁰ / No ¹ / Yes ⁸⁸ / Mi no save ⁹⁸ / Nogat ansa

AF4b. Sipos yes, hamas taem? _____

AF4c. Hamas taem evri manis o wik long taem blong kakae yu kakae ol ting andanit nomo?

AF4ci. Drae raes _____ AF4cii. Raes wetem kabis _____

AF4ciii. Simboro maniok _____ AF4civ. Raes wetem makaroni _____

AF5. Yu pem sol wetem iodine? ⁰ / No ¹ / Yes ⁸⁸ / Mi no save ⁹⁸ / Nogat ansa

AF6. Yu bin givim titi long bebe blong yu? ⁰ / No ¹ / Yes ⁸⁸ / Mi no save ⁹⁸ / Nogat ansa

AF7a. Yu bin givim melek blong tin blong bebe long pikinini blong yu?

⁰ / No ¹ / Yes ⁸⁸ / Mi no save ⁹⁸ / Nogat ansa

AF7b. Bebe blong yu i gat hamas manis taem we yu fes fidim hem long melek blong tin blong bebe?

AF7c. Plante taem yu pem melek blong tin blong bebe long wanem stoa? _____

AF8a. Bebe blong yu i gat hamas manis taem we yu fes fidim hem long lif lemon? _____

AF8b. Bebe blong yu i gat hamas manis taem we yu fes fidim hem long popo jus? _____

AF9a. Yu kasem ol wota blong dring, kuk mo was olsem wanem?

¹ / UNELCO Wota Servis

⁵ / Wel we yu pamem wota long em

² / Fiber glass tank wetem lid

⁶ / Freswota reva

³ / Plastik dram be hemi no gat lid

⁸⁸ / Mi no save

⁴ / Dram, wanem kaen: _____

⁹⁸ / Nogat ansa

AF9b. Evri manis, yu pem hamas long wota? _____

AF9c. Wan wan taem wota blong yu i finis, o olgeta offem wota from se yu no gat mani?

⁰ / No ¹ / Yes ⁸⁸ / Mi no save ⁹⁸ / Nogat ansa

AF10. Pikinini blong yu bin kasem wom bifo? ⁰ / No ¹ / Yes ⁸⁸ / Mi no save ⁹⁸ / Nogat ansa

Survey Code: _____

Kwesten Blong Wok (SE)

SE1a. Yu wok samples? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

SE1b. Sipos yes, yu wok wea? _____

SE1c. Sipos yu salem kakae o handi kraft long maket, hamas taem long wan wik o wan manis bambae yu karem ol ting blong yu i go long maket?

_____ taem long wan wik, o _____ taem long wan manis.

SE2a. Man o woman blong yu i wok samples? ⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

SE2b. Sipos yes, emi wok wea? _____

SE2c. SE1c. Sipos hemi salem kakae o handi kraft long maket, hamas taem long wan wik o wan manis bambae hemi karem ol ting blong yu i go long maket?

_____ taem long wan wik, o _____ taem long wan manis.

SE3. Taem we yu o man/woman blong yu i mekem mani, hu i mekem ol disisen blong olsem wanem bambae yutufala i spendem ol mani?

¹ ☐ Mi ² ☐ Man/Woman blong mi ³ ☐ Mi spendem mani blong mi nomo ⁴ ☐ Tufala tugeta

⁵ ☐ Narafala memba blong famli blong mi: _____ ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

SE4a. I gat narafala famli blong yu we i stap givim sam mani long yu?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

SE4b. Sipos yes, hu? _____ SE4c. Hamas taem? _____

SE5a. Wan wan taem yu fraet we yu no gat inaf mani long pem kakae blong ol pikinini blong yu?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

SE5b. Sipos yes, hamas taem? _____

SE6a. Wan wan taem yu fraet we yu no gat inaf mani long pem skul fi blong ol pikinini blong yu?

⁰ ☐ No ¹ ☐ Yes ⁸⁸ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

SE6b. Eni pikinini blong yu i no bin go long skul long wan yia o term from se yu no gat mani? _____

SE7. Mi wantem save wanem yu ting se i impotan tumas we yu mas spendem mani blong yu fistaem evri manis. Yu save putum wan namba klosap long evri ting andanit, we namba 1 minim se yu mas pem fistaem, afta 2 minim se yu pem sekend taem afta i go kascem namba 8.

¹ Klos, kaliko _____ ² Laet _____ ³ Wota _____ ⁴ Skul Fi _____ ⁵ kakae _____

⁶ Mani blong bus _____ ⁷ Haos, rent _____ ⁷ Sav long bank _____ ⁸ Other _____

Survey Code: _____

Nutrisen mo Kakae (NFB)

NFB1a. Yu kasem eni kaen advaes o tingting long wan man blong famli blong yu long saed blong fidim pikinini blong yu?

⁰ ☐ No ¹ ☐ Yes ³³ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

NFB1b. Hu i givim yu advaes o tingting olsem plante taem?

¹ ☐ Man blong mi ² ☐ Mama ³ ☐ Mama blong man blong mi ⁴ ☐ Papa

⁵ ☐ Papa blong man blong mi ⁶ ☐ Anti/Ankel ⁷ ☐ Sista/Brata ⁸ ☐ Narafala man: _____

NFB1c. Yu folem advaes olsem hamas taem?

¹ ☐ Ol taem ² ☐ Plante taem ³ ☐ Wanwan taem ⁴ ☐ Wan taem nomo ⁵ ☐ Neva

³³ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

NFB1d. Man we i givim advaes olsem, i silip long haos wetem yu, or klosap long haos blong yu?

⁰ ☐ No ¹ ☐ Yes ³³ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

NFB2a. Taem we pikinini blong yu i kasem sik, yu givim sam spesel kakae long em?

⁰ ☐ No ¹ ☐ Yes ³³ ☐ Mi no save ⁹⁸ ☐ Nogat ansa

NFB2b. Wanem kaen kakae yu fidim pikinini blong yu taem we emi kasem flu? _____

NFB2c. Wanem kaen kakae yu fidim pikinini blong yu taem we emi sitsit wota? _____

NFB2d. Wanem kaen kakae yu fidim pikinini blong yu taem we emi fiva? _____

NFB3a. Pikinini blong yu i go kakae long ples long lafet hamas taem? _____

NFB3b. Pikinini blong yu i go kakae long ples long lafet taem we yu no stap wetem hem hamas taem? _____

NFB3c. Pikinini blong yu i go mekem wanem long ples blong lafet? _____

NFB3d. Pikinini blong yu i kakae wanem kaen kakae long ples long lafet we i no kakae plante taem long haos? _____

NFB3e. Kakae long lafet long taon i difren long kakae long lafet long vilij olsem wanem? _____

NFB3f. Taem we pikinini i go long ples long lafet long taon i difren long taem we pikinini i go long ples long lafet long vilij olsem wanem? _____

APPENDIX E

VISUAL-COGNITIVE ELICITATION CONSTRUCT AND PROTOCOL

The following lists the steps and procedures for the visual-cognitive elicitation component of this research. The first part describes the tasks and the order in which participants completed each of the tasks necessary for this project. The second part lists the discussion questions and topics that were used during the discussion group portion of this project.

E.1.1 Visual-cognitive Elicitation Discussion Group Project Activities and Work Plan

Part 1) Enrolling Participants in this Study: Identify 4-5 individuals within the same community who want to participate in the project. Explain project, distribute cameras, and set out guidelines and expectations for the remainder of the project. Provide training on the use of the cameras. Participants were presented with my research topic—I am interested in learning from you everything I can about childhood nutrition and feeding practice. Intentionally, I kept the topic broad. While this frustrated some participants as they wanted more clear direction to ensure they took the “right” photos, I resisted their pushes to ensure that they elicited the topical themes with their photos, which is the very goal of this methodology. The following Bislama text is what the explanation of this that was provided to the participants:

Mi wantem askem yu long makem ol foto we, long lukluk blong yu, yu ting se foto I stap soem olsem wanem ol pikinini I jusum kakae blong hem. Mo long lukluk bong yu, wanem kaen problem yu ting se yumi gat we ol pikinini I no kakae gudfala kakae. Mi no wantem givim yu tumas tingting long wanem yu save mekem foto long hem from se mi wantem save long lukluk blong yu—bambae mi no wantem yu mekem ol foto we ol eksampol mi bin givim long yu nomo. Mi wantem save long lukluk blong yu nomo.

Part 2) Developing Images: They took photos for a week, and I returned and collected the cameras. After uploading the photos to my computer, I prepared electronic folders of photos to develop. The only photos that I did not take in for printing were instances where there was multiples of the same picture or where the photo was clearly accidentally snapped. For example, often participants would take a couple of pictures of the exact same thing, either by accidentally depressing the button twice, or because the first image appeared blurry or they wanted to reattempt for a photo with better lighting. In these instances, I chose the best photograph and developed that one only. I also did not develop photos that were clearly mistakes, or practice shots—sometimes participants wanted to take a photo of me with the camera first to test it out and make sure they could use the camera. Additionally, I saw some photographs that had a thumb over the lens and thus 90% of the image was the thumb. After eliminating photos in these two categories, I developed all of the remaining photograms.

Part 3) Coding Images: After the photos were printed, I numbered each photograph on the back with a permanent marker. The codes assigned to the photo had three parts. First there was a marking to indicate which group the participant belonged to, for example PAP indicates

grandmothers in Pango Village. The second part of the label indicates which individual within the group this photograph belongs to, thus, CA, indicates that the photo was taken by the photographer holding Camera A. This distinction helps to group people in a way that I can identify them, while keeping identities secret. The third and final part was the number of that photo, listed P1, P2, P3 etc. in the order in which it was snapped by the participant.

Part 4) Captioning Images: I returned the labeled images to the participant with worksheets that I created for her/him to caption each photograph. The worksheet had two columns for each photograph, asking for two captions for each photo. Participants largely captioned photos in Bislama, but they were told they could write in either Bislama or English based on what they found easier. The captions served two purposes: first to determine exactly what the photo shows and what types of food are displayed, and second to determine the rationale for why the participant chose to take that photograph. The worksheets asked participants the following questions:

What is in this photo? What does this photo show? Wanem i stap insaed foto ia? Foto ia soem wanem?

Why did you take this photo? Or complete the sentence, This photo means... From wanem yu bin mekem foto ia? O finisim tingting: foto ia minim se ...

I asked participants to complete the captioning activity by the time that we met again for the discussion group to discuss and look at all of the photos together.

Part 5) Discussion Group: Next we all met to discuss the photographs together in a discussion group setting. The questions and activities that I prepared for the discussion group are listed in

the second part of this appendix. The discussion groups typically took place about a week after participants were given their photographs to caption. At the beginning of the discussion group, I reminded participants of my research questions and objectives, and thanked them all for all of their work on this project. Discussion groups lasted between an hour and a half and two and a half hours depending on how much time participants had available and how interested they were in continuing the discussion.

Part 6) Pile Sorting Activity: The final part of the discussion group was a pile sorting activity. Participants were asked to mix all of the photographs together and create piles of similar photographs. This was deliberately open-ended as it is designed to determine how participants think about and categorize foodstuffs. When we were finished with the discussion group, I collected all of the photographs and captioning worksheets.

E.1.2 Discussion Group Script

Part 1: Discussion/Presentation of Photos by the Photographer

- 1) Choose 3-5 photos that show the most important things regarding food in Vanuatu that you took? Prompt the discussion with the following questions.
 - a. Why these photos?
 - b. Tell us the story of this photo.
 - i. What do we See here?
 - ii. What is really Happening here when the photo was taken?
 - iii. How does this relate to Our lives?
 - c. Is this showing something positive or negative?
 - d. What do other people think about this photo?
 - e. Does this photo raise any other questions for us?
- 2) As a researcher if I learned only one thing about food in Vanuatu, which photo(s) would best teach me about this?
 - a. Why?
 - b. Is this positive or negative?
 - c. Other comments about this?

Part 2: Discussion of Photos by the Group

Now give a few minutes for the photos to be passed around for everyone to look at, and spread out so that they are all together for everyone to see all of them at one time. Because they are all labeled on the back, it is okay for them to get intermixed.

- 1) Are there any photographs that you're surprised to see here? Any photos that you didn't expect to see during this group?
 - a. Which photos?
 - b. Why does this photo surprise you?
 - c. What do you think you learn about food behavior from this photo?
 - d. Can the person who took this photo please explain the context of the photo and what they were thinking about when they took the photo?
- 2) Can we group these photographs into categories with similar themes? (Provide time for participants to pile sort the photographs. While they discuss this and work on this activity, their dialogue and process of consensus building is important to observe.)
 - a. What themes do you see here and why might you put photos into certain groups?
 - b. Which photographs illustrate similar issues or problems or strengths?
 - c. *If needed themes to suggest: too many sweets; school lunch; fresh food versus store-bought food; healthy food versus unhealthy food; different ways to access/procure/obtain/get food; etc.*
 - d. Which themes could be/should be targeted for action? What could we do about some of these issues?
- 3) How do these photographs represent issues that are most important for you to think about as teachers? How about as parents?
- 4) I'd like each person to tell me which THREE photos they think show the most important things regarding food and child nutrition in Vanuatu from the whole group?
 - a. Why?
 - b. Tell us the story of this photo.
 - i. What do we See here?
 - ii. What is really Happening here?
 - iii. How does this relate to Our lives?
 - iv. Why does this situation, concern or strength Exist?
 - v. What can we Do about it?
 - c. Did another person take this photo? Who?
 - d. Did this photo appear as a selection in the individual component of the discussion group?
 - e. Does this photo raise any questions for us?

APPENDIX F

INSTRUCTIONAL TEXT FOR THE DIETARY JOURNAL ACTIVITY

While each mother who participated in the dietary journaling exercise was given complete verbal instructions, and a chance to ask me questions about the project, I also provided all of that same information as a written introduction to the journals. Each participant was provided a journal and a pen if needed to complete the exercise. The inside cover was also marked with the date, two weeks from the date the book was distributed, indicating when I would return. This served as a reminder to the participants about when I would be back and that they should continue the record every day until that day. The first three pages included text with all the written instructions about the journaling task, what types of things to include, and an example of how participants might record this data. The last two pages had color photographs of example plate and portion sizes. Nearly everyone in this study uses a plastic or metal serving spoon that is the same style, shape and size as the one pictured in the photos. This was an interesting and unexpected uniformity, but helped as it could serve as a way to estimate the measure and scale of food servings. The photographs at the end all made use of one of these spoons as a way to contextualize and indicate portion size. As explained in chapter five of this dissertation, the literature suggests that photographic references can help participants with sizes. However, these photographs were only

referenced by one of the participants. Most however, indicated the number of spoonfuls served to their child using the above-mentioned serving spoon. The text is provided in this appendix in both Bislama and English, however, in practice, it was only written and delivered in Bislama. The photographs follow the text.

F.1.1 Bislama Text

Daeri Blong Kakae

Tank yu tumas blong giv han long mi long risej blong mi. Plis usum notbuk blong raetem evri samting we evri pikinini blong yu oli kakae long evri dei. Plis usum niufala pej long evri pikinini from se plante pikinini oli kakae difren kakae long dei. Plis putum evrisamting we oli dring tu, olsem Milo, jus, ti, melek, wota. Sipos pikinini blong yu i stap dring melek blong titi, bambae yu raetem hamas taem long evri dei yu bin givim titi long hem. Taem we mi raetem snak, emi minim se ol kaen kakae olsm smol frut, twisti, aeskrim o loli. Sipos wan pikinini emi no kakae lans o emi no kakae wan snak, emi oreat. Yu jas putum wanem emi bin kakae nomo. Mi bin raetem evri samting long wan eksampol nomo.

Afta yu raetem wanem kaen kakae pikinini i bin kakae o dring, plis raetem saes o amaon blong hem mo hamas pis. Olsem mi mekem wan eksampol andanit:

Moning: dring 1 kap ti wetem 2 tispun suga. 5 brekfas kraka.

Lans: 2 pis simboro maniok, dring wota.

Snak: 1 bag twisti mo 1 loli

Sava: 1 bigfala spun raes, half spun macaroni. Dring 1 kap ti wetem 1 tispun suga.

Emi wan eksampol wan mama emi bin givim long mi nomo. Emi no minim se emi bes kaen kakae blong pikinini. Yu no jenisem kakae blong yufala. Yu raetem kakae we yu stap kakae evri dei nomo.

Mi putum sam foto i stap insaed long notbuk ia, mo yu save usum olsem wan eksampol long hamas wan pikinini emi bin kakae. Sipos emi helpem yu, yu save raetem:

Sava: raes wetem sup. Sup I gat tin tuna wetem kumala mo aelan kabis. Amaon i stap luk olsem foto #3.

Sipos yu gat eni kweston blong mi, Chelsea Wentworth, yu save kolem o textem mi long: (list my mobile phone number during the research). Tank yu tumas blong help blong yu!

F.1.2 English Translation

Dietary Journal

Thank you very much for your help with this research project. Please use this notebook provided to record the daily food intake of your children. Because not all children eat the same thing every day, please use a new page for each child. Please also list everything the child drinks, such as Milo, juice, tea, milk, or water. If your child still breastfeeds, please write the number of times in the day that you breastfed the child. Please include all the snacks your child eats, both local fruits, and food from the store such as Twistis and suckers. If one day your child skips lunch, or does not eat a snack, that is okay. Just write what your child consumed. I just wrote these things as an example to help mothers to think about all foods the child consumes.

After you write what your child has eaten and drank, please write the size, amount or number of pieces of this food or drink that the child consumed. I have listed an example below:

Breakfast: 1 cup of tea with 2 teaspoons of sugar added. 5 Breakfast Crackers.

Lunch: 2 pieces of simboro manioc, and drank water.

Snack: 1 bag of twistis and 1 sucker

Dinner: 1 serving spoon of rice, ½ serving spoon of ramen noodles. Drank one cup of tea with 1 teaspoon of sugar added.

This is just an example provided to me by a ni-Vanuatu mother to give you an idea of how to complete this dietary journal. This does not mean that this is the best food for all children to eat. Do not change the foods that you eat for this project. Write only what you normally eat on a daily basis, as this is what I want to learn about.

I put some pictures on the last pages of this book for you to use as a way to estimate the amount of food that your children ate that day. If this is helpful to you, you could use it as a reference like in the example below:

Dinner: Rice and soup. The soup has canned tuna, sweet potatoes and island cabbage. The size of the portion was equivalent to that shown in photograph number three.

If you have any questions for me, Chelsea Wentworth, you can call or text me at any time: (provided my cell phone number during fieldwork). Thank you very much for all your help!

F.1.3 Photographs Included for Estimating Portion Sizes



Appendix Figure 1: Food Diary Image Listed as *Foto 1* (Photograph 1)



Appendix Figure 2: Food Diary Image Listed as *Foto 2* (Photograph 2)



Appendix Figure 3: Food Diary Image Listed as *Foto 3* (Photograph 3)

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