

UC Irvine

UC Irvine Previously Published Works

Title

The Circulation of Children through Households in Yap and Kosrae

Permalink

<https://escholarship.org/uc/item/7sz4s8nm>

Journal

Ethos, 29(3)

ISSN

0091-2131

Authors

Burton, Michael L

Nero, Karen L

Egan, James A

Publication Date

2001-06-01

DOI

10.1525/eth.2001.29.3.329

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed



A · M · E · R · I · C · A · N
A N T H R O P O L O G I C A L
A S S O C I A T I O N

WILEY

The Circulation of Children Through Households in Yap and Kosrae

Author(s): Michael L. Burton, Karen L. Nero and James A. Egan

Source: *Ethos*, Vol. 29, No. 3, Honouring the Contributions of Beatrice B. Whiting (Sep., 2001), pp. 329-356

Published by: Wiley on behalf of the American Anthropological Association

Stable URL: <http://www.jstor.org/stable/640627>

Accessed: 15-02-2017 22:08 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://about.jstor.org/terms>



American Anthropological Association, *Wiley* are collaborating with JSTOR to digitize, preserve and extend access to *Ethos*

The Circulation of Children through Households in Yap and Kosrae

MICHAEL L. BURTON
KAREN L. NERO
JAMES A. EGAN

ABSTRACT *We describe a gendered pattern of circulation of youth through households in two Micronesian societies. Yapese girls and female teens shift into vertically extended households, where elders reside, between ages 11 and 17. The opposite pattern pertains in Kosrae, where females shift between ages 11 and 14 into two-generation households. The opposing patterns are explained by opposite divisions of labor, with Yap having a female farming system and Kosrae having a male farming system. In both instances the residence shifts of female youth between middle childhood and the late teens involve movements into the kinds of households where they do the most work, per capita. We explain the pattern first in terms of the desire to teach young people socially valued work roles, and, secondly, in terms of the need for their labor. These analyses demonstrate the need for processual modes of understanding household composition and its effects on the formation of gender roles and transmission of knowledge.*

Cross-cultural studies of socialization have emphasized the effect on children of cultural practices and social relationships within households. Household patterns vary within societies and individual households change over time. Hence, studies of socialization must consider synchronic and diachronic variability in household form. In our research on household processes in four Micronesian societies in the early 1990s we collected four waves of census data for each of nearly 200 households. Through the process of coding

and analyzing these census data we encountered a high rate of movement of individuals and kinship groups among households. In this article we focus on one consequence of these movements for the children of two societies—because the circulation of children varies by gender, boys and girls tend to live in different kinds of households over time. We analyze these age group and gender patterns in relation to food production and preparation tasks.

The Whiting model for the study of socialization emphasizes the effects of the material system upon the child's learning environment (Whiting 1973). The term *ecocultural niche* is now used to describe this culturally based context of development (Super and Harkness 1982, Weisner 1984). Important components of that niche include subsistence work, the division of labor by age and sex, children's work, and the care of younger children by older children (Weisner 1984, Whiting and Edwards 1988). Many of these processes are affected by the structure of the household.

The Whitings' seminal work, *Children of Six Cultures* (1975), highlighted the contrast between extended family households and nuclear family households. In many societies grandparents and other elders play an important role in child care and the transmission of cultural values and practices.¹ Elders also may have lower levels of formal education, greater commitment to tradition, greater involvement in subsistence production, and less experience with wage labor. In many societies, moreover, senior women have greater equality with men than do younger women (Brown 1985). In the matrilineal societies of Micronesia senior women may have considerable economic power, often exercised through their role in deciding inheritance. Hence, compared to residence 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. Traditional pedagogy in Micronesian societies stresses learning through observation and participation (Metzgar 1991; Rubinstein 1979), and the shifting of children of different age groups and sexes through a range of linked households should be understood as the deployment of youth not only to help with work tasks but also as a way to maximize their chances of learning vital subsistence knowledge as well as appropriate social behavior, and to strengthen each individual's vital kin linkages.

Micronesian households often vary considerably within a community, with some children living in small nuclear family households, and others living in complex multigeneration households (Burton et al. 2002). Hence, the concept of ecocultural niche must allow for variability across households. This concept must also allow for variability over time in the life course of the individual. In many societies children live in several different

households while growing up. Weisner (1984:346) lists a variety of reasons for these residence shifts including care of elders, repayment of debts, apprenticeship, formation of political alliances, and educational advantage. According to Weisner these residence shifts often begin in middle childhood (ages 6–12) and occur frequently in East and West Africa, and in Polynesia. In societies where these changes of residence occur, an understanding of the ecocultural niche of a child's development must incorporate that child's individual experience with visiting, fostering, and adoption—circumstances that may cause children to experience a variety of households in different sequences.

In our research in two Micronesian societies, Yap and Kosrae, we find that individual experiences with households vary by gender and by age group. We discuss this finding using ethnographic and survey data. In the ensuing sections of this article we describe how children circulate through linked households. We examine how the varying household experience of young males and females appears to be linked to children's work responsibilities.

LINKED HOUSEHOLDS AND THE CIRCULATION OF CHILDREN

People move frequently among Pacific Island households. Individuals normally have land rights in several locations and they may move among locations for a variety of reasons. Children sometimes move among households as part of their larger family unit. They also move as individuals. Pacific Island children are often adopted (Brady 1976; Carroll 1970). Adoption adds social relationships rather than canceling them as is often the case in the United States. Adopted children typically retain their social ties to natal parents. Thus it is common for them to move between the households of their natal and adopted parents. Children may also be fostered for long periods of time with a variety of close or distant relatives, being sent to help care for grandparents or young children, or to stay with grandparents or other relatives on the home islands while their parents work in an urban center in the islands or in the United States. There are two consequences for children of the frequent movement of individuals and groups among households. First, the child's household experience may change over time because the child moves among households, either as an individual or as a member of a larger social unit. And, second, even if the child does not move, the household in which the child lives is likely to change its composition frequently, as some family members depart and others arrive.

Circulation of children has received the most attention from anthropologists who work in Africa (Bledsoe and Isiugo-Abanihe 1989; Castle 1995; Goody 1970, 1982,). Page (1989) reported data on the percentage

of children not residing with their mothers, by the sex of the child for a number of regions of Africa, and found no systematic sex differences. African societies share with Pacific Island societies a pattern of linkages of households within larger extended family structures. We think that this pattern of linked households encourages the movement of individuals, including children, among Micronesian households. The implications of these patterns for the cross-cultural study of human development are clear. A set of snapshots of a child's activities taken at *one* point in time will lead to underestimates of the degree of variation of children's household experience *over* time. Static comparisons of nuclear family households with extended family households may be misleading if many children experience both kinds of households sequentially. Different children experience different households at different points in time, and, as we show below for Kosrae and Yap, the aggregate household context of socialization varies significantly by gender. As a result, one cannot explain the formation of gender roles and identities within the shared framework of a single type of household, even if it is the statistically predominant form.

KOSRAEAN AND YAPESE HISTORIES

Yap is in Western Micronesia between Guam and Palau. Kosrae is in Eastern Micronesia between Pohnpei and the Marshall Islands. They share an Austronesian linguistic heritage. They also shared a long colonial history under Spanish, German, Japanese, and American administrations and now constitute two of the four states of the Federated States of Micronesia (FSM).² Hence, they are good candidates for controlled comparisons. Kosrae State is populated by a single ethnic group the Kosraeans. Yap State is populated by the Yapese, who live in the main island group, called "Yap Proper" and by the Carolinean Islanders, who live in a chain of coral atolls east of the Yap islands. The focus of this article is on "Yap Proper." In 1994 "Yap Proper" had a population of 6,919 and Kosrae had a population of 7,317 (Federated States of Micronesia 1996).

Yap and Kosrae are primarily rural societies that have maintained their subsistence systems based on farming and fishing but also now have high levels of education and wage labor. They have different gender divisions of labor. Whereas Yap has a female farming system based on cultivation of taro and other root crops, Kosrae has a male farming system that places more emphasis on a tree crop, breadfruit. Men do the fishing in Yap, but women make a substantial contribution to fishing on Kosrae. This gender contrast in the adult division of labor carries over to the work allocated to children and adolescents, and thus allows us to examine the effects of children's work upon the movement of children through households.

The populations and social systems of Yap and Kosrae were greatly affected by the colonial experience. During the mid- to late-19th century they both suffered depopulation and rapid social change. Severe population losses in Kosrae due to European diseases reduced the population to fewer than 300 individuals (Gorenflo 1993; Ritter 1981). As a result of this depopulation and the stresses that new illnesses brought, the Kosraeans abandoned their chiefly system of governance and traditional religion, and converted to the Congregational Church, which continues today to play a strong role in Kosraean social life (Peoples 1985). The Yapese retained more of their traditional social system. Councils of hereditary chiefs today have considerable influence in Yap State politics, including specific duties outlined in the Yap State Constitution.

Following World War I, Yap and Kosrae were under Japanese rule. Following the American victory in the Pacific during World War II, these Micronesian islands were administered first by the U.S. Navy and then by the United Nations Trust Territory of the Pacific, a trust that was held by the United States and administered by the Department of the Interior. Populations began to recover in Yap, Kosrae, and the rest of Micronesia, and by the time of our study both societies were experiencing population growth. Kosrae had the higher fertility, a TFR of 3.93 in 1994 versus 3.26 in Yap; and a correspondingly lower median age of 18.8, versus 20.9 in Yap (Federated States of Micronesia 1996).³

The Federated States of Micronesia was formed in 1979. Full independence came in 1986 with the signing of a Compact of Free Association with the United States. Under the terms of that agreement the United States will continue its transfer payments to the FSM until 2001, and a possible renewal of the Compact is now being negotiated.

The political and economic relationships of the past half century have had significant effects on families and households. During the 1960s the United States greatly increased its spending on education and government services. There were great increases in the levels of Micronesian education; in the number of wage jobs, mostly in the government sector, and in consumption of imported food. These processes continue today. The economic activities of young parents may be quite different than those of the grandparent generation. Where wage labor was once rare and most were in the subsistence economy, we find today that most households include wage laborers, and many younger people are less involved in farming and fishing. Many Micronesians are concerned about the potential for loss of cultural knowledge and of the food exchange systems that are at the core of social life in much of the Pacific. Contact of children with grandparents is seen as very important to preserving tradition, a theme that emerged in our focus group discussions when we formulated our project.

We collected data in Kosrae and Yap as part of a larger comparative study of household processes in four Micronesian societies. Leaders of each society were closely involved in the research design. The ethnographic research was done by James Egan in Yap and by Karen Nero in Kosrae. Data for the present study were collected as part of four waves of household surveys that were conducted during 1992 and 1993.⁴

METHODOLOGY FOR STUDYING HOUSEHOLDS

We define households as spatially contiguous units whose members share cooking and food preparation. Micronesian households often comprise several houses but utilize a single cookhouse. Often a number of related households are located in close proximity. Elders may occupy their own households within these linked household networks. In those cases most of their foods are prepared and/or delivered by their children or grandchildren. Within the larger households, there may be smaller nuclear family units that act independently in many ways; nonetheless, many family resources and decisions are shared across the various units comprising the larger multigenerational extended family. Certain decisions affecting a number of households may be made at the level of an apical household including elders. For this reason our research design included examples of what we have called “linked households.” We ensured that our sample included households at several levels of the linkages, from households that were newly formed to mature households of elders.

We collected census data at four intervals within a year. In this article we classify households into three basic types, based on the kinds of extensions that occur within the household. *Nuclear households* usually consist of a married couple and their children. For the purpose of this study we also included single-parent households in the nuclear category, as well as households that included a married couple, their children, and one or more other relatives, such as a nephew or niece, provided that the household did not fall into one of the following extended family categories.

We distinguished two kinds of extended family households. *Vertically extended* households consist primarily of an older person (or married couple), one or more of their children, some or all of the spouses of the children, and grandchildren or great-grandchildren. They also may include other relatives, such as a sibling, nephew, or niece of one of the elders. We included in this category one household that consists of a grandparent and grandchild, with the intermediate generation absent. *Laterally extended* households are extended through siblings, and usually consist of two or more siblings, their spouses, and their children or other descendants. These households could be formed by the death of the senior member of a vertically extended household, or by the independent decision of two or

more siblings to form a household. We include in this category households that include persons linked through a sibling of the head of household in the case where that sibling is no longer present. While laterally extended households could span three or more generations,⁵ in Kosrae and Yap they tend to span only two generations.

After extended analyses it is important to note that the single most important distinguishing characteristic among these broad household types is the presence or absence of elders, who are often the grandparents of the children in our sample. In both Yap and Kosrae nuclear households are more involved with wage labor and vertical households are more involved in farming and fishing, however both economic forms are widespread within both kinds of households, for monetized and subsistence economic practices are highly interconnected within Micronesian societies.

We turn now to the data from Yap.

YAP

Yap is a small complex of high islands within a single fringing reef that enjoys high but seasonal rainfall. The Yapese economy employs a mix of wage labor and local food production. Men and boys fish within the reef or in the open sea while women and girls do most of the agricultural work. Taro, the staple *cultigen*, is grown in irrigated gardens. Yams, sweet potatoes, bananas, cucumbers, and other crops are grown in *swidden* gardens. Tree crops such as breadfruit, Tahitian chestnut, papaya, mangoes, and other fruits supplement garden produce. Yapese household resources usually include pigs and chickens, and both male and female children participate heavily in their care.

The fundamental sociopolitical unit in Yap is the estate—the *tabinaw*—which consists of a group of land parcels and the people who hold rights to them. An individual *tabinaw* may consist of a single household in which reside a man, his wife, and their children. More frequently, members of several linked households share *tabinaw* lands. The land parcels of the *tabinaw*, though widely dispersed throughout a village, are all symbolically linked to the stone platform (*def*) upon which the primary house rests. The *def* has both a personal name and a social rank with respect to other *def* both within the village and throughout the rest of Yap.

The extension of *tabinaw* lands to several households usually begins with the marriage of sons. Residence is virilocal. When they marry, adult sons typically build homes upon separate parcels of the estate land, where each resides with his own wife and children. The sons and their families continue to identify with the *def* of their father and act as a political unit within the village. All have access to special resources that belong to the

tabinaw, such as garden land, groves of coconut and betel trees, and reef fishing rights. Hence, these households of the sons and father may collectively comprise a single tabinaw. At the same time, each of these semi-independent households maintains other resources of its own, such as pigs, chickens, and rights to garden produce. Each keeps a separate account of income and expenditures, its own kitchen or cookhouse in which it prepares food, and its own refrigerators, automobiles, and other items. Because so many decisions regarding resources and daily household maintenance are made at the level of these individual homesteads, we treat these as households for the purposes of the present analysis.

The nuclear household is the most frequently occurring household form in Yap. Twenty-two of the 35 households in our sample were classified as nuclear. Next in order of frequency, vertically extended households constitute ten of our 35 households. These are created by one of two processes. First, adult sons and daughters with children may reside with their parents. A young married son may reside with his parents while he is amassing sufficient resources to build a house of his own. Or, a divorced daughter with young children may relocate to the household of her parents. While young children may accompany their mother after the divorce, older children are more likely to remain with their father since their land rights will be in their father's estate.

A second process that creates a vertically extended household occurs when elderly parents leave their own homes to live with middle-aged sons or daughters, who thus demonstrate their worthiness through helping care for aged parents, and thereby earn tabinaw leadership roles.

Laterally extended households are least frequent—three of the 35 households in our sample. These households are extended through siblings of the household, most commonly to incorporate children of a deceased brother. When a man dies, his oldest surviving brother assumes the role of father to his children, and it is not unusual for a child or young adult to reside at some point with this new father. Less frequently the siblings of the household head or his wife may join the household, along with their children.

CHILDHOOD IN YAP

Regardless of which type of household children find themselves in, each child will need to make connections to the land. Yapese children belong to their mother's matrilineal clan, not the clan of their father, on whose land they reside. Over time, a woman's labors on behalf of her husband's estate will earn both her and her children full membership in his tabinaw (Egan 1998; Labby 1976). A child's tie to estate land formally begins when the child is assigned one of the names that are associated with

the tabinaw def. From this point on, a male child's position within the Yapese landed hierarchy is primarily a matter of the social rank and networks of political relations associated with this def, although his position within the wage economy can provide additional political influence and prestige. Girls also maintain a lifelong association with the def from which they received their names. Although they will one day marry and join the tabinaw of their husbands, they retain membership rights in their natal estate. In fact, authority within the tabinaw is divided between the eldest son and eldest daughter, and each is charged with specific responsibilities in tabinaw affairs. While the son will see to the external affairs of the estate, the daughter protects the rights of her brother and oversees all internal estate matters. It is she who gives names to children born to the tabinaw; it is she who holds authority over her brothers' children; and it is she who will one day play a central role in allocating the estate taro patches among brothers' sons' wives. The complementary division of authority in the tabinaw and the gendered division of labor in production structure the contexts in which Yapese children are raised.

The mother and older female siblings keep a watchful eye on young children. Close relatives often live next door, and young children roam the area playing in safety with young siblings and peers. Brothers and sisters may join each other in mixed-sexed playgroups when young, but increasingly avoid interaction as they approach puberty. Brother-sister avoidance after puberty shows respect for the central role of the cross-sibling dyad in structuring tabinaw affairs. These same relations manifest themselves in sleeping arrangements. Should the central building of the homestead contain only one room, parents and children sleep there together. Increasing numbers of homes today include a separate internal bedroom for the husband and wife, although nursing mothers may sleep with infants apart from their husbands. Adolescent boys, however, usually sleep in an entirely separate building of the homestead compound and thus maintain distance from their sisters.

Just as separation by gender comes to structure play and sleeping arrangements as children get older, so too does it organize daily chores in the household. Children of both sexes do few chores before the age of ten, but thereafter their workloads increase. Both boys and girls are frequently charged with the daily feeding of pigs and chickens. Both boys and girls also collect land crabs, help others to gather ripened coconuts from tabinaw coconut groves, and sometimes lend a hand in clearing land for new yam gardens. Boys alone are likely to acquire fishing skills, although we did find rare instances of older girls employing nets near the shoreline. Boys also join older brothers and young male relatives on excursions that involve hunting fruit bats and "wild" chickens with air guns. Boys are more likely than girls to harvest betel, breadfruit, and other tree crops. Girls, on

the other hand, are more likely to be assigned care of younger siblings, to be expected to help with food preparation and washing dishes, and to help with the routine care and harvesting of garden produce and taro.

Children are likely to spend significant periods of time in the villages of other relatives, notably those of maternal grandparents. Mothers with wage jobs often leave children in the care of grandparents or other relatives during working hours. Although children usually live in the same village as paternal grandparents (whom they see frequently), this is not always the case. Many Yapese reside in the vicinity of Colonia—Yap's port town and sole urban area. Children whose parents live in Colonia may spend weeks or even months at a time with grandparents and other relatives back in the village.

Yapese frequently send their children to live with other relatives for extended periods of time in order to broaden each child's network of close personal ties and to maintain and strengthen the parents' ties to relatives and to landed units of which the parents are members. Sending children to other households also gives the children an opportunity to observe and participate in activities that may not be occurring in their own households or home villages. This is especially so with respect to local food production. Young mothers rarely have opportunities to tend gardens and taro patches. On the other hand, middle-aged and older women who are no longer burdened with the care of young children are usually very productive, and they often take older girl visitors with them to care for agricultural resources. Similarly, young boys who live in households in Colonia may not have opportunities to fish. Spending significant periods of time with relatives in other villages allows them to learn and develop these skills. Children are also expected to participate in village dances. Yapese take great pride in traditional dance, and dances are a regular part of elementary school graduation ceremonies, competitive inter-village exchange events, the annual Yap Day celebrations, and other village and island complex-wide festivities. Children who spend a summer or any extended period of time with grandparents or other relatives in a distant village will join the other children of the village for dance practice and performances if a dance is scheduled over the period of their stay.

Each of Yap's ten municipalities includes a public elementary school that is within walking distance of the municipality's villages. Most students attend classes at their respective local schools, although a few enroll at either the private Catholic school in Colonia or the Seventh Day Adventist school located in Tomil municipality. Middle schools are less numerous, prompting students to take buses to school or to live with relatives who reside near such schools. In the early 1990s, only one public high school operated on Yap Proper. Some students, however, enroll in high schools abroad. Yapese have a relatively high rate of educational attainment. In

1994, 47.7 percent of ethnic Yapese had a high school education or more, compared with 31.8 percent for the FSM as a whole (Federated States of Micronesia 1996:95).

LINKAGES BETWEEN YAPESE HOUSEHOLDS

An example will help to elucidate some of the processes that create the household types in Yap, especially with regard to movements of people between households. Figure 1 shows two linked households. Household 1 is a vertically extended household consisting primarily of an older couple, their divorced daughter, and her four children. This household is located in a village belonging to a lower social stratum of the Yapese sociopolitical hierarchy. Although the household is without electricity, it has abundant agricultural resources as well as easy access to the marine resources of the lagoon. None of the individuals in this household have wage employment.

By returning to live with her parents, the daughter of Household 1 has exercised an option widely used by divorced women in Yap. More unusual is the fact that she has brought her children with her. Children receive personal names that link them to the land of their father's estate. The linkage so provided may even specify portions of a son's inheritance. Still, a divorced woman may wish to have her children with her. She knows that should her husband remarry and have more children, her children will have a weaker voice in their father's estate than those of his new wife. More importantly, if her husband is himself the member of a low-ranking estate or is without land of his own, she may believe that her children's prospects

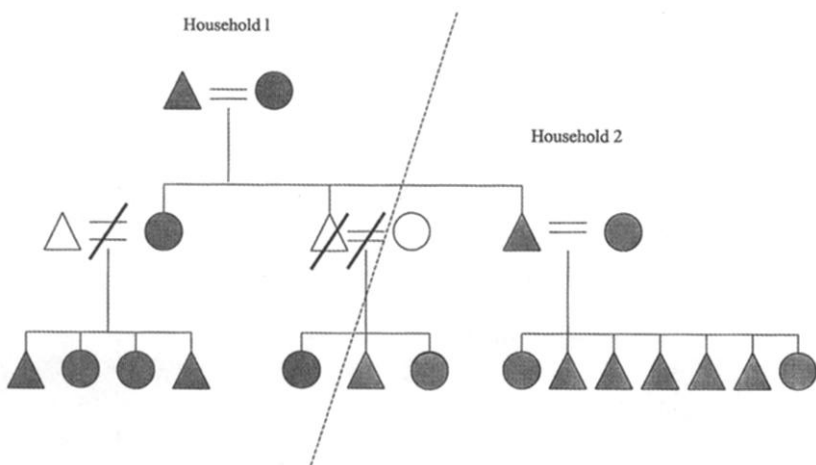


Figure 1.

are better served by their staying with her and the people of her natal estate. Barring any protestation from her former husband's sisters, who hold authority over these children, she then may bring them with her to the estate of her parents. In the case at hand, the divorced daughter's former husband is of a low-ranking village.

The second household consists of a surviving son of the older couple, his wife, and their seven children. One of the sons of the older couple is deceased, and he was divorced before his death. Following one of the Yapese options for children's residence after a divorce, the deceased son's three children had lived with him after the divorce, and they are divided between these two households of their father's family. One daughter is living in the vertically extended household, giving it a preponderance of girls (three to two). One son and one daughter are living in the second household. As the eldest brother of the deceased, the head of this household is considered father to this brother's children. The husband and wife both hold steady wage jobs in Yap's public sector. The eldest daughter holds a part-time wage job and has many childcare and basic household maintenance responsibilities. In addition to wage employment, this household has its own agricultural resources and its members fish frequently. This second household, with its nuclear structure and greater involvement in the wage economy, has a preponderance of boys (six to three).

These two linked households are separated by little more than a ten minute walk. Since the second household is derived from the parental household (Household 1), both are constituent parts of a single tabinaw. Both act with "one voice" (*lung*) in any of the various village, municipality and broader Yap-wide political functions, and the members of the two households share collective resources. At the same time, each household maintains other resources of its own, prepares and consumes food independently, has its own sources of income, and makes its own decisions about resources and household maintenance.

We now examine the substantial cumulative effects of these kinds of decisions upon Yapese households and the socialization experiences of children who move through the various household forms.

YAPESE DEMOGRAPHIC DATA

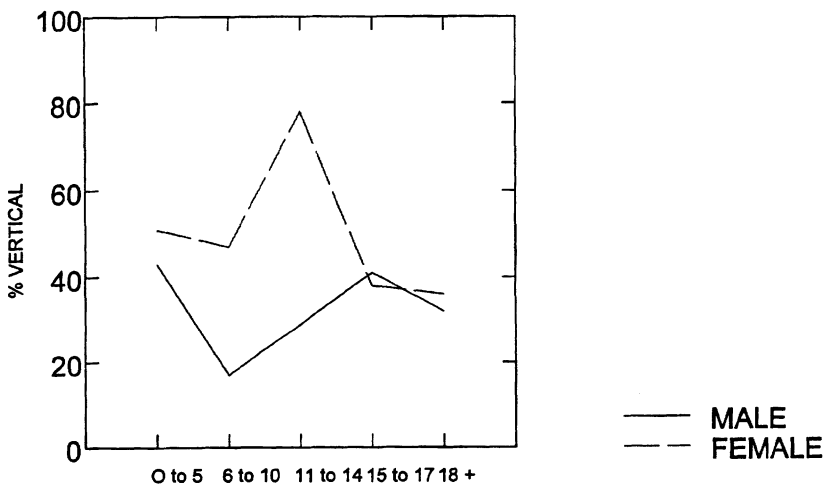
We began by tabulating the residence patterns of Yapese children and adolescents from birth to age 17. Table 1 shows the total number of boys and girls who appeared in four waves of household census data, by household type. Here we have categorized Yapese households into two categories. The first category—vertically extended—includes three generations. The second category includes two kinds of two-generation households—nuclear and laterally extended. We refer to these two types together as

Table 1. Gender by household type, Yap.

Household Type	Sex		Sex Ratio
	Male	Female	
Two Generation	129	100	1.29
Vertically Extended	57	115	.50
All Households	186	215	.87

two-generation households. Within our Yap sample of 35 households, twice as many young females as young males reside in vertically extended households, while 30 percent more young males than young females live in the two-generation households. More than half (53.5 percent) of all young Yapese females reside in vertically extended households whereas less than one-third (30.6 percent) of young males reside in vertically extended households. The pattern is statistically significant.⁶

This pattern of gender differentiation within Yapese households varies by age (Figure 2). Gender differentiation begins in the age range from six to ten with a shift of boys out of vertically extended households into two-generation households. This is followed by a shift of girls from two-generation households into vertically extended households during the age range from 11 to 14. There is little gender difference in household residence before age six or after age 14. Consistent with Weisner's observation that the movement of children often begins in middle childhood, residential shifts in Yap begin in middle childhood, continue through early adolescence, and end by late adolescence.

**Figure 2. Gender composition of Yapese households by age group and household type.**

THE EFFECT OF WORK UPON GENDER DIFFERENCES IN YAPESÉ RESIDENCE

As Weisner and others have noted, there are many reasons for the circulation of children among households. Several of these reasons may differ by gender, including apprenticeship, formal schooling, elder care, and subsistence labor. Here we focus on just one factor, the role of work done by children and adolescents in food production and food preparation. We hypothesize that the circulation of children and adolescents is driven partly by the desire that children learn certain tasks as well as by the need for household labor. Cross-culturally, the adult division of labor affects children's work. Girls tend to do more household labor than boys, and their work tends to be supportive of adult women's work (Bradley 1987). Given that nuclear and vertical households differ with respect to adult economic activity, we hypothesize strong relationships between the work done by girls and female adolescents and their residence patterns. We anticipate an intensified use of female labor in the vertically extended households, where female gardening work is more prevalent.

We tested these hypotheses using measures of total work contributions of children and adolescents from our food survey. We surveyed each of 35 Yapese households during one week during four seasons of the year, collecting data on daily food production, consumption, exchanges, and food-related work by both regular residents and guests. Most of the households (27 out of 35) had young people between age six and 17. The four waves of data collection provided information on 468 separate instances of food-related work by Yapese between ages six and 17. These tasks occurred in 24 of the 35 households.

Table 2 presents average hours of childrens' and adolescents' work per household for three age categories between age six and 17. The unit of time is the four-week survey period. The numbers are averaged across households, including those who have no children in the given age range. These measures are designed to estimate the relationship between total children's work and household structure. They are not estimates of the amount of work done per child.

We can see from these numbers that children's work is not very important to the average Yapese household. The average household has 16.02 hours of work by young people ages six to 17 in a four week period, about four hours per week. Of course, some of these households do not have children within this age range. For those households that do have children in the age range the average is higher, but still only 5.2 hours per week. However, a few households have much larger amounts of children's work, with the maximum being 118 hours during the time period, or nearly 30 hours per week. And some individual children have quite high work

Table 2. Average work hours per household by Yapese children and adolescents (Four week survey period).

Sex and Age Category	Task					All Tasks
	Prepare Food	Farm and Garden	Fish	Livestock	Gather	
Male 6–10	.06	.97	.37	.38	.50	2.28
Male 11–14	.20	.61	.96	.89	.46	3.12
Male 15–17	.04	.06	.33	.26	.46	1.15
Average Male	.30	1.64	1.66	1.53	1.42	6.55
Female 6–10	.22	1.08	.21	.06	.39	1.96
Female 11–14	1.21	1.94	.21	.81	.40	4.57
Female 15–17	.89	.51	.89	.28	.37	2.94
Average Female	2.32	3.53	1.31	1.15	1.16	9.47
% Female	88.5	68.3	44.1	42.9	46.0	59.1

loads. Hence, the variance to be explained is between those circumstances in which children's work is important as opposed to most of the cases, where it is not especially important.

Within the age range six to 17, girls do most of the work (59.1 percent). Farming is the most important single task for young people, and that is a mainly female task. This is consistent with the adult division of labor—Yap is a strongly female farming society. The fact that girls' work is more important, especially in farming, is consistent with the differential assignment of girls to vertically extended households, where girls can learn valuable Yapese gardening knowledge from senior women.

If the labor of girls and female adolescents plays a key role in the circulation of children through Yapese households, then we would expect to find a relationship between household structure and the work done by girls, with girls doing more work in vertically extended households. In fact, females account for less than half (42.7 percent) of the total work contributions by young people to two-generation households and most (70.0 percent) of the work contributions by young people to vertically extended households. Figures 3 and 4 show how these relationships vary by age. Here we see that there is a great increase in girls' contributions to work in vertically extended households during the age range 11 to 14. This correlates with the high concentration of 11 to 14 year old girls in vertically extended households discussed above. However, the high aggregate workload of girls in these households could be simply a function of their numbers.

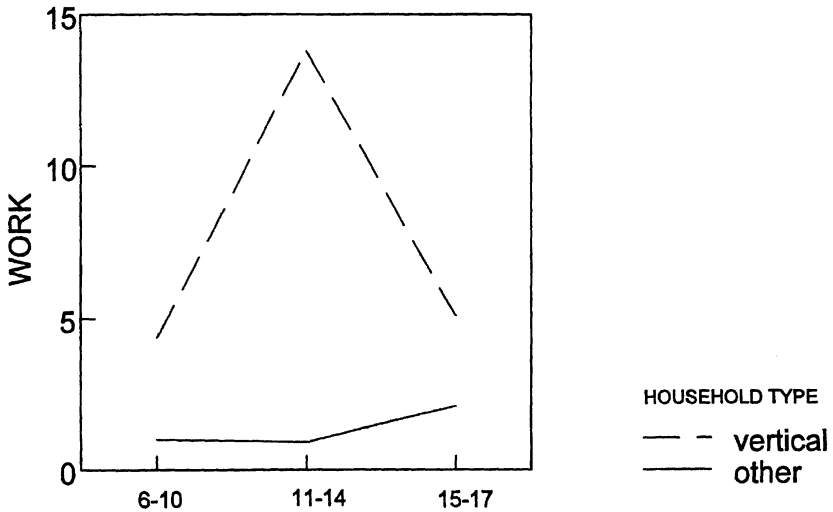


Figure 3. Yapese girls' work by household category and age group.

To test whether girls work harder when they reside in vertically extended households, we computed workload per capita for males and females in the three kinds of households. Here the unit is the week. Between ages six and 17 female work per capita averages 3.06 hours per week in vertically extended households, 1.68 hours per week in laterally extended households, and 1.53 hours per week in nuclear households. Male work follows a similar pattern, averaging 2.88 hours per week in vertically extended households, 1.73 hours per week in laterally extended households, and 1.07 hours per week in nuclear households. Both males and females work harder when they reside in vertically extended households. Across the three types of households girls have a higher average workload per capita—2.39 hours per week versus 1.67 hours per week for boys. Neither boys nor girls do much work on average. However, there is a high variance in work load across the sample, with some individual children having a much higher work load.

We used regression analysis to further refine these relationships. In these analyses the dependent variables are total amounts of work by male and female youth, per household. The independent variables are measures of the numbers of youth in each household, by age group (Table 3). The beta weights for these age groups estimate the net addition to total household work per additional young person. We see in Table 3 that there are significant effects for numbers of males in the age groups from six to 14, and for numbers of females in the age group 11 to 14. For each gender the strongest effects are in the 11 to 14 age group. After controlling for numbers,

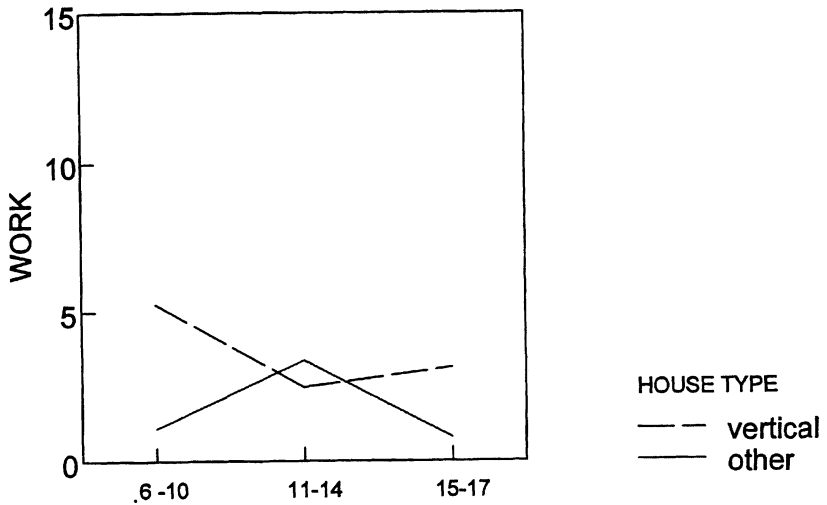


Figure 4. Yapese boys work by household category and age group.

we find that both boys and girls have higher workloads if they reside in vertically extended households.

In sum, the pattern of gender differentiation in Yapese households is to move females into vertically extended households where they have the highest workload, while simultaneously moving boys out of vertically extended households.⁷ This finding supports the notion that the circulation of children is driven by the desire that girls learn female farming tasks in these households.

THE ROLE OF WAGE LABOR

What role does wage labor play in household work patterns? Since the 1960s, transfer payments from the United States have fueled Yap's wage economy. By 1988–89, when our research began, 58.6 percent of Yap State households had income from wages (Taverner 1990).⁸ Most of the jobs were in the public sector. Thirty-one of the 35 households in our Yapese sample included at least one member who earned wages. Collectively, the 35 households included 38 male wage workers and 26 female wage workers, in keeping with a generally high rate of female employment in Yap.

The vertically extended households in our sample have an average of 1.50 wage workers per household, versus 1.96 for all other households. The vertically extended households are also larger, and they have just .19 wage workers per capita, versus .41 wage workers per capita in all other households ($p = .022$). With fewer wage workers per capita, it seems likely

Table 3. Regressions predicting total boys and girls work in Yap.

Predictor of Female Work	Beta	t	p
Girls 6–10	.40	.37	.72
Girls 11–14	2.50	2.61	.01
Girls 15–17	1.25	1.27	.22
Vertically-extended	10.04	1.85	.07
$R^2 = .48$			
Predictor of Male Work			
Boys 6–10	1.69	3.59	.001
Boys 11–14	2.50	4.02	.000
Boys 15–17	.27	.43	.67
Vertically-extended	6.48	2.27	.03
$R^2 = .57$			

that the vertically extended households are more dependent upon subsistence food production. Be that as it may, wage work does not have a direct effect upon the children's work patterns described, once we control for numbers of children and household form.

We now turn to the data for Kosrae, where we will discuss a different pattern of relations among gender, household composition, and children's work that occurs in a male farming system.

KOSRAE

Kosrae is a high volcanic island with lush vegetation and high rainfall averaging more than 5000 millimeters (200 inches) per year, with little seasonal variation. Our Kosrae sample focused on Lelu, the city of the former chiefly rulers of the island. Lelu is still inhabited by the descendants of these chiefly families. Today Lelu is the main urban center of Kosrae and one of the state's four municipalities. Our Kosrae sample includes 30 households from Lelu and ten from each of the other three municipalities. Kosrae is a primarily horticultural society relying on tree crops, especially breadfruit and bananas cultivated by male farmers, augmented by its rich lagoon fish and shellfish resources harvested mainly by women, with off-shore pelagic species harvested by men (Wilson 1968).

Today's Kosraean families trace kinship cognatically, although some echoes of the importance of matrilineal ties can still be seen. Kosraean families are large, children are highly valued, and households tend to extend over several generations. Families live about equally in nuclear or vertically extended households, which sometimes include four generations in

Kosrae; only two households are two-generation laterally extended. In most cases there is a strong nodal household of the eldest generation, surrounded by households of the children and grandchildren, each with separate cooking facilities.

Although many imported foods are incorporated into the diet, local foods continue to be important, in particular breadfruit, which is prepared in an earth oven (*inuhm*) every week. Once a part of every established household, the earth-oven cookhouse was a feature of three-quarters of all households in our sample; other households share foods from the ovens of their extended family members. Families gather every Sunday for a meal of Kosraean foods including baked breadfruit, Kosraean soup (made of coconut cream, breadfruit, and a protein such as fish or chicken), banana, fruits, and various specialty foods. Sharing of foods and household labor among houses is common, and individuals frequently shift between households, and sleep and share food at other households. Both individuals and small family units may move briefly among related households for reasons such as attending funerals and special occasions. Young girls usually shift within a close circle of related family households, helping to care for new infants and elders, and helping with household tasks. Slightly older boys shift within the related households to help with and learn skills related to farming and tree horticulture.

Participation in wage labor is high, and is heavily concentrated in the public sector. Males are more involved in wage labor. The 1993 census counted 565 men and 158 women in government employment, and 436 persons (gender not specified) in private employment (Bureau of Planning and Statistics 1993). A third of those 15 years and older (total 4,089) worked in 1993 (48 percent of men, and 19 percent of women). Although women's wage labor is highly valued, Kosraeans attempt to provide employment for at least one family member, with an emphasis on providing such employment for males. In 1993, 81 percent of all families had at least one wage earner. Fifty-five of our 60 sample households had at least one wage earner, with a mean of 1.6 wage earners per household. Most (38) of these 55 households also participated in farming and/or fishing.

KOSRAEAN CHILDHOOD AND ADOLESCENCE

Kosrae has a high birth rate and children of both sexes are highly valued. A mother is expected to breast-feed her infant at least six months, and breast-feeding often extends to a year or more. If a new mother is married the young couple generally moves in with the husband's family. Less frequently they stay with the wife's family. Married couples establish their own households and cooking area as they are able, often adding a house within a compound on family lands. The residence choice depends

on circumstances such as work-related housing requirements and access to land. If a mother is not married she will stay with her parents, who may adopt the baby or help the mother to raise her children. These children either stay with their mother when she eventually marries or stay with her parents. In the case of divorce the father has the strongest rights to the children. However, the children, especially girls, may accompany their mother if she returns to her parents' household. It is expected that all families will have children. Childless couples or individuals generally adopt one or more children, and both natural and adoptive parents retain ties with the child, who may during her or his life live alternately with each set of parents. Of our sample population of 296 individuals under age 18, thirty-two (11 percent) were identified as having been adopted. Of these, two-thirds were girls and the vast majority of those adopted were living in extended-family households.

Although mothers and teens have general responsibilities for the care of infants and young children, men and boys of all ages also participate in caring for children, and it is common to see men holding and carrying infants. Kinship terms follow the Hawaiian pattern, with the word for *child* (*ngatik*) extending to all children of the descending generations of the extended kin group. Infants are held during much of their waking hours, and soon learn to hold on as they are carried on the hip. Kosraean households generally have one large room, and may have additional smaller rooms for married couples. Infants sleep with their parents. After weaning, or after the birth of a sibling, a child sleeps on mats in the large room with siblings, cousins, and older relatives. Relatively large numbers of children and intensive child care practices result in a high domestic workload for women and young girls.

Generalized respect behavior toward parents and grandparents includes special eating protocols by which the elders and honored guests are served first, with family members and children served last. Small children assist in running errands and doing small gender-specific tasks. In the morning, for example, young children pick up leaves and clean the yard area. Young girls assist in washing dishes and clothes; young boys assist in farming tasks, and take care of pigs and other livestock. Fishing (except trolling outside the reef) is mainly done by women, and girls may accompany their mother. Both boys and girls accompany their parents to the farmlands to work and relax on Saturdays. Young girls especially assist in caring for infants and small children. Around puberty both boys and girls take increasing responsibility for completing household and gardening work. At this life-stage, girls stay much closer to home than the young boys, who may move out to stay with other relatives. Saturdays are busy days, as the inuhm is prepared and breadfruit and other foods are baked in preparation for Sunday when there should be no work.

Sundays are set aside to attend church and Sunday school classes. This is also a day for visiting relatives and for the larger extended families to come together for meals that are prepared on Saturday. Religious instruction is very important, and with the exception of the small Seventh Day Adventist School is handled directly by the churches and their local ministers, elders, deacons, and teachers. Kosraeans attend church more frequently than most Micronesians. Children learn bible stories, hymns and song, on Sundays and perhaps one or more evenings of the week.

Work and play flow into one another, nowadays interrupted by school. Children swim and collect shells in the reef flats, swing and play in the sand, and play group games on the beach strand and within the family compounds. Among younger children the groups are generally of mixed sex. A few families have televisions and videos (during our research in 1992 there was no television station on the island); it is common for ten to 30 children to gather together to watch a video. In addition to rented videos, the Kosrae Historic Preservation Office has videotaped many cultural and historical events, and these videos are available for families to see. A few families have a computer at home, on which children might at times play a game. All households have radios, tuned to the Kosraean radio station.

Kosraeans are highly educated, with 42.6 percent of the adult population having a high school degree or higher, and many individuals hold high positions on Pohnpei within the national government of the Federated States of Micronesia. Schooling is highly valued by Kosraeans, who send several hundred children overseas for higher education every year, where they are noted high achievers. Older children are fluent in English, which is the official national language. Children begin classes in Kosraean but soon are taught in bilingual programs with English gradually introduced in the lower levels. Many Kosraean households have members who have lived overseas or who travel back and forth to the national capital in Pohnpei. In these houses English is often spoken part of the time with young children.

There are no public puberty ceremonies for either boys or girls. At adolescence there is a partial segregation by gender, as girls tend to stay with their parents while boys are moving into linked-extended households. As we discussed above, this kind of gender separation in adolescence is common in Pacific Island societies.

KOSRAEAN HOUSEHOLD DEMOGRAPHY

The Kosrae samples includes 60 households—30 from the town of Lelu and ten from each of the other three municipalities. Our sample included 28 vertically extended households, 28 nuclear households, and four

laterally extended households. Virtually all (56) of the households have young residents under the age of 18. Among those households the number of young people ranges from one to 13, with a mean value of 4.75.

Table 4 shows the number of children in different household types by gender and age category, along with sex ratios. In this table we see a shift after age ten. Among younger boys and girls (birth to age ten) we find more boys living in two-generation households and more girls living in vertically extended households. From ages 11 to 17, however, the girls shift into two-generation households, while the number of boys in vertically extended households slightly expands.⁹ This pattern is shown in Figure 5, which plots the percentage of Kosraean males and females living in vertically extended households across three age ranges.¹⁰ This pattern is almost the opposite of the pattern in Yap. Can the different pattern be explained by the fact that Kosrae has a division of labor opposite from that of Yap?

As noted earlier, Kosrae has a male farming system. Previous research on the gender division of labor has shown that male farming is associated with an intensification of female domestic labor, such as food preparation, food processing, and weaving (Burton and White 1984). If more household labor is required in nuclear households and more farm labor required in vertically extended households, then the shift of pubescent girls to nuclear households would make sense, as would the preponderance of boys in the vertically extended households with male elders.

As with the case of Yap, our work data are based on four weekly waves of a survey. In our Kosrae sample 55 out of households had one or more young people ages six to 17 during at least one wave of the survey. All of these 55 households recorded some children's work, with a range from a low of one hour during the four weeks to a high of 323 hours, or 80.5 hours per week.

Table 5 shows the average hours of work per household for the three age categories of boys and girls. As with the Yap data, these are total hours in a four-week period.¹¹ Kosraean girls do 61 percent of the children's work. Kosraean boys make their highest household work contributions between ages 11 and 14, whereas Kosraean girls make their highest con-

Table 4. Gender by age category and household type, Kosrae.

Age Group	Two-generation			Vertically Extended		
	m	f	ratio	m	f	ratio
0-10	153	108	1.42	174	211	.83
11-17	87	127	.69	104	98	1.06
18+	187	188	1.01	360	378	.95
Total	427	423	1.01	638	687	.93

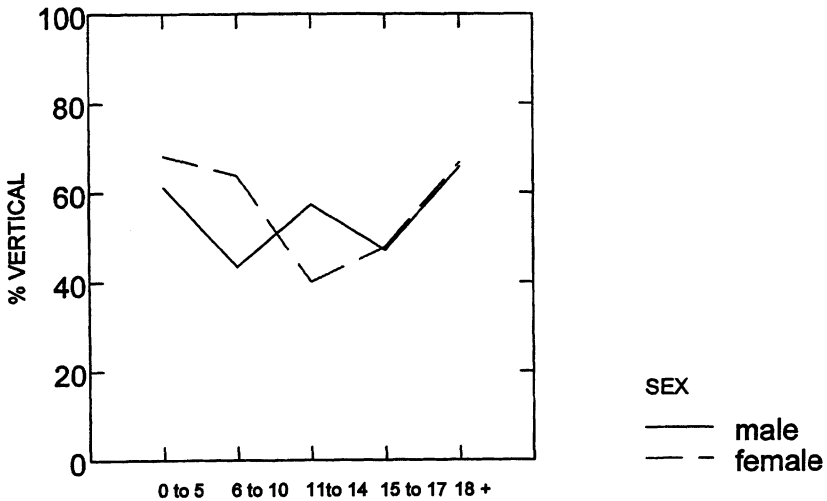


Figure 5. Gender composition of Kosraean households by age group and household type.

tributions between ages 15 and 17, but also with high contributions between 11 and 14. Kosraean girls' work is much more heavily concentrated in domestic tasks than boys' work, especially in food preparation and shopping, while boys work is concentrated in livestock care and farming.

We computed work hours per capita and per week, as with the Yap data. These numbers are higher than in Yap, but we must remember that they are based on a larger number of tasks, including kitchen work and shopping. Kosraean boys, age six to 17 average 3.9 hours of weekly work per capita, versus 5.4 hours for girls. Boys do about the same amount of work in each of the three kinds of households—4.20 hours in nuclear households, 3.58 hours in vertically extended households, and 3.95 hours in laterally extended households. Kosraean girls' work, however, varies greatly across household type—7.59 weekly hours per capita in nuclear households, 4.31 hours in vertically extended households, and only 2.90 hours per capita in laterally extended households.

Table 6 summarizes regressions of total hours of boys' and girls' work on numbers of boys and girls of the three age groups, and on a dummy variable for residence in a nuclear family household. Whereas Yapese girls do more work when living in vertically extended households and do more subsistence production, Kosraean girls do more work when living in nuclear households, where they assist their mothers in domestic tasks. And, their intensified workload occurs between ages 11 and 17, when they move out of vertically extended households. Hence, as in Yap, the adult division of labor affects children's work in a way that can account for gender differ-

Table 5. Average work hours per household by Kosraean young people by task (Four week survey period).

	Prepare Food and other Kitchen Work	Shop	Farm and Garden	Livestock	Fishing	Gathering	Total
Male 6–10	.76	.65	1.45	2.85	1.05	.40	7.16
Male 11–14	.90	.85	2.00	5.27	.63	.42	10.07
Male 15–17	.43	.15	1.31	2.02	.17	.82	4.90
Average Male contribution per household	2.09	1.65	4.76	10.14	1.85	1.64	22.13
Female 6–10	4.19	.61	.59	.09	.22	1.38	7.08
Female 11–14	9.61	.66	.54	.81	.79	.18	12.59
Female 11–14	12.03	.77	.93	.38	.83	.00	14.94
Average Female contribution per household	25.83	2.04	2.06	1.28	1.84	1.56	34.61
Per Cent							
Female	92.5	55.3	30.2	11.2	49.9	48.8	61.0

ences in young persons' residence. And as in Yap, the farming system, whether male- or female-oriented, helps explain the placement of adolescents at this key period of socialization.

DISCUSSION

We have demonstrated systematic relations among the adult division of labor, children's work, household type, and the residence patterns of male and female children. In both Yap and Kosrae gender differences in residence emerge in middle childhood, reach their maximum between ages 11 and 14, and disappear by the late teens. In both cases these demographic differences in the experiences of children and early adolescents are strongly correlated with the patterns of children's household work, especially female work. Girls and female adolescents are more likely to reside in the kinds of households where they do the most work. In Yap, farm and garden work is done by women and domestic work in food preparation is less intensive. There girls and female teens are highly involved in farm and garden work, and are heavily concentrated in vertically extended households, where that work is most intensified. In Kosrae, where farming

Table 6. Regressions predicting total boys and girls work in Kosrae.

Predictors of Female Work	Beta	t	p
Girls 6–10	12.85	2.92	.005
Girls 11–14	20.73	4.62	.000
Girls 15–17	27.65	5.44	.000
Nuclear household	17.09	2.61	.012
$R^2 = .58$			
Predictors of Male Work			
Boys 6–10	13.12	3.68	.001
Boys 11–14	23.33	5.38	.000
Boys 15–17	13.58	2.13	.038
Nuclear household	6.20	1.06	.296
$R^2 = .56$			

is primarily a male task and household domestic work in food preparation is more highly elaborated, girls and female teens shift in early adolescence into nuclear households, where they have a high domestic workload, while boys stay or move into the vertical households where they learn horticultural tasks.

These findings have considerable significance for the fields of anthropological demography and cross-cultural human development. Within demography our findings emphasize the need for better ways to represent household structure, and the importance of adapting a more processual view of household composition. The implications for cross-cultural human development are clear: if boys and girls experience different kinds of households during critical stages of their development, then they may learn very different versions of cultural and practical knowledge, be exposed to different normative systems, and experience different degrees of modernity. In particular, we think the difference between residence in vertically extended households and residence in two-generation households will affect the opportunity to learn “tradition” as it is currently constituted, as well as specialized practical knowledge, such as gardening knowledge, that is held by elders.

MICHAEL L. BURTON is Professor in the Department of Anthropology, University of California, Irvine.

KAREN L. NERO is Senior Lecturer in the Department of Anthropology, University of Auckland.

JAMES A. EGAN is Lecturer in the Department of Anthropology, University of California, Irvine.

NOTES

Acknowledgments. Our research was funded by a gift from Dr. Robert Gumbiner and by a grant from the Cultural Anthropology Program of the National Science Foundation to Michael L. Burton and Karen L. Nero. We are indebted to numerous colleagues in Kosrae and Yap who helped us to plan and carry out the research. Yvonne Braun assisted with the data analysis.

1. Whiting and Child (1953:312) concluded that the extended versus nonextended family was one of two social structure variables that affect child rearing, emphasizing the role of grandparents in enforcing rules.

2. It is in this limited context that we use the term *Micronesian* in this article (the historical experiences of the Micronesian islanders of Nauru and the Gilberts under British/Australian rule differed considerably).

3. Total Fertility Rates (TFR) were computed from data in Federated States of Micronesia (1996).

4. Census and survey research in Yap was supervised by James Egan. Andrew Kufas, and the staff of the Yap State Historical Preservation Office played an essential role in the design of the research, as did numerous Yapese consultants, including Constantine Ynuq. Census and survey research in Kosrae was supervised by the staff of the Kosrae State Department of Planning and Statistics, with the help of the Kosrae State Historical Preservation Office.

5. In the Marshall Islands they may span four generations (Burton et al. 2002).

6. We counted children in every wave of data collection in which they appear. Some children appear only once, whereas most appear in all waves of the census. A statistical test based on the numbers in the table would be misleading because the cases are not independent. We computed a Chi-Square test using data only for the first wave of the census. Using this conservative test we found $p = .025$.

7. Readers have noticed the low sex ratio (.87) in our sample of Yapese youth and asked whether a larger number of boys could be absent at school. Yapese boys are only 9 percent more likely than girls to attend high school, and are equally likely to attend grades one to eight (calculated from FSM 1996). Hence it appears that the low sex ratio is simply a sampling fluctuation. The overall sex ratio for Yap is 107.8 between ages five and 14 and 94.5 between ages 15 and 19 (FSM 1996).

8. This includes the outer islands, where employment rates are low.

9. In the 11 to 17 cohort the Kosraean sex ratio is .85. Sex ratios for all of Kosrae are 1.078 between ages five and 14 and .945 between ages 15 and 19. In Kosrae boys are 23 percent more likely than girls to attend high school (calculated from FSM 1996). If a substantial number of the boys from our households were off-island in school, that could account in part for the lower sex ratio.

10. As with the Yap data, our statistical test is based only on Wave 1 census data. The three-way interaction is significant: for example, the relation between gender and household category varies by age group ($p = .017$).

11. Our sample of children and adolescents through age 17 included three young married women. We did not include their work in our tabulations because work expectations may change considerably with marriage.

REFERENCES CITED

Bledsoe, Carolyn, and Uce Isiugo-Abanihe

1989 Strategies of Child-Fostering among Mende Grannies in Sierra Leone. *In* *Reproduction and Social Organization in Sub-Saharan Africa*. Ron J. Lesthaeghe, ed. Pp. 442-474. Berkeley: University of California Press.

- Bradley, Candice
1987 Women, Children and Work. Ph.D. Dissertation, School of Social Sciences, University of California, Irvine.
- Brady, Ivan, ed.
1976 Transactions in Kinship: Adoption and Fosterage in Oceania. Honolulu: University of Hawaii Press.
- Brown, Judith K.
1985 Introduction. *In* *In Her Prime: A New View of Middle-Aged Women*. Judith K. Brown and Virginia Kerns, eds. Pp. 1–11. South Hadley, MA: Bergin and Garvey Publishers.
- Bureau of Planning and Statistics
1993 Kosrae State Statistical Bulletin, 1992. Bureau of Planning and Statistics: Tofol, Kosrae, Federated States of Micronesia.
- Burton, Michael L., Karen L. Nero, and Jim Hess
2002 Who Can Belong to a Micronesian Household? *Field Methods* 14:65–87.
- Burton, Michael L., and Douglas R. White
1984 Sexual Division of Labor in Agriculture. *American Anthropologist* 86:568–583.
- Carroll, Vern, ed.
1970 Adoption in Eastern Oceania. Honolulu: University of Hawaii Press.
- Castle, Sarah E.
1995 Child fostering and Children's Nutritional Outcomes in Rural Mali: The Role of Female Status in Directing Child Transfers. *Social Science and Medicine* 40(5):679–693.
- Egan, James
1998 Taro, Fish, and Funerals: Transformations in the Yapese Cultural Topography of Wealth. Ph.D. Dissertation, Department of Anthropology, University of California, Irvine.
- Federated States of Micronesia
1996 National Detailed Tables, 1994 FSM Census of Population and Housing. Palikir, Pohnpei, Federated States of Micronesia: Office of Planning and Statistics.
- Goody, Esther N.
1970 Kinship Fostering in Gonja. *In* *Socialization: The Approach from Social Anthropology*. A.S.A. Monographs # 8. Philip Mayer, ed. Pp. 51–74. London: Tavistock Publications.
1982 Parenthood and Social Reproduction: Fostering and Occupational Roles in West Africa. Cambridge: Cambridge University Press.
- Gorenflo, Larry J.
1993 Demographic Change in Kosrae State, Federated States of Micronesia. *Pacific Studies* 16(2):67–118.
- Labby, David
1976 The Demystification of Yap. Chicago: University of Chicago Press.
- Metzgar, Eric Harold
1991 Traditional Education in Micronesia: A Case Study of Lamotrek Atoll with Comparative Analysis of the Literature on the Trukic Continuum. Ph.D. dissertation, School of Education, University of California, Los Angeles.
- Page, Hilary
1989 Childrearing versus Childbearing: Coresidence of Mother and Child in Sub-Saharan Africa. *In* *Reproduction and Social Organization in Sub-Saharan Africa*. Ron J. Leshtaege, ed. Pp 401–441. Berkeley: University of California Press.
- Peoples, James G.
1985 Island in Trust: Culture Change and Dependence in a Micronesian Economy. Boulder, CO: Westview Press
- Ritter, Philip L.
1981 The Population of Kosrae at Contact. *Micronesia* 17(1–2):11–28.

- Rubinstein, Donald H.
 1979 *An Ethnography of Micronesian Childhood: Contexts of Socialization of Fais Island*. Ph.D. dissertation, Department of Anthropology, Stanford University.
- Super, Charles M., and Sara Harkness
 1982 *The Infant's Niche in Rural Kenya and Metropolitan America*. In *Cross-Cultural Research at Issue*. Leonore. L. Adler, ed. New York: Academic Press.
- Taverner, Robert
 1990 *Household Income and Expenditure Survey in the Federated States of Micronesia, 1988–89*. Final Report, UNDP Project PPP TTP/86/203.
- Weisner, Thomas S.
 1984 *Ecocultural Niches of Middle Childhood: A Cross-Cultural Perspective*. In *Development in Middle Childhood*. W. Andrew Collins, ed. Pp. 335–369. Washington, DC: National Academy Press.
- Whiting, Beatrice B., and Carolyn P. Edwards
 1988 *Children of Different Worlds: The Formation of Social Behavior*. Cambridge, MA: Harvard University Press.
- Whiting, Beatrice B., and John W. M. Whiting
 1975 *Children of Six Cultures*. Cambridge, MA: Harvard University Press.
- Whiting, John W. M.
 1973 *A Model for Psycho-Cultural Research*. Distinguished Lecture. American Anthropological Association.
- Whiting, John W. M., and Irvin L. Child
 1953 *Child Training and Personality*. New Haven, CT: Yale University Press.
- Wilson, Walter Scott
 1968 *Land, Activity and Social Organization of Lelu, Kusaie*. Ph.D. dissertation, Department of Anthropology, University of Pennsylvania.