

Education and Depopulation on a Micronesian Atoll

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Abstract.—Extensive migration by young persons attending school has altered drastically the population structure of the small community on Namoluk Atoll, Caroline Islands. This alteration seems likely to lead to a continuing decline in the atoll's de facto population, the continued erosion of the community's self-sufficiency, an acceleration of the trend toward atoll exogamy, and the likelihood that Namoluk's educated young adults increasingly will emigrate from the Trust Territory to the United States and elsewhere in search of employment opportunities unavailable at home.

Introduction

During the past decade many Micronesian young adults have left the islands in pursuit of post-secondary education abroad—principally in the United States. While systematic studies of Micronesian students in the United States remain to be accomplished, several writers have given limited attention to the likely impact that this growing number of college-educated persons will have on Micronesia's future (e.g., Ballendorf, 1977; Morikawa, 1975). All such studies, however, look at Micronesia as a whole and none is based on hard data. The purpose of this paper is to assess some of the consequences of increased secondary and post-secondary educational opportunity for community life on Namoluk Atoll, by examining detailed anthropological data gathered in two research periods five years apart. The major consequence of greater educational opportunity for Namoluk persons has been a pronounced disruption of the community's population structure. This demographic shift bears implications not only for Namoluk but for many other small island societies in years ahead.

The Dilemma

Sustained rapid growth over the past thirty years has led to a doubling of Namoluk's de jure population in little more than a generation. Despite this continuous growth, however, the de facto population of the atoll had declined by January, 1976, to the lowest figure ever recorded (Table 1). Moreover, this low figure will probably continue to decline in the future. We are confronted with a paradox: the "depopulation" of an atoll whose de jure population is growing at a rapid rate.

The reason for the decline in Namoluk's de facto population is straightforward: Namoluk's resident population is shrinking because her young people are leaving their

Table 1. De facto censuses for Namoluk atoll. Details, including sources, for these censuses may be found in Marshall (1975: Table 5.2), with the exceptions of the 1910 figure (Thilenius and Hellwig, 1927), the 1973 figure (TTPI 1973), and the 1976 figure, which was derived from my field notes.

Year	De Facto population (both sexes)
1900	264
1910	335
1920	330
1925	341
1930	323
1935	289
1946	238
1970	254
1971	294
1973	263
1976	221

ancestral home to obtain high school and post-secondary education off the atoll. Once these young adults obtain an education—particularly a college education—few of them return to reside permanently on Namoluk.

While most Namoluk young people emigrate initially to further their education, they remain off the atoll upon completing their schooling for other reasons. Foremost among these is the availability of wage employment, and the comparative lack of such employment on Namoluk, but other factors also influence decisions to settle away from home. For many, permanent migration is connected with a fundamental alteration that has occurred in marriage patterns among Namoluk persons from a system of atoll and Mortlocks endogamy to one in which a growing number of marriages occurs with spouses from Truk Lagoon and points beyond (see Marshall (1975) for a detailed account of this alteration). Most of the recent marriages with individuals from outside the Mortlocks are between persons who have met in school, and thus it is fair to say that off-island educational opportunities have had an important effect on Namoluk marriage patterns. Yet another reason that many educated Namoluk young persons settle away from their home atoll is that life at home has become a bore. The more exciting lifestyle associated with the “bright lights” of places such as Moen, Honolulu, or Portland to which these young people have been exposed while attending school has made most of them unwilling to return to the quieter outer island existence in which they grew up.

The new opportunities for education, employment, and marriage away from Namoluk have bred an attitude expressed nicely by one young Namoluk man, reflecting on a visit home after three years of college, before returning to the States to complete his schooling. He said he was, “Glad to go but sorry to leave”. Many Namoluk young persons would like to return home upon completing their schooling, but there is little for them to “do” there and this keeps them away.

The Population Shift

The migratory processes that have affected Namoluk's population are illustrated in Tables 2 and 3, which compare the situation in January, 1971, with that in January, 1976. Readers interested in a more detailed description of Namoluk population structure are referred to Marshall (1975).

That major readjustments have taken place between the on-island and off-island components of Namoluk's population over this five year period is shown in Table 2. While close to three-fourths of Namoluk's de jure population resided on the atoll in 1971, less than one-half of the de jure population was on the atoll five years later. During this same time the number of Namoluk persons off the island more than doubled. Clearly, migration is the dominant demographic trend.

While by 1976 the number of persons in nearly all age cohorts located off the atoll had increased over the comparable figures for 1971, Table 2 also shows that striking differential migration has occurred. Specifically, young adults between the ages of 15 and 29 have moved out most emphatically: in fact, 85 percent of all Namoluk persons between the ages of 15 and 29 were away from the atoll in January, 1976. As noted above, the major reason persons in this age group are not to be found on Namoluk is because they are enrolled in schools elsewhere.

Namoluk pupils attend school on their home atoll through 8th grade. Until the early 1970s, all eighth graders in Truk District took a competitive examination which allowed only those who scored in the upper quarter to the upper half admission to high school on Moen Island. In more recent years, intermediate schools (9th and 10th grades) have been built in Truk District, and now all Namoluk 8th grade graduates go on for at least two more years at the intermediate school on Satawan Atoll. Satisfactory completion of 10th grade on Satawan allows these students to continue their high school education in the district center on Moen Island, Truk for their last two years (cf. Ramarui 1976). In recent years, after graduation from high school, most Namoluk students have gone on for further education away from Truk (Table 6).

The out-migration of Namoluk young adults, and hence their under-representation in the de facto population, has resulted in an "hour-glass" population profile for the atoll. In both 1971 and 1976, approximately two-thirds of the de facto population was either under age 14 or over age 55 (Table 2). Contemporary Namoluk may be described quite accurately as a combination "old folk's home" and "day care center."

Table 3 provides more detailed information on the off-island components of Namoluk's de jure populations in 1971 and 1976. Most striking is the fact that three times the number of females were located off-island in 1976 as were away in 1971. During this same five year period, the number of males away from Namoluk did not even double. Consequently, while males outnumbered females off the atoll by more than two-to-one in 1971, the sexes were represented nearly equally off the atoll by 1976.

There is a twofold explanation for this. First, women increasingly have had post-elementary educational opportunities formerly denied them by cultural and

Table 2. Namoluk de jure populations alive on 1 January 1971 and 19 January 1976 by age and location.
(Sources: 1971 data are from Marshall (1975: 178. Table 5.4); 1976 data are from Marshall, field notes.)

	On-Island both sexes			Off-Island both sexes			Total population both sexes					
	1971		1976		1971		1976		1971		1976	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
0-4	54		40		8		33		62		73	
5-9	46	55	43	54	3	12	11	13	49	25	56	42
10-14	50		36		1		15		51		51	
15-19	17		5		28		45		45		50	
20-24	10	15	4	9	30	64	56	44	40	50	48	27
25-29	13		11		6		29		19		40	
30-34	15		10		12		7		27		17	
35-39	14		14		5		14		19		28	
40-44	9	21	10	23	1	33	29	9	10	17	19	23
45-49	9		9		7		2		16		11	
50-54	10		7		8		8		18		15	
55-59	8		10		2		10		10		20	
60-64	7	9	5	14	1	5	4	4	8	8	9	8
65+	10		17		2		4		12		21	
All ages	272	100	221	100	114	100	237	100	386	100	458	100

Table 3. Namoluk off-Island de jure populations alive on 1 January 1971 and 19 January 1976, by sex and age. (Sources: 1971 data are from Marshall (1975: 178, Table 5.4); 1976 data are from Marshall, field notes.)

Age	1 January 1971			19 January 1976		
	Males	Females	Both sexes	Males	Females	Both sexes
0-4	4	4	8	14	19	33
5-9	3	0	3	9	4	13
10-14	0	1	1	7	8	15
			12			61
15-19	19	9	28	23	22	45
20-24	23	7	30	26	18	44
25-29	4	2	6	20	9	29
			64			118
30-34	6	6	12	2	5	7
35-39	3	2	5	6	8	14
40-44	1	0	1	5	4	9
45-49	5	2	7	1	1	2
50-54	4	4	8	4	4	8
			33			40
55-59	2	0	2	4	6	10
60-64	1	0	1	2	2	4
65 and over	2	0	2	3	1	4
			5			18
All ages	77	37	114	126	111	237

social attitudes concerning the education of women. The sudden rush of a majority of young women into high school and beyond began only in the late 1960s. Second, with nearly all the eligible young men off the atoll it is not too surprising that the young women have followed suit. Chances of young women being courted and marrying on Namoluk have declined precipitously as young men have left the atoll for school and employment.

We have seen that migration from Namoluk has increased strikingly between 1971 and 1976 and that three-fourths of the de jure population away from the atoll in 1976 was under 30 years of age (Table 3). Moreover, we have observed that young adults between the ages of 15 and 29 are an increasingly rare component of Namoluk's de facto population by 1976. Finally, we have noted that while males have greatly outnumbered females off-island in years past, the sexes are now off-island in approximately equal numbers. All of this taken together makes it clear that a severe shortage of able-bodied young adults exists on Namoluk today which must have profound consequences for the continuation of community life as this has existed in the past. We shall return to these consequences in the conclusions to this paper.

Where They Have Gone

Table 4 directs our attention to where Namoluk persons who have left their atoll

have gone. Sixty-four percent of the 1971 off-island population was located in Truk Lagoon (especially in the urban center on Moen Island) and this figure remained at 61 percent in 1976. In both census years the proportion of Namoluk's population located elsewhere in Truk District stood at about 21 percent, and the percentage of Namoluk persons located elsewhere in the United States Trust Territory of the Pacific Islands (USTTPI) remained constant (7 percent in 1976 vs. 8 percent in 1971). The sole increase during this period was registered for locations Outside the Trust Territory where the figure rose from 7 percent of the off-island population in 1971 to 11 percent in 1976. Nearly all of this increase is accounted for by young adults pursuing a college education in the United States.

Table 4 also reveals that the number of persons in each major off-island location category has grown markedly over five years. The number has doubled for Islands in Truk Lagoon, Elsewhere in Truk District, and Elsewhere in the USTTPI. During this same period Namoluk citizens have become more widely dispersed. In 1971, they were to be found on seven other islands in Truk District, four islands elsewhere in the Trust Territory, four states in the U.S.A., and Guam. By 1976, they were spread over ten different islands in Truk District, six islands elsewhere in the Trust Territory, seven states in the U.S.A., on Guam, and in Thailand. Slightly over one-half (26/50) of the Namoluk persons located on islands Elsewhere in Truk District were students attending the intermediate school on Satawan.

The striking increase in the number of Namoluk females away from the atoll also is evident in Table 4. The number of females located on Islands in Truk Lagoon, Elsewhere in Truk District, and Elsewhere in the USTTPI all tripled while the

Table 4. Namoluk off-Island de jure populations alive on 1 January 1971 and 19 January 1976, by sex and location. (Sources: 1971 data are drawn from Marshall (1975: 181, Table 5.5); 1976 data are from Marshall, field notes.)

Location	1 January 1971			19 January 1976		
	Males	Females	Both sexes	Males	Females	Both sexes
Islands in Truk Lagoon*	49	24	73	69	76	145
Elsewhere in Truk district	16	8	24	26	24	50
Elsewhere in USTTPI	9	0	9	14	3	17
Outside of USTTPI	3	5	8	17	8	25
All locations	77	37	114	126	111	237

* Includes the urban port-town ("district center") on Moen Island, Truk.

corresponding figures for males failed to double. Only for those locations Outside the USTTPI has the number of males grown faster than the number of females during the five years under consideration: here the number of males has increased almost six times over the 1971 figure.

A more detailed breakdown of the category Outside of the USTTPI is provided in Table 5. Immediately apparent is the dramatic upswing in the number of Namoluk persons located in the United States—more than nine out of ten Namoluk persons away from the Trust Territory are in America. This number amounted to 5 percent of the de jure population of Namoluk Atoll in 1976, and is a direct result of the new educational opportunities that have become available to Micronesian young people.

Beginning in 1973, several government programs, e.g., Basic Educational Opportunity Grants (BEOG), Work-Study, and low-interest National Defense Loans (NDSL), were extended to persons in the U.S. Trust Territory. Given their small family incomes (when compared with those in the United States) and their “minority” status, nearly every Micronesian student instantly qualified for these new federal programs designed to assist low-income persons in furthering their education. Ever increasing numbers of Micronesian students have taken advantage of this “bonanza”, along with scholarship and loan funds from the Congress of Micronesia and the various district legislatures, and Namoluk young people are no exception. Going to the U.S.A. for college and junior college education has become the latest status symbol of educational achievement for Namoluk young adults, but this trek from Truk to the world beyond brings status in other ways as well. Just as their great-grandfathers signed aboard trading and whaling vessels a century ago to “see the world”, so Namoluk young persons today (especially young men) set off to “see the world” on a Boeing 727.

A more specific idea of how educational opportunities have affected the migration of Namoluk’s young adults can be obtained by examining the “careers” of those students who have graduated from the district’s high schools over the last five

Table 5. Namoluk off-Island de jure populations located outside the USTTPI alive on 1 January 1971 and 19 January 1976, by location. (Sources: 1971 data are from Marshall (1975: 181, Table 5.5); 1976 data are from Marshall, field notes.)

Location	1 January 1971	19 January 1976
Guam Island	4	1
U.S.A.	4 ^a	23 ^b
Thailand	0	1 ^c
All locations	8	25

^a This breaks down by state as follows: Hawaii = 1; Minnesota = 1; Oregon = 1; Wisconsin = 1.

^b This breaks down by state as follows: Arizona = 1; California = 5; Florida = 2; Hawaii = 3; Michigan = 5; Montana = 2; Oregon = 5.

^c This is a young Namoluk woman married to an American M.D. stationed in Thailand with the U.S. Public Health Service.

Table 6. Namoluk student "careers" by class years as of 19 January 1976.

Year of graduation	Number in class	Number who graduated	Number employed	Number with Post-H.S. education abroad	Number located outside Truk district	Number located on Namoluk
1972 ^a	7	6	1	5	4	1
1973 ^b	12	10	2	8	7	2
1974 ^c	13	10	0	8	7	0
1975 ^d	9	9	2	6	7	0
1976 ^e	6	6	0	4	0	0
Total	47	41	5	31	25	3

- ^a The member of this class who did not graduate finished 3 years at Truk High School and then transferred to the Micronesian Occupational Center in Palau. Following my January 1976 census, another member of this class returned to Moen from the USA after graduating from college and is now employed.
- ^b The two members of this class who did not graduate dropped out of high school after one or two years. One member of this class graduated from High School on Guam. The two who are employed are schoolteachers. Two others returned to Moen from abroad after my census to seek employment.
- ^c All three members of this class who did not graduate dropped out of high school, are unemployed and living on Truk. A fourth member of this class dropped out of college after a year in the U.S. and has returned to Moen where he is married and unemployed. One member of this class graduated from high school in Hawaii.
- ^d The two members of this class who are employed took jobs right out of high school. One member of this class completed high school on Palau and has remained there.
- ^e The figures for this year are incomplete: I do not know what has become of two of the graduates. Three members of this class left Truk to further their education in the fall of 1976, although one has subsequently returned to Moen; a fourth began college in the U.S. in January 1977.

years (Table 6). Of forty-seven potential high school graduates from Namoluk during this period, forty-one graduated (87 percent) and thirty-one (two-thirds of the total) have gone on for further training, mostly in the States. In early 1976, only a handful of these forty-seven persons was employed. Most were still in school. Over one-half of them were outside Truk District at census time in 1976, and over 90 percent (44/47) were away from Namoluk. The primary factor that continues to affect the exodus of these young adults from Namoluk is new educational opportunity.

Conclusions

This paper has documented the fundamental change in de facto population structure that extensive outmigration by young persons attending school has wrought on Namoluk Atoll. It is now apposite to examine the implications of such changes for the community life of Namoluk and similar small island societies. In a recent unpublished paper entitled "The anthropologist and social problems in Micronesia", Fran Hezel has labeled many of the issues to be discussed below as "major social problems" that are "painfully obvious to those of us who live in Micronesia". Specifically, Hezel cites the debilitation of local communities, migration into towns,

and "over-education" as among the problems worthy of investigation by concerned social scientists working in the islands.

For their numbers, Namoluk persons have been amazingly successful in taking advantage of recent opportunities to obtain higher education in the United States. Wholly accurate data on the number of Micronesian students studying abroad do not exist, yet a consensus exists among those who have looked into the matter that roughly a tenfold increase has been registered over the past decade. Ballendorf (1977 : 6) claims there were approximately 300 Micronesians studying abroad in 1967. During the 1973-1974 academic year, immediately following the availability of the various federal programs for low-income students discussed above, this number rose to between 1000 and 1200 (Morikawa, 1975 : 21). The number of students abroad has continued to climb, with Hezel estimating 2000 for 1976-1977 and close to 3000 for the 1977-1978 school year (cf. also Ballendorf, 1977 : 6). Figuring that approximately 1500 Micronesians were studying abroad during 1975-1976, Namoluk persons comprised more than 1.5 percent of the total even though Namoluk's *de jure* population made up only about .4 percent of the entire Trust Territory population. There can be no question that Namoluk persons have woven higher education firmly into the social fabric of their atoll's future.

Other data indicate the high value that Namoluk people place on education. More than two-thirds of the respondents to a questionnaire administered to all adults resident on the atoll in June 1971, indicated a preference for more education over more land, even though typically throughout the Pacific, atoll dwellers value land above all other "possessions". While this emphasis on educational achievement doubtless has contributed to Namoluk's success in Micronesia's "educational sweepstakes", it has also been a major factor leading to the alteration in population structure noted above. Valuing education highly and encouraging their children to seek their future through education, Namoluk parents inadvertently have created a dilemma in which their children no longer return to the atoll where there is a lack of employment and excitement. Magnified from a focus on Namoluk to a focus on the wider Trust Territory scene, these hopes regarding education have contributed to what Nevin (1977) calls the "dangerous sense of unreality" that he believes afflicts contemporary Micronesia, namely, that attitudes and expectations have been created which cannot be satisfied. Nevin lays most of the woes that beset Micronesia today squarely at the door of the educational system fostered under the American administration, but I am convinced that the matter is more complex and less pessimistic than he paints it.

From what we know of the effects of outmigration on small communities in other parts of the world, e.g., the American Midwest, we can venture a number of predictions for small island societies like Namoluk. First, the community will not disappear, i.e., the atoll will not become uninhabited. Nevertheless, the *de facto* population of Namoluk probably will continue to decline, coming more and more to resemble the communities of the Southwest Islands in Palau District where the social machinery is kept going with a "skeleton crew" (McKnight, 1977). The continued

decline in Namoluk's de facto population will occur as more and more members of Namoluk's de jure population are born and reared away from the atoll by young adults entering their child-producing years, and as more of the parents of these young adults move away to live with and be supported by their educated, employed children. Commensurate with this trend the atoll will become a place of "vacation homes", a process that already has begun. This phrase refers to the tendency for many young adults working away from the atoll to build nice cement homes on Namoluk that stand empty much of the year except when they and their families return to the atoll for periodic vacations.

A second implication of the population shift that is occurring is that community self-sufficiency on the atoll will be further eroded. When highly educated persons leave a country and migrate abroad it is common to speak of a "brain drain". Less obvious but equally important is that migration to the towns (as well as migration abroad) creates a "brain drain" for communities such as Namoluk that is perhaps even more severe because of its extent (recall that nearly 90 percent of the de jure population aged 15-29 have left Namoluk). Bereft of their best minds and likely leaders such communities may find it more difficult to organize themselves effectively, a task made even harder by a lack of able-bodied persons to perform the physical labor needed for community work projects and to sustain a labor-intensive subsistence economy. In the face of this, communities like Namoluk may become even more dependent on imported programs and foodstuffs.

A third prediction that follows from Namoluk's heavy outmigration is that the tendency toward atoll exogamy, reversing a long-standing pattern, will increase (Marshall, 1975). Not only will Namoluk young people come to marry greater numbers of persons from outside the Mortlocks, but it also seems likely that more and more of them will marry non-Trukese. This has begun to occur already as Namoluk students meet other Micronesian and American students at schools in the U.S.A. Along with these non-Namoluk and non-Mortlocks marriages will come a problem of ethnic identity. As fewer Namoluk youngsters spend their childhood years on the atoll, and as more of them have a parent from outside Truk District, cultural notions about what constitutes 'Namoluk citizenship' will alter. Such alterations will affect a host of things, not the least of which will be land rights and inheritance patterns on the atoll.

A final prediction concerns the long-range prospects for employment of college educated persons from Namoluk and elsewhere in Micronesia. Observers like Nevin (1977:28) remark on current unemployment in "this angry, sullen, frightened paradise in the western Pacific", but they ignore the history of similar societies elsewhere in Oceania. It is logical to expect that as wage jobs become increasingly scarce in the Trust Territory, job-seekers will look abroad for other opportunities (as Palauans already have done on Guam). It is also logical to expect that young people who already have had a taste of life in the United States will return there for employment just as persons from American Samoa have done (cf. Lewthwaite, Mainzer, and Holland, 1973). There may come a time not too many years hence when

Micronesians resident in the United States—like American Samoans—will outnumber “the folks back home”. Alternatively, outer island communities may undergo a cultural and demographic revitalization as educated migrants, longing to reestablish their cultural and ethnic roots, forego the urban centers and work toward building a new economic future for their home communities. Which of these scenarios comes to pass lies ultimately in the hands of Micronesia’s educated young adults.

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