

CHAPTER IV

POPULATION

In this chapter I will present population statistics for the village of Aman-Namkaj and for the Asmat region as a whole. I will indicate some of the ways in which warfare and ecological variations have had effects on the distribution of Asmat population. Then I will make some comparisons between the Asmat and the other groups that make up the Kamoro-Asmat speakers.

THE ASMAT

Aman-Namkaj

Population

Table I presents the results of a census taken of the households in Aman-Namkaj during the summer of 1962. The population at that time was six hundred ninety-eight. This was a slight increase over the population in 1960, which was six hundred eighty-two (van Amelsvoort 1964:192).

Both in the births which occurred while I was in the village and in the population figures, particularly for the Aman men's house group, there is a slight preponderance of males. This is probably within the normal range of variation. The Asmat do practice infanticide. Mothers may kill unwanted or deformed children, and fathers may kill children whom they believe to be the progeny of other men. But informants denied a tendency to female infanticide. Nor is

Age	Awok		Namkaj		Aman		Total	
	M	F	M	F	M	F	M	F
0-4	22	23	23	22	23	20	68	65
5-9	20	17	22	19	25	15	67	51
10-14	11	13	13	12	14	11	38	36
15-19	8	15	10	14	10	14	28	43
20-24	13	16	10	12	14	10	37	38
25-29	9	8	9	8	10	10	28	26
30-34	7	6	12	11	9	8	28	25
35-39	8	3	7	6	6	8	21	17
40-44	3	4	3	2	5	6	11	12
45-49	4	5	4	3	6	4	14	12
50-54	4	2	2	2	3	1	9	5
55-59	2	0	1	1	0	0	3	1
60-64	0	1	1	1	1	2	2	4
65+	1	0	2	1	4	1	7	2
Total	112	113	119	114	130	110	361	337
Gd. Total	225		233		240		698	

Table I

The Population of Aman-Namkaj

The population figures for the different men's house groups are for entire households in the different sections of the village. In-marrying individuals are reckoned as members of their spouse's men's house group.

there a feeling that the first child should be a boy, such as Zegwaard (1954a:5) reports for Mimika. Infanticide is in any case rare. Most children are wanted and prized.

A whooping cough epidemic which originated outside the Asmat area spread through the village during the early months of 1962. It had its effect almost entirely on children under four years of age. This partially accounts for the absence in Table I of any significant decline in numbers between the two age groups composed of children of four or under and those from five to nine. In addition, though, I suspect that I may have consistently under-estimated the age of pre-pubertal children over nine years of age. Some of the children whom I classed as under ten probably belong in the age range of ten to fourteen.

Birth and Death Rates

As the population figures indicate, an Asmat has a fair chance of surviving to middle age if he or she survives the first attacks of malaria and other diseases during the first ten years of life. Malaria is endemic and can result in serious sickness, but it is rarely fatal during the middle years of life. Yaws are present during this period, but are not usually fatal until a later age. Warfare, village fights, and simple homicide account for many of the deaths in this age group. Crocodiles kill many people, especially women who are out net fishing. Pig hunting can also be a lethal

occupation. Fright of black magic accounts for a few victims. One middle aged woman, who appeared to me to be in a state of psychotic depression, starved to death because she refused to eat.

After the age of forty-five or fifty, chronic diseases take their toll, as do other diseases, especially pneumonia. The oldest people in the village are often vigorous, respected leaders. Nevertheless, the oldest Asmat man I ever saw, a senile man who must have been at least eighty, died principally because of neglect and starvation.

In the period from November 15, 1961 to August 26, 1962 there were nineteen male births and eleven female births, a total of thirty. This is a birth rate of approximately fifty per thousand per year. During the same period, eighteen boys and eight girls under the age of four died. Three adult men, one of them very old, one girl about ten years of age, and three adult women, all over fifty, also died during this period. This is a death rate of approximately fifty-five per thousand per year.

These figures indicate a stable or even declining population, but they undoubtedly present a false picture. The whooping cough epidemic of the first months of 1962 was directly responsible for the deaths of five boys and two girls under four, and further deaths may well have resulted from the lowered state of general health caused by the epidemic,

to which the young children had very little resistance. While there is no doubt that there is normally a high rate of mortality among children, resulting principally from malaria and pneumonia, genealogical material indicates that the adult population of Aman-Namkaj has grown rapidly in the last generation, both by natural increase and by the immigration of groups and individuals from other villages.

The Asmat Region as a Whole

Population

In 1960-61 the Kawenak, living in thirty-one villages, had a total population of fourteen thousand five hundred eighty-nine; the Keenok, in thirteen villages, had a population of seven thousand one hundred sixty-nine; the Keenakap, in ten villages, had a population of one thousand seven hundred eighty (van Amelsvoort 1964:192-193). The populations of the major Asmat villages are shown in Table II. In that table, the villages are grouped according to river course rather than by dialect group.

During the following discussion the reader is asked to compare Table II with the map of the Asmat region. Certain points should be borne in mind. Small refugee villages far up sidestreams have been ignored. Jamas-Jeni was formerly located farther upstream, closer to the present location of Saowa, but moved downstream at the behest of Europeans. There was exploration for oil on the upper Lorentz River

Le Cocq d'Armandville River		Northwest River	
Ao	251	Jemas-Jeni	837
Keni	307	Seowa	1,005
As-Atat-Nakai	676	Erma	696
Emo-Espeno	75	Mu	665
		Agani	573
		Momogo-Sagapo	295
Lorentz River		Utumbuwe River	
Joun-Jufri	578	Jepen	401
Komor	779	Ewer	696
Jinajer	709	Suru	697
Manep	887	Ajam	1,407
Monu	962		
Cemor	212		
Awemu	100		
North Eilanden and Eilanden Rivers		South Eilanden and Kampong Rivers	
Amborep	539	Miwar-on-sea	509
Warse	631	Jow	473
Jao-Sokor	397	Amisu	293
Namen	162	Ac	1,163
Keimo	289	Aman-Namkaj	682
Awok	121	Nanim	216
Os	64	Mipim	115
Fos	189	Mine	256
Jinak	243	Sogoni	207
Wooi	165		
Coastal		Coastal	
Per	365	Oma-Nesep	695
Owus	504	Ocanep	1,068

Table II

Populations of Major Asmat Villages by River Course

Figures are for 1960-61. After van Amelsvoort 1964:192-193. On each river, villages are listed in order, starting from downstream.

during the mid-1950s. The demand for labor may have increased the population of Monu and may have lured members of that village somewhat farther upstream than normally. Manep did become larger as a result of the immigration of Simne, a village of perhaps three hundred people, from its former position on the Utumbuwe upstream from Ajam. This recent migration explains the absence of any village above Ajam on the Utumbuwe.

It is everywhere the case that the largest villages on a river are located in its middle course. The villages toward the coast are somewhat smaller; those inland are usually very much smaller. There are several related ways in which the cresting of village population in the middle courses of the rivers can be viewed. In the first place, this middle zone represents, in general, the optimum balance between tidal swamp and fresh water swamp. It can, therefore, support a relatively larger population than areas downstream or upstream. In the second place, the desirability of this zone as a settlement site must naturally result in a state of especially intense warfare there. In fact, as noted in Chapter II, much of the most intense warfare in recent years has been in this zone, particularly in the area of the Northwest and Lorentz Rivers. Given the correlation between intense warfare and large villages, it is to be expected that the largest villages will lie in the middle courses of the large rivers.

In the third place, this middle zone corresponds to the division between upstream and downstream dialect groups. Though there is no love lost among villages of the same major dialect group, there is no doubt that a special enmity is directed toward completely alien groups. This would also result in intensified warfare and larger villages. Finally, however, the dialect divisions are probably not only a cause but also a result of the intensive competition in the middle zone. In such riverine territory, one would expect that dialect groupings would correspond to entire river courses. That they do not do so may well result from long-standing hostilities up and downstream from the optimum central reaches of the rivers.

A similar set of factors must be having effect on the northernmost portion of the Casuarine Coast. Here, the two coastal villages of Oma-Nesep and Ocanep have intruded from the Kawenak area on to the Casuarine Coast, where rich stands of sago forest extend almost to the coast. Both these villages speak the Mec-Mip sub-dialect of Kawenak. The other villages of this dialect group are located on the South Eilanden and Kampong Rivers at least as far upstream as the village of Nanim. Ocanep, which lies farthest southeast along the Casuarine Coast and is a very large village, is a rather interesting special case. Although it is linguistically and culturally a Kawenak village, it is allied

politically with the Casuarine Coast villages to the south-east and is considered to be a Casuarine Coast village by the Kawenak. Ocanep and Oma-Nesep are deadly enemies. It looks as if Ocanep, having spearheaded a Kawenak intrusion into the rich coastal sago areas of the Casuarine Coast, has found itself in the position of having to defend these same sago areas against further intrusions.

There remains one problem. While the North Eilanden-Eilanden River sequence in Table II does not vary from the generalization that the largest villages are located on the middle course of the river, nevertheless it is the case that the Keenakap villages upstream from Jao-Sokor are on the whole quite small. The large villages of the upper Lorentz and Northwest Rivers are not duplicated on the upper Eilanden River. This is explained by the fact that salt water does not extend as far inland on the Eilanden River as it does on the Northwest and Lorentz Rivers. Sea water flows almost undiluted at least as far inland as Saowa on the Northwest River, while the water is only occasionally brackish at Ac-Jasiw and Aman-Namkaj. I do not know what combination of geographic factors results in this difference. In any case, most of the Keenakap villages are small fresh water swamp villages like those farthest upstream on the Lorentz and Northwest Rivers. This is also reflected in the low total population of the group.

Birth and Death Rates

Reporting on several villages in different regions of the Asmat area for different years, van Amelsvoort (1964: 196) reports crude birth rates ranging from twenty-eight to eighty-four per thousand per year. The mean average of the figures he gives is sixty-six per thousand per year. He shows crude death rates ranging from twenty-one to forty-five per thousand per year. The mean average of the figures he gives is thirty-one per thousand per year. The mean average net increase works out to thirty-five per thousand per year. Thus, the period during which birth and death statistics were collected in Aman-Namkaj was one in which the birth rate was below the apparent average for the Asmat as a whole and in which the death rate was considerably above the average for the Asmat as a whole.

Table III reviews the population data for a number of Asmat villages from 1956 through 1961. It will be noted that, though some villages have expanded in population and others have declined, the over-all population increased by about thirteen per cent in the area which van Amelsvoort calls the central Asmat and about nine per cent in the border regions. These increases have occurred during five years of pacification. If they continue unabated, the Asmat population will approximately double every fifty years.

CENTRAL ASMAT						
	1956	1957	1958	1959	1960	1961
Ao	229	244	243	248	272	272
As/Atat/Nakaj	688	704	653	639	687	676
Jaun/Jufri	467	573	586	539	546	578
Kapi	238	265	249	265	277	307
Per	332	---	307	316	314	365
Ajam	1,202	---	1,300	1,285	1,409	1,407
Amborep	493	---	509	505	519	539
Ewer	658	---	658	686	655	697
Jepem	349	---	400	382	383	401
Total	<u>4,656</u>	<u>1,786</u>	<u>4,905</u>	<u>4,865</u>	<u>5,062</u>	<u>5,242</u>
BORDER REGION OF ASMAT AREA						
Agani	603	559		488	631	573
Mu	686	717	1,231	617	617	665
Jipajer	670	712	724	699	736	709
Manep	578	871	871	938	938	887
Monu	933	---	1,000	919	905	962
Kowet	97	---	109	123	127	121
Momogo	265	---	256	163	200	295
Tjemor	239	---	239	238	176	212
Total	<u>4,071</u>	<u>2,859</u>	<u>4,430</u>	<u>4,185</u>	<u>4,330</u>	<u>4,424</u>

Table III

Population Changes in Some Asmat Villages

After van Amelsvoort 1964: 108-109

It is somewhat difficult to relate these recent figures to the situation prior to the coming of the Europeans. Van Amelsvoort (1964) discusses in detail the introduction of European medical practices among the Asmat. I judge that, especially in the border regions, these medical practices have not yet made much difference in either the birth rate or the death rate. Pacification has made a difference, however. Zegwaard (1954a:11, quoted in Appendix I) estimates that one to two percent of the population was killed each year in warfare and feuding. If this estimate is correct, then the Asmat population as a whole must have been almost stable prior to the coming of the enforced peace.

This does not mean that the population of each village was stable. As is pointed out in Chapter II and in Appendix I and as can be seen in Table III, there was a wide fluctuation in the population of particular villages. Some were nearly, or entirely, exterminated. Others grew, not only as a result of luck or skill in warfare, but also as a result of the incorporation of individuals and entire groups from other villages.

THE KAMORO-ASMAT REGION AS A WHOLE

Equation of Kawenak with Sempan

Mimikan Terms for Social Units

Before discussing the population contrasts between the different areas of the Kamoro-Asmat region, it is necessary

to turn briefly to some of the characteristics of Sempan social organization, for this group is the key to making comparisons between the Asmat and the Mimikans. Because the Sempan village is essentially similar to a small Kawenak village, it is possible to see how Mimikan, and Power's, terminology would be applied to Kawenak villages.

Each Sempan village constitutes a "stan." Each is organized into two neighborhoods on either side of a men's house. In the three Sempan villages five of the six neighborhoods are occupied by a single named group of people known as a tapary group. In the village of Onawka, there are no further named subdivisions within the two tapary groups. In the village of Otokwa, two formerly separate stammen have combined to form one men's house group. These two former tribes now constitute two named tapary groups within a single compound tribe. Nevertheless, the five tapary groups which were components of the former separate tribes retain their names, so that we have the significant situation in which named tapary groups include other named tapary groups. In Inawka there are two tapary groups in one of the neighborhoods and one tapary group in the other (Power 1954:91 and 282-283). I think that it is clear that a Mimikan, or Power, in discussing Kawenak social organization, would term the Kawenak men's house group a "stan" and the men's house moiety a "tapary group." In this chapter only, I will adopt this terminology.

Comparison of Sempan and Kawenak Populations

As is shown in Table IV, Sempan stammen are also about the same size as large Kawenak stammen. The range in population size of Kawenak stammen is very wide. According to the fortunes of war, a group may shrink to or beyond the verge of extinction. The villages of Jepem, Suru, Mecow, and Atamut, which have some of the lowest average number of people per stam, are all villages which, to my knowledge, have been very badly mauled in warfare during the last fifteen to twenty years. I am less sure what the situation is in Kiwar. The village of Ac-Jasiw, on the other hand, has very large stammen, which are accounted for, at least in part, by the fact that in recent years the village has absorbed refugees from the now defunct village of Aniw and from Atamut. Similarly, in Inawka, in the Sempan area, it seems probable that the aberrant third taparu group accounts for the very large populations of that stam. If one calculates the average size of the taparu groups among the Sempan, the result is one hundred fifteen, not very different from the average taparu population of the Kawenak, which is ninety-three.

Kamoro-Asmat Population Comparisons

Having made this equation between Sempan and Kawenak groups and terminology, it is possible to proceed to the comparisons between the various Kamoro-Asmat groups which are made in Table V.

Village	Number of Men's Houses	Population
<u>Kawenak</u>		
Jepen	4	401
Suru	5	697
Ajan	6	1,407
Mecow	1	142
Anan-Nankaj	3	682
Atanut	1	139
Nanim	1	216
Miwar	5	509
Ac-Jasiw	3	1,163
	<hr/>	<hr/>
Total	29	5,356
 <u>Sempan</u>		
Otokwa	1	184
Inawka	1	375
Onawka	1	243
	<hr/>	<hr/>
Total	3	802
Average size of Kawenak men's house group:		185
Average size of Sempan men's house group:		267

Table IV

Population of Kawenak and Sempan Men's House Groups

The Kawenak villages included are those where the author knows the current number of men's house groups in the village. The population figures are taken from van Amelsvoort 1964:192.

The Sempan data are taken from Pouwer 1955:91 and 282.

Region	Total Population	Mean Village Population	Mean Stan Population	Mean Tapary Group Population
W. Kamoro	2,689	134 ¹	112 ¹	44 ¹
E. Kamoro	4,303	245	179	63
Sempan	802	267	267	115
Keenok	7,169	551	200 ²	100 ²
Keenakap	1,780	178	189 ³	95 ³
Kawenak	14,589 ⁴	471 ⁴	185 ⁴	93 ⁴
N. Cas. Cst.	3,653	332	?	?
S. Cas. Cst.	2,978	331	?	?

Table V

Mean Population of Units of Kamoro-Asmat Societies

Figures are calculated from Pouwer 1954:282-286 and van Amelsvoort 1964:192-193 except where noted otherwise. The Mimika statistics are for 1952; the Asmat statistics are for 1960-61.

The Asmat men's house group has been equated with the Sempan stan and the Asmat men's house moiety has been equated with the Sempan tapary group in accordance with the discussion in the text. Similarly with the feast house group of the Keenok.

1. It must be remembered that most of the "villages" of the western Kamoro, and some of the eastern Kamoro had dispersed settlement patterns in aboriginal times. I have excluded one village from the reckoning of the last two figures for the western Kamoro. No stan name is known for the village of Nanessa, and the number of tapary groups listed appears to me to be fantastically high for a village of 100.
2. This figure is for the feast house group of Monogo-Tame only.
3. This figure is for seven downstream Keenakap villages known to me.
4. Van Amelsvoort considers the village of Oeanep to be a Casuarine Coast village. Since its dialect is Kawenak, I have considered it to be a Kawenak village. I have excluded the non-Kawenak villages of Mipim and Warkaj. The last two figures are for the same group of villages as in Table V.

Village Population

The total population and average village size of the sub-divisions of the Kamoro-Asmat people are shown in the first two columns of Table V. As has already been suggested, and as would be expected from the higher intensity of warfare in the center of the Kamoro-Asmat region, the villages are generally smaller in the peripheral regions and larger in the central regions. The only exception to this tendency lies among the Keenakap speakers, who have already been discussed. Note that even though the stammen are bigger toward the center of the area, the ratio between stam size and village size nevertheless increases.

Taparu Group Population

The figures in column three and four are mean averages. They conceal a point of some importance. The results of some calculations with the population information for Mimika are presented in Table VI. There are not sufficient cases to make the same calculations with the Kawenak. Using the smallest units of Mimikan population for which the number of people is given, I worked out the average size of the taparu groups in each of the units. Then, to compensate for the fact that more people can live in a single large taparu group than can live in a single small taparu group, which would skew any simple tally of the frequency of taparu groups of different sizes, I added up the number of people

Taparu
Group
Size

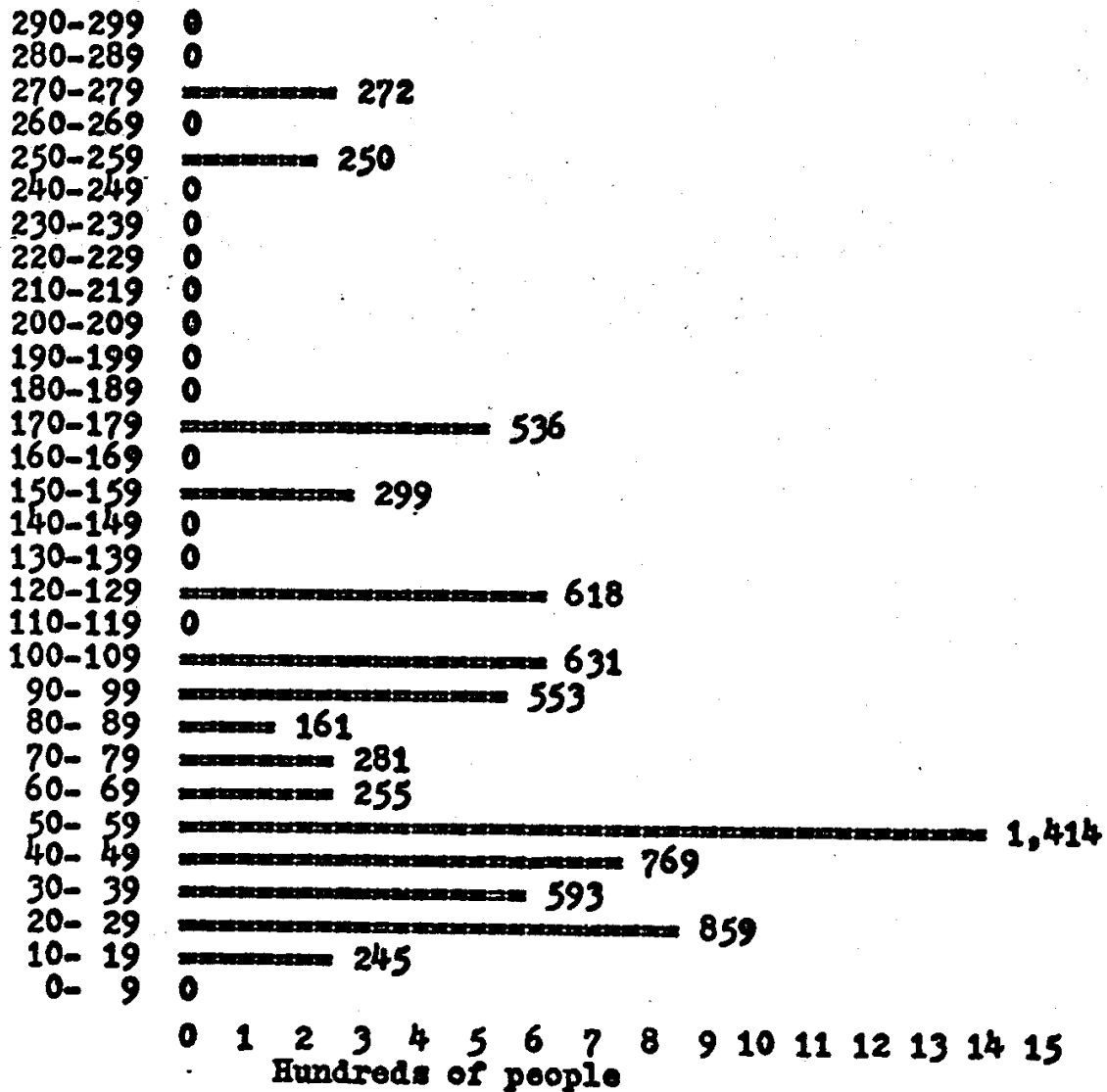


Table VI

Number of People in Relation to Size of Taparu Group
in Kamoro and Sempan Areas

Taparu group size was calculated from Pouver 1954:282-286 by dividing the populations of the smallest social units for which there was population data by the number of taparu groups each unit contained. This table shows the number of people living in such average taparu groups.

living in groups which had the same mean average size tapary groups. One would expect the result to be a slightly skewed bell-shaped curve. It is not. Instead, in the figures below two hundred, there is a bi-modal curve. One of the modes centers around fifty persons per tapary group; the other centers around one hundred persons per tapary group. I suggest that the reason for this curious distribution is that it represents the over-lapping of two normal distribution bell-shaped curves. The village of Otokwa where there are tapary groups within tapary groups provides a clue that, in fact, there are at least two distinct kinds of tapary group: a small tapary group, the population of which ranges around fifty, and a large tapary group, the population of which ranges around one hundred. Pouwer himself (1954:87-88) notes the existence of small and large tapary groups, though he does not emphasize the discontinuities between them. It may be straining statistical interpretation too far to claim that Table VI also indicates an order of tapary group ranging around two hundred in population, but I suggest that this is the explanation for the largest groups shown. It is also probable that the population peak around twenty-five represents a fourth, very small, order of tapary group.

In the following chapters it will be suggested that Mimikan tapary groups which range around twenty-five persons

are usually equivalent to a Kawenak doorway group, that those which range around fifty persons are usually equivalent to a pair of Kawenak doorway groups, that those which range around one hundred are usually equivalent to a Kawenak moiety, and that those which range around two hundred are usually equivalent to a Kawenak men's house group. It will be noted from Table VII that the size of the group which is sufficiently discrete to be recognized as an independent, named taparu group increases from west to east in the Mimikan region.

The Stan

Since a Mimikan stan typically consists of two taparu groups or two pairs of taparu groups, it is natural to expect that patterns similar to those of taparu groups will occur in the distribution of stammen. As is shown in Tables VIII and IX, this is the case. The bi-modal curve in size of stan is less evident, but it is still there. The two most frequent classes of stammen range around one hundred and two hundred people respectively, double the size of the most frequent classes of taparu group. The smaller stammen are concentrated toward the western part of the Mimika region; the larger tribes are concentrated toward the eastern part.

	Western Kanore	Eastern Kanore	Sempan
Over 180	0	12%	0
86-180	10%	34%	100%
36- 85	57%	37%	0
0- 35	33%	17%	0

Table VII

Percentages of Mimikan Populations
in Relation to Size of Taparu Group

Calculations were made in the same manner as in Table VI,
but here population is expressed as a percentage of the
total population of the sub-area.

530-539	=====	536
520-529	=====	522
510-519	0	
500-509	0	
490-499	0	
480-489	0	
470-479	0	
460-469	0	
450-459	0	
440-449	0	
430-439	0	
420-429	=====	422
410-419	0	
400-409	0	
390-399	0	
380-389	0	
370-379	=====	375
360-369	0	
350-359	0	
340-349	0	
330-339	0	
320-329	0	
310-319	0	
300-309	0	
290-299	=====	299
280-289	=====	281
270-279	0	
260-269	=====	269
250-259	0	
240-249	=====	243
230-239	=====	234
220-229	0	
210-219	=====	211
200-209	=====	625
190-199	=====	190
180-189	=====	184
170-179	=====	171
160-169	=====	329
150-159	=====	156
140-149	=====	145
130-139	=====	535
120-129	=====	249
110-119	=====	456
100-109	=====	620
90- 99	=====	98
80- 89	=====	336
70- 79	0	
60- 69	=====	68
50- 59	=====	171
0	0 1 2 3 4 5 6 7 8 9 10 11 12	

Hundreds of People

Table VIII

Number of People in Relation to Size
of Stam in Kamoro and Sonpan Areas

	Western Kamoro	Eastern Kamoro	Senpan
Over 300	0	35%	54%
180-300	27%	29%	46%
80-179	63%	35%	0
0- 79	10%	1%	0

Table IX

Percentages of Mimikan Populations
in Relation to Size of Stan

Calculations were made in the same manner as in Table VIII, but here population is expressed as a percentage of the total population of the sub-area.

SUMMARY

High birth and death rates probably maintained a more or less stable population among the Asmat prior to contact with outsiders, though there were wide fluctuations in the population of particular villages. The cessation of warfare is probably the principal factor in upsetting this balance. The lowering of childhood mortality rates will also be very important in the future.

The largest Asmat villages are found in the middle courses of the rivers. This reflects the fact that it is in this area that there is an optimum balance between tidal and fresh water swamps.

Within the Kamoro-Asmat area as a whole, the villages of the peripheral regions are the smallest, and village population increases toward the center of the area. The only exception to this rule is to be found among the Keenakap.

The size of the units of social organization, stannen and tapary groups, also increases toward the center of the area, but this is not a gradual progression. In western Nimika the typical tapary group ranges around fifty people, and the typical stan ranges around one hundred people. Among the Sempan and the Asmat the typical tapary group ranges around one hundred people and the typical stan ranges around two hundred people. It is suggested that these

figures are not co-incidental, but represent a compounding of groups of the same size into discrete social units of geometrically increasing complexity.