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Recent Demographic Trend and  
Socio-economic Implications in French Polynesia

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The object of this article is to bring to the present Symposium the facts concerning the socio-economic implications of the recent demographic evolution in French Polynesia. For information concerning previous demographic evolution, the work of Dr. Norma Mac Arthur : Island Populations of the Pacific (1) may be consulted, particularly the chapters concerning French Polynesia.

Public opinion in French Polynesia does not seem to have become fully conscious of the frightening problems which will be raised in time to come by the demographic renaissance begun eighty years ago. This may be because demographic collapse of the last century, and the de-population of the interior of the islands which resulted from it, and of which the absence of settlement in the centre of Tahiti remains the most obvious example. It is also because of present day experiments and the supposed risks they suggest that the problem of accelerated demographic growth has remained unnoticed.

This article attempts to answer the questions raised by current population growth : what is the position of economic development in French Polynesia with regard to demographic expansion ? what phenomena of adaptation can now correct this growth ? How does the phenomenon of urbanisation insert itself in this evolution ?

#### Demographic growth and economic development.

The main fault of the classical concept of balance between population and resources lies in its static nature. A dynamic vision therefore seems preferable.

From the point of view of demographic growth, I shall speak only of the last three evaluations : those made in 1956 and 1962, and the 1967 census, since the work of Dr. Mac Arthur covers the period lasting until the 1956 census (see table 1 and figure 1).

POPULATION

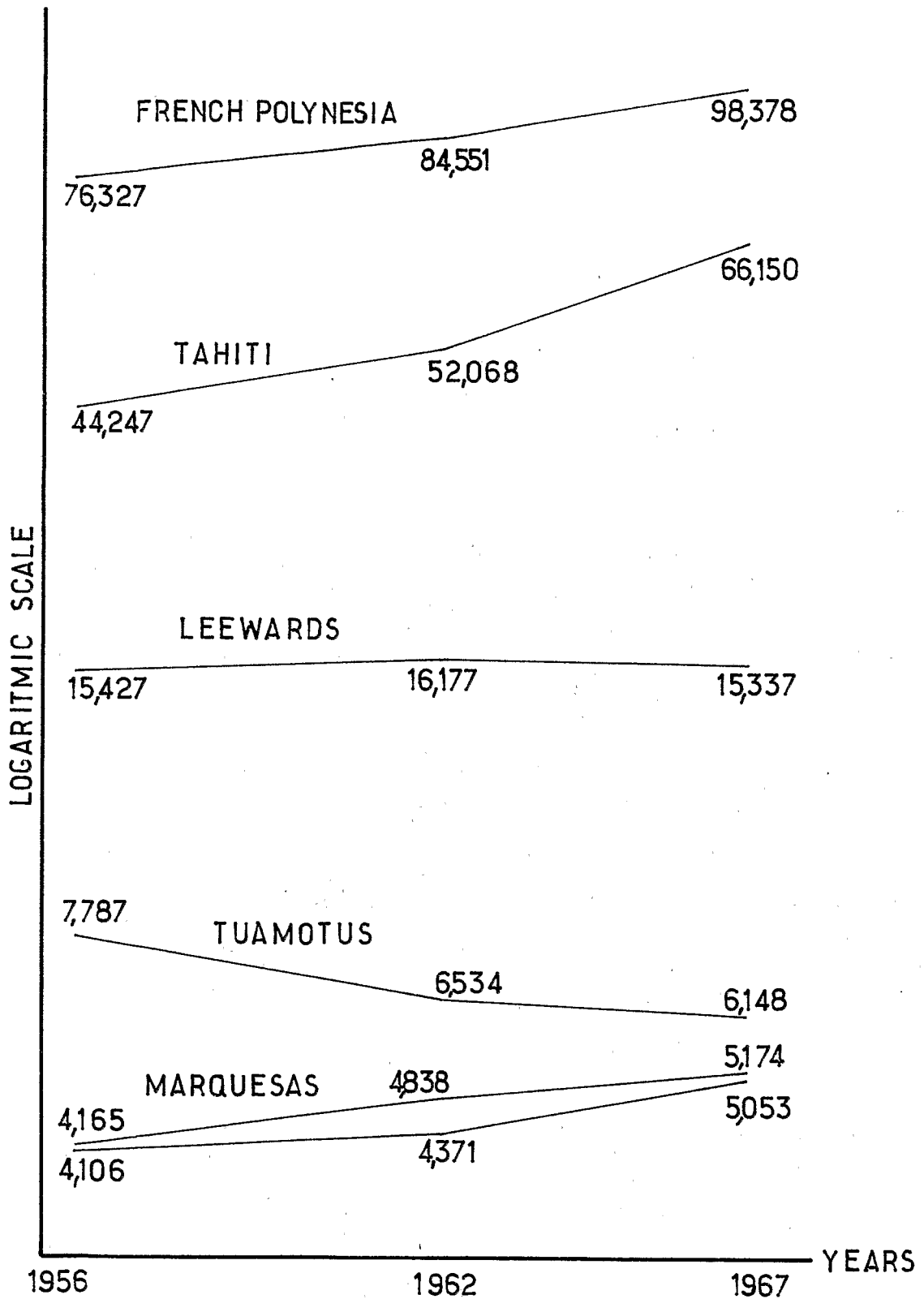


FIG.1\_ POPULATION OF FRENCH POLYNESIA

Table 1 - Population of French Polynesia

	POPULATION			Annual rates of growth (per 1000 population)		
	1956	1962	1967	46-56	52-62	62-67
Tahiti	38,140	45,430	61,519	43	28	71
Moorea	3,596	4,147	4,370	22	24	11
Maiiao	183	218	206			
Makatea	2,328	2,273	55	- 7	- 4	- 195
Windward Group	44,247	52,068	66,150	40	28	54
Leeward Group	15,427	16,177	15,337	24	8	- 10
Marquesas	4,165	4,838	5,174	40	26	14
Austral Islands	4,106	4,371	5,053	50	11	31
Tuamotu Archipelago	7,787	6,534	6,148	25	-28	- 12
Gambier Islands	595	563	516			
TOTAL French Polynesia	76,327	84,551	98,378	31	18	33

On this table, I have reproduced the classification of her own tables (table 56, in particular, p. 320) in order to make the comparison easier ; and I have added the growth-rate as calculated by INSEE (2). These calculations reveal quite remarkable variations, which seem to indicate that the censuses are unreliable. On the subject of growth between 1956 and 1962, criticisms were made by the geographer J. Fages in the Journal de la Société des Océanistes, Paris, 1968, N° 24, within the framework of his research carried out at the ORSTOM Centre at Papeete (3). Fages concluded that the average annual growth-rate for this period was more than 3 %. As for the 1967 census, this was not carried out by INSEE (Paris) but by the local authorities (4) and has been revealed to contain serious mistakes. Fages criticized in a survey made in the Leeward Island (5). Taking the 1962 figure as a base and adding to it on the one hand the natural growth-rate calculated for 1962-67 from civil registers, and on the other hand the balance of arrivals and departures during the same period, a total of more than 110,000 is reached (6).

Since then we have been able to use the 1971 INSEE census and a brief survey on the growth of the population also carried out by this same organisation (7).

In 1971 French Polynesia had 119,168 inhabitants, with a growth rate of 3.32 % per year, which "will mean the doubling of the present population within about 21 years" (8). On the basis of these facts, the population will reach the figure of 191,000 inhabitants in 1987 (9).

Figure 2 compares the demographical evolution of several Polynesian territories.

What then were the migratory movements which modified recent population figures ? A wave of Polynesian emigration to Noumea, strong during the years 1951-1956 and which seems to have almost completely stopped by 1962-63 ; the returning to the Cook Islands of workers native to those parts after the closing-down of the phosphate company on Makatea ; inversely, a wave of French immigration of temporary inhabitants after the implantation of the nuclear base ; and finally, after 1967, and especially since 1969, the slowing-down of the economical effects of the nuclear centre, and a strong wave of Polynesian emigration to Noumea which is still being calculated (survey by J. Fages at Noumea now under analysis).

For the future of the Territory, it is the natural growth-rate which must be considered.

When speaking of a doubling of the population within about 21 years on the basis of a growth-rate of 3.32% per year, it is necessary to point out certain facts of demographical history which may slightly modify these statistics. The low mortality rate springs from the relatively young population, an epidemic of Spanish flu in 1918 having prematurely killed a large number of adults (10). Also, the (provisional) rush of European residents following the implantation of the Nuclear Base has the same effect of increasing numbers amongst younger members of the population.

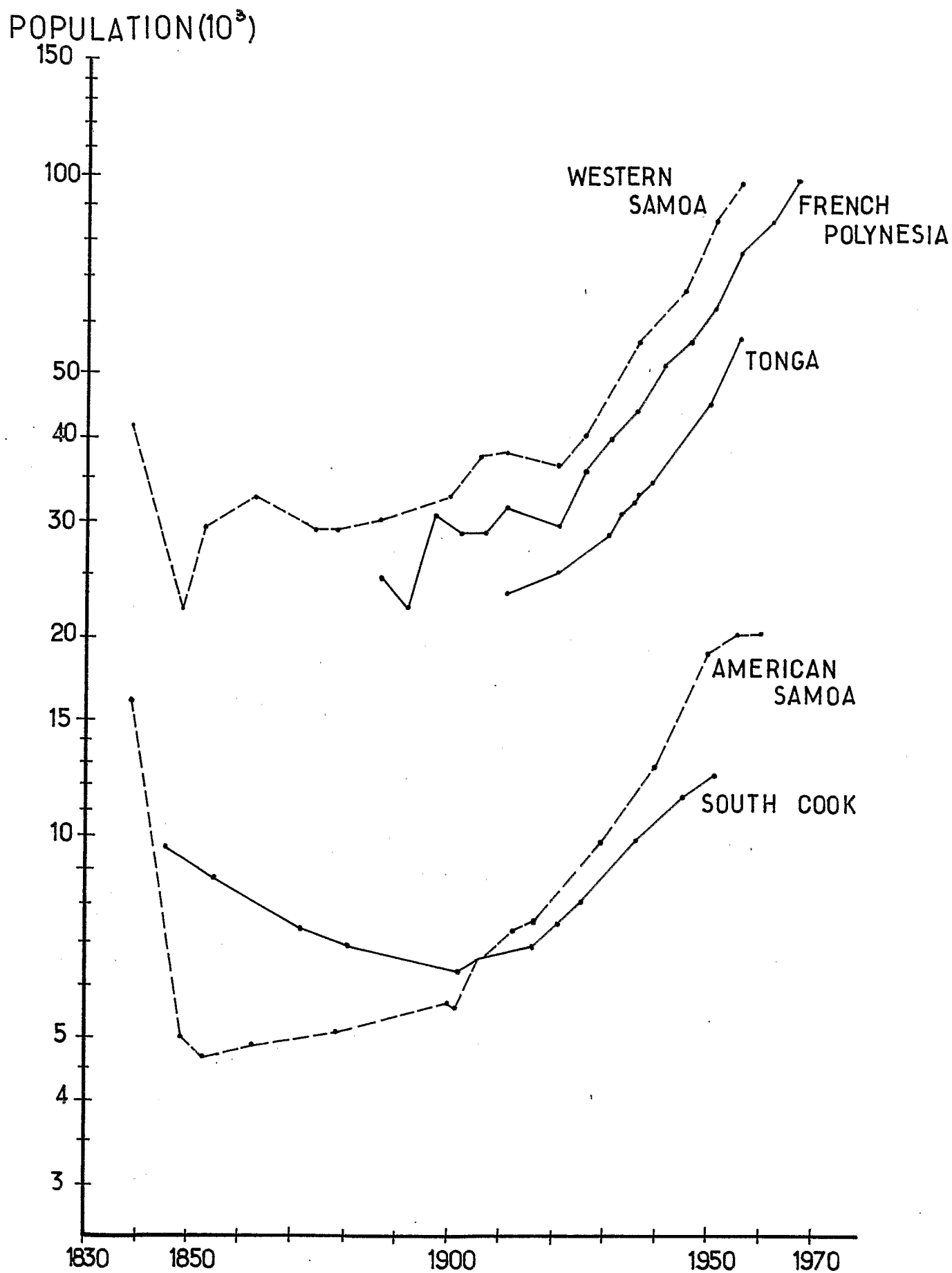


FIG. 2\_\_ POPULATION OF SOME STATES AND TERRITORIES OF THE SOUTH PACIFIC

The differences in the growth of the archipelagoes explain the different effects of rural exodus ; growth-rate on the Leeward and Tuamotu-Gambier Islands is low because many young people have already left. It is perhaps necessary, in the case of the most distant archipelagoes (Australs, Marquesas), to take into account the great imperfections of the civil register service. Other factors, too, can come into play : the absence of European residents, Polynesian birth-rate being higher than that of Europeans ; a greater effect of the 1918 epidemic due to poorer medical services in the Australs and Marquesas Islands ; in the Marquesas, the fact that the demographical recovery took place about 20-30 years later than in the rest of eastern Polynesia.

The ethnic composition of the population is important, but difficult to establish, because the notion of part-Europeans or "demis" is extremely confused. The growth rate for each different category is not known. Figure 3 resumes what is known at present (after the 1962 census).

With regard to this demographic expansion, what is the economic expansion of the Territory ? To give a clear view it is necessary to show the evolution of a few variables (Figures 4 and 5).

What is the meaning of this growth ? INSEE which accomplishes national accountancy work in the Territory distinguishes between natural economy, that is the means disposed of by the population to meet its needs, and artificial economy, that is the economic activities of the Nuclear Experiments Centre (11) (labourers' wages, imported matter and materials, services bought locally by civil and military staff at the Centre : for example the hiring of cars or rooms by military staff on leave...). But it is also artificial to neglect the economic effects of the Nuclear centre, since the population benefits from them. Because of the provisional nature of the atomic experiments, it is more correct to speak of artificial prosperity since, unless substitute activities are created before the end of the experiments, this prosperity will be short-lived.

From the preceding figures, it becomes apparent that :

1) the increase of income per head, even tempered by inflation, is undeniable, but

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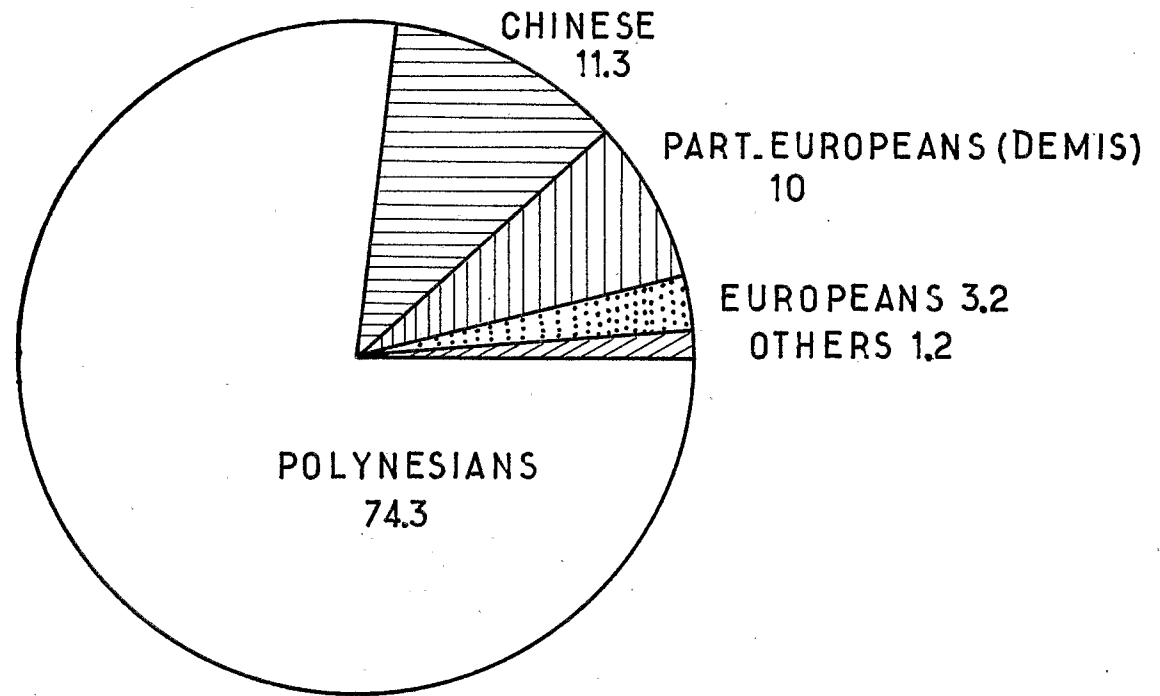


FIG.3\_ ETHNIC COMPOSITION OF THE  
POPULATION OF FRENCH POLYNESIA



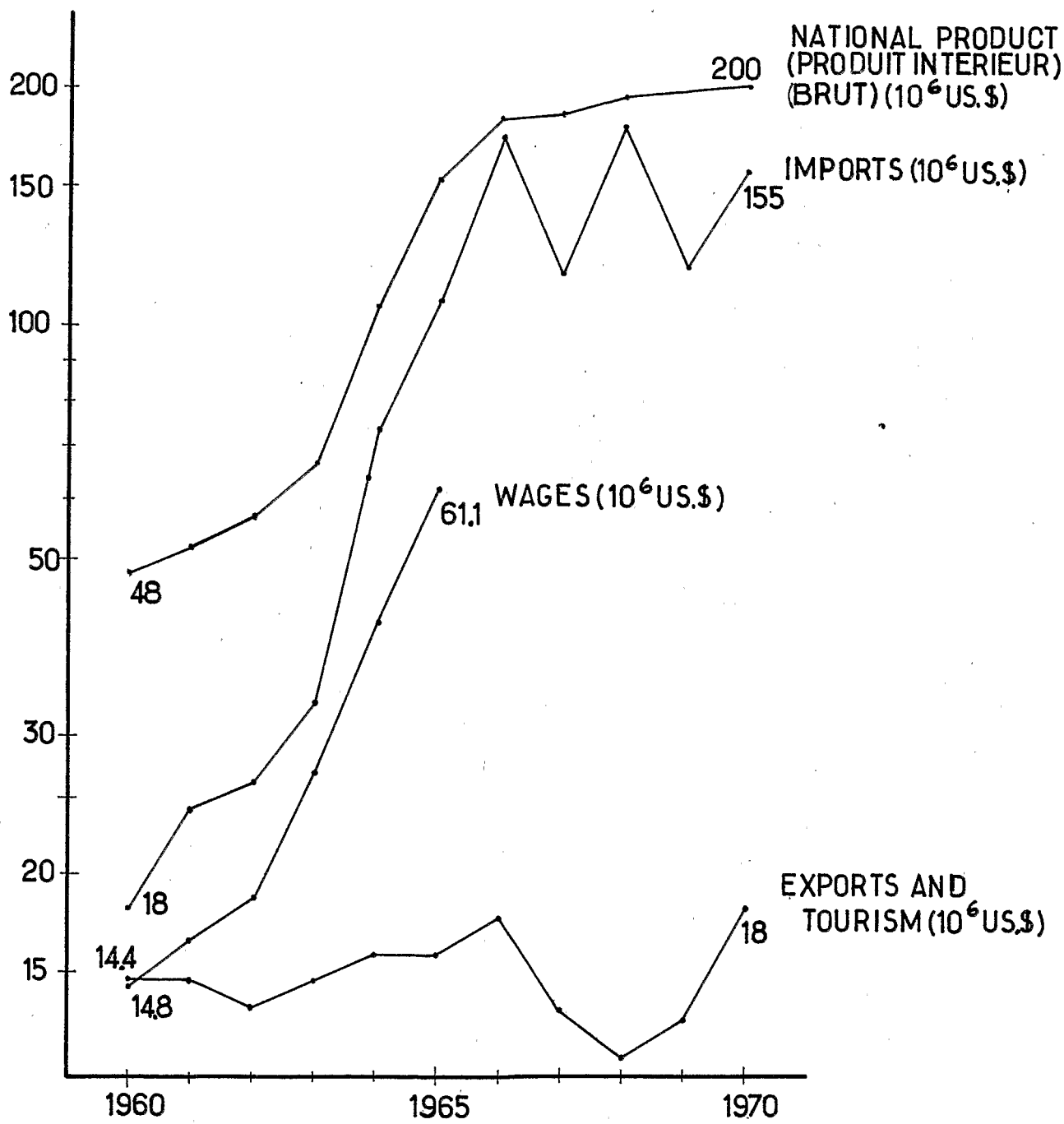


FIG. 4 \_ ECONOMIC EVOLUTION

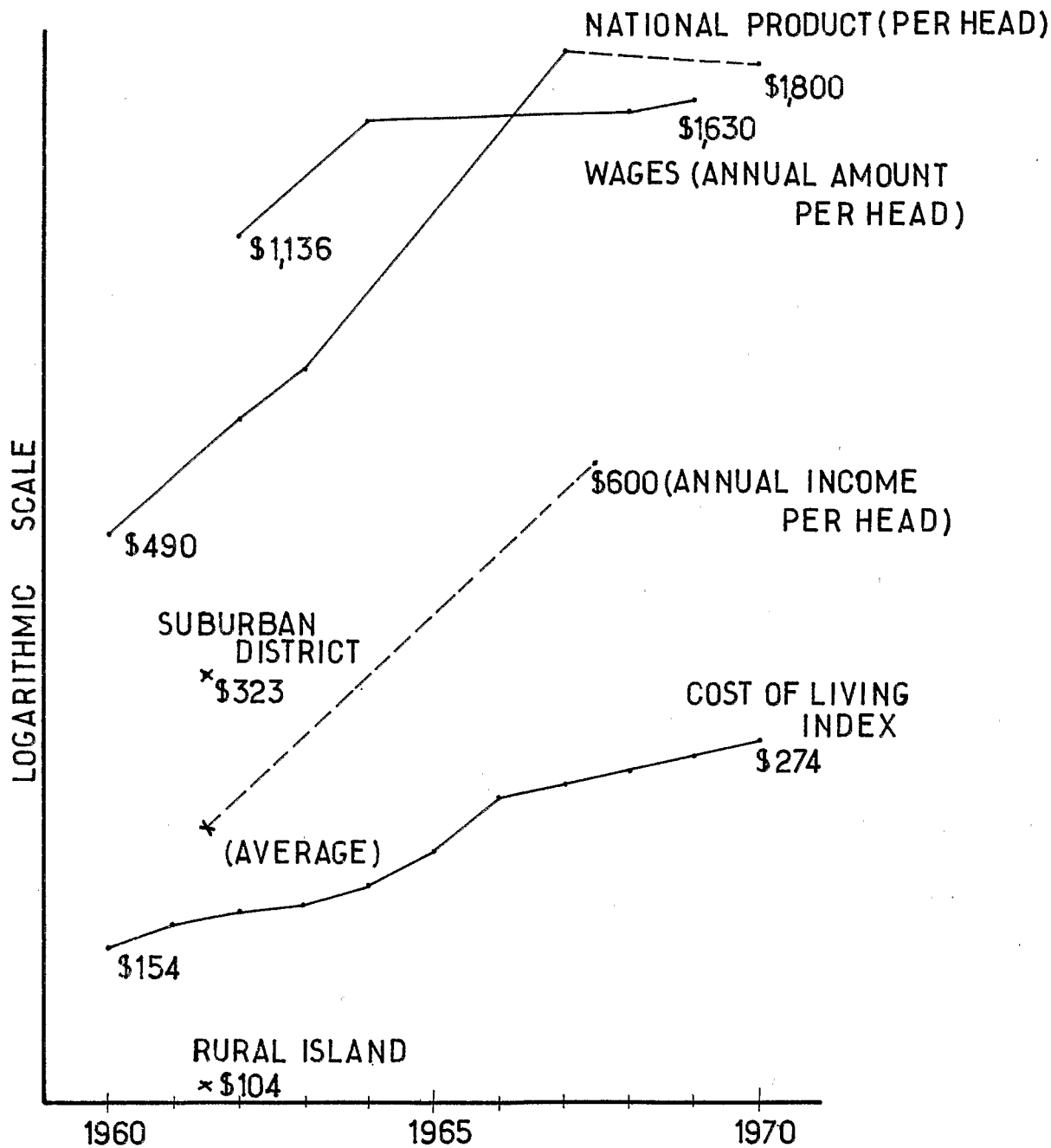


FIG.5 \_ECONOMIC EVOLUTION

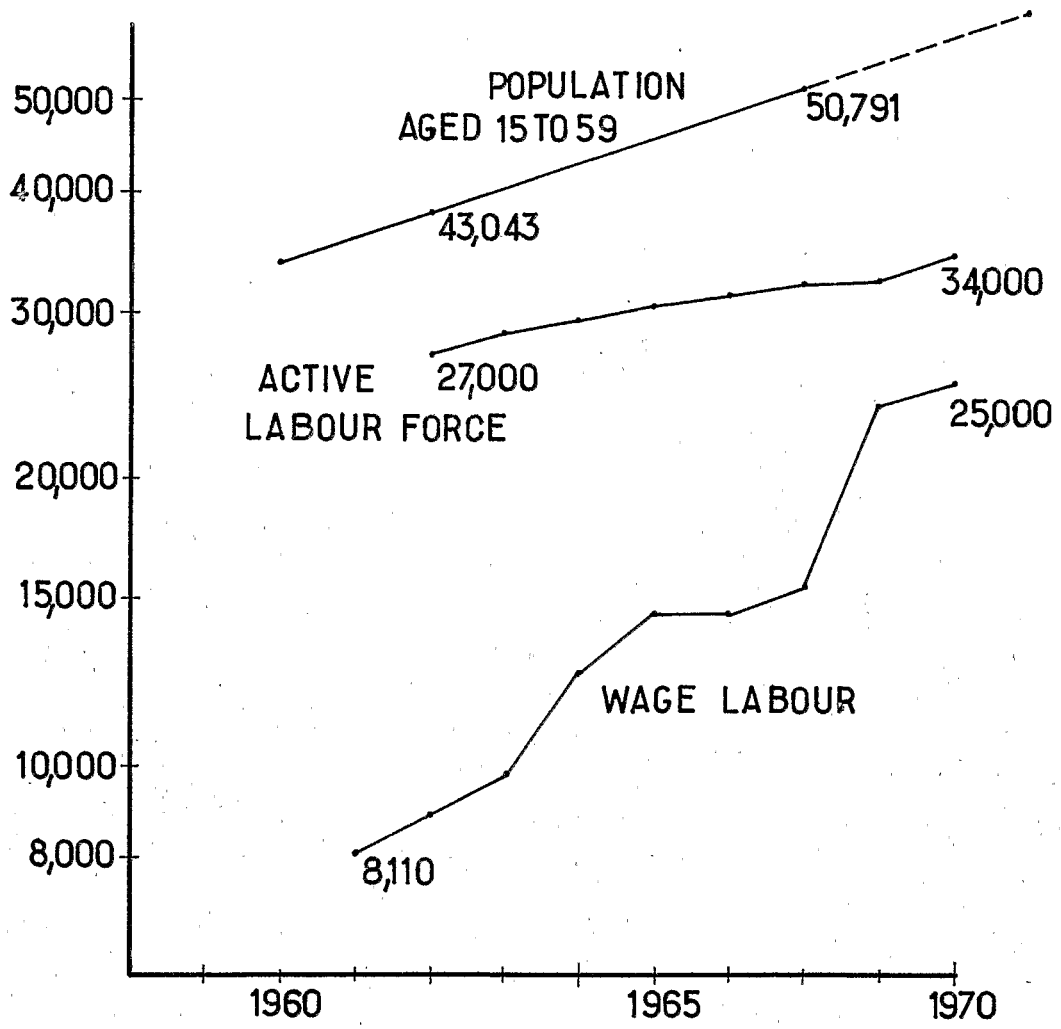


FIG.6\_ACTIVE POPULATION, AND EMPLOYMENT

2) as in any too rapide change, differences in the levels of income have been created.

3) Inflation carries prices and salaries to a much higher level than in the other Territories of the South Pacific (except New Caledonia) and in the world. Not only are Tahitian products at high prices on the world market, but these products are sold at higher prices than imported goods at Tahiti itself.

4) The essential positive effect of these high incomes is the considerable increase of material comfort enjoyed by the salaried population. Since 1960, there has been an increase in the salaried population. This increase is described in Figure 6. It has become possible only because of the mobility of the population.

5) In the next years, the crucial problem will be to prevent from the recession, that is to say the unemployment of a proletarian population.

#### Mobility.

It can be said that the mobility of the French Polynesian population is both an ancient and general phenomenon. It is first of all geographical : for a man, a couple, a household or a more or less large family, this consists of moving house, either temporarily or permanently. People must be absent for a sufficiently long time to be considered as having moved house : that is, several months at least. If the time-length is shorter, other criteria of judgement must be used ; for example if a house has been rented in the new place of residence (if people are not simply staying with other members of the family), if they have a job there, if the person who left has married and the couple have settled in the new place of residence. It is by studying the past that the phenomenon and its reasons may be understood.

P. Ottino was the first research-worker to insist on the problem in his work (12) : La pêche au grand filet à Tahiti, 1964 ; Early 'ati of the Western Tuamotu, 1967 ; Adoption on Rangiroa Atoll, 1970. Mobility can be calculated roughly during a census by asking the population

their place of birth. The civil-status of the population is also established by medical control (action against filariasis (11) and this reveals that people have lived at a certain time in a certain place, and sometimes where they came from or where they are going. But community surveys give the most information (Table 2) :

- they indicate the origin of inhabitants living there at the time of the inquiry,
- they retrace the movements of the population and reveal their motivation,
- the survey of marriages is an indicator of mobility and provides a cultural background to the phenomenon.

Table 2 - M o b i l i t y

District	Islands (others districts)	Archipe- lago (others districts)	French Po- lynesia (others archip.)	Abroad
<b>I. PLACE OF BIRTH OF THE POPULATION</b>				
Tahiti- Papeete/Manuhoe 1962 (Kay)	41 %	8 %	51 %	
Paea 1962 (Fages 1968)	33	44	5	14
Punaauia 1967 (Fages 1968)	12	46	2	19
Moorea- Maharepa 1966 (Ravault)				
• The whole population	63	7	17	10
• Older than 20 years pop.	45	8	21	18
Leeward Group 1967 (Fages 1970)	51	17	19	11
<b>II. MIGRATIONS</b>				
Moorea 1962-1967 (Robineau)	29	5	66	
<b>III. MARRIAGE (Panoff 1962)</b>				
	Two spouses in the district	One spouse in the district	No spouse in the district	
Tahiti - Vairao	29 %	57 %	14 %	
Moorea - Teavaro	30	55	15	
Leeward Group - Tahaa : Faaaha	10	59	31	
Australs - Tubuai Island	69 <sup>+</sup>	29,5 <sup>+</sup>	1,5 <sup>+</sup>	
<sup>+</sup> Instead of district please to read island in the Australs example.				

This cultural background must be emphasised. There is a relationship between the marriage-system and mobility. Apart from the prohibition of marriage between descendants of a reduced number of generations, no rule limits the liberty of any individual, for example no-one is obliged to choose his/her partner within a determined group, nor to reside within any particular group. Another element of this cultural background is the phenomenon of adoption. It is a factor which gives rise to child-mobility in as far as the biological parents do not reside near the adoptive parents, and this mobility may continue when the children have reached adult age, and spread to their own families.

There are also causes which depend on social evolution. The multiplication of land rights and the breaking up of Tahitian properties are an indirect cause of mobility : it is the possession of rights which allows the population to settle on lands unoccupied by other right-holders. The break in scattered families described by Ben Finney, at Maiao and Aua (14) causes newly-weds to find individual accommodation (neo-local residence) and creates mobility as long as the young couple do not succeed in finding a permanent residence. The transformation of a way of living, the influence of mass-media and the pressure exerted by Western models encourage the population to crowd into the most adequate centres : the head-villages in the archipelagoes and above all Papeete. This problem of rural exodus and urbanisation is worsened by economic causes favouring mobility.

The development of salaried employment concentrated mainly in the urban centres has been an important cause of mobility during the last few years. For example a vanilla crisis on Moorea reduced the island's population, while the recent development of the tourist industry has compensated for this. Above all, the Nuclear Centre has created activities which have influenced mobility. Three types of employment may be distinguished as follows :

- employment on the nuclear sites ; only the worker leaves home, and the family remains in the usual residence ;
- employment at Papeete which has uprooted the whole family ;
- employment at Papeete for which the worker only leaves home, the family remaining in the village. This is the solution adopted by the population of Tahiti and Moorea.

As mobility pushes its roots into the social and cultural surroundings of inhabitants, it makes them predisposed to reacting to economic incitement. An example of this is the economic expansion of New Caledonia and the current migration of the Tahitians. In a sense it is the answer, in the form of adaptation to the demo-economic blockage which can result from the different growth-rate of two phenomena : the growth of population and that of its economy.

Inter-island migrations and urban growth.

In the demo-economic equilibrium which results from these two components, inter-island migrations and urban growth intervene as a supplementary parameter which modifies the facts. Figures 1 and 7 show, on the one hand, the evolution of inter-island migrations leading to the gradual de-population of outlying archipelagoes, and on the other hand, the expansion of the agglomeration. The de-population first (in time and quantity) reached the Tuamotus, then the Leeward Islands, and finally the Marquesas and the Australs. Correlatively, the growth of the agglomeration becomes stronger (Table 3), to the detriment both of the outlying archipelagoes and of the rest of Tahiti.

Table 3 - Urban growth

Urban Area	: 1936	: 1941	: 1946	: 1951	: 1956	: 1962	: 1967
Papeete district	: 8,456	: 11,614	: 12,428	: 15,220	: 17,288	: 19,903	: 22,278
<u>Suburbs</u>	: :	: :	: :	: :	: :	: :	: :
Faaa	: :	: :	: 1,447	: 2,045	: 2,625	: 3,681	: 6,778
Pirae	: :	: :	: 965	: 1,733	: 2,487	: 4,202	: 8,429
Arue	: :	: :	: :	: 1,005	: 1,478	: 2,035	: 3,778
Punaauia	: :	: :	: :	: :	: 1,719	: 2,424	: 2,448
Paea	: :	: :	: :	: :	: 1,507	: 2,185	: 2,919
Mahina	: :	: :	: :	: :	: :	: :	: 1,694
Total Urban Area	: 8,456	: 11,614	: 14,840	: 20,203	: 27,104	: 34,430	: 49,324
% Growth	: -	: 37 %	: 28 %	: 36 %	: 34 %	: 27 %	: 43 %
% Growth 1946-67	: :	140 or 6,66 per annum					

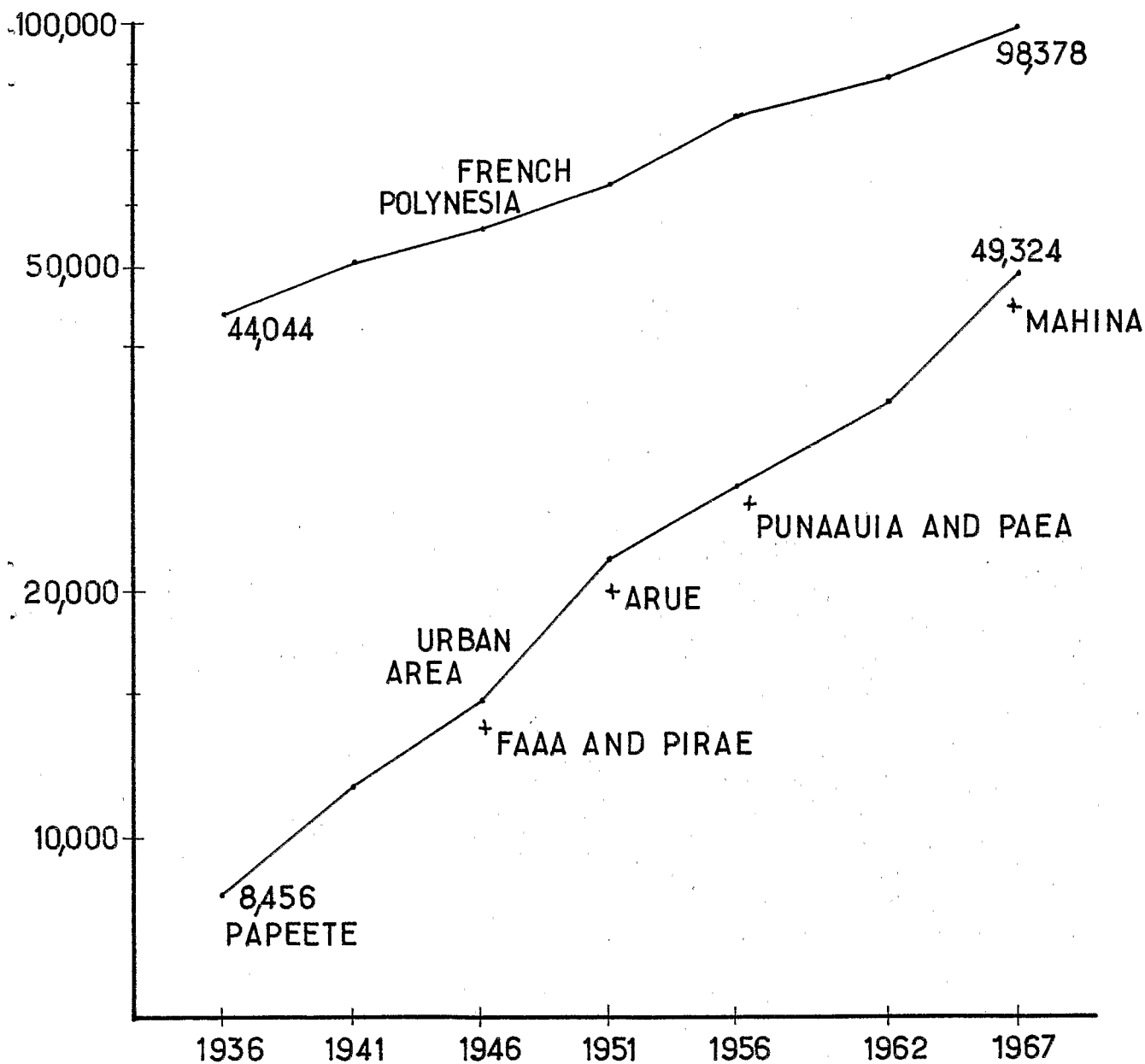


FIG.7 \_GROWTH OF URBAN AREA OF  
PAPEETE



The deep-lying causes of this evolution are to be found in the difficulties of equipping rural communities, especially in outlying archipelagoes, in relation to the modern needs of the population, and in the fact that nothing will prevent the town, as opposed to the country, from being the home of modern life.

Let me conclude :

The population of French Polynesia has a considerable growth-rate. The coming of the Experiment centre, then the recent economic development of New Caledonia provided a provisional economic solution because of the capacity of adaptation of the social institutions as mobility. But the supplementary phenomenon of urbanisation and the absence of modern resources except tourism constitute an important handicap for the future economic growth of the Territory.

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