THE LAST FUEGIANS

The spread of Western and Christian civilisation all over the world, during the last four hundred years, has been marked, on all continents, by the disappearance of large numbers of technically less advanced peoples. or by their numerical regression, which in turn was accompanied by the decadence and crumbling of their cultural inheritance. But such feats of extinction are not the prerogative of the white man of modern civilisation. Every point on the globe, at all times, has witnessed struggles for life, where victory went to the stronger. The extinction of Neanderthal man, some thirty thousand years ago, was probably due to the appearance of Cro-Magnon and Chancelade man, who entered Europe at that time and had attained a more advanced technical civilisation than their predecessors. In historic times, we know of several cases in which peoples were driven back and annihilated by neighbours whose civilisation was more advanced and who were endowed with a greater expansive force. The Negritos of South-east Asia had been ousted from a part of their original territory by the Malayans and Chinese long before the arrival of the Europeans. Several Melanesian tribes were exterminated in the

course of the ancient Polynesian migrations. These examples could be multiplied. They are in fact so numerous that it has become customary to consider them almost as manifestations of a biological necessity, against which human will remains impotent.

Certain tribes, like the Onas of the Tierra del Fuego, the Bushmen of South Africa, the Tasmanians, were simply exterminated on the spot or driven out of their traditional hunting grounds. The few survivors regrouped themselves on some uninhabitable fringes of their former territory, to which they were ill adapted. Within a few years they disappeared from the population map. These pages of history are not glorious for our civilisation. But they do not provide an adequate explanation for all the instances where primitive tribes have disappeared from the earth.

Not in all cases can we speak of extermination. Retarded populations have rarely if ever been subjected to economic exploitation, for the simple reason that their nomadic way of life and their rudimentary techniques could not be adapted to regular work which was alien to their traditions. It remains true, nevertheless, that in almost all cases groups of nomadic hunters have disappeared after coming in contact with the whites. Their state of health deteriorated rapidly and epidemics broke out. Within a few decades the demographic stability of the group was upset. Soon there would be nothing left but a few survivors. A certain number of them would be attracted by the great urban centres, with their proletarian masses, into which they merged. Others would die on their home grounds. This history repeats itself again and again, with striking exactness, among peoples who are quite different in all other respects. Pathology does not seem to provide a sufficient explanation, and the majority of authors seek the cause in a certain feeling of discouragement or impotence which would seize inferior peoples in the presence of new forces upsetting their concepts of the world, forces which they can neither make their own nor resist. Thus we speak, in certain cases, of the senescence of a race or of a civilisation. Such explanations, however, seem terribly verbal. How are we to define the senescence of a race or civilisation? And-apart from suicide and birth control, equally unheard of among the populations in question -in what ways could discouragement jeopardise the demographic equilibrium of a human group? All this needs a great deal more precision. As far as we know, no one as yet has undertaken a comprehensive study of the causes of the disappearance of retarded peoples after coming in contact with the white race.

This phenomenon of extinction is ununderstandable at first sight. In cases

where no extermination has taken place, where the indigenous population has not been driven back by brute force, and where there is no conflict between vital interests, one could imagine the possibility of a stable and peaceful co-existence between men who have not surpassed the level of Stone Age civilisation and colonisers of the twentieth century. Reality however is different. The process may be variable, but the result is the same, in almost all cases: extinction, plain and simple, biological as well as cultural; disappearance of individuals; disappearance in so far as the race is concerned; disappearance in so far as its civilisation is concerned.

The rhythm of extinction of the most primitive peoples grows faster with every one of the world cataclysms by means of which the white man's power asserts itself ever more imperiously on islands and continents. The indigenous population of Australia which, it seems, numbered two or three hundred thousand at the end of the eighteenth century has dwindled to some ten thousand survivors. The Pygmies too are getting fewer and fewer, despite the protection afforded by their equatorial forests. Several Eskimo groups have vanished since the end of last century.

The last Veddas of Ceylon, who still live in caves, are on the verge of extinction. On the American continent the picture is particularly gloomy. Several indigenous groups have vanished completely—apart from those who had been exterminated by the conquerors—and at the extreme southern tip we are witnessing at this moment the final extinction of the last Paleo-Amerindians, generally known under the name of Fuegians. By the end of 1953, they had been reduced to twenty-seven Yahgans and sixtyone Alakalups. The study of their disappearance will soon be a problem for historians or archeologists to cope with.

In some cases of this kind, nothing can be done any more. In others, there is still time, and the urgency with which the conditions of their extinction are being studied does not stem merely from the curiosity of the specialist. This study can be applied practically. Some of the survivors of these groups, left at present to miserable extinction on various points on our continents, could be saved. If it is too late for them, the lesson learned from their tragic experience could be applied to the study of the difficult situation in which many of the world's minority groups find themselves in view of the expansion of new and more dynamic groups. These facts concern basic and elementary phenomena, and they are all the more precious for that. It is not absurd to imagine that the situation of the old European countryside, under the invasion of our twentieth-century civilisation, shows some analogies with that of certain

primitive tribes, submerged by pioneers who created new needs and destroyed the old traditions. These analogies may be remote; certain traits, however, are identical, the most obvious of these being the rapid disintegration of the old systems of values.

This work of synthesis and of applying facts observed in one set of circumstances to different realities is only a remote possibility. The scope of the present article is restricted to an exposition and interpretation of the documents which the two French ethnographic missions to austral Chile (1946–8 and 1951–3) were able to assemble on the last phase of the extinction of the Fuegians on the archipelagoes of western Patagonia.

I. The Alakalups of the Magellan Archipelago

Before going into facts and figures, we must give some other details about the Alakalups: Leaving aside for the moment such matters as the extension of their habitat and their way of life, we should stress above all that we are dealing here with living beings—a detail which, bent over facts and figures, we are liable to forget. Real beings: which means that today, in some desolate and desperate corner of the world, the sixty-one last Alakalup Indians of the archipelagoes are sleeping around a fire. The wind howls around their huts tempestuously, almost all the year round. Inside the huts, men and dogs are huddled together—two, three, or four families per sordid hut. There are sick persons among them, one or more in each hut. In 1952 the death rate had reached almost one per month. Someone certainly has died some weeks ago, and someone else is bound to die some weeks hence. They know it. They know, and they say it, that they all must die and that after them the stormy archipelagoes will be deserted once more. But they do not know why.

These few Indians who eke out a miserable living, mostly hovering around the Chilean military station of Puerto Eden, on the large and practically unexplored island of Wellington, are the remainder of a tribe which, some time ago, was very important and led a nomadic life of hunting and fishing over the whole stretch of the western Patagonian archipelagoes.¹ They represent one of the most retarded human civilisations. When they occupied the region, several thousand years ago, they brought with them a civilisation of bone and chipped stone which already at that time was rather worn out. The level of their technique never rose above that of the European Reindeer age and in several respects remained

¹The western Patagonian archipelagoes extend over 12 degrees of latitude, from Chiloé to Cape Horn. They are today practically uninhabited.

markedly below that level. After their arrival, and probably owing to the geographical conditions which were particularly unfavourable, their technical culture continued to go down. When, four centuries ago, the first European navigators crossed the archipelagoes, the Fuegians, whom they met there, seemed to them the most frightful savages they had ever seen.

They were completely naked and appallingly dirty. Body and face were greased with walrus oil which, when rancid, gave off a dreadful odour, and they were smeared all over with red and white clay. The only kind of clothing they knew was a sort of seal-skin or otter cape which, occasionally, they would throw over their shoulders. They hunted the seal with clubs, bone harpoons and spears; they also knew bows and arrows. Besides seal, and occasionally deer, they ate the eggs of water birds and shell fish which the women would gather in their straw baskets, plunging naked as deep as three or four metres below the surface of the sea in any temperature. They kept fire, either on the ground of their huts or, if they were travelling, on little clay platforms which were guarded in the centre of their canoes. If the fire died, they were able to rekindle it by striking pyrites. They cut stones, rather roughly, worked bones and wood into tools and weapons; but their most common tool was a knife made of simple mussel shell.

About their psychology, their social and religious life, we know practically nothing. The navigators of past centuries were neither psychologists nor sociologists and they did not seek other impressions, beyond the stupefaction or indignation aroused by such savagery. For a long time we knew nothing of the Fuegians except their dirtiness, the clumsiness of their technical achievements, and a cannibalism which perhaps is not altogether legendary; since more than one excavation has yielded cracked human skulls thrown together with kitchen refuse.

In 1946 the first French ethnographical mission to austral Chile, composed of two members, arrived with its equipment at Puerto Eden, in the heart of the western Patagonian archipelagoes. A semi-stable Alakalup encampment had been established at that time near the military station which consisted of two non-commissioned officers in charge of providing the Indians with food and medical care. Most of the Indian families had abandoned nomadic life and contented themselves with catching shell fish around the bay. Each of them had a canoe, which they had cut with axes out of tree trunks. The traditional tools and weapons, with the exception of the bone harpoon, had yielded their place to imported axes and knives. Life went on in almost complete idleness, in the expectation of the distributions

of the military station and of gifts brought by passing ships. The centre of this life was the hut which had remained unchanged through the ages: with its casing of pegs, its form of an oval or round cupola, its dimensions which never surpassed I metre 80 for the height at the centre and 3 metres for the longest diameter; but the ancient covering of seal skins had been largely replaced by old pieces of canvas or drag-net. The adults all wore European-type clothes, while the children continued to play naked, most of the time, in mud and wind. They had no longer any feasts or ceremonies. It seemed as if any form of creed had disappeared. Only the traditional language was still spoken. It is in this language, which the white man, or *cristiano* as he is called by the Indian, does not know, that some scraps of the past are preserved inside those huts, around a fire some remnants of the creeds which, a century ago, were held by those free nomads of the sea.

The two members of the mission settled down in the encampment. They passed twenty-two months in a tent, sharing the life of the Indians, and in the course of that time they began to assimilate the first elements of the Alakalup language. All of the Indians were subjected to a complete medical and anthropological examination. At the same time, and parallel to the ethnographical work, the mission carried on a demographic investigation which included not only the living but also the dead in so far as they were still present in the memories of the survivors. The second mission to the same region lasted for two years, from 1951 to 1953. Its main purpose was to solve the problem of Man's appearance on the extreme tip of the American continent during the early post-glacial period, i.e., ten to twelve thousand years ago. This mission had the opportunity for a stop-over at the Alakalups and, without undertaking any new research, they could complete, for the period 1948–53, the research on demographic evolution that had been initiated by the first mission.

II. Contacts with the White Race

We do not know with precision, or even approximately, to how much the original Fuegian population may have amounted some two or three hundred years ago. Almost surely to several thousand. This population seems to have remained numerically rather stable until about the middle of the last century, when it began suddenly to drop, for reasons which are as yet unknown but which evidently have something to do with the fact that the whites were now visiting the archipelagoes in much greater numbers. At the beginning of the twentieth century the Alakalup Indians

numbered no more than two or three thousand; about fifteen years ago, when the Chilean government, alarmed by this rapid rate of disappearance, enacted a law for the protection of the archipelago Indians, they were about 500; when the first French expedition arrived in 1946, they were 150; at the moment of its departure two years later, they were 105. In September 1953 they were no more than 61.

The history of the contacts with the whites does not teach us much as to the cause of this phenomenal rate of extinction.² From the sixteenth to the nineteenth century, the navigators around the archipelago of Magellan met the Alakalups on their voyages. The names of Ladrillero (1557-59), of the English pirate Francis Drake, of Sarmiento de Gamboa, later of Byron, Bougainville, Fitz Roy, are connected with this littleknown history. Whether peaceful or not, those contacts were brief. Undoubtedly they did not exercise any deep influence on the life of the Alakalups except for the introduction of the use of iron in the form of nails, fragments of old barrel hoops made into some kind of adze, or sometimes knives and hatchets. The introduction of a new means of acting on matter meant an improvement and did not contain in itself the germ of decay. It had no influence whatever on the Indians' beliefs and social structure nor did it affect in any way their vital interests. It is doubtful whether the spread of certain European diseases, in particular, of venereal diseases, amounted to much. It does not seem so, but our ignorance on this point is rather complete.

A new chapter in the history of relations between the Alakalups and the whites begins with the end of the nineteenth century. At that time the Alakalups made more lasting contacts with the fur hunters and fishers from the great island of Chiloé, north of their territory, and with the recent European immigrants to Punta Arenas in the Tierra del Fuego. In most cases, hunting expeditions would last from three to six months. The schooners would disperse over the archipelagoes, and small groups of men, each one disposing of a shallop, were stationed near the seals' breeding grounds, with the order to kill and skin the new-born and the fur seals, at the time of parturition. Their hunting encampment was refurnished from time to time, and at the end of the season the hunters would be re-embarked with their cargo of thousands of hides which were scraped, salted and packed.

²The details of this history may be found in 'Evolution démographique des Indiens Alakaluf' by J. Emperaire, *Journal de la Société des Américanistes*, Nouvelle série, tome xxxix, 1950, pp. 187–218. Cf. also J. Emperaire, *Les Nomades de la mer* (publication imminent).

Despite their aversion against the people from Chiloé, the Alakalups settled near their encampments. Their confidence was won by some gifts, and eventually they furnished skilled manual labour at a very low price. In exchange for their labour of preparing the hides, a job for which they had a traditional competence, they received foodstuffs from Chiloé and sometimes wine and liquor. The Alakalups also furnished the people from Chiloé with their otter- or racoon-skin capes, and received in exchange second-hand clothing or blankets of a much lower quality and value.

At that time most of the Indians disposed of knives and hatchets, but other objects soon began to rouse their envy: canvas sails, rifles, shallops. Frequently they would depart in the thick of the night, carrying with them as much as they could of their hosts' equipment. If the Indian canoe was caught, the operation generally ended in a savage massacre. On the other hand, the people from Chiloé showed a lively interest in the Alakalup women. Women and young girls were often kidnapped by the fur hunters, sometimes to be returned later on, sometimes to be carried off to Chiloé. Young boys, who would provide skilled and almost gratuitous manual labour, likewise were carried off, sometimes by persuasion, sometimes by force.

During that same period shipping between the Atlantic and the Pacific became much more intensive. Most of the ships followed the coastal waters and canals, which were more secure and less fatiguing than the open ocean. Shipwrecks were common. Hydrographic missions were sent to explore the safest passages. The natural ports where the ships would anchor were in most cases bays used by the Alakalups. Short but repeated contacts took place. The nakedness and misery of the Alakalups aroused both curiosity and pity. Foodstuffs, clothing, tobacco, and metal tools were given to them.

The whites penetrated ever deeper into the new and unexplored territories on the archipelagoes. Grounds suitable for cattle breeding were discovered on the peninsula of Brunswick, on the island of Riesco, and on the territories which border the gulf of Ultima Speranza. These were the ancient hunting grounds of the Alakalups. They abandoned those regions, yielding to the attraction of the urban centres or transplanting themselves to smaller settlements.

The period between 1880 and 1930, with the twofold influence of the seal hunters from Chiloé and of the white coloniser, marks the beginning of the Alakalups' decline. But we are unable to determine clearly the reasons. Extermination did not take place anywhere, nor were the Indians driven back by force. They reduced their area of their own accord, following their main game, the seal, which had disappeared from the colonised regions. The last large breeding grounds are to be found on those almost inaccessible islets which border the Pacific. But the decline of the seal did not mean a real danger to the Fuegian population. Though less abundant than formerly it remained still sufficient. This, nevertheless, is the time in which the numerical regression of the Alakalup Indians was first noted. Entire zones of the archipelagoes in which they formerly were found were now deserted. Almost unnoticed by the newcomers, the Indians entered the road of extinction. Was it due to alcoholism, tuberculosis, venereal diseases, or to phenomena of a different order? We know nothing about it. All that could be done was to register the fact.

Around 1940 the Chilean government began to worry about this situation, and, on the initiative of President Don Pedro Aguirre Cerda, a law was enacted for the protection of the Indians of the archipelagoes. Under this law, the last Fuegian survivors—there were still a few hundred of them—became the official charges of the State. Puerto Eden, a magnificent bay of the island of Wellington, which had been destined as an airport for hydroplanes, became—at least on the records of the government—a hospital, first-aid station, distribution centre for provisions, etc. The station belonged to the Air Force. Its administration was entrusted to aviators.

The first years of this era of protection, the result of a generous initiative, were marked by a scandal which came into the open around 1950. The outpost was responsible for the distribution of foodstuffs to Indians who, attracted by this windfall, came in large numbers to set up their huts in the vicinity of the station. It was also responsible, in principle, for giving elementary medical aid and for inducing the Indians to settle down and gradually to adopt a more civilised way of life. A sergeant of the technicians' corps was entrusted with the command of the station. His incompetence, his harshness, and the excessive interest he showed in fur dealing utterly ruined the experiment. Medical assistance amounted to zero. The Indians seemed satisfied with exchanging their various hides for foodstuffs, and continued to disappear at an ever more alarming rate.

This scandal is over now. The guilty lost their positions and were transferred, and the outpost has been entrusted to two voluntary workers of the Chilean Army, who, in principle, ought to be changed every six months. The two young men who received us in 1953 in their wooden chalets, lost in complete solitude and ill-prepared for this unpredicted type

of work—the one was a radiotelegraphist, the other a meteorologist did their best to solve the innumerable difficulties they were faced with. It is obvious that they could not get very far where even doctors, educators, psychologists, anthropologists would probably have failed.

Their main job was the distribution of food. They did not possess the necessary knowledge to do more, and in fact they did not even try to improve housing conditions and raise the standards of living, nor to draw the Indians into occupations commensurate with their possibilities, and to force them out of the idleness to which the relative abundance of these years has accustomed them.

The picture of the contacts with the whites would remain incomplete without mentioning however briefly the activities of the Salesian missionaries of Punta Arenas. The memory of the ancient missionaries who, at the beginning of the seventeenth century and later during the second half of the eighteenth, visited the northern parts of the Alakalup territory, certainly has vanished long since. The mission established in 1887 south of the Straits has not left any deep trace either. That mission was founded mainly to act on the Onas, but the Alakalups too were received there, sometimes in groups of several dozens. The mission disappeared around 1906. After that time no serious effort was made, on the part of the missionaries, in favour of the archipelago Indians. Occasionally a Salesian Father from Punta Arenas, animated by the desire to do something for those disinherited souls and taking advantage of the transportation offered by a vessel of the Chilean Navy, tries to baptise some child or to marry some couple. Their lack of understanding is total and their influence amounts to zero. It is quite possible, on the other hand, that these scraps of religious teaching coming from peoples so obviously superior to the Alakalups, have contributed somehow to the disintegration of the ancient creeds. In this sphere, even more than in others, we are reduced to vague hypotheses.

III. Demographic Research

The explanations advanced by most ethnologists—physical and moral decay due to an abuse of alcohol and tobacco, to venereal diseases, to the recent introduction of clothing and blankets which, always humid, induce colds and pulmonary affections; and due also to a sort of discouragement which afflicts the groups—these explanations may be partially or totally correct, but they need to be verified. The disappearance of a group is not an abstract phenomenon. It translates, very concretely, into the disappearance

of each one of its members and into the fact that he is not being replaced. The first task incumbent on the investigator of the extinction of a people is an investigation of the life, the death, the reproduction of each family group and of the individuals that compose it.

First of all, we should define the word 'disappearance'. From the point of view of the individual there exists only one kind of disappearance, namely through death. But from the point of view of the group, the permanent removal of an individual has the same effect as his death, because he will not contribute in any way to any of the activities of the community, in particular, he will not contribute anything to its renovation. In the following tables, which are drawn up from the point of view of the Alakalups as a group, we have therefore added the number of those who have left the group to the number of dead.

Demographic research was conducted by interrogating the surviving members of the group, who always have a very keen memory of the dead and vanished, even if their connexion with them had apparently been very loose. The facts we gathered—except for the last period, 1948-53 were checked up to five times, and they were not adopted until all doubts had been eliminated. A table of filiations and deaths thus was put together for each family group of which at least one survivor had remained. This picture is incomplete because it includes only those groups which still have a surviving member. Other groups have disappeared completely, and it seemed preferable to leave them out of our calculations in order to avoid possible errors. After assembling all the available facts, one would estimate that the number of family groups living some sixty years ago must have been about twice the number (17) of those marked on the table.

In this investigation we counted only straight biological filiation, as the Alakalups know and understand it, leaving any social system of parentage out of the picture. The point of departure for each family group thus is a woman and her children. Masculine filiation has been left aside. Figs. 2 and 3 show two examples of genealogical tables, and Fig. 1 presents, synthetically, the over-all results. The investigation embraces four generations, the last being that of the present-day children, and covers a period of 60 to 80 years.³

The evolution of the feminine Alakalup population speaks for itself: in

⁸This time span may seem too narrowly calculated, because in general we allow thirty years per generation; but two facts should be kept in mind: first, that the fourth generation is still very young and second, that the Alakalups reach the age of reproduction very early and age very fast.

1946 it still consisted of 48 persons of whom 27 were adults, 8 adolescents, and 13 children. In 1948 it comprised only 43, of whom 25 were adults, 5 adolescents, and 13 children. We note already a decrease of 10 per cent in the span of two years. Five years later, in 1953, the balance is still more catastrophic. Of the 17 family groups covered by the investigation, 5 did not have a single living woman on Alakalup territory. The others, together, had 24 women-a decrease of 50 per cent as compared to the figure of 1946. Two of these women were aged, four young women, who had been married several times, had remained childless, five women had children who died at an early age (two children who survived are of mixed blood), five women had a large offspring, but three of them did not live beyond the age of 40, and many of the children died, either accidentally or due to unknown diseases; and finally there were eight children or adolescents below the age of 18. The survival of the group thus depends entirely on the two or three adult women and the eight children or adolescents, several of whom will certainly leave the archipelagoes or die before reaching adulthood.

What are the most obvious reasons for this extinction?

Violent deaths: Under this heading we should assemble deaths by drowning or due to accidents on the rocks during hunting or fishing excursions, and cases of murder. All these cases are extremely numerous. They may account for the extinction of a family. In group 2, e.g., a woman named Kostora had seven children, all living. The oldest one was killed by a white man, the six others, ranging from 1 to 15 years, were drowned near the Isla Solitario, when their canoe capsized in a squall.

During the whole span of four generations we counted 41 drownings and 24 murders. The drownings and accidents affected all age groups and both sexes. The males are hit at a higher rate, apparently on account of their more adventurous type of life, although the whole family leads a nomadic life, in canoes, and fishing is the exclusive prerogative of the women, who often carry along their young children. 6 women and 7 girls, 15 men and 13 boys drowned during the period under consideration. It should be noted that for five of the men the accident was the result of a brawl, after excessive drinking.

The total number of drownings represents 12 per cent of the total number of deaths (335) while the number of drownings after excessive drinking represents 3.3 per cent of the number of deaths of adult persons, 6.8 per cent of the number of deaths of adult men, and only 1.5 per cent of the total number of deaths. One might think that the number of drownings or fatal accidents on the rocks should not have been raised substantially by the presence of some whites in the archipelagoes (except for the five cases of drowning due to intoxication) and that this factor of mortality is directly linked to the climatic conditions and the way of life of the Indians. The five particular cases do not change the total percentage very much (12 per cent instead of 10 per cent of the deaths). This factor of extinction thus may be considered as constant.

The number of murders is more startling: 24 murders, in the span of a half century and for a total of 335 deaths, is enormous, considering that we are dealing in each case with individual murder, not with a state of war or open hostility. It accounts for 7 per cent of the total number of deaths, 13.5 per cent of the number of deaths of adult persons, 19 per cent of the number of deaths of adult men.

It is difficult to appraise exactly the influence of the white man's presence on these massacres. Most of them were committed by Indians. In most cases an old revenge for some theft was involved, and the offended party often holds back for a very long time before finding a suitable occasion for avenging himself. Often he does not even think any more about the old complaint; but when the slightest dispute arises, or when his enemy suddenly finds himself in some difficult situation, the Alakalup remembers his old grudge and satisfies it by murder. At other times, some domestic scene is involved, which may come up on account of any smallishness, the loss of an object, for example. The discussion becomes poisonous and degenerates into blows. The husband eventually beats his wife to death, although he may not have had the slightest intention of doing so.

The Alakalups are often polygamous. The women are not polyandrous though they have considerable freedom in this sphere. A woman often changes husbands several times during her life. Occasionally she may spend one or several nights with another Indian, a man from Chiloé or a white man, without meeting any objection on the part of her regular husband. Scenes of jealousy occur rarely, though they do occur. A husband has no particular liking for his rival: he kills him. If a man fails to convince a woman to go with him, he kills her, or her husband. Any sort of combination is possible; but we did not find a single case in which the woman did the killing.

Murders committed by people from Chiloé or by whites had always the same two motivations: theft and love. An Indian has stolen a shallop,

a rifle, or some tool: he will be killed, together with his whole family, when the occasion arises. It also seems that at the beginning of this century the whites visiting the archipelagoes used the Indians as targets for their shooting, just for fun.

It is difficult to assess the influence of these murders on the rate of extinction of the Alakalups. 19 per cent of the number of deaths of adult men are accounted for in this way; but more than half of the cases in question involved reasons intrinsic to the group life and it does not seem that they increased due to the presence of the whites. Another part is due to the seal hunters from Chiloé, whose way of life is very similar to that of the Indians, and they fall more or less in the same category. The few cases where murder takes the form of extermination are so isolated that they cannot be considered as a real factor in the disappearance of the group.

One might think that the changed living conditions and the disappearance of group traditions strengthened the impulse to murder among the populations of the archipelagoes. This may be correctin so far as the inner life of the group is concerned; but if we take into account the ancient feuds with the southern neighbours, the Yahgans, or with the Tehuelches of the pampas; if we take into account the fact of cannibalism which is corroborated both by the tales of the ancient navigators and by recent excavations, we may come to the conclusion that the proportion of violent deaths among the Alakalups has not risen during their phase of decline. Perhaps it has even gone down, owing to the lessened demographic density and to the rupture of most contacts with neighbouring tribes.

Departures with no returns: Their number is relevant: 51 per 396 births or per 335 individuals eliminated from the group. This means, 15 per cent of the causes of disappearance. This figure calls for our particular attention because it is generally overlooked as a reason for the decrease of the Fuegian population and because it is entirely due to the presence of the whites. These 15 per cent represent a loss which is much more catastrophic than one might think at first, and this for two reasons: Infant and child mortality is high among the Alakalups, and if the number of emigrants is considered not in porportion to the total number of eliminated persons but in proportion to the number of children who reach the age of adolescence, the percentage is more than twice as high. It reaches 34 per cent. This means that, of 100 persons who escaped fatal illness, drowning, or other accident during their childhood, 34 will leave the traditional group to try to adapt themselves to the ways of life proposed by the newcomers. This proportion is very high indeed, but since these departures always take place rather sporadically and as individual whim may suggest, they have never attracted the attention of the statistician. This impoverishment of the race, during the last three or four generations, divides up as follows: 24 females, of whom 2 were children, and 27 males, of whom 5 were children. Departures were most numerous during the heydays of seal hunting. They have decreased since about 1930.

But there is something even worse: Quantitatively the loss is heavy. Qualitatively it is even heavier. In the vast majority of cases, the departing ones were young boys and men carried off by the captains of schooners or fishing parties from Chiloé in search for endurant and cheap labour; or they were young girls and women kidnapped on the same vessels or by the same fishers. Young men and women were chosen for their strength, their pleasing ways, or their greater intelligence. They represent an élite, from the physiological as well as from the psychological point of view. Their departure bereft the community of its best elements. Even though the word 'kidnapping' has been used in this connexion, it is a fact that curiosity, the attraction of otherwise inaccessible wealth, the seduction of men belonging to a superior race, all played an important role in these departures.

We have counted these emigrants, somewhat arbitrarily, under the heading of those really vanished, because they are definitely lost for the language, the culture, and even the race of the Alakalups. They will never return to the home waters, and their children, if any, will merge with the lower classes of Chiloé, of Punta Arenas or of Natales, which consist mostly of people from Chiloé. Large numbers of these individuals will die, either of tuberculosis against which they are not immunised, or of various other diseases contracted in the cities. Others live and reproduce. Eventually they are assimilated and adopt easily the way of life of their hosts who are, like the Indians, essentially a sea-going people. If there had been sufficient time, it would have been interesting to follow the vicissitudes of each one of those Indians, after adaptation to the new way of life.

Deaths due to disease: Almost all of the 180 persons who, as Fig. I indicates, died of some illness during the last three or four generations, died without receiving even a minimum of medical care or undergoing medical examination. Any hypothesis as to the causes of this mortality would therefore be sheer fancy. In general the Indians are quite unable to explain the nature of their suffering. The memories they may have of illnesses in

their families are even more unreliable and, moreover, they amount to almost nothing. Therefore the scope of our inquiry is restricted to the cases observed by Dr. Robin, during the first mission to the archipelagoes and to the results of the complete medical and anthropological examination to which he subjected all Indians then living.

Of the 99 persons settled at Puerto Eden and vicinity, the following died during the 22 months the mission spent there: four children, two of whom showed symptoms of heredosyphilis at birth, died at the age of three. Another one died of broncho-pneumonia, and the fourth died while the mission was absent for a few days. As he had apparently been quite healthy, it is likely that he too was the victim of some pulmonary affection. A fifth child, it should be noted, died immediately after birth. Five adults died of illnesses during the same period. Two elderly women (60 and 55 years old respectively) and a man and a woman in their thirties died of hemiplegic ictus. In the case of the two younger ones, this was certainly of syphilitic origin. A fourth woman died without medical observation.

The causes of the 33 deaths which occurred between February, 1948, and January, 1953, could not be determined medically. Four drownings and one assassination took place which do not concern us here, and some children died immediately after birth; but the memory of our informers fails to record the exact number. As far as the remaining deaths resulting from diseases are concerned, the age distribution is as follows: eight children between 7 and 15 years of age; seven young men and women between 20 and 24; seven men and women between 30 and 45; six men and women above 45 years of age. The balance is frightful.

The small number of deaths which occurred under medical control would prevent an over-all determination of the causes, had it not been complemented by medical observation covering about 80 living persons. A rough summary of the results of these observations, taking into account only those relevant to the problem of mortality, may reveal certain facts:

Though he is of small stature, the Alakalup Indian has a highly developed musculature, is very resistant to fatigue and to cold, and shows a physical strength which is above average. Both men and women age very fast and their strength gives way rather abruptly. Their constitutional physical strength is almost always associated with acquired frailty.

Pulmonary diseases: Medical examination revealed a perfectly normal functioning of the pleuro-pulmonary apparatus in almost all cases. From time

to time, however, and especially during the winter, epidemics break out in the encampment which are of a particular violence. All Indians are severely affected; they refuse nourishment at the first sign of fatigue; they fail to gather wood for heating; they neglect their children, and soon decline into a status of physiological debility and moral depression. Crowded in their icy huts, they will fall prey to prompt and certain contagion.

Are we faced here with a form of European grippe? This is not impossible, though difficult to ascertain. In all cases the disease is epidemic, and when the diseased succumbs, it is in consequence of a pneumonia or pleurisy. After the epidemic of the winter of 1946 all Indians of the camp, adults, children, and aged, were affected. The two members of the mission alone were healthy enough to treat, warm, and nourish the sick. Even if it were of European origin, the epidemic has been known for a long time in austral Patagonia. It seems it is this same disease that Müsters describes in an account referring to the year 1870.4 Müsters, an officer of the British Navy with a liking for adventure, had arranged for a long sojourn among the nomadic Tehuelche Indians in the pampas stretching north of the Straits of Magellan. There he witnessed the outbreak of an epidemic which was in every respect like those which periodically hit the Alakalups. Several children died. If it is the same disease, it was possibly introduced somewhat later into the archipelagoes which are better protected against outside contacts than the pampas, and the losses it caused among the Alakalups are probably of a more recent date. If, on the contrary, these epidemics occurred at earlier times, they must have wreaked less havoc in the small communities of that time, spread out all along the archipelagoes, than they did later in the permanent settlement of Puerto Eden.

Public opinion in Chile tends to ascribe the disappearance of the Fuegian population to pulmonary tuberculosis the spread of which was helped along by the abuse of tobacco and alcohol, and to epidemics of measles which, it seems, took a high toll around the beginning of this century in the missions of Dawson and Ushuaia. There are no precise medical records as far as the measles are concerned, but it is likely that this disease really caused the disappearance of a relevant number of Yahgan Indians. The Alakalups were less numerous than the Yahgans in the missions of the Fuegian islands, and even if a certain number of them were stricken by measles, this disease—of which no further epidemics are recorded for the archipelagoes—must be considered merely as an accident causing the

⁴G.Ch. Müsters, At Home with the Patagonians: A Year's Wandering Over Untrodden Ground from the Straits of Magellan to the Rio Negro. London, 1871.

death of some tens of individuals at a time when there still were about a thousand of them, not as a lasting cause of their disappearance.

Nor does it seem that tuberculosis was an important factor in demographic evolution. The Chileans have been impressed by the fact that most of the Alakalups who came to the urban centres contracted tuberculosis and died rapidly. But from this we should not jump to the conclusion that all Alakalups are tuberculotic. On the contrary, only 8 of the 25 adult men who were examined, and 5 of 28 women had a positive reaction to tuberculine. The cutireaction of children was negative in all cases. Moreover, in all the cases mentioned, the only Indians who had a positive cutireaction were those who had lived or were living continuously with the seal hunters from Chiloé or the whites. Tuberculosis remains practically unknown among the Alakalups who live in the archipelagoes. It was even more so, obviously, half a century ago.

Syphilis: Syphilis, on the contrary, must be responsible for a great number of deaths. Given the total lack of earlier observations, we must limit ourselves, also in this case, to the examinations made between 1946 and 1948. These, however, reveal a great deal. During that period Dr. Robin diagnosed and treated a certain number of cases, in all stages of development, among the Alakalups as well as among the seal hunters from Chiloé who were living near the Indian encampment. We know enough about sexual relations between *loberos* and Indians and within the Indian group itself, to be quite sure that if there is only one clear case of contagious syphilitic lesion, the disease will find its way through the whole population of the archipelagoes.

A great number of syphilitic cases were observed, scarred as well as active: chancres, rashes, mucous plaques, cutaneous ulcerations, symptoms of a heredosyphilitic character in newborn babies, nervous disorders and tabes among old people, hemiplegic ictus inducing the sudden death of persons in their prime and apparently quite resistant. Primary sores were visible in four cases, a primary active tumour in one case. Secondary lesion was observed in one case, in the form of mucous plaques, and one tertiary case, with multiple gummata.

Newborn babies showed heredosyphilitic symptoms which led to their death within a few months after birth, despite regular treatment. A host of other disturbances and accidents which affected at least one fourth of the population, must be attributed to hereditary syphilis: testicular atrophy, cutaneous lesions, blindness, nervous disorders, etc. It is very likely that

of the 33 deaths which occurred between 1948 and 1953, several must be ascribed to syphilis. The high rate of infant mortality, the death of adolescent boys and girls, the disappearance of a high percentage of young adults could have no other reason.

Whatever may be the part played by venereal diseases in the physiological degeneration of the Alakalup population, it is impossible to venture a figure, with any degree of certitude, as to the percentage of deaths for which they are responsible. What is sure is that, even if that percentage is not very high for the adults, a large number of the deaths of small children and doubtlessly almost all cases of sterility must be ascribed to this disease. Venereal disease, then, would be at the root of the evil: it would explain the lack of reproduction of the population, and hence its disappearance.

IV. The Evolution of the Death Rate from Generation to Generation

If we take up the figures given in Fig. 1 under the headings 'deaths from diseases' and try to break them up according to generations, the result is surprising. It may perhaps be summarised as follows: For the oldest generation reached by this inquiry, i.e., the generation of the greatgrandparents of today's children, infant mortality is o per cent; for the generation of their grandparents, 16 per cent; for the generation of their parents, 38.5 per cent; for that of today's children, 56.4 per cent. Obviously this table cannot be accepted at its face value, for the simple reason that the small children who died forty, fifty, sixty, or more years ago have left no traces in the memory of the present population. To a certain extent the results of Fig. 1 must be modified and the over-all percentage of children who died at a low age must be increased. The fact remains, however, that this first generation is represented on the genealogical tables by families with four, five, six, up to nine children, plus those who must be assumed a priori to have died at an early age. It seems that the family groups of former times were both more prolific and more resistant than the families of today.

For the last two generations, comprising the children of today and their parents, almost none of them having passed the age of 40, the records are exact and almost certainly complete. They reveal a steep and catastrophic demographic decline: 38 per cent of the children of the preceding generation died of diseases; 56.4 per cent, of the present generation.

This relative variation of 18 per cent is nothing compared to the demographic decline it really represents. 184 children were born to the preceding

generation, as compared to only 49 born to the present one. Parents are hit by sterility, and of the few children they bring into the world a much higher proportion than formerly prove not viable. Of the seventeen family groups recorded at the beginning of this investigation, one disappeared a generation ago because its members emigrated. During the present generation, eight groups have disappeared or are in the process of extinction. The members of three of these groups have emigrated, the members of three others died young or are childless; the seventh group had four children born of three different women, but all four of them died; and in the eighth group the only child that was born died, while another young woman is sterile. Even supposing that some births will still occur during the coming years, this will not change the picture.

Of the 22 children still living in the Alakalup group we may suppose conditions remaining equal—that 34 per cent will emigrate while the others will either drown, be killed, or die for unknown reasons, and only one or two will live beyond the age of fifty. At that time the Alakalup group will have disappeared long since, and the last survivors will have joined groups of people from Chiloé or will have been carried off as manual labourers into some remote corner of Patagonia.

V. Causes and Remedies

If we now make a balance sheet of the causes which brought about the disappearance of the Alakalups and which were introduced by the arrival of the whites, we find certain secondary factors (tobacco, alcohol, clothing, pulmonary diseases) and two factors of primary importance: syphilis and emigration.

Tobacco and alcohol were far more common among the Indians of the archipelagoes in the days of the seal hunters than they are at the present moment, when the difficulty of procuring them reduces their influence to practically zero. Around the beginning of the century drinking parties of Indians and seal hunters were frequent, as attested by oral and written accounts; but we should not forget that the Indians could not get hold of liquor or wine except when they happened to be near a white settlement or an encampment of hunters from Chiloé. Once they left this environment, they had no choice but to resume their habitual diet, and no one has taken account of these phases of sobriety. If alcoholic beverages, or, to an even lesser degree, tobacco, have had a certain part in the dislocation of the Alakalup community, this is due not so much to physical damages which they could entail as to the seduction they exercised on the Indians, pushing

them to accept jobs which were contrary to their customs and interests, or even to emigrate in the hope of procuring this pleasure to themselves as promptly as possible.

As we have seen, tuberculosis played practically no role at all. But the damage attributed to imported clothing and blankets is probably not merely imaginary. In a country where it rains 280 days every year and where the wind blows practically all year round, a man is better off with a protective layer of grease on his bare skin and occasionally a fur cape on his shoulders than with clothes which are always humid or wet. These clothes must be responsible for a part of the pulmonary affections.

These factors, however, are of little importance if compared with syphilis and emigration. These two factors act in quite distinct spheres: the one in the medical, the other in the psychological sphere. Through them the Alakalups have come to know at the same time the two ways along which a population may disappear from the map of living peoples: by extinction, or by fusion with invading groups. Extinction is in wait for the individuals who have remained on the traditional territory, while the emigrants—to the extent that they survive—will fuse with the poorest classes of the invading population. These two sets of factors act independently, but their effects are cumulative and hasten the complete disappearance of the race.

If there is an interaction, it is difficult to assess its importance. Are the Alakalups driven to emigration because their archipelagoes are diseaseridden and mortiferous? Probably. But are they more susceptible to the diseases of the whites because their group is more disorganised and more exposed to any kind of influence? Also this is probable, although it is impossible to say anything positive on these two points.

The stages of the Alakalups' disappearance can be retraced as follows: Around 1900, we have a steep increase in the contacts with whites and people from Chiloé, most of whom are seal hunters and, we can imagine, do not represent the cream of their civilisations. These contacts entail quite a series of changes in the traditional life of the archipelago Indians. The vital interests of the group expand. Hunting and fishing cease to be the Indians' exclusive preoccupation. More tools—though known already since over a century ago—are acquired by a greater number of persons, soon by all the members of the group. As long as it is only a matter of tools, this represents an improvement of the technical aspect of life. The other gifts offered by the seal hunters in exchange for Indian labour entail more important consequences. Gradually the Indians grasp the meaning

of labour paid for in clothing, foodstuffs and alcohol. At the same time new tastes are developed, for such clothes and such drinks, which end by being more damaging than useful to the individuals as well as to the group. Although our documentation is inadequate, it is likely that the introduction of syphilis and the first erosion of creeds date back to this same period. The whites make fun of the Indians' way of life; the Indians become aware of the inefficiency of some of their practices in comparison with the more successful methods of the whites; and scraps of teachings arriving from the far-off missions of Ushuaia and Dawson do their part in undermining the ancient customs. Even among the Fuegians, the contact between two systems of truths and of values weakens the older and less coherent system, and creates a sort of scepticism. Rites and ceremonies which were the joy and the strength of the group lose their importance and vanish. At present the ancient creeds have not been abandoned altogether, but an Alakalup would be ashamed to mention them in public, and they are not spoken of except in the secrecy of the huts.

The Alakalup society begins to disintegrate. Men are seduced by a way of life which they deem superior to their own; women are seduced by men; the people from Chiloé are close enough, on the one hand, while their wealth and power, on the other, links them to the new superior beings come into these waters. Men and women embark voluntarily in the schooners which carry them to Chiloé whence they will never return.

The attraction is stronger yet considering that life in the encampment is not what it used to be: no more feasts, no more chants, no more dancing —or only rarely so. The interest of the group turns away from the things which formerly were its very life, and gravitates to the seal hunters and their goods, which are so desirable. Many children die. The adults are afflicted by unknown diseases. Gradually a kind of discouragement and resignation seizes the Alakalups. The old people, who have known life in the archipelagoes in its plenitude, resist the new attractions better than the young generation.

Owing to economic reasons of various kinds, the number of seal hunters decreased after some twenty or thirty years, and now they have all but disappeared from the archipelagoes. In the wake of their departure, alcohol became scarcer, the number of murders decreased, even kidnappings and emigrations declined. But one evil was replaced by another. There were now more ships visiting the archipelagoes. A regular line was set up between Valparaiso and Punta Arenas, and also other foreign

lines passed through the canals. Passengers and crews, moved to pity by the unhappy Indians, naked in wind and rain, pleased themselves in handing out no matter what, usable objects as well as useless ones. The Indians began to get accustomed to having everything for the asking. Hunting and fishing, the vital activities of the group, thus passed to a second place, being less rewarding and much more toilsome than the waiting for passenger boats.

The law of protection was the finishing stroke. Theoretically, the Indians should have been stabilised around Puerto Eden and led, step by step, towards a more civilised way of life. The first point of this programme was easily realised. The distributions of foodstuffs sufficed to draw the Indians to Puerto Eden, but, owing to the difficulty of control, this was as far as the experiment ever got. It took place, moreover, at a moment when the Alakalups were already in full decline; nothing was achieved but a hastening of this process. Nothing was changed in the way their huts were constructed; only they were now still filthier than before. The seal-skins, which had become more rare, were replaced by old pieces of canvas, less comfortable. Hygienic conditions became even more deplorable. No human labour would substitute for the clean-up job which wind, rain, and constant dislocations formerly did inside the huts. Now the Indians huddle on straw litters, on the sheer ground, which is never cleaned at all, in shocking promiscuity. In a single hut, whose longest diameter does not exceed three metres, sometimes two or three families live together with their dogs, which means, about ten persons or more with some fifteen dogs. It is easy to imagine the effects of venereal and other diseases under such conditions. Men as well as women live in almost complete inactivity, and their resistance to disease has gone down. No ceremonies of any kind take place. Contacts with the supranatural serve no longer any purpose. The white man provides and answers for everything. He distributes ready-made objects which the Indian suspects cost no labour at all. The people crowding together in their huts finally die while waiting for the next food distribution. Few children are born, many of whom die at an early age; the others await the first opportunity to have themselves adopted or kidnapped. Nothing remains for the group but death and disease. If any hope is left it is turned altogether towards the outside world.

The example of the Alakalups shows that, even without any struggle for the possession of a territory or of the means of production, a human

group can find itself, on the biological as well as on the cultural level, in a position where it cannot resist the contact with another group. On the archipelagoes this contact was weak and sporadic, yet sufficient to introduce into the community pathological germs unknown up to that point, against which no immunisation had been acquired; to awaken new desires which the traditional life could not satisfy; and to convey the idea of new values, more coherent and powerful than the ancient ones, which they destroyed without replacing them.

The facts gathered for a single population do not permit an extension of the problem to other peoples who have disappeared or are on the verge of disappearance. They give but hints as to the direction in which other research might be undertaken. It is always relatively easy to assemble a medical documentation, because it is objective and does not require knowledge of the individuals, their behaviour, their language, and their customs. It is almost always possible to put together demographic information, establishing the number of deaths and their causes, the number of births, of departures of men, women, and children, and contingent conditions. The interest of such information grows in the exact measure in which the researcher is able to record the social implications and psychological resonances of the figures registered in his tables.

Only further research, undertaken in other parts of the world, will tell us what is the role of the pathological and psychological factors in the extinction of other minority groups facing forms of higher evolved civilisations. It is possible that if the pathological factors do not play everywhere the devastating role they had in the case of the Alakalups, the psychological factors, on the other hand, are more or less constant: disintegration of customs and creeds in the face of more efficacious customs and creeds which rapidly undermine the respect for the traditions of the group; the desire to mix with the newcomers in order to enjoy both their material wealth and the prestige that accrues to them; corresponding enfeablement of the structures on which the force and the cohesion of the group formerly rested; emigration of the younger and more enterprising members of the group; impoverishment and disappearance of the others.

Demographic investigation by itself is not enough. To know the sickness is but the first step for a physician. He tries to cure the sickness. The human sciences are trying more and more to apply in practice the results of their research.

On the medical plane it is relatively easy to find solutions for the kind

of problem we have been discussing in this paper. Many methods have been tried all over the world; it is useless to insist.

It is not enough to increase the chances for an individual to live. We must also propose to him a kind of life that makes sense to him. Obviously the kind of organised beggary around Puerto Eden did not constitute an acceptable 'way of life'. Welfare, in the form of gratuitous distributions, does not provide a definite solution. Something else has to be found, and it is at this point that the difficulties arise. The choice of a solution implies in reality a very precise conception of the relative values of civilisations. Does any civilisation or culture, no matter what its stage of development, possess an intrinsic value, and is it the duty of a government to protect its existence as such? Or should the so-called inferior civilisations be 'integrated' into the economic prosperity and the spiritual life of the nation on which they depend? Is it a question of merely trying to save individuals without encumbering the movement of the colonising nation? Few governments have given a neat answer to these questions, and theories have been stretched to fit practical necessities.⁵

These questions no doubt exceed the scope of this essay. It is one thing

For the Alakalups other experiments were tried, in connexion or without connexion with the protective law. They all failed. A mission which was established in 1887 on the island of Dawson by the Salesian missionaries of Punta Arenas failed and dispersed around 1906 after the outbreak of a murderous epidemic. It seems this mission has left no positive trace among the Alakalups whom it had sheltered only temporarily and all of whom returned to nomadic life in their cances.

Much later, at the time when the protective law was enacted, another attempt was made which seemed to be based on a sound idea. A young Alakalup, still in his teens and particularly intelligent, was sent to Santiago to an Airforce Training Centre. The idea was to give him a good education, to 'civilise' him, then to send him back to his group, to make of him the chief of the community, and thus to lead the Indians step by step, and under the guidance of one of their own men, to change their way of life. Young Lautaro Wellington adjusted

⁵ For the Fuegians of the Patagonian archipelagoes, three solutions have been tried by the Chilean government, with various degrees of success. The system of reservations, which had been tried with a certain measure of success in other places, was applied to the Yahgan group in the south. When the islands bordering the west coast of the Tierra del Fuego were invaded by white settlers, the Yahgans, whose numerical decline was similar to that of the Alakalups, were assigned a reservation of 10,000 hectares on the great island of Navarino. The government put at their disposal a certain number of sheep, cattle, and horses, in charge of a man of their race who was intelligent and had a good command of Spanish. Against all expectations, the Yahgans adapted themselves rather well to their new condition of small cattle raisers. In their new habitat, at Puerto Mejillones, they built ranches of wood planks and corrugated iron of their type usually met with in that region, and traded the ridiculously small products of their breeding and fishing for provisions, tools and clothing. After falling to twenty-seven, the Yahgan population seemed to have reached a stable equilibrium, which was helped along by numerous mixed marriages. At the time they received their reservation, they had lost practically all of their civilisation, with the exception of the language, and from then on they lived their lives just like any other group of small cattle breeders on the west coast of the Tierra del Fuego.

to determine the causes of a people's disappearance and the extent of its inevitability; it is quite another thing to find remedies.

It seems, at any rate, that there is no way of stopping the process of disintegration which we have analysed in these pages. Sooner or later all the peoples of the earth will have to face our great modern civilisations. It is hard to imagine how a less advanced population could resist the temptations of a greater dynamism and efficiency. Depending on the nature and the coherence of the civilisation which has to be faced, and depending on the conditions in which this contact takes place, disintegration or assimilation or disappearance will come about sooner or later. It is only a question of time.

In various places reservations have been established, somewhat like zoos, where, theoretically, our retarded brothers could continue to live their traditional lives, protected against contacts with the white man. Theoretically: in practice the reservations for the indigenous populations on the best hypothesis slow up the process of disintegration; they do not stop it. More than one example could be cited where ancestral customs have no other function but to serve as baits for tourists and journalists.

The primitive civilisations are doomed. If attempts are made to save

From time to time the government tries to send young Alakalup Indians for their military service to Santiago or elsewhere. In general, these young men are enthusiastic at the moment of their departure, but then pass a whole year in contact with other young Chileans without learning anything at all, hardly a few words of Spanish. As soon as they come back to Puerto Eden, they take up their former ways in huts and canoes, without any difficulty, and without the slightest attempt to change in any way the habits of the group. The idea of civilising the Alakalups, by settling them in the neighbourhood of a military

The idea of civilising the Alakalups, by settling them in the neighbourhood of a military station or by educating some individual among them and counting on the strength of his example and authority to act on the others—this idea has failed completely. Given the lack of competent personnel—educators, psychologists, or anthropologists—these experiments were doomed to inevitable failure. Other solutions have been proposed spontaneously by the Indians themselves, with a varying measure of success, i.e., those of emigration and partial

remarkably well to his new situation. He passed his tests and left school with a degree and an instruction equivalent to those of a non-commissioned officer of the French army. He returned to Puerto Eden, with the official order to govern the little Alakalup group. This experiment turned into a catastrophe. For several weeks, Lautaro ordered the hapless Indians, who were bewildered but admiring, to execute the most senseless manœvres with shovel and axe; whereupon he disappeared from Puerto Eden eloping in an Indian cance with a young Indian woman. The official civiliser, who incidentally was married to a nurse at Santiago, had taken up the life of the nomads of the sea. The Indians who had been half-settled at Puerto Eden lost no time joining him in his new habitat. A new life took shape, in collaboration with hunters from Chiloé. The little Indian community took to fur dealing; and had it not been for an over-consumption of wine and liquor, some kind of satisfactory economic equilibrium might have been reached. Around Lautaro the Indians found a type of life much like that of the *loberos* and not too different from that of their ancestors. The government wisely closed its eyes to Lautaro's defection and let the experiment take its course. It ended in a catastrophe. At the beginning of 1953 Lautaro and a whole group of Indians drowned themselves. The other Indians gradually returned to Puerto Eden.

them, this is not a question of nostalgia for the past, that passion for history which is so characteristic of our contemporaries who love to play the role of archivists of humanity; nor is it a manifestation of that somewhat morbid taste for the extraordinary, the picturesque, and the sensational, which turns with equal pleasure towards the big crime, the dangerous voyage, or an unknown people. This is another matter. For the destruction of the equilibrium of human groups means the destruction of a whole system of values worked out in the course of thousands of years, of an entire universe of the mind—esthetic, affective and religious; which, in most cases, is not replaced by anything at all. It means, finally, the destruction of what is most human in human beings. It is not enough to distribute food and to care for the body. If we want to achieve anything more valuable we must give a new sense and a new coherence to those despoiled communities—even in those cases where nothing has remained of their ancient universe. The task calls for a programme as well as for men.

As far as the population of the archipelagoes is concerned, there is not much that could be saved. Some specialists may find that this little human group does not deserve any particular attention, considering that miserable masses are dying all over the world. This point of view can be sustained.

There is another kind of half-emigration which, it seems, has yielded better results and which might provide a definite solution for the sixty or so Indians who have resisted decimation. Several families, or in other cases also isolated individuals, have joined the woodsmen and hunters from Chiloé who live—not in very large numbers—in the archipelagoes. These men, as we have seen, have a way of life rather akin to that of the nomadic Indians, but they command better tools and equipment. They originally came from Chiloé, some 700 km north of Puerto Eden, and they seem to belong to the same human family as the Fuegians. The two groups show great physical resemblance, but the people from Chiloé, who were colonised by the Spanish four centuries ago and who have been in contact with old civilisations for much longer, have reached a much higher level of evolution. This assimilation through intermediaries, a process somewhat similar to the one chosen by Lautaro Wellington, might be the best alternative. It seems at any rate the only one which might offer to the Alakalups of our days the possibility of enduring and asserting themselves and finding some vital equilibrium.

Unfortunately the people from Chiloé who live on the archipelagoes often are the scum of their society—those who did not succeed on the native island and are seeking adventure elsewhere. Their influence is much more often damaging than useful to the Indians. Propagators of venereal diseases, of alcoholism, thefts, sometimes capital crimes, they are educators of doubtful value, and there is an ordinance which bars them in principle from Puerto Eden and from any contact with the Alakalups. It is impossible, however, to enforce any kind of control, and no one pays any attention to the ordinance.

assimilation. But due to the bad medical conditions under which the majority of emigrations took place, these often ended catastrophically. The few Indians who live in the suburbs of Punta Arenas or Natales, have been more or less assimilated by the poorest classes of those suburbs. Misery, tuberculosis and alcoholism are their lot, and even if one or the other survived, we cannot justly speak of a success of this experiment. The Indians, in these cases, have but swelled the ranks of those for whom a solution has to be found in all countries. They have lost themselves in a multitude, and their problem does not present itself any longer in a particular form: but it has not been solved for all that.

On the other hand, an experiment could be tried here under particularly simplified conditions. This argument weighs in favour of the Alakalups, those last of the Paleo-Amerindians.

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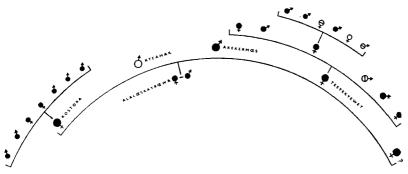


FIG. 2. Family group No. 2. The black circles indicate the dead, the blank circles the living, and those with a diameter indicate the Alakalups living outside their group (extract from the *Journal de la Société des Américanistes*, Nouvelle série, Tome XXXIX, 1950, pp. 187–218.

I. Descendants of ALAOELSKAYROEWA

Died very old. Buried at English Narrows.

KOSTORA-Died October 1947 at Bahia Eden, at the age of 65.

ктсанак-60 years old. Narrowly escaped drowning several times.

AKEKERMOES—Died by drowning during a quarrel among Indians, after excessive drinking (shipwreck).

TESYEKYEWET-killed by a white. Buried near Baker Canal.

X (name unknown)—drowned at the age of 10-12 while gathering shells on steep rocks.

II. Descendants of KOSTORA

MESEYEN-Killed by white.

ATARMOEROKS TAKSE AYWONEYEKANAY KASA TATOERTOROES ATESKOWAYERA

III. Descendants of TESYEKYEWET

YERKAWKS-Died at around 30 years of age, on January 1, 1947, at Bahia Eden.

MATCAWES-Kidnapped and taken to Chiloé at the age of 15. Worked

at Chonchi, where he married a native woman. Has not been seen at home for several years.

- TCEYATOEWA—Died at the age of 15 (approximately) in the Falles canal, after his canoe capsized in a squall. Was able to reach a steep rocky island, where he died of cold and hunger.
- TESKYEN-Kidnapped at the age of 12 by woodsmen. Died at Punta Arenas some years later.
- WAKTERSELOES-Died between two and three years of age. Buried at Eyre Fjord.
- X-Died a few months after birth. Buried at English Narrows.

IV. Descendants of YERKAWKS

- X-Drowned, a few months after his birth, at Bahia Eden.
- X-Died soon after birth.
- KASO—Kidnapped by men from Chiloé at the age of 10 or 12. Was never heard of again.
- TESKARSENTOERA-10 years old; died after 1948.

KERAY-6 years old.

TCALA-2 years old. Kidnapped recently (1950) to Punta Arenas.

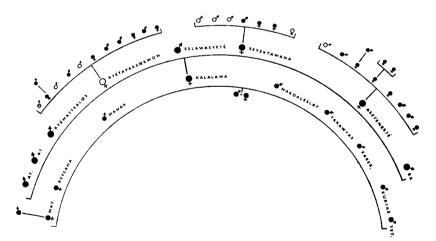


FIG. 3. Family group No. 10. Black circles indicate the dead, blank circles the living, and circles with diameter indicate the Alakalups living outside their group (extract from *Journal de la Société des Américanistes*, Nouvelle série, Tome XXXIX, 1950, pp. 187–218).

MANUEL—17 years of age. In military service at Santiago since the beginning of 1948.

WORKWA-18 years of age. A boy born of a mixed marriage, died at the age of 3, in February 1947. Buried at Bahia Eden. Married to an Indian man. Without descendance. Died after 1948.

STAKSO-13 years of age.

ATKASAP-11 years of age. Died after 1948.

ASAMALO—8 years of age.

YENSENTARA-6 years of age. Died after 1948.

KNOKWOALAS-Drowned at Bahia Eden, after excessive drinking.

MATA-died at 10 or 12 years of age. Buried at Puerto Molyneux.

KSERKYEYEN-Died at an early age. Buried at Puerto Pico.

TEREKSTAT-Died at an early age. Buried at Puerto Grapler.

MAYAHENAY-Died at an early age. Buried at Canal Aceite.

II. Collateral kin of KYETAPAKSOEKWON

ATCANA—Drowned after excessive drinking.

ATCOEPESKAR-Died after falling on the rocks. Aged about 20 to 25 years.

KYEWAYTCALOES—50 years of age. Died after 1948.

SELAWASYETE—Died of old age. Buried at Brazo Norte.

SEYEKTAWANA-Died of old age. Buried at Messier Canal.

ASEYENEKTE-Died of old age. Buried at San Pedro.

KAMELOKLAY-Died at age of 17-18 years. Immersed[®] at Puerto Grapler.

III. Collateral kin of KALALA WA

KEYERMAEKSEPATALO-Died young, without children.

NAYWAK-Had one child, who died soon after birth. Immersed at Puerto Bueno.

MANAKAWRIAS-Died at age of 20-25 years.

KALALAWA-Had 9 children. Died of old age. Immersed.

MAKOALESLAY—Died of old age.

YAKAWYAS—Died of old age.

KARER-Died adult.

YETELKTETCEFTCASLAY-Died adult.

Form of water burial, common among the Alakalups.

IV. Descendants of SEYEKTAWANA ATALAKYENAYEWE—40 years of age. Married. Offspring. JOSE—35 years of age. Married. Offspring. TCASKYEP—25 years of age. Married. Without offspring. MALOTCE—Died young. Killed by an Indian. Buried at Brazo Morte. KOLAKTESEYA—Died about the age of 14. Killed by an Indian. OFSAKOERA—Died about the age of 3-4. Buried at Puerto Molyneux. TCARSA—22 years of age. Married several times. Childless. One of the wives of Lautaro Wellington.

V. Descendants of ASEYENEKTE

PEDRO-50 years of age.

KNOKWOALAS—60 years of age. Lived for many years around Punta Arenas. Died after 1948.

- SAYEKTE—Died in her youth. Buried in a grotto at Puerto Grapler. Had one child who died at birth.
- KOSWAKER—Died of old age, in 1946. Had two daughters who died soon after birth

2 girls and 2 boys, who died soon after birth.