

# The Road to Alto

Robin Jenkins



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Pluto  Press



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# The Road to Alto

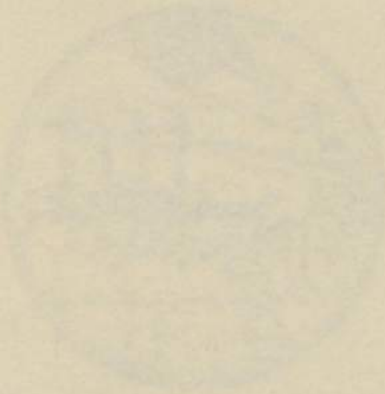
**The Road to Alto**

*Robin Jenkins*

An account of peasants, capitalists  
and the soil in the mountains of  
Southern Portugal

Pluto Press

The Road to Airo



THE ROAD TO AIRO  
A TRAVELER'S GUIDE  
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# Abbreviations and Measures

- PPD Partido Popular Democratico (now the PSD – right wing social democrats)  
PS Partido Socialista (social democrats)  
CDS Centro Democratico Social (conservatives)  
PCP Partido Comunista Portugues  
MDP/CDE Movimento Democratico Portugues (communist front)  
MFA Movimento de Forcas Armadas  
PIDE Fascist secret police

## Money (1976)

67 escudos = £1

1000 escudos = 1 conto (about £17)

*Women earned 12 escudos (18 p) per hour for field work*

*Men earned 25 escudos (37 p) per hour for casual work*

*In 1976, apart from cheap alcohol and tobacco, and expensive petrol (£1.35 per gallon), the cost of living in Portugal was about the same as in Britain.*

## Distance

1 metre = 39 inches

8 kilometres = 5 miles

100 metres = 328 feet

## Height

1 metre = 3.28 feet

1,000 metres = 3,280 feet

*Picota is 2,532 feet high and Foia is 2,959 feet high.*

## Area

1 hectare = 10,000 square metres (100 metres × 100 metres) (about 2.47 acres)

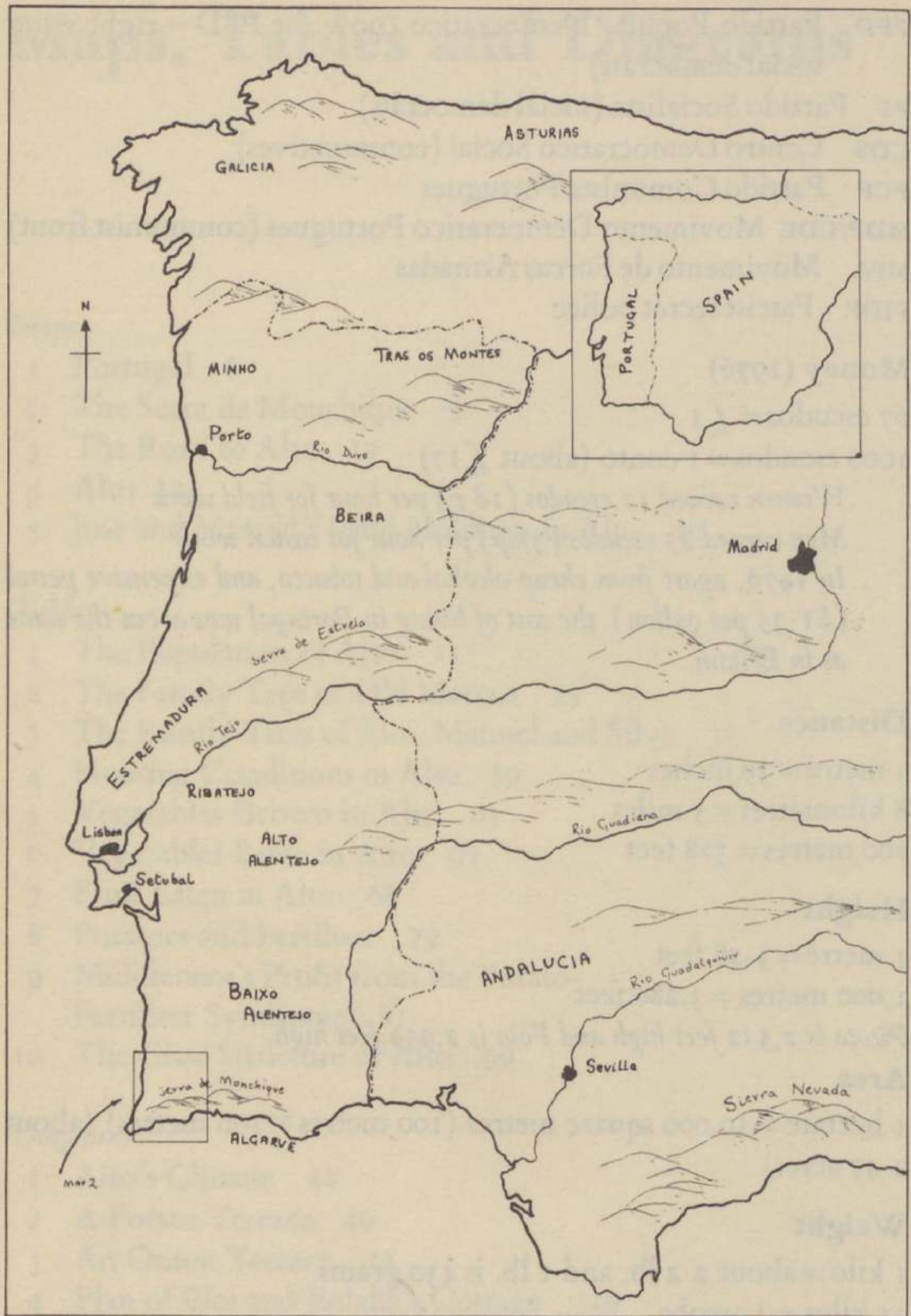
## Weight

1 kilo = about 2.2 lb. and 1 lb. is 430 grams

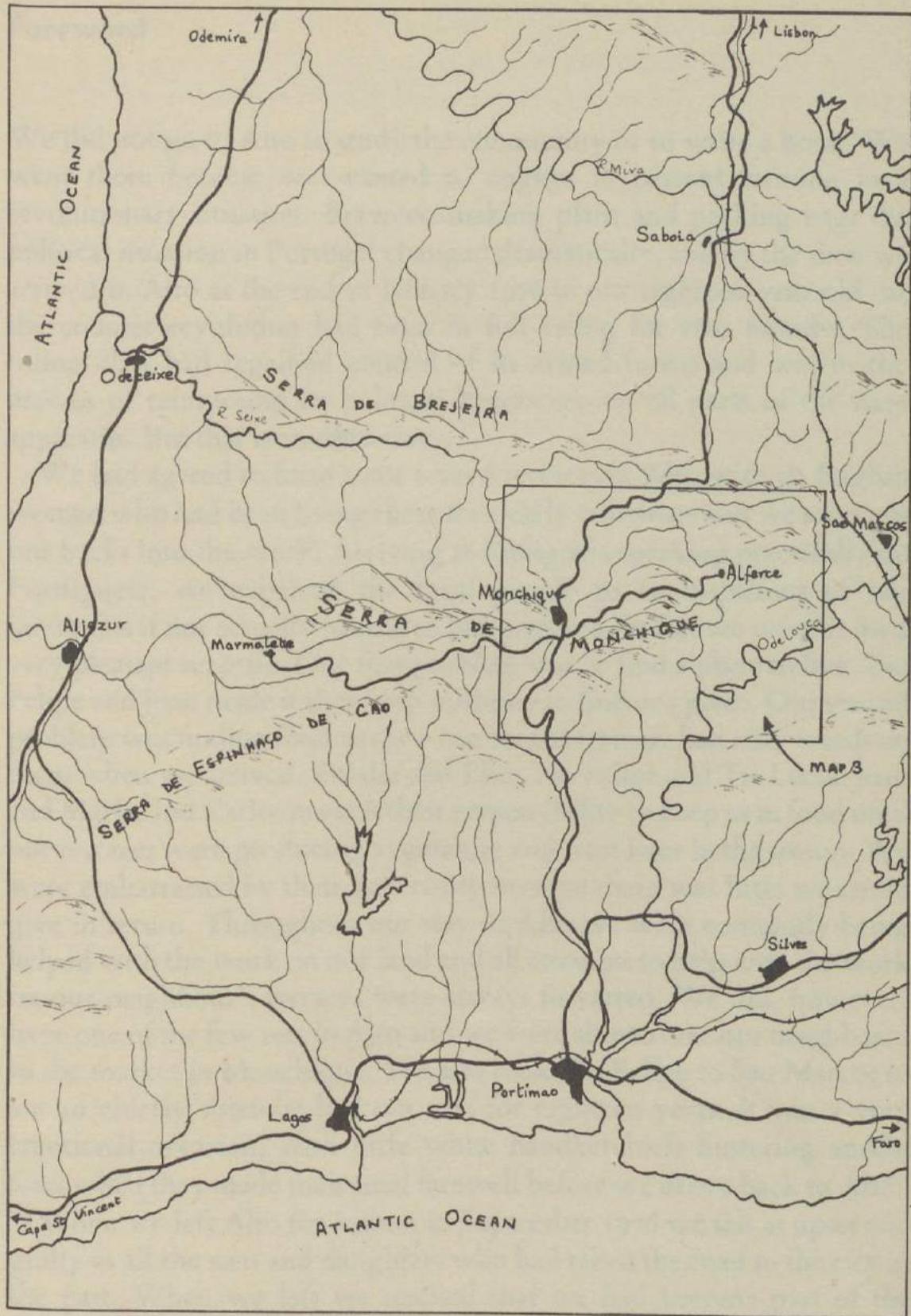
15 kilos = 1 arroba

## Liquids

1 litre = 1.7 pints    1 gallon = about 4.5 litres



Portugal



The Serra de Monchique



The River System of the

## Foreword

We did not go to Alto to study the community or to write a book. We went there because we wanted to engage in peasant farming in a revolutionary situation. Between making plans and packing bags the political situation in Portugal changed dramatically, and by the time we arrived in Alto at the end of January 1976 in our eighteen-year old car the counter-revolution had been in full swing for two months. The ruling class had regained control of its armed forces and was in the process of reimposing its political hegemony on all parts of the state apparatus. But that is another story.

We had agreed to farm some rented terraces in Alto with an English woman who had been living there for nearly two years and we soon got our backs into the work. Arriving as foreigners speaking practically no Portuguese, we expected the local people to be suspicious of our intentions if not actually hostile to our presence. In fact we were in for a very pleasant surprise. Our first problem was to find a place to live. Tio Felipe and Joao made it their responsibility to find us a place. Our second problem was finding food to eat – our rented terraces had only weeds on them when we arrived. Eulalia and Eloi, Tio Felipe and Tia Lucia, Joao and Maria, and Carlos made it their responsibility to keep us in food until our terraces were producing vegetables and fruit later in the season. We were embarrassed by their generosity because there was little we could give in return. Throughout our stay in Alto we were constantly being helped with the work on our land and all attempts to help with the work on our neighbour's terraces were always thwarted. We did, however, have one of the few cars in Alto and we were able to take our neighbours to the market in Monchique. We also took Tio Felipe to Sao Marcos to see an elderly sister he had not met for eighteen years. It was a very emotional occasion, with little white handkerchiefs fluttering amidst tears when they made their final farewell before we drove back to Alto.

When we left Alto for Lisbon in September 1976 we felt as upset and guilty as all the sons and daughters who had taken the road to the city in the past. When we left we realised that we had become part of the community, almost part of a family. It had been a very rich experience. It seemed important to write it all down, to puzzle out what made Alto tick; this is the result.


Two months after moving to Lisbon, Mary and I returned to Alto to

pick up Eulalia, Eloi and Perpetua and take them to their capital city. For Eulalia and Eloi it was the first time in a city. They never left the flat without us and just could not take it all in. Eloi was upset by his inability to read anything, but otherwise thoroughly enjoyed himself, especially when he discovered that the hippopotamus at the zoo ate exactly the same straw as his donkeys. Eulalia was terrified by the traffic and the tube. It was a world apart. They were no doubt very relieved to get back to the little world they understood so well. We waved goodbye at dawn on a blustery, wet November morning as their boat set off across the Tagus for the train to the Algarve on the other side and we have not seen them since.

I regret that even a Portuguese version of this book would be inaccessible to the people of Alto. Illiteracy places an insuperable barrier between this book and the people it is about. It is in fact an insult that we can read about their lives and they cannot. So this book is a token of gratitude for a rich experience rather than gratitude properly given. I owe a debt to the people of Alto, and particularly to Sheila Young who introduced us to the place and made it all possible.

# I Introduction

Down by the Correntinho cottages the limed walls reflected enough light to make lanterns unnecessary, and sitting out in front of the cottages was a small group of peasants, quietly drinking medronho from a single glass, passed round, slowly munching cake, and bit by bit, between long silences, assessing the day's events.

It was 25 June 1976, the day of Portugal's Presidential Elections. All day long, peasants from higher up the mountain had been passing the Correntinho cottages, some on foot, some by donkey, all dressed in their very best and on their way to or from Alferce to register their votes. No one had seen so many faces since the General Election in April and the whole process still held a fascination – and some fears for the older people. Old Tio Felipe squatted on the ground, still ill at ease because he had not voted, not entirely convinced that the police would not be after him in the morning. He was singularly unprepared for Portugal's rapid lurch towards democratic institutions. Unable to read or write, he had spent hours in April practising crosses under the supervision of younger people. It scared him. He did not understand what he was supposed to be doing and he felt doubly afraid at the fact that the local landlord had told him to put his cross against the PPD whilst his ancient friend from the village had shown him the hammer and sickle sign put out by the PCP. In fact he decided to put his cross against the  sign of the MDP/CDE because it looked like a chicken's foot and he could identify with that. When he got to the polling booth down in Alferce, however, the sight of the police and the solitary soldier in fatigues casually handling a machine gun made him panic and he quickly put his cross against the first symbol on the paper – the PPD. For Tio Felipe it was a dreadful experience. Enough was enough and he was never going to vote again.

Many of the younger people had acted differently. They jauntily cast their votes – but kept their mouths shut. Supporters of three of the four Presidential candidates had come into Alferce and plastered the walls with posters. The road from Monchique had been painted with slogans

on almost every bend. Cars and vans equipped with loudspeakers had ventured as far as they could up the rough tracks into the mountains to blast out their message to the assembled pigs, donkeys, dogs and occasional peasant, and to echo it in garbled form from mountain to mountain. But no one discussed politics except for a few PPD supporters in Alferce who thought that their chances with the local bosses might be improved by occasionally spitting violently about 'comunistas' as they got steadily more drunk in the local tabernas.

And so the conversation outside the Correntinho cottages, slow and halting as it was, never touched politics. Any other time most of the people of Alto would have been happy to shout their condemnation of the capitalistas, the church, the PIDE, the Town Hall in Monchique and any other symbol of external authority. This election business, however, had cast a cautious, glum suspicion over their conversation. No one was going to say how they voted, not even to members of the family. Around eleven, this peaceful scene, with its unspoken, and perhaps partly unconscious worries was broken by the spluttering of a big old motorbike climbing the steep hill from the village. It was Carlos (2), back from the count. No one showed any eagerness for the results and it was only after some minutes of conversation about dogs and chickens that Carlos felt able to tell one of the peasants the local results. The information passed slowly around the group, not as news but as information in passing. Tio Felipe and his wife remained tense and uncomprehending but the others could not hold their silence, and slowly their murmurs of approval gathered into quiet self-congratulation. They were not reacting to the fact that General Eanes had come first, but to the fact that Otelo had come a respectable second. With some fear, and in complete secrecy, each of them had placed their crosses against Otelo, each of them knowing that this was a direct snub for the Alferce shop-keepers, the middle-men, the local capitalistas and the one and only rich landlord in Alto. Now they could not help but show their pleasure at the number who had done the same.

For all of them, politics was a distant thing in the outside world. Other than the PPD, no party had any local organisation and they could draw their own conclusions about the PPD from the fact that the landlord had one of its stickers in the back window of his car. None of them could have named the leaders of the PPD or the PS. One or two of them knew that Cunhal was the leader of the PCP, but of all the names heard on the transistor radios, they identified with only one – Otelo. He alone was



known throughout Portugal simply by his Christian name. In the whole confused process that had started on 25 April 1974, Otelo was the only person who came over as a man of the people. Now these peasants quietly congratulated themselves and their community for giving him a respectable vote.

The conversation went on, but soon Eloi got bored, went along to the barn at the end of the Correntinho cottages to saddle his donkey and then clopped slowly past on his way to a taberna down in the village. He was in fact indicating that it was now safe to go out again. The others made their way to their cottages, glad that this particular day was over, and the night was left to the cicadas, the dogs, the moon and the drunks down in the village.

Alto is perched three-quarters of the way up Picota, a great slab of granite that forms part of the Serra de Monchique in southern Portugal. Up above Alto there is a ridge and on it are the ruined remains of a windmill. The roof and the wooden parts have long since been carted away for firewood. The two massive millstones lie together just outside the door. This spot is open to the four winds and from here you can see most of the south-western tip of Europe. To the north, several ranges of lower mountains finally give way to the rolling grass plains of the Alentejo, and in the distance it is possible to pick out the brilliant white houses of Aljustrel. To the west, the mountain rises to a bare summit but to one side there is a clear view of the Western Atlantic, thirty kilometres away. To the south-west, you can see Cape St Vincent, where Henry the Navigator planned the explorations that founded the Portuguese Empire some six hundred years ago. To the south you can see the coastal plain of the Algarve, and on the coast, twenty kilometres away, is Portimao with its big new hotels. Immediately to the south-east, and somewhat lower than the windmill there is a rocky outcrop with the crumbled remains of a Moorish fort, and beyond that, range upon range of lower mountains all the way to the Spanish frontier a hundred kilometres away.

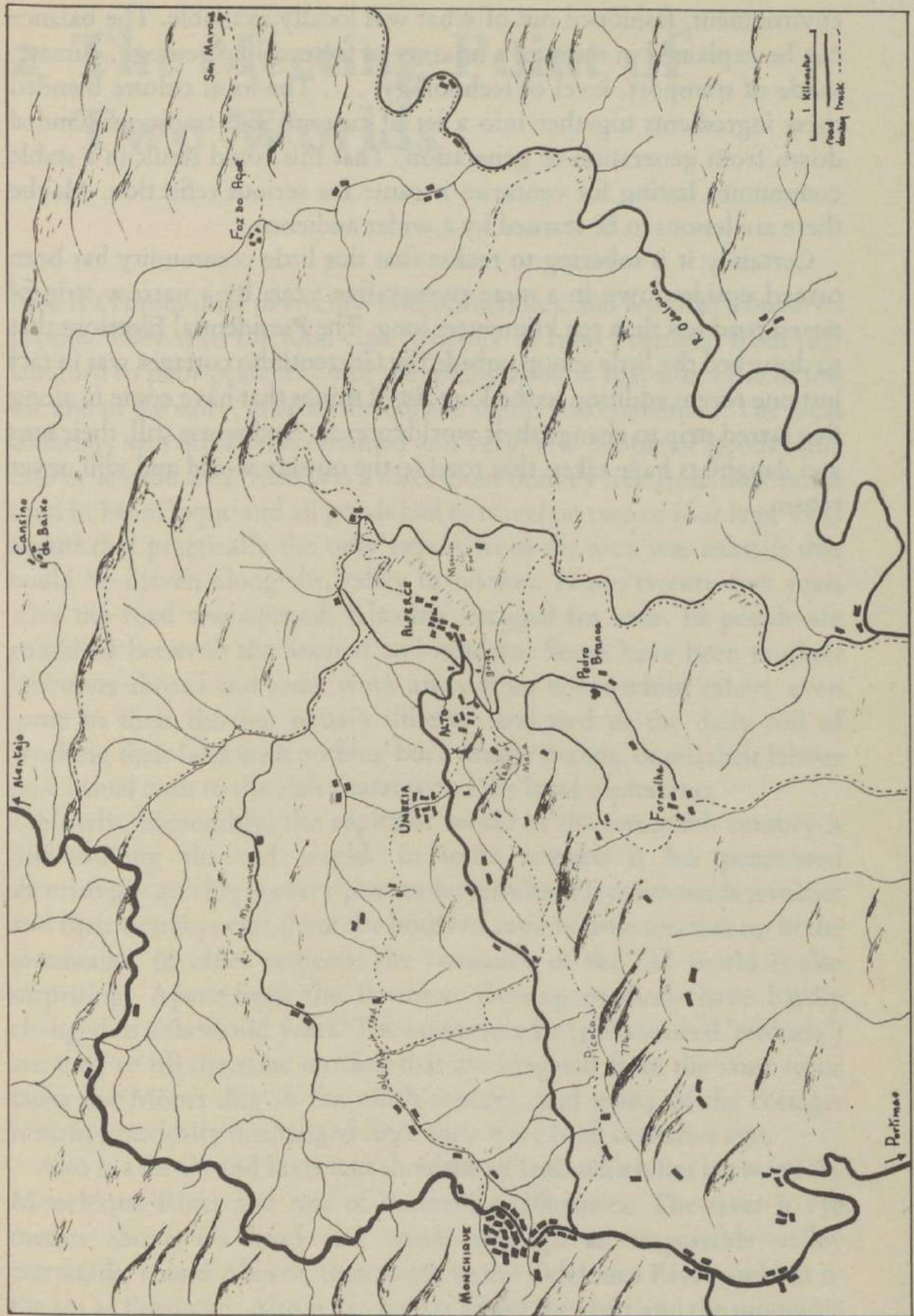
Immediately below the windmill, and to the north-east, you can see Alto, a small hamlet of scattered cottages with white walls and pantile roofs, surrounded by hundreds of irrigated terraces. It is a lush, green sight, contrasting dramatically with the barren, worn-out appearance of the surrounding landscape in every direction. The shadowy group of peasants who nervously awaited the election results the previous night had now forgotten about this latest intrusion into their community and

were again busy on their terraces, engaged in the daily work of growing food for themselves and their animals, like the many generations before them. Here and there on the terraces, you could just pick out the shape of a person, back bent into the daily summer task of irrigating, and every now and again, the life-giving water running along a newly opened channel would glint and sparkle in the sunshine.

Beyond Alto, and lower down, is the compact village of Alferce, its white walls and red-brown roofs contrasting sharply with the dense groves of olive-green cork oaks around it. Alferce has a post office, a cafe, three tabernas, a general store and some large new warehouses. The newness and size of the warehouses gives the village an air of modernity belied by the fact that there is no mains electricity and that most of the cottages are without running water and drains. There are two water taps in the street and the surrounding cork groves serve as the lavatory.

This report is about life in the mountains around Alferce. It focuses on life in Alto, and in particular, on the little group of peasants who were outside the Correntinho cottages that election night. Each chapter is a cross-section of their lives, and bit by bit, they and their world, its pleasures and problems, and above all, the contradictions that are rapidly developing within their community are described and unfolded. In order to do this I have written one chapter describing the hamlet, one on the annual cycle of work, one on the local mode of production and its resulting economy, one on the local class structure, one on the family that lives in the Correntinho cottages, one on the ecological consequences of the recent intrusion into the area of the wider capitalist economy. At the end there are some broader reflections on the sad story related here. Sad because life in these mountains is becoming increasingly demoralised, sad in a wider sense because a way of life that had managed to exist almost unchanged for nearly a thousand years is now doomed to extinction. There is of course no particular merit in ancient things and traditions but there is something special about the subsistence agriculture that has persisted and managed to reproduce the conditions for its existence on these mountains down through the centuries.

It is in the light of such considerations that Alto is of particular interest. Until 1951 there was no road to Alferce. The only route to the outside world was along rough donkey tracks that are impassable to even a horse and cart. The whole area was cut off from the outside world and was self-sufficient in most things. Local life was in a state of balance with the local



The Road to Alto

environment, fashioned out of what was locally available. The balance can be explained in terms of a mixture of factors, like geology, climate, mode of transport, level of technology. . . . The local culture blended these ingredients together into a set of customs and traditions handed down from generation to generation. That this could result in a stable community lasting for centuries is cause for serious reflection. Maybe there are lessons to be learned by a wider audience.

Certainly it is sobering to realise that this little community has been turned upside down in a mere twenty-five years by a narrow strip of tarred road less than ten kilometres long. The Presidential Elections that so disturbed the little group outside the Correntinho cottages was in fact just one recent addition to the long list of things that have come in along that tarred strip to change their world forever. And worse still, their sons and daughters have taken that road to the outside world and will never return.

## 2 The Meeting Point of Two Worlds

Alto is a community of twenty-four households, and less than a hundred people. They span the total class structure of rural Portugal, from rich landlord to poor peasant. Until the road was built, that was more or less the end of the story, as far as the outside world was concerned. The local economy was quite self-contained and very few people or goods came into or left the area. Alto was a three-hour donkey trek from the nearest road in Monchique and all goods had to travel on two or four legs. That meant that practically the only export from the area was animals that could be driven along the valley to market. Now, twenty-five years after the road was opened, Alto has changed for ever. Its people are straddled between the ancient and modern. Some have been migrant labourers abroad and some work away from home whilst others, even some in their thirties, remain illiterate and tied to the daily toil of working their land with nothing but a simple enxada, or sell their labour on a casual basis to the rich peasants and the local capitalists.

Slowly, inexorably, the capitalist world of the twentieth century is undermining the old world. In some respects it has penetrated surprisingly quickly – every peasant buys sacks of factory-made fertiliser and their donkeys cart them for hours to remote little terraces up in the mountains. In other respects, the resistance of the old world is also surprising. Apart from the fertiliser, farming methods have hardly changed in a thousand years. The same enxadas (pronounced ‘enshada’) are used to till the same terraces that are irrigated from the same stone tanks the Moors dug in the ninth century, and many of the cottages remain practically unchanged since they were built centuries ago.

Alto is a fertile and luxuriant shoulder of land which lies between the Monchique River and one of its smaller tributaries. The river is 150 metres above sea level and winds through an impassable valley eastwards, round Alferce, then south to the Odelouca River and out to the sea at Portimao. Alto is 250 metres above the river and the mountain that dominates the view to the west rises steeply to 600 metres, then

flattens out somewhat, reaching 774 metres at the top of Picota.

The mountain is extraordinarily beautiful. From a distance one might mistake the scenery for a part of the Swiss Alps. In fact most of the trees are not pines but strong-scented eucalyptus, and what from a distance looks like open patches of grazing grass between the trees actually turns out to be impenetrable bush up to five metres tall, consisting of medronho trees, oleander and gigantic ling and heather.

The Serra de Monchique is old, semi-decayed granite, with huge slabs and outcrops higher up the mountain. There are also large patches of shale and soft sandstone. It is the sandstone from which the soil has developed. Left to nature, only evergreen trees and scrub bushes would grow here, but over more than a thousand years the mountain slopes have been terraced and the terraces have been filled with loam. Tunnels have been dug into the hillsides to tap natural springs and to feed the water into irrigation tanks. This has produced a luxuriant environment for a large variety of crops. The locality is very, very green compared with the surrounding landscape. There are lots of trees – great, twisted old cork oaks, often in large groves on the lower slopes, small patches of sweet chestnuts, willows on either side of every stream, carefully pollarded each spring for making baskets. Then on the drier slopes there are pines, eucalyptus and medronho trees, the latter producing many red berries that are collected by the ton, fermented and distilled.

There are many different fruit trees on the terraces – oranges, lemons and tangerines, plums, cherries, peaches and nectarines, loquats, pomegranates and figs, and many varieties of apple and pear. Here and there, a persimmon or a mulberry grows, and tangled in and out of many of these fruit trees are grape vines of every description. Finally there are olive groves and then the odd palm tree.

The mountain changes its scents and sounds throughout the year. In the spring, when it is very wet and the clouds drift along the valley below, the eucalyptus scent is at its strongest but it does not mask the scent of wild rosemary or the strong apricot smell of the chanterelles that grow in clumps under the oak trees. On the sunnier spring days there is the constant activity of bees, disturbed only by the noisy chattering of azure-winged magpies marauding in small bands across the terraces.

In May, as the ground begins to warm up, the strong, sweet scent of the wild lavender becomes dominant on the wilder slopes, whilst on the terraces the orange and lemon blossom is all pervasive. The hoopoes arrive and betray their presence by a constant, monotonous poop . . . poop; then come the cuckoos. In June, the unpredictable rainy and often

stormy winter weather finally gives way to the total predictability of the summer sun and there is scarcely another cloud until September and sometimes even until January. The earth seems to develop a scent of its own at the height of a summer afternoon, when the only sound is the ethereal buzz of millions of insects, apparently oblivious to the oppressive heat. All other life confines its activities to the hours around dawn and dusk, when temperatures fall to the mid-sixties.

The cicadas start up their trilling as the sun goes down, and finally go quiet long after dark. Then the little green frogs in the irrigation tanks start calling, with a sound like the repetitive kraw-kraw of nocturnal crows. And on moonlit nights, when the trees cast precise shadows and the white-washed cottages seem luminous, the dogs come into their own: they bark, bay and howl in rounds and choruses, set off perhaps by the shufflings of a giant toad or the wanderings of a polecat.

As the summer wears on, the heat silences almost everything but the donkeys; the plants burn up bit by bit, and the only green things left are the trees and the irrigated terraces.

The most delicious smell of all is the sweet freshness of the first autumn rains – any time from September to January. Within days of the first rain, the landscape changes to a bright green as millions of little seeds germinate and start off the next season.

Every year, the peasants start again the battle against their environment. Left for a few years, the terraces would crumble away and become again a part of the natural chaos of the mountainside. The man-made caves to the springs need clearing. The water channels to the terraces need rebuilding after the winter rains. The weeds that cover the terraces all winter have to be dug and cleared. Hundreds of donkey panniers full of manure have to be carted up and down the mountain to the terraces.

This pattern of toil has gone on, practically unchanged, for many centuries. Over the ages, more terraces have been built – and are still being built – more caves have been dug, more springs tapped. Complex inheritance customs have split the terraces into little handkerchief plots here and there, with ever more complicated divisions of water rights. Family feuds and permanent litigation over boundaries and water rights are the main livelihood of the lawyers working at the Town Hall in Monchique, and every so often, this necessitates the odd sight of officials dressed for the office, clopping slowly along by donkey to the remote sites of disputes.

Most peasants know their boundaries in the dark, denoted by odd rocks

and trees, but the bigger landlords rely on granite posts carved with their initials and placed in the ground around their property. Every scrap of land is owned by somebody and most peasants will have inherited half a hectare here and half a hectare there, often a day's donkey trek apart.

Within living memory, life in Alto was essentially the same as it had been in the middle ages. The old track from Monchique to Alto and on to Alferce is over a thousand years old. It climbs up to Alto from Alferce, on and above the terraces into the oak forest, then down to the terraces of Umbria and on up the fertile valley to Monchique. The journey takes about three hours by donkey (two hours on foot) and the old track is still used on market days.

Few goods ever passed along this track. Alto's main exports had to be self-transporting, like goats, sheep, cows and pigs, though the latter can only be driven with great perseverance, normally at night. The only exports that were carried on donkeys were cork, medronho and sweet chestnuts. A generation ago, sweet chestnuts used to grow in profusion all around Alto and when they were carted into Monchique from the surrounding mountains they filled the whole town square knee deep.

The road from Monchique to Alferce was opened in 1951. The state plan was to build the road another 15 kilometres eastwards to the railway town of Sao Marcos, where trains run up to Lisbon from the Algarve Coast, but the money ran out and the road ends suddenly in the middle of nowhere as it reaches the Monchique River below Alferce.

The road has changed the whole logic of Alto's self-contained life. It is now possible to drive from Alto to the nightclubs of the Algarve in less than an hour. Faro Airport is only two hours away. The biggest Volvo trucks can get into the mountains to cart off timber. Bulldozers can climb to the very tops of the mountains to make rough tracks for tractors, gouge new terraces and dig new dams for reservoirs. A labourer with a 100 cc motorbike can get round to the other side of the mountain to cut eucalyptus in less than half an hour. Travelling times have been telescoped. And now, multinational companies bring their equipment into the mountains to drill for uranium samples, and rich foreigners build villas with fantastic views over the Algarve coast. The election cavalcades get within loudspeaker distance of almost every peasant.

The road has cut through the shared experience of the local people. There are those who have taken the train from Lisbon to Paris and beyond, to work in the EEC, and those who have only been to Portimao

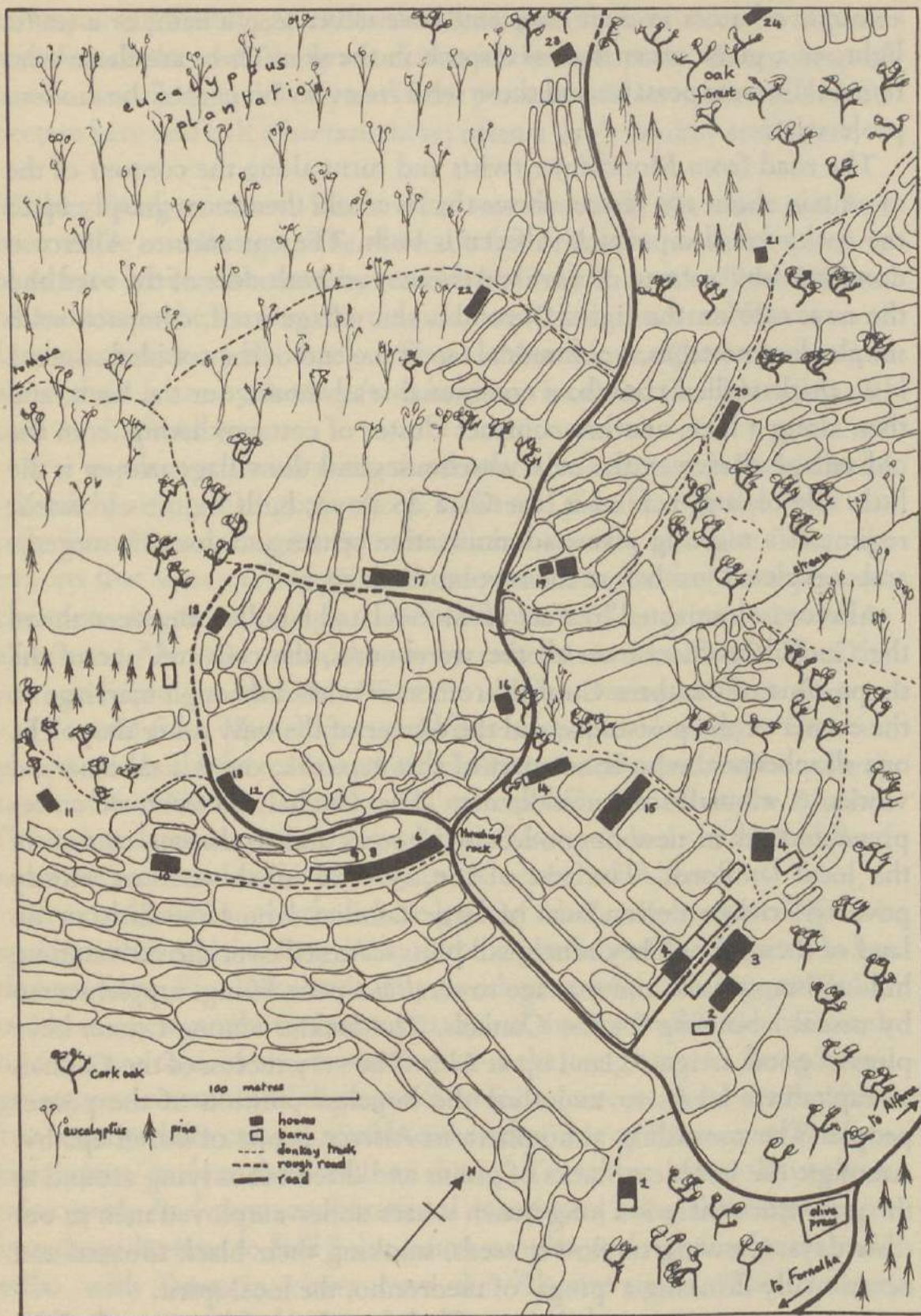


a couple of times in their lives and have never seen a bath, or a traffic light, or a plane other than as a speck in the sky. There are those who remain illiterate peasants and those who are every bit part of the modern proletariat.

The road from Monchique twists and turns along the contour of the mountain about 200 metres above the river and then turns sharply up to the rocky knoll on which Alferce is built. The entrance to Alferce is dominated by a string of new warehouses on both sides of the road and the new café on the right. Beyond is the village itself, compact, with simple, low cottages, a communal tap at the end of the cobbled street, a low, thick-walled church, a communal wash house out the back, and then along a lane, another compact cluster of cottages dating from the old village. Between the new warehouses and the village proper is the little school, and behind it, the Casa do Povo, built by the old fascist regime as a meeting place, administrative centre and doctor's surgery, and completed just before the revolution in 1974.

Alferce is dominated by a set of inter-related families. Between them, the Cunhal brothers own all the warehouses, the café and one of the shops. One of the three Cunhal brothers is related through marriage to the owner of the post-office and the owner of the only other shop. The one shopkeeper, who is not part of this network, owns a taberna and works as a small-scale middleman. The Cunhal network of entrepreneurs lives in new or modernised houses and so do one or two of the local landlords. The rest of the 250-odd inhabitants are mostly poverty-stricken descendants of large families who have little or no land of their own. They rent small plots scattered over the surrounding hills and mountains and manage to scratch a poor living, supplemented by casual labouring for the Cunhals. The luckier amongst them have plots of good, irrigated land up at Alto. The very success of the Cunhals as capitalists seems to underline the hopeless position of the poorer people. The prevailing atmosphere in Alferce is one of bored apathy. Amongst the jumble of sacks of grains and dried beans lying around in the post-office there is a long bench where under-employed men sit out their days, chewing sunflower seeds, smoking their black tobacco and occasionally drinking a 'pinga' of medronho, the local spirit.

Near the warehouses and the café, the road climbs up steeply from Alferce, through an oak grove to the olive press, where it forks. To the left a rough track follows along the edge of the gorge to the east of Alto, climbs a small pass below the Moorish fort and then runs



Alto

Table 1 The Population of Alto

age →	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	
1			• Julia					• Conceicou										
			• Zelia					• Manuel										
2			• Perpetua					• Xila										
			• Afonso					• Carlos										
3			• Criada			*	*							• Sr. Carneiro				
														• Dona Carmen				
4														• Eugenia				
														• Julio				
5					*	*	*	*						• Maria				
														• Joao				
6								• Mary										
								• Robin										
7	• Silva							• Leonor										
								• Manuel										
8			• Maria											• Eulalia				
			*	*	*									• Eloi				
9				*										• Hilda				
														• Mario				
10								• Lucia										
								• Vasco										
11			• Lucinda															
			• Alberto					• Lalineia						• Lidia				
								• Carlos						• Adelino				
12														• Matilde				
														• Florenco				
13	• Filezminha																	
	• Maria		• Margerida															
								• Ramiro										
14														• Perpetua				
																		• Tia Lucia
																		• Tio Felipe
15								*										
														• Carlos				
														• Maria				
16														• Ann				
17			• Alberto															
			*											• Gloria				
														• Mario				
18			• Feliza															
														• Silva				
														• Ramalho				
19																		
			• Vasco											• Silva				
														• Fernando				
20																		
					*									• Matilde				
														• Maria	• Antonio			
														• Luis				
21			• Maria															
			• Alvaro											• Cecilia				
														• Ze Manuel				
22																		
														• Carlos				
23																		
						• Ze	• Carlos	• Alberto						• Tia Arcanjo				
														• Tio Manuel				
24			• Adelino															
														• Lidia				
														• Tia Maria				
														• Fernando				

Note An asterisk indicates sons or daughters who no longer live in the locality.

round the southern side of the mountain to the little hamlet of Fornalha.

To the right, the road climbs again and then suddenly levels out on the shoulder of land that is Alto.

In order to get some idea of the hamlet, its atmosphere and its rhythm of life, let us climb the hill from the olive press in the late morning of a sunny March day. This involves an encounter with every inhabitant of Alto, some just in passing, others in some detail. Before starting, however, a note. Table 1 shows the hamlet's population, grouped by household and age. Each household is numbered from 1 to 24 on Map 4. Every character I shall mention is identified by the number of his or her cottage in brackets after the name. If you want to follow the complexities of the extended family networks, and patterns of land ownership which ramify through the community, you are advised to follow the description of this somewhat drunken encounter with the hamlet of Alto with the help of the map and the table, and perhaps even to equip yourself with pen and paper. It took me several months and many confusions, some socially embarrassing, before I puzzled out the various connections. For instance, Tio Felipe (14) is Joao's (5) uncle by his first marriage and Maria's (8) boyfriend's step-grandfather by his second marriage. In urban Britain, such facts are only of curiosity value and have no social relevance but in rural Portugal they are important and the language has an adequate vocabulary for such complexities. For those interested in the bare facts, bereft of personality, the family trees and tables at the end of this chapter compress most of the necessary information into a readily usable form. Let's now climb up from the olive press. . . .

The first sign of life is Tia Matilde, a lady in her late sixties who comes marching down the hill. She is stout and jovial, having just finished planting her potatoes in Alto. Now she is returning to her cottage in Alferce for dinner. A few paces behind her is an old grey donkey, and sitting on top, astride the beast, her old grey husband. He is smaller than she, very thin and has an old ankle injury which justifies his riding whilst his wife strides ahead. They both utter a fulsome 'Bom Deeciya' (Bom Dia) as they pass.

Just as the road levels out, there is a rocky knoll up on the left, on top of which is perched Manuel's cottage and barn (1). He has just finished some ploughing and is busy getting the wooden plough off the back of his mule. The smoke percolating out of the pantiles of the cottage suggests that his wife is cooking.

A little farther on the right, the tarred road suddenly ends amidst a collection of cottages called Alto de Baixo. On the right is a big irrigation tank. Dona Xila is busy washing sardines in a bowl by the tank. Behind her are three cottages forming a courtyard (2). The oldest one is built between rocks and is now used as a barn. Another is about 200 years old and serves as a large pantry and store. The third one was built in 1969. It has tiled floors, plaster ceilings, piped water and even a bathroom and flush lavatory. Although there is a gas stove, much of the cooking is still done on a big log fire in the kitchen and the sardines will certainly be grilled over some charred embers of ling in the courtyard. Dona Xila stops her work and steps down to the road to talk. Her husband, Carlos, appears from the oldest cottage with a basket of potatoes, sprouted and ready for planting. He is short, has a huge stomach and a wide-open, red beaming face. He waves and carries on. It is clear from the swearing that Afonse, their teenage son, is again trying to get their Italian mini-tractor to work. Parked in the courtyard is an ancient untaxed lorry which they use to get to their orange groves down on the Odelouca River. Carlos is a rich peasant. He owns odd terraces around Alto which he and his wife work, hundreds of hectares of rough hillside supporting cork oaks, some eucalyptus and medronho trees, and about thirty hectares of orange trees in the valley six kilometres due south.

Behind Carlos' house, on the same scarp that overlooks Alferce, lives Senhor Carneiro and his wife Dona Carmen (3). She is hardly ever seen out of doors and spends her days supervising the cleaning of the house, the cooking, entertaining the priest from Monchique or preparing delicacies for her ailing husband. Senhor Carneiro is pottering around in the old house opposite, testing his casks of ageing medronho. He offers a glass, which must be knocked straight back, expects a compliment, which he gets because most medronho around here is drunk and gone within months of distilling and it is rarely that one comes across the stuff well aged. Senhor Carneiro is always well dressed, which contrasts strangely with everyone else in their working clothes. There are two middle-aged sons, one an agricultural engineer, the other a doctor, both living elsewhere. The house is comparatively large and well furnished. There is even a private chapel. On the east side there are garden terraces overlooking Alferce and it is here that guests are entertained in the afternoons, some of the poorer women of Alto becoming waitresses for the occasion. Senhor Carneiro employs an old criado (servant), now aged

82, and a maid, who lives in. Five other local people work for him on a casual basis – three men from Alferce and two women from Alto. His landholdings are extensive, though little of it is in Alto. He has over fifty hectares down in the Odelouca Valley, hundreds of hectares of cork groves around Alto and Alferce, some terraces in Alto and Umbria and over a hundred hectares of open farmland near Sao Marcos. Although he is only 67, his health is bad and his spirit has been broken by the Revolution and the worry about what might happen, though in fact his estates have remained intact. At the weekends, his elder son does all the accounts; Senhor Carneiro just worries about it all. Most days he drives to Monchique to while away the time in the politics of the PPD. He is the only person in Alto who lives entirely on the rent and tribute of his tenants and quinteiros.

Farther up the lane beyond Senhor Carneiro's house and behind his stables and garage is a posh new cottage built for Julio and his wife Eugenia (4). They left Alto over forty years ago and have spent their working lives in Lisbon. Now they have returned to Alto to live out their retirement.

Back down the lane, opposite the Carneiros, live Joao and his wife Dona Maria (5). Joao is sorting seed potatoes in his big barn. A tap on the door and he breaks into a broad smile and invites you in. He wants to know what's new, comments briefly on the election campaign and how he hates the PPD. He says that he wanted to watch Alvaro Cunhal on his television last night but the lorry battery which he uses to run the old set is almost flat and all he got was poor sound. Joao is the most cultured person in Alto. He owns a few books, always listens to the news on the radio, makes twice yearly trips to see relatives in Lisbon and even knows a few words of French and English. Entirely self-taught, he was one of the youngest of a large poor family in Alto but managed to marry upwards so that he is now a middle peasant. Most of his brothers and sisters had to leave the locality because they did not inherit sufficient land to make a living. Joao proudly shows the sturdy sprouts on his potatoes, then insists on offering a glass or two of his white wine. He claims that it is just like champagne, light, dry and sparkling – and it's not bad either. Now Dona Maria turns up, small, round and jolly, with nearly twenty eggs tucked away in her apron. She clutches any visitor or neighbour tightly by the arm and proceeds to talk in a secretive, confidential manner. Then she slips four eggs from inside her apron and explains that they are for your lunch. Joao is already pouring more glasses of wine from the barrel. It is impossible to refuse. . . .

Joao and Maria are both in their mid-sixties, though one might think that they are in their forties and Joao sometimes looks even younger. They have two sons and two daughters, all married, and seven grandchildren, none of whom live near Alto. They own a few large terraces near their cottage, some smaller ones near the rim of the Valley of Maia, and about twenty hectares of mountain up by the old windmill, which Joao is currently planting with eucalyptus. Although they are middle peasants and employ others only to help with the onion planting and the potato harvest, their life style is more that of rich peasants. Each year they have a capital investment project. This year it is the small eucalyptus plantation and a lemon orchard. They intend planting about 200 small lemon trees on their biggest terrace but will continue growing potatoes, onions and beans in between. In previous years they built a large new irrigation tank which doubles up as the communal swimming pool for the children in the hamlet during the summer. Other projects have included the installation of a flush lavatory and laying a plastic pipe to carry water over three kilometres round the hillside from the Valley of Maia. Joao does not keep his savings in a hole in the wall; he invests them in his property.

That is Alto de Baixo, the more prosperous part of Alto. Farther up the main track, which is now on the level, there is a chain of cottages and barns going off at right angles to the left, known collectively as Correntinho. Squatting in the doorway of the barn by the track is Mario. He is pinning together a cork beehive with little pieces of hardwood. Mario is a man of few words — except when he is drunk, and then he becomes quite extrovert. He nods a greeting and continues working. Inside the barn, Mario and Hilda keep their rabbits and chicks, and store most of their onions. Next to this barn is a tiny cottage without windows and with an earth floor which was our home (6). Then the next cottage, slightly larger, with a concrete floor, is where Manuel and Leonor live with their three-year old daughter (7). They rent three small terraces immediately in front of their cottage where they grow all their vegetables. Manuel is a labourer and lorry driver's mate for the Cunhals, the capitalists in Alferce. He has a small motorbike for getting to work and is rarely around except on Sundays. Leonor makes a small income from sewing and takes orders for trousers, shirts and skirts.

The next cottage is rather larger and carefully painted in white and blue (8). It belongs to Eulalia and Eloi whose teenage daughter Maria lives with them. They own terraces to the front and back, rent some terraces from Eloi's sister, and have a mixture of irrigated, dry and

mountain land over at Foz do Acor. The next cottage belongs to Mario and Hilda (9). It is quite large but has no windows. A plastic pipe carries water from a spring higher up the hill, over the roof of their cottage to a tap outside the door. Hilda is washing sardines, bought half an hour ago from the man who brings them up from Portimao every morning except Sundays. She is a very straightforward woman and speaks with a loud voice, turning every few minutes to hoik noisily and spit on the ground. She is jokingly known as 'the journalist' because she makes a point of knowing all the gossip. After a few minutes conversation you realise how she gets her information – from a series of blunt, full-frontal questions. The only gossip she doesn't retail is about the rows she and Mario have when he returns drunk from Alferce. Mario and Hilda own their cottage and some terraces behind it, rent some land from one of Mario's brothers and work as *quinteiros* on some other land belonging to old Marcos' son. The *quinteiro* system involves share-cropping. The landlord provides the seed, fertiliser and manure and takes half the harvest. Hilda also works from time to time for Carlos (2) and Joao (5), planting or harvesting onions and potatoes for 12 escudos per hour, whilst Mario makes beehives and cuts cork during the month of May for about 50 escudos per hour. They are poor peasants, but by no means the poorest in Alto.

Beyond their cottage is a barn where Eloi and Eulalia keep their two donkeys; beyond that is the last building in the chain, Eloi's smithy. Eloi has just finished shoeing Tio Manuel's donkey. (Tio means uncle but 'Tio' and 'Tia' are used generally as a mark of respect for people in their late sixties or beyond.) The final part of shoeing a donkey involves a *pinga* all round. Eloi hobbles off to get a bottle of *medronho* and a glass. It is the stuff he made last month over at Foz do Acor – pure and strong. We all have two *pingas* and there is some difficulty in avoiding a third. Eloi insists on showing us his latest invention. Tio Manuel laughs. Inside the barn there is a new fan for the smithy, with cork pulleys and string – a real Heath Robinson affair – but after testing, it proves to be better than the old bellows and much easier to work.

Beyond Correntinho and along a narrow footpath is a further cottage where Vasco and his wife Lucia live (10). She is Mario and Eloi's niece (yes, they are brothers). Lucia's mother was married to their elder brother, now dead, and they lived up at Maia. Vasco is a bricklayer, has a motorbike and works anywhere within reasonable travelling distance of Alto. They are owners of a smart little cottage and a small piece of land



around it but they also share the work and the harvest on the land up at Maia.

Beyond their cottage is another, somewhat isolated from the rest and in the middle of a fine old olive grove (11). Here live Adelino and Lidia, both in their sixties, together with their daughter-in-law and two teenagers. Their son, Carlos, is the petrol pump attendant in Monchique and is in Alto only on his days off. One of the grandchildren is still at school whilst the other, Alberto, who is sixteen, works spasmodically felling and carting eucalyptus around the mountain.

Back to the main track, there is a fork just past the Correntinho cottages. On the left the track climbs round the back of the cottages and past a large irrigation tank which is also Alto's most popular wash-tub. Eulalia, her daughter Maria and Leonor are each leaning over granite slabs at the side of the tank, banging, scrubbing and rinsing amidst lots of chatter and the occasional shriek from Leonor's little daughter who is carefully copying the adults with her own plastic bowl. The tank is six metres long, three metres wide and one and a half metres deep. The washing is done with bars of hard soap which until recently was made at home with wood ash and pig fat. There is a knack to doing the job properly which involves flicking water onto the washing stone whilst banging the clothes into a lather. Really dirty things are lathered, then left to dry in the sun whilst full of soap, and then washed again. In the winter and spring, the tanks have a constant flow of water through them so they stay clear. In the early summer when there is less water flowing from the springs, the water gets covered with scum, and then other, less convenient tanks have to be used. When the tanks are used daily for irrigating in the summer, the washing has to be done around dawn before the water is used.

Washing is a noisy, communal affair, done exclusively by the women, three in a line at this particular tank. It is not a once-a-week thing but something that is done daily, as and when things get dirty. The only big wash of the year is in August, when the insides of the cottages are re-limed. Then practically everything gets a good scrub in the tank, including pots and pans, tables and chairs.

A hundred metres past the tank there is another row of cottages on the right, known collectively as Alto de Cima. They are owned by Manuel Cunhal, one of the Alferce capitalists. Here live Florenco and Matilde who work as quinteiros on about a hectare of terraces below the cottages (12). Next door live Ramiro and Margarida with their two young

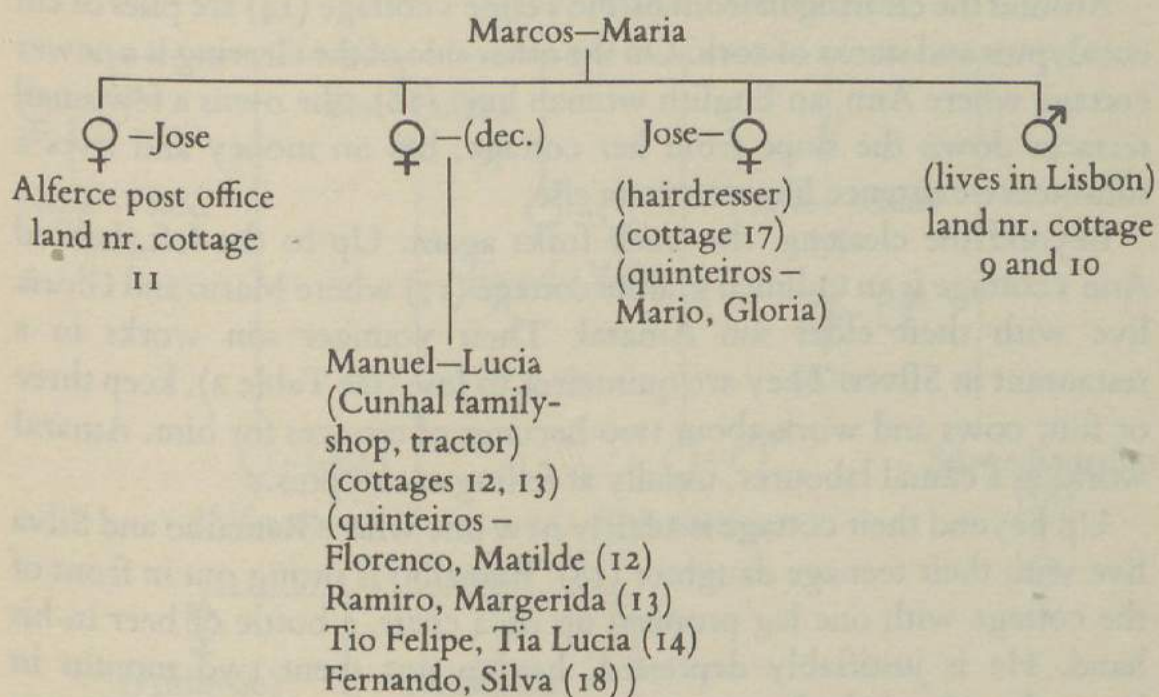
daughters (13). Margarida is Matilde's younger sister. They too work as quinteiros for Manuel Cunhal, but they also rent another half hectare from Pires and own nearly half a hectare of their own below the cottage, plus another half hectare by Manuel's cottage (1), where they intend building their own place. Ramiro works full-time for Manuel Cunhal, driving his big Fordson tractor, the only large tractor in the area. He also looks after two or three cows and some pigs and although he works very hard, he makes a good income and runs an old car.

Old Marcos lived in one of these cottages until two years ago. He now lives in Alferce and although he is 91, he walks up the hill to Alto every day to look at his old cottage and land. He used to own the Alto de Cima cottages (12 and 13) and the one that Mario and Gloria live in (17), plus all the land in between and quite a slice of the mountain behind, but he has now handed them over to his family. He has three daughters and one son. The son now lives in Lisbon. He is Mario and Hilda's (9) landlord. Each of the daughters married into one of the shop-keeper families in Alferce. One married the owner of the post-office so they own land in Alto which Mario (9) works. One married the local hairdresser, middleman and taberna keeper, Jose, so they are the landlords of cottage 17. The third married another middleman, now dead, and their daughter married Manuel Cunhal, one of the three brothers who now dominate the whole area, so he too is a landlord in Alto. The family tree (opposite page) clarifies things.

The track goes on past the Cima cottages and ends at a cowshed where Ramiro manages three cows and some pigs for Manuel Cunhal. Beyond, the track gives way to forest – cork oaks and pines lower down and eucalyptus higher up. A donkey track winds through the forest along the contour, to the stream in the bottom of the Valley of Maia and the old stone channels and the new plastic pipes follow the track into the valley.

Back at Correntinho, the right fork in the track goes round a rock outcrop where Eloi has his threshing pad. Fifty metres farther on there is a low cottage on the right (14), surrounded by cork oaks, which overlooks a large clearing. It is obvious from the noise that Tio Felipe is having one of his daily altercations with his donkey. It was probably trying to kick in the door of the stable. Eventually Tio Felipe emerges from the stable, his anger satiated. 'Olaaa', he calls musically. Time for a pinga before dinner. He fetches the bottle and glass from the cottage and we quickly knock back one each. 'Ah! That's better,' he says, rubbing his chest vigorously. He is 83, tiny, thin as a sparrow and very fit. He has

Table 2 The Family Tree of Old Marcos



lived in this cottage for 65 years almost to the day and he still works long hours. This morning he has been collecting a mountain of brushwood for cooking. At the other end of the cottage there is a barn and from inside you can hear Tia Lucia talking to the chicks that have just hatched. Inside, the barn is very dark. In one corner, Tia Lucia is bent double over an old cardboard box, shredding tiny bits of dandelion leaves for the chicks. She is 78, very bent from years of migrant work, planting rice in the Alentejo and picking almonds in the Algarve. She stands up, asks how you are and gives you a friendly tap on the back with her stick. How many cocks and how many hens this time then? There is disagreement — only time will tell for sure. Through the back of the barn is the kitchen, without window or chimney and with an earth floor. Perpetua, Tia Lucia's widowed daughter by her first marriage, comes into the barn from the kitchen, looking flustered. She does not like cooking on an open wood fire but her primus stove is playing up. Tio Felipe and Tia Lucia both refuse to use it.

Just behind their cottage is another one surrounded by terraces (15). Carlos and Maria live here. They are both in their mid-sixties and work about a hectare of large terraces right by their cottage. Their only son, Vasco, is a merchant seaman who lives with his wife and two children near Lisbon. In 1976 he started building a house alongside his parent's

place hoping to move in sometime in 1977 though he will still work away from home on the boats.

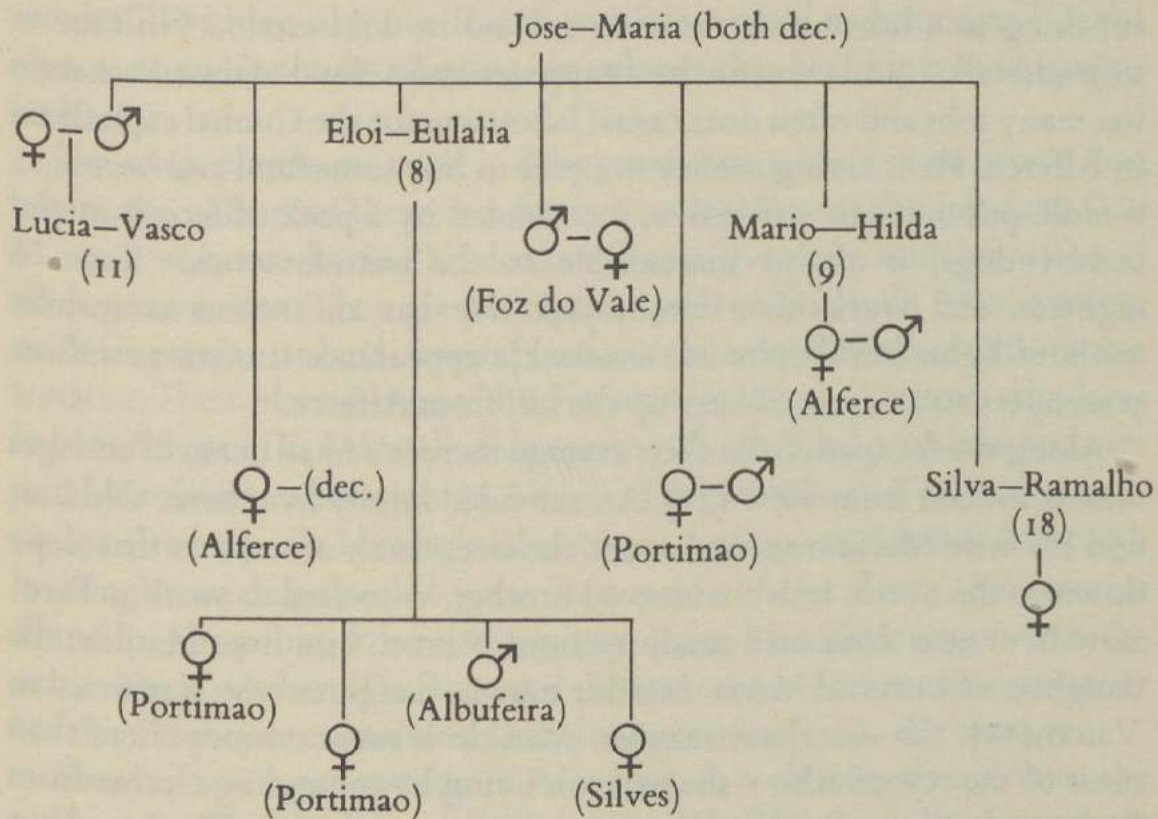
Around the clearing in front of Tio Felipe's cottage (14) are piles of cut eucalyptus and stacks of cork. On the other side of the clearing is a newer cottage where Ann, an English woman lives (16). She owns a few small terraces down the slope from her cottage, has no money and lives a subsistence existence like everyone else.

Beyond the clearing, the track forks again. Up to the left, behind Ann's cottage is an unlimed granite cottage (17) where Mario and Gloria live with their elder son Amaral. Their younger son works in a restaurant in Silves. They are *quinteiros* to Jose (see Table 2), keep three or four cows and work about two hectares of terraces for him. Amaral works as a casual labourer, usually at felling eucalyptus.

Up beyond their cottage is a fairly new one where Ramalho and Silva live with their teenage daughter (18). Ramalho is sitting out in front of the cottage with one leg propped up on a chair, a bottle of beer in his hand. He is justifiably depressed, having just spent two months in hospital at Setubal after a serious car accident in which his knee was smashed. His car was wrecked; he cannot work as a lorry driver – delivering flour throughout the Algarve – and it will be at least a year before he can work again. He cannot get down to the 'povo' (*Alferce*) so he welcomes all visitors. He is large and has put on an enormous pot whilst in hospital. He asks his wife to bring out some more beers. She breaks into a long explanation about the accident, how it was not Ramalho's fault, how a 'retornado' from Mozambique was driving on the wrong side of the road, how he was not insured so there is no compensation even though Ramalho was insured. Ramalho is quite resigned to the situation. He even talks of doing some of the cooking whilst Silva plants the potatoes. They have worked hard for what they have got. Ramalho is from a poor family at Foz do Vale, down by the Monchique River; he will eventually inherit a bit of land there. Silva is Eloi (8) and Mario's (9) youngest sister and the terraces in front of their cottage were inherited from her parents.

Ramalho worked in Hamburg for two years and saved enough money to build his own cottage, which has ceilings, tiled floors, windows with glass, a flush lavatory and a bathroom. Their ambition was to move to Portimao and run a boarding-house and *taberna* but now the accident is using up all their savings, they are having to retreat into a subsistence existence. Still, they have their own terraces for vegetables, two pigs,

Table 3 The Family Tree of Eloi, Manuel and Silva



chickens, rabbits and pigeons, so they will manage. Ramalho apologises that there is no more beer in the cottage, but by now, with the alcohol from previous encounters taking its inevitable effect, you are thankful for small mercies.

Up behind their cottage, the terraces give way to a cork grove and then to eucalyptus. A very old worn donkey track winds up the steep hill to the ridge that overlooks the Valley of Maia and then turns upwards again to the old windmill. In the old days, everyone in Alto knew when the windmill was working because the miller used to tie earthenware jugs to the tips of the sails and they made a low siren noise.

Back down near the clearing outside Tio Felipe's cottage (14) the main track goes straight on, but to the right a footpath dips down and then round the contour. On the right is Casa Velha, the only house in Alto with a name. It is owned by Senhor Pires, a painter from Lisbon who rarely uses it. Next door is a small cottage where Fernando, Silva and their teenage son Vasco live (19). Their cottage and the surrounding terraces are also owned by Senhor Pires. Fernando is the quinteiro for this land. The water supply to some of the terraces is gradually drying up so Fernando has been planting vine cuttings which do not need irrigating.

Fernando is small, thin and always in a hurry. Almost all his meals are eaten on the trot between Alto and Alferce. At the moment he is breaking in a horse and careering around in wild circles. No time to stop and talk – just a wave as he disappears into a cloud of dust. Fernando has many jobs and often does casual labouring for the Cunhal capitalists in Alferce. He is saving money in order to buy some land and become a middle peasant. His wife Silva, surrounded by a pack of ferocious and scabby dogs, is almost inaccessible to the outside world. Vasco is eighteen and works as a lumberjack. He has an ancient motorbike without lights but despite its ramshackle appearance it often gets three passengers and a crate of beer up the hill from Alferce.

Along the footpath from their cottage there is a small chain of cottages almost hidden from view (20). An extended family lives here. Old Luis and his wife Maria own and work the steep bank of terraces that slope down to the north. Luis's widowed brother, who used to work in Faro, now lives next door on a small pension. Next to him lives Matilde, the daughter of Luis and Maria. Matilde has one daughter who is married to Vasco (15), the merchant seaman. Matilde is more cosmopolitan than most of the rest of Alto – she makes a living by smuggling clothes from Spain and selling them locally. She is buxom, cheerful and when she is not off smuggling she spends much of her time carting her washing over to Carlos's and Maria's tank (15).

Another hundred metres beyond Matilde's cottage there is a very old place (21), made of mud bricks, where Ze Manuel and his family lived until the beginning of 1976. Now they live in a house they have built for themselves in Alferce but they still work the steep amphitheatre of terraces that fall away sharply from the cottage right down to the road from Monchique. The place is owned by Maria's (5) sister. Ze Manuel wears an old homburg hat and has a thick black moustache; you can see him wielding his enxada down on the bottom terraces. He is the local cooper and the most skilled cork cutter in the area.

Back above Casa Velha, the track starts to climb across the gradient, the carefully laid, irregular stones of the old Moorish track being visible underfoot. Above the track on the left is an immaculate set of terraces; above them, a cottage (22) and two pigsties. These are owned by the Santos family who have the post-office in Alferce. Carlos, one of the brothers, works these terraces though he lives with his ageing mother in Alferce. He trudges the two kilometres along and 150 metres up to the land twice a day, regular as clockwork, rain or shine. He is in his sixties,

thin, grey and something of a loner ever since his wife left him years ago. Above his terraces he has planted the whole mountainside right up to the windmill with eucalyptus. It will provide a good cash income but the trees are now seriously affecting the springs that feed his two irrigation tanks.

The track climbs on until it disappears into a large cork grove. Just where the oaks start there is a further cottage up on the left (23). Tio Manuel, who was having his donkey shod, lives here with his wife and three grown sons. They are perhaps the poorest family in Alto, owning neither cottage nor land, farming some of the most difficult, north-facing terraces. Their place is owned by Senhor Carneiro's (3) sister, who lives in Monchique. Tio Manuel's eldest son works the land with him and gets paralytic-drunk every night in Alferce. The second son, Carlos, is thirty-two and works as a builder's labourer or cutting eucalyptus. Although he fought in Angola and spent four years in the Army, he remains illiterate. His younger brother is away doing his military service in the navy. Their mother, Tia Arcanjo, shouts to us to throw some stones at her dogs if they are a nuisance and disappears back into the cottage.

There is one more cottage in Alto (24), in a clearing deeper into the oak grove. The tinkling of bells indicates that Fernando is somewhere around, bringing his eighty goats back from a morning's forage. He spends his days alone with the goats, all over the scrub and forest of the mountains. His wife, Lidia, does much of the work on their terraces, hidden amongst the trees, and also makes cheese in the cottage with her mother. They have a son, aged four. They are relative newcomers to Alto, having moved from the other side of Monchique about six years previously. Tio Manuel and his family lived in their cottage before them.

From this point, the Moorish track dips down, across the new road, through Umbria and then to the bottom of the valley which it follows up to Monchique. Turning back, you get a bird's eye view of Alto and Alferce from outside Tio Manuel's cottage (23). With half the potatoes already in, the immaculate ridges and furrows in the rich brown earth on the terraces makes a beautiful pattern, contrasting sharply with the rocky scrub and wilderness of the mountains beyond.

It was never possible to be sociable in Alto without getting somewhat inebriated. In this context, the duty of the research to distil clear statistics out of the jumble of crude facts took on a new meaning. Here, however, are the sober statistics on the people of Alto and their living conditions.

There are 24 households in the hamlet. Despite the complex of

irrigation channels and kilometres of plastic tube around the mountain, only 40 per cent of the cottages have running water whilst 60 per cent collect their water in earthenware jugs from springs or taps which are in some cases over 200 metres from the cottage. Only 27 per cent of the cottages have lavatories, and strangely enough, there is nothing between an indoor flush lavatory and the random use of the surrounding woods. Almost three-quarters of the people use the woods. A majority of the cottages have concrete floors but 28 per cent still have the beaten earth floors. Only 28 per cent of the cottages have plaster ceilings; the rest are open to the rafters and tiles. In fact when the various indicators of living standards are put together the correlation between the various factors is quite high, as can be seen from Table 4.

Note that we, in cottage 6, were responsible for one of the two butane cookers that do not fit the general pattern in the Table. Senhor Carneiro's house (3) has all the mod cons of a twentieth-century house that it is possible to have without electricity, whilst Fernando and Lidia (24), who keep the goats, live in the most primitive circumstances, in a cottage without windows of any kind, with rooms open to the tiles above and to the bare earth below; they do all their cooking on an open wood fire, lit on the floor without a chimney, the smoke billowing through the cottage and slowly percolating through the gaps between the tiles.

The detailed composition of each household is shown in Table 1. Asterisks indicate where sons or daughters have left Alto to live elsewhere. Joao and Maria (5) have four grown children who have left. Three of Eloi's and Eulalia's (8) grown children work in hotels on the coast and by the end of 1976 the fourth, a daughter of seventeen, had also left. Senhor Carneiro's (4) two sons have gone. The same pattern is repeated with each family. Without exception, those who have left Alto are engaged in work away from the land and live in towns or cities. Although there is an age range of 80 years between the oldest and the youngest inhabitant of Alto there is a missing generation in between. Over 70 per cent of the adult population is over 40. The majority of those in the 20-40 age group have left to make a livelihood elsewhere. Those in the 20-40 age group who remain are distinguished by one fundamental characteristic - they are all illiterate and are thus to a large extent denied access to the outside world. Literacy seems to make all the difference between leaving the land forever, or tilling the land forever. The younger illiterates have something else in common - they all come



Table 4 Housing Conditions in Alto

	3	2	4	5	18	16	15	10	8	7	1	12	13	14	19	11	17	22	9	20 <sub>c</sub>	6	23	20 <sub>a</sub>	20 <sub>b</sub>	24	21	
telephone	X																										
tiled floors	X	X																									
bath	X	X	X																								
plaster ceilings	X	X	X	X																							
lavatory	X	X	X	X	X																						
butane cooker	X	X	X	X	X	X															X						
running water	X	X	X	X	X	X																					
glass windows	X	X	X	X	X	X	X					X	X	X	X	X											
wooden shutters	X	X	X	X	X	X	X	X				X	X	X	X	X											
concrete floors	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X				X						
rooms open to tiles							X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
cooking on open fire										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
no windows																											
earth floors																											

Number of cottage on Map 4

† unoccupied

\* rented

from the poorest families in Alto. It is ironic that the children of those without land stay on in Alto whilst the children of the middle peasants, who learn to read and write, leave. The divide between the middle and poor peasants becomes greater as the years go on and it is the middle peasants who are the more demoralised because their families have abandoned them.

To a peasant, farming is not something that is done for profit, or even to better their own living conditions. It is a way of life. In the last analysis, the peasant gains satisfaction and meaning to his life not from growing his own food and being self-sufficient but from knowing that he has provided properly for future generations. He has tilled the land as part of a long, long process, stretching back through the centuries and forward into the future well beyond his own death. He plants trees that he will never see in their maturity. He engages daily in a project much bigger than his own life. He sees himself as the guardian of a set of traditions, to be adhered to and passed on to his children the same way as his parent passed them on to him. It is for this reason that the families whose children have taken the road to the outside world are so intensely demoralised. The young people don't want their life, their land or any part of it and this rubs off on those who are condemned to stay. The younger men who stay are all poor landless peasants; they form their own sub-culture of despair, lubricated by drink.

At the same time, the older people who have seen the very reason for their whole lives desert the land, try to find a certain comfort by doing their work conscientiously and with pride, but the men periodically end up consoling themselves with bouts of heavy drinking while the women resort to tranquillisers, sleeping pills and other drugs. Joao (5) has spent his whole life improving his land and making a little, self-contained paradise but now that his four children are gone he continues working as a ritual to maintain his sanity, has bouts of depression and sometimes takes to drink. Eloi (8) tries to keep off the drink but every two or three weeks he drinks heavily into the small hours at one of the *Alferce tabernas*, gets brought home by his donkey and spends the next day groaning in bed with a terrible hangover. His wife, Eulalia, panics when she runs out of sleeping pills. None of this is immediately apparent. The demoralisation of the community only comes to the fore during the seasonal lulls in the work. Most of the time the demands of the land keep most people busy and cheerful.

### 3 Alto's Year

The Serra de Monchique has its own micro-climate, quite different from the surrounding country. Because of the height of these mountains and their proximity to the sea, they catch the rains blown in from the Atlantic all winter and are very wet from around the end of November to the beginning of May. The Serra retains much of this rainfall, which bubbles out of hundreds of natural springs during the dry part of the year.

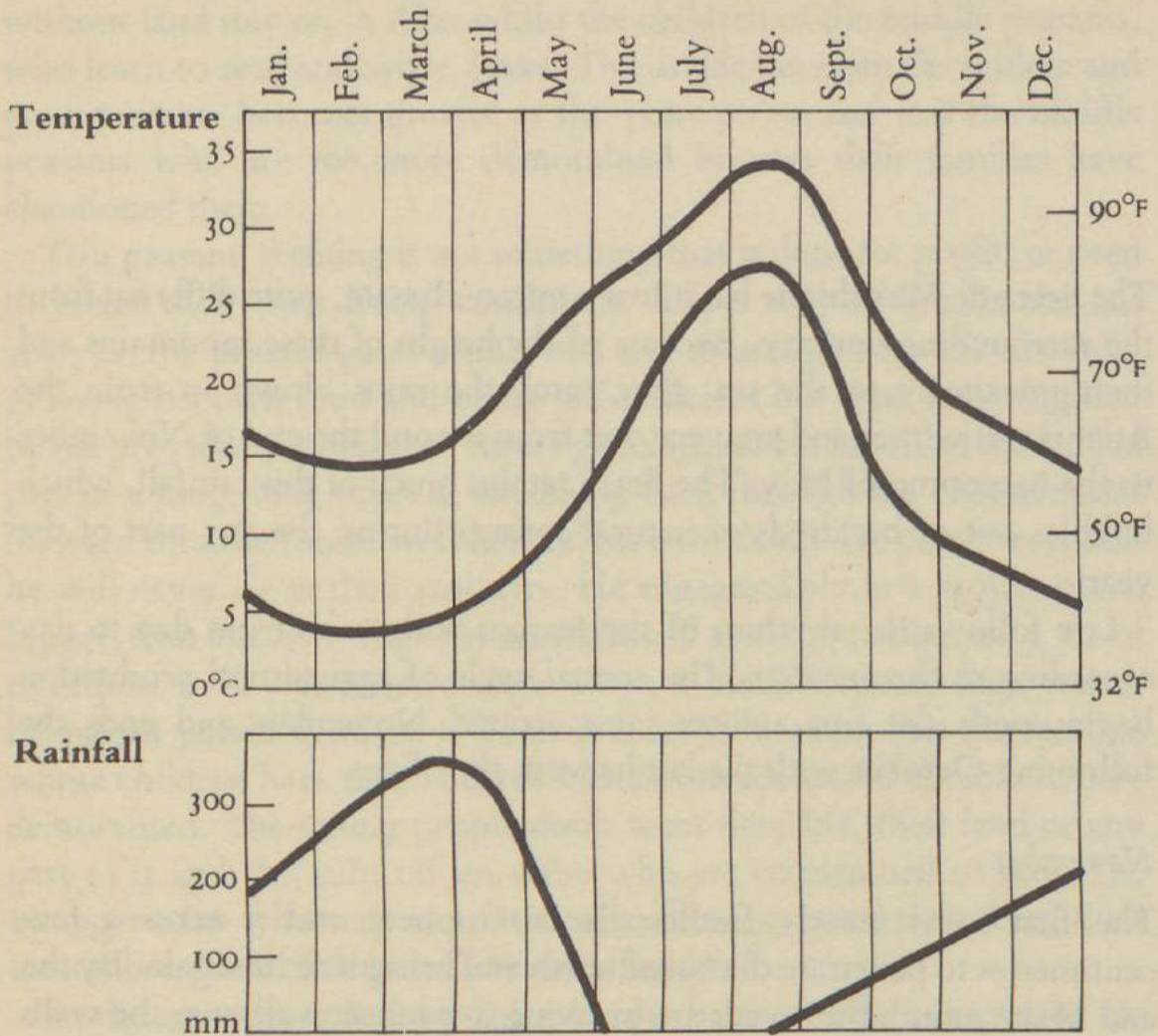
Life follows the rhythms of the seasons and varies from day to day according to the weather. The annual cycle of agricultural production begins with the first winter rains around November and ends the following October with the last harvest, the olives.

#### *November*

The first rains merely freshen the atmosphere and it takes a few centimetres to penetrate the baked earth and bring it to life again. By the end of the month the weeds are growing in profusion all over the walls and terraces. The dominant weed is oxalis, a plant with leaves like shamrock and bright yellow flowers in the spring. It is a natural green manure. Because it is a legume, it builds up the nitrogen content of the soil. By the end of May, the leaves have died away and the plant survives the summer in corms under the ground which are often dug and eaten roasted, like chestnuts.

The first crop to be sown is wheat and oats but first the weeds have to be cleared, manure must be spread and the land is given a liberal dose of chemical fertiliser too. Like many of Alto's peasants, Eloi and Eulalia (8) reserve their irrigated terraces for the kitchen garden and cash crops and grow their grain on dry land elsewhere. Towards the end of November, Eloi sets off to Foz do Acor (see Map 3). It is only five kilometres away as the crow flies but it involves descents of 400 metres and climbs of nearly 300 metres through rough terrain. The old donkey track zig-zags down the steep wooded scarp behind Alferce, worn two metres below ground

Diagram I Alto's Climate



**Note** The rainfall is approximately 60" per year. In 1976, the highest recorded temperature in the shade was 36° C (102° F) and the lowest temperature was 4° C (39° F).

level by centuries of use. At the bottom is the Monchique River. The track follows the river bed for a way, which can be difficult and dangerous when the river is in flood. Then it rises steeply on the other side and it is necessary to dismount and lead the donkey up through the oak and eucalyptus forest, up to the barren scrub at the top. From here, Alto looks precariously perched three-quarters of the way up its mountain. From the top the track quickly turns downwards and the hamlet is lost from view. The landscape is now rocks and dry old scrub until it dips steeply into Foz do Acor, a hamlet of eight people nestling by a tributary of the Odelouca River. Eloi keeps a plough here and spends nearly a week ploughing with his two donkeys. Then he sows his wheat by hand, harrows it in with an implement he made in his smithy,

checks the medronho vats in the barn and returns to Alto. The journey takes three or four hours because the donkeys are loaded with grain from the previous year's harvest. It is all hauled back, bit by bit, for making bread and for feeding the donkeys, rabbits and chickens.

### *December*

The weather remains warm and sunny with occasional rain throughout December, though at night the temperature drops to around 5°C, making the mornings very misty. More land has to be dug and prepared for sowing peas and broad beans, and planting individual cloves of garlic. None of these crops need irrigating so they are often planted in patches on odd slopes that have never been terraced. A daily task now, and for the rest of the winter, is collecting wood for the fires. Every day, Joao (5) plods slowly up the donkey track to Maia, then turns up through his land to the old windmill 200 metres above Alto. He cleared this land last year, ready for planting eucalyptus and now he drags down a small pine tree every day, with a sack over his head and back and the trunk on his shoulder. Eulalia (8) collects huge cork trunks that Eloi cut earlier in the year and slowly walks back with one on each shoulder. They look much heavier than they are because of the thick coating of cork around the wood, but even so, they are not exactly light. Tio Felipe and Tia Maria (14) do all their cooking on a wood fire. They heat water in a pot on a tripod placed right in the log fire but much of the cooking is done quickly, using the hot embers of brush wood. In the depths of the cork groves it is sometimes possible to see a huge mound of brushwood moving slowly . . . then stopping. Closer examination reveals Tio Felipe underneath, moving along like a giant hedgehog. High up on the Serra, above the windmill, you can sometimes see two donkeys silhouetted against the skyline at dusk. Nearby, Eloi (8) is on his knees, cutting out the roots of dead medronho trees. The wood is extremely hard and he uses it for the smithy. Much of the wood gathering is done at dusk, and encounters in the forest and on the Serra, which at any other time would be a welcome opportunity for a rest and a chat, instead become an embarrassment. The social norms on collecting firewood are quite straightforward – if nobody sees you, take what you can carry into the cottage and chop it up quickly and if you are likely to be seen, only take dead wood that has fallen to the ground and can be carried with ease. Hence the activity around dusk.

*January*

Dense cloud becomes prevalent in January but there are still many days of blue skies and hot sun followed by sparkling dews the next morning. The air turns crisp and sharp and is pervaded by the delicate, fresh scent of the mimosa trees in flower along the tracks. The broad beans and peas are just poking through the ground whilst the oats and wheat are already well up and form belts of vivid green across the landscape. The next crop to be sown are the tremosas. These are lupin-like plants from the Andes that produce pods of very bitter yellow beans. The plants will grow on very rough ground, taking six months to complete their cycle. The beans require much soaking and boiling before they are edible; they are used in stews and are also popular with draught beer in the tabernas.

The most attractive things this time of the year are the orange, lemon and tangerine trees, laden with fruit. The early oranges are ready for picking and fetch 12 escudos per kilo in January.

The main focus of life in January is the pig killing. Almost every household in Alto has at least one pig. Weaners are usually bought in the summer, fattened for eighteen months and then slaughtered – always on a Sunday morning. It is a job for the whole family – many relatives come from town for the occasion. It takes several men to hold the pig down on a slab whilst its throat is slit. Amidst the terrible screaming that then ensues, the blood is carefully collected for making chourico, the favourite Portuguese sausage. Once the pig is dead, the whole carcass is scrubbed vigorously with boiling water to remove the hairs and clean the skin. Then the stomach is slit open and the intestines removed. Metres of this warm, blubbery, ballooning stuff are dragged to the nearest irrigation tank where the contents are washed out and the cleaned intestine is prepared for use as sausage skins. The internal organs are removed and hung up in a barn. Then the carcass is hauled up on ropes to hang from barn rafters overnight. All this requires fast, coordinated work: six people is not too many for the task. Then there is a feast and, strangely enough, the traditional dinner is bacalhau – dried, salted cod.

The next morning, the pig is chopped in two pieces down the spine. The belly fat is cut into small pieces and slowly melted in a pot over a wood fire, then stored in earthenware pots. The rest of the carcass is cut into hams and chops. Most people sell the best meat and keep the rest for themselves. All the odd pieces are cooked with herbs and the blood and stuffed into the small intestine to make chourico. The various organs are

eaten over the following week. The remaining meat is dry-salted or cured, which requires some work every day over the following month. Nothing is thrown away, nothing wasted. Once when Tio Felipe was helping us plant our potatoes, he sat down hard – right on a big thistle. ‘Mind your balls, Tio Felipe!’ ‘Oh, nothing to worry about’, he replied, ‘I’ve got four at the moment.’ His pig had been castrated the previous day so guess what he had for supper.

The last task in January is to prepare warm little plots near the cottages for sowing onions, which rapidly sprout in thick patches, and require constant weeding.

### *February*

As the winter wears on, the clouds come in from the Atlantic at a height of about 300 metres. If they were a bit higher, they would produce a uniformly overcast, grey sky, but at 300 metres they produce mysterious effects. Sometimes Alto is above the cloud all day, whilst a hundred metres lower down, the clouds totally envelop the valley. Sometimes the clouds come in at between 300 and 500 metres and then the weather changes dramatically from hour to hour. In the early morning Alto is bathed in warm sunshine from a clear blue sky and you look down on the clouds below. Then, quite suddenly, it is shrouded in thick mist; half an hour later, blue sky returns, followed by some higher cloud that just makes Alto overcast . . . and so it continues throughout the day.

Although trees are felled throughout the year, February is a good month for this work because it is cooler and the sap is running slower. The eucalyptus is an evergreen. It grows tall and straight, and sheds its bark in long fibrous sections which hang untidily from the trunks. The leaves of the young trees are round, succulent and a bright silver colour for the first couple of years, after which the mature, tough pointed leaves begin to grow. The trees are felled every five or six years when the trunks are up to half a metre in diameter at the base. They are cut down with power saws, and then into sections about two metres long. After that, the bark which is about 3 cm thick, is peeled off with an axe and goes into tight whorls. Together with the smaller, leafy branches, the bark is left to rot. The dead leaves are so slippery that it is almost impossible to stand up on a newly felled slope – this provides an excellent surface for sliding the cut trunks down the hillsides. Within weeks, the cut stumps sprout again, producing four or five new trunks in place of

the old one, and within months of felling, the slopes are more than three metres high with new eucalyptus leaves. The trunks are slid down to bulldozed tracks, loaded onto the one and only tractor and trailer in the area and carted to the clearing opposite Tio Felipe's cottage (14). Here the young labourers unload the trunks and stack them high, where they remain for several months. Every now and again, about twenty young labourers gather in this clearing at about eight in the morning. They come mostly on motorbikes but they all bring big black umbrellas and a small wickerwork hamper containing food and wine. If it is raining they gather under a cluster of umbrellas by one of Tio Felipe's cork oaks, light up cigarettes and wait sullenly for the truck to come. If the weather is good they perch on the trunks, get out their bottles of wine and have a bit of a party because sometimes they have to wait all morning. When the truck eventually arrives it is fast work throwing up the trunks until it is grossly overloaded some five metres high. Then a bottle of medronho appears and there is a noisy lunch. They get paid only for the time they are actually loading the truck — 50 escudos for two hours — and then they disperse to find some other casual work.

On the land there is more to do. The slopes have to be prepared for early potatoes, fruit trees pruned and sprayed. Willows are pollarded and the flexible shoots tied in bundles and weighted down in the bottom of irrigation tanks where they stay until they are used for basket-making in the summer. The medronho berries, which were picked in September and October and pressed into barrels and vats to ferment, are now ready to be distilled. Several of the barns in Alto have large copper stills built into brick ovens in one corner. The landscape is often misty and mysterious and this atmosphere is accentuated by the clouds of smoke billowing out of the barns where the men are distilling. Inside, in the dark, the men sit alone, feeding the fire under the still, collecting the distillate, testing its strength by splashing some against the hot copper and igniting it, tasting it, downing it. Each distillation takes about eight hours; many of the men camp out and distill more or less constantly for a week or more. Their wives bring small hampers of food from time to time. It is a long and boring business though the end product produces enough excitement. Any neighbour who pops his or her head round the door of the barn to see how things are going is inevitably cajoled into testing the medronho. The final product, after three distillations, is 100 per cent proof, tastes slightly bitter and is never given a chance to age in the barrel. It is the only spirit consumed in these mountains and it is



practically unobtainable elsewhere because most of it is consumed locally – with honey and water for breakfast, and neat any other time of the day.

Eloi (8) disappears from Alto for much of February because he distills his medronho over at Foz do Acór. Most years he makes between 800 and 1000 litres of the stuff. Other men disappear to remote barns near their medronho trees. This is how the men spend February, sitting in dark barns in varying states of drunken stupor. Joao (5) does not own a still so he uses the one in Mario's barn (17). He ferments the medronho in his own barn, using a wheelbarrow in which he perches buckets to transport the fermented slush up to Mario's barn. Distilling requires enormous quantities of brushwood for the fire. Before he starts distilling, Joao accumulates a pile almost as big as the barn. As each day of the process wears on, he gets drunker and the last few barrows of slush have to be wheeled by his wife, who also helps him home at the end of the day. It is a local joke to watch Joao trying to manage his wheelbarrow and buckets at such times, especially since he always unthinkingly lets go of one wheelbarrow handle in order to wave, with predictable consequences.

Meanwhile, the women weed the onion seedlings, hoe the garlicks, broad beans and peas, and start ridging the early potatoes. There are some men who do not make medronho: they spend February getting stung instead because they are bee-keepers. Bee-keeping in Alto is a very secretive affair and only Jose the barber from Alferce keeps them openly. He has about sixteen modern hives and sells honey but most people just have a cork hive or two hidden up in the trunk of an oak tree somewhere in the woods. Making the cork hive is the simplest part of the work and Mario (9) makes them throughout the year – large cylinders of cork with a circular top and bottom carefully fitted and pinned in place. The most difficult bit is finding the bees. This is both a gamble and a gambol. First you find a bee laden with pollen, then you attempt to follow it through the woods, over bracken, under brambles and through thickets. The bee loses you. After a few attempts you end up, scratched and bruised, gazing at a bees' nest in an oak tree. If you are lucky it is a wild nest, not a cork cylinder some neighbour has already placed up there. Now is the time to fetch the cork hive. The bees' nest is smoked to make them drowsy and the cork hive is placed underneath with the top off. The nest is then knocked into the cylinder. Hopefully the queen falls in too. Once the fuss has died down, the top is secured and the bees find their way out of a

hole near the bottom. If everything goes to plan, the bees stay and fill the cylinder with honeycomb. With this method, the honey can be collected at the end of the summer only by driving the bees away and off they go to build a new nest. An easier method is to get a surplus queen from a neighbour with a modern hive and start a colony in a more orderly fashion but most people still use the old method, shrouding it in secrecy and mystique.

### *March*

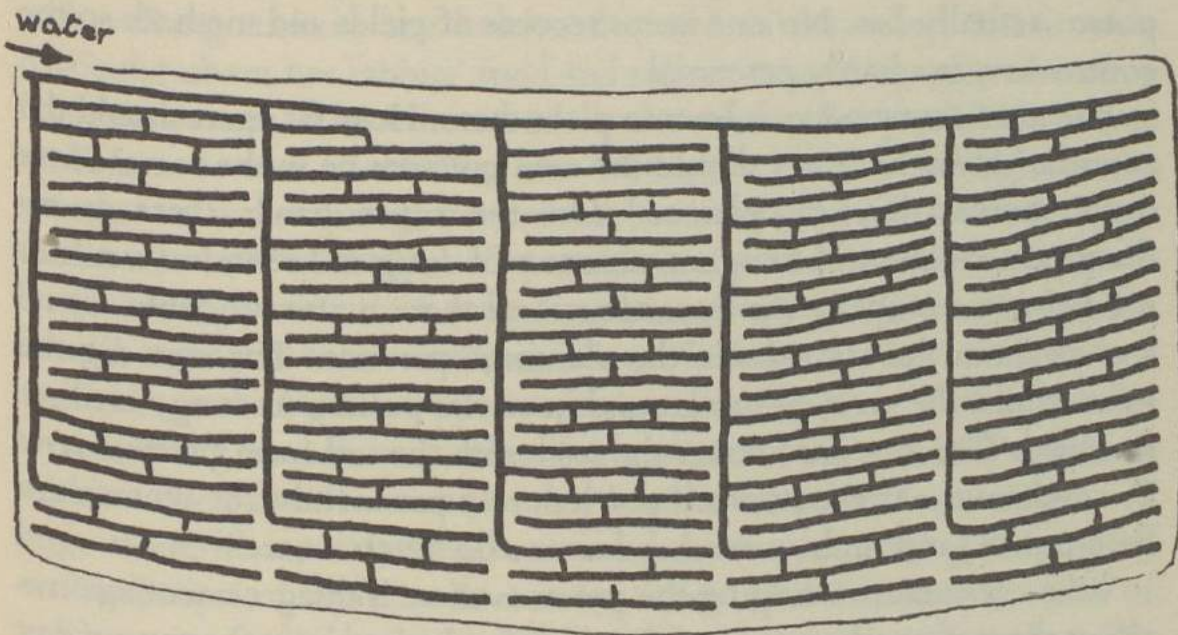
In March work starts on the land in earnest – so long as it is not raining. In fact much of March is spent standing under trees with stout black umbrellas waiting for the rain to stop. Sometimes there are great Atlantic storms for days at a time. The trees sway and creak against the onslaught and the rain and hail come down in uninterrupted sheets, splattering into the cottages through the gaps between the pantiles. The dogs disappear into odd corners of barns and the whole community, animal and human, withdraws from life and goes to sleep. The donkey tracks become rushing torrents and the terraces look like rice fields. Occasionally it is necessary to struggle out to adjust a water channel so that the terraces are not washed away. At such times the only protection against the elements are old sacks, one used as a hood, others tied round the waist; umbrellas simply turn inside-out. After such storms, all the clothes and bedding have to be dried outside in the sun.

When the sun shines, the terraces are prepared for the main crop potatoes and since these will be irrigated later on, the ground has to be tilled with this in mind. The slope has to be exactly right from back to front; equally important is the slope from one end of the terrace to the other. The main *rega* (water channel) is dug along the back of the terrace and at three paces, smaller *regas* are dug from the back to the front of the terrace. The potatoes are planted in rows parallel to the back of the terraces so that they form a series of blocks.

Potatoes are the main cash crop in Alto so it is not surprising to find that they are the subject of much discussion and some dispute as to the best growing methods. Each person swears blind that his or her method is the best but there is actually a big gap, if not a total contradiction, between what people say about their farming methods and what they actually do in practice.

The controversy starts at the point of buying seed potatoes. In hot climates potatoes grow very well but they – especially the modern

Diagram 2 A Potato Terrace



breeds – are also liable to contract many diseases, and it is generally agreed that the seed stock needs renewing every few years with new seed potatoes, imported at great expense from Ireland, where the colder, damper climate produces hardier, less disease-prone tubers. The most favoured potato in the Serra de Monchique is 'Arran Banner'. Generally speaking, each peasant has a choice between buying 'firsts' directly from Ireland and selling at 270 escudos per arroba (15 kilos) in 1976; 'seconds' which are produced from the previous year's 'firsts', and 'thirds' which are produced by the previous year's 'seconds'. It is generally agreed that 'thirds' are of doubtful value and 'fourths' are not worth bothering with. The longer the potatoes are grown from the same stock in this climate, the poorer the stock becomes, and the higher its susceptibility to disease and low yields.

Whilst 'firsts' were selling at 270 escudos per arroba, 'seconds' were selling at the same price as the grade A harvest from the previous year – between 80 and 100 escudos per arroba. Tio Felipe (14) would never buy 'firsts': he considered them a waste of money when he could get almost the same yield from 'seconds' bought from a neighbour for much less. Joao (5) always bought 'firsts' on the grounds that these seed potatoes could be cut into smaller segments than the 'seconds' and therefore produced a greater yield per arroba of seed than the 'seconds'. Eloi (8) on the other hand, maintains that it is all the same – 'firsts' can be cut into four or five segments, whilst 'seconds' can be cut only once and 'thirds' are best planted whole. Jose disagrees with all this and maintains that the

number of pieces a seed potato could be cut into has nothing to do with the stock but depends simply on the number of good eyes each seed potato actually has. No one keeps records of yields and methods so the controversy is a hardy perennial.

The next controversy is how to plant them. How far apart should the rows be? How far apart should the seed potatoes be in the rows? How deep should they be planted? On the other hand, there is no disagreement about the copious amounts of dung and chemical fertiliser needed to accompany the operation. And there is also no doubt whatsoever about the sex roles in the planting operation. The men dig the rows whilst the women run around in circles putting in dung, fertiliser and seed. The men then cover the seed with the soil from the next row . . . and so on. The men work at a leisurely pace whilst the women are hard put to keep up because they have to do much more.

When it comes to ridging the potatoes there is disagreement again – about the timing, the height of the ridges and even about the time of day that is best. Tio Felipe maintains that the leaves should never be disturbed when there is dew on them whilst Joao considers it stupid to disturb the leaves when they wilt temporarily during the heat of the day. Joao even maintains that the potatoes should not be irrigated for the first time until the plants look half dead, whilst Eloi says that if they were not irrigated as soon as they start to wilt they would put too much energy into foliage and not enough into new potatoes. Once irrigating has started, however, everyone agrees that this should be done every nine days.

That, however, does not end the controversy. Most people irrigate from shared tanks with complicated water rights. They may have water for two days every fifth day. Try dividing that by nine! Either the potatoes are watered too frequently or not enough. Some say that too much water makes the plants produce lots of leaves and not much else whilst others claim the exact opposite, and still others argue on a different tack – that the amount of foliage is irrelevant but that too much water results in lots of little potatoes and very few saleable grade A ones.

There are, of course, scientific answers to each of these controversies but no one is interested in that. These potato controversies are the meat of many a drunken argument in the tabernas of Alferce and it is far more enjoyable to heap scorn on one another's methods year after year than to discover what is best.

When the women are not running around on the terraces trying to keep up with the potato planting they are either gathering large sacks of

greens for the rabbits or doing needlework. Every day, Tia Lucia (14) potters off to different terraces, her old back bent nearly double, a sickle and walking stick in one hand and a sack in the other. She is very particular about her rabbits' food and rejects everything other than five favourite weeds. The other work – darning socks, patching clothes, making new ones, crocheting and knitting – goes on throughout the year but on warm spring afternoons it becomes more of a social activity. A variety of different types of spectacles are worn for such work, some bought over the counter many years ago, some passed down through the family, some just borrowed from others. Only two women in Alto had spectacles made for them by an optician. For the rest – their spectacles were nothing but arbitrary magnifying glasses. Tia Lucia (14) would sit with a folded sheet balanced on her head to keep off the sun, a pair of huge moon-like spectacles balanced on her nose, repatching the patches on Tio Felipe's dungarees. Leonor (7) would be deftly sewing a pair of new trousers for her husband. Eulalia (8), who would much prefer to be wielding an enxada, fumbles away at some intricate embroidery for her daughter's bottom drawer but actually gets exasperated within minutes and stomps off to find something less exacting to do. Perpetua (14) works rapidly at her crotchet work, now her only source of income since her Swiss employer in Silves fled with the wages just after 25 April 1974. Eloi's (8) threshing pad up on the rocks is one of the favourite sites for such work because the rocks reflect the spring sunshine and the place provides a good view of whatever else is going on in Alto.

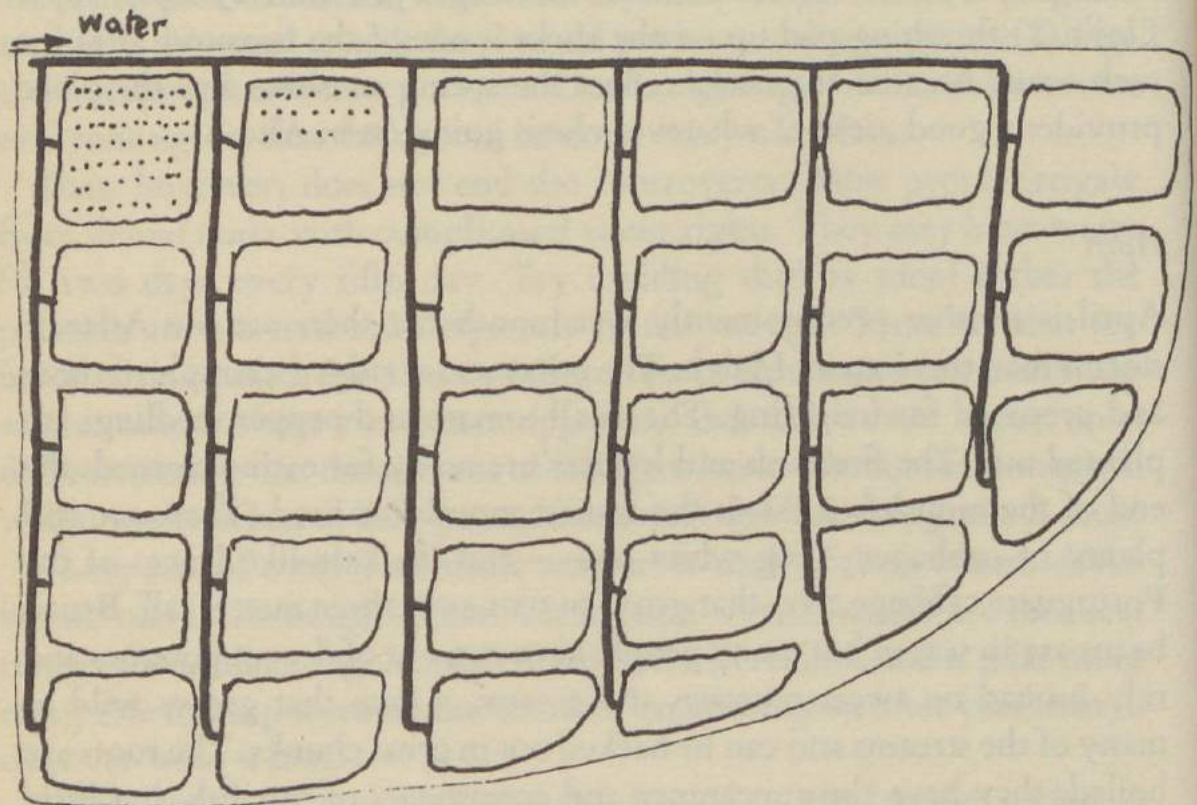
### *April*

April is another predominantly wet month but there are less Atlantic storms than there are in March. The potatoes are ridged a couple of times and prepared for irrigating. The small tomato and pepper seedlings are planted out. The first peas and lettuces are ready for eating towards the end of the month but this is the leanest month for food. There are still plenty of cabbages – big white ones – and the kale-like leaves of the Portuguese cabbage trees that grow two or even three metres tall. Broad beans are in season but many people have run out of decent potatoes and rely instead on sweet potatoes and eniami, a yam that grows wild in many of the streams and can be hacked out in great chunks. The roots are boiled; they have the appearance and consistency of tunafish, but little taste.

Another wild thing, there for the taking, supplements the diet at this time of the year. On damp nights you can see lanterns slowly bobbing along the terrace walls, stopping, then moving on. Someone is hunting snails, which are boiled with lots of garlic and eaten with bread.

In April, some of the best onions from the previous year are planted to produce seeds for the following year. The seedlings from the onion seeds that were sown in January – now up to 20 cm tall – are ready for transplanting too. Eloi (8) grows his onion seedlings in the rocky crevices around his threshing pad. Filled with loam, they make an excellent warm seed bed and he is always the first to plant out his onions. Onions are not irrigated in channels like the potatoes but are planted in pans about two metres square, each pan being surrounded by an earth ridge about twenty cms high. A terrace prepared for onion seedlings looks like a miniature earthworks. About 200 seedlings are transplanted into each pan. The work goes on . . . and on, because many people have between 10,000 and 20,000 little plants to put in, but this time the work is shared equally between men and women with no discrimination between roles.

**Diagram 3 An Onion Terrace**



*May*

After months of heavy dews, mists and torrential rain, the hot dry weather begins in May. Mid-day temperatures already reach 25°C and there is enough work on the land to last from dawn to dusk. The peasants work their terraces within talking or shouting distance of one another so there is quite a communal atmosphere. The landscape quickly changes as the remaining terraces of green weeds are dug and the earth is bared for planting. Although the terraces are close together, there are so many fruit trees between them that many of them are quite secretive-looking places. Conversation goes on between neighbours working their land although they cannot see each other. Others talk to their dogs or donkeys. The donkeys bray to each other. Somewhere, Manuel (1) can be heard softly cajoling his mule into the ploughing. The mule is a well-worn creature, his hind quarters shiny, black and hairless where the plough traces constantly rub. In the mornings, Manuel saddles him with a large, straw-padded affair, throws the plough up on top and sets off for a neighbour's terraces. The animal is quite agile and sometimes the only way to get from one terrace to another is to throw the plough down and leave the mule to jump, which he does quite willingly. When he is not ploughing he is usually carting mounds of cork from place to place.

There is now a veritable glut of broad beans and peas but neither are worth selling at the miserable two escudos per kilo the middlemen are offering. However, oranges, lemons and the last of the tangerines are still being picked for sale. More crops are planted — melons, peanuts, cucumbers, and pumpkins, and also the first maize and beans. In between all this labour, the cork has to be cut.

The cork oaks are evergreen and have leaves similar to the English sessile oak. The trunks and branches of the trees are covered with a layer of deeply fissured cork which is often up to 10 cm thick. The trees with their thick branches twisting at all angles, thus look much more ponderous than they really are. The larger trees are 20 metres high; their boughs stretch out to a diameter of up to 30 metres. The cork is carefully stripped from the trees every nine years. An experienced eye can decipher the roman numerals made with an axe which tell when the tree was last cut. An IX means that it was last done in 1969 and is due for another cutting in 1978. When Tio Felipe (14) shows people around his cork trees and gets to the tree marked with an IV, he invariably says that

he will not be alive to see it cut again, and everyone tells him to stop talking such nonsense.

Cutting cork is a skilled task. It is done with a light, elegant axe with a solid butt on the opposite end to the blade and a long, thin handle. The cork is cut in two or three metre sections by ringing the trunk, top and bottom, then cutting straight down one side. The blunt end of the axe is used to knock and prise away the cork in a complete cylinder. If the weather is too dry the cork breaks into many pieces, and if the weather is too wet and cold, the tree dies of shock. The nine-year-old cork is thickly encrusted with hanging lichen and is a light grey-brown colour. When the cork is removed, the trunk underneath is a bright salmon pink but within a month it turns chestnut brown, sometimes almost black. Only very gradually does it turn light grey again as the layer of new cork grows thicker. Different parts of the tree are cut in different years. The lower trunk might have been cut in 1975 and is now a smooth dark chestnut whilst the next section up was cut in 1970 and is thus thicker, more encrusted and greyer. Branches higher up might have been cut back in 1967 so they are thick with cork and fronds of hanging lichen. Cutting the trunk requires skill but cutting the branches requires gymnastic ability too. Mario (9) almost runs up these trees, aided by a rope sling round the trunk, and frequently cuts the cork whilst hanging under a bough with one arm and legs folded over the top. The pay for this work is determined on a piece-work plus quality formula because cork that is prised off in unbroken cylinders is worth more. Mario reckons to earn up to 600 escudos working a 12- to 14-hour day.

Once the cork is cut, it is the owner's task to stack it near a track. Carlos (2) spent weeks staggering through the woods with piles of cork as big as a car on his back. When he was finished he had a stack two metres high and about twenty metres square. There it stays, sometimes for years until the price seems good or the money is needed. There is status involved in having a good pile of unsold cork on view.

### *June*

Just before 6 a.m. in June, the sun rises from behind the range upon range of mountains stretching away to the east of Alto. The night air on the mountains is cool so the water vapour condenses into mist and rolls down into the valleys. At dawn, Alto and the tops of all the mountains to the east are a bold, precise grey, whilst the valleys between them are



shrouded in thick mist. As the sun rises higher, the mist quickly disperses and the mysterious tranquillity is replaced by the solid parched brown of these worn old mountains. By mid-morning the temperature is up to 35°C in the shade, considerably higher out on the terraces. Everyone rises with the dawn to work before it gets too hot.

By the beginning of June, irrigating is a daily task and hoeing weeds a constant necessity. The small onion plants in particular require careful weeding and the only crop that successfully smothers weeds and requires less attention is the potato. But about this time the first colorado beetles appear. They are pretty little things but once their eggs start hatching, the fat, pink grubs can eat a whole terrace of potato leaves in less than a week. Everyone sprays their potatoes with a deadly poison which unfortunately also kills the ladybirds and praying mantises which are the colorado beetle's natural predators.

The terraces are now producing a large variety of crops for home consumption but the broad beans and peas are already finished and it is now too hot to grow lettuces – they run to seed immediately. Strawberries, loquats and cherries are ripe at the beginning of the month, followed by plums and apricots a bit later on. The tangerines have long since finished but there are varieties of orange and lemon that provide fresh fruit throughout the year. At times it is impossible to distinguish between the late lemons from the previous year and the early lemons from the current year.

The garlic cloves are ready for pulling and plaiting into strings and the remains of the broad beans and peas are pulled up and threshed with dung forks. The early potatoes, planted in February, have died down and are ready for digging; the wheat is ready for harvesting. Most of the oats are not grown to maturity but, together with alfalfa, are cut throughout the first six months of the year and fed green to the cows, which spend their entire lives inside barns.

Eulalia and Eloi (8) grow about two hectares of wheat every year over at Foz do Acor, so in June they have to make a week's trip over there to harvest it. They do the work entirely by hand, using only sickles. They work on and on, throughout the heat of the day, cutting a bundle, tying it with a few straws, then another bundle . . . and so on. Bit by bit they cut their way across the field – Eulalia wearing her battered straw hat and Eloi his dirty old trilby – until it is all done. The bundles are loaded onto the donkeys and carted to one corner where they build a circular rick about four metres across and three metres high, and carefully thatch

the top. The wheat stays here for some months because there is no time for threshing in June. The threshing is done at almost any time of the year and is done by hand. The bundles of wheat are untied, spread on a threshing pad and the donkeys walked round and round to break up the ears and extract the grain. Then the straw is removed with a dung fork and the wheat and chaff are collected. If it is a moderately windy day, the wheat is winnowed by pouring it against the wind into earthenware bowls – two or three times if necessary. The chaff blows to one side and the wheat drops more or less vertically. Great care is required to keep the whole process clean and to make sure that stones and earth do not get mixed up with the wheat. The whole process is repeated again and again, a few bundles of wheat at a time, until eventually the old stack is used up and has been replaced by another stack alongside, now consisting only of straw.

The grain is sacked and stored in the cottage. Eulalia and Eloi bring some back to Alto every time they make a trip to Foz do Acor. The grain used to be ground at the old windmill above Alto but nowadays it is done at an electric mill in Monchique. Once a month on market day, people go into Monchique with one or two donkeys loaded with sacks of grain for themselves and their neighbours and bring the whole flour back the same day. When necessary, small quantities of flour are milled by hand at home, using two flat circular stones, the top one having a large hole in the centre and a wooden handle embedded into it near the circumference. The grain is tipped into the centre hole and the top stone is slowly turned, forcing the ground flour out between the two stones. It is very hard work. The hand mills are generally used only for milling maize to make certain types of cakes, and to mill oats in order to make pappas, a type of porridge.

The flour is sieved to remove all the bran and wheat germ, which is fed to the chickens and rabbits. The remaining white flour is used for breadmaking. Yeast is preserved from one baking to the next by putting some dough aside in a cool place. This old dough is then rubbed in with the new mixture, from which another bit of dough is put aside . . . and so on.

Most of the bread ovens are built in barns or outside the cottages. They are circular, domed structures made of stone and mud. The more modern ones are lined with bricks on the inside whilst the older ones are lined with beaten mud which bakes rock-hard. The ovens have an entrance about 30 cm square. Through this, some brushwood and

eucalyptus bark is put into the oven and burned to ash in about twenty minutes. The ash is then raked out. The floor of the oven is wiped with a wet cloth on a pole and the loaves are slid in. The door of the oven is bricked up and an hour later the loaves are perfectly baked, though it takes much practice to know how much wood to burn for making bread, for baking cakes or for roasting peanuts. Bread is eaten with every meal.

### July

The landscape slowly burns up as the summer wears on. The chick peas and tremosas are harvested and threshed, sometimes in the open with a fork and sometimes by putting them in a sack and banging it against a wall. The remains are winnowed by tipping them from bucket to bucket in a light breeze.

The main task in July is the potato harvest. Despite all the argument about every other aspect of growing potatoes, there is never any controversy about when to harvest them. The work requires the help of the extended family so it always happens on a pre-determined Sunday morning when it suits everyone. Tio Felipe (14) keeps his early potatoes in until the beginning of July except for a few that have been dug for immediate consumption each week from May onwards. His potatoes are grown on the slope below his cottage, share-cropping with Manuel Cunhal who owns the land. On the Saturday, Tio Felipe cuts the remaining tops from the plants and in the evening the family arrives: Tia Lucia's son, his two sons and daughter and the daughter's husband. All of them live near Silves. On the Saturday night there is a bit of celebrating but not much drinking and by 10 p.m. everyone is in bed or asleep on some straw in the barn. At dawn they are all down on the potato slope, including Perpetua, Tia Lucia's widowed daughter, and Maria (Eulalia and Eloi's daughter (8)), who is walking out with Tia Lucia's younger grandson. Breakfast by the potato slope consists of bread, pork fat and medronho, with lemon tea for the women. Then the men get into the digging with their enxadas. The grandsons have to work to keep up with Tio Felipe, who despite his 83 years, can dig as fast and for as long as anyone sixty years his junior. The enxadas rise and fall in a line, the tools being jerked towards the body as they bite into the soil beyond each potato plant. The effect is to heave the whole plant out of the soil and to send it flying between the legs of the digger and out behind him. The women quickly gather the potatoes and sort them into 'A's', 'seeds', tiny

ones and those nibbled by mice or rats, or sliced by an enxada. The competition between the men continues all morning and after six hours, with the temperature in the sun well above 40°C, the last row is finished. The men then retire to the shade of a tree and get out the medronho whilst Perpetua goes up to heat the dinner she has prepared the day before and the rest of the women go on collecting and sorting the potatoes. Even in this heat, Tio Felipe works in his vest, shirt and waistcoat and has thick, long woollen pants under his dungarees but the younger men strip to the waist for the work and after a couple of medronhos, go off and dive into one of the bigger irrigation tanks to cool off. An hour later there is a big feast of rabbit, chips and green beans, with lots of salad and wine, followed by watermelon and more medronho. Whilst everyone else drifts off to sleep inside the cottage or under the oak trees, Tio Felipe is busy supervising the process of giving half the harvest to Manuel Cunhal, who has meanwhile come up from Alferce with his tractor and trailer. There is no question about him helping with the digging but he makes sure he is there at the end to get his 50 per cent of the grade A potatoes as well as the others. Only Tio Felipe helps him load the trailer.

The terraces are now providing lots of tomatoes, peppers, cucumbers and melons as well as apricots, plums, pears and the first apples. Everyone eats mountains of salad twice a day, garnished with olives, oil, garlic and oregano.

The bare potato terraces do not remain fallow for long. Within a week they are planted with sweet potato shoots which have been broken from old tubers placed in the ground a month previously. The sweet potatoes produce leaves like ivy and quickly cover the whole terrace with creeping vines. More beans and maize go into every bare patch that can still be irrigated and by the end of the month, the round of work that began in March starts to slacken off. Everyone takes a rest, then starts on the odd jobs, like repairing a stable door, plugging a leak in an irrigation tank, and liming the inside and outside of the cottage. Now the only work on the land is weeding and irrigating and this is done mainly by the women whilst the men get on with other activities in order to make a cash income. The bees need some attention. The nests of parasitic wasps have to be destroyed and the odd polecat that has been disturbing the hives is snared. Those with modern hives are collecting the honey and filtering it. Others go off cutting eucalyptus for 25 escudos per hour. Another buys fillies and breaks them in before re-selling them. The

cooper is busy mending old barrels ready for the autumn wine-making. The blacksmith has queues of donkeys, especially on Sunday mornings, waiting to be shod. As the countryside dries up it takes longer and longer to gather weeds for the rabbits. The pigs get fed up with the glut of tomatoes and refuse to eat them. New chicks are hatched and require attention; another piglet is bought. Factories in Lisbon and Setubal close for July or August so relatives who have long since left the land come to stay and perhaps to help with odd jobs too.

### *August*

The biggest task in August is harvesting the onions. In a matter of weeks, the bulbs suddenly swell until each onion is touching the next. The leaves start to turn yellow and then they are no longer irrigated but left to dry for a couple of weeks. Then the onion terrace is lightly irrigated to loosen the soil; a day later the onions are pulled and left lying on their sides so that the roots dry and wither. After a week of this they are ready for plaiting. This is best done in the morning when the dew is still fresh so that the stems are not too dry and brittle. The stems have to be just right – too dry and they snap, too wet and the onions drop out of the plait as the stalks dry. The onions are plaited like a girl's pigtail and it takes several days on the terrace to complete the whole crop. Then they are loaded onto the donkey, taken to the barn and hung on the rafters. In 1976, onions were fetching only 50 escudos per arroba in August but by the end of the year the price rose to 125. By April, the price often rises to as much as 200. However, it does not necessarily make sense to hang on as long as possible before selling. The onions slowly dry out and lose weight – something like 30 per cent in six months. Some go rotten; others sprout and put all their weight into green shoots. In 1976, Eloi and Eulalia (8) hoped to make a packet out of selling their 1975 onions late in the spring. They had stored very well, perhaps because they were hung on the rafters of the smithy which was always dry and warm. But they waited too long and by May the first onions from the Algarve were on the market. In the end they got 45 escudos per arroba for them, having seen the price rise from 70 the previous August, up to 130 in March and then down again.

By the end of the month the peaches are ripe and so are the first grapes and persimmon. There are practically no vineyards around Alto – the land is too good and precious for vines. Instead the grapes grow on

massive vines that climb to the tops of the trees. Picking them is not easy.

By the end of the month half the terraces are bare, baked earth. The only remaining cash crops are beans and peanuts. If it were more profitable to grow beans, those with sufficient irrigating water would plant more, but it is hardly worth the time and effort involved. For some, there is a drastic shortage of water by the end of August. Tio Felipe (14) has gardened the same terraces for more than thirty years and he has been able to grow enough maize for his donkey and his hens all that time. The past two years have been more difficult as the eucalyptus trees up above his terraces have increasingly dried up the water source – perhaps this is the last year that he will be able to grow maize here. The stone tank above his maize patch is the biggest one in Alto but now it has only a few centimetres of water and mud in the bottom. Tio Felipe bends slowly and removes the wooden plug at the bottom, then pokes some channels in the mud, guiding the little water to the exit. His land has rights on this water between 1 p.m. and 3 p.m. twice a week. Now, in the oppressive heat of the afternoon sun he coaxes the water towards his maize plants. The pathetic trickle will barely keep the plants alive and there is no hope that they will grow good cobs of corn for the winter feed of his donkey and hens, yet he will not abandon the plants to die. He refuses to believe that this can happen to his maize patch, that there will not be more water later in the week, or next week or the week after. The plants are short and thin, the leaves browned at the edges. He feels that it reflects badly on him. The neighbours will be saying that at 83 his useful days are over and he can no longer grow enough food for his donkey. For all his years, Tio Felipe is usually sprightly, even jaunty at times, but now the dribble of water ages him visibly as he leans on his enxada watching the water disappear into the baked earth before it gets near the maize plants. There is nothing dramatic or sensational about this sad sight but it is for that very reason that the predicament is all the more bitter for Tio Felipe. The drying up of the water represents to him the end of his days. He reflects on the fact that his family sold him, the eldest son, to a rich peasant in Alto in 1903 when he was eleven. He hid in the pigsty but they found him and took him away. His family needed the money. He reflects on the fact that because he was sold, he never inherited anything. One of his brothers got a job as a signalman on the railway to Lisbon. Another emigrated to Brazil. A sister married upwards and still lives in a good house in Sao Marcos but he has not seen her for eighteen years. He has no children. His first wife was 48 when he married her at the age of 18 and

his second wife was 64 when he started living with her at the age of 70. For all the shabby treatment he got from his family, he still intends his cottage to go to them and not to the children and grandchildren of his second wife. It is a question of pride — he has to show his family that despite everything, he has made out too. He has worked the land around Alto for three-quarters of a century, worked hard and well, and this is what it has come to, this pathetic dribble of water. Each time Tio Felipe returns to his cottage from the maize patch he is an old, old man, thinking about his approaching death.

Elsewhere in Alto there is still water in abundance, even at the end of August, and the maize still grows strong and tall.

With the approaching winter, the work now concentrates on drying and on preparing for the leaner months. Figs are picked for drying and packing away with pieces of fennel. Peppercorns are picked from the trees, coriander seeds collected and bunches of wild marjoram and oregano are picked and dried. All sorts of little jobs are done. Ze comes up from Alferce and hauls the willow shoots from the bottom of the tanks, moving from cottage to cottage making baskets with a penknife and a small mallet. The finished baskets are too heavy to lift and take weeks to dry out.

#### THE FEAST OF SAO JOAO

The biggest social event in the calendar is the festival in Alferce on 9 and 10 August. Originally a religious festival, it has now become a market and fair, though the local saint does get taken out of the church for his annual airing, watched by a largely uninterested and somewhat drunken populace. On the Sunday there is an animal market in the cork grove behind Alferce, with cattle, sheep, donkeys, horses, mules, goats and pigs. As with the monthly market in Monchique, there is no formal organisation or auction ring. Each peasant family brings its animals, driven along the old tracks, and tethers them in the wood. Haggling over prices goes on mostly around the beer tent but few animals are actually bought or sold and most are not really for sale at all. In fact many families only bring their animals because no one wants to stay at home and they are afraid that gypsies might steal them in their absence.

In the village itself there are market stalls and side-shows. In the evening there is a dance in one of the Cunhals' big warehouses. About a thousand people come in from the surrounding mountains for the event

and the younger men stay drinking all night. On the Monday there is a drunken continuation of Sunday's activities and it all ends with folk dancing in the village square. A group came up from the Alentejo with an accordionist and, typically, arrived three hours late just after midnight. They danced expertly for a couple of hours. During the long wait, some of the younger people in the village rigged up a sound system from the generator at the Casa do Povo and one of them sat up in the church belfry with a gramophone, playing revolutionary songs by Ze Afonso, Cuban records and songs by Quilapayun and Inti Illimani, the two exiled Chilean groups. This music caused unrest amongst the older people, not because of the content but because they wanted correntinho music on an accordion. When the Alentejo dancers had finished, the accordionist continued and the floor was open. It took some time to break through the embarrassment of dancing in front of the whole community but in the end the ice was decisively broken by Tio Felipe (14) who insisted on dancing with Mary (6). He was very drunk and as each step backwards in the dance threatened to take both of them to the ground, the whole village watched and gasped. Tio Felipe's family did not know where to put their faces. They could have shrunk away into the dark night with the shame of it all. But the ice was broken. More old men joined in to show that they could be nimble with their footwork too. Eventually, of course, Tio Felipe did go over backwards. The next day he was up at seven and could remember nothing. As he gradually pieced together his activities of the previous evening from what his family and friends said to him, he felt he was expected to be ashamed but in fact he was rather proud of himself.

### *September*

The first task in September is clearing the ground beneath all the olive trees to make it easier to pick up the fallen olives. Then there is the task of picking grapes from high up on the tangled vines and, for the few who make their own wine, the messy and enjoyable business of treading the grapes. Alto is not vine country and wine-making is simply a sideline for those who prefer their own vintage to the stuff that is brought up from the Alentejo to be sold in the tabernas.

On the terraces there are still beans to pick and ripe maize cobs to cut and store for the animals during the winter. Cabbage plants that were



sown in odd patches in August are transplanted into empty terraces for the winter.

By mid-September, the medronho picking starts. Alto becomes empty and quiet as one family after another treks off to distant mountains to pick the small strawberry-like berries. Eulalia and Eloi (8) pack great quantities of beans, tomatoes, potatoes, pork fat and tomato jam for the donkeys to haul over to Foz do Acor because this time they are there for a whole month. The medronho trees grow wild and spasmodically, up to five metres tall amidst heather, bracken and scrub. It is hot, rough work scrambling around such terrain with ladders and panniers.

In 1976, Eloi and Eulalia picked nearly eight tons of berries. Their campaign to get pickers started early in the summer. An opportunity was never missed to remind the family that they could not possibly manage by themselves. During different periods in September and October they had their three daughters with their husbands, their son and his wife, Perpetua (14) and other distant relatives to help. Tio Felipe and Tia Lucia (14) looked after the pig, the chickens and the rabbits and irrigated the terraces back in Alto. Eloi paid 40 escudos per arroba (15 kilos) and the pickers went on from dawn to dusk, with only short breaks for water and food, their two donkeys permanently busy carting the berries back down the mountain to the big, wax-lined concrete vats that Eloi had built in the barn a couple of years previously. One arroba of berries usually makes about two litres of spirit so they expected to have just under a thousand litres of spirit for sale the following February. The smithy back at Alto is more work than the medronho but the medronho is their main cash income. The picking is rough, exhausting work. Despite this, and despite the fact that she hates alcohol and drunkenness, and totally abstains, Eulalia always insists that she looks forward to the medronho picking and enjoys this month more than any other. The cottage at Foz do Acor is low, small and primitive; it is exceedingly cramped when the whole family is there. They are all dog-tired at the end of each day but for Eulalia, there is one factor that compensates for everything else. For this one month each year, Eulalia is surrounded by her four children, their husbands and wives and all the grandchildren. For a few brief weeks she can enjoy *her* family on *her* land, all working together in the traditional way. This is what her peasant life was all about – carrying on with the age-old tradition of work, keeping everything in good order, and above all, feeling that it was going to be left in good order for all the generations of family to come. She would enjoy all this

whilst she could because she knew that once the picking was finished, she and Eloi would make the long haul back over the mountain on their two donkeys and spend the winter alone in their cottage in Alto. Their family would go their separate ways to the towns of the Algarve coast and the realisation of that would come heavily home. Their four children had all chosen to leave the land. There was no one to continue the tradition after they were gone.

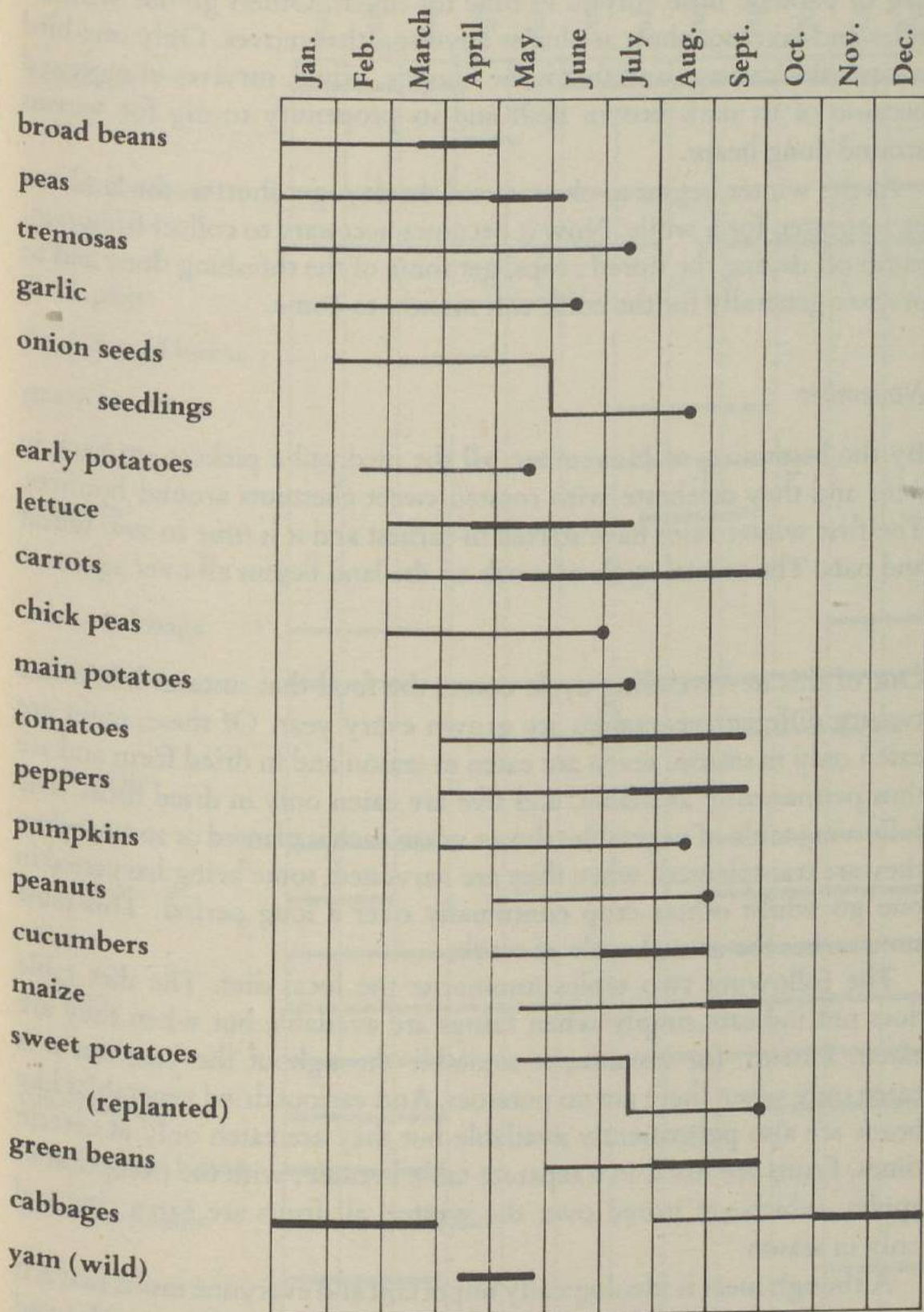
### *October*

The medronho picking goes on through most of October and overlaps with the olive harvest. Eulalia always complains about it but there is nothing she can do. She has to rush back to Alto for odd days to get some of the olives in. Picking them up involves hours of scrabbling around on the ground, filling sacks and hauling them down the hill on the donkey to the olive press. The press, owned inevitably by the Cunhals, is a modern affair serving a wide area. Each peasant takes sacks of olives to the press where they are weighed and recorded. At the end of each week, the Cunhals work out the ratio of dry olives to pressed oil. They either give back the appropriate quantity of oil, minus 10 per cent as a charge for pressing it, or pay for it then and there if the peasant does not want the oil. The system is run this way because the oil content of olives varies a great deal from year to year, and even from week to week, depending largely on how much rain there has been. In 1976 there was, quite exceptionally, some rain at the end of August so the oil content of the olives was high, though the same rain ruined a lot of grain and rotted most of the figs on the trees, making them smell like vinegar factories.

Of course the best olives stay at home where they are cured in brine, flavoured with herbs and eventually stored in fresh, slightly salted water over the following year.

For those without olives or medronho to pick, October affords other pleasures because the hunting season starts. It is an excuse for a day out on the mountains with a gun, a basket of food and medronho, and a number of fairly ill-disciplined dogs. Very few rabbits or foxes meet their end as a result. More effective is the part-time hunting that goes on all the year round. Any peasant distilling medronho will spend a considerable time fixing up a complicated bird trap outside the barn before getting down to work – hoping to add the flavour of a couple of sparrows to an otherwise predictable lunch. On Sunday mornings a popular pursuit is

Table 5 Vegetables Grown in Alto



Note The thin line indicates the growing time, a dot indicates a complete harvesting and a thick line indicates a period of continuous harvesting. Onions are sown, then transplanted; sweet potatoes are buried for sprouting and the sprouts are later dug up and planted out.

to set a number of wire bird traps at dawn and collect the indiscriminate bag of pathetic little corpses in time for lunch. Others go out with air rifles and take pot-shots at almost anything that moves. Only one bird escapes this carnage and that is the hoopoe, which survives unmolested because of its dark brown flesh and its propensity to dig for worms around dung heaps.

As the winter begins to close in and the days get shorter, the land can be forgotten for a while. Now it becomes necessary to collect firewood, finish off drying the stored crops, get some of the threshing done and to prepare generally for the cold, wet months to come.

### *November*

By the beginning of November, all the medronho pickers are back in Alto and they celebrate with roasted sweet chestnuts around bonfires. The first winter rains have started in earnest and it is time to sow wheat and oats. The annual cycle of work on the land begins all over again.

Out of this never-ending cycle comes the food that sustains life. Some twenty different vegetables are grown every year. Of these, eight are eaten only in season, seven are eaten in season and in dried form and are thus permanently available, and five are eaten only in dried form. The following table of vegetables shows when each is planted or sown, when they are transplanted, when they are harvested, some being harvested in one go whilst others crop continually over a long period. This table summarises the annual cycle of work.

The following two tables summarise the local diet. The diet table does not indicate simply when things are available but when they are eaten. Eniami, for instance, is available throughout the year but it is eaten only when there are no potatoes. And various dried vegetables like beans are also permanently available but they are eaten only at certain times. Fruits are listed in a separate table because, with the exception of apples, which are stored over the winter, all fruits are eaten ripe and only in season.

Although meat is ideologically important and everyone insists that it is impossible to work without it, the diet is primarily of vegetables and fruit, meat being used more as a flavouring than as a basic food.

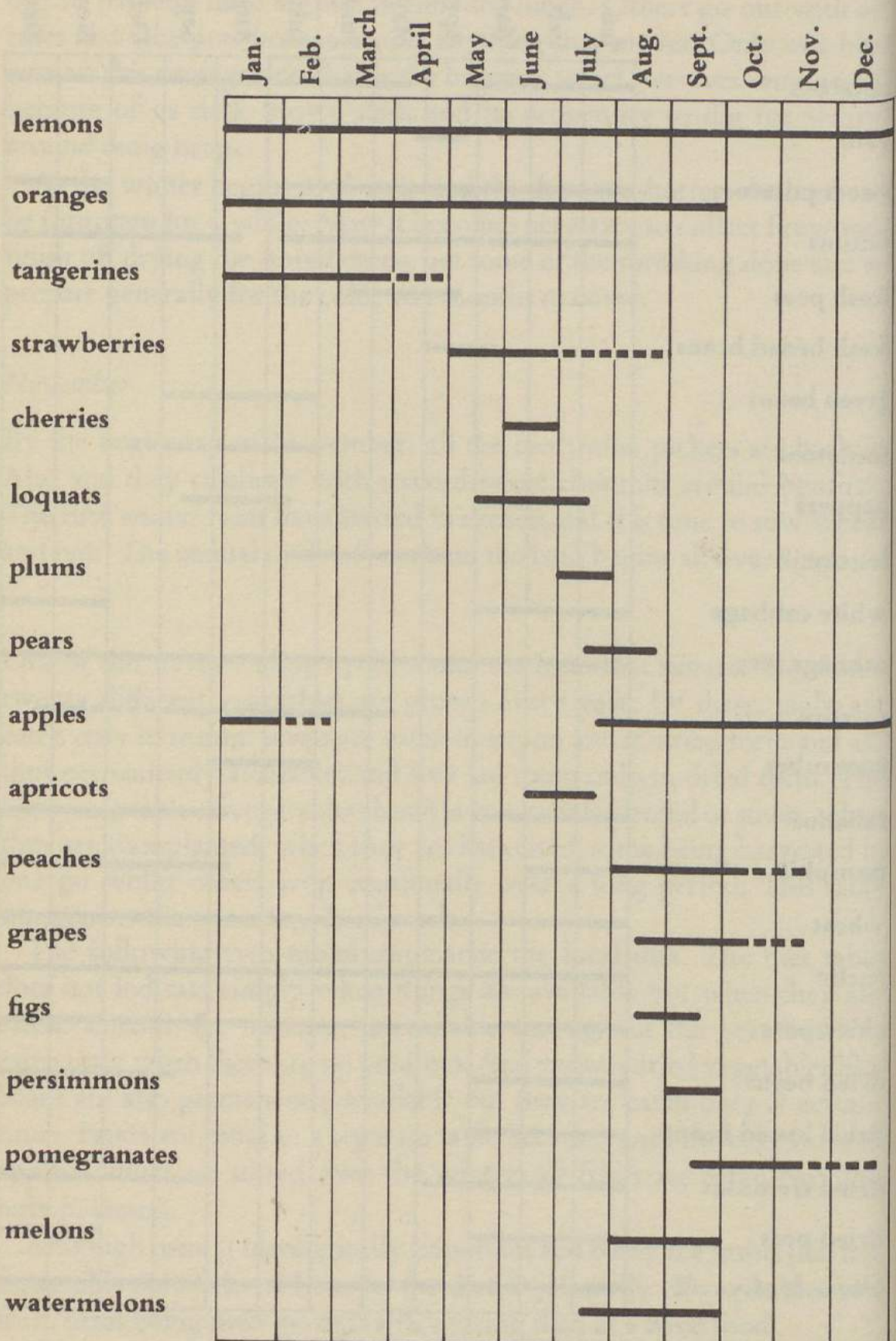
The road from Monchique has made little difference to the diet. Even

Table 6 Diet. Vegetables Eaten in Alto

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
potatoes				—	—	—	—	—	—	—	—	—
yam				—	—							
sweet potatoes											—	—
onions	—	—	—	—	—	—	—	—	—	—	—	—
fresh peas				—	—	—						
fresh broad beans			—	—								
green beans							—	—	—	—		
tomatoes							—	—	—	—		
peppers							—	—	—			
lettuce				—	—	—	—					
white cabbage	—	—	—								—	—
cabbage tree	—	—	—	—	—	—	—	—	—	—	—	—
carrots					—	—	—	—	—	—	—	—
cucumber							—	—	—			
rabanos	—	—	—					—	—	—	—	—
pumpkin	—	—	—					—	—	—	—	—
wheat	—	—	—	—	—	—	—	—	—	—	—	—
garlic	—	—	—	—	—	—	—	—	—	—	—	—
chick peas	—	—	—	—	—	—	—	—	—	—	—	—
dried beans	—	—	—						—	—	—	—
dried broad beans	—	—	—									
dried tremosas	—	—	—	—				—	—	—	—	—
dried peas	—	—	—								—	—
olives & olive oil	—	—	—	—	—	—	—	—	—	—	—	—

Note This table does not indicate when vegetables are available but when they are eaten.

Table 7 Diet. Fruit Eaten in Alto



Note The lines indicate when the fruit is ripe on the tree or plant. With the exception of apples, which are stored, all fruit is eaten ripe from the tree.

before it was built, rice was hauled up from the Alentejo and almonds up from the Algarve. Bacalhau (dried cod) was eaten once a year after the pig-killing, but otherwise, almost all the food was, and still is, grown locally. The road has, however, resulted in sardines being locally available. A local labourer-turned-entrepreneur goes down to Portimao on his motorbike and buys sardines fresh on the quay when the fishing boats return between nine and ten in the morning. The boxes of sardines are roped onto the back of the motorbike and every day except Sunday, Ramalho, who lives at Fornalha, arrives in Alto at around mid-day. The sardines are cheap and most people eat them two or three times per week. The only other noticeable change in diet is a small increase in sugar consumption.

Although Alto usually has between four and six milking cows at any point in time, most of the milk goes to the calves and only the landlord and those who keep the cows have milk regularly. The same applies to goat's milk and to cheese. Although Fernando and Lidia (24) produce goat's cheese for sale, their only regular customer locally is the landlord's house, the maid being sent up daily to collect fresh cheeses.

The first part of the report deals with the general situation of the country and the progress of the various branches of industry and commerce. It is found that the country has made considerable progress in all these respects since the year 1870. The population has increased, the land has been cultivated, and the manufactures and commerce have flourished. The progress of the various branches of industry and commerce is detailed in the following table:

Year	Population	Land Cultivated	Manufactures	Commerce
1870	1,000,000	100,000	100,000	100,000
1871	1,050,000	105,000	105,000	105,000
1872	1,100,000	110,000	110,000	110,000
1873	1,150,000	115,000	115,000	115,000
1874	1,200,000	120,000	120,000	120,000
1875	1,250,000	125,000	125,000	125,000

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1873	1,150,000	115,000	115,000	115,000
1874	1,200,000	120,000	120,000	120,000
1875	1,250,000	125,000	125,000	125,000

Year	Population	Land Cultivated	Manufactures	Commerce
1870	1,000,000	100,000	100,000	100,000
1871	1,050,000	105,000	105,000	105,000
1872	1,100,000	110,000	110,000	110,000
1873	1,150,000	115,000	115,000	115,000
1874	1,200,000	120,000	120,000	120,000
1875	1,250,000	125,000	125,000	125,000



## 4 The Local Economy

Any account of the local economy must start with the basis of it all – agriculture. Most of the land in Alto is terraced for irrigation. The terraces range in size from less than 20 square metres to over 10,000 square metres. Depending on the slope of the land and the size of the terraces, the stone walls between them range from one to five metres tall. Across these terraces runs a complicated pattern of irrigation channels, some made of stone, some just earth gulleys. The water is stored in stone or concrete tanks which vary in size from five to fifty cubic metres and these in turn are fed by springs in the mountain. Some springs are right next to the tanks and run naturally from fissures in the rocks whilst others run from caves that have been dug into the mountain and other sources are channelled up to three kilometres round the mountain from the Valley of Maia. The irrigation system is made more complex by land inheritance laws that have resulted in the constant splitting of family plots and ever more complicated sharing of rights over existing tanks. One tank in Alto is shared by twelve families and the person with the smallest share has the right to use water only from 1 p.m. to 3 p.m., twice a week. In the winter, water flows freely along the gulleys, through the tanks and on down the main irrigation channels to the river way below Alto.

Irrigating usually starts in the middle of May and by the end of July there is not enough water to go round. When the water starts to get scarce, the formal 'partilhas d'agua' or water divisions are made; after that it is a serious offence to use water at the wrong time. Every piece of land has its particular water rights. Without water the land bakes hard. The sloping land that is not irrigated is only productive during the wet season from November to May. It is used for wheat, oats, chick peas, tremosas, garlic and early potatoes.

Agricultural work is done with two basic tools. The enxada is an all-purpose tool used for digging, ditching, hoeing and irrigating. It is a

spade with the blade at about 80° to the handle, wielded in similar fashion to a pick-axe. This one tool is used in place of the English spade, fork, hoe, rake and shovel. The other main implement is the fouce, a sickle with a serrated cutting edge. And of course everyone carries a pocket penknife which does all manner of tasks and always comes out at meal times. The poorer peasants own no other tools. The smaller and more inaccessible terraces are worked entirely by hand. The larger ones are ploughed with a mule or a donkey, using a simple reversible plough made of wood and steel that cuts no more than 15 cm into the ground. In the past couple of years some of the more accessible terraces have been ploughed by tractor. Manuel Cunhal, the Alferce capitalista, has a five litre Fordson and Carlos (2) the rich peasant has a one litre Italian mini-tractor. Both tractors have hydraulic ploughs so they can get into tight corners, and both are used for contract ploughing. However, about two thirds of Alto's terraces are inaccessible to the tractors so the major part of the work is still done by hand, or with the help of a mule. Many of the peasants own a mule or a donkey which is used to cart manure and fertiliser to the terraces, and heavy crops like potatoes and onions back to the cottages.

Most of the peasants have rather less than one hectare of irrigated land. Half a hectare is enough to grow all the food for an average family of four; the rest is used for cash crops. The main cash crops are oranges, lemons, potatoes and onions. Although the surplus of any other crop can always be sold, and some people, for instance, sell a lot of green beans, the income from such surpluses is so derisory that most people prefer to give their surplus away. Each family decides in advance what its cash crops are going to be and even if they end up producing an appreciable surplus of something else, they rarely sell it. For one family, strawberries are a cash crop whilst for another, they are only for the house and for giving away. So Joao (5) gives away baskets of plums and pears and is always offering big white cabbages around, whilst Tio Felipe (14) gives away mulberries and Eulalia (8) supplies half the neighbourhood with tomatoes, cucumbers and beans. She also sells some of her tomatoes and beans at 5-6 escudos per kilo to the shops in Alferce but she would never dream of selling them in Alto. With this local system of give and take, everyone gets some of the various fruits and vegetables that are grown.

Financially, the most important cash crop is potatoes and the economics of growing them is best expressed in simple accounting terms:

For one hectare of potatoes<sup>1</sup> —

	<i>costs</i>	<i>income</i>	<i>net</i>
50 arrobas of seed (2nd)	5000		
36 sacks fertiliser	7200		
harvesting costs	300		
1000 arrobas grade 4 (80 esc per arroba)		80,000	67,500 esc

These figures are for middle peasants owning their own land, with enough pigs and donkeys to provide all the necessary manure. A poor peasant will have to pay a rent of about 3000 escudos per hectare per year and if he does not have much animal stock he will also have to buy about 1000 esc. worth of manure for a hectare of potatoes, so his net cash income is only 63,500 escudos.

For a *quinteiro*, the figures are even worse. He pays nothing for the seed potatoes, manure and fertiliser but he gets only half of the harvest so his income is only 40,000 escudos.

A hectare is 100 metres by 100 metres. Growing a hectare of potatoes entirely by hand is a lot of work but potatoes pay better than any other crop. In the summer of 1976 onions were selling at only 50 esc. per arroba although in the early spring the price sometimes goes as high as 250 esc. per arroba. Onions can produce a higher weight yield per hectare but they are more work to plant out and require constant weeding whereas potatoes only need ridging and irrigating. If a peasant manages to get 1200 arrobas of onions from a hectare he might make 100,000 esc. at the top price but that requires good storage facilities, weeks of plaiting the onions, and other risks. The advantage with potatoes is that they can be sold immediately and got out of the way whereas an immediate sale of onions would bring in only 60,000 esc. per hectare.

As for oranges and lemons — the yield per hectare is rarely more than 2500 arrobas and even at the best price in January, that fetches only about 15,000 esc. However, a terrace of orange or lemon trees can also be used for such crops as beans or maize. In fact there are no plantations in Alto and only Carlos (2) has a real orange grove, down by the Odelouca River.

The average middle peasant in Alto is unlikely to make more than 40,000 esc. from his cash crops and the poorer people make considerably less. That is why they try to stay out of the money economy as much as possible and actually use much of their best land to grow crops for their

own direct use rather than concentrating on cash crops and then buying in their food from outside, as is normal in the monocultures of capitalist farming.

Cultivating one hectare by hand is hard work but it is not a full-time job for one person. Most families share the work on the land so there is plenty of time for the men at least to sell their labour on a casual basis and thus augment their cash income. Some have a trade. Manuel (1) uses his mule for ploughing and carting cork. Eloi (8) has his smithy. Ze Manuel (21) makes barrels and cuts cork. Mario (9) also cuts cork. Each of them makes another few thousand escudos per year in this way. Then there are those who work as lumberjacks for 25 esc. per hour; they can expect to pick up a maximum of 35,000 esc. per year working on average three days per week, and tilling their land the rest of the time. For the women the opportunities for earning cash are more limited. They can either work as servants in the landlord's house for 12 esc. per hour, or they can do field work for the richer peasants at 12 esc. per hour. Either way, their maximum possible wage is less than half the minimum wage for unskilled male work.

Another source of income is the rough mountainside. Most peasants have a slice of it somewhere or other and all sorts of things grow wild there. Some make another 10,000–20,000 esc. selling cork and a similar amount selling a bit of timber. Eloi (8) makes 50,000 esc. net per year selling medronho and others make somewhat less from distilling.

Despite the generally low incomes, there are practically no families in Alto that do not make a cash surplus each year, to be counted and stuffed away in secret places. How much cash is hidden in Alto's cottages is anyone's guess but 500,000 esc. could well be a figure for some of the cottages and a few might have much more. These savings are of course a fairly recent phenomenon. Twenty-five years ago the land produced little surplus and the peasants had practically no cash income at all. In any case, the savings are quite out of proportion to the meagre cash incomes involved.

What is interesting is how the landlords and middlemen manage to extract a surplus out of this economy. Only Senhor Carneiro (3) lives entirely from rents and tributes and he owns land in every direction from Alto. The rest of the local landlords are smaller fry and their unearned income is only a part, sometimes only a small fraction of the total.

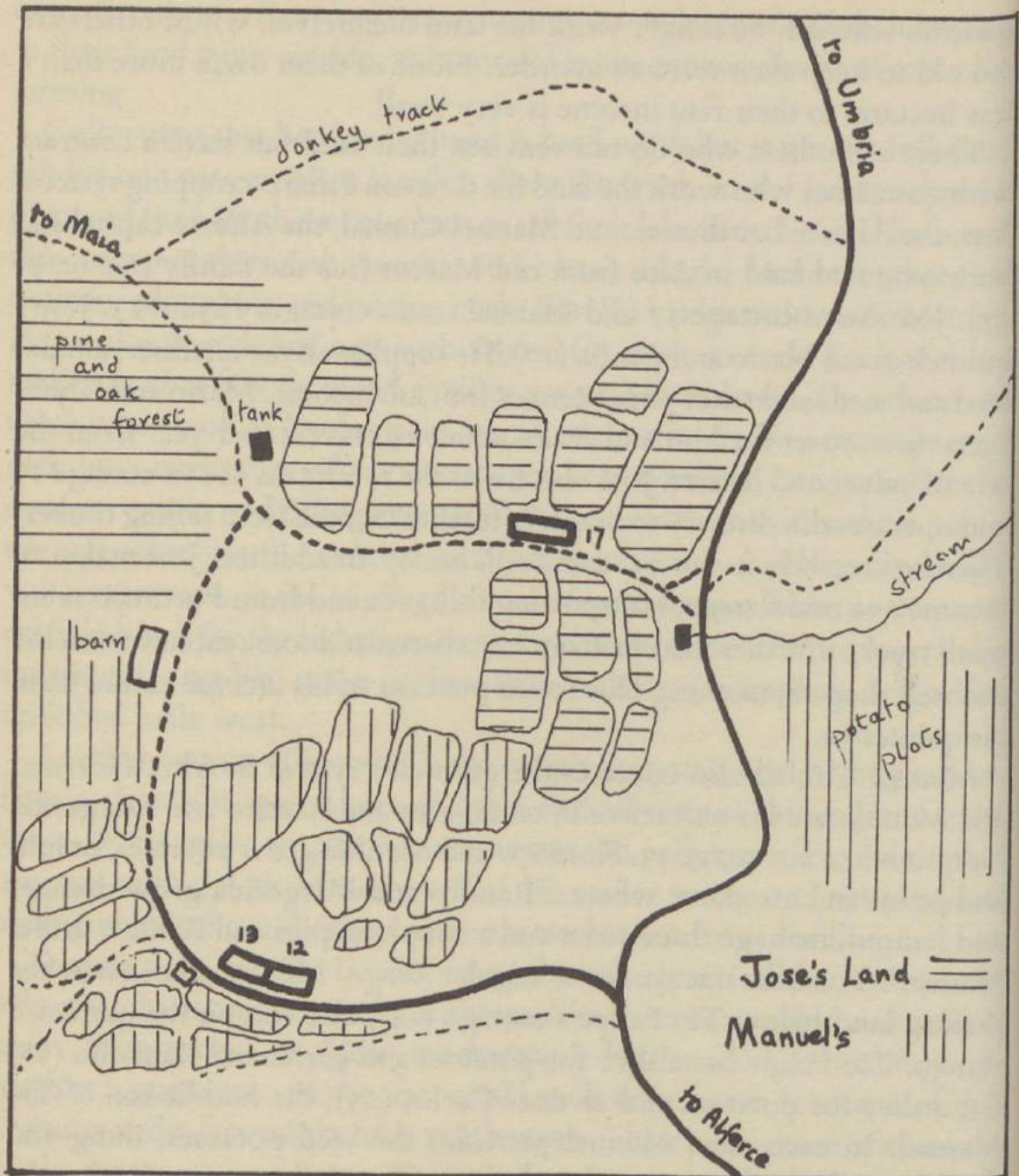
First, Alto's landlords. There are a number of people in Alferce who own land in Alto and rent it out at about 3000 esc. per hectare. Some are

widows who can no longer work the land themselves, whilst others are too old to keep their terraces in order. None of them owns more than a few hectares so their rent income is very small.

There are others who do not rent out their land but have a contract with *quinteiros* who work the land for them on a share-cropping system. Jose, the Alferce hairdresser, and Manuel Cunhal, the Alferce capitalista, both inherited land in Alto from old Marcos (see the family tree on p. 33). Jose owns cottage 17 and Manuel owns cottages 12 and 13. Jose's *quinteiros* are Mario and Gloria (17). He supplies all the fertiliser, animal feed and seeds and takes 50 per cent of the cash income. Mario and Gloria keep three cows for him and make about 15,000 esc. per year from the sale of calves and heifers. Jose also owns the mountain above cottage 17 and operates this directly so he gets a further income from selling timber. Then he keeps bees in the forest and sells honey. In addition, Jose makes an income as a middleman, transporting things to and from Portimao in his small truck, a further income from his *taberna* and some money from the barber's shop. Something like 10–20 per cent of his income comes from his *quinteiros*.

Manuel Cunhal also operates the *quinteiro* system in Alto. Florenco and Matilde are his *quinteiros* in cottage 12 and Ramiro and Margerida his *quinteiros* in cottage 13. Florenco and Matilde grow potatoes, onions and beans and are poor, whereas Ramiro and Margerida grow oranges and lemons, manage three cows and a couple of pigs and Ramiro drives Manuel's Fordson tractor for a regular wage. Manuel also owns the sloping land below Tio Felipe's cottage (14), also run on the *quinteiro* system. Tio Felipe has a slice for potatoes and garlic and Ramalho (18) has a slice for potatoes and so does Carlos (23), the middle son of Tio Manuel. In each case, Manuel provides the seed potatoes, dung and fertiliser and gets Ramiro to plough the land with the tractor. It takes the tractor an hour to do what would be a week's work with an *enxada*. Manuel then takes half of the harvest, and because he is also a middleman and sells directly to Portimao, he makes a greater profit than the average landlord who has to sell to a middleman.

The pure middle peasant and the pure poor peasant do not really exist in Alto; nor do pure landlords. Although Senhor Carneiro (2) lives entirely from his tenants and *quinteiros*, most of his income is from land well beyond Alto. Most people own some land of their own, or rent some from a landlord, or work as *quinteiros* or rent out land, depending on what they have inherited, their state of health and other factors. For



convenience, some middle peasants rent a terrace or two near the terraces they own, and rent out other terraces that they own farther afield.

Superimposed on this system of agricultural production is the local capitalist structure which is almost entirely parasitic upon it. Until the road was built there were no capitalists in the locality – just peasants and landlords. Even now, the only independent capitalist production in the area is a large pig farm or factory across to the east of Alto beneath the Moorish fort. This is owned by Agostinho Cunhal, one of Manuel's brothers. This enclosed factory has some 600 pigs – a year old pig was selling at around 4000 esc. in 1976. Agostinho also owns a truck and his

elder brother, Afonso, has a whole fleet of trucks and several warehouses, so the cost of shifting in bags of pig feed and shifting out pigs is considerably less than it would be for a straight pig farmer, dependent on middlemen for such services. The only thing that cuts into the profits of the pig factory is the eucalyptus plantation that Carlos (2) has planted higher up the mountain, around the old fort. The trees have dried up the stream that used to supply the pig factory and now Agostinho has the extra expense of trucking water six kilometres along and 200 metres up from the Monchique River, which takes a modern Mercedes truck from dawn to dusk in the summer.

All other capitalist activity in the area is dependent on the local peasants. There is the olive press owned by Agostinho and Afonso, the timber carted off in Afonso's trucks, the fertiliser that comes in, the potatoes and onions that go out, the cement, the plastic tube and many other things that pass through their hands. Practically nothing comes into Alferce and Alto, or leaves the area, without going through the Cunhal brothers or their extended family which includes Jose the barber and Jose at the post-office (see old Marcos's family tree, p. 33). Only one family of middlemen operates independently and also runs a taberna but it is destined to be squeezed out within a few years.

Capitalist penetration of the area has hardly changed the local mode of production. There has been practically no mechanisation of farming methods and even though the two tractors in the locality probably have a combined power of 50 men or 10 mules when it comes to ploughing or shifting manure, most of the agricultural work is still done by hand and each hectare requires the same number of man-hours as it did 25 or even 250 years ago. Despite this, the local capitalists have managed to increase the productivity of the peasants by enough to make a handsome profit and to invest and expand further. The key to this increased productivity is chemical fertiliser and that is a complex and contradictory story. Of lesser importance are the plastic tubes that the Cunhals sell. They replace the old stone channels and aqueducts with the immediate advantage that water can be taken up and down gradients and therefore to places that were previously dry. Then there are the newer breeds of potatoes and other crops with higher yields (but also much more exacting growing demands). And of course the chemical sprays to control colorado beetles and other pests also increase the productivity of the land. In the short term, all this would appear to be a thoroughly progressive influence. An area that was only self-sufficient has been transformed into one that

produces an agricultural surplus. So far, so good. The peasants make a higher cash income than ever before and the average standard of living also rises. In the long term, however, this increased productivity has costs that are so great as to be disastrous. I shall return to this in Chapter 7.

Since the road was built to Alferce, the local economy has changed dramatically. Thirty years ago the agricultural surplus was limited to sweet chestnuts, cork, medronho, pigs and goats, all of which had to be transported over rough, narrow tracks to the outside world.<sup>2</sup> The impact of the road and the things that came along it was immediate. Suddenly there were plentiful supplies of fertiliser, cement and plastic in every shape and form imaginable. It suddenly became possible and profitable to produce a surplus. Trucks replaced many of the donkeys and more land became available for the production of cash crops instead of donkey feed. For the average middle peasant with one or two hectares of land this changed many things. Before 1950 the yields per hectare were lower because little or no fertiliser was used, and older, less productive strains of potatoes, onions and other seeds were being used. In addition, at least a quarter of the land, and in some cases more, was needed to feed the donkey all the year round. The irrigated terraces produced little surplus before 1951.

What has happened since is best explained in terms of a table. Once the road was built there was a ready, available market for potatoes. On good, fertile soil, and using plenty of manure it is possible to get a yield of at least 1 : 16 with potatoes. Some argue that higher yields are possible if the soil is composted but this seems never to have been done in Alto. The first time fertiliser is used it will increase this yield to at least 1 : 20 and often dramatically more, but after a few years it requires more and more fertiliser to maintain the increased yield. In addition, it is necessary to rotate the potatoes so the kitchen garden becomes the potato plot and vice versa. After a while it is necessary to use fertiliser on the kitchen garden in order to maintain the yield that was formerly produced with manure alone. Over twenty years, the implications for an average middle peasant are interesting.

Despite the assumptions of Table 8, it is nevertheless a useful guide to the processes at work, and if anything, underestimates the increase in the use of fertiliser over the period. As soon as the road was built and potatoes became marketable, there was an immediate gain in cash income for the average middle peasant. This initial flush was used in Alto to concrete the floors of the cottages and line the irrigation tanks with cement, partly because cement became available at the same time. The



Table 8 Potatoes and Fertiliser

	costs	income (escudos)	net
1950 (using no fertiliser) ½ hectare of kitchen garden 1 hectare of potatoes (yield 1 : 16) 50 arrobas of seed 800 arrobas harvested	5000	64,000	59,000
1955 ½ hectare of kitchen garden 1 hectare of potatoes (yield 1 : 20) 50 arrobas of seed 12 sacks of fertiliser 1000 arrobas harvested	5000 2400	80,000	72,600
1960 ½ hectare of kitchen garden 9 sacks of fertiliser 1 hectare of potatoes 50 arrobas of seed 18 sacks of fertiliser 1000 arrobas harvested	1800 5000 3600	80,000	69,600
1965 ½ hectare of kitchen garden 12 sacks of fertiliser 1 hectare of potatoes 50 arrobas of seed 24 sacks of fertiliser 1000 arrobas harvested	2400 5000 4800	80,000	67,800
1970 ½ hectare of kitchen garden 15 sacks of fertiliser 1 hectare of potatoes 50 arrobas of seed 30 sacks of fertiliser 1000 arrobas harvested	3000 5000 6000	80,000	66,000
1975 ½ hectare of kitchen garden 18 sacks of fertiliser 1 hectare of potatoes 50 arrobas of seed 36 sacks of fertiliser 1000 arrobas harvested	3600 5000 7200	80,000	64,200

attraction of the first dose of chemical fertiliser is obvious – the yield jumps noticeably. But after twenty years the increased yield of potatoes has been maintained by using ever increasing quantities of fertiliser. Yet the net income from selling 1000 arrobas of potatoes in 1975 is only 5200 esc. more than the net income from selling 800 arrobas in 1950 – not much for a 20 per cent increase in productivity. And in time, the extra fertiliser necessary to maintain the same yield actually exceeds the amount gained from the original increase in productivity.

For a poorer peasant, with only one hectare of terraces, half of which is kitchen garden and half for potatoes, the situation is considerably worse. Using the same assumptions as those in Table 8, his net income over the years looks like this:

1950	29,500 esc.
1955	36,300
1960	32,100
1965	30,300
1970	28,500
1975	27,000

After twenty-five years he is actually worse off than when he grew potatoes without fertiliser. The rate at which income deteriorates as a result of using fertiliser depends of course on the size of the landholding. For a rich peasant, there are gains over a longer period, and for a landlord who has a quinteiro growing, say, ten hectares of potatoes per year, the gains are greater because he does not have to pay for the fertiliser for the kitchen garden. His net income from 50 per cent of the harvest looks like this:

1950	295,000 esc.
1955	363,000
1960	357,000
1965	351,000
1970	345,000
1975	339,000

It takes more like fifty years for the logic of rising costs and static returns to work through to something worse than the original situation. So the poorer peasant with only one hectare makes a loss over the twenty-five years, whilst the middle peasant with one and a half hectares increases his income by 9 per cent over the same period and the landlord with 10

hectares on the quinteiro system increases his income by 15 per cent. The difference is striking. The contradictory consequences of using fertiliser come home much more quickly with small land holdings.

The main thing, however, is that the local capitalists have managed to maintain the initially increased yields by selling more and more fertiliser. None of Alto's peasants have decreased their purchases of fertiliser and settled for a lower yield, even though this might leave them with the same net income.

All this pales into insignificance when one looks at the middlemen and what they get out of it. Alto produces approximately twenty hectares of potatoes per year. Let us suppose that the same middleman has bought all of Alto's potatoes throughout this period and has also sold the peasants all their fertiliser. Let us also assume that the middleman makes a consistent 20 esc. profit on each arroba of potatoes and 40 esc. profit on each bag of fertiliser. These are, of course, assumptions but they are based on recent figures.

**Table 9 The Middleman's Profit from the Potato-Fertiliser Syndrome**

	Fertiliser	Potatoes	Total
	(escudos)		
1945 no surplus potatoes, no fertiliser	0	0	0
1950 16,000 arr. of potatoes, no fertiliser		32,000	32,000
1955 20,000 arr. of potatoes 240 sacks of fertiliser	9,600	40,000	49,600
1960 20,000 arr. of potatoes 360 sacks of fertiliser	14,400	40,000	54,400
1965 20,000 arr. of potatoes 480 sacks of fertiliser	19,200	40,000	59,200
1970 20,000 arr. of potatoes 600 sacks of fertiliser	24,000	40,000	64,000
1975 20,000 arr. of potatoes 720 sacks of fertiliser	28,800	40,000	68,800

Even though many of Alto's peasants gain practically nothing in the long run from growing potatoes for sale, and actually make a loss by using fertiliser, the middleman makes a consistently increasing profit. In

1945 he could not and did not exist. Then suddenly, in 1951 there was money to be made from buying and selling potatoes, then fertiliser, so that over twenty-five years his profit has more than doubled – and this figure does not include the extra fertiliser sold to the peasants for use on their kitchen gardens after 1960. If this is included, the middleman's profits have increased by something like 300 per cent since 1950.

At a rough estimate, the total hinterland of Alferce grows about ten times as many potatoes as Alto, so the annual profit accruing to the Alferce middlemen each year from the potato-fertiliser syndrome alone is about 780,000 escudos. Now it begins to be possible to see how the Cunhal brothers have grown from middle peasants to a moderate sized business, with warehouses, trucks and about 40 workers in a little over ten years. And of course potatoes are only part of their story. There are also olive oil, cork, eucalyptus, pine, cement and plastic tubes.

Just over ten years ago the Cunhal brothers were simply middle peasants working their land round the other side of the mountain near the track to Fornalha. Had it not been for the eucalyptus plantation that Senhor Carneiro (2) had planted above their land, they would probably still be middle peasants to this day. But the eucalyptus trees sucked the water out of the rocks and their land started to dry out. The springs went dry and as the water table went down, they had to dig wells and invest in a petrol-driven water pump to get the water up to the terraces. Now the water table is lower than the deepest well at the bottom of their lowest terrace and the land and cottages lie abandoned. Even before this happened they had an old truck and were dabbling in buying and selling crops. As it became more difficult to farm their terraces they moved into middleman operations in a bigger way. Their initial profits made them credit-worthy with the bank in Monchique and they quickly expanded. Then they moved into Alferce. And now they dominate the village and all the countryside around. The road into Alferce is overshadowed on both sides by their new warehouses. The street is congested with their fleet of giant trucks. They own the only café, the biggest shop, the only taxi, the generator, the oil press, the pig farm and now some of the eucalyptus plantations too.

Unlike the middle peasants who hide their surplus cash at home, the local capitalistas use their profits to get credit, invest and expand. If they do not expand, someone else will and their business is swamped. Already, the Cunhal brothers are so far ahead of their competitors that they are destined to hold a complete monopoly of capitalist enterprise in the whole area within a few years.

The peasant works an economy of simple reproduction — his aim is to work enough each year to make sure that the next year can be the same. He has no use for any cash surplus he might make. The surplus does not even become a source of social status because no-one knows how much is hidden away. The capitalist, by contrast, works an economy based on the drive for accumulation which leads him to convert the major part of his annual surplus into further capital investment. The Cunhals have already reached the point in their expanding empire where a degree of conspicuous consumption is deemed necessary to establish finally their new social status and power. Manuel Cunhal has built himself a three storey block in Alferce with the shop below and a penthouse flat on top, which looks entirely out of place alongside most of the rest of Alferce. Manuel's eldest brother runs around in a Mercedes saloon and has built himself an even bigger house in pseudo-baroque style with ugly, expensive tiles cladding the outer walls. It is indicative of the stage of accumulation that he has reached, and of his continuing uncertainty about his social position that this house is built on top of one of the warehouses.

Whilst the peasants continue to live according to the rules of a simple reproduction economy, the capitalists are busy expanding into other areas. There is a limit to the profit that can be made out of supplying fertiliser and cement to the local peasants and buying all their agricultural surplus. If they are to expand further, the Cunhals must either set up independent capitalist enterprises like their pig farm, which is totally separate from the peasant economy, or they must increase the productivity of the peasants still further. Had it proved easier to make the peasant sector more productive, the pig farm project would probably have waited a few more years. In fact the geographical layout of the terraces makes it very difficult to mechanise agricultural production and the resistance of the peasants to selling their land makes it quite impossible to accumulate any single large piece of land that can be worked by modern methods. It is possible only to buy an odd hectare here and half a hectare there, and that is of no interest to capitalists. The Cunhals have probably already reached the limit at which they can make a profit out of the peasant sector, although with one exception — the eucalyptus plantations. However, they do not have the sort of capital necessary for such big operations and this area has been monopolised by a multinational company with a paper mill in the Alentejo.

Although many of the arid slopes in every direction from Alto are now planted with eucalyptus, the majority of the land remains scrub and

its only economic value is from the medronho trees that grow wild. The quantity of medronho berries that can be picked per hectare varies from ten to twenty-five kilos. It takes about  $7\frac{1}{2}$  kilos of berries to make a litre of spirit that sells at about 60 escudos. The pickers are paid 40 esc. per arroba so the average cash income that can be made from the mountainside is about 45 escudos per hectare.

It is surprising that eucalyptus trees will grow on this terrain but they do. The trees are planted about two metres apart so there are about 2500 per hectare. They grow at least three metres per year on these mountains, and even faster around Alto where it is wetter. When felled each tree produces at least ten metres of good timber selling at around 3 escudos per metre. A hectare of eucalyptus thus produces about 75,000 esc. each time it is cut, or 12,500 escudos per year. It can take ten years or more from the initial planting to the first cutting but after that it is possible to cut every six years because the trunks sprout again and again.

Whilst a thousand hectares of scrub can produce a maximum of 50,000 esc. per year from the sale of medronho spirit, the same land planted to eucalyptus can produce 12,500,000 esc. per year. But the medronho trees are there already; they grow wild. The eucalyptus trees have to be planted. The cost of clearing whole mountainsides, bulldozing tracks so that the tractors can get in to cart off the timber, and buying and planting the small trees is enormous. If a peasant did it by himself it would take a week or two to clear a single hectare, another fortnight to plant the saplings and the cost would be around 20,000 escudos for the saplings alone. And in any case, it is not an economic proposition to fell odd hectares of eucalyptus here and there. It is necessary to have plantations of hundreds of hectares or more to justify the cost of bulldozing access tracks. The investment in such plantations is well beyond the resources of the Cunhals, let alone the peasants. Apart from smaller plantations that local people have made near existing tracks, the business of growing eucalyptus has been left to the big companies from outside. The paper companies offer 40-year contracts for slices of land at least a few hundred hectares in size. The company pays all the costs of making the plantation and the owner of the land gets 25 per cent of the value of the cut timber. With no work involved, a peasant can sign away a thousand hectares of rough land and after ten years he can expect something like 3,125,000 escudos per year for the next thirty years. That is a lot of money by any standards. The profit machine behind the rapid changes being wrought in the landscape now becomes apparent.

Four families in Alto own large tracts of land and are potentially rich as a result – Carlos (2), Senhor Carneiro (3), Eloi (8) and Carlos (22). Three of these families have already signed eucalyptus contracts and are now waiting for the first felling. Eloi and Eulalia refuse to sign a contract. Given the rich rewards from eucalyptus plantations, it becomes necessary to explain why the whole area is not already a giant forest, why at least half of the dry mountainsides are still scrub, why Eloi and Eulalia continue to struggle across the slopes every autumn, picking medronho berries by the ton. It is not a question of ignorance. They know all about the contracts. Every autumn, at the end of a hard day's work picking the berries, their family campaigns about the matter, cajoling them as they sit round the fire in their little cottage at Foz do Acor. Eulalia's family have made medronho from these mountains for centuries. Even though their children try to argue them into signing a eucalyptus contract, they still sometimes hope that one of them at least will return from the town and carry on working their land. Their children argue that they could retire, live in a flat in Portimao and have a secure income, but no, it has no effect. Eloi and Eulalia are not interested in retiring. What would they do each day? Why have they worked this land all their lives? Not for money or profit, that is certain. No. They come from another era and they have a mentality that is difficult for anyone living in the modern capitalist world to understand. It seems totally irrational and their children say so in no uncertain terms. Eloi and Eulalia feel defensive in such arguments. They are not equipped to argue back. They are even made to feel a little stupid. They do not have clear intellectual reasons for carrying on the way they do and when they become angered or upset by these arguments they resort simply to reciting the traditions of life on these mountains. In fact, Eloi and Eulalia live their own lives in their own manner whilst their children live an alienated existence in the towns, selling their labour on the open market and being divorced from the products of their labour. There is no understanding between the two generations. Their children think they are stupid and pig-headed, and they do not dare to think that their children are totally wrong. After all, they went to school, learned to read and write, have well-paid jobs, run motorbikes and cars and understand more about the outside world. But Eloi and Eulalia feel let down, so the argument becomes an emotional issue. They feel hurt and they *are* hurt by these confrontations, and as the years go on, they feel more beleaguered and the arguments become more bitter.

One thing is certain; they will never sign a eucalyptus contract. Another thing is equally certain; as soon as they are dead, their children will sign. The fact that eucalyptus trees still cover only half of the mountains around Alto is a reflection that the peasant mentality is still alive. When these mountains are finally covered with eucalyptus, it will indicate that the peasant mentality has finally died.

It is a big shift in thinking, from the maintenance of a simple subsistence-agriculture economy of annual reproduction to a system of expanding reproduction – the search for profit and accumulation. By the time a peasant has signed a eucalyptus contract, his mind is already operating within a different framework, even though daily life might still consist of tilling the soil. Carlos (22) from Alferce works his terraces in Alto every day but he also has four hundred hectares of eucalyptus plantation east of Alto which was planted under contract six years ago. Carlos (2) also works on the land every day but he has a eucalyptus plantation which is eight years old right up the mountain to the old Moorish fort. And Senhor Carneiro (3) has his eucalyptus plantations round the other side of the mountain, above Fornalha. Some have already been felled. When the money from the eucalyptus trees comes rolling in to these families, they are unlikely to stuff the cash into secret hiding places. The change in mentality that led them to sign the contract will mean that they will invest the money instead. And then, these peasants will have been finally integrated as capitalists into a capitalist society and tilling the land will become an unnecessary hobby. Of course this road into the modern world is not open to all. A majority of Alto's peasants do not have sizeable slices of mountainside and will continue to eke out a living the only way they can, by tilling the soil. In time, even this will be impossible. The eucalyptus revolution is now firmly on its way around Alto. It will sweep the old world away, people and all, if only because the trees are drying up the precious water that alone makes it possible to grow and irrigate crops on the terraces. The terraces on the southern slope of the Serra de Monchique have already dried up. Ironically, the Cunhals were one of the first victims. To the east of Alferce where Carlos (22) has his plantation, the water for the hamlet of Cansino de Baixo has already dwindled to a trickle and it is only a matter of time before the little river through Foz do Acor dries up in the summer months, making it impossible to live there.

Let us now compare some of the family economies in Alto, from the landlord through to the poor peasant, from the capitalist to the worker.



## SENHOR CARNEIRO, LANDLORD (3)

Senhor Carneiro owns some 100 hectares of open farmland and fruit groves scattered twenty kilometres in every direction from Alto, all of which is farmed on the *quinteiro* system. Most of the land is put down to cash crops but some is used for cattle fodder. Some of the land is down near the Algarve and produces early crops of peas and beans which fetch high prices. The land probably yields an average of 40,000 escudos (40 contos) per hectare, of which he gets half so he makes approximately 200 contos per year from it. He also owns several thousand hectares of barren mountain which is currently used for *medronho*. He gets only a third of the *medronho* spirit because it is a more labour-intensive business than farming. He probably receives about 20 contos worth of *medronho* per year, much of which he stores away in oak casks to mature. Then he has over 100 hectares of cork groves which net him about 70 contos per year, plus some eucalyptus plantations, one of which has already been felled once and brought in about 500 contos. In another few years his income from eucalyptus will leap as the other plantations are felled. At the moment his annual income is probably around 700 contos per year.

## CARLOS AND XILA, RICH PEASANTS (2)

Carlos and Xila own a few terraces scattered around Alto which they use as their kitchen garden and work themselves. Then they have a cork grove below their new cottage and another one near Pedra Branca, about 100 hectares in all, which bring in about 60 contos per year. They own most of the mountain and the Moorish fort to the south-east of Alto, some of which is planted to eucalyptus which will start bringing in about 400 contos per year when it is ready for felling. Down by the Odelouca River they have an orange grove of 40 hectares which is just beginning to bear a full crop and should bring them in another 400 contos in due course. Then on the mountain overlooking the Odelouca River they have a lot of arid land from which they produce *medronho* and sell about 20 contos worth. At the moment their annual income is somewhat less than 500 contos per year but it will double when the orange trees are fully mature and will treble when the eucalyptus trees are ready for felling. Carlos also owns a mini-tractor which his son uses for contract work around Alto but they reckon that they cannot compete with the much lower charges that Manuel (1) makes for ploughing by mule and the whole venture only just breaks even.

## JOAO AND MARIA, MIDDLE PEASANTS (5)

Joao and Maria own the largest terrace in Alto, which is about half a hectare, some smaller terraces below it, amounting to another half hectare, another half hectare of terraces on the rim of the Valley of Maia and some 10 hectares of eucalyptus plantation running up from these terraces to the derelict windmill. They keep chickens and a couple of pigs down near their cottage. Except for coffee, sugar and rice they are more or less self-sufficient in food. Their cash income is from potatoes and onions which they grow every year on their large terrace. They also make a bit from selling piglets. Their cash income is around 50 contos per year. However, they are not typical of middle peasants because instead of hiding their savings, they plan capital investment projects each year. As a result, their cottage is modernised and has a flush lavatory, they have a big new irrigation tank and a plastic tube over three kilometres long which brings a plentiful supply of water round the mountain from the Valley of Maia.

## TIO MANUEL AND TIA ARCANJO, POOR PEASANTS (23)

Tio Manuel and his wife live with their three grown sons above Alto on the track to Umbria. They used to live in the cork forest at cottage 24 but moved to the present place about five years ago. They own neither land nor cottage, and rent their place from Senhor Carneiro's sister who lives in Monchique. Their terraces face north and are slowly drying up because Carlos (22) has planted eucalyptus trees up above. Their cottage has an earth floor, no windows and the rooms are open to the tiles. Tio Manuel works the land every day with his eldest son, Alberto, and they sometimes make a bit of cash by transporting things on their donkey or working casually for Carlos (22) or Joao (5) when the occasion demands. Carlos, the middle son, works as a builder's labourer and runs a motorbike whilst the youngest son is doing his military service. The family sells a little of this and that but their cash income is certainly no more than 20 contos per year.

## MANUEL AND LEONOR, WORKERS (7)

Manuel and Leonor own neither their cottage nor land. They rent one of the smallest Correntinho cottages and three terraces immediately in front

where they grow most of their own vegetables, Leonor doing most of the work. Leonor also has a small income from making trousers, shirts and skirts to order. Manuel works as a labourer and occasional lorry driver's mate for the Cunhals. He has a motorbike, leaves at 8 a.m. and is rarely back before 8 or 9 in the evening. Their annual income is around 50 contos per year but their standard of living differs in important respects from that of Joao and Maria, whose cash income is about the same. Being workers, it is hardly surprising that Manuel and Leonor are more integrated into the modern sector than Joao and Maria. The motorbike is the main symbol of this difference and they frequently go off on quite long trips to visit relatives, with their little girl sandwiched between them. An examination of the rubbish from the two cottages also reveals important differences. Almost all of Joao and Maria's waste makes good food for their pigs or chickens. By comparison, Manuel and Leonor have accumulated a disgusting heap of old tin cans, bottles and polythene wrappers which the dogs help to disperse to the four winds.

#### MANUEL CUNHAL, CAPITALIST

Manuel and Dolores own the biggest shop in Alferce, which Dolores runs with her widowed mother. Behind the shop is a warehouse stacked with fertiliser, cement, pig food, garafons of wine and crates of beer. Manuel owns the only big tractor which Ramiro (13) drives, doing all manner of contract work. He charges 100 esc. per hour for carting things and rather more for ploughing. Cottages 12 and 13 in Alto are owned by Manuel, plus the terraces around them and much of the mountain from Alto up to Maia. They have a small cork grove and a large eucalyptus plantation here. Then they have the 3 hectares of sloping land below Tio Felipe's cottage (14) which is, like their other land, managed on the *quinteiro* system. In addition, Manuel operates as a middleman and buys up much of the local orange and lemon harvest.

The internal financial relationship between the three Cunhal brothers is complicated and impossible for an outsider to unravel. They work closely with one another and although there is some surface competition – for instance, between Manuel's shop and Afonso's café – they actually work something approaching a partnership in many areas.

In 1960 all three brothers were still working their land near Fornalha. When they moved into Alferce, the two elder brothers were already married. Manuel married into an Alferce family, choosing Dolores, the

most eligible woman. She is old Marcos's eldest granddaughter (see the family tree on p. 33). This marriage linked Manuel into the family of Alferce shopkeepers. Jose at the post-office is his wife's uncle and Jose the hairdresser is too. Manuel acquired his land in Alto by marriage, as did Jose the barber who owns cottage 17. Manuel's terraces on the other side of the mountain, where he was born, now lie dry and abandoned and the old family cottage is slowly crumbling away. No doubt it will be sold some day to a rich German who wants a villa with an unrivalled view of the Algarve coast.

It is impossible to estimate Manuel and Dolores' income but it is doubtful whether the income from their land in Alto is more than a tiny fraction of the total.

Of these six families, only Tio Manuel and Tia Arcanjo (23) end up with practically no surplus at the end of the year. And even they probably save about five contos per year and hide it away. But the important thing is not the income or the surplus that each family makes so much as what they do with it. Manuel Cunhal uses his surplus to get further bank loans for more capital investments. Senhor Carneiro would never dream of taking a bank loan; he spends some of his surplus in improving his estates and the rest goes into the bank to collect interest.

As a result of the changing mentality and the gradual implantation of the capitalist ethic, the local economy is changing – slowly but constantly. Twenty-five years ago few cash crops were grown in Alto or any other part of the hinterland of Alferce. Estimates, given from memory, vary greatly, but few people seem to have sold more than a few arrobas of potatoes, onions or beans and in order to do so they had to cart them all the way to Monchique by donkey. The change in the local donkey population has also had its effect on the amount of surplus produced. In 1976 there were only eight donkeys and three mules in Alto, though the whole hinterland of Alferce had more like a hundred. A quarter of a century ago practically every family had at least one donkey and a lot more of the land was used for fodder. In addition, Alto used to grow, harvest, mill and bake all its own bread whereas now about half of the families buy bread that is brought in daily from Monchique and made of wheat grown in the Alentejo.

There was never much local exchange. Each family produced all the food it needed. What exchange did take place was more on a barter basis – cabbages for oranges or beans for tomatoes. On top of these factors,

Alto had a somewhat larger population in the past. All in all, the locality produced practically no surplus and the community had a much lower cash income. There were no middlemen.

The shops in Alferce were rudimentary and sold only a few things that were not locally produced. The sole exception to this pattern of self-sufficiency was Senhor Carneiro (3). Even thirty years ago he had quite a large cash income from his estates but none of this came from around Alto. Senhor Carneiro has always been economically separate from Alto. Twenty years ago he chose to live on the coast at Faro so that his sons could go to the best school in the Algarve. Now he lives in Alto because his wife inherited a good house and the climate is healthy. In Alto he has the added status of being the only big landlord around. He is the only person locally, capitalistas included, who is not known or addressed by his first name.

The shift in agricultural production in Alto since the road was built is quite significant. Now nearly 40 of Alto's 50 irrigated hectares are used to produce cash crops for the outside world whereas 25 years ago it was probably less than five hectares. Because of the potato-fertiliser syndrome, the poorer peasants have gained practically nothing from these changes, whilst middle and rich peasants have for the time being significantly increased their cash incomes even after the climbing costs of increased amounts of fertiliser are taken into account. Alto's peasants have increased their spending over these 25 years, not so much because they were making more money — they mostly made a small cash surplus before — but because of the new availability of things like plastic pipes and cement. With few exceptions, cash income has increased faster than spending and the surplus has been hoarded. Those who have gone in for capital investment projects are the exception.

With the Cunhals it has been a different story. The super-profits they made out of cornering the potato-fertiliser market were quickly re-invested in capital equipment in Alferce. Above all, this has led to the creation of a resident local working class which is expanding. At present the capitalist sector is still parasitic upon the peasant sector but the patterns of land ownership and local custom make it impossible to increase the productivity of the terraces any further. Even if the peasants wanted to increase their productivity they would find it difficult. Most of them could afford to buy and run a petrol-driven rotovator and one peasant with a rotovator could easily farm five or more hectares of terraces. But none of the peasants in Alto has five hectares in one place

and it would be impossible to shift a rotovator from one handkerchief plot to another throughout the year. Only a reform of the inheritance laws and a rationalisation of land ownership could make this viable. The two tractors around Alto are also of limited use because they just cannot get onto most of the terraces. The sale of fertiliser will probably continue to increase slowly, but the land ownership patterns are a complete barrier to further capitalist penetration of agricultural production. It is hardly surprising to find that the capitalistas who started off by selling fertiliser to the peasants have now shifted into other areas of investment. At the moment the emphasis is on forestry but here again there is peasant resistance and, in addition, the sums involved place the initiative firmly in the hands of big capital from outside the area.

The next big local investment will probably be tourism. Alto has a superb summer climate, its mountains are exceedingly beautiful and many of the slopes have fantastic views across the Algarve. Whether the Cunhal brothers see their opportunities in this direction or get upstaged by bigger capital from outside remains to be seen. Despite the fact that an Angolan coffee millionaire has built a small residence on the road to Fornalha and a German worker is gradually building his own guest house nearby, the local people seem to have little idea of the potential value of some of the land with the best views.

All these changes would have been inconceivable without the road. Out of the potato-fertiliser syndrome, the peasants increased their cash income and their dependence on cash, whilst some middle peasants became capitalistas and some of the poor peasants have become workers. The eucalyptus revolution will have even greater socio-economic effects. Twenty-five years ago a middle peasant with five hectares of irrigated terraces and ten hectares of scrub was much better off than the middle peasant with a hectare of irrigated terraces and a thousand hectares of scrub. Now the peasant with a lot of scrub land is potentially incomparably richer than the one with a lot of irrigated terraces, and as the eucalyptus trees dry up the water supply, the peasant who is dependent on irrigated terraces will be forced to find another livelihood whilst the peasant with eucalyptus plantations can sit idle and watch the money roll in. The outside world has turned the old values of Alto upside down. The old socio-economic structure, where everyone had their place and nothing much ever changed no longer exists. In its place there is a system in which any land becomes and is increasingly seen as a potential source of profit. The old stability and predictability has gone

for ever, to be replaced by the competitiveness and the mentality of a gold-rush. All because of six kilometres of tarred road.

It is clear that Alto and the surrounding area will continue to be a site of profitable and expanding capitalist enterprise for the foreseeable future. It is equally clear that Alto's middle peasants who own their own land, will not only be superfluous to this process but will actively hinder it as long as they can. The changes are confusing and demoralising but these peasants will not change. They are the last of the line. Their sons and daughters have already left for the towns and cities but these older people will spend the rest of their days steadfastly maintaining their traditional life as long as the water supply lasts. There is no possible mix or compromise between a subsistence economy practising a cycle of simple reproduction and a capitalist economy driven by the perpetual pursuit of profit and the generation of surplus value.

The text on this page is extremely faint and illegible. It appears to be a multi-paragraph document, possibly a journal entry or a report, but the specific content cannot be discerned. The text is arranged in several distinct blocks, suggesting a structured format. The overall appearance is that of a scanned document with very low contrast or significant fading.



## 5 The Local Class Structure

There are two contradictory, yet intertwined economic systems in Alto – one is subsistence and the other capitalist. The latter now dominates the former and is destined in the longer run to annihilate it completely. Before delving deeper into the class relations produced by this dual economy, it is necessary to mention some theoretical problems. I have been careful not to use the term 'feudal' because all the evidence suggests that Alto never had a feudal system in the classic sense, though only thirty kilometres away in the southern Alentejo, the long, sordid and sometimes brave history of these rolling, open plains has been dominated by feudal or quasi-feudal relations right up to 25 April 1974. I have been less careful in the use of the term 'class'. Strictly speaking, the old subsistence economy of Alto did not and could not produce a class of peasants and landlords. If we are to follow the distinctions made by Marx, it is clear that within a system of simple reproduction for direct consumption, where no appreciable surplus was produced, the conditions necessary for class relations to arise simply did not exist. Amongst the local peasants there was never any identity of interests, never any common enemy other than the periodic and partial interference of the state, and never any political organisation. Alto seems never to have been dominated by big landlords and it has already been pointed out that the only local big landlord makes his income from land many kilometres away from Alto. Alto's peasants do not constitute a class in the sense that they are consciously organised against another class, and they probably never were. But here comes the complication: since the imposition, or superimposition of a capitalist sector on top of the old subsistence sector over the past 25 years, the whole of the old sector, from landlord through to poor peasant, has become increasingly aware of the way in which the local capitalists exploit them. The history of the old sector denies them any tradition of organisation or struggle but that does not mean that they are not conscious of their own exploitation by the middlemen. To a person, they are acutely aware of all that and spend a

lot of time discussing it. In a sense, it is possible to say that the peasants have started to form a class as a result of the capitalist penetration of the area. The irony is that the increasing awareness of their class position merely keeps pace with the rate at which they are being exterminated, not just as a class but also as a physical entity. The political and ecological aspects of this process are the subject of Chapter 7, but before that can be fruitfully examined, it is necessary to look at the complexity of the local class structure.

A further theoretical problem remains. I have used the controversial term 'dual economy'. For some years now there has been a running dispute about the use of this term and all that it implies. It crops up constantly in the literature on underdevelopment in Latin America, Africa and other parts of the so-called 'third world'.<sup>3</sup> In using the term here, I am not siding with the bourgeois economists of 'development' as against the marxist economists of underdevelopment. I am merely noting that the dispute has too often proceeded only at the level of abstract theory.

The basis of the subsistence economy is the private ownership of land. This is not a general statement — that would obviously not be true — it is specific to the mountainous parts of Portugal and perhaps to many other regions too. The basis of capitalism is the private ownership of capital. Of course land can be developed as capital and capital can be invested in land but they do not amount to the same thing. To a peasant or a landlord, land is not capital and in many cases it has little to do with money either. They live in a static or slowly moving system and are interested only in making sure that this system can reproduce itself, year in, year out. Capitalism is entirely different. It is a dynamic system propelled by the pursuit of profit and accumulation. The individual capitalist cannot settle for a fixed profit for years on end for fear that other capitalists will grow and put him out of business. Capitalism is a dynamic system dependent on perpetual growth for the survival of both the individual capitalist and for the perpetuation of the system as a whole.

Each economic sector in Alto throws up its own particular class structure. The class structure of the traditional subsistence sector can usefully be divided into four categories which are differentiated by the relationship between land and labour.<sup>4</sup>

## THE LANDLORD

Landlords own land, do not work it themselves but live entirely from the rent or tribute derived from their tenants. Some tenants rent land for cash whilst some are share-croppers and pay their landlord 50 per cent of the harvest and the landlord pays all the capital costs.

## THE RICH PEASANT

The rich peasants own more land than they can work themselves and either rent some of it to tenants, or more commonly, employ casual labour as and when necessary in order to get all the work done.

## THE MIDDLE PEASANT

The middle peasants own all their own land and work it entirely with their own labour. They work and live as self-contained family units.

## THE POOR PEASANTS

The poor peasants have no land of their own and frequently own no cottage either. There are two classes of poor peasants:

- (a) Tenants, who pay an annual fixed rent for their land and cottage;
- (b) *Quinteiros* (share-croppers), who live in tied cottages and work their landlord's land, paying a tribute in the form of 50 per cent of the harvest.

For the purposes of this analysis, the capitalist class structure can be usefully divided into three categories:

## THE CAPITALIST

Capitalists own capital and buy the labour of others in order to work it. They derive surplus value from this exploited labour which they convert into further capital.

## THE SELF-EMPLOYED ARTISAN

Self-employed artisans own some capital and work it entirely by themselves, employing no labour. Within a dynamic capitalist system,

these people can only be a transitory phenomenon — either they accumulate profits, expand and begin to employ workers, or they get put out of business. There are of course self-employed artisans within the traditional sector, like the blacksmith and the cooper. (The complexities of the real situation are obviously already causing problems for the theoretical scheme!)

#### THE WORKERS

The workers own no capital and their income is derived solely from selling their labour on the open market to capitalists.

These categories are obviously abstractions. The actual situation is more complicated, and Alto, straddled as it is between the traditional and modern sectors, produces a complex and contradictory mixture. This complexity is best explored by cross-tabulating the old and the new to produce 12 logical possibilities. However, in order to cover the full picture, it is necessary to add a 'pure' category onto each side of the table because some people are not a mixture but are simply capitalists, or simply middle peasants and nothing else besides. That produces 19 possibilities in all, of which 14 can be found empirically in Alto. Some of the logical possibilities are so contradictory that they do not exist anywhere.

Some of the people in Table 10 have been described in some detail already, whilst others have been mentioned only in passing.

#### 1 AFONSO CUNHAL, PURE CAPITALIST

Afonso, Manuel's eldest brother, has long since given up farming and is now totally occupied by his work as the biggest capitalista in Alferce. He employs about fourteen men and one woman on a full-time basis and more than twenty men on a casual basis. He has made it, as they say. He lives in a large new house above one of the warehouses, drives around in a Mercedes estate and never walks anywhere. He is now quite distant from the local people and is never seen in any of the tabernas, or for that matter, even just passing the time in the village street. He spends an increasing amount of time away from the locality, doing business in Monchique, Portimao or even Lisbon.

Table 10 The Class Structure of Alto

	'pure'	capitalist	self-employed	worker
'pure'		1. Afonso Cunhal	2. Matilde (20)	3. Manuel (7)
landlord	4. S. Carneiro (3)	5. Manuel Cunhal	6. Jose the barber	7.
rich peasant	8. Carlos (2)	9.	10. Afonso (2)	11.
middle peasant	12. Joao (5)	13.	14. Eloi (8)	15. Ramalho (18)
poor peasant	16. Tio Manuel (23)	17.	18. Mario (9)	19. Fernando (19)

**Note** Each box is filled with the name of a person typical of that category. The numbers in brackets denote the cottages they live in, but Afonso and Manuel Cunhal, and Jose the barber, live in Alferce.

## 2 MATILDE, SELF-EMPLOYED WORKER

Matilde (20) is unique. She lives in a tiny cottage next door to her parents. She never married but she has a married daughter and two grandchildren, presently living south of the river from Lisbon. Her son-in-law is Vasco (15) and although he is in the merchant navy, he intends settling with his family in Alto when their new cottage is completed. Matilde frequently goes to Lisbon and also to Ayamonte which is across the frontier in Spain. There she buys cheap clothes which she smuggles back into Portugal. She is the main local source of men's jeans and there is a constant traffic along the footpath to her cottage to collect clothes, take them home and try them for size. This is her living. Matilde is buxom, boisterous, cosmopolitan and quite sophisticated. Unlike most of her generation — she is about 45 — she can read and write. She usually arranges her trips here and there to coincide with the movement of one of Afonso Cunhal's giant trucks and always has her eyes open for an opportunity. The rubbish dump near her cottage is different from most of the others in Alto: it contains countless empty perfume bottles and

used tubes of lipstick and eye-liner. No other woman in Alto uses such things.

### 3 MANUEL, WORKER

Manuel and his wife Leonor (7) are workers. Their lives have already been described on page 89.

### 4 SENHOR CARNEIRO, LANDLORD

Senhor Carneiro (3) is an old-fashioned landlord who has only recently begun to think about entering the world of capitalist enterprise, and then only under the persistent influence of his elder son who is an agricultural engineer. Despite his comparative wealth, he is as dependent as the peasants on the local middlemen. Old Carneiro has all the airs and graces of a traditional landlord. He is always well-dressed and doffs his trilby to all the local women, something none of the peasant men would think of doing. He expects a certain respectful subservience from everyone else and usually gets it, though it is not always willingly offered. Although he does not drink at any of the tabernas in Alferce, he is often seen pottering about, seeing what is going on and talking briefly to anyone who is around. Whilst no one would dream of asking Afonso Cunhal for a lift to Monchique in his Mercedes (he would probably tell them to use his taxi), it is quite different with Senhor Carneiro. His car usually fills up along the road and he would never think of charging for petrol. He has the only telephone in Alto and this again is used by others when necessary. Yet when all is said and done, he is not really part of Alto and Alferce and has never tried to exert much of an influence locally. His social time is spent in Monchique and Portimao.

### 5 MANUEL CUNHAL, CAPITALIST AND LANDLORD

The complexities of Manuel Cunhal's interests have already been described on pp. 89-90. He is not as distant from the community as his eldest brother. His wife runs their shop and comes into daily contact with much of the locality and Manuel is frequently around, shifting stock from the warehouse to the shelves. Theirs is the only shop in Alferce with any semblance of rational organisation - it is intended to and does make a profit. By comparison, the post-office is a complete shambles and

each request across the counter leads to long, often unsuccessful searches for the required items. When he is not in or about the shop, Manuel is likely to be careering around at a ridiculous speed in his consequently battered shooting-brake, or with his tractor and trailer, collecting oranges or potatoes from his *quinteiros* or taking a load of pig muck up to someone's terraces. He does not rush around because he is in a hurry. In fact he spends much of his day drinking beer from the bottle, aimlessly chatting with anyone who happens to be around. The speed is a status symbol and scatters the loaded donkeys of local peasants to the ditches. Manuel's status as a landlord gives him a foot in the old world and he seems compelled to live at least part of his life at the same pace as the peasants that he directly exploits. Whilst his elder brother employs only workers, Manuel, significantly, employs only peasants.

#### 6 JOSE, SELF-EMPLOYED MIDDLEMAN, BARBER, PUBLICAN AND LANDLORD

Jose is the uncle through marriage of Manuel's wife. (See the family tree on p. 33.) Much of Jose's life is spent in the old world, with the peasants in his *taberna* or barber shop, or up in Alto with his *quinteiros*, Mario and Gloria (17). His small truck is a recent acquisition and it has come much too late to make him a real competitor with the *Cunhals*, who are in any case, part of the extended family. There is however a degree of genuine competition between him and Manuel *Cunhal*, since both of them spend quite a lot of time loitering around offering different prices for various crops. It is not unusual for Manuel to drive up to Alto to buy some oranges that he thought he had cornered only to find that Jose had already bought them at a fractionally higher price.

#### 7 THE WORKER-LANDLORD

The worker-landlord sounds like a complete and impossible contradiction, and indeed, there are none in Alto at the moment. But in Umbria there are migrant labourers working most of the time in the EEC who rent out their land to poor peasants.

#### 8 CARLOS, RICH PEASANT

Carlos and Xila (2) work their terraces around Alto and employ seasonal labour from the peasant sector to help with the cork-cutting, eucalyptus



elling and the work on their large orange grove down by the Odelouca River. Carlos keeps to the world that he understands. His son will undoubtedly go into entrepreneurial activities but Carlos never will. Although he is comparatively rich, he is basically a peasant who understands little about the wider world.

#### 9 THE CAPITALIST-RICH PEASANT

There are no capitalist-rich peasants in Alto and this could only be a transitory phenomenon anyway. Running a capitalist enterprise does not allow one to work the land full time and either the enterprise fails and there is a return to peasant activities alone, or the enterprise grows and the land is rented out, thus transferring to category 5.

#### 10 RICH PEASANT - SELF-EMPLOYED WORKER

Afonso (2), the son of Carlos, works alongside his father on many tasks, albeit unwillingly. He is also a self-employed tractor driver and does contract ploughing around Alto with the family's mini-tractor. Afonso studied mechanical engineering in Lisbon and in due course he is certain to set up his own business independent of his father's agricultural work.

#### 11 THE WORKER-RICH PEASANT

This is an impossible combination as each requires a full day's work.

#### 12 JOAO, MIDDLE PEASANT

Joao and Maria (5) have already been described on p. 88. They buy about 100 hours of casual labour annually to help with the potatoes and onions, insufficient to call them rich peasants. They sell their labour to no one and live entirely from the proceeds of their own land.

#### 13 THE CAPITALIST-MIDDLE PEASANT

At one stage of their development into the local capitalists, the Cunhal brothers combined their activities as middle peasants and capitalists but this was only a transient phenomenon. After a few years they abandoned their land (which they were in any case forced to do) and concentrated entirely on their entrepreneurial activities.



## 14 ELOI, MIDDLE PEASANT AND SELF-EMPLOYED WORKER

Eloi and Eulalia (8) work their own land entirely by themselves. In addition, Eloi is the local blacksmith. It is significant that his smithy caters for the needs of the traditional sector only and that his main work is making donkey shoes and fitting them. Eloi is well known for his Heath Robinson-like appliances and his moving scarecrows with cork cogs and polythene sails are always cause for comment, but he is not trained in the modern sector so cars, trucks and motorbikes are a complete mystery to him. Had he known more about such things, he might have expanded his smithy to deal with welding jobs. As it is, such work is done in Monchique or Portimao.

## 15 RAMALHO, MIDDLE PEASANT AND WORKER

Ramalho and Silva (18) grow all their food on their own land and sell some potatoes and a few pigs every year but this is only a fraction of their income. Until his car accident, Ramalho was a full-time truck-driver, delivering flour all over the Algarve. He once worked in Germany and has the mentality of a worker. Their ambition is to make enough money to build a taberna and flats in Portimao.

## 16 TIO MANUEL, POOR PEASANT

Although Tio Manuel (23) sells about 100 hours of his labour to his richer neighbours each year, he lives almost entirely from the produce of his rented terraces.

## 17 THE CAPITALIST-POOR PEASANT

Although it is possible for a poor peasant to become a capitalist, the two roles are clearly totally contradictory.

## 18 MARIO, POOR PEASANT AND SELF-EMPLOYED WORKER

Mario and Hilda (9) work most of their time as *quinteiros* but she sometimes does fieldwork for Joao (5) and Carlos (2) and he is a self-employed cork cutter. Although cork is only cut during the month of May, most of their cash income is from this source.

## 19 FERNANDO, POOR PEASANT AND WORKER

Fernando works as a *quinteiro* for his landlord, Pires. He also works casually for the Cunhals for much of the year, and on top of that he is a self-employed horse-trainer. Fernando is exceptional in that he is trying to improve his position in the traditional sector by buying land with the cash he earns in the modern sector. This means that he is permanently working and only rests or plays cards in the *Alferce* café when it is pouring with rain and impossible to work outside. Other poor peasants, like Tio Manuel, also sell their labour from time to time but usually to other peasants, not to the capitalists, and then only occasionally. In addition, they sell their labour only to make a sufficient cash income to maintain their position in the traditional sector.

It can be seen from this brief consideration of Table 10 that the simpler categories used in Chapter 4 on the local economy have already been superseded. Even the categories in this table are by no means entirely satisfactory. It could, for instance, be argued that there should be a 'self-employed' category in both the capitalist and the traditional sectors. There is certainly a big difference between the self-employed work of Eloi (8) and that of Matilde (20). Whilst Matilde is clearly self-employed within the capitalist sector it is equally clear that Eloi's work is within the traditional sector. If the only clients of a self-employed person are peasants there is little possibility of making any real profit. Fitting donkeys with steel shoes is more a social responsibility than a profitable business and, indeed, Eloi makes an insignificant part of his cash income from this work, totally out of proportion to the amount of his time that it takes. Eloi runs the smithy for traditional social reasons. Matilde sells clothes to local peasants, workers and even capitalists to make a profit. It is a complicated matter. Most people in Alto work part of their time in the modern and part in the traditional sector. Because of the profound differences in the internal logics of the two systems, most people find themselves in a confusing and contradictory situation.

In the traditional system, life expectations are determined by the ownership of land – or lack of it. Ownership of land is in turn determined by inheritance and marriage. There are thus two types of mobility in the traditional sector, one determined by the size of the family and the other through making an advantageous marriage. The Portuguese system of inheritance splits property equally between all sons and daughters. The children from large families end up with scattered

little handkerchief plots all over the place, whilst an only child will accumulate land. Senhor Carneiro (3) did not become a landlord because he or his family before him managed to exploit the labour of others and to buy land with the proceeds. He became a landlord because his family had been relatively infertile and his wife's family had been similarly infertile. Maybe their families had practiced careful contraception for several generations; maybe they were naturally infertile. Either way, the result was the concentration of more and more land in fewer and fewer hands. Of course Carneiro exploits the *quinteiros* who work his land but this does not explain how he or his family got it in the first place.

Because Joao (5) was one of seven children and his parents were also from large families he inherited very little land. He remained in Alto because he made an advantageous marriage and almost all of his present land comes from Maria, his wife. His brothers and sisters took the only route other than remaining poor peasants; they made for the towns.

Those born into poor peasant families without land, like Carlos (23) have no prospect of getting land except through marriage. Since marriage is invariably between social equals, the sons of the poor find that they must either marry a woman without land, or remain unmarried. The poor peasants exist because their family land has been split and split again until there is nothing left worth working. It is then better for them to rent from a less fertile family that has too much land to work themselves. Or else they are forced to leave the area altogether, to join the urban proletariat or the rural proletariat of the Alentejo estates. Because land ownership determines all in this system, there are many family feuds over the splitting of property and a lot of work and money for the lawyers as a result. The Portuguese rural inheritance system tends to encourage contraception or abortion and although we never gained any information on this subject, the fact that most of the families in Alto have only one or two children speaks for itself. Large families are the exception and even four children is unusual.

Marriage used to be a more or less arranged affair, carefully controlled by the bride's father. The prospective husband had to be equal in land holdings to be eligible. In Alto there are only three cases of advantageous marriages. Because Tio Felipe (14) came to Alto as an indentured labourer, he inherited nothing. In 1911, at the age of 18, he married a widow of 48 and now lives in her house with his second wife. Joao (5) who married Maria, probably managed to do so because of his extraordinary good looks. The other Joao, Tio Felipe's grandson

through his second marriage, who eloped with Maria, Eloi's and Eulalia's (8) youngest daughter, comes from a very poor family near Silves. The romance flourished against Eloi's wishes but he was eventually reconciled to it. Every other marriage in Alto has been between class equals.

It is obvious from this account that there is no way out for poor peasants without land. Most of the men from such families never get married because they spend their whole lives trying to engineer an advantageous liaison. As they get older, these single men focus their attention on the local widows. Nothing happens directly but they ask another man, preferably a relative of the widow to 'speak for them'. Such negotiations carry on spasmodically, often for years, without result. The widows are of course waiting for the possibility of bettering their lot too. More often than not, these single men form their own sub-culture separate from the family life of the community. They are shunned, not because of their poverty and their constant obsession with finding a wife but because, in the end, they resort to heavy drinking. On a Sunday afternoon it was common for Vasco (19) and Carlos (23) to bring crates of beer up from Alferce on their motorbikes and to sit with four or five of the older single men under the oak trees beyond Tio Felipe's cottage. There they would sing slow, mournful songs to tunes that had nothing to do with Europe. These essentially Moorish songs, with their lilting pentatonic scales were often sung with sadness and depth of feeling. They spoke adequately enough to the hopelessness of the men's predicament. After a while the alcohol would dominate, the singing would stop, and they would become a noisy, drunken rabble.

The rest of the community, who have varying amounts of land and are married, find that their class position is determined by the size of their family, the longevity of their parents and the marriages they make. The quantity of land determines the style of life. The landlord spends his time managing his estate, agreeing with his *quinteiros* about what crops to plant and taking 50 per cent of the proceeds. Further down the social scale, the differences between rich, middle and poor peasants are often difficult to see. They all work the land in the same way, working hours are similar and their standards of living are often very similar. But of course everyone in the community knows how much land everyone else has got and whether they own or rent it, and this is what determines social status. Since land ownership or the lack of it is given fact, it reflects in no way on the individual. There is no trace of snobbery, or a need to

keep up with the acquisitions of neighbours or any attempt to achieve more than others. Despite large differences in ownership, the richest and poorest peasants in Alto interact as equals and always address one another by their first names.

So much for the traditional sector. Although the capitalist world hardly affords greater social mobility than the traditional sector it is dominated by the ideology of achievement and aspiration – in short by the pursuit of personal, private profit. This is not to imply that the old sector is not exploitative. Clearly the rate of exploitation of *quinteiros* is high. The point is that exploitation is not at the very basis of the old system but a secondary consequence of that system. The ideologies of the two are poles apart.

In Alto and Alferce there are capitalists and workers. Because the *Cunhals* were middle peasants only a few years ago, every worker-cum-poor-peasant is an aspiring capitalist wanting to follow in their footsteps. Many naïvely think they can. Others see the modern sector as a route to social mobility within the traditional sector. Some are making enough money driving trucks to think seriously about setting up their own small business in the modern sector whilst others are working for the *Cunhals* to save money and buy land. As a result, competition to work for the *Cunhals* – the only significant employers in the area paying more than the usual 25 esc. per hour – is acute. Other peasants have gone to work in the EEC to make enough money to buy some land. Ramalho (18) made enough money in Germany to build himself a modern cottage when he returned. He was expecting to make a reasonable living as a middle peasant but the land could not produce the cash income necessary for the new tastes acquired in Germany. He found it impossible to buy more land because it is rarely for sale and then very expensive, so now he has resorted again to the modern sector to work as a lorry driver. Fernando (19), on the other hand, is still trying to save enough money by working casually for the *Cunhals* to buy himself some land and build a cottage on it so that he can cease being a *quinteiro* and can become a middle peasant. Although Ramalho and Fernando might both spend a day wielding an *enxada*, their minds are worlds apart.

How can these two different worlds exist together in a community of only twenty four households? Partly there is a generational split. Those over 40 have mostly settled for their lot in the traditional sector. Almost without exception, they could afford flush lavatories, butane gas stoves and all the other paraphernalia that sociologists love to use as indicators

of social status or 'levels of development'. Almost without exception, they do not give a damn for such things. Tio Felipe (14) hates it when Perpetua, his widowed step-daughter, starts lobbying for butane gas, a pressure cooker, glass tiles in the roof of the kitchen to let some light in and other labour-saving devices. They are not his 'costume'. He has lived in the same cottage since 1911 and the only improvement he has made is to concrete the floor of the best room and the two bedrooms. The other floors remain beaten earth. The rooms are all open to the tiles and during the winter, hailstones bounce through into the cottage. His answer to that problem is simple: he puts up his stout umbrella. Their only source of heating is a wood fire, lit on the floor against a wall. There is no chimney and the smoke slowly percolates through the gaps between the tiles. The cooking is done in iron pots on the fire, though when Perpetua is staying, she uses a paraffin stove. Water is collected in buckets from a communal tap a hundred metres away. There is no lavatory. In the summer the cottage is marvellously cool but in the winter the place is beset by howling gales and lashed with rain. It is uncomfortable, draughty, wet and cold but nothing would convince Tio Felipe to insulate even one room against the winter elements. It was the Duke of Wellington who marvelled at the ability of the Portuguese to put up with extreme physical discomfort in the most stoic manner. Little has changed almost 200 years later.

Before the road was built, the cash income of Alto's peasants was hardly enough to buy tobacco, salt and rice and it was a struggle from dawn to dusk for the poorer peasants to maintain even this standard of living. Now that most of them have a cash surplus, they are too accustomed to their traditional living conditions to want to change them. Besides, such changes often decrease their independence and permanently increase their cash requirements and that is to be avoided at all cost. Tio Felipe, in any case, has a small surplus only because he now receives a state pension of about 500 escudos per month. Other poor families manage to make a cash surplus only because one or more members of the family sells labour casually.

So the older peasants try to carry on more or less regardless of the changes that are taking place around them. The younger ones know very well that the community has changed for ever and they are trying, in different ways, to come to grips with the new world that is being created in their midst. Literacy is a major dividing line here. Just over half the population of Alto is illiterate. Most of the older people and many of the

poorer ones, irrespective of age, remain illiterate so they are inevitably cut off from the wider world and its workings. This wider world appears only as a threat, as dimly perceived processes that are not to their advantage. Those who have retained their suspicions of the changes and have kept to their old customs of agricultural work can easily find examples around them to prove that any attempt to plough capital into the land is a mug's game. Some of the richer peasants, like Carlos (2), have invested heavily, only to find themselves squeezed by the middlemen whom they cannot circumvent. Others have tried to make a killing out of growing early peas in the hot, sheltered river bottoms, only to find the whole crop devastated by a freak frost as the cold air rolled down from the mountains.

Faced with such examples, it is not surprising that most of the middle peasants decide to carry on their subsistence existence and keep their cash needs to the minimum. Even if the only way to make the necessary cash is to grow a hectare of potatoes for sale, this seems to them preferable to putting a lot of money into planting fruit trees or becoming dependent on the Cunhals for work and wages. The traditional subsistence way of life is known, its problems understood, its costs in terms of physical discomfort and poverty tolerated without complaint. Maximum economic independence is their objective.

By comparison, the unskilled labourers who work for the Cunhals have an unpredictable existence. In good years when there is plenty of work they can spend money on motorbikes, factory-made furniture for the cottage, stoves and ovens that work with cylinders of butane, fashionable clothes and even tinned food. In bad years when there is not enough work to go round, they cannot maintain this standard, but they are ill-prepared for a return to subsistence living too. No one ever goes short of food in Alto but some of the labourers certainly go short on meat when there is not much work to be had. It is one thing to keep a kitchen garden and even a few chickens but few workers find the time to keep pigs. The traditional peasants scorn the acquisitions that the labourers make in good times and happily provide surplus vegetables when things are not so good, almost as though to prove a point. And of course this pattern is repeated throughout Portugal. The unemployed urban workers are subsidised by their peasant relatives in the country.

The traditional and the modern co-exist, more or less, but in a state of mutual incomprehension. This is seen most clearly in the lives of those who straddle the two sectors. Fernando and Silva (19), who live with

their teenage son, Vasco, are one of the poorest families in Alto, owning neither land nor cottage. Vasco has an old motorbike and gets casual work felling eucalyptus. He reckons to get 200 days work per year at around 150 escudos per day. It would take two-thirds of his annual income to buy a small, new motorbike. Fernando used to work as a *quinteiro* for two different landlords – nearly five hectares in all, and he had to work very long hours to earn about 25 contos a year. He was trying to save money to buy some land. At the end of 1974 he gave up the smaller plot so that he worked only four hectares and then started working for the Cunhals. In 1975 he gave up a further hectare so that he could spend more time working for the Cunhals, who pay him 200 escudos per day for loading trucks, mixing cement, digging trenches and anything else that needs doing. Fernando also trains horses. He is constantly earning a bit of money here and there, from dawn to dusk, seven days a week. At the beginning of 1976 he offered Senhor Carneiro (3) almost 50,000 escudos for slightly more than a quarter of a hectare of land on a north-facing slope but with an excellent water supply. He wanted to build a cottage there and grow all his food on the terraces, whilst saving all his cash income in order to buy more land and eventually become a middle peasant. In fact his offer was not accepted because the sitting tenant, who has first right of refusal, bought the land at the same price. The economics of Fernando's ambitions are worth examining. It is impossible to make a living by growing crops for sale on a quarter of a hectare of land. Even if the whole lot were put down to potatoes and then to beans, it could not possibly produce an income of more than 10 contos per year. On the other hand, the same land, intensively cultivated, could produce all the food for the family, which if it had to be bought, would cost about 25 contos per year. After two years, an investment of 50 contos pays for itself. However, if Fernando had been offering 200 contos for one hectare it would have made no economic sense because, after producing food for home consumption on a quarter of it he would be able to make a maximum of only 30 contos out of cash-cropping the rest. In addition, he would be committing himself to at least 200 days work to farm that land when he can earn the same amount from the Cunhals in only 150 days. Whether Fernando will ever succeed in buying enough land to live entirely as a middle peasant is doubtful but within a few years he will almost certainly have his own cottage and kitchen garden and will thus have attained some mobility in the traditional sector by resorting to the cash wages of the modern sector.



In a society without adequate social security and with chronic unemployment, owning your own cottage and land is a form of security and pension. None of Alto's workers (and for that matter, few of Lisbon's) want to sell their land even if they have no immediate or planned use for it. Few Portuguese have to go back more than a generation to find their peasant stock and most of them know how to eke out a living for a family on a little bit of land if they have to. (Many do just that all round the runways of Lisbon Airport.) Even those who left Alto forty years ago have not sold their land despite its high market value and low rent income. (Rents in Alto vary between  $\frac{1}{2}$  per cent and  $1\frac{1}{2}$  per cent of the current market value of the land.) The small-time absentee landlords are not interested in making money from their land. They treat it instead as an insurance policy in case of hard times. This partly explains the huge discrepancy between land rents and land prices. There is very little land for sale and a constant demand for it from poor peasants who have saved money by becoming workers. However, the situation is gradually changing. Until the beginning of 1976 there was no legal security for tenants and although one tenant might rent the same plot all his life, the land was actually rented on an annual basis. Now the law has changed, giving tenants complete security, although only when both landlord and tenant register their agreement at the Town Hall in Monchique. Of course, most peasants remain ignorant of the change.

Although the *quinteiro* system is very exploitative, a *quinteiro* working five hectares is often better off than a poor peasant renting the same amount. This is because *quinteiro* farming uses the landlord's capital and is usually more capital intensive as a result. *Quinteiros* tend to concentrate on raising cows and pigs whilst poor renters tend to concentrate on potatoes and beans. The animals produce higher cash returns for less work. But because the *quinteiro* system is so openly exploitative and severely restricts the *quinteiro*'s freedom to farm as he wants, every family tied down by this system is trying to get out of it. One way out is to try renting land instead, but this usually involves a drop in cash income. More often, the *quinteiros* resort to the modern sector and are amongst the first recruits to the growing local proletariat.

The transition from the traditional system to capitalism inevitably turns the old class structure upside-down. Once the *Cunhals* were established in Alferce and started to buy labour, it was the poorest and most exploited peasants who became the first workers. For those who had managed to learn to read and write, there was the possibility of join-

ing the 'labour aristocracy' and becoming one of the ever-increasing band of truck drivers. For others who had managed to stay at school beyond the elementary grades, there was the chance of learning a skill in the capitalist sector, a very different proposition from having a skill in the traditional sector.

Thus it has been the poorer peasants, turned workers, who have been the first to build new cottages and go in for a certain amount of conspicuous consumption. Ramalho and his wife were poor middle peasants – they own land but not enough to be self-sufficient. (18) After working in Germany he built a new cottage, bought a car and now works as a truck driver. Vasco (10) inherited only a tiny slice of land. He too left the peasant sector to become a builder. He has a motorbike and his cottage is crammed full of factory-made furniture, bought in Portimao. Ramiro (13) inherited nothing and he moved first to become one of Manuel Cunhal's quinteiros and now, in addition, his tractor driver, earning a regular wage. Out of his comparatively high cash income he has bought some land for his kitchen garden, another patch down by Manuel's cottage (1) which he has cleared and levelled ready to build a cottage of his own, and runs an old car too.

There are several people in Alto who were once poor peasants but now live in a similar style to Senhor Carneiro. Their cottages are certainly equipped with more modern comforts than those of most of the middle peasants, even though the latter undoubtedly have more cash.

Alto is in the midst of a rapid transition, but for the time being the old and the new exist side by side. When the doctor visits a patient up at Maia, he drives to the compound in front of Tio Felipe's cottage (14) and parks his Mercedes under an oak tree. He borrows a donkey and with some difficulty and a little embarrassment, climbs a stone wall and then sits uncomfortably astride the beast, looking slightly ridiculous in his suit with his leather bag of medicaments roped to the back of the straw-padded saddle. Such odd contrasts are commonplace, daily occurrences. They will persist as long as the traditional sector continues to obstruct the further capitalist penetration of the area.

## 6 One Family

On a winter's day, the most likely place to find Eloi (8) is around the smithy at the end of the Correntinho cottages where he lives. The smithy is also home for about twenty rabbits and the onion store – thousands of them shining in plaited bundles from the rafters. Eloi would be bent over the fire, turning the fan with one hand and heating a piece of steel for a donkey shoe in a pair of tongs with the other. You would notice his battered trilby, jauntily perched with the brim down to his eyebrows, his muscular arms and his big, steel-tipped boots. Only when he stood up would you realise that he is badly crippled, barely able to walk without a stick, and with one arm capable of only limited movement. When he was a child he fell off a donkey and broke his right arm and left leg. The nearest doctor was three hours away and too expensive anyway so Eloi has been crippled all his life. As he turns towards the light of the doorway you would notice his fine features, dark, humorous eyes, thick black eyebrows and aquiline nose. He would say hallo by way of a sardonic comment, chuckle and return to the work at hand. Eloi was born twenty metres from his smithy 52 years ago.

Eulalia would be out collecting wood for the evening fire. She would eventually come down the track from the woods, carrying huge cork trunks on each shoulder. Her walk is light, belying both the weight of the trunks and her own. She is well built. The zip on her skirt is broken and gaping, her cardigan is done up on the wrong buttons and banged flat on top of her head is an old straw hat. But it would not matter what Eulalia was dressed in. She has style, purpose and strength of character. Until you get to know her, she seems the most formidable woman in Alto. Characteristically, she will forget to put the trunks on the ground and happily enter into a long conversation with them still resting on her shoulders.

At some point she says something that requires a manual gesture, tosses the trunks to the ground outside her cottage and goes inside for an axe. There is nothing cack-handed about the way she chops up the logs

either. Left to its own devices – and it usually is – Eulalia's hair is short, crinkly and sticks out like an Afro. Her eyes are pale blue, her complexion clear and her face unwrinkled. Yet she is fifty, has four married children and three grandchildren. Her voice is reedy but musical and when she laughs it is with her whole body.

Eulalia was born in the tiny hamlet of Foz do Acor in 1926. Her father was a gypsy and never recognised her as his daughter. Her mother lived with her brother and parents, who owned and worked about two hectares of irrigated land in the river valley below their cottage, four hectares of dry land across the river and over twelve hundred hectares of barren mountains on all sides. Eulalia's mother died when she was eight so she was brought up by her grandparents. School was five kilometres away over the mountain so she rarely attended. She was educated on the land. The busiest time of the year was in the autumn when the family picked tons of medronho berries which were fermented in the big oak vats in the barn down by the river, and then distilled in their most valuable possession, the copper still. The medronho was sold in Sao Marcos, only eight kilometres away but a long trek up narrow tracks, across a ravine and round a mountain.

In between helping his parents on the land, Eloi went to school in Alferce but he was never taught to read and write. He had an older brother, now dead, his widow still living up at Maia, an older sister, now widowed and living in Alferce, a younger brother now living at Foz do Vale, another younger brother, Mario, who lives next door (9), a younger sister who married a taberna owner in Portimao, and finally another sister, Silva, who is married to Ramalho and lives in Alto (18). (See the family tree on p. 35.) From an early age, Eloi worked closely with his father in the smithy and learned the trade. It was his job to trek to Sao Marcos with two donkeys to buy steel strips for making donkey shoes. The journey involved tiring ascents of over 500 metres and descents of over 700 metres, along steep tracks, across two rivers and through ravines, all the way through unpopulated wilderness. It took three or four days there and back and Foz do Acor was exactly halfway. He used to stop here to rest and water the donkeys. To Eulalia he was a familiar sight and could be seen for an hour or so, silhouetted on the skyline, sitting side-saddle on the first donkey with the second one following with loaded panniers, slowly coming down the mountain into Foz do Acor.

Eloi and Eulalia married in 1946. There was no room for them in Alto.

Eloi's parents' cottage was grossly overcrowded, they and five children living in four small rooms even after the elder two had married and moved away. There was also insufficient land to support them. On the other hand, at Foz do Acor, Eulalia's grandparents were growing old and unable to cope. So there was really no choice in the matter: they set up home with the grandparents. For Eloi it was a big change. From working for his father and living with the family in a cramped cottage, working only a few hectares of terraces around Alto, he suddenly became the effective head of a household owning all the surrounding mountain as far as you could see. It was barren and, except for the medronho trees, unproductive – but what an expanse. Eloi got to know every gulley, rock and tree on that land and still delights in taking people off on a burricada (donkey trek) to rediscover odd apple, pear and fig trees hidden in the deep gulleys.

They lived at Foz do Acor for ten years, during which time the grandparents died and three children were born. Eulalia inherited half the land through her dead mother, the other half going to her uncle. In all, she received about a hectare of irrigated land, two hectares of dry land and 600 hectares of mountain.

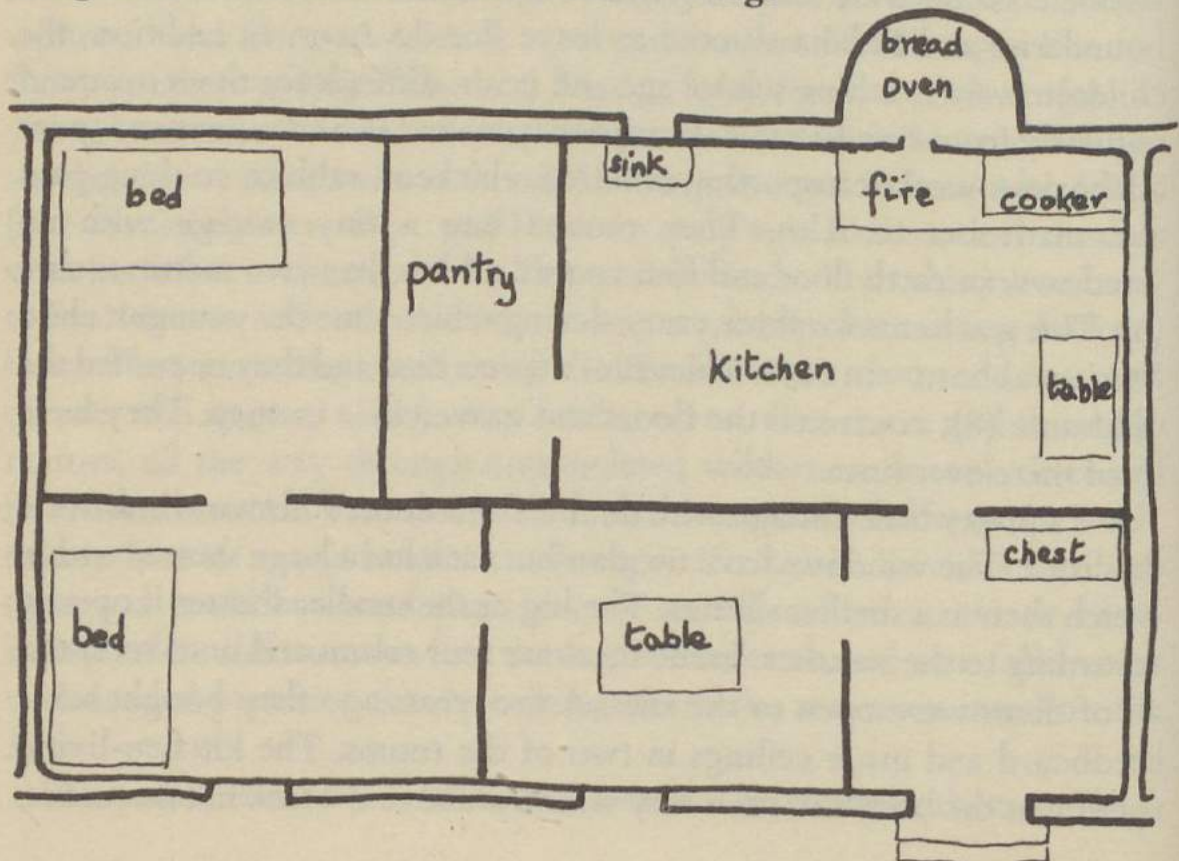
During these years, Eloi still collected steel from Sao Marcos for his father, but eventually the smithy became too much for the old man. Besides, there were disputes between Eulalia and her uncle about boundaries and Eulalia wanted to leave Foz do Acor. In addition, the children were reaching school age and it was difficult for them to attend regularly from Foz do Acor. In 1956 they loaded their donkeys and spent a laborious week transporting children, chickens, rabbits, cooking pans and mattresses to Alto. They moved into a tiny cottage with no windows, an earth floor and four rooms, all less than two metres square (6). This was home for three years, during which time the youngest child Maria was born – in 1958. Then Eloi's father died and they re-roofed the old house (8), concreted the floors and moved in – in 1959. They have lived there ever since.

It is a pretty little cottage with double front doors and two windows at the front. The windows have no glass but each has a large shutter within which there is a smaller shutter. The big or the smaller shutter is opened according to the weather. Inside there are four rooms and until recently, all of them were open to the tiles. A few years ago they bought some hardboard and made ceilings in two of the rooms. The kitchen-living room is at the back and has a tiny window above the sink in one corner.

It is dominated by the fireplace and cooking range in an alcove. In one corner of Eulalia's kitchen there is a hole in the roof and underneath is a large wood fire on the floor which stays alight most of the time in the winter. To one side of the fire there is a stone structure about half a metre high. It has a flat top with metal grids. Hot embers are taken from the fire and placed on the grids and the cooking is done on the top. Above the fire there is an opening in the wall to the bread oven, a large, domed, circular structure which sticks out of the back of the cottage. During the summer, much of the cooking is done outside, using brushwood which burns hot and fast, and cooking kettles on tripods or grill frames which are placed amongst the embers. Quite a lot of the cottages, Eulalia's included, now have little paraffin stoves or burners run on butane cylinders but the supply of butane to Alferce is unreliable, so much of the cooking is done on the fire anyway.

By the time Eloi and Eulalia moved to Alto, the road had been open for six years and was producing changes. The school in Alferce had been modernised and had one teacher. All four children went to school there, learned to read and write and later went to the secondary school in Monchique. By the time Eulalia was 35, her three eldest children were literate. By laboriously copying their homework, getting their help with

Diagram 4 Plan of Eloi's and Eulalia's Cottage



the alphabet and following their exercises stage by stage, she taught herself to read and write. The perseverance required to achieve this can be judged from the collapse of the literacy campaign initiated by the Armed Forces Movement (MFA) in Alferce after the 1974 Revolution. Although a number of local people enrolled, especially the poorer young men, few learned more than to recognise the letters of the alphabet, and the majority of the people in Alto remain illiterate.

Eloi's mother lived with them until she died in 1966. Encouraged by Eulalia, who said it kept her young, she developed a long-standing affair with Senhor Carneiro's old servant. The affair was frowned upon by Eloi, more, one suspects, because it was the landlord's servant than for any general moral reason. When the mother died, the church bell in Alferce tolled once, intermittently. (It is tolled twice for a man.) The bell can be heard throughout the mountains and within hours, everyone knew. The funeral, like all funerals here, was simple and dignified. Ze Manuel, the cooper, made the coffin and it was carried up to Alto. The next day the funeral procession wound its way down the hill, six men carrying the coffin and the whole of Alto following on foot. In Alferce, the shops and tabernas closed one after another and everyone joined the procession to the church. After a short service – one of the very few concessions that these people make to the church – the procession continued out of the back of the village to the cemetery for the burial.

Neither Eloi nor Eulalia have any religious beliefs or superstitions. They both hate the church and frequently mock the sacraments and the figure on the cross, and regard religion as mumbo-jumbo. After a good Sunday lunch Eloi would declare that they had all eaten like *padres* and should be ashamed of themselves. Around the fireside on long, dark winter evenings, while squatting on little chairs the discussion would sometimes drift to the possibility of life after death and similar matters, all of which was shouted down by Eulalia amidst hoots of laughter. To them the church was just a money-spinner, a trick. Eulalia would put on a show of the priest crossing himself and then stretch out her palm for money, her eyes lifted up to the tiles.

Once, when we were returning across the mountain from Foz do Acor with Eloi one dark night, he stopped his donkey and pointed out a slow-moving bright light in the sky to the south-west. The scene was biblical – three people on three donkeys in this barren wilderness gazing at a bright light in the night sky. It could have prompted all manner of superstitious beliefs but Eloi simply said that it must be an American satellite and we trekked on.

The children grew up. In their teens, they each in turn went to work in the taberna kept by Eloi's sister in Portimao. The two eldest daughters met their men there, both waiters in Algarve hotels. They married and now live in Portimao. Afonso, the only son, got into the hotel trade through them and is now also a waiter living near Albufeira. Maria, the youngest daughter, lived at home until the autumn of 1976. One night, when Eloi was away at Foz do Acor harvesting the sweet potatoes, she eloped with her boyfriend Joao. Eulalia was distraught and also worried that Eloi would think she was party to the whole affair. In fact Eloi was annoyed, but also relieved that he would not be burdened with the costs of a marriage ceremony. Eulalia insisted that her daughter had been stolen, that it was all a huge disgrace, that she would never be able to hold her head high in Alferce again and that it could never be forgiven. Yet six weeks later, when the medronho picking started, there was a reconciliation and the whole family went off into the mountains to pick berries. After a fortnight, Eulalia was saying what a good picker Joao was.

The romance had started in February when Joao came up to Alto to visit Tia Lucia (14), his grandmother, old Tio Felipe's wife. The romance brought the two families close together. Right from the start, Sunday was institutionalised as a regular celebration. Joao would arrive on his motorbike on the Saturday afternoon after finishing work as a builder's labourer. Since he and Maria were supposed to be 'walking out', the older women had their time cut out making sure there was always 'a presence'. The Sunday routine alternated between the two cottages (9 and 14). At ten in the morning a cockerel would be killed and by one o'clock the meal was ready – always the same rice soup with chicken claws, giblets and eggs, followed by chicken and chips and mountains of salad. Then fruit and medronho. One chicken was shared amongst fifteen people.

Tia Lucia and Tio Felipe were always delighted by the Sunday routine. Tio Felipe's old mouth organ would come out after the meal and everyone would dance the correntinho until late in the afternoon, Tio Felipe playing fast, jaunty tunes and dancing vigorously at the same time. Eloi always got bored by these proceedings and irritated the others by consistently turning up late for the meal in his dungarees and then getting back to the terraces as soon as possible.

One particular afternoon the men soon got pretty drunk and spent the time noisily laughing at their own dirty jokes, singing, occasionally



playing the mouth organ and shouting through large mouthfuls of cake. The women kept more to the cake and less to the medronho. As the sun went down and the temperature cooled, the donkey, the pig, the rabbits the cat and the chickens had to be fed. Tio Felipe was very drunk but somehow he made his rounds. The time then came to shut up the chickens. He called them but could count only seven. Everyone else joined in the counting game, and given the blurred vision of most, there was little agreement as to the number of chickens present. The counting was repeated . . . and repeated, until eventually they were more or less agreed on the number seven. The hilarity of the counting episode was beginning to die down as one after another, the assembled company concluded that indeed a chicken was missing. By this time Tio Felipe had lost his bonhomie and was beginning to mutter oaths. People lurched off into the woods in various directions, making chicken-calling noises, but to no avail. The chicken had definitely disappeared. Tio Felipe decided that he had been robbed. There was no humour now – just long silences between serious suggestions as to which teenage labourer it might have been. Throughout this time, Tia Lucia had been in the cottage, aware only that there was some sort of problem outside. Now she emerged and joined in the discussion. She asked how many chickens were present and counted. Tio Felipe answered angrily that there was one less than there should be. Someone else said seven. ‘Huh’, she said, ‘you stupid old drunks, the lot of you. You ate the other one for dinner!’ This revelation was greeted with wild hilarity and instant demands for more medronho to celebrate the discovery.

These festivities ended suddenly with the elopement of Maria at the end of August. Now Joao and Maria live near Silves and visit only occasionally.

Eloi's and Eulalia's four children have become part of the outside world. There is no one to take over the smithy or to farm the land. The annual medronho picking requires more and more arm-twisting to get the whole family over to Foz do Acor for a month of hard work. In 1976 they succeeded in picking eight tons of berries but it will be more difficult in the future. So Eloi and Eulalia are the end of a line that stretches back hundreds of years, perhaps even thousands. Theirs is not a happy position and it will become more miserable with increasing age. The only thing they desperately want and have not got is a son or a daughter who will carry on their peasant traditions.

The years roll on; the routine stays the same. They rise late in the

winter. In fact Eloi sometimes does not get up until there is a queue of donkeys outside his cottage and some mildly impatient neighbours, who, having waited and chatted for an hour, start banging on the shutters and making ribald remarks. In the summer they are always up with the dawn because it is soon too hot for work during the day. When the winter evenings are cold and wet, they might be in bed by nine, but in the summer they usually sit outside until well after midnight, as they did on the night of the Presidential Elections. And when Eloi goes on one of his drinking bouts in Alferce he rarely manages to get back before two and it is the donkey that finds the way home.

Like most illiterate people, Eloi is cut off from the outside world. Once he told us about a terrible earthquake that had killed a million people in eight seconds. He did not know where it had happened – somewhere overseas, not in Portugal anyway. He was actually talking about the disaster in Tang-shan. The far-flung empire that the Portuguese ruling class clung to until the bitter end meant nothing to the older people other than the fact that their sons had to go away, perhaps never to return. There were even young men in Alto who had fought in Angola – Carlos (23) for instance. But they had been kept illiterate and had no real idea where they had been beyond the fact that they spent two weeks on a ship out of sight of land. One word sums up the outside world – *alem*, beyond. The world beyond these mountains is largely incomprehensible and so is the news received from it on the transistor radios. Television might change things when Alferce and Alto finally get electricity but the set in the Casa do Povo in Alferce, which is run off a generator and gives a poor picture intermittently, seldom attracts much of an audience. Better by far to sit in the dim light of a lantern at one of the tabernas, drink medronho, play cards or dice, or just talk and argue about farming matters. Eloi does just this twice a week, but Eulalia would not be seen dead sitting in a taberna. Although some women do and it never reflects badly on them, the tabernas are basically a male preserve.

Whatever its main line of business, every one of the six shops in Alferce also sells drink though only three of them are actually tabernas that concentrate on it. The most popular taberna is one owned by a small middleman, the only one not related to the Cunhal network. His place is minuscule, no more than three metres square, and full of sacks of beans and grains that serve also as the seats. The beams are covered with strings of onions and garlic. Here the hours between sunset and bedtime are

whiled away by the dim, flickering light of a solitary oil lamp, sometimes in long silences broken only by consensual comments on the crops and weather, sometimes in boisterous, drunken argument. Here you can get drunk for 10 escudos and dead drunk for 20. Mario (9) gets dead drunk every night of the week. Mario (17) is less consistent but sometimes completely overdoes it, like the night his mother-in-law died and his wife went down to Alferce to tell him, only to find the mule patiently standing in the road half way up the hill and Mario fast asleep in a ditch. And there was the time when Maria (2) sent her husband Luis down to the povo to buy some sugar at 4 p.m. When he had not returned by 1 a.m. some neighbours were called and a search party set out with lanterns. The sugar was soon located, scattered all over the road, and Luis was eventually found in the woods, having fallen over and complaining that his leg was broken. He was carried home and when he set out for more sugar the next day he went with a black eye from his wife.

Almost all the men in Alto are paralytic at some time of the year. Tio Felipe (14) has slept in his clothes and boots on several occasions. Tia Lucia would not take them off for him because he would not say please. But however drunk they get and wherever they end up sleeping, most of the men are up at the usual time the next day, ready for work and none the worse for it all. Only Eloi seems to suffer after-effects. He tries to control his drinking but about once a fortnight the excitement of some argument in the taberna would lead to confusion over counting drinks and he would then spend the whole of the next day in bed, his hangover interrupted by noisy banging on his bedroom shutters and loud jokes at his expense from neighbours who wanted their donkeys shod. Eulalia would stamp around all day making infuriated complaints and would eventually push him out of the cottage with an enxada in his hand and send him hobbling off to a terrace.

Most of the men in Alto and Alferce are in fact alcoholics. The Portuguese seem to drink more than many other nations. Some argue that it is a sublimated form of class struggle, the only outlet during half a century of fascist rule. Others say that it is a consequence of the 'idiocy of rural life'. Others that it is simply out of boredom and the impossibility of achieving social mobility. On the worker-occupied farms in the Alentejo in 1975, the male alcoholism was a constant problem and it is reliably reported that on several co-operatives the women forced the men into a compromise whereby they promised not to drink more than a garafon of wine per day. That is five litres, about a gallon. In Alto, the

women complained amongst themselves and frequently to their husbands, but basically, they accepted it as an unsatisfactory but unchangeable fact of life. If there is any one major reason for the alcoholism in Alto it is the social despair engendered by a dying community.

Each year, Eloi spends eight to nine months in Alto and the rest of the time over at Foz do Acor. Most of September and October are spent picking medronho berries over there. Then in November he spends a week ploughing and sowing wheat. In February both Eloi and Eulalia spend a fortnight there distilling the medronho, Eulalia making sure that with up to a thousand litres of spirit around, things do not get out of hand. Then in May there is more ploughing in order to plant the sweet potatoes. A neighbour there irrigates them in return for a portion of the harvest. In June there is the wheat harvesting, and sometime later, the threshing.

Eloi and Eulalia own about a hectare of terraces in Alto and rent another quarter hectare from Eloi's sister in Portimao. In Foz do Acor they own another hectare of irrigated land, three hectares of dry land and some 600 hectares of mountain. Because they keep two donkeys for the journeys between Alto and Foz do Acor most of their dry land is used to produce grain and fodder. The irrigated land at Foz do Acor is used for garlic, followed by sweet potatoes because they do not require much attention. The land in Alto is mainly for the kitchen garden, part of it being used for cash crops of onions, beans and tomatoes. They keep a pig, some hens and about twenty rabbits and are entirely self-sufficient in food. They buy clothes, kitchen equipment, cylinders of butane for the cooker, paraffin for the oil lamps and some sugar, rice, salt, tobacco and wine.

They make about 40 contos per year from their cash crops. Then there is the smithy. Eloi buys steel strips from Portimao at 90 escudos per metre, which works out at about 9 escudos per donkey shoe for the metal alone. It takes him about an hour to make a pair of shoes and he usually makes no more than four or six at a time because of the intense heat, especially in the summer. The donkeys are shod cold and on average the shoes last four months. Many donkeys are only shod on the front hooves but those that regularly make long trips get four. Eloi charges 40 escudos per pair of shoes fitted, thus making a cash profit of 22 escudos. He reckons to do about 1000 shoes per year and makes 11 contos from this work. Other work in the smithy includes bits of ploughs, odd

tools and spigot hinges but most of these things are now bought factory-made from Portimao. Eloi works only with steel. (There is a coppersmith in Monchique who makes stills for the medronho.) Eloi's and Eulalia's most important source of income is the medronho spirit which they sell in Sao Marcos. They make about a thousand litres every year and it sells at around 60 escudos per litre. After paying for the picking, they make about 50 contos per year from the medronho. Their annual income is thus around 100 contos per year.

Small though it is, their annual income exceeds their expenditure by at least 50 contos. The surplus is hidden in a place that only Eloi knows. Maybe there are 500 contos or more in that secret place. It will never be spent and no one will know exactly how much there is until after Eloi and Eulalia are dead. Eloi's sister in Portimao and all four of his children periodically campaign to get him to put the money in a bank. 'We all disagree with capitalist banks and do not like them', the argument goes, 'but you could be earning 7 per cent interest instead of losing it all through inflation.' Eloi says he will think about it but everyone knows that the money will stay in its secret hiding place. He could, in any case, be quite a rich man if he so chose. Various paper mills have offered him contracts to plant eucalyptus on the barren mountains around Foz do Acor. But no, that would destroy the medronho. It would dry up the river running through Foz do Acor and make it impossible to live there. Eloi is well aware of the ecological arguments. He knows that eucalyptus trees drink water (in fact a 12 metre tree will suck up 400 litres per day).

But it is not really these reasons that make him refuse the contracts. It is something much deeper. Neither Eloi nor Eulalia have the slightest desire to imitate the customs, standards of living and tastes of their social superiors. They prefer their own way of life, the life of a middle peasant, without ambition, without any needs that they cannot fulfil directly with their own labour. It would be difficult to imagine a less alienated existence than theirs. They produce food directly for their own consumption. They own the products of their labour. They alone decide how to work their land, what to grow, what to eat and what to sell. They are carrying on a long tradition, acting out customs that contain the intelligence, trials and errors of generations because the local customs are a very precise reflection of what the local landscape, its soil and climate actually make possible. They have no interest in *conquering* nature, the great ambition of industrial, scientific man. Certainly they do

battle against natural forces and start every spring with the most immaculately tilled terraces imaginable. But uncontrollable factors, like drought in April and rain in August, or blight or colorado beetles can soon turn the perfect April garden into a forlorn salvage operation by July.

Despite the set-backs, few crops are completely wiped out and food is produced in abundance every year. By the end of the summer, the terraces are a shambles, battles having been fought, some won, some more or less lost. A lifetime of such experiences leads to a philosophical attitude. It leads to a very precise idea of how much effort is worth putting into each terrace and each crop. This is commonly mistaken by outsiders for the 'lazy fatalism' of peasants. In fact it is a reflection of their very deep knowledge of the land and the climate which has been accumulated over generations and distilled into local custom.

For Eulalia and Eloi, the preservation of this local culture with its self-sufficient, unalienated life of Homeric simplicity, is enough. It gives adequate meaning to their lives and needs no additives.

Eulalia would get animated in her condemnation of two things. One was the church, the other, flush lavatories. She would never have one. The woods were good enough for all the generations before her and they were good enough now. And anyone who has tried operating a flush lavatory in an area that sometimes suffers severe autumn droughts would see the wisdom of her views.

If you ask Eloi and Eulalia why they live the way they do, they answer in terms of their customs. Because customs are not the same as intellectual reasons, the answers appear arbitrary and unsatisfactory. Indeed, some of the answers are arbitrary and some of the local customs have no obviously sound basis. But most of them are distilled from hundreds of years of agricultural experience on these mountains. Anyone who strays too far from them is likely to fail. Anyone who ignores them will not only fail to evolve a self-sufficient existence that can regenerate itself from year to year but will probably destroy such possibilities for others too. Such is the case with the eucalyptus plantations, which run entirely against the local customs, are rapidly lowering the water table in the mountain and will eventually make it impossible to grow summer vegetables in Alto.

These ideas might not be intellectually persuasive, but they are there, in the very bones of people like Eloi and Eulalia, informing their daily activities and their plans from year to year. To an outsider, they frequently appear to be unthinking reasons for dogmatic behaviour. To

a mind that has been trained to think intellectually, they are often a nonsense. And indeed some purely social customs which operate only at an ideological level are lifeless reflections of practices that once had a sound basis in reality but only exist today as tradition. It is clear that eating salted cod at the pig-killing once served the very important function of getting some iodine into the local diet. Now with the daily availability of sardines it is no longer necessary. But it is equally certain that some of the customs in Alto that still appear to me to have no sound basis, would turn out, with more investigation, to be an integral and necessary part of the annual renewal of the conditions of subsistence living.

There is, in any case, an important difference between ideological customs and customs that inform the daily practice of farming. The latter are a form of local science, practical knowledge gained under the most daunting of conditions. It is precisely because this science is perpetuated in the form of a custom which on the face of it has no more significance than any other bit of folklore, like blessing the onion seedlings with a goat's skull, that Alto's peasants are ill-equipped to deal with the advantages and disadvantages of chemical fertilisers. It is a dreadful irony that the customs of agricultural practice in Alto which had a sound enough basis to make possible the continuous use of the same soil for over a millennium, existed in a form that could not be applied intellectually to the apparent magic of the new fertiliser. Like all the other peasants in Alto, Eloi and Eulalia have unknowingly ruined their land with too much fertiliser, whilst at the same time adhering strictly to all other aspects of local agricultural practice. They remain the incumbents of a subtle intelligence about how to farm in Alto but that is not enough to stop them ruining the land with a new product that is completely different from all previous agricultural experience in the area.

Their understanding is the sublimation of generations of toil under exacting conditions; when Eloi and Eulalia die this intelligence will die with them. Their children have gone and the basic rationale for their existence – to hand on their land in good heart for the generations to come – has gone too. It leaves an unhappy hole in their lives and their despair is reflected in Eloi's alcoholism and Eulalia's addiction to sleeping pills these last four years.<sup>5</sup>

The first part of the paper discusses the general theory of the subject. It is shown that the theory is based on the principle of least action. The action is defined as the integral of the Lagrangian over time. The Lagrangian is a function of the coordinates and velocities of the particles. The equations of motion are derived from the principle of least action. It is shown that the equations of motion are equivalent to Newton's laws of motion. The second part of the paper discusses the application of the theory to the case of a particle in a potential. It is shown that the energy of the particle is conserved. The energy is defined as the sum of the kinetic energy and the potential energy. The energy is constant in time. The third part of the paper discusses the application of the theory to the case of a particle in a magnetic field. It is shown that the energy of the particle is conserved. The energy is defined as the sum of the kinetic energy and the potential energy. The energy is constant in time.

The fourth part of the paper discusses the application of the theory to the case of a particle in an electric field. It is shown that the energy of the particle is conserved. The energy is defined as the sum of the kinetic energy and the potential energy. The energy is constant in time. The fifth part of the paper discusses the application of the theory to the case of a particle in a magnetic field and an electric field. It is shown that the energy of the particle is conserved. The energy is defined as the sum of the kinetic energy and the potential energy. The energy is constant in time. The sixth part of the paper discusses the application of the theory to the case of a particle in a magnetic field and an electric field and a gravitational field. It is shown that the energy of the particle is conserved. The energy is defined as the sum of the kinetic energy and the potential energy. The energy is constant in time.

The seventh part of the paper discusses the application of the theory to the case of a particle in a magnetic field and an electric field and a gravitational field and a magnetic field. It is shown that the energy of the particle is conserved. The energy is defined as the sum of the kinetic energy and the potential energy. The energy is constant in time. The eighth part of the paper discusses the application of the theory to the case of a particle in a magnetic field and an electric field and a gravitational field and a magnetic field and an electric field. It is shown that the energy of the particle is conserved. The energy is defined as the sum of the kinetic energy and the potential energy. The energy is constant in time.

The ninth part of the paper discusses the application of the theory to the case of a particle in a magnetic field and an electric field and a gravitational field and a magnetic field and an electric field and a magnetic field. It is shown that the energy of the particle is conserved. The energy is defined as the sum of the kinetic energy and the potential energy. The energy is constant in time. The tenth part of the paper discusses the application of the theory to the case of a particle in a magnetic field and an electric field and a gravitational field and a magnetic field and an electric field and a magnetic field and an electric field. It is shown that the energy of the particle is conserved. The energy is defined as the sum of the kinetic energy and the potential energy. The energy is constant in time.



## 7 The Developing Contradictions

Before the Moors invaded Southern Portugal, human settlements around the Serra de Monchique were probably limited to a few hamlets in the bottom of the deep valleys where water was freely available throughout the year. The Moors stayed several centuries, built rough donkey tracks, terraces, irrigation tanks and their Fort up on the mountain to the south-east of Alto. The mountainsides were gradually populated. The influence of the Moorish Empire can still be seen and the present inhabitants are partly from Moorish stock.

As Portuguese mercantile capitalism expanded to many parts of the world in the Middle Ages, so Portugal itself changed. New plants were brought back from China, Africa and America and found their way into these mountains, some to become staple parts of the local diet. No doubt there was a great deal of local excitement the year potatoes were first grown in Alto and the locals might well have thought that it was a revolutionary change. And so it was, but only in their diet. Nothing else changed. The subsistence economy remained intact. The cash needs of the peasants were slightly increased perhaps by the need to buy in potato stock from outside every now and again but the old system remained intact. And so it was with all the other changes that took place in the thousand years between the original Moorish incursion into the area and the year 1950. The Portuguese Empire rose and fell. The open land of the Alentejo and the Algarve were subjected to different types of rule and oppression but the Serra de Monchique in between remained a comparative oasis of tranquillity. It did not produce any appreciable surplus for the outside world so it did not fulfil the primary condition for the making of history, the dynamic of class struggle and everything that follows from it. Different regimes poached these mountains for men to fight their wars in distant places, but that did not change the structure of local life either. Perhaps the world outside has had only one significant influence on the life of the communities in these mountains over the past millennium. The land inheritance customs, which have important

consequences for every aspect of local life, date from the Napoleonic Wars. But that again did not change the pattern of subsistence agriculture. If anything, it reinforced it by making the rationalisation of land use more difficult, as the local capitalists today know all too well. For without wheeled transport into and out of these mountains, local life was necessarily organised around subsistence farming.

Without a doubt, the biggest thing that has happened to Alto in the last thousand years has been the building of the road.

Subsistence farming involves a natural cycle of production and consumption without waste. Practically nothing leaves the location of production and practically nothing is brought into it either. The physical, biological, economic and social processes are all interwoven in the natural cycle of the seasons. Less than thirty years ago, the people of Alto made their lives almost entirely with what was locally available. Those few necessities that they could not produce were hauled in by donkey. Iron for tools and donkey shoes came from the mines of Aljustrel, seven days trek to the north. Rice came from Saboia, two days away. Almonds were brought up from the Algarve, a day or two away. Cigarettes and other manufactured goods came from the railway town of Sao Marcos, nine hours away by donkey, three days there and back. Salt came from Portimao, four days there and back.

The road from Portimao to Monchique was built in 1936 and made Monchique the commercial and market centre for the area. Monchique was still a three hour donkey trek away, and a donkey can carry only about 6 arrobas (about 2 cwt). Carting things around in this way was an expensive and time consuming business. Of course Senhor Carneiro's house (3) had glass in the windows, tiles on the floors and plaster ceilings, all brought in at great expense. For the rest, life consisted of growing and making what you could from what was available locally. There is hardly a plant that an old peasant cannot give you a use for. Grasses for making sacks and string and washing greasy dishes, willows for baskets, pine for chairs and tables, oak for doors, cork for a hundred and one odd tasks, including plates and cups, herbs for all manner of medicines. Local life was fashioned out of what happened to be available. It blended with its environment because it was almost totally a product of that environment. Of course the peasants also acted upon the environment, day in, day out. In the end, the local landscape cannot be understood without the peasants and the peasants cannot be understood without the local landscape. For a millennium, life in Alto was almost entirely the

product of a limited technology working within a particular geology and micro-climate. People ate what they could grow at this altitude in this latitude and they kept the animals that thrived under the same conditions. They worked to maintain the standard of subsistence living that their energies and their technology allowed. And experience over many years, handed down from generation to generation, told them how much energy it was worth putting into growing potatoes, or olives, or into keeping pigs. They never made any quick, intensive effort to grow a huge crop of something – what could they do with the surplus? It could not all be consumed. It could be stored for a limited period only and it could not be sold because the market was too far away. The environment and its isolation allowed a certain density of population and a certain standard of living and that is what the people worked to maintain over the centuries.

Some of the terraces around Alto are the recent creations of giant bulldozers but most of them have been there for several centuries and some for even longer. Much of the soil has been in continual cultivation for all that time but everything that was taken out also found its way back again, some without any social organisation like the human faeces which to this day are deposited at random in the woods, but most through a carefully worked perfect cycle. Life under such conditions had its own stoic and simple grandeur but for all the fragrant scent of the mimosas and the fleshy succulence of the fruits that grow in abundance, it was no Garden of Eden. Subsistence living is dependent on the local geology and can, as it does in Alto, result in localised diseases caused by mineral deficiencies in the rocks and soil. Until sardines became a regular part of the local diet there was, for instance, a high incidence of goitre, especially amongst the poorer peasants who could not afford to buy the traditional salted cod that was eaten once a year to celebrate the pig-killing. Dietary deficiencies, in particular a shortage of protein, produced a people rarely more than  $1\frac{1}{2}$  metres tall. And there were social problems too. There was a limit to the population that Alto could support but the population always tended to exceed this limit. The land inheritance laws determined the form of the solution to this problem. Poor peasants, either without land or with insufficient land to make a living have left to work and live in the Alentejo or the Algarve and some have even gone to Brazil or Mozambique. Alto has probably been an exporter of people for centuries. Even today, there is pressure on the land.

The most convincing evidence that Alto has been a self-contained, stable community for many centuries are the old terraces that have been worked and kept in order ever since they were built. There are terraces near cottage 20 that have been abandoned only ten years – the result of a complicated family feud over ownership. Already the winter rains have swept away parts of the retaining walls and washed the soil down the steep slopes. Less than a generation of neglect would return these mountains to the natural chaos of their rocky, wooded state.

Whilst life in Alto continued almost unchanged from one century to the next, the world beyond changed out of all recognition. Feudalism gave way to capitalism, to the industrial revolution, to modern imperialism and two world wars. Mass consumer societies produced trains, buses, cars and planes, electricity and all manner of consumer durables. News of all this found its way back by word of mouth but it remained a world apart, yonder, far away over the mountains.

Then in 1950 it all came rushing into Alto at last. Suddenly goods that had to be hauled by donkey for hours or days along the old Moorish track came speeding down the new road in fifteen minutes from Monchique. The trucks rolled in with the fertiliser and the peasants found that they could increase their yields almost overnight. The effect was dramatic. They found that they were producing well in excess of their own needs. For the first time they had sizeable crops to sell from their terraces. In fact they had to sell them to pay for the fertiliser so they quickly got bound into the wider economy. A new class of local entrepreneurs arose to exploit these new possibilities.

Gradually, processes that had always been part of Alto's integrated existence were substituted by the 'higher technology' of Monchique. The windmill closed down in 1958, and nowadays the wheat is milled by an electric machine in Monchique. Earthenware pots and wicker baskets made in Alto were replaced by cheap plastic buckets. Earth floors in the cottages got concreted over. Cement also made it possible to build new water tanks exactly where they were needed instead of where the water could be retained with stone and mud dams without too much leakage. Plastic tubes made it possible to siphon water across gradients, making it unnecessary to maintain the old stone water channels that had to run round the gradients. Perhaps the most important new commodity was the motorbike, which with some ingenuity could be made to carry rather more than a donkey and did not need daily attention.

So far, so good. Plastic buckets are more convenient than earthenware

jugs. Concrete floors are a great improvement on beaten earth and a motorbike is far less bother than a donkey and goes at least twenty-five times faster. But all these things have to be paid for in cash. Besides, a motorbike wears out and has to be replaced, whereas a donkey, if it is female, can give birth to more donkeys. And whilst motorbikes consume petrol and produce noise and fumes, donkeys eat all sorts of rough stuff and produce large quantities of manure for use on the land. The donkeys were an integral part of the old ecology of the area. As their numbers were reduced, so was the amount of manure locally available. The manure had to be bought or even larger doses of chemical fertiliser applied in order to maintain the yields. And the next year more . . . and more. That of course has had its effects on the soil. It is now possible to dig all day on Alto's terraces and never find a single worm. They have been killed by massive doses of chemicals in the fertiliser. The changes that have taken place in Alto's soil over the past 25 years are not unique to Alto – they are common to almost all capitalist farming. The process is nevertheless worth describing.

Fertile soil is not an inorganic mixture of sand and clay.<sup>6</sup> It is a living medium full of bacteria, insects, grubs and worms, each part of an ecological cycle. Insects and grubs are usually seen only as pests that eat plants but many of them eat a lot of other matter and change its chemical composition into a form that plants can use. The bacteria also rot down the dead matter, in other ways. The real king of the soil, however, is the earthworm which consumes vast quantities of partly decomposed material and produces casts rich in all manner of good things. Most important of all, earthworms tunnel down as much as three metres into the soil, aerating it, thus making bacterial life possible, and heave up minerals that are down too deep for many plant roots. This is especially important with irrigated land, where weekly drenchings of water tend to leach the upper soil of important minerals. There are of course plants like alfalfa and comfrey that have roots long enough to draw up these elements but of these only alfalfa is grown in Alto and then only in odd patches.

The effect of chemical fertilisers on such land can now be sketched in. The fertiliser is too strong for the worms, which die, so the chemicals deep down in the soil are lost to the plants. Instead of the soil being a living medium, with worms that constantly turn the earth far deeper and more efficiently than the best spade or plough, it becomes a static, sterile medium with a one-way downwards flow of water and chemicals

beyond the reach of the plant roots. Without worms to aerate the soil, the important aerobic bacteria cannot operate and the soil gets increasingly compacted. Without bacteria, worms and insects, the dead plant matter does not decompose so the humus content of the soil declines. Once soil has lost its humus element (all the fibrous material that clings to your fingers when you run a fertile loam through your hands) it no longer holds water easily and gets further compacted. The water just sinks down through the soil very quickly, taking the chemicals from the fertiliser with it. That means that more fertiliser and more water have to be applied. It now takes more water to irrigate a terrace than it did 25 years ago. Eventually the soil just becomes a sterile medium for sticking plants in and keeping them upright. Nothing much will grow in it unless it is fed copious amounts of fertiliser for immediate consumption by the plants. Some crops even require additional supplies of fertiliser every fortnight – especially beans because they have such shallow roots.

This destruction of the soil has now taken place on all of Alto's terraces. It started off with the use of industrial fertiliser to increase the potato yields but because potatoes have to be rotated from year to year, every terrace has gone the same way. Now it is impossible to grow anything either as a cash crop or for home consumption without giving the plants liberal doses of fertiliser.

The economic implications are far-reaching. Twenty-five years ago, the middle peasant owning his own land was able to farm it almost entirely outside the money economy. Now the same peasant needs a cash income to pay for the fertiliser even to grow a few broad beans or peas for dinner. Of course he can make money by selling his surplus potatoes where previously he had little surplus to sell. But the cost of producing cash crops and food has increased year by year as the dose of fertiliser necessary has gone up. There has been at least a 100 per cent increase in the use of fertiliser over the past 25 years and on some terraces the figure is probably in excess of 200 per cent.

Potato prices have not kept pace with the cost of fertiliser. For the poorer peasants, the point of diminishing returns has already been reached and it is only a matter of time before it is reached by even the rich peasants. Already there are poor peasants in Alto who find that they lose by growing cash crops. The problem is that once the soil has been ruined, there is no easy road back. It takes years to bring soil back to natural fertility and during that time it can produce only low yields so

everyone is stuck with the fertiliser. But because they have to buy so much of it, the cash income from their agricultural produce is insufficient. They have to find casual work to pay for the fertiliser to grow their own food.

The subordination of the peasant economy has gone through three stages:

1. Before the road was built, the peasants were self-sufficient as far as possible. Middle peasants could be almost completely self-sufficient whilst rich peasants had to sell an agricultural surplus to pay for the labour they needed, and poor peasants with rents to pay had to make a small cash income, usually by specialising in a particular activity like cork-cutting, medronho distilling or picking sweet chestnuts. The only exports of any consequence from Alto were cork, medronho, sweet chestnuts, pigs and goats.
2. The road made possible the production and marketing of an appreciable agricultural surplus. Initially the peasants made more cash from marketing their surplus than they spent on fertiliser, cement and other things but after a few years, various local skills that formed the basis of traditional cash incomes were substituted by products from outside. Thus the miller, the baker and the basket maker gradually lost their traditional source of income.
3. Because they were using ever-increasing amounts of fertiliser and consequently damaging the soil, the peasants increasingly found that their agricultural activities were doing no more than breaking even, but by then they could not grow anything without fertiliser, so they were trapped into having to grow and market an agricultural surplus. By this time they were dependent on other activities for their cash needs, but because the traditional sources of cash income were diminishing or had disappeared, they were forced bit by bit into selling their labour in the modern sector to the capitalist class who did so well out of selling them the original fertiliser.

This might not look so bad if one forgets for the moment that the soil has been destroyed. After all, one way or another, the peasant can still make a cash income, still grow all his own food and in addition produce an agricultural surplus for the outside world. However, Alto's peasants increased their agricultural productivity entirely through the use of fertiliser and the diminution of the donkey population. There has been

no significant mechanisation of agricultural production and almost all the work is still done by hand. Twenty years ago a family would dig a ton of potatoes for themselves. Now they dig a ton for themselves and a ton for sale; when the cost of fertiliser for all the other crops is taken into account they make practically nothing from that extra ton. But they cannot afford to give up growing that extra ton either. It is actually back-breaking work digging a ton of potatoes by hand and when one considers that it has to be done every year, the work involved is totally out of proportion to the once-off benefits, like concrete floors in the cottages, that accrued from the original investment in fertiliser.

There are also longer-term ecological problems produced by the over-use of fertiliser. The fertilisers currently in use react with the sulphates and chlorides of trace elements like magnesium, boron and manganese, locking these elements up in combinations that are inaccessible to the plants. The crops and trees in Alto are already showing signs of these deficiencies. The lemon trees tend to have weak, yellowish leaves. Bean plants turn yellow when still young and the leaves of strawberry plants turn red several months before the autumn<sup>7</sup>. Whilst some of these deficiencies are difficult to counter, others are easily dealt with. Magnesium deficiency, for instance, can be quickly cured with a small dose of epsom salts. But knowledge of all this does not exist in Alto, so the home-grown food becomes deficient in these same minerals, which has predictable long-term effects on the health of the population.

To cap it all, the new high yield breeds of plants like beans and maize which are now being grown everywhere require very specific growing conditions, large doses of fertiliser and a lot of insecticide too because they are more susceptible to pests and diseases than the older breeds.

All this pales into insignificance, however, when compared with the most important consequence of the building of the road – the afforestation of the mountains with eucalyptus. Now that timber can be carted out of the area on trucks, the sweet chestnuts, medronho trees and scrub are being bull-dozed away and replaced by eucalyptus, the fastest growing tree in the world. Eucalyptus grows so fast, whole landscapes change from year to year. By the end of 1976, a hillside that was bare eucalyptus stumps at the beginning of the year was densely covered with trees five metres tall. The tree grows particularly fast in Alto because of the high annual rainfall.

On the face of it, eucalyptus plantations appear to be a good long term source of income for the community. They certainly produce a good income. But they drink water. They survive on arid hillsides only



because their roots grow deep down between the rocks to tap the underground water. Before the eucalyptus trees were planted, the heavy winter rainfall percolated through these mountains, reappearing as permanent springs lower down the slopes. Now that same rainfall is used by the eucalyptus trees – a hectare of 12 metre trees transpiring about a million litres of water per day – and the water table in the mountain falls year by year.

Once the water table has dropped below the level of the springs and tanks, the peasants dig wells and pump it up. Eventually the water table falls below the bottom of the well, the costs of digging deeper are not justified and the terraces are abandoned – or planted to eucalyptus. The Cunhal brothers were forced to abandon their land for this reason. In 1976 there was just a little water at the bottom of a 12 metres deep well which they had dug at the lowest point of their land. Twenty years previously the water table there was over 40 metres higher and a spring 28 metres above their bottom terrace produced a steady flow of water into their top tank. The Cunhals abandoned their land and became the local capitalists; that route is no longer open to anyone else.

Whilst the eucalyptus trees are sucking up water, the land on the terraces requires more water because it has lost its humus content through the over-use of fertiliser and can no longer retain moisture. There is a double water crisis – more is needed and less is available. So far, no one in Alto has been forced to abandon their land because of the eucalyptus plantations up above them but the crisis is developing. Already, some 10 per cent of Alto's terraces have lost their irrigated water supply and are useful only for winter or spring crops. Tio Felipe's rented terraces are the next to go this way. Carlos (22) can no longer grow beans after he has harvested potatoes because of the eucalyptus that he himself planted on the mountain above. After July, his terraces remain bare and barren. The land alongside his terraces rented by Tio Manuel (23) has the same problem. And below these, the ones farmed by Fernando (19) have dried up so much that the landlord has asked him to plant vines there.

Others are less affected so far. Senhor Carneiro (3), Carlos (2), Joao (5), Eloi (8) and Manuel Cunhal (12 and 13) all use water that has been run three kilometres round the mountain from the Valley of Maia. The water, which runs in plastic tubes, is not a collective venture. Five tubes run more or less parallel under the ground for the whole distance.

The Valley of Maia is the deepest in the whole Serra. It is approached through a sheer ravine that runs round the back of Alferce and then

widens into a bowl some three hundred metres deep and three kilometres across. It is immediately east of Mount Picota so it catches all the rain. In 1976 the upper rim of this bowl was being prepared for a eucalyptus plantation. In less than a decade the springs in the bottom of the bowl will be seriously affected. Two of these springs provide water for the village taps in Alto and Alferce.

For centuries the local system of dividing water rights worked to the satisfaction of everyone. No one could disturb another person's water supply because the water ran from natural springs. The worst that could happen was to use the water from a shared tank on the wrong day, and this could easily be rectified, though not without ill feeling. The only way of increasing the flow of water from a natural spring was to dig back into the mountain with a pickaxe, a laborious procedure which was never likely to tap someone else's spring inside the mountain. Now, as the water table falls and this vital liquid becomes more and more scarce, no holds are barred in competing for it. People are digging wells near other people's springs and using bull-dozers to gouge out small dams which intercept underground water runs. The winner in this situation is the person who can afford to dig the deepest well or hire the largest bulldozer. The old agreements about water rights are totally unable to cope with the new technology.

Slowly and inevitably Alto is drying up.<sup>8</sup> The social organisation that could prevent such a calamity does not exist. Many of those whose terraces are destined to go dry have themselves planted eucalyptus. Carlos (22) from Alferce and Carlos (2) the rich peasant, Jose the barber (17), Manuel Cunhal (12 and 13), Senhor Carneiro (3) and Joao (5) all have eucalyptus plantations ranging from a few hectares to a few hundred. Even Tio Felipe (14) has planted about a hundred eucalyptus trees amongst the cork oaks by his cottage. Each pursues the logic of private accumulation because nothing else is open to him. If he does not plant eucalyptus, someone else will. Only Carlos (22) owns the plantation that is directly drying up his own water supply. For most, the process is less direct, but there is nothing they can do to prevent others from planting eucalyptus above their terraces, and so prevent their water supply from drying up. Some still resolutely deny that it is happening, others plant eucalyptus for the day when they can no longer grow summer crops and need an alternative source of cash. Their individual rationality adds up to a collective ecological disaster.

The agricultural community of Alto now has a limited life. No doubt people will continue to live there and manage to get sufficient water for

household needs, but the terraces will no longer be able to produce summer crops and the economic and ecological basis for centuries of stable agricultural production, already undermined by the excessive use of fertiliser, will be destroyed.

So what? one may ask. Alto is a community of only 69 people. Portugal's food can be grown more economically by capital intensive methods in parts of the Alentejo, and trees have to be grown somewhere for paper pulp, cardboard and a thousand and one other industrial uses. It is not as though Alto is being made into a desert that will support nothing at all.

But if you sit by the windmill on the hill high above Alto and look down at the clusters of little cottages surrounded by their neat terraces far below you have to marvel at what has been achieved here. This once-isolated hamlet has existed in a state of balance with its natural environment for centuries. The balance was not planned but came about through an odd assortment of factors, through trial and error. But once achieved, the knowledge of how to maintain it forever was laid down in the local customs and culture and passed on orally from generation to generation. There is a wealth of knowledge in those cottages down below and it will be lost forever in a few years. That knowledge arose out of the annual struggle to grow enough food and some extra for the next year's seed. It is not just knowledge about a mode of production with very limited capital on a particular bit of mountain. It is also knowledge about the means of *perpetual reproduction* of that simple mode of production. It is a very sophisticated form of knowledge, lying deep in the local culture, almost inaccessible to an outsider because it is not part of conscious dialogue and will never be revealed in discussion. It can be deduced only by carefully watching, and above all, by copying local practices in great detail. Then, and only then can one begin to understand the wisdom of simple peasants and the limits to that wisdom that makes it impossible for them to cope with the consequences of things like fertiliser and eucalyptus plantations.

Alto was singularly ill-prepared for the invasion from the outside world that hit it in the years after 1950. The people had been kept illiterate and ignorant by nearly fifty years of fascism, and to this day, most of them remain totally bemused by the world beyond their bit of the mountains. Their one great strength – their local culture – could do nothing against the onslaught from the world outside. It offered them no basis for understanding, let alone dealing with, the new factors that were subordinating their traditional world to the demands of a wider capitalism.

The exciting revolutionary adventure that the Portuguese proletariat in town and country embarked upon after the military coup on 25 April 1974 hardly touched Alto.<sup>9</sup> There was the analfabetismo scheme which soon collapsed and an unsophisticated attempt by Communist supporters in Monchique to spread their influence in Alferce by building a proper sewerage system which also collapsed when the local capitalists convinced the peasants that it was all part of a devious and subversive plot.

But supposing the Revolution had managed to expand beyond Lisbon and the Alentejo, and supposing that the right wing coup on 25 November 1975 had not been successful. . . . The Revolution, with its uneasy mixture of Stalinist orthodoxy, Maoist 'fanshen' (meaning to overturn, to throw off the landlord yoke, gain land, stock, implements and houses and build a new world), of Trotskyite 'permanent revolution' and Anarchist 'autogestion', would eventually have reached Alto. It would have fired the local imagination with new ideas about co-operating over agricultural production, collectivising land, buying machinery communally, marketing crops as a collective, expropriating land from the landlords and rich peasants and redistributing it so that the whole community had the status of middle peasants, cutting out the middlemen and the local capitalists, controlling the planting of eucalyptus by the whole community. . . . For some it would have been a painful process and for others it would have been heaven on earth. With perseverance this community might have been able to re-organise its relationship with its natural environment, to learn the lessons from the subordination of their community to the demands of a capitalist world over the past twenty-five years and to plan an ecologically sound future. Faced with this task, it is doubtful whether the marxisms of the Revolution would have been adequate to deal with the growing ecological contradictions around Alto. It offers no theoretical basis for dealing with such matters; only anarchism has a tradition of concern with such things but also, no theoretical basis either.

In any case, the Portuguese Revolution was doomed from the start and ideas like these remain only as ideas. They form the basis for some of Joao's (5) sad dreams about what might have been, and of Senhor Carneiro's (3) recurring nightmares about what might have happened to his estates.

In twenty years the peasants of Alto will all be dead and the area will be a giant eucalyptus forest.

## 8 Some Wider Reflections

Towards the end of the day, with the work done and the sun dipping into the Western Atlantic, the old windmill above Alto is a good place to sit and contemplate the past and the future of human existence in this landscape. People had undoubtedly sat on this spot many times before, pondering the world below them. Only a few years ago the miller used to sit here, waiting for the donkeys to haul grain up the mountain from Alto. Five hundred years earlier, the shepherd sat on the same spot, watching over his goats and sheep. Maybe a thousand years ago, a Moor sat here and looked across at his new fort.

The landscape I was looking at was very different from each of theirs. I was surrounded by Australian eucalyptus trees, imported into these mountains a mere twenty years ago. The miller was surrounded by sweet chestnuts, a few of which still remain – old, gnarled specimens with hollow trunks. The shepherd was undoubtedly surrounded by scrub, his goats and sheep having destroyed much of the vegetation on the mountain. And the Moor – what did he see? Probably an endless forest of cork oaks in all directions, with smaller scrub like the medronho trees nearer the dry tops of the mountains.

There is no such thing as a natural landscape in this part of the world. Each tree, shrub, grass and rock reflects the activities of people over many centuries. It is not just the irrigated terraces that are human creations but the whole landscape. And of course, as people changed the landscape, so the changed landscape had its consequences for them. Down below me, on the cultivated terraces, there were plants from every part of the world. Potatoes from South America, loquat trees from China, maize from Central America and mandarin trees from Indonesia. The introduction of these new plants took centuries and because they were introduced into a subsistence economy in which the only interest was direct consumption, each of them found a niche in the slowly changing ecological balance and was integrated into the local pattern of plant life and human existence.

The eucalyptus trees all round the old windmill are the single major exception to this slow pattern of change. They are not the result of piecemeal local experimentation but of massive external intervention by the might of modern monopoly capital.

Throughout the spring of 1976, Joao (5) struggled up the mountain to this spot by the windmill with sacks of eucalyptus saplings on his back. He planted them carefully two metres apart down the slope to the east. Some died but most survived. It seems strange to think that these tiny plants, less than half a metre high and almost lost amidst the rocks and boulders, should mark the final subordination of Alto to the demands of the outside world. Joao knew perfectly well what these trees were doing. He also knew exactly why he was planting them himself – to provide an income for the day his terraces go dry. Like everyone else in Alto, Joao is surrounded by contradictions. These trees make absolutely no sense to a self-sufficient community but they are immensely profitable and that is what counts in the modern world. This landscape is being parched dry in the name of profit.

The ecological balance is very delicate in areas like the Mediterranean rim, where the rainfall is concentrated into a few months of the year and there is a long summer drought. It requires very little human intervention to destroy this pattern forever. Indeed, the dry mountains from this farthest tip of Western Europe right across to Greece, Turkey and beyond were once covered with good soil, trees and grasses.

Like the Incas of Peru, the Moors who populated this landscape from the seventh century onwards were genuine soil makers. They painstakingly built the terrace walls and made an artificial soil in which to grow their food. Their form of social organisation allowed them to produce an agricultural surplus and maintain an ecological balance. Their descendants came under the influence of a Judeo-Christian tradition in which humanity was no longer an integral part of an ecological system but saw itself as God's tenants and the rest of their environment as the furnishings let with the property. They tended to treat their natural environment as an unlimited resource, there for the poaching, and the fact that in this Serra, an ecological balance was maintained right up to recent times is no doubt partly attributable to the continuing pervasiveness of Moorish traditions and partly to the limited technology locally available and the impossibility of marketing any agricultural surplus.

Elsewhere on the Mediterranean rim, this has not been the case. As society's ability to manipulate and dominate its natural environment

increased with the domestication of animals and the manufacture of tools, it began to create a surplus. If the surplus could easily be exchanged, if, in other words, the surplus value could be realised, society's relation to its natural environment changed rapidly. Whole landscapes were ruined and climates altered. In many parts of the world a lifeless desert has been left behind. In civilisation after civilisation, the natural resources were depleted and then destroyed. The top soil was eroded and washed away by the rivers, and insufficient was left to maintain the civilisation which depended on it.

If people are to produce a surplus from agricultural pursuits and also to be able to reproduce this system over centuries, they have to develop the complementary need for careful ecological management of the natural resources. China and Japan are the main exemplars of agriculture being successfully practised for more than a thousand years on the same land, maintaining soil fertility and producing a surplus.<sup>10</sup> It is not at all surprising to discover that knowledge of ecological processes has reached a higher level of sophistication in these civilisations than elsewhere. Nowhere in the west would people pay gold for human excrement but until quite recently this was commonplace in China. For all their age-old self-sufficiency and care of the soil, the peasants of Alto never valued their own excrement as a source of soil fertility.

Paltry though it was to the outside world, the Serra de Monchique has always produced some surplus agricultural produce. But whenever an attempt was made to increase that surplus, it led to ecological disaster. Trees were felled to clear the mountain and make it a vast sheep run because they could be shepherded to distant markets whilst trees could only be carted a few hundred metres, and that with great difficulty. The sheep ate the bushes and grasses down to dry stalks and the soil from the mountain tops was eroded. Then the sheep went since they could be reared more profitably near the main market of Lisbon, down on the Alentejo. In due course, the mountains were planted with sweet chestnuts, to be replaced in turn by the eucalyptus.

No doubt there have been times when the higher slopes of the Serra de Monchique looked as bleakly barren as all the lower mountains around it. But this Serra is an exception. Its higher slopes came back to life. It is the highest range in Southern Portugal. There is nothing of similar height for over 200 kilometres in every direction. It is also very near the Atlantic. As a result, it has always cheated the surrounding mountains of rain. The consequences of the difference in rainfall have been exaggerated by human deprivations. Whereas the Serra has been

enabled by its high rainfall to recover from the over-felling and over-grazing of the distant past, the surrounding mountains have been eroded and dried up, their once green pasture and woods turned into rocky barren slopes. They have achieved a new ecological balance, kept together by garrigue that manages to thrust its roots deep down between the bare rocks and somehow survive the long, hot summer.

Alto's guaranteed rainfall has helped to maintain an ecological balance through the centuries, but that alone is not sufficient. The infrastructure which made it possible to practise agriculture on this mountain was originally laid down by the Moors. The form of the terraces and their relation to springs and irrigation tanks determined a pattern of life that has remained practically unchanged. New plants were brought into the mountain but they did not change the basic pattern. The technology of production did not change, neither did the destination of the crops. The quantity of human labour needed to garden a terrace remains the same today as it was for the Moors. This self-perpetuating stability was not the result of careful research, or mystical understanding of 'nature's ways' or even a social plan. No one calculated what the natural resources of the Serra could sustain, or how much people could tinker with these resources before changing them fundamentally, and perhaps permanently. It just happened that Alto had a particular combination of factors that produced an ecologically balanced, self-regulating situation, whilst thirty kilometres to the north in the Alentejo, and ten kilometres to the south on the Algarve plain, a drier climate, easier transport involving wheeled vehicles, closer markets and other factors led to a constantly changing agriculture, a history of class struggles and in parts, to the permanent erosion and destruction of much of the soil.

The factors that led to a balance in Alto are:

- (a) the local climate and geology;
- (b) the limitations on wheeled transport in and out of the Serra, and the dependence on donkeys;
- (c) the inheritance customs, resulting in scattered 'handkerchief plots' that required much travelling and limited the technology of agricultural production to the simple *enxada* which could be easily carried.
- (d) the difficulty of marketing any agricultural surplus, which had its effect on the local class structure, which in turn influenced the mode of production.



These various factors interact in a complex manner but their consequences add up to something that is not only ecologically stable but socially stable too. Because Alto did not produce any appreciable surplus, the type of class structure that is based on the extraction of surplus value is simply not found. Alto's history is neither feudal nor capitalist, but that of a self-sufficient peasantry. Instead of producing an agricultural surplus – and being organised to produce such a surplus – the local population simply increased to the maximum the terraces could sustain within the existing technology of production. The surplus population – those with little or no land – tended to leave and join the rural proletariat of the Alentejo or the Algarve. The Serra de Monchique has probably exported labour for centuries.

The absence of any appreciable surplus has profound implications for any community. It means, first of all, that there is no class structure, though of course there may well be status differences. It means secondly, that there are no class contradictions, and therefore no internal pressures for social change. It means thirdly that there is no technological change because the dynamic for such change arises out of the internal class contradictions of a society. Alto remained stable and unchanging for these reasons. When it started to change in 1950 it was not as the result of any internal development but because of the massive intervention of the outside world, together with all its many contradictions.

With the exception of China and Japan, there are practically no parts of the world where society has both produced an agricultural surplus and managed to achieve a balance with its physical surroundings such that the surplus could be generated and its mode of production re-generated for centuries. Most of Europe has gone through massive changes in agricultural techniques and preoccupations. Parts of Portugal and Spain that were once irrigated by large and complicated schemes are now dry sheep runs, while other parts which served for centuries as cattle ranches are now, through the addition of much factory fertiliser, growing sunflowers. Most of Europe has been accessible to wheeled transport for at least two thousand years. That means that where an agricultural surplus could be produced, it could be realised by getting the crops to a market. The class struggles that have taken place over the use and distribution of that surplus are history but the influence of this history on the land is largely ignored and goes unstudied.

The mere marketing of an agricultural surplus breaks the ecological cycle in the place the surplus was produced. Except in the Far East, city

shit rarely finds its way back to the land. Instead, the land is slowly robbed of its fertility and all the industrial fertilisers imaginable can never make up for that broken cycle. Of course it is possible to increase soil fertility by green manuring, composting and mulching but these are labour intensive and are rarely practised beyond the kitchen garden or allotment. In general, Westerners have been parasitic poachers of the soil, preoccupied more by the politics generated by an agricultural surplus than by the consequences of marketing it and breaking the local ecological cycle. Looking at the past, it is quite widely agreed that the destinies of most empires and civilisations can be traced back to the way the land was used. There is no good reason to believe the same is not the case today.

When agricultural production results in a surplus, the form and size of that surplus become the basis for divisions of labour, class structures and class struggles which in turn have consequences for the soil. In many parts of the world, these have resulted in the ruination of large tracts of land, making them practically useless for any further farming use, including forestry and pastoral animals. The interior of Spain is such an example, the Sahara another. Capitalist farming techniques based on a high degree of mechanisation and massive inputs of industrial fertiliser are now doing the same on a scale previously unknown.

It is in the light of such considerations that Alto is of such interest. Until 1951, its physical isolation maintained it as an area without an appreciable realisable surplus, living in a state of simple production. This simple production was in ecological balance with the environment and that made it possible to reproduce the simple mode of production from year to year. Such a state of affairs is probably a necessary condition for an unplanned balance between agriculture and the physical and biological processes in the natural environment. But other factors, mentioned above, are also necessary and so is a local culture consistent with these factors. The local customs of agricultural production are the distillation of generations of trial and error under relatively unchanging physical conditions and come to reflect all the possibilities and problems of making a living under those conditions.

Since 1951, Alto has been progressively subordinated by the capitalist world and integrated into the process of producing an agricultural surplus for it. As a result, it has developed a class structure and has lost its ecological balance. In fact one can say that the more massive the intervention of the capitalist world, the more Alto has lost its ecological

balance. This might sound as though the production of an agricultural surplus is the fatal bite of the apple whilst subsistence agriculture is the Garden of Eden. Although the experience of Alto seems to substantiate this view, it is not necessarily the case, though admittedly one has to go all the way to the Far East where surpluses and an ecological balance coexist to find the evidence. But even there, the important knowledge of how this has been done is being wilfully discarded in favour of the quick magic and longer term disaster of using industrial fertilisers indiscriminately.

Looking down at Alto, with its rapidly deteriorating ecology, one is tempted to ask how a new balance might be achieved. What type of economy, society, ideology and plan can consistently produce an agricultural surplus whilst maintaining the ecological balance? At the end of Chapter 7 there is a hesitant poke around at an answer but before examining the problem further, let us look at what answers – if any – are offered by economists or ecologists, marxists or anarchists.

Although there is a tradition of ecological thought in the Western World running back to St Benedict and beyond, it is only quite recently that human activities have multiplied so much as to shrink the natural environment and force the question of ecology to be considered on a global scale. There are two main themes in recent ecological discussions. One concentrates on the consequences of industrial pollution, manufactured fertilisers and chemical sprays on our diet and our environment.<sup>11</sup> The other concentrates on the consequences of present growth patterns like birth rates, energy consumption, the squandering of finite resources and the growing world food crisis projected into the future. Broadly speaking, the first theme is about the bio-chemistry of food chains and ecological cycles whilst the second is a statistical game, well illustrated by the writings of the Club of Rome.<sup>12</sup> There is also the more utopian aspect of ecological thought and the many attempts to demonstrate in practice that utopia is not an impossible dream.<sup>13</sup> There have been a vast number of attempts to concentrate, store and use renewable energy sources like the sun, the wind, the tide and rivers.<sup>14</sup> Unfortunately, none of this mental and practical activity carries the weight it should because it has no unifying scientific theory. Too often, there is a tendency in the ecological literature to reify nature and to use metaphysical, even romantic concepts like 'nature', 'nature's ways', 'natural equilibrium' and 'mother earth'. Worse still, most of these concepts have teleological implications and thus implicitly or even

explicitly rely on some concept of a deity. Some even argue that there are no scientific answers to the core ecological questions – that it is essentially a matter of metaphysics.<sup>15</sup>

This is part of a current tendency to see science as 'inhuman', the source of all our present alienations and troubles, a type of thought and investigation that is inextricably intertwined with the insatiable greed of industrial capitalism and which needs to be replaced by moral notions of love, kindness and beauty. But this is purely a reflection of disillusionment with the Judeo-Christian tradition rather than with science as such. Mankind could only start to understand its universe when Copernicus extracted astronomy from the metaphysical. The chemistry of the environment became open to rational enquiry only after Mendeleev constructed his periodic table. In more recent times, Darwin did the same for our biological views of man and Marx was the first to lay the foundations for a scientific understanding of human society. Metaphysics can produce a great deal of heat but only science can throw light on the nature of things. And so it is with ecology – until such time as its metaphysical concepts are replaced by scientific theories about the hidden factors at work it will remain an arena for ideological polemic rather than useful understanding. These hidden factors are geological, climatic, economic and political amongst others; they are all inter-related, and it will be impossible to understand one without understanding the others. So long as ecologists continue to consider 'self-sufficiency' and 'the creation of an ecological balance' in essentially moral terms, they will remain tied to reactionary notions about the imaginary past, and in the last analysis, to the Old Testament idea of the Garden of Eden and its implications of original sin.

With economists there is a different obsession; they are mainly interested in production, consumption and exchange, and the linchpin of classical economics and its modern derivatives in the concept of the Market, which supposedly determines the value of commodities for exchange, and therefore also the processes of production and consumption. Because economists choose to study only certain, limited aspects of human activity, a whole range of problems simply do not exist for them. Many economists have such a faith in the 'market mechanism' and its modern constraints in the form of the industrial state apparatus that they happily analyse ecological problems in terms of the costs – or even the possible profits – of dealing with specific forms of pollution. Amongst modern economists, only a few have seen fit to consider the

problem further, to extrapolate a few growth tendencies and to throw up their arms in horror, proclaiming that this cannot continue for ever. It is hardly surprising that economists have nothing constructive or interesting to say about self-sufficient farming because self-sufficient farming has nothing much to do with economics. The great objective of the middle peasant is to stay out of the money economy as far as possible. As a result, the life of a middle peasant cannot be analysed or understood in economic terms. The life of a peasant is about the muscular energy needed to produce the consumable energy necessary to sustain and reproduce life. Out of necessity, self-sufficient peasant life has always based its energy needs on human and animal muscle, the sun and the wind. There is a lot that can be learned from a community that remained isolated for centuries yet managed to live and recreate the means to live without interruption. Modern economists are incapable of learning anything from peasants because peasants do not fit their abstract categories.

City-based economists and ecologists apart, there is an increasing tendency for modern city dwellers to want to 'return to the land'. Their motives are varied, ranging from those who are convinced that industrial society has no possible future and can only result in catastrophe, to those who see self-sufficiency as the basis of 'the good life' and simply want a quiet, unalienated existence in the countryside where they can live out their Tolstoyan principles in seclusion.<sup>16</sup> There is a long tradition for such projects in the Western World, going back to the ecological practices of monastic collectives in the Dark Ages. Without exception they have either been corrupted and re-integrated into the dominant culture, or have failed. Today, there are in any case more city dwellers reading about such dreams than there are people laboriously putting their ideas into practice, wittingly or unwittingly trying to recreate the self-sufficient economy of the middle peasant, or more ambitiously, a community of middle peasants. There is of course a hopeless divide between peasants who practice a subsistence existence because they have no choice, and the urban refugees with a bit of capital and direct experience of all the consumer goodies presently available who voluntarily turn their backs on the whole apparatus and seek a bit of land out of choice. Nonetheless, because the modern homesteaders from the cities are involved in the practical business of growing enough to eat and some more from particular pieces of land, they are more likely to learn from peasant farming practices and to arrive at an understanding

of some basic ecological problems than any number of academics.

And now to the marxists who have an ambivalent attitude towards peasants, to say the least. Orthodox Leninists see them as an obstruction to the making of the socialist revolution. Marx himself expected revolutions to take place in the more advanced capitalist countries of Western Europe where the peasantry had already been successfully turned into an urban proletariat. In fact, the revolutions that have been made in the name of Marx (which does not mean that they are necessarily socialist or communist or marxist of course), have taken place in backward regions where the peasantry predominated. Trotsky argued that the Russian Revolution would have been impossible had it not occurred at the same time as peasant rebellions. Stalin collectivised the peasants by force in a desperate but successful attempt to industrialise the USSR and to prepare it militarily against the onslaught of fascism. The twenty million who died on the Eastern Front between 1941 and 1945 are paralleled, body for body, by a similar number of peasants who were butchered or starved in the collectivisation programme of the thirties. Even to this day, the peasants remain a political problem to the power elites of the USSR and Eastern Europe and it is widely acknowledged that the most productive farming in the whole of this region is on the little plots of land that the peasants have been allowed to keep for their own private production.

The Chinese Revolution took a different route because it was based on the peasantry and the land reforms that took place bit by bit from 1927 through to the 1950s consisted basically of making everyone a middle peasant through the process of 'fanshen'. What has happened since is not so clear, though China is now the biggest importer of industrial fertiliser in the world and Chinese farming methods are becoming increasingly industrialised.<sup>17</sup> Whether the age-old tradition of ecologically balanced farming in China has been adapted to deal with these new circumstances is doubtful. The process of building a strong industrial state is probably almost impossible to reconcile with such a tradition.

Marxists of all persuasions still remain more or less uninterested in ecological questions. Those in the West see ecology as a bourgeois distraction whilst the ruling bureaucracy in the USSR and China is into 'agribusiness' almost as much as the USA, but that does not mean that marxist theory is irrelevant to ecology. A basic concept in marxist theory is the 'mode of production', from which arises analyses of value, surplus value, class structure and class contradictions. The importance of marxist

theory is that it offers a basis for understanding how societies change through the working out of their internal contradictions. It therefore provides an insight into the strategies to be followed if societies are to be changed by conscious action. No amount of ecological blue-prints for an imaginary utopia are an adequate substitute for an understanding of the systematic conflicts that exist in a society and the ways in which they are most likely to develop. People can indeed make history and change the world but they are not free to choose the conditions under which they do it. They are doomed to failure if they ignore or try to go against the internal logic of the contradictions that are present. A fundamental weakness of marxist theory, one which becomes increasingly apparent as more and more potential ecological disasters crowd in on us, is its relative indifference to the whole complex question of the relationship between society and its physical and biological environment. It is clear from his notes on pre-capitalist economic formations that Marx was not naïve about this subject.<sup>18</sup> He simply did not spend much time on it and saw it as intellectually interesting but not politically relevant to the age he lived in. This is hardly surprising because the ecological strains generated by industrial society were not apparent a hundred years ago and some aspects of our present ecological crises would simply have been inconceivable then. In short, Marx took little interest in subsistence societies and abandoned them to the category of 'pre-history' – which is logical enough if history is defined as the story of class struggles, but not very helpful in understanding the internal logic of these simpler formations. As it is, the marxist concept of value is inapplicable to a subsistence agriculture. Before looking at the relationship between energy and value in a self-sufficient community let us look briefly at the peculiar relationship between energy and economics in the capitalist world.

Industrial society has produced a world where efficiency is defined in economic, not energy terms, usually as the ratio of capital employed to profit produced. This notion of efficiency has been the driving ideology behind capitalist accumulation and industrialisation (For the purposes of this analysis, the USSR and China are engaged in similar projects of increasing economic efficiency and accumulating capital, albeit using somewhat different organising principles which some have termed 'state capitalism'). This drive to increasing economic efficiency was born out of a certain concept of humanity – as the centre of the universe, as potentially all-intelligent, as involved in a battle against the

unpredictability and apparent capriciousness of the environment, as technologist involved in the subordination of the environment in the name of a 'progress' that increased its control not only over the environment, but also, and increasingly, over humanity as well. In energy terms, this has resulted in the most inefficient form of society ever known, one that is fuelled by finite sources of energy which are now running out. The entire apparatus is built on the extraction of relatively cheap energy from fossilised fuels stored in the earth's crust. This stored energy can be traced back to the photosynthesis of solar energy in the distant past. These resources are already in short supply and it is only a matter of time before they are totally squandered. Ironically, this industrial society can carry on from year to year only by constantly increasing production, consumption and waste. In 1976, American 'agribusiness' required an input of 25 calories of energy to produce one calorie of cooked food on the plate of the average urban dweller.<sup>19</sup>

There are of course the optimists who argue that by the time fossil fuels become rare the technology of nuclear fusion (as opposed to the fission processes of present nuclear power stations) will have been developed. Even if that happens, it will not solve the problems of industrialised agriculture because most fertiliser is produced from oil and alternative ways of fixing nitrogen from the air are unlikely to produce the tonnage of fertiliser required. Nor will it solve the problem of the deteriorating soil that results from the use of industrial fertiliser, not to mention the pollution of rivers, lakes and whole seas by the run-off of surface water.

The last quarter of the twentieth century will undoubtedly be dominated by inter-imperialist rivalry for the increasingly scarce mineral resources necessary for the maintenance of industrial societies. The forms that this rivalry will take are still vague but it is clear that the walls will go up round the richest imperialist centres and the poorer parts of the world will be forced to accept declining living standards, self-sufficient forms of survival and probably even starvation. The foreign policy of the imperialist nations (including the USSR) is increasingly dominated by the need to preserve access, and if possible, monopoly over strategic sources of energy and other raw materials.

In 1951, Alto was opened up to this bizarre world and it has quickly been dominated by its mode of production, its pursuit of profit and its concern with 'economic efficiency'. The peasant ideology has been swamped and replaced by the ideology of modern capitalism; the eucalyptus plantations expanding in every direction indicate precisely



where the biggest profits lie. It is ironic that industrialised agriculture, which is grossly inefficient in energy terms, produces a healthy profit whilst the peasant sector, for all its energy and efficiency, cannot make ends meet in economic terms.

As sources of cheap energy run out it becomes more important than ever to understand what this old peasant culture was all about. To most outsiders it seems worthless – primitive, bloody-minded old people who prefer to live the hard way, to keep their odd, back-breaking traditions, practice their irrational customs and resist progress in all its forms. By our standards, their standard of living is appallingly low, their living conditions uncomfortable if not actually wretched and their lives dominated by the need to till the land by hand, year in, year out, for ever.

But appearances are deceptive. As Marx once wrote – if things were as they appear to be, science would not be necessary. If self-sufficient peasants are not motivated by the pursuit of profit, what actually motivates them? In order to survive, they have to produce sufficient food to eat, sufficient seed for the next year, sufficient shelter from the rain and sufficient warmth from the cold of the winter. There is no point in producing a surplus beyond these needs. So peasant thinking is organised around the *effort* necessary to survive and to reproduce the means of survival from year to year. This has nothing to do with economics. It is about energy and the work effort necessary to produce the energy needs of life. Work and energy can be reduced to calories.

Self-sufficient peasant life can only be understood in energy, not economic, terms. Peasants need to use X calories of physical labour to produce Y calories of food, heating and seed for the next year, and Z calories of food for exchange with those things that cannot be locally produced. Since life has sustained itself on this pattern for hundreds, even thousands of years, Y plus Z must be consistently greater than X. That might sound like magic but it is possible because of the sun. Plants need phosphorus, potassium, calcium and nitrogen from the soil and traces of many other elements in order to photosynthesize, but the calories that they lay down in their tissues come from the sun. Plants are the most efficient converters and storers of solar energy that exist, and all animal life, ours included, is dependent on the ability of plants to convert solar energy into forms that can be eaten, digested and converted into muscular energy.

Rough and ready calculations based on my own tilling of the soil in

Alto, show that reasonably fertile land can produce at the very minimum, two calories of consumable energy for every calorie of human work. For some crops like potatoes, the ratio is nearer 1 : 4 even after accounting for carting the manure and potatoes by donkey, the donkey feed, the calories necessary to produce an *enxada* and even the calories necessary to make the fire to cook the potatoes. It turns out that self-sufficient peasant life is based on an extraordinarily efficient energy equation.<sup>20</sup>

Compare this with the energy efficiency of American 'agribusiness' in 1976, where it took five calories of fertiliser, tractor fuel and depreciation, human labour and chemical sprays to produce one calorie of food and an incredible extra 20 calories of energy to clean, package, transport and cook the food ready for eating in the city. In energy terms, self-sufficient peasant life is at least 50 times more efficient than industrialised food production. In addition, self-sufficient peasant agriculture producing only a small surplus has a good chance of being able to reproduce itself on the same soil for millenia whilst industrialised farming depends entirely on the availability of cheap but finite energy sources and produces a never-ending trail of ecological disasters in its wake.

In the pursuit of profit and in the name of progress, these old, incredibly efficient peasant societies have been all but wiped off the face of the earth. Alto survived intact up until the middle of this century because it was inaccessible. The road was built so that this 'backward' area could be 'developed' or in other words, subordinated to the pursuit of profit. Until the road was built, Alto was of no consequence to the wider world because it produced insufficient surplus. Now it is being increasingly integrated into the wider capitalist system, producing a profit for the local capitalists and the timber mills in the Alentejo. In energy terms, Alto is an increasingly inefficient community and that of course hits those peasants whose lives are still based on energy efficiency rather than economic efficiency. But Alto now produces a profit and that is what counts.

As the industrialised world moves steadily closer to the final depletion of its cheap energy resources there will have to be a shift of emphasis back towards the renewed use of the sun, the wind, rivers and the tide. It will be necessary to revert to the only unlimited sources of energy available on this planet.

It will take time for ecology to break with its metaphysical and moral

traditions and develop as a science but the material circumstances necessary for this development now exist. If ecology does develop scientifically, it will probably become as much a basis for modern anarchist practice as marxist economics has been the scientific basis of much revolutionary socialist practice. So far, anarchist theory has existed more as a set of moral precepts than as a scientific basis for action but perhaps with the growing ecological crisis, it will come into its own. Scientific progress is a process of making increasingly conscious approximations to hidden realities. With hindsight, the science of previous generations can always be seen as a form of ideology compromised by the existing social structure. Science does not develop through autonomous intellectual endeavour. Like all other forms of human consciousness, its very concepts are limited and determined by current modes of production and their resulting structures. To marxists at least, it should not be at all surprising if the growing ecological crises of industrial civilisation force a radical revision of marxism, and perhaps the total relegation of classical economics and its modern derivatives to the realm of ideology. And for all the traditional hatred between marxists and anarchists, the growing ecological crises might yet force some productive synthesis of ideas.

This chapter started with a question: looking down on Alto from the derelict windmill, at the expanding eucalyptus plantations and the deteriorating terraces, can one say what type of plan, economy, society and ideology can bring it back into ecological balance, whilst still producing an agricultural surplus? The excursion above is no answer but it might clarify the nature of the question and its relevance to the world beyond Alto.

Without any trace of sentimentality for the satisfactions and discomforts of peasant life in the past, it will be necessary to re-learn the cultures that have been destroyed and lost, examine with great care the energy equations of self-sufficient farming and build anew from this base. The people of Alto are not just a backward pocket of resistance to progress. They and their increasingly subordinated culture are far more relevant to the future of mankind than any of them would ever believe.

Perhaps our collective ability to understand our environment and organise our affairs will not be great enough. But maybe, in due course, modern industrial society with all its compulsive consumption and waste will come to be seen as an enormous backwater in which the human spirit almost perished. Perhaps in due course the eucalyptus forests

around Alto will be uprooted and replaced by plants that can fit into a local ecological balance. Perhaps the terraces below the derelict windmill will be painstakingly returned to fertility and again worked efficiently. Perhaps on the site of this derelict windmill, people will yet again harness the infinite energy of the wind.

## Notes

1. The yield is about the same as can be expected in Britain – around 6 tons to the acre – but the price fetched in Alto, at about £90 per ton, is little more than half the £175 per ton made by the British farmer in 1977.
2. The traditional agricultural surplus of the Serra de Monchique was animals and the products of forest farming. There is a very important difference between forestry and forest farming. Forestry is the process of growing timber whilst forest farming concentrates on the products of trees rather than the trees themselves – chestnuts, cork, olives, fruit, etc.

The ecological implications of forest farming are spelled out by J. Russell Smith in *Tree Crops* and by J. Sholto Douglas and Robert A. de J. Hart in *Forest Farming*. In Edward Hyams' *Soil and Civilisation* the long period of forest farming in the ancient history of Western Europe is held to be important for the gradual building up of a highly fertile soil.

3. The most stimulating critique of the 'dual economy' approach of bourgeois social scientists is 'The sociology of development and the underdevelopment of sociology' by Andre Gunder Frank, which appears, in amongst other places, in Cockcroft, Frank and Johnson *Dependence and Underdevelopment* (see especially pp. 375–81). Whilst agreeing wholeheartedly with Frank's overall argument and his condemnation of the sociology of development, I do think he overstates his case when he maintains that 'the entire social fabric of the underdeveloped countries has long since been penetrated and transformed by, and integrated into the world embracing system of which it is an integral part' (pp. 377–8). The present study of Alto indicates that this integration, or subordination, is a recent phenomenon even in parts of Europe. (Though in many respects, Portugal is a good example of an underdeveloped nation – one that has been underdeveloped.) On the other hand, I have shown that the local capitalist class that arose once the Serra de Monchique was producing a marketable surplus was entirely parasitic upon the peasants, the very opposite of what the sociological literature on development would lead one to expect. As Marx has pointed out, 'Capital subordinates labour on the basis of the technical conditions in which it historically finds it. It does not, therefore, immediately change the mode of production. (*Capital*, vol 1, p. 310.)
4. My categorisation of the subsistence sector into four main groups follows that of the Agrarian Reform Law of the People's Republic of China, as presented in William Hinton's *Fanshen* (pp. 623–6).
5. The progressive demoralisation of a very different rural community is described by Hugh Brody in *Inishkillane*.
6. For a thoroughly straightforward account of the structure of fertile soil, see

John Russell, *The World of the Soil*. Although Russell is aware of the consequences of chemical fertilisers (pp. 271–2) he merely states that ‘progress cannot be halted’ (8). For a more ecologically sound approach, the classic text is Albert Howard’s *Agricultural Testament*. This has stimulated many more recent contributions, amongst which Robert Rodale’s *The Basic Book of Organic Gardening*, Joseph Cocannouer’s *Organic Gardening and Farming*, and F. Lappe’s *Diet for a Small Planet*, are worth mentioning. For an ambitious and stimulating historical study of soil structures, see Hyams’ *Soil and Civilisation*.

7. The complex subject of mineral deficiencies is well summarised in *The Diagnosis of Mineral Deficiencies in Plants*, by T. Wallace.
8. For an account of the disputes that arose as the result of the irrigation water being diverted from a village, see Ignazio Silone’s *Fontamara*.
9. For a very readable, though passionately anti-Leninist account of the Portuguese Revolution from 25 April 1974 to 25 November 1975, see Phil Mailer, *Portugal – the Impossible Revolution*.
10. For an account of Chinese and Japanese farming systems, see the classic work first published in 1911 by F. King, *Farmers of Forty Centuries*. The wisdom of ancient Chinese agriculture never extended over to the loess of lands of Western China where wilful deforestation has created some of the most incredible erosion patterns to be seen anywhere in the world. For other examples of permanent agriculture, see Hyams’ account of Incan farming in *Soil and Civilisation*.
11. Apart from the classics on pollution, starting with Rachel Carson’s *Silent Spring*, there is now a veritable industry around pollution, including journals like *The Pesticides Monitoring Journal* which are devoted exclusively to the monitoring of various man-made chemicals in the environment.
12. See Meadows and others, *The Limits to Growth*.
13. See articles in *The Ecologist*, *Quarterly Review of the Soil Association*, *The Complete Book of Self Sufficiency* by John Seymour, *Grow It* by Langer, and many, many others.
14. See Farrington Daniels’ *Direct Use of the Sun’s Energy*, various editions of the *Whole Earth Catalog*, the journals *Appropriate Technology*, *Practical Self Sufficiency*, *Resurgence*, and many others.
15. In *Small is Beautiful* E. F. Schumacher makes a point of arguing the non-scientific nature of ecological questions, and ends up by appealing to mystical notions.
16. For an interesting account of how American communists went self sufficient, see Helen and Scott Nearings’ *Living the Good Life*.
17. From an unpublished manuscript – Harris Gleckman, *Detente: Oil and Food Grease the Way*.
18. See E. J. Hobsbawm’s edited edition of Marx’s writings on pre-capitalist economic formations – though it is heavy going.

19. Official US statistics quoted in 'Towards a self-sustaining agriculture' by Richard Merrill, published in the *Journal of the New Alchemists* no. 2. The article is a short but devastating statistical analysis of US 'agribusiness' and its consequences.
20. Exploring the energy equations of various crops within a self-sufficient framework is now one of the aims of a farming project we have started in the Montseny Mountains of Catalonia. We can be contacted through Pluto Press.

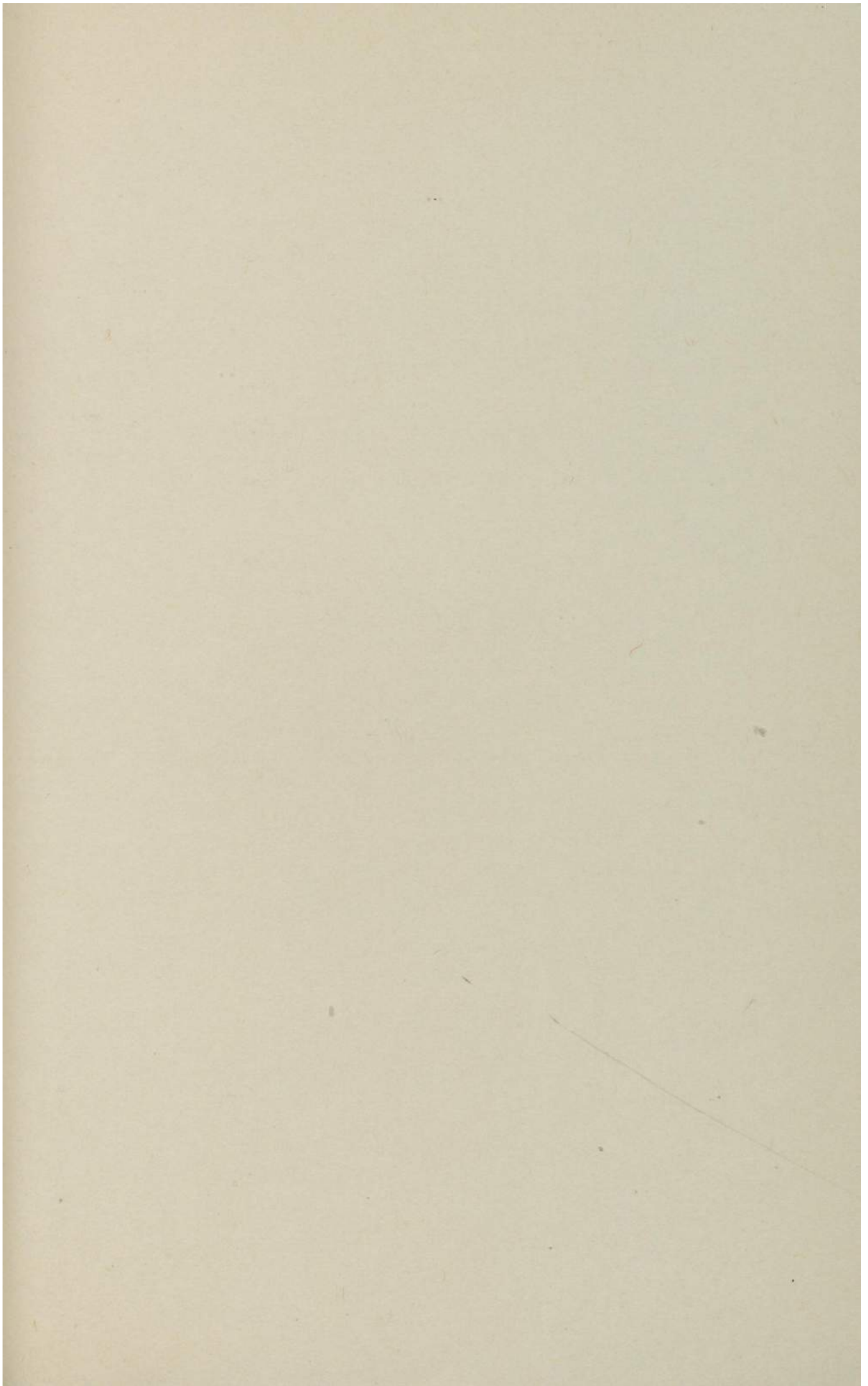
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Received of the Hon. Secy. War Dept. New York, August 1914  
the sum of \$100.00 for the purchase of the following books

1. The War of the Civil War, New York, Ballantine's  
2. The War of the Civil War, New York, Ballantine's

3. The War of the Civil War, New York, Ballantine's  
4. The War of the Civil War, New York, Ballantine's  
5. The War of the Civil War, New York, Ballantine's

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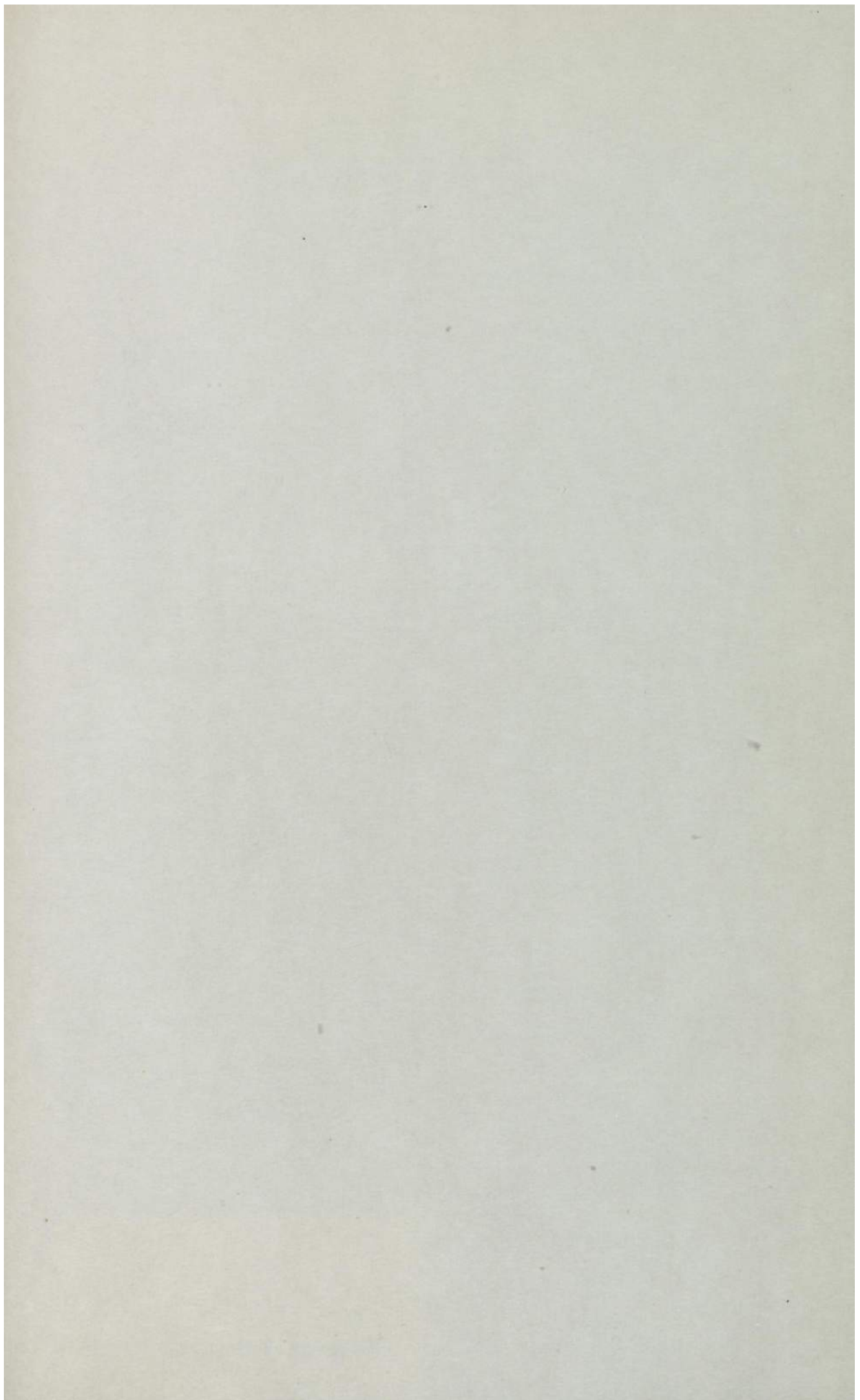
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**The Road to Alto** was opened in 1951. An isolated community that has gardened its luxuriant green irrigated terraces for centuries was suddenly connected to the outside world . . .

At first sight, Alto appears to be a simple cluster of cottages with a population of 69. In fact the recent history of the community encapsulates many of the conflicts, contradictions and changes that have dominated generations of human life in many parts of the world over the past 250 years.

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Is this necessary or inevitable? **The Road to Alto** is a wide-ranging analysis of the 'development' of a primitive community, its subordination to the demands of the outside world and now its rapid decline.

Robin Jenkins, sociologist turned subsistence farmer, wrote **The Road to Alto** while working thousand-year-old terraces in the Algarve, Portugal. Author of **Exploitation**, an account of the growing inequality between nations, he has worked for and campaigned against the race relations and community industries in Britain. He is currently reclaiming a terraced hillside in Catalonia for low-energy farming.

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