FERNAND BRAUDEL

The Mediterranean

and the Mediterranean World in the Age of Philip II

VOLUME I

Translated from the French
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Preface to the First Edition

I have loved the Mediterranean with passion, no doubt because I am a northerner like so many others in whose footsteps I have followed. I have joyfully dedicated long years of study to it – much more than all my youth. In return, I hope that a little of this joy and a great deal of Mediterranean sunlight will shine from the pages of this book. Ideally perhaps one should, like the novelist, have one's subject under control, never losing it from sight and constantly aware of its overpowering presence. Fortunately or unfortunately, the historian has not the novelist's freedom. The reader who approaches this book in the spirit I would wish will do well to bring with him his own memories, his own vision of the Mediterranean to add colour to the text and to help me conjure up this vast presence, as I have done my best to do. My feeling is that the sea itself, the one we see and love, is the greatest document of its past existence. If I have retained nothing else from the geographers who taught me at the Sorbonne, I have retained this lesson with an unwavering conviction that has guided me throughout my project.

It might be thought that the connections between history and geographical space would be better illustrated by a more straightforward example than the Mediterranean, particularly since in the sixteenth century the sea was such a vast expanse in relation to man. Its character is complex, awkward, and unique. It cannot be contained within our measurements and classifications. No simple biography beginning with date of birth can be written of this sea; no simple narrative of how things happened would be appropriate to its history. The Mediterranean is not even a *single* sea, it is a complex of seas; and these seas are broken up by islands, interrupted by peninsulas, ringed by intricate coastlines. Its life is linked to the land, its poetry more than half-rural, its sailors may turn peasant with the seasons; it is the sea of vineyards and olive trees just as much as the sea of the long-oared galleys and the roundships of merchants and its history can no more be separated from that of the lands surrounding it than the clay can be separated from the hands of the potter who shapes it. 'Lauso la mare e tente'n terro' ('Praise the sea and stay on land') says a Provençal proverb.

So it will be no easy task to discover exactly what the historical character of the Mediterranean has been. It will require much patience, many different approaches, and no doubt a few unavoidable errors. Nothing could be clearer than the Mediterranean defined by oceanographer, geologist, or even geographer. Its boundaries have been charted, classified, and labelled. But what of the Mediterranean of the historian? There is no lack of authoritative statements as to what it is not. It is not an autonomous world; nor is it the preserve of any one power. Woe betide the historian who thinks that this preliminary interrogation is unnecessary, that the Mediterranean as an entity needs no definition because it has long been clearly defined, is

instantly recognizable and can be described by dividing general history along the lines of its geographical contours. What possible value could these contours have for our studies?

But how could one write any history of the sea, even over a period of only fifty years, if one stopped at one end with the Pillars of Hercules and at the other with the straits at whose entrance ancient Ilium once stood guard? The question of boundaries is the first to be encountered; from it all others flow. To draw a boundary around anything is to define, analyse, and reconstruct it, in this case select, indeed adopt, a philosophy of history.

To assist me I did indeed have at my disposal a prodigious body of articles, papers, books, publications, surveys, some purely historical, others no less interesting, written by specialists in neighbouring disciplines – anthropologists, geographers, botanists, geologists, technologists. There is surely no region on this earth as well documented and written about as the Mediterranean and the lands illumined by its glow. But, dare I say it, at the risk of seeming ungrateful to my predecessors, that this mass of publications buries the researcher as it were under a rain of ash. So many of these studies speak a language of the past, outdated in more ways than one. Their concern is not the sea in all its complexity, but some minute piece of the mosaic, not the grand movement of Mediterranean life, but the actions of a few princes and rich men, the trivia of the past, bearing little relation to the slow and powerful march of history which is our subject. So many of these works need to be revised, related to the whole, before they can come to life again.

And then, no history of the sea can be written without precise knowledge of the vast resources of its archives. Here the task would appear to be beyond the powers of an individual historian. There is not one sixteenth-century Mediterranean state that does not possess its charter-room, usually well furnished with those documents that have escaped the fires, sieges, and disasters of every kind known to the Mediterranean world. To prospect and catalogue this unsuspected store, these mines of the purest historical gold, would take not one lifetime but at least twenty, or the simultaneous dedication of twenty researchers. Perhaps the day will come when we shall no longer be working on the great sites of history with the methods of small craftsmen. Perhaps on that day it will become possible to write general history from original documents and not from more or less secondary works. Need I confess that I have not been able to examine all the documents available to me in the archives, no matter how hard I tried. This book is the result of a necessarily incomplete study. I know in advance that its conclusions will be examined, discussed, and replaced by others and I am glad of it. That is how history progresses and must progress.

Another point is that by its inauspicious chronological position, between the last flames of the Renaissance and Reformation and the harsh, inward-looking age of the seventeenth century, the Mediterranean in the second half of the sixteenth century might well be described, as it was by Lucien Febvre, as a 'faux beau sujet'. Need I point out where its interest lies? It is

of no small value to know what became of the Mediterranean at the threshold of modern times, when the world no longer revolved entirely around it, served it and responded to its rhythms. The rapid decline of the Mediterranean about which people have always talked does not seem at all clear to me; rather, all the evidence seems to point to the contrary. But even leaving this question aside, it is my belief that all the problems posed by the Mediterranean are of exceptional human richness, that they must therefore interest all historians and non-historians. I would go so far as to say that they serve to illumine our own century, that they are not lacking in that 'utility' in the strict sense which Nietzsche demanded of all history.

I do not intend to say much about the attraction and the temptations offered by such a subject. I have already mentioned the difficulties, deceptions, and lures it holds in store. I would add just this, that among existing historical works, I found none which could offer general guidance. A historical study centred on a stretch of water has all the charms but undoubtedly all the dangers of a new departure.

Since the scales were so heavily weighted on both sides, was I right in the end to come down on the side of the unknown, to cast prudence aside and decide that the adventure was worth while?

My excuse is the story of how this book was written. When I began it in 1923, it was in the classic and certainly more prudent form of a study of Philip II's Mediterranean policy. My teachers of those days strongly approved of it. For them it fitted into the pattern of that diplomatic history which was indifferent to the discoveries of geography, little concerned (as diplomacy itself so often is) with economic and social problems; slightly disdainful towards the achievements of civilization, religion, and also of literature and the arts, the great witnesses of all worthwhile history; shuttered up in its chosen area, this school regarded it beneath a historian's dignity to look beyond the diplomatic files, to real life, fertile and promising. An analysis of the policy of the Prudent King entailed above all establishing the respective roles played in the elaboration of that policy by the king and his counsellors, through changing circumstances; determining who played major roles and who minor, reconstructing a model of Spanish foreign policy in which the Mediterranean was only one sector and not always the most important.

For in the 1580s the might of Spain turned towards the Atlantic. It was out there, whether conscious or not of the dangers involved, that the empire of Philip II had to concentrate its forces and fight for its threatened existence. A powerful swing of the pendulum carried it towards its trans-atlantic destiny. When I became interested in this hidden balance of forces, the physics of Spanish policy, preferring research in this direction to labelling the responsibilities of a Philip II or a Don John of Austria, and when I came to think moreover that these statesmen were, despite their illusions, more acted upon than actors, I was already beginning to move outside the traditional bounds of diplomatic history; when I began to ask myself

finally whether the Mediterranean did not possess, beyond the long-distance and irregular actions of Spain (a rather arid topic apart from the dramatic confrontation at Lepanto), a history and a destiny of its own, a powerful vitality, and whether this vitality did not in fact deserve something better than the role of a picturesque background, I was already succumbing to the temptation of the immense subject that was finally to hold my attention.

How could I fail to see it? How could I move from one set of archives to another in search of some revealing document without having my eyes opened to this rich and active life? Confronted with records of so many basic economic activities how could I do other than turn towards that economic and social history of a revolutionary kind that a small group of historians was trying to promote in France to the dignity that was no longer denied it in Germany, England, the United States, and indeed in Belgium, our neighbour, or Poland? To attempt to encompass the history of the Mediterranean in its complex totality was to follow their advice, be guided by their experience, go to their aid, and be active in the campaign for a new kind of history, re-thought, elaborated in France but worthy of being voiced beyond her frontiers; an imperialist history, yes, if one insists, aware of its own possibilities and of what it had to do, but also desirous since it had been obliged to break with them, of shattering traditional forms – not always entirely justifiably perhaps, but let that pass. The perfect opportunity was offered me of taking advantage of the very dimensions, demands, difficulties, and pitfalls of the unique historical character I had already chosen in order to create a history that could be different from the history our masters taught us.

To its author, every work seems revolutionary, the result of a struggle for mastery. If the Mediterranean has done no more than force us out of our old habits it will already have done us a service.

This book is divided into three parts, each of which is itself an essay in general explanation.

The first part is devoted to a history whose passage is almost imperceptible, that of man in his relationship to the environment, a history in which all change is slow, a history of constant repetition, ever-recurring cycles. I could not neglect this almost timeless history, the story of man's contact with the inanimate, neither could I be satisfied with the traditional geographical introduction to history that often figures to little purpose at the beginning of so many books, with its descriptions of the mineral deposits, types of agriculture, and typical flora, briefly listed and never mentioned again, as if the flowers did not come back every spring, the flocks of sheep migrate every year, or the ships sail on a real sea that changes with the seasons.

On a different level from the first there can be distinguished another history, this time with slow but perceptible rhythms. If the expression had had not been diverted from its full meaning, one could call it *social history*, the history of groups and groupings. How did these swelling currents

affect Mediterranean life in general – this was the question I asked myself in the second part of the book, studying in turn economic systems, states, societies, civilizations and finally, in order to convey more clearly my conception of history, attempting to show how all these deep-seated forces were at work in the complex arena of warfare. For war, as we know, is not an arena governed purely by individual responsibilities.

Lastly, the third part gives a hearing to traditional history – history, one might say, on the scale not of man, but of individual men, what Paul Lacombe and François Simiand called '*l'histoire événementielle*', that is, the history of events: surface disturbances, crests of foam that the tides of history carry on their strong backs. A history of brief, rapid, nervous fluctuations, by definition ultra-sensitive; the least tremor sets all its antennae quivering. But as such it is the most exciting of all, the richest in human interest, and also the most dangerous. We must learn to distrust this history with its still burning passions, as it was felt, described, and lived by contemporaries whose lives were as short and as short-sighted as ours. It has the dimensions of their anger, dreams, or illusions. In the sixteenth century, after the true Renaissance, came the Renaissance of the poor, the humble, eager to write, to talk of themselves and of others. This precious mass of paper distorts, filling up the lost hours and assuming a false importance. The historian who takes a seat in Philip II's chair and reads his papers finds himself transported into a strange one-dimensional world, a world of strong passions certainly, blind like any other living world, our own included, and unconscious of the deeper realities of history, of the running waters on which our frail barks are tossed like cockleshells. A dangerous world, but one whose spells and enchantments we shall have exorcised by making sure first to chart those underlying currents, often noiseless, whose direction can only be discerned by watching them over long periods of time. Resounding events are often only momentary outbursts, surface manifestations of these larger movements and explicable only in terms of them.

The final effect then is to dissect history into various planes, or, to put it another way, to divide historical time into geographical time, social time, and individual time. Or, alternatively, to divide man into a multitude of selves. This is perhaps what I shall be least forgiven, even if I say in my defence that traditional divisions also cut across living history which is fundamentally *one*, even if I argue, against Ranke or Karl Brandi, that the historical narrative is not a method, or even the objective method *par excellence*, but quite simply a philosophy of history like any other; even if I say, and demonstrate hereafter, that these levels I have distinguished are only means of exposition, that I have felt it quite in order in the course of the book to move from one level to another. But I do not intend to plead my case further. If I am criticized for the method in which the book has been assembled, I hope the component parts will be found workmanlike by professional standards.

I hope too that I shall not be reproached for my excessive ambitions,

for my desire and need to see on a grand scale. It will perhaps prove that history can do more than study walled gardens. If it were otherwise, it would surely be failing in one of its most immediate tasks which must be to relate to the painful problems of our times and to maintain contact with the youthful but imperialistic human sciences. Can there be any study of humanity, in 1946, without historians who are ambitious, conscious of their duties and of their immense powers? 'It is the fear of great history which has killed great history,' wrote Edmond Faral, in 1942. May it live again![1]

May, 1946

[1] My list of debts is long. To enumerate them all would fill a book. I shall list only the greatest. My grateful thoughts go to my teachers at the Sorbonne, the Sorbonne, that is, of twenty-five years ago: Albert Demangeon, Émile Bourgeois, Georges Pagès, Maurice Holleaux, Henri Hauser to whom I owe my first interest in economic and social history and whose warm friendship has been a constant comfort to me. In Algiers I benefited from the friendly assistance of Georges Yver, Gabriel Esquer, Émile-Félix Gautier, René Lespès; I had the pleasure in 1931 of hearing the marvellous lectures of Henri Pirenne.

I must express my particular thanks to the Spanish archivists who have helped me with my research and were my earliest masters in Hispanic studies, Mariano Alcocer, Angel de la Plaza, Miguel Bordonau, Ricardo Magdalena, Gonzalo Ortiz. I have the happiest of memories of all of them – as I do of our discussions at Simancas, the 'historical' capital of Spain. At Madrid, Francisco Rodriguez Marin gave me a princely welcome. I also wish to thank the archivists in Italy, Germany, and France whom I have inundated with requests in the course of my research. In my acknowledgments I would reserve a special place for Mr. Truhelka, well-known astronomer and incomparable archivist at Dubrovnik, who has been my great companion in my journeys through archives and libraries.

The list of my colleagues and students at Algiers, São Paulo, and Paris who gave me their help is long too, and they are dispersed throughout the world. I would especially thank Earl J. Hamilton, Marcel Bataillon, Robert Ricard, André Aymard, who have collaborated with me in very different ways. Of my companions in captivity two have been associated with my work, Maître Addé-Vidal, Counsel at the *Cour d'Appel* at Paris, and Maurice Rouge, urbanist and historian in his leisure time. I could not forget finally the assistance that the little group around the *Revue Historique* has always unstintingly accorded me – Maurice Crouzet and Charles-André Julien, in the days when Charles Bémond and Louis Eisenmann protected our aggressive youth. In the final corrections to the book I took note of the remarks and suggestions of Marcel Bataillon, Émile Coornaert, Roger Dion, and Ernest Labrousse.

What I owe to the *Annales*, to their teaching and inspiration, constitutes the greatest of my debts. I am trying to repay that debt as best I can. Before the war I only once made contact with Marc Bloch. But I think I can honestly say that no aspect of his thought is foreign to me.

May I finally add that without the affectionate and energetic concern of Lucien Febvre, this work would probably never have been completed so soon. His encouragement and advice helped me to overcome long-lasting anxiety as to whether my project was well founded. Without him I should undoubtedly have turned back once more to my endless files and dossiers. The disadvantage of over-large projects is that one can sometimes enjoy the journey too much ever to reach the end.

Part One

The Role of the Environment

The first part of this book, as its title suggests, is concerned with geography: geography of a particular kind, with special emphasis on human factors. But it is more than this. It is also an attempt to convey a particular kind of history.

Even if there had been more properly dated information available, it would have been unsatisfactory to restrict our enquiries entirely to a study of human geography between the years 1550–1600 – even one undertaken in the doubtful pursuit of a determinist explanation. Since in fact we have only incomplete accounts of the period, and these have not been systematically classified by historians – material plentiful enough it is true, but insufficient for our purpose – the only possible course, in order to bring this brief moment of Mediterranean life, between 1550 and 1600, out of the shadows, was to make full use of evidence, images, and landscapes dating from other periods, earlier and later and even from the present day. The resulting picture is one in which all the evidence combines across time and space, to give us a history in slow motion from which permanent values can be detected. Geography in this context is no longer an end in itself but a means to an end. It helps us to rediscover the slow unfolding of structural realities, to see things in the perspective of the very long term.[1] Geography, like history, can answer many questions. Here it helps us to discover the almost imperceptible movement of history, if only we are prepared to follow its lessons and accept its categories and divisions.

The Mediterranean has at least two faces. In the first place, it is composed of a series of compact, mountainous peninsulas, interrupted by vital plains: Italy, the Balkan peninsula, Asia Minor, North Africa, the Iberian peninsula. Second, between these miniature continents lie vast, complicated, and fragmented stretches of sea, for the Mediterranean is not so much a single entity as a 'complex of seas'. Peninsulas and seas: these are the two kinds of environment we shall be considering first of all, to establish the general conditions of human life. But they will not tell the whole story.

One one side, to the south, the Mediterranean is a near neighbour of the great desert that runs uninterrupted from the Atlantic Sahara to the Gobi Desert and up to the gates of Peking. From southern Tunisia to southern Syria, the desert directly borders the sea. The relationship is not

[1] Fernand Braudel, 'Histoire et sciences sociales, la longue durée', in: *Annales E.S.C.*, Oct.–Dec., 1958, pp. 725–753.

casual; it is intimate, sometimes difficult, and always demanding. So the desert is one of the faces of the Mediterranean.

On the other side, to the north, lies Europe, which if often shaken by Mediterranean influences has had an equally great and sometimes decisive influence on the Mediterranean. Northern Europe, beyond the olive trees, is one of the permanent realities of Mediterranean history. And it was the rise of that Europe with its Atlantic horizons, that was to decide the destiny of the inland sea as the sixteenth century drew to a close.

Chapters I to III, then, describe the diversity of the sea and go far beyond its shores. After this we shall have to consider whether it is possible to speak of the physical unity of the sea (Chapter IV, *Climate*) or of its human and necessarily historical unity (Chapter V, *Cities and Communications*). These are the divisions of a long introductory section whose aim is to describe the different faces, and the face, of the Mediterranean, so that we may be in a better position to view and if possible understand its multi-coloured destiny.

CHAPTER I

The Peninsulas: Mountains, Plateaux, and Plains

The five peninsulas of the inland sea are very similar. If one thinks of their relief they are regularly divided between mountains – the largest part – a few plains, occasional hills, and wide plateaux. This is not the only way in which the land masses can be dissected, but let us use simple categories. Each piece of these jigsaw puzzles belongs to a particular family and can be classified within a distinct typology. So, rather than consider each peninsula as an autonomous entity, let us look at the analogies between the materials that make them up. In other words let us shuffle the pieces of the jigsaw and compare the comparable. Even on the historical plane, this breakdown and reclassification will be illuminating.

I. MOUNTAINS COME FIRST

The Mediterranean is by definition a landlocked sea. But beyond this we must distinguish between the kinds of land that surround and confine it. It is, above all, a sea ringed round by mountains. This outstanding fact and its many consequences have received too little attention in the past from historians.

Physical and human characteristics. Geologists, however, are well aware of it and can explain it. The Mediterranean, they say, is entirely contained within the zone of tertiary folds and fractures covering the Ancient World from Gibraltar to the Indian Archipelago: in fact, it constitutes one section of the zone. Late foldings, some dating from the same time as the Pyrenees, others from the time of the Alps, raised and activated the sediments of a secondary Mediterranean much vaster than the one we know, chiefly enormous limestone deposits, sometimes over 1000 metres thick. With some regularity these violent foldings collided with ancient hard masses of rock, which were sometimes raised (like the Kabylias) or sometimes incorporated into great ranges, as is the case of the Mercantour and various axial ridges of the Alps or the Pyrenees. More often still, they collapsed – to the accompaniment of a greater or lesser degree of volcanic activity – and were covered by the waters of the sea.

Although interrupted by inlets of the sea, the mountains correspond on either side of the straits to form coherent systems. One range formerly linked Sicily and Tunisia; another, the Baetic range, existed between Spain and Morocco; an Aegean range used to stretch from Greece to Asia Minor (its disappearance is so recent in geological terms as to correspond

to the Biblical flood) – not to mention land masses like the Tyrrhenides continent of which there remain only a few islands and fragments scattered along the coast to mark the spot, that is, if geological hypotheses have some foundation in reality – for these are all hypotheses.[1] What we can be certain of is the architectural unity of which the mountains form the 'skeleton': a sprawling, overpowering, ever-present skeleton whose bones show through the skin.

All round the sea the mountains are present, except at a few points of trifling significance – the Straits of Gibraltar, the Naurouze Gap, the Rhône valley corridor and the straits leading from the Aegean to the Black Sea. There is only one stretch from which they are absent – but that is a very considerable one – from southern Tunisia to southern Syria, where the Saharan plateau undulates over several thousand kilometres, directly bordering the sea.

Let it be said too that these are high, wide, never-ending mountains: the Alps, the Pyrenees, the Apennines, the Dinaric Alps, the Caucasus, the Anatolian mountains, the mountains of Lebanon, the Atlas, and the Spanish Cordillera. They are impressive and demanding presences: some because of their height, others because of their density or their deep, enclosed, inaccessible valleys. They turn towards the sea impressive and forbidding countenances.[2]

So the Mediterranean means more than landscapes of vines and olive

[1] This is not the place for a detailed discussion of this controversial issue. A. Philippson, *Das Mittelmeergebiet*, 1904 (4th ed., Leipzig, 1922) is clearly out of date. For more recent geological explanations, the reader is referred to such classic works as Serge von Bubnoff, *Geologie von Europa*, Berlin, 1927; W. von Seidlitz, *Diskordanz und Orogenese am Mittelmeer*, Berlin, 1931 – a great work of general relevance despite its title; or H. Stille, *Beiträge zur Geologie der westlichen Mediterrangebeite*, hsrg. im Auftrag der Gesellschaft der Wissenschaften, Göttingen, 1927–35; or to monographs such as H. Aschauer and J. S. Hollister, *Ostpyrenäen und Balearen* (Beitr. zur Geologie der westl. Mediterrangebiete, no. 11), Berlin, 1934; Wilhelm Simon, *Die Sierra Morena der Provinz Sevilla*, Frankfurt, 1942, or the recent study by Paul Fallot and A. Marin of the Rif Cordillera, published in 1944 by the Spanish Institute of Geology and Mineralogy (cf. paper given to *Académie des Sciences*, session of 24th April, 1944, by M. Jacob). It would be impossible to compile a complete list of the many works by P. Birot, J. Bourcart, and J. Lecointre. The return to the apparently outdated theory of vanished continents and mountain ranges was suggested to me by Edouard Le Danois, *L'Atantique, histoire et vie d'un océan*, Paris, 1938. Raoul Blanchard's clear and stimulating book, *Géographie de l'Europe*, Paris, 1936, (Eng. translation by Crist, *A Geography of Europe*, London, 1936) stresses the family resemblance of the Mediterranean mountains, for which he suggests the general name of Dinarides. For the Dinarides proper, see Jacques Bourcart, *Nouvelles observations sur la structure des Dinarides adriatiques*, Madrid, 1929. P. Termier, *A la gloire de la terre*, 5th edition, has a chapter on the geology of the Western Mediterranean. As I said I do not here wish to enter into discussion of the geological or geographical problems of the Mediterranean as a whole, for which the reader is referred to the standard works. For the present state of research and an up-to-date bibliography, see P. Birot and J. Dresch, *La Méditerranée et le Moyen-Orient*, 2 vols., Paris, 1953–56.

[2] The dense, compact character of the mountains under the general heading Dinarides is well brought out by R. Blanchard, *op. cit.*, pp. 7–8. M. Le Lannou, *Pâtres et paysans de la Sardaigne*, Paris, 1941, p. 9.

Fig. 2: *The folds of the Mediterranean*

Hercynian blocks banded, Alpine foldings in black; the white lines indicate the direction of the mountain ranges. To the south, the Saharan plateau in white, borders the Mediterranean from Tunisia to Syria. To the east, the tectonic fractures of the Dead Sea and the Red Sea. To the north, the intra-Alpine and extra-Alpine plains are in white. The dotted lines mark the furthest limit of former glaciers.

trees and urbanized villages; these are merely the fringe. Close by, looming above them, are the dense highlands, the mountain world with its fastnesses, its isolated houses and hamlets, its 'vertical norths'.[3] Here we are far from the Mediterranean where orange trees blossom.

The winters in the mountains are severe. Snow was falling thickly in the Moroccan Atlas when Leo Africanus, crossing in winter, had the misfortune to be robbed of clothes and baggage.[4] But any traveller who knows the Mediterranean well will have seen for himself the winter avalanches, blocked roads and Siberian and Arctic landscapes only a few miles from the sunny coast, the Montenegrin houses buried in snow, or in Kabylia the Tirourdat col, the gathering point for tremendous blizzards, where up to four metres of snow can fall in a night. In an hour skiers from Chrea can reach Algiers where roses are in bloom, while 120 kilometres away in the Djurdjura, near the cedar forest of Tindjda, the local inhabitants plunge bare-legged up to their thighs in snow.

The traveller will have seen too the snows that linger until midsummer, 'cooling the eye', as a visitor once put it.[5] The peak of the Mulhacen is

[3] Strzygowski's expression. In Greece, notes A. Philippson, *op. cit.*, p. 42, it is often possible to climb up above the belt of orange and olive trees, pass through all the European zones of vegetation and arrive practically at the point of all-year-round snow.

[4] Leo Africanus, *Description de l'Afrique, tierce partie du Monde*, Lyons, 1556, p. 34.

[5] Président Charles de Brosses, *Lettres familières écrites en Italie*, Paris, 1740, I, p. 100.

white with snow while down below, Granada swelters in the heat; snow clings to the slopes of the Taygetus overlooking the tropical plain of Sparta; it is preserved in the crevasses of the mountains of Lebanon, or in the 'ice boxes' of Chrea.[6] These are the snows that explain the long Mediterranean history of 'snow water', offered by Saladin to Richard the Lionheart, and drunk to fatal excess by Don Carlos in the hot month of July 1568, when he was imprisoned in the Palace at Madrid.[7] In Turkey in the sixteenth century it was not merely the privilege of the rich; in Constantinople, but elsewhere as well, Tripoli in Syria, for instance,[8] travellers remarked on merchants selling snow water, pieces of ice, and water-ices which could be bought for a few small coins.[9] Pierre Belon relates that snow from Bursa used to arrive at Istanbul in whole boatloads.[10] It was to be found there all the year round according to Busbecq, who was astonished to see the janissaries drinking it every day at Amasia in Anatolia, in the Turkish army camp.[11] The snow trade was so important that the pashas took an interest in the exploitation of the 'ice mines'. It was said in 1578 to have provided Muḥammad Pasha with an income of up to 80,000 sequins a year.[12]

Elsewhere, in Egypt, for example, where snow arrived from Syria by

[6] The list could easily be extended to the Mercantour behind Nice; Mount Olympus 'with its greenish crown of snow' (W. Helwig, *Braconniers de la mer en Grèce*, Leipzig, 1942, p. 164); the snows of Sicily noted by Eugène Fromentin, in his *Voyage en Égypte*, Paris, 1935, p. 156; and 'that terrible snow desert' near Erzurum mentioned by the Comte de Sercey (*Une ambassade extraordinaire en Perse en 1839–1840*, Paris, 1928, p. 46) apropos of the Armenian mountains. See also the astonishing lithograph by Raffet of the retreat from Constantine in 1836, which could be a picture of the retreat from Moscow (reproduced in Gabriel Esquer, *Inconographie de l'Algérie*, Paris, 1930). Or the details given by H. C. Armstrong (*Grey Wolf, Mustafa Kemal*, 1933, p. 56) of the 30,000 Turkish soldiers surprised by winter in the mountains on the Russian frontier during the 1914–18 war, who died huddled together for warmth and were found long afterwards by Russian patrols. On the persistence of snow in North Africa, a note by P. Diego de Haëdo, *Topographia e historia general de Argel*, Valladolid, 1612, p. 8 v°: '. . . en las montañas mas altas del Cuco o del Labes (do todo el año esta la nieve)'. Heavy snowfalls saved Granada in December 1568. Diego de Mendoza, *Guerra de Granada*, Biblioteca de autores españoles, vol. XXI, p. 75.

[7] The best book on Don Carlos is still Louis-Prosper Gachard, *Don Carlos et Philippe II*, 1867, 2nd ed., 2 vols. The question is also raised in Ludwig Pfandl, *Johanna die Wahnsinnige*, Fribourg-en-Brisgau, 1930, p. 132 ff. The theory advanced by Viktor Bibl, *Der Tod des Don Carlos*, Vienna, 1918 is unacceptable.

[8] *Voyage faict par moy Pierre Lescalopier*, MS H. 385, Montpellier School of Medicine, f° 44 and 44 v°, published in an abridged version by Edouard Cléray, under the title, 'Le voyage de Pierre Lescalopier Parisien de Venise à Constantinople l'an 1574', in *Revue d'Histoire diplomatique*, 1921, pp. 21–25.

[9] Salomon Schweigger, *Ein newe Reissbeschreibung auss Teutschland nach Constantinopel und Jerusalem*, Nuremberg, 1639, p. 126.

[10] Pierre Belon (Belon du Mans), *Les observations de . . . singularités*, Paris, 1553, p. 189.

[11] G. de Busbecq, *The Turkish Letters*, trans. E. S. Forster, Oxford 1927 (reprinted 1968), Letter I, p. 53, letter III, p. 153.

[12] S. Schweigger, *op. cit.*, p. 125.

relays of fast horses; in Lisbon which imported it from great distances;[13] in Oran, the Spanish *presidio*, where snow arrived from Spain in the brigantines of the Intendance;[14] in Malta, where the Knights, if we are to believe them, would die if snow did not arrive from Naples, their illnesses apparently requiring 'this sovereign remedy',[15] snow was, on the contrary, the height of luxury. In Italy as in Spain, however, snow water seems to have been used widely. It explains the early development of the art of ice cream and water-ice in Italy.[16] Its sale was so profitable in Rome that it became the subject of a monopoly.[17] In Spain snow was piled up in wells and kept until summer.[18] Western pilgrims travelling to the Holy Land in 1494 were none the less astonished to see the owner of the boat presented, on the Syrian coast, with 'a sack full of snow, the sight of which in this country and in the month of July, filled all on board with the greatest amazement'.[19] On the same Syrian coast, a Venetian noted with surprise in 1553 that the 'Mores', 'ut nos utimur saccharo, item spargunt nivem super cibos et sua edulia,[20] 'sprinkle snow on their food and dishes as we would sugar'.

In the heart of the warm Mediterranean these snowy regions impress by their originality. Their massive bulk and their constantly moving population compel the attention of the plains, of the brilliant but narrow creations along the coastline, precisely to the extent, and we shall be coming back to this, that these 'favoured' regions require manpower and, since they depend on trade, means of communication. They compel the attention of the plain, but arouse its fear as well. The traveller tries to go round the obstacle, to move at ground level, from plain to plain, valley to valley. Sooner or later he is obliged to travel through certain gorges and mountain passes of sinister repute, but he resorts to them as little as possible. The traveller of yesterday was almost entirely confined to the plains, the gardens, the dazzling shores and teeming life of the sea.

To tell the truth, the historian is not unlike the traveller. He tends to linger over the plain, which is the setting for the leading actors of the day, and does not seem eager to approach the high mountains nearby. More than one historian who has never left the towns and their archives would be surprised to discover their existence. And yet how can one ignore these conspicuous actors, the half-wild mountains, where man has taken root like a hardy plant; always semi-deserted, for man is constantly leaving them? How can one ignore them when often their sheer slopes come right

[13] J. Sanderson, *The travels of John Sanderson in the Levant (1584–1602)*, 1931, p. 50, n. 3.

[14] B. M. Add. 28 488, f° 12, about 1627.

[15] A. N. A. E. B¹890, 22nd June, 1754.

[16] On ice cream and water-ice, Alfred Franklin, *Dict. Hist. des Arts*, p. 363–364; *Enciclopedia Italiana*, *Treccani*, article 'Gelato'.

[17] Jean Delumeau, *La vie économique à Rome*, 1959, I, p. 398. For a proposal for a tax on snow, A.d.S. Naples, Sommaria Consultationum, 7, f° 418–420, 19th July, 1581.

[18] Ortega y Gasset, *Papeles sobre Velásquez y Goya*, Madrid 1950, p. 20.

[19] Petrus Casola, *Viaggio a Gerusalemme*, 1494 (edited Milan 1855), p. 55.

[20] Museo Correr, Cicogna 796, *Itinerary of Gradenigo*, 1553.

down to the sea's edge?[21] The mountain dweller is a type familiar in all Mediterranean literature. According to Homer, the Cretans were even then suspicious of the wild men in their mountains and Telemachus, on his return to Ithaca, describes the Peloponnese as covered with forests where he lived among filthy villagers, 'eaters of acorns'.[22]

Defining the mountains. What exactly is a mountain? To take some simple definition – all land in the Mediterranean region over 500 metres for instance – would be to draw a completely arbitrary line. What should be reckoned are the uncertain human boundaries which cannot easily be shown on a map. As Raoul Blanchard warned us long ago, 'It is well nigh impossible even to provide a definition of the mountains which is both clear and comprehensible.'[23]

Can we define the mountains as the poorest regions of the Mediterranean, its proletarian reserves? On the whole this is true. But, in the sixteenth century, there were plenty of other poor regions below the 500-metre level, the Aragon Steppes and the Pontine marshes, for instance. Besides, many mountains are, if not rich, at any rate reasonably prosperous and comparatively well populated. Some of the very high valleys in the Catalan Pyrenees are even able to absorb some of 'their own emigrants, from one village to another'.[24] Many mountains are also rich because of their high rainfall: according to Arthur Young, in the Mediterranean climate, soil is unimportant, 'what does all is sun and rain'. The Alps, the Pyrenees, the Rif, the Kabylias, all the mountains exposed to winds from the Atlantic, have green hillsides where grass and trees grow thickly.[25] Other mountains are rich because of their mineral resources.

[21] Cf. a letter from Villegaignon to the king of France in 1552; 'The entire sea coast, from Gaietta to Naples and from Naples to Sicily, is bounded by high mountains, at the feet of which lies a beach open to all the winds of the sea, as you would say that the coast of Picardy is open to the sea-winds, except that your coast has rivers along which one might retreat, and here there are none', Abbé Marchand's communication, 'Documents pour l'histoire du règne de Henri II', in *Bulletin hist. et phil. du Comité des travaux hist. et scient.*, 1901, p. 565–8.

[22] V. Bérard, *Les Navigations d'Ulysse*, II, *Pénélope et les Barons des îles*, 1928, p. 318–9. Such mountain peoples are still found in modern times. Cf. in the last century the Montenegrin immigrants in America; in the twentieth century the soldiers who fought in the Turkish war of independence, the companions of Mustafa Kemal, whom H. C. Armstrong (*Grey Wolf, Mustafa Kemal, op. cit.*, pp. 117 and 124) has described in picturesque detail: the 'irregulars' of Edhem's Green Army, 'wild-faced men', and Mustafa's bodyguard from the mountain tribe of the Lazzes (on the south coast of the Black Sea), 'wild, black-eyed men . . . as lithe as cats', who were allowed as a special privilege to retain their traditional costumes and dances, in particular the 'Zebek' dance. The Kurds are another example: see the remarks by the Comte de Sercey, *op. cit.*, pp. 216, 288, 297, on their black tents, their oatcakes which contain more chaff than grain, their goats-milk cheese and their way of life in general.

[23] Preface to Jules Blache, *L'homme et la montagne*, *op. cit.*, p. 7.

[24] Pierre Vilar, *La Catalogne dans l'Espagne moderne*, I, 1962, p. 209. Arthur Young's remark is quoted *ibid.*, vol. II, p. 242.

[25] The Rif and the Atlas 'where the typical meal is a comforting hash of flour, beans and oil', J. Blache, *op. cit.*, p. 79–80.

Others, again, are unusually densely populated as a result of the lowland population having been driven up from the plain, an accident which we find frequently repeated.

For the mountains are a refuge from soldiers and pirates, as all the documents bear witness, as far back as the Bible.[26] Sometimes the refuge becomes permanent.[27] This is borne out by the example of the Kutzo-Vlachs, who were chased out from the plains by the Slav and Greek peasants, and from then on throughout the Middle Ages leading a nomadic existence over the free spaces in the Balkans, from Galicia to Serbia and the Aegean Sea, continually being displaced but also displacing others.[28] Nimble as mountain goats, 'they come down from the mountains to carry away some booty . . .', noted a twelfth-century traveller.[29] Throughout the Peninsula, 'as far as Matapan and Crete, they travel with their flocks of sheep and their black hoods, and the two highest ridges, the Haemus and the Pindus, afford them the best shelter. It is from these two mountains that they come down into Byzantine history at the beginning of the eleventh century.'[30] And it is around these mountains that the nineteenth century finds them still, herdsmen, farmers, and above all drivers of the muletrains which are the chief means of transport in Albania and northern Greece.[31]

Many mountains, then, form exceptions to the rule of poverty and emptiness, of which however there is so much evidence in the writings of travellers and other witnesses in the sixteenth century. The Venetian envoy, crossing the mountains of Upper Calabria on his way to join Don John of Austria at Messina in 1572,[32] found them quite deserted; deserted too were the Sierra Morena in Castile[33] and the Sierras of Espadan and Bernia,[34]

[26] Joshua, II, 15–16. After the failure of his conspiracy in Florence, Buondelmonti seeks refuge in the Tuscan Apennines (Augustin Renaudet, *Machiavel*, 1941, p. 108). The Cretans take refuge in the mountains of the island to escape the corsairs and the Turkish ships (B. N. Paris, Ital. 427, 1572 f° 199 v°).

[27] This opinion was held by Paul Vidal de la Blache, *Principes de géographie humaine*, (English translation by Millicent Bingham, *Principles of Human Geography*, London 1926, p. 65.) Among the examples he gives are the Transylvanian Alps where the Rumanian people was reconstituted and the Balkans, where in the same way but on a smaller scale, the Bulgarian people was reborn, the Caucasus, etc.

[28] André Blanc, *La Croatie occidentale*, 1957, p. 97.

[29] *The Itinerary of Benjamin of Tudela*, trans. and ed. M. N. Adler, London, 1907, p. 11.

[30] Victor Bérard, *La Turquie et l'hellénisme contemporain*, 1893, p. 247.

[31] F. C. H. L. de Pouqueville, *Voyage en Grèce*, 1820, vol. III, pp. 8 and 13; V. Bérard, *op. cit.*, p. 79–83 and 247. On the Wallachians and the Aromani there is abundant literature. For details see J. Blache, *op. cit.*, p. 22; J. Cvijić, *La Péninsule balkanique*, Paris, 1918, p. 115, 178 note 1, 202–3.

[32] Luca Michieli, 25th October, 1572, *Relazioni*, A.d.S. Venice, Collegio Secreta, filza 18.

[33] *Don Quixote*, the Cardenio episode, '*la razon que os ha traido*,' asks the knight, '*a vivir y a morir en estas soledades como bruto animal*'.

[34] *Discorso sopra le due montagne di Spadan e di Bernia* (1564 or 1565), Simancas E° 329. To be read in conjunction I think with the document B. N. Paris, Esp. 177: *Instruccion a vos Juan Baptista Antonelli para que vays a reconoscer el sitio de la Sierra de Vernia* (undated).

in the kingdom of Valencia, about which enquiries were made in 1564, when there were fears of unrest among the Moriscos and of a war that might be carried up into this difficult hill country, where the rebels of 1526 had resisted the German lansquenets. Even more deserted, eternally deserted, are the wild bare mountains of the Sicilian interior, and so many other mountains scattered here and there, whose low rainfall makes them unable to support even pastoral life.[35]

But these are extreme cases. According to the geographer J. Cvijić,[36] the central Balkan mountains (we are free to extend his remarks or not as we choose) are a zone of dispersed habitat, where the predominant form of settlement is the hamlet; in the plains, on the contrary, it is the village. The distinction is valid for Wallachia and, almost absurdly so, for Hungary and the enormous villages of the Puzta; also for upper Bulgaria, where the hamlets, formerly semipastoral, are known by the name of *kolibé*. The distinction still holds for Old Serbia, Galicia, and Podolia. No rule though can ever be more than a rough guide. In many cases it would be difficult to mark precisely, on a map, where the zone of lowland villages – often real towns – ends and the zone of mountain hamlets, consisting of a few houses and sometimes a single family, begins. A detailed study by the same author on the Serbo-Bulgarian borders, between Kumanil and Kumanovo,[37] establishes that it is practically impossible to draw a precise boundary.

And then again, can this interpretation of a Balkan pattern be transposed as it stands to the rest of the Mediterranean world, to nearby Greece,[38] or to the Western countries permeated with maritime culture, where for fear of pirate raids the people withdrew from the plains, which were frequently devastated and unhealthy as well? One thinks of the large hill villages of Corsica, Sardinia, Provence, the Kabylias, and the Rif. One thing at least is certain. Whether settled in tiny hamlets or in large villages, the mountain population is generally insignificant in comparison with the vast spaces surrounding it, where travel is difficult; life there is rather like life in the early settlements in the New World, which were also islands set

[35] Cf. the remarks by Paul Descamps, *Le Portugal, la vie sociale actuelle*, 1935, apropos of the Sierra da Estrela, p. 123–124, with its less developed pastoral life than that of the North.

[36] On this question see the illuminating pages in Vidal de le Blache, *op. cit.*, Eng. trans. p. 303–5. J. Cvijić's opinions are expressed in his book in French, *La Péninsule balkanique*, 1918. Apropos of mountain hamlets, Vidal de la Blache notes: 'Constantine Porphyrogenetes wrote regarding these people, that 'they cannot endure having two cabins near one another', *op. cit.*, p. 303.

[37] 'Grundlinien der Geographie und Geologie von Mazedonien und Alt-Serbien' in: *Petermanns Mitteilungen aus J. Perthes Geographischer Anstalt*, Erganzungsheft no. 162, 1908.

[38] For a delightful portrait of the Greek 'village-town' see J. Ancel, *Les peuples et nations des Balkans*, 1926, p. 110–111. Striking proof is provided by Martin Hurlimann, *Griechenland mit Rhodos und Zypern*, Zurich, 1938, p. 28 for a magnificent photograph of the Greek village of Arakhova, which stands at about 3000 feet, overlooking a landscape of terraced cultivated fields, on the slopes of Mount Parnassus. The village is known for its woven products.

in the middle of wide open spaces, for the most part uncultivable[39] or hostile, and thereby deprived of the contacts and exchanges necessary to civilization.[40] The mountains are forced to be self-sufficient for the essentials of life, to produce everything as best they can, to cultivate vines, wheat, and olives even if the soil and the climate are unsuitable. In the mountains, society, civilization, and economy all bear the mark of backwardness and poverty.[41]

It is then possible, in general terms, to talk of the dilution of the mountain population, and even more, of a partial and incomplete form of civilization, the result of inadequate human occupation. Heinrich Decker has produced a handsome study[42] of the artistic civilization of the Alps; but the Alps are after all the Alps, that is, an exceptional range of mountains from the point of view of resources, collective disciplines, the quality of its human population and the number of good roads. The Alps should hardly be considered typical Mediterranean mountains. More typical are the Pyrenees with their violent history and primitive cruelty. And even the Pyrenees are somewhat privileged; one could make out a case for a Pyrenean civilization, if the word is used in its old, genuine sense. One region, to which frequent reference will be made – the Catalan Pyrenees – saw the rise in the eleventh and twelfth centuries of a vigorous Romanesque

[39] Paul Arqué, *Géographie des Pyrénées françaises*, 1943, p. 48, points out that the area *cultivated* in the French Pyrenees according to the calculations of the Inspector-General Thierry 'is comparable to the area of an average *département*'; a revealing observation.

[40] For Corsica, see the letter of remonstrances from F. Borromeo to the bishop of Ajaccio, (14th November, 1581, ed. Vittoria Adami, 'I Manoscritti della Biblioteca Ambrosiana di Milano, relativi alla storia di Corsica', in *Archivio storico di Corsica*, 1932, 3, p. 81). Through these reprimands, a picture emerges of the itinerant life of the bishop, travelling over the mountains with his little caravan of pack animals. Compare this with the difficulties of St. Charles Borromeo, in the Alps it is true, in 1580, or with those of the bishop of Dax, crossing in winter the snow-covered mountains of Slavonia (his letter to the king, January 1573, Ernest Charrière, *Négociations de la France dans le Levant*, 1840–1860, III, p. 348–352.) Travelling in the mountains near Ragusa in winter is an ordeal 'whose consequences are generally most injurious to the health' and can be fatal (12th November, 1593), document published in Vladimir Lamansky *Secrets d'État de Venise*, 1884, p. 104. Until 1923 it still took three days to bring goods from Vianna do Castelo to the mouth of the Lima (P. Descamps, *op. cit.* p. 18).

[41] René Maunier, *Sociologie et Droit romain*, 1930, p. 728, sees in the agnatic family of Kabylia an example of the patriarchal family, a Roman *gens*, in a much debased form of course. On the economic backwardness of mountain regions, frequently remarked, cf. Charles Morazé, *Introduction à l'histoire économique*, 1943, p. 45–46. On what J. Cvijić calls the 'perfected patriarchality' of the Dinaric regions, see *La Péninsule balkanique*, *op. cit.*, p. 36. I prefer his expression 'mountain islands' (*ibid.*, p. 29). Montenegro, the great fortress, and other high regions, he said, behaved 'from a social point of view, like islands'. On the *zadruga*, another example of economic backwardness, R. Busch-Zantner, *Albanien*, Leipzig, 1939, p. 59.

[42] *Barockplastik in den Alpenländern*, Vienna, 1944. On the social environment in the Alps, see A. Günther's great and controversial *Die Alpenländische Gesellschaft*, Jena, 1930. Some interesting remarks in J. Solch, 'Raum und Gesellschaft in den Alpen' in *Geogr. Zeitschr.*, 1931, p. 143–168.

architecture[43] which survived curiously until the sixteenth century.[44] But it is a different story in the Aurès, the Rif, and the Kabylias.

Mountains, civilizations, and religions. The mountains are as a rule a world apart from civilizations, which are an urban and lowland achievement. Their history is to have none, to remain almost always on the fringe of the great waves of civilization, even the longest and most persistent, which may spread over great distances in the horizontal plane but are powerless to move vertically when faced with an obstacle of a few hundred metres. To these hilltop worlds, out of touch with the towns, even Rome itself, in all its years of power, can have meant very little,[45] except perhaps through the military camps that the empire established for security reasons in various places on the edges of unconquered mountain lands: hence León, at the foot of the Cantabrian mountains, Djemilah, facing the rebellious Berber Atlas, Timgad and the annex at Lambaesis, where the *IIIa legio augusta* encamped. Neither did Latin as a language take root in the hostile massifs of North Africa, Spain or elsewhere, and the Latin or Italic house type remained a house of the plains.[46] In a few places it may have infiltrated locally, but on the whole the mountains resisted it.

Later, when the Rome of the Emperors had become the Rome of Saint Peter, the same problem remained. It was only in places where its action could be persistently reinforced that the Church was able to tame and evangelize these herdsmen and independent peasants. Even so it took an incredibly long time. In the sixteenth century the task was far from complete, and this applies to Islam and Catholicism alike, for they both met the same obstacles: the Berbers of North Africa, protected by the mountain peaks, were still hardly at all, or very imperfectly, won over to Muḥammad. The same is true of the Kurds in Asia;[47] while in Aragon, in the Valencia region or round Granada, the mountains were, conversely, the zone of religious dissidence, a Moslem stronghold,[48] just as the high, wild, 'suspicious' hills of the Lubéron protected the strongholds of the Vaudois.[49]

[43] Cf. the handsome studies by J. Puig I Cadafalc, *L'arquitectura romanica a Catalunya* (in collaboration), Barcelona, 1909–18; *Le premier art roman*, Paris, 1928.

[44] P. Arqué, *op. cit.*, p. 69.

[45] In Baetica, Rome was much more successful in the lowlands, and along the rivers, than on the plateaux, G. Niemeier, *Siedlungsgeogr. Untersuchungen in Niederandalusien*, Hamburg, 1935, p. 37. In the mountainous northwest of Spain with the added difficulty of distance, Rome penetrated late on and with little success, R. Konetzke, *Geschichte des spanischen und portugiesischen Volkes*, Leipzig, 1941, p. 31.

[46] Albert Dauzat, *Le village et le paysan de France*, 1941, p. 52.

[47] Comte de Sercey, *op. cit.*, p. 104: 'One can see however, (since they dance) that the Kurdish women, although Moslem, are not kept in seclusion'.

[48] See below, sections on the Moriscos, (Part II, ch. V and Part III, ch. III).

[49] Lourmarin, Cabrières, Mérindol and about twenty other hill towns in the heart of the Lubéron, where there was abundant wild life – foxes, wolves and boars – were Protestant strongholds, J. L. Vaudoyer, *Beautés de la Provence*, Paris, 1926, p. 238. And there were the Vaudois of the Savoy states and in the Apennines in the kingdom of Naples. 'Catharism', wrote Marc Bloch, 'had dwindled to an obscure sect of mountain shepherds', *Annales d'hist. sociale*, 1940, p. 79.

Everywhere in the sixteenth century, the hilltop world was very little influenced by the dominant religions at sea level; mountain life persistently lagged behind the plain.

One proof of this is the great ease with which, when circumstances did permit, new religions were able to make massive, though unstable, conquests in these regions. In the Balkans in the fifteenth century, whole areas of the mountains went over to Islam, in Albania as in Herzegovina around Sarajevo. What this proves above all is that they had been only slightly influenced by Christianity. The same phenomenon was to recur during the war of Candia, in 1647. Large numbers of Cretan mountain dwellers, joining the Turkish cause, renounced their faith. Similarly, in the seventeenth century, when faced with the Russian advance, the Caucasus went over to Muḥammad and produced in his honour one of the most virulent forms of Islam.[50]

In the mountains then, civilization is never very stable. Witness the curious passage by Pedraça in his *Historia eclesiastica de Granada*, written in the time of Philip IV. 'It is not surprising,' he writes, 'that the inhabitants of the Alpujarras (the very high mountains in the Kingdom of Granada) should have abandoned their ancient faith. The people who live in these mountains are *cristianos viejos*; in their veins runs not one drop of heathen blood; they are the subjects of a Catholic king; and yet, for lack of instruction and following the oppression to which they are subjected, they are so ignorant of what they should know to obtain eternal salvation that they have retained only a few vestiges of the Christian religion. Can anyone believe that if the Infidel were to become master of their land tomorrow (which God forbid) these people would remain long without abandoning their religion and embracing the beliefs of their conquerors?'[51]

A separate religious geography seems then to emerge for the mountain world, which constantly had to be taken, conquered and reconquered. Many minor facts encountered in traditional history take on a new meaning in this light.

The fact that Saint Teresa, who as a child dreamed of being martyred by the Moriscos of the Sierra de Guadarrama,[52] should have established the first monastery of the reformed Carmelite order at Duruelo, although a detail, is worth remembering. The house was the property of a gentleman

[50] Muridism, Cf. L. E. Houzar, 'La Tragédie circassienne', in: *Revue des Deux Mondes*, 15/6/1943, p. 434–435.

[51] Francisco Bermúdez de Pedraça, Granada, 1637 f° 95 v°. Quoted in French translation by Reinhart-Pieter A. Dozy, to whom credit for finding this splendid passage is due (*Histoire des Musulmans d'Espagne*, 1861, II, p. 45, note 1.) However the Abbé de Vayrac (*État présent de l'Espagne*), Amsterdam, 1719, I, p. 165) maintains that the inhabitants of the Alpujarras, although Christians are Moriscos who have retained 'their old way of life, their costume and their particular language which is a monstrous mixture of Arabic and Spanish'.

[52] As a child, St. Teresa set off, with her brother, towards the mountains in the hope of finding martyrdom: Gustav Schnürer, *Katholische Kirche und Kultur in der Barockzeit*, 1937, p. 179; Louis Bertrand, *Sainte Thérèse*, 1927, p. 46–47.

of Avila. 'Quite an adequate porch, a bedchamber with its attic and a small kitchen,' writes the saint, 'was the entire extent of this fine dwelling. After consideration, I thought the porch could be made into a chapel, the attic into a choir, and the bedchamber into a dormitory.' And it was in this 'perfect hovel' that Saint John of the Cross came to live, with a companion, Father Anthony of Heredia, who joined him there in the autumn, bringing a chorister, Brother Joseph. There they lived through the winter snow the most frugal monastic life, but not shut off from the world: 'often they would go barefoot, by the most terrible paths, to preach the gospel to the peasants as if to savages'.[53]

A chapter of missionary history can be glimpsed too from the religious history of Corsica in the sixteenth century. The example is even more significant if we remember that the Corsican people had been converted by the Franciscans several centuries earlier. What traces were left of the first Catholic conquest? Many documents show that by the time the Society of Jesus arrived at the island to impose upon it Jesuit law and the Roman order, the spiritual life of the population had reached an extraordinary state. They found that even those priests who could read knew no Latin or grammar, and, more seriously, were ignorant of the form of the sacrament to be taken at the altar. Often dressed like laymen, they were peasants who worked in the fields and woods and brought up their children in the sight and full knowledge of the whole community. The Christianity of their congregations was inevitably somewhat eccentric. They did not know the Creed or the Lord's Prayer; some did not even know how to make the sign of the cross. Superstitions fell on fertile ground. The island was idolatrous, barbaric, half-lost to Christianity and civilization. Man was cruel, unmerciful to man. Killings took place even in church and the priests were not the last to take up the lance, the dagger, or the blunderbuss, a new weapon that had reached the island towards the middle of the century and enlivened disputes. Meanwhile in the tumbledown churches, the rainwater poured in, grass grew, and lizards hid in the cracks. Let us allow a little for the natural exaggeration of even the best-intentioned missionaries. But the general picture was true. One stroke completes it. This half-savage people was capable of great religious outbursts, of spectacular devotion. When a foreign preacher passed through, the church was invaded by peasants from the mountains, late comers stood outside in the pouring rain, and penitents came to confession until late into the night.[54]

In much the same way, in a Moslem country this time, what we can

[53] E. Baumann, *L'anneau d'or des grands Mystiques*, 1924, p. 203–4.

[54] On the shortcomings of religious observance in Corsica, there is an enormous dossier: the letter from Cardinal de Tournon to Paul IV, 17th May, 1556, asking for the reform of abuses, Michel François, 'Le rôle du Cardinal François de Tournon dans la politique française en Italie de janvier a juillet 1556' in: *Mélanges . . . de l'École Française de Rome*, vol. 50, p. 328; Ilario Rinieri, 'I vescovi della Corsica' in: *Archivio storico di Corsica*, 1930–31, p. 334 ff. Father Daniele Bartoli, *Degli uomini e de' fatti della Compagnia di Gesù*, Turin, 1847, III, 57–58; Abbé S. B. Casanova, *Histoire de l'Église corse*, 1931, p. 103 ff.

glimpse of the Marabout conquest of the Sous mountains, in the sixteenth century, through the hagiographies of the period – notably Ibn 'Askar – gives an idea of the atmosphere of wonderment in which the saints and their admirers moved: 'We find them surrounded by a crowd of schemers, madmen, and simple souls.'[55]

It is not surprising that the folklore of these high regions reveals primitive credulity. Magic practices and superstitions abounded in everyday life, encouraging both religious enthusiasm and downright trickery.[56] A novella by the Dominican Bandello[57] takes us to a little village in the Alps near Brescia, about the beginning of the sixteenth century, where there are a few houses, spring water, the village fountain, great barns for storing fodder, and, among his little flock, a priest, who goes about his duties, blessing the thresholds of the houses, the barns and the cowsheds, preaching the holy word, and setting an example of virtue. One day a peasant girl, coming to draw water from the presbytery fountain, arouses his lust. 'You are in terrible danger,' he goes among his parishioners explaining, 'a great bird – a griffon – an exterminating angel – is about to swoop down on you to punish you for your sins. As soon as it appears, I will ring the church bell, and you must all stand still and hide your eyes.' No sooner said than done. No one moved until the bell rang for the second time. And Bandello does not even think it necessary to protest the truth of his story.

This is of course only a tiny example picked out of the enormous dossier of peasant superstitions which historians have not yet seriously tackled. Widespread, irresistible outbreaks of 'diabolism' swept through the old populations of Europe, holding them enthralled, and nowhere did these outbreaks occur more strongly than in the uplands whose primitive isolation maintained them in backwardness. Sorcerers, witchcraft, primitive magic, and black masses were the flowerings of an ancient cultural subconscious, from which Western civilization could not entirely separate itself. The mountains were the favoured refuge of these aberrant cults, which originated far back in time and persisted even after the Renaissance and Reformation. At the end of the sixteenth century, there were innumerable 'magic' mountains, stretching from Germany as far as the Milanese or Piedmontese Alps, from the Massif Central, seething with revolutionary and 'diabolical' ferment, to the healing soldiers of the Pyrenees, from the Franche-Comté to the Basque country. In the Rouergue, in 1595, 'sorcerers

[55] R. Montagne, *Les Berbères et le Makhzen dans le Sud du Maroc*, 1930, p. 83.

[56] How can we unearth the rich folklore of these mountains? One example is the story of the *teriels*, quoted by Leo Frobenius, *Histoire de la civilisation africaine*, 1936, p. 263 ff. apropos of Kabylia, whose remote life he describes, devoted to great hunts not to agriculture. Perhaps there is somewhere a collection of mountain folksongs? On the religious life of the Alps and the localization of heretical sects, G. Botero, *Le relationi universali*, Venice, 1599, III, I, p. 76. On the visit of Cardinal Borromeo to Mesolina, *ibid.*, p. 17.

[57] IV, 2nd part, *Novelle*, London edition, 1791, II, p. 25–43. The ancedote is set in the Val di Sabbia, part of the Brescian Pre-Alps.

reign over the mass of the inhabitants and their ignorance'; because of the lack of local churches even the Bible was unknown. And everywhere the black sabbath seems to have been a social and cultural reaction, a mental revolution for lack of a coherent social revolution.[58] The Devil seems to have been afoot in all the countries of Europe as the sixteenth century drew to a close, and even more in the first decades of the following century. He even seems to have crossed over into Spain by the high Pyrenean passes. In Navarre in 1611, the Inquisition severely punished a sect of over 12,000 adherents who 'worship the Devil, put up altars to him and deal with him familiarly on all occasions'.[59] But we must leave this fascinating topic, as our chief interest for the moment is the problem of disparity between mountain and lowland, of the backwardness of mountain society.

Mountain freedom.[60] There can be no doubt that the lowland, urban civilization penetrated to the highland world very imperfectly and at a very slow rate. This was as true of other things as it was of Christianity. The feudal system as a political, economic, and social system, and as an instrument of justice failed to catch in its toils most of the mountain regions and those it did reach it only partially influenced. The resistance of the Corsican and Sardinian mountains to lowland influence has often been noted and further evidence could be found in Lunigiana, regarded by Italian historians as a kind of mainland Corsica, between Tuscany and Liguria.[61] The observation could be confirmed anywhere where the population is so inadequate, thinly distributed, and widely dispersed as to prevent the establishment of the state, dominant languages, and important civilizations.

A study of the vendetta would lead one towards a similar conclusion. The countries where the vendetta was in force – and they were all mountainous countries – were those that had not been moulded and penetrated

[58] These remarks were suggested to me by Emmanuel Le Roy Ladurie's study, *Les paysans de Languedoc*, Paris, 1966, p. 407.

[59] A. S. V. Senato, Dispacci Spagna, Madrid, 6th June, 1611, Priuli to the Doge.

[60] As observed by contemporaries; Loys Le Roy, *De l'excellence du gouvernement royal*, Paris, 1575, p. 37, writes 'A country covered with mountains, rocks, and forests, fit only for pasture, where there are many poor men, as is most of Switzerland, is best suited for democracy . . . The lands of the plain, where there are greater numbers of rich and noble men, are better suited to an aristocratic form of government'. Jean Bodin, in *Les six livres de la République* (English translation, *The Six Books of the Commonwealth*, by Knolles, 1606, facs. edition Harvard, 1962, p. 694) reports that Leo Africanus was astonished by the robust physique of the mountain folk of Mount Megeza, while the plain-dwellers were smaller men. 'This force and vigour doth cause the mountaineers to love popular liberty . . . as we have said of the Swissers and Grisons'. The Middle Ages in Corsica, says Lorenzi de Bradi, *La Corse inconnue*, 1927, p. 35, were a great period for liberty. 'The Corsican would not suffer any man to rob him of the product of his labour. The milk from his goat and the harvest from his field were his alone.' And H. Taine in his *Voyage aux Pyrénées*, 1858, p. 138, says 'freedom took root here deep in the past, a gruff and wild sort of freedom'.

[61] Arrigo Solmi, 'La Corsica' in *Arch. st. di Corsica*, 1925, p. 32.

by mediæval concepts of feudal justice,[62] the Berber countries, Corsica, and Albania, for example. Marc Bloch,[63] writing about studies of Sardinia, points out that during the Middle Ages the island was an 'extensively manorialized, but not feudalized society' as a result of having been 'long isolated from the great currents which swept the continent'. This is putting the accent on the insularity of Sardinia, and it is quite true that it has been a decisive factor in Sardinian history. But the mountains are an equally important factor, just as responsible for the isolation of the people of Sardinia as the sea, if not more so; even in our own time they have produced those cruel and romantic outlaws, at Orgosolo and elsewhere, in revolt against the establishment of the modern state and its *carabinieri*. This moving phenomenon has been portrayed by anthropologists and film directors. 'He who does not steal', says a character in a Sardinian novel, 'is not a man'.[64] 'Law?' says another, 'I make my own laws and I take what I need.'[65]

In Sardinia, as in Lunigiana and Calabria, and everywhere where observation (when it is possible) reveals a hiatus between the society and the broad movements of history – if social archaisms (the vendetta among others) persisted, it was above all for the simple reason that mountains are mountains: that is, primarily an obstacle, and therefore also a refuge, a land of the free. For there men can live out of reach of the pressures and tyrannies of civilization: its social and political order, its monetary economy. Here there was no landed nobility with strong and powerful roots (the 'lords of the Atlas' created by the Maghzen were of recent origin); in the sixteenth century in Haute-Provence, the country nobleman, the '*cavaier salvatje*', lived alongside his peasants, cleared the land as they did, did not scorn to plough and till the ground, or to carry wood and dung on the back of his donkey. He was a constant irritation 'in the eyes of the Provençal nobility, who are essentially city-dwellers like the Italians'.[66] Here there were no rich, well-fed clergy to be envied and mocked; the priest was as poor as his flock.[67] There was no tight urban network so no

[62] For a general picture, see the penetrating but legalistic work by Jacques Lambert, *La vengeance privée et les fondements du droit international*, Paris, 1936. In the same order of ideas, cf. Michelet's remark on the Dauphiné, where 'feudalism (never) exerted the same influence as it did upon the rest of France.' And Taine again: *op. cit.*, p. 138, 'These are the *fors* of Béarn, in which it is said that in Béarn in the old days there was no *seigneur*'. On blood feuds in Montenegro and upper Albania, see Ami Boué, *La Turquie d'Europe*, Paris, 1840, II, p. 395 and 523.

[63] Marc Bloch, *Feudal Society*, (trans. L. Manyon), London, 1961, p. 247. See also his useful remarks on Sardinia, 'La Sardaigne' in *Mélanges d'histoire sociale*, III, p. 94.

[64] Maurice Le Lannou, 'Le bandit d'Orgosolo', *Le Monde*, 16/17 June, 1963. The film was directed by Vittorio de Seta, the anthropological study carried out by Franco Caguetta, French transl.: *Les Bandits d'Orgosolo*, 1963; the novels mentioned are by Grazia Deledda, *La via del male*, Rome, 1896; *Il Dio dei viventi*, Rome, 1922.

[65] *Ibid.*

[66] Fernand Benoit, *La Provence et le Comtat Venaissin*, 1949, p. 27.

[67] For the high Milanese, see S. Pugliese, 'Condizioni economiche e finanziarie della Lombardia nella prima meta del secolo XVIII' in *Misc. di Storia italiana*, 3rd series, vol. xxi, 1924.

administration, no towns in the proper sense of the word, and no gendarmes either we might add. It is only in the lowlands that one finds a close-knit, stifling society, a prebendal clergy, a haughty aristocracy, and an efficient system of justice. The hills were the refuge of liberty, democracy, and peasant 'republics'.

'The steepest places have been at all times the asylum of liberty', writes the learned Baron de Tott in his *Memoirs*.[68] 'In travelling along the coast of Syria, we see despotism extending itself over all the flat country and its progress stopt towards the mountains, at the first rock, at the first defile, that is easy of defence; whilst the Curdi, the Drusi, and the Mutuali, masters of the Lebanon and Anti-Lebanon, constantly preserve their independence'[69]. A poor thing was Turkish despotism – ruler indeed of the roads, passes, towns, and plains, but what can it have meant in the Balkan highlands, or in Greece and Epirus, in the mountains of Crete where the Skafiotes defied, from their hilltops, all authority from the seventeenth century onward, or in the Albanian hills, where, much later, lived 'Alī Pasha Tepedelenli? Did the Wali Bey, installed at Monastir by the Turkish conquest of the fifteenth century, ever really govern? In theory his authority extended to the Greek and Albanian hill-villages, but each one was a fortress, an independent enclave and on occasion could become a hornets' nest.[70] It is hardly surprising, then, that the Abruzzi, the highest, widest, and wildest part of the Apennines, should have escaped Byzantine rule, the rule of the Exarchs of Ravenna, and finally the domination of Papal Rome, although the Abruzzi lie directly behind the city and the Papal State ran north through Umbria as far as the Po valley.[71] Nor is it astonishing that in Morocco the *bled es siba*, lands unsubdued by the sultan, should be essentially mountain regions.[72]

Sometimes this freedom of the hills has survived into our own time and can be seen today in spite of the immense weight of modern administration. In the Moroccan High Atlas, notes Robert Montagne,[73] 'the villages which are ranged along the sunny banks of the mountain torrents, near immense walnut trees watered by the turbulent Atlas streams, have no *chikhs*' or

[68] *Mémoires sur les Turcs et les Tartares*, (Eng. trans. *Memoirs of the Baron de Tott on the Turks and Tartars* . . . London 1785, I, p. 398): 'asylum of liberty, or,' he adds, 'the haunt of tyrants.' This was in connection with the Genoese installations in the Crimea.

[69] *Ibid.*, Preliminary Discourse, I, 11.

[70] Cf. Franz Spunda in Werner Benndorf, *Das Mittelmeerbuch*. 1940, p. 209–210.

[71] A. Philippson, 'Umbrien und Etrurien', in *Geogr. Zeitung*, 1933, p. 452.

[72] Further examples: Napoleon was unable to control the mountains round Genoa, a refuge for deserters, in spite of the searches organized (Jean Borel, *Gênes sous Napoléon Ier*, 2nd ed. 1929, p. 103). In about 1828, the Turkish police were powerless to prevent outbreaks of brigandage by the peoples of Mt. Ararat (Comte de Sercey, *op. cit.*, p. 95); they seem to be equally unsuccessful today in protecting the mountain's forest wealth from the ravages of the flocks (Hermann Wenzel, 'Agrargeographische Wandlungen in der Türkei', in *Geogr. Zeitschr.* 1937, p. 407). Similarly in Morocco: 'In reality, in southern Morocco, the sultan's authority did not reach beyond the plain', writes R. Montagne, *op. cit.*, p. 134.

[73] *Ibid.*, p. 131.

Khalifats' houses. It is impossible to distinguish between a poor man's house and a rich man's. Each of these little mountain cantons forms a separate state, administered by a council. The village elders, all clad alike in brown wool garments, meet on a terrace and discuss for hours on end the interests of the village. No one raises his voice and it is impossible from watching them to discover which is their president.' All this is preserved, if the mountain canton is sufficiently high and sufficiently inaccessible, away from the main roads, which is a rare case today but was less so in former times before the expansion of road systems. This is why the Nurra, although connected to the rest of the island of Sardinia by an easily accessible plain, remained for a long time out of the reach of roads and traffic. The following legend was inscribed on an eighteenth century map by the Piedmontese engineers: 'Nurra, unconquered peoples, who pay no taxes'![74]

The mountains' resources: an assessment. As we have seen, the mountains resist the march of history, with its blessings and its burdens, or they accept it only with reluctance. And yet life sees to it that there is constant contact between the hill population and the lowlands. None of the Mediterranean ranges resembles the impenetrable mountains to be found in the Far East, in China, Japan, Indochina, India, and as far as the Malacca peninsula.[75] Since they have no communication with sea-level civilization, the communities found there are autonomous. The Mediterranean mountains, on the other hand, are accessible by roads. The roads may be steep, winding, and full of potholes, but they are passable on foot. They are a 'kind of extension of the plain' and its power through the hill country.[76] Along these roads the sultan of Morocco sent his *harkas*, Rome sent its legionaries, the king of Spain his *tercios*, and the Church its missionaries and travelling preachers.[77]

Indeed, Mediterranean life is such a powerful force that when compelled by necessity it can break through the obstacles imposed by hostile terrain. Out of the twenty-three passes in the Alps proper, seventeen were already in use at the time of the Romans.[78] Moreover, the mountains are frequently overpopulated – or at any rate overpopulated in relation to their resources. The optimum level of population is quickly reached and exceeded; periodically the overflow has to be sent down to the plains.

[74] M. Le. Lannou, *Pâtres et paysans de la Sardaigne*, 1941, p. 14, n. 1.

[75] J. Blache, *op. cit.*, p. 12. On this contrast see Pierre Gourou, *L'homme et la terre en Extrême-Orient*, 1940, and the review of the same book by Lucien Febvre in: *Annales d'hist. sociale*, XIII, 1941, p. 73. P. Vidal de la Blache, *op. cit.*, Eng. trans. p. 371–2.

[76] R. Montagne, *op. cit.*, p. 17.

[77] I am thinking in particular of the travels of Sixtus V, in his youth and middle age, as described by Ludwig von Pastor, *Geschichte der Papste*, Freiburg-im-Breisgau, 1901–31, X, 1913, p. 23 and 59. They would make a good map.

[78] W. Woodburn Hyde, 'Roman Alpine routes', in *Memoirs of the American philosophical society*, Philadelphia, X, II, 1935. Similarly the Pyrenees have not always been the barrier one might imagine (M. Sorre, *Géog. univ.*, vol. VII, 1st part, p. 70; R. Konetzke, *op. cit.*, p. 9)

Not that their resources are negligible: every mountain has some arable land, in the valleys or on the terraces cut out of the hillside. Here and there among the infertile limestone are strips of flysch (a mixture of slate, marls, and sandstone) and marls on which wheat, rye, and barley can be grown. Sometimes the soil is fertile: Spoleto lies in the middle of a fairly wide and comparatively rich plain, and Aquila in the Abruzzi grows saffron. The further south one goes, the higher is the upper limit for the cultivation of crops and usable trees. In the northern Apennines today, chestnut trees grow as far up as 900 metres; at Aquila, wheat and barley are found up to 1680 metres; at Cozenza, maize, a new arrival in the sixteenth century, grows at 1400 metres, and oats at 1500 metres; on the slopes of Mount Etna, vines are grown up to a level of 1100 metres and chestnut trees at 1500 metres.[79] In Greece wheat is grown up to a level of 1500 metres and vines up to 1250 metres.[80] In North Africa the limits are even higher.

One of the advantages of the mountain region is that it offers a variety of resources, from the olive trees, orange trees, and mulberry trees of the lower slopes to the forests and pasturelands higher up. To the yield from crops can be added the produce of stockraising. Sheep and goats are raised, as well as cattle. In comparatively greater numbers than today, they used to be plentiful in the Balkans, and even in Italy and North Africa. As a result, the mountains are a source of milk, cheeses[81] (Sardinian cheese was exported in boatloads all over the western Mediterranean in the sixteenth century), butter, fresh or rancid, and boiled or roasted meat. The typical mountain house was a shepherd's or herdsman's dwelling, built for animals rather than for human beings.[82] In 1574, Pierre Lescalopier, when crossing the Bulgarian mountains, preferred to sleep 'under some tree' than in the peasants' huts of beaten clay where beasts and humans lived 'under one roof, and in such filth that we could not bear the stench'.[83]

The forests in those days, it should be pointed out, were thicker than they are today.[84] They can be imagined as something like the National Park of the Val di Corte, in the Abruzzi, with its thick beechwoods climbing up to 1400 metres. The population of the forests included foxes, wolves,

[79] Richard Pfalz, 'Neue wirtschaftsgeographische Fragen Italiens', in *Geogr. Zeitschr.*, 1931, p. 133.

[80] A. Philippson, *Das Mittelmeergebiet*, *op. cit.*, p. 167.

[81] Victor Bérard, *La Turquie et l'hellénisme contemporain*, *op. cit.*, p. 103, writes on leaving Albania: 'After three days of goat cheese . . .'.

[82] P. Arqué, *op. cit.*, p. 68.

[83] *Op. cit.*, f° 44 and 44 v°.

[84] There used to be forests on the slopes of Mount Vesuvius. On the forests in general, the observations of Theobald Fischer are still useful (in. *B. zur physischen Geogr. der Mittelmeerländer besonders Sicilliens*, 1877, p. 155 ff.) On the forests of Naples, Calabria and the Basilicata, in 1558, cf. Eugenio Albèri, *Relazioni degli ambasciatori veneti durante il secolo XVI*, Florence, 1839–63, II, III, p. 271. Even today there are many remains of the great forests of the past, forest ruins. They are listed for Corsica in Philippe Leca (preface by A. Albitreccia) *Guide bleu de la Corse*, Paris, 1935, p. 15; See also the latter's *La Corse, son évolution au XIXe siècle et au début du XXe siècle*, 1942, p. 95 ff.

bears, and wildcats. The Monte Gargano's oak forests supported a whole population of woodcutters and timber merchants, for the most part in the service of the shipyards of Ragusa. Like the summer pastures, the forests were the subject of much dispute among mountain villages and against noble landowners. Even the scrubland, half forest, can be used for grazing, and sometimes for gardens and orchards; it also supports game and bees.[85] Other advantages of the mountains are the profusion of springs, plentiful water, that is so precious in these southern countries, and, finally, mines and quarries. Almost all the mineral resources of the Mediterranean, in fact, are found in its mountain regions.

But these advantages are not all found in every region. There are chestnut tree mountains (the Cévennes, Corsica) with their precious 'tree bread',[86] made from chestnuts, which can replace wheat bread if necessary. There are mulberry tree mountains like those Montaigne saw near Lucca in 1581,[87] or the highlands of Granada. 'These people, the people of Granada, are not dangerous', explained the Spanish agent, Francisco Gasparo Corso, to Euldj 'Ali, 'King' of Algiers in 1569.[88] 'What could they do to injure the Catholic King? They are unused to arms. All their lives they have done nothing but dig the ground, watch their flocks, and raise silkworms. . . .' There are also the walnut tree mountains: it is under the century-old walnut trees that even today, in the centre of the village, on moonlit nights, the Berbers of Morocco still celebrate their grand festivals of reconciliation.[89]

All told, the resources of the mountains are not as meagre as one might suppose. Life there is possible, but not easy. On the slopes where farm animals can hardly be used at all, the work is difficult. The stony fields must be cleared by hand, the earth has to be prevented from slipping down hill, and, if necessary, must be carried up to the hilltop and banked up with dry stone walls. It is painful work and never-ending; as soon as it stops, the mountain reverts to a wilderness and man must start from the beginning again. In the eighteenth century when the Catalan people took possession of the high rocky regions of the coastal massif, the first settlers were astonished to find dry stone walls and enormous olive trees still growing in the middle of the undergrowth, proof that this was not the first time that the land had been claimed.[90]

[85] Comte Joseph de Bradi, *Mémoire sur la Corse*, 1819, p. 187, 195 ff.

[86] P. Vidal de la Blache, *op. cit.*, (Eng. trans.) p. 141, 147, 221, 222. There are some excellent observations in D. Faucher, *Principes de géogr. agraire*, p. 23. 'The people eat bread from the trees', near Lucca, Montaigne, *Journal de voyage en Italie*, (ed. E. Pilon, 1932), p. 237.

[87] Montaigne, *ibid.*, p. 243.

[88] *Relacion de lo que yo Fco Gasparo Corso he hecho en prosecucion del negocio de Argel*, Simancas E° 333 (1569).

[89] R. Montagne, *op. cit.*, p. 234–5.

[90] Franchesci Carreras y Candi, *Geografía general de Catalunya*, Barcelona, 1913, p. 505; Jaime Carrera Pujal, *H. política y económica de Cataluña*, vol. 1, p. 40. Similarly Belon, *op. cit.*, p. 140, v° notes that there had formerly been terraced fields, abandoned when he saw them, in the mountains round Jerusalem.

Mountain dwellers in the towns. It is this harsh life.[91] as well as poverty, the hope of an easier existence, the attraction of good wages, that encourages the mountain people to go down to the plain: 'baixar sempre, mountar no', 'always go down, never go up', says a Catalan proverb.[92] Although the mountain's resources are varied, they are always in short supply. When the hive becomes too full,[93] there is not enough to go around and the bees must swarm, whether peacefully or not. For survival, any sacrifice is permitted. As in the Auvergne, and more especially as in the Cantal in the recent past, all the extra mouths, men, children, artisans, apprentices, and beggars are expelled.[94]

The history of the mountains is chequered and difficult to trace. Not because of lack of documents; if anything there are too many. Coming down from the mountain regions, where history is lost in the mist, man enters in the plains and towns the domain of classified archives. Whether a new arrival or a seasoned visitor, the mountain dweller inevitably meets someone down below who will leave a description of him, a more or less mocking sketch. Stendhal saw the peasants from the Sabine hills at Rome on Ascension Day. 'They come down from their mountains to celebrate the feast day at St. Peter's, and to attend *la funzione*.[95] They wear ragged cloth cloaks, their legs are wrapped in strips of material held in place with string cross-gartered; their wild eyes peer from behind disordered black hair; they hold to their chests hats made of felt, which the sun and rain have left a reddish black colour; these peasants are accompanied by their families, of equally wild aspect.[96] . . . The inhabitants of the mountains between Rome, Lake Turano, Aquila, and Ascoli, represent fairly well, to my way of thinking,' Stendhal adds, 'the moral condition of Italy in about the year 1400.'[97] In Macedonia, in 1890, Victor Bérard met the eternal Albanian, in his picturesque cavalry soldier's costume.[98] In Madrid, Théophile Gautier came across water-sellers, 'young Galician *muchachos*, in tobacco-coloured jackets, short breeches, black gaiters and pointed

[91] Life in Haute-Provence for example: 'The farm of Haute-Provence' writes Marie Mauron ('Le Mas provençal', in *Maisons et villages de France*, 1943, preface by R. Cristofiour, p. 222) 'which endures long winters, fear of avalanches, and indoor life for months on end, behind the snowy window panes with prospects confined to winter rations, the cowshed, and fireside work'.

[92] Maximilien Sorre, *Les Pyrénées méditerranéennes*, 1913, p. 410.

[93] This surplus population which makes the move to the plains necessary is indicated in the geographical survey by H. Wilhelmy, *Hochbulgarien*, 1936, p. 183. But there are other motives: whether life is agreeable or not, for example, cf. A. Albitreccia in Philippe Leca, *La Corse*, *op. cit.*, p. 129 who also notes of Corsica: 'in other places the presence of roads encourages emigration; here their absence does so.'

[94] J. Blache, *op. cit.*, p. 88, according to Philippe Arbos, *L'Auvergne*, 1932, p. 86.

[95] The mass.

[96] *Promenades dans Rome*, ed. Le Divan, 1931, I, p. 182–183.

[97] *Ibid.*, p. 126. A similar picture, this time of the Caucasus, is to be found in *Souvenirs* of the Comte de Rochechouart, 1889, p. 76–77, on the occasion of the capture of Anapa by the Duc de Richelieu: the Caucasian warriors, some clad in iron, armed with arrows, are reminiscent of the thirteenth or fourteenth century.

[98] Victor Bérard, *La Turquie et l'hellénisme contemporain*, *op. cit.*, *passim*.

hats'.[99] Were they already wearing this dress when they were to be found, both men and women, scattered all over sixteenth-century Spain in the *ventas* mentioned by Cervantes, along with their Asturian neighbours?[100] One of the latter, Diego Suárez, who was to become a soldier and chronicler of the events of Oran at the end of the sixteenth century, describes his own adventures, his escape, while still a child, from his father's house, his arrival at the builders' yards of the Escorial where he works for a while, finding the fare to his taste, *el plato bueno*. But some of his relatives, from the mountains of Oviedo, arrive in their turn, no doubt to find summer work on the farms of Old Castile, like so many others. And he has to move on so as not to be recognized.[101] The whole region of Old Castile was continually being crossed by immigrants from the mountains of the North who sometimes returned there. The Montaña, the continuation of the Pyrenees from Biscay to Galicia, provided little sustenance for its inhabitants. Many of them were *arrieros*, muleteers, like the Maragatos[102] whom we shall meet again, or the peasant-carriers from the *partido* of Reinosa, travelling south, their wagons laden with hoops and staves for casks, and returning to their northern towns and villages with wheat and wine.[103]

In fact, no Mediterranean region is without large numbers of mountain dwellers who are indispensable to the life of town and plains, striking people whose costume is often unusual and whose ways are always strange. Spoleto, whose high plain Montaigne passed through in 1581 on the way to Loreto, was the centre for a special kind of immigrant: pedlars and small traders who specialized in all the reselling and intermediary activities that call for middlemen, flair, and not too many scruples. Bandello describes them in one of his novellas as talkative, lively and self-assured, never short of arguments and persuasive whenever they want to be. There is nobody to beat the Spoletans, he says, for cheating a poor devil while calling the blessing of St. Paul upon him, making money out of grass-snakes and adders with drawn fangs, begging and singing in marketplaces, and selling bean meal as a remedy for mange. They travel all over Italy, baskets slung around their necks, shouting their wares.[104]

[99] *Voyage en Espagne*, 1845, p. 65, 106. On the *gallegos*, both harvesters and emigrants, see *Los Españoles pintados por si mismos*, Madrid, 1843. This collection contains: *El Indiano*, by Antonio Ferrer Del Rio, *El segador*, *El pastor trashumante* and *El maragato* by Gil y Curraso, *El aguador* by Aberramar.

[100] At Toledo, at the house of the Sevilian, there are two *mocetonas gallegas*, (Galician girls) (*La ilustre fregona*). Galicians and Asturians do heavy work in Spain, especially in the mines: J. Chastenet, *Godoï*, 1943, p. 40. On *gallegos* as harvest workers in Castile in the eighteenth century, see Eugenio Larruga, *Memorias políticas y económicas sobre los frutos, comercio, fabricas y minas de España*, Madrid, 1745, I, p. 43.

[101] Diego Suárez, MS in the former *Gouvernement-Général* of Algeria, a copy of which was kindly passed on to me by Jean Casenave, f° 6.

[102] See below, p. 484.

[103] Jesús García Fernández, *Aspectos del paisaje agrario de Castilla la Vieja*, Valladolid, 1963, p. 12.

[104] Matteo Bandello, *Novelle*, VII, p. 200–201. Spoletans often served as soldiers, particularly in foreign armies, L. von Pastor, *op. cit.*, XVI, p. 267. On their cunning, see M. Bandello, *ibid.*, I. p. 418.

The people of the Bergamo Alps[105] – in Milan commonly known as the people of the *Contado* – are equally familiar in sixteenth-century Italy. They were everywhere. They worked as dockers in the ports, at Genoa and elsewhere. After Marignano, they came back to work the smallholdings of the Milanese, left abandoned during the war.[106] A few years later Cosimo de' Medici tried to attract them to Leghorn, the fever town where no one wanted to live. Rough men, clumsy, stocky, close-fisted, and willing for heavy labour, 'they go all over the world', says Bandello[107] (there was even an architect to be found working at the Escorial, Giovan Battista Castello, known as *el Bergamasco*[108]), 'but they will never spend more than four *quattrini* a day, and will not sleep on a bed but on straw'. When they made money they bought rich clothes and fed well, but were no more generous for it, nor any less vulgar and ridiculous. Real-life comedy characters, they were traditionally grotesque husbands whom their wives sent to *Corneto:* like the bumpkin in one of Bandello's novellas who has the excuse, if it is one, that he found his wife in Venice, among the women who sell love for a few coppers behind St. Mark's[109].

The picture, as we see, quickly turns to caricature. The mountain dweller is apt to be the laughing stock of the superior inhabitants of the towns and plains. He is suspected, feared, and mocked. In the Ardèche, as late as 1850, the people from the *mountagne* would come down to the plain for special occasions. They would arrive riding on harnessed mules, wearing grand ceremonial costumes, the women bedecked with jangling gold chains. The costumes themselves differed from those of the plain, although both were regional, and their archaic stiffness provoked the mirth of the village coquettes. The lowland peasant had nothing but sarcasm for the rude fellow from the highlands, and marriages between their families were rare.[110]

In this way a social and cultural barrier is raised to replace the imperfect geographical barrier which is always being broken in a variety of ways. It may be that the mountain dweller comes down with his flocks, one of the two annual movements of stock in search of pasture, or he may be hired

[105] M. Bandello, *op. cit.*, II, p. 385–386. It was poverty which obliged the people of Bergamo to emigrate. Sober at home, they were said to be great eaters elsewhere. At least one native of Bergamo could be found in every place in the world. Most of the Venetian subjects in Naples were *Bergamaschi*, E. Albèri, *op. cit.*, Appendix, p. 351 (1597).

[106] Jacques Heers, *Gênes au XVe siècle. Activité économique et problèmes sociaux*, 1961, p. 19. M. Bandello, *op. cit.*, IV, p. 241. Similarly, after the restoration of Francesco Sforza, many peasants arrived in Milan from Brescia.

[107] *Op. cit.*, IX, p. 337–338.

[108] L. Pfandl, *Philippe II*, French trans. 1942, p. 353–354. Both the famous Colleoni and the Jesuit Jean-Pierre Maffee, the author of *L'histoire des Indes*, Lyons, 1603, came from Bergamo.

[109] *Op. cit.*, IV, p. 335. He came from Brescia and had settled at Verona.

[110] Result of personal research. In fact, this opposition between highland and lowland is even more marked further north. Gaston Roupnel reports it in *Le vieux Garain*, 1939, on the Burgundy Côte, around Gevrey and Nuits-Saint-Georges. In 1870 the 'mountain folk' still wear smocks when they come to the lowland fairs.

in the lowlands at harvest time, and this is a seasonal emigration which is fairly frequent and much more widespread than is usually supposed: Savoyards[111] on their way to the lower Rhône valley, Pyrenean labourers hired for the harvest near Barcelona, or even Corsican peasants who regularly in summer, in the fifteenth century, crossed over to the Tuscan Maremma.[112] Or he may have settled permanently in the town, or as a peasant on the land of the plain: 'How many villages in Provence or even in the County of Avignon recall, with their steep, winding streets and tall houses, the little villages of the southern Alps'[113] from which their inhabitants originally came? Not so long ago, at harvest time the people from the mountains, young men and girls alike, would flock down as far as the plain and even the coast of lower Provence, where the *gavot*, the man from Gap, which is really a generic name, is still known 'as typically a hard worker, careless of sartorial elegance, and used to coarse food'.[114]

A host of similar and even more striking observations could be made if one included the plains of Languedoc and the uninterrupted flow of immigrants coming to them from the North, from Dauphiné, and even more from the Massif Central, Rouergue, Limousin, Auvergne, Vivarais, Velay, and the Cévennes. This stream submerged lower Languedoc, but regularly went on beyond it towards wealthy Spain. The procession reformed every year, almost every day, and was made up of landless peasants, unemployed artisans, casual agricultural workers down for the harvest, the grape harvest, or threshing, outcasts of society, beggars and beggar-women, travelling preachers, *gyrovagues* – vagabonds – street musicians, and shepherds with their flocks. Mountain poverty was the great spur of this journey downwards. 'Behind this exodus', says one historian, 'there lies an obvious disparity of living standards, to the advantage of the Mediterranean plains.'[115] These beggars would arrive, set off again and die on the road or in the hospices, but in the long run they contributed to the human stock of the lowlands, so that for centuries there persisted the aberrant type, the man of the North, taller than average, with fair hair and blue eyes.

Typical cases of mountain dispersion. Transhumance is by far the most important of these movements from the hill to the plain, but it is a return journey. We shall study it later in more detail.

The other forms of mountain expansion are neither as large-scale nor as regular. All the evidence is of particular cases; we shall have to present a series of examples, except perhaps in the case of 'military' migration, for

[111] P. George, *La région du Bas-Rhône*, 1935, p. 300: mentions bands of Savoyards going to work at harvest time in the Arles region, in the first years of the seventeenth century.

[112] Grotanelli, *La Maremma toscana, Studi storici ed economici*, II, p. 19.

[113] P. George, *op. cit.*, p. 651.

[114] Fernand Benoit, *op. cit.*, p. 23.

[115] Emmanuel Le Roy Ladurie, *op. cit.*, p. 97 ff.

all the mountain regions, or almost all, were 'Swiss cantons'.[116] Apart from the vagabonds and adventurers who followed armies without pay, hoping only for battle and plunder, they provided regular soldiers, almost traditionally reserved for certain princes. The Corsicans fought in the service of the king of France, of Venice, or of Genoa. The soldiers of the Duchy of Urbino and those of the Romagna, whom their overlords sold by contract, were generally allotted to Venice. If their masters turned traitor, as they did at the battle of Agnadello in 1509,[117] the peasants abandoned the cause of St. Mark to follow them. There were always lords of Romagna to be found at Venice; having broken their ban and committed other crimes, they now sought absolution and restitution of their property from Rome,[118] in return for which they went to the Low Countries to serve the cause of Spain and Catholicism. Or again there were the Albanians, the *pallikares* of Morea, and the 'Anatolian oxen' whom Algiers, and other similar cities drew from the barren mountains of Asia.

The story of the Albanians deserves a study in itself.[119] Attracted by the 'sword, the gold trappings, and the honours',[120] they left their mountains chiefly in order to become soldiers. In the sixteenth century they were to be found in Cyprus,[121] in Venice,[122] in Mantua,[123] in Rome, Naples,[124] and Sicily, and as far abroad as Madrid, where they went to present their projects and their grievances, to ask for barrels of gunpowder or years of pension, arrogant, imperious, always ready for a fight. In the end Italy

[116] It would be impossible to list all the known examples. For the predominance of recruitment from poor and mountainous areas in Spain, see Ramón Carande, *Carlos V y sus banqueros*, Madrid, 1949, p. 14 (the high regions of Valencia and the *montes* of León). Th. Lefebvre, *Les Pyrénées atlantiques*, 1933, p. 286, (3000 Guipuzcoans and soldiers from Navarre fought at Pavia). On the Aragonese Pyrenees, see Fernand Braudel, *La Méditerranée* . . . 1st ed., p. 47 and 48.

[117] Piero Pieri, *La crisi militare italiana nel Rinascimento*, 1st ed. Naples, 1934, p. 523.

[118] H. de Malsse to the king, Venice, 6th June, 1583; A.E. 31, f° 29 v° and 30.

[119] For a bibliographic guide see R. Busch-Zantner, *Albanien*, 1939. On the Albanian migrations, caused by famine in the Middle Ages towards the plains of Metohidja and Podrina, cf. J. Cvijić, *op. cit.*, p. 150. On their fantastic success in the Turkish empire in the nineteenth century, *ibid.*, p. 17. In the Bibliotheca Communale of Palermo there is an unpublished memoir by Mongitore Antonino, *Memoria de Greci venuti dall' Albania in Sicilia*, Qq E 32, f° 81. On the Albanian as a great drinker of wine see Bandello, *op. cit.*, IV, p. 350–351. On the Albanians seeking Christendom, any one of a number of documents, e.g. Joan de Pallas, consul at Ragusa to the Grand Commander of León, Naples, 3rd April, 1536, A.N., K. 1632.

[120] Victor Bérard, *La Turquie* . . . *op. cit.*, p. 164.

[121] In Cyprus they were soldiers from father to son. Fr. Steffano Lusignano di Cipro, *Corograffia et breve historia universale dell' isola de Cipro*, Bologna, 1573, (B.N. Paris, 4° G 459).

[122] They made up a considerable section of the Venetian army, cf. the series of documents, published by V. Lamansky, *op. cit.*, p. 549, note.

[123] M. Bandello, *op. cit.*, III. p. 329 ff.

[124] Museo Correr, D. delle Rose, 21, f° 80 on the large Albanian villages in Apulia, 1598. At the beginning of the century they are often feared. They are forbidden (3rd June, 1506) to leave fortified towns and villages carrying arms. Ludwig von Thallóczy, 'Die albanische Diaspora', in *Illyrisch-albanische Forschungen*, 1916, p. 339.

gradually shut its doors to them. They moved on to the Low Countries,[125] England,[126] and France during the Wars of Religion, soldier-adventurers followed everywhere by their wives, children, and priests.[127] The Regencies of Algiers[128] and Tunis refused them, and the lands of the Moldavian and Wallachian boyars also denied them entry. So they hastened to the service of the Sublime Porte, as they had in the first place, and as they were to do on a massive scale from the nineteenth century on. 'Where the sword is, there is the faith'. They were for whoever would give them a living. And, if necessary, 'with, as the song goes, their gun for pasha and their sabre for vizir',[129] they set up on their own account and became brigands. From the seventeenth century on, large numbers of Albanians, for the most part orthodox, spread over Greece where they camped as if in conquered territory. Chateaubriand could not fail to notice them in 1806.[130]

The history of Corsica – outside the island – is no less rich in information. Famous Corsicans are claimed everywhere, with some reason let it be said. 'In Spain, how many islanders achieved fame', exclaims de Bradi.[131] De Lecas, alias Vazquez, was one of Philip II's ministers; this is certainly true, and Cervantes even addressed some verses to him. De Bradi goes on to say that the original Don Juan was a Corsican, of Corsican father and mother. He even gives his name and his parents' names. One feels he is ready to prove that Christopher Columbus was born at Calvi! But without going as far as Don Juan, one can trace many genuine Corsicans who, whether as sailors, dealers, merchants, agricultural labourers – when they were not kings of Algiers,[132] or pashas, or renegades in the service of the Grand Turk – lived around the shores of the Mediterranean.

The inhabitants of the Milanese mountains have provided another longstanding source of immigrants. We mentioned the *Bergamaschi*, subjects of Venice. But every mountain valley in the Alps has its swarm always ready to leave. There is frequently a second homeland where the exiles can meet. The travelling tinkers of the Val Vigezzo traditionally went to France, sometimes settling there permanently, like the Mellerios who are today jewellers in the Rue de la Paix.[133] The inhabitants of Tre-

[125] O. de Torne, 'Philippe et Henri de Guise' in *Revue Historique*, 1931, II, p. 324.

[126] In 1540; G. Lefèvre Pontalis, *Correspondance politique d'Odet de Selve*, 1888, p. 64, 65, 351, 354.

[127] A.H.N. L° 3189, 1565, Inquisition of Valladolid, the curious affair of Guillermo de Modon.

[128] D. Haëdo, *Topographia* . . . p. 121 v°, mentions in Algiers Arnaut Mami and 'un renegado, tambien albanes y arnaut como el', p. 122 v°.

[129] Victor Bérard, *La Turquie* . . . *op. cit.*, p. 26.

[130] *Itinéraire de Paris à Jérusalem* (ed. 1831) I. pp. 111 and 175.

[131] *La Corse inconnue*, p. 44, with a list of Corsicans who achieved fame outside the island.

[132] Like Hasan Corso, J. Cazenave, 'Un Corse roi d'Alger, 1518–1556', in *Afrique latine*, 1923, pp. 397–404.

[133] Giuseppe Mellerio, *Les Mellerio, leur origine, leur histoire*, 1895. On emigration from the Milanese, Alps, see Carlo Antonio Vianello, 'Alcuni documenti sul consolato dei Lombardi a Palermo', in *Archivio storico Lombardo*, 1938, p. 186.

mezzo preferred the Rhineland; from their numbers came the Majnoni and Brentanos, the Frankfurt bankers.[134] From the fifteenth century on, the emigrants from the Val Masino took the road to Rome.[135] They can be found in the apothecaries' shops and bakeries of the Eternal City, and in Genoa too. From the three *pievi* of Lake Como – particularly those of Dongo and Gravedona – men left for Palermo as innkeepers. As a result there is a rather curious link, with visible traces, in the Val di Brenzio,[136] in the costume and ornaments of the women. For these departures often ended in return journeys. We find a considerable number of typically Milanese surnames in sixteenth-century Naples;[137] however, says the consul G. F. Osorio in 1543, 'these Lombards who come here in thousands to work, as soon as they have earned any money, go back to Milan with it'.[138] Lombard masons – *muratori* – (doubtless from the Alps) built the castle of Aquileia in 1543;[139] when winter came, they went back home. But if we were to follow these masons or stonecutters, the search would lead us all over Europe, and certainly throughout Italy. As early as 1486, *lapicide lombardi* were working on the construction of the Palace of the Doges at Venice.[140]

Even a country as continental and enclosed as Armenia does not escape the inevitable fate of all mountain regions. Without subscribing to the Armenian story that the Murat family, whose real name was Muratjan, originally came from Kara Bagh in the Caucasus[141] – it seems on examination even less likely than a Corsican Don Juan – we have plenty of evidence of the Armenian dispersion in the directions of Constantinople, Tiflis, Odessa, Paris, and the Americas. Armenia played a considerable part too in the rise of the great Persia of the Shah 'Abbās, at the beginning of the seventeenth century. It provided him with, among others, the indispensable travelling merchants[142] who journeyed at that time[143] to fairs in Germany,

[134] A. Vianello, *ibid.*, p. 186.
[135] *Ibid.*, p. 186. [136] *Ibid.*, p. 187. [137] *Ibid.*, p. 187.
[138] G. F. Osorio, console dei Lombardi alla camera dei mercanti di Milano, Naples, 27th September, 1543, ed. A. Vianello, *op. cit.*, p. 187.
[139] A.d.S. Naples, Sommaria Partium 240, f° 111–113, 15th January, 1544, with the names of the *muratori*.
[140] A.d.S. Venice, Notatorio di Collegio 13, f° 121, 12th October, 1486.
[141] According to a newspaper article, 'Eriwan, die Haupstadt der Armenier' in *Frankfurter Zeitung*, 9th August, 1940.
[142] Jean-Baptiste Tavernier, *Les six voyages qu'il a faits en Turquie, en Perse et aux Indes*, (Eng. trans. by John Phillips: *The Six Voyages of Jean-Baptiste Tavernier*, London, 1677, Persian Travels, p. 159.)
[143] 'At that time', that is in the seventeenth century. In the sixteenth century, in Constantinople and the eastern Mediterranean, the Armenians' time had not yet come: N. Iorga, *Points de vue sur l'histoire de commerce de l'Orient a l'époque moderne*, 1925, p. 23. In the seventeenth century by contrast, the Armenians were trading as far away as the western Mediterranean. An Armenian ship 'The Merchant Armenian' brought wheat to Leghorn (*Mémoires du Chevalier d'Arvieux*, 1735, I, p. 13). On the role played by the Armenians in the quarrel over the holy places in 1621, cf. Gérard Tongas, *L'ambassadeur L. Deshayes de Cormenin (1600–1632)*, 1937, p. 132. On the present dispersion of the Armenians there are a few words in Werner Sombart, *Vom Menschen*, 1940, p. 178–179.

to the quaysides of Venice, and to the shops of Amsterdam.[144] Others before the Armenians had attempted this connection and had failed. If they succeeded, it is in small part because of their Christianity, and in large measure because they would take on hard work, had great resistance, and were very sober, that is real mountain people. 'When they return from Christendom', notes Tavernier who knew them well, 'they bring along with them all sorts of Mercery-ware and Pedlery-ware of Nuremberg and Venice; as little Looking-glasses, trifles of Tin enamel'd, false Pearls, and other things of that nature; which pays for the Victuals they call for among the Country-people'.[145] It was with large fortunes in ready money that they returned home to Zolpha, the rich Armenian colony of Ispahan, where they led a life as ostentatious as the Persians, dressing their women sumptuously in Venetian brocades and harnessing their horses with gold and silver trappings. True, they had two avenues of trade to choose from and not content with Europe, they dealt with the Indies, Tonkin, Java, the Philippines, 'and throughout the East except for China and Japan'.[146] They might make the journey themselves: Tavernier travelled to Surat and Golconda with the son of a wealthy Armenian merchant of Zolpha – or they could take advantage of the branch set up in the nearby great city by the 'Banyans', the Hindu merchants who formed the advance guard of Asiatic commerce in the Persian capital. Some Armenians even owned ships on the Indian Ocean.[147]

This emigration dating from the end of the sixteenth century and the early seventeenth, explains the Venetian cast of the Armenian Renaissance. But was it not precisely because Armenia extended herself beyond her frontiers to such an extent, both to her advantage and her cost, that she ceased to be a state, if not a human reservoir of great potential, after the fourteenth century? Armenia was lost through her own success.

Mountain life: the earliest civilization of the Mediterranean? The mountains have always been a reservoir of men for other people's use. Mountain life, exported in generous quantities, has contributed to the overall history of the sea.[148] It may even have shaped the origins of that history, for moun-

[144] There exist trading manuals, in Armenian, specially written for the great northern town.
[145] J.-B. Tavernier adds, 'indeed the Armenians are so much the more fit for trading, because they are a people very sparing and sober; though whether it be their virtue or their avarice, I know not. For when they are going a long journey, they only make provision of Bisket, smoak'd *Bufalo*'s flesh, Onions, bak'd butter, Flour, Wine and dry'd Fruits. They never buy fresh Victuals but when they meet with Lambs or Kids very cheap in the mountainous countries'. *The Six Voyages*, Persian Travels, p. 159.
[146] On the wealth and luxury of the Armenians of Zolpha, see J.-B. Tavernier, *op. cit.*, Persian Travels, p. 159.
[147] *Ibid.*, *Travels to India*, p. 16.
[148] The mountains are 'a zone of human emigration', Pierre Deffontaines, Mariel Jean-Brunhes-Delamarre, P. Bertoquy, *Les problèmes de géographie humaine*, 1939, p. 141. On the mountain-plain contrast characteristic of the Mediterranean region, Charles Parain, *La Méditerranée: les hommes et leur travaux*, Paris, 1936, p. 191; Jules Sion, *La France méditerranéenne*, Paris, 1934, p. 44 ff.

tain life seems to have been the first kind of life in the Mediterranean whose civilization 'like that of the Middle East and Central Asia, cloaks and barely disguises its pastoral origins',[149] a primitive world of hunters and herdsmen, of nomads and migrating flocks, with now and then a few crops hastily sown on burnt clearings. This is the life of the high places, the first to be brought under control by man.

Why was this? Perhaps because of the varied distribution of mountain resources, and also because the plains were originally a land of stagnant waters and malaria, or zones through which the unstable river beds passed. The thickly populated plains which today are the image of prosperity were the culmination of centuries of painful collective effort. In ancient Rome, in the time of Varro, people could still remember the time when one had to cross the Velabrum by boat. Human habitation only gradually progressed from the highlands down to the fever-ridden flats with their stagnant pools.

There is no lack of proof of this. Take for example the map of prehistoric settlements of the Lower Rhône in the study by P. George.[150] All the known sites are to be found in the high limestone country overlooking the low-lying delta, to the east and north. It was not until thousands of years later that work began on the draining of the Rhône marshes in the fifteenth century.[151] Similarly, in Portugal, prehistoric sites are not found in the valleys and basins. The mountains on the other hand were populated from the time of the Bronze Age: the deforestation there is not as recent as that of central Europe. In the ninth and tenth centuries, people still lived high up; the places that date back to that period – the age of the kings of the Asturias and León – are almost always the highest villages of today.[152]

The example of Portugal takes us outside the limits of the Mediterranean. But right in the centre is Tuscany: a country of narrow, naturally marshy plains, interspersed with valleys between the hills which rise higher and higher as one travels east or south, Here there are towns. And the earliest and oldest towns are precisely at the highest points, looking down on the slopes that today are covered with vines and olive trees. This is where we find the Etruscan towns, all *oppida*-towns perched on hill tops, *Hochrückenstädte*, as A. Philippson calls them.[153] Pisa, Lucca, Florence,

[149] Jules Blache, *op. cit.*, p. 15. The same point is made in P. George, *op. cit.*, p. 352.

[150] P. George, *op. cit.*, p. 237; V. L. Bourilly and R. Busquet, *Histoire de la Provence*, 1944, p. 7: 'In Provence, the earliest settlements have been found on the edges of the Mont Ventoux, on the mountains of the Vaucluse, on the south of the Lubéron, on the right-hand side of the Durance valley and at the point where the Verdon joins it; they seem to be connected with the abundant deposits of flint and hard rocks rolled down by the rivers'. Louis Alibert is of the same opinion, 'Le Génie d'Oc.' in *Les Cahiers du Sud*, 1943, p. 18. 'The essentially mountainous skeleton of the Mediterranean countries favoured the sedentarization and permanent settlement of prehistoric and protohistoric peoples'.

[151] P. George, *op. cit.*, p. 310–322.

[152] H. Lautensach, 'Die ländlerkundliche Gliederung Portugals' in *Geogr. Zeitschr.* 1932, p. 194.

[153] A. Philippson, 'Umbrien und Etrurien', in *Geogr. Zeitschr.*, 1933, p. 455, 457, 461, 462.

and the lowland towns were on the contrary late developments of the Roman period.[154] And around Florence, the marshes remained a threat for a long time to come.[155] Even in the sixteenth century the plains of Tuscany had not been completely drained. In fact, the water level rose dangerously over the region. Marshland spread in the Val di Chiana and on the edge of the plain flooded by Lake Trasimene. Fever increased in the Maremma and in the wheat-growing plain of Grosseto where all the efforts of the Medicis' policy failed to develop intensive wheat culture for export.[156]

So the contrast between plain and mountain is also a question of historical period. We have learned from agrarian studies to distinguish in central and western Europe between old and new soils, *Altland* and *Neuland*, as German historians and geographers call them, the former acquired by neolithic farmers, the latter opened up by mediæval and modern colonization. Old soils and new soils: in the Mediterranean one might almost call them mountain and plain.

2. PLATEAUX, HILLS, AND FOOTHILLS

This sketch of the mountain regions is necessarily incomplete. Life cannot be reduced to such a simple outline. The mountains are full of variety, in relief, history, customs, and even cooking. In particular, there is alongside the high mountains that half-mountainous region of plateaux, hills, and foothills that in no way resembles – indeed all its features clearly distinguish it from – the real mountains.

The high plains. Plateaux are large, high, open plains, where the soil, at least in the Mediterranean, is dry and therefore hard, occasionally interrupted by river gorges. Roads and tracks are comparatively easy to establish. The plateau of Emilia, for example, hardly a plateau at all – almost a plain – is criss-crossed with roads and has always been the seat of outstanding civilizations, of which Bologna is the prime symbol. Asia Minor, with its precious tertiary overthrusts (without which it would have been as wild as its neighbours, Kurdistan and Zagros),[157] with its caravans, caravanserais, and stage-post towns, is the centre of an unrivalled history of communications. Even the high Algerian plateaux are like an uninterrupted chain of steppes, from Biskra and the Chott-el-Hodna basin to the Moulouya in Morocco.[158] In the Middle Ages, a great east-west thoroughfare linked these markets and this main artery, before the rise of Bougie, before Algiers and Oran were founded, and the Saracen sea became important in the tenth century,[159] was the physical embodiment of what was known as Africa Minor, between Ifriqiya and Morocco.

[154] A. Philippson, *op. cit.*, p. 457.

[155] Alfred von Reumont, *Geschichte Toscana's*, Gotha, 1876, p. 366–367.

[156] *Ibid.*, p. 368 ff.

[157] A. Philippson, *Das Mittelmeergebiet*, p. 20.

[158] And beyond; E.-Félix Gautier has frequently stressed the role of this backbone of North Africa, in among other works, *Le Passé de l'Afrique du Nord*, 1952, p. 115.

[159] Georges Marçais, in *Histoire d'Algérie*, by Gsell, Marçais and Yver, 1927, p. 121.

As for the two pre-Apennine plateaux that extend westward more or less over Umbria and Tuscany, and eastward over Apulia, should we follow Philippson[160] and describe them as the vital theatres of the history and cultural development of the peninsula? Undoubtedly they played a significant role, simply because along these plateaux ran the all-important roads. To the west, on the tuff plateaux of southern Etruria, Rome lost no time in building the Via Flaminia, the Via Amerina, the Via Cassia, the Via Clodia and the Via Aurelia. In the sixteenth century their outlines were still there almost unchanged. Apulia, a vast limestone plateau,[161] not too high, facing eastwards towards Albania, Greece, and the East, is equally accessible to traffic. It is crossed by two parallel strings of towns: one on the coast, from Barletta to Bari and Lecce; the other five miles inland, from Andria to Bitonto and Putignano.[162] From antiquity Apulia has been a centre of habitation between the sea and the almost deserted interior of the Murge. And it was already a cultural centre. Its character as a communications region opened it to western influence – it was Latinized without difficulty[163] – as well as to constant influences by sea from the east, from Greece and Albania; so much so that at certain points in its history Apulia gave the impression of literally turning its back on the rest of the peninsula. It clearly bears the mark of man's continual intervention.[164] In the sixteenth century, wealthy Apulia was a grain-store and an oil reservoir for the rest of Italy. People came from all around in search of foodstuffs. They came in particular from Venice, which was always hoping to gain control of the region – and did twice in 1495 and 1528 – but also from the other towns on the Adriatic, Ragusa, Ancona, Ferrara.[165] Through the intermediary of the little archipelago of the Tremiti and the good offices of the Frati della Carità who lived there, the contraband passage of wheat persisted throughout the sixteenth century.[166]

The finest example of these busy plateaux, however, is in the centre of the Spanish peninsula, the plateau of the two Castiles, Old and New, chequered with roads or rather tracks,[167] which were none the less inundated with people on the move, swarming with caravans of *arrieros*. The carters, whose adventures Cervantes describes, only played a minor role by comparison.[168] These unending processions of beasts of burden, mules and

[160] 'Umbrien . . .' *art. cit.*, p. 450.
[161] Jules Sion, *Géogr. Univ.*, VII, 2, 1934, p. 326.
[162] P. Vidal de la Blache, *op. cit.*, (Eng. trans.) p. 136.
[163] N. Krebs, 'Zur politischen Geographie des Adriatischen Meers', n *Geogr. Zeitschr.*, 1934, p. 375.
[164] I am thinking for example of the *trulli*, but even more of the irrigation system of the plateau-plain, the 'acquedotto pugliese'. Fritz Klute, *Handbuch der geogr. Wissenschaft*, Berlin, 1914, p. 316, provides a good diagram of it, but what is its history?
[165] According to A.d.S. Naples, Dipendenze della Sommaria, Fascio 417, fasc. I°, 1572.
[166] A.d.S. Naples, Sommaria Consultationum, II, 237–241.
[167] Georg Friederici, *Der Charakter der Entdeckung und Eroberung Amerikas durch die Europäer*, I, Gotha, 1925, esp. p. 174–179.
[168] In 'The Man of Glass', *The deceitful marriage and other exemplary novels*, Signet classics, 1963, p. 162.

donkeys invisible inder their loads, journeyed over the Castiles from north to south and from south to north. They transported anything that could be sold along the way, wheat and salt, wool and wood, earthenware and pottery from Talavera, as well as passengers.

This carrying trade enabled Castile to maintain the links between the peripheral regions of the peninsula which surround it and in places separate it from the sea. It was this, and not Castile unaided, as has been said,[169] 'which made Spain'. This traffic determined and, it could be said, revealed the basic economy of the country. So it was that for a long period the movement of caravans was directed to the east coast, first to Barcelona, which therefore among its other functions was responsible for selling Spanish wool; then to Valencia, which reached the peak of its fortunes in the fifteenth century,[170] especially in the reign of Alfonso the Magnanimous (1416–1458); and eventually to Málaga and Alicante, which were the great wool ports in the sixteenth century. In his work on the *Grosse Ravensburger Gesellschaft*, A. Schulte suggests that if Valencia declined at the end of the fifteenth century, it was because Castilian traffic, restored in all its vigour under the ordered regime of the Catholic Kings, turned to the North and its thriving towns, Medina del Campo, Burgos, Bilbao, through which Spain made links with powerful northern Europe. This is a reasonable argument that takes account of the movement throughout the area, the caravan traffic to which reference must be made if we are to understand either Spain as a whole or Castile itself with its north–south alignments of towns situated along the transhumance and transport routes – the very same roads taken by the Reconquest; Castile, that was so quickly and effectively brought under control by its kings, and ruled, after Villalar, with that 'rod of iron' mentioned by a Venetian ambassador in 1581[171], for ease of communication is one of the first conditions of effective government. Castile for all these reasons became the heart, the centre of gravity of Spain.[172]

A hillside civilization. Where mountain and plain meet,[173] at the edge of the foothills – in Morocco known as the *Dir* – run narrow ribbons of flourishing, established ways of life. Perhaps it is because between 200 and 400 metres they have found the optimum conditions of the Mediterranean

[169] Ortega y Gasset, *España Invertebrada*, Madrid, 1934, Similar remarks can also be found in the works of Unamuno, Machado, and Pidal.
[170] A. Schulte, *Geschichte der grossen Ravensburger Gesellschaft*, 1923, notably I, p. 285 ff. and p. 295.
[171] E. Albèri, *Relazioni*, I, V (Francesco Morosini), p. 293.
[172] P. Vidal de la Blache, *États et Nations de l'Europe*, 1889, p. 358.
[173] M. Sorre, *Les fondements biologiques de la géographie humaine*, Paris 1943, p. 386: 'The climate of the foothills and the lowest plateaux is more encouraging to effort, at least in the Mediterranean, than that of the lowlands'. There is a good outline in André Siegfried, *Vue générale de la Méditerranée*, 1943, of the 'mountain fringes' the 'revermonts', to use an expression from the Jura; by these I mean all the foothills, including the curious line of the Piedmonts, that zigzag line which is so important, especially in Andalusia: see G. Niemeyer, *op. cit.*, p. 109.

habitat, above the unhealthy vapours of the plain, but within the limits between which the *coltura mista* can prosper. The mountain's water resources also allow irrigation and the cultivation of the gardens which are the beauty of this narrow region.

In Morocco, on leaving the Atlas for the *Dir*, which lead to the great plains of the west, one finds at the entrance of every valley irrigation channels and along with them the gardens and orchards admired by the Père de Foucauld. Similarly the traveller from the North receives his first impression of Italy, that is of the real Mediterranean, only some time after crossing the Alps, when he reaches the first foothills of the Apennines whose gullied hillsides stretch from Genoa to Rimini dotted with delightful oases. Arriving in spring, he is greeted by a green landscape already bright with flowers, and cultivated fields where white villas stand among vines, ash, and olive trees, while in the Po valley, the bare trees, poplar, willow, and mulberry, still seem to be in the grip of winter. For *coltura mista*, the combination of orchard, market garden and sometimes sown fields, is often localized at the level of the foothills. 'At this altitude (between 200 and 400 metres)', notes Vidal de La Blache,[174] 'is situated the series of *castelli romani* around the Roman campagna, and the ancient *oppida* bordering the unfrequented fringe of the Pontine marshes (it still was unfrequented in Vidal's time) upon the slopes of the Volscians and the age-old cities commanding the almost deserted approaches to ancient Etruria. . . . Gardens fill the foreground, grey mountains the background. The *oppida*, old fortified enclosures, found a foothold on the parts of the mountain spurs which are not cultivable. Urban life is not indigenous there. Instead there is a rather puissant cantonal life. . . . In this crisp pure air, there is both preserved and constantly replenished a race of men which formerly furnished this same Rome with the best of its legionaries, and today the labour supply for cultivating the campagna.'

The same kind of hillside landscape overlooks the Adriatic, along the edge of the Dinaric Alps, from around Istria up to Ragusa or Antivari.[175] A narrow strip of Mediterranean life borders the mountains almost as far as the coast, running inland with the contours of the land, reaching as far as Postojna by the Carniola gate, as far as Livno by the Prolog col, or to Mostar in Herzegovina by the fever-ridden valley of the Narenta. In spite of these incursions, this is basically a ribbon phenomenon, quite unlike the vast expanse of Zagora, the *Karst* highland, which is as wide at the latitude of Ragusa as the Alps on a level with Munich, and forms a barrage on the side of the Balkan subcontinent.

It is difficult to imagine a more striking contrast. To the east, the vast

[174] *Op. cit.*, p. 149–150.

[175] On the whole of this question see J. Cvijić's book *La Péninsule balkanique*, Fr. trans. 1918, which is full of insights. For descriptive colour see R. Gerlach, *Dalmatinisches Tagebuch*, Darmstadt, 1940. For a geographical description, Milojević, *Littoral et îles dinariques dans le Royaume de Yougoslavie* (Mém. de la Soc. de Géographie, vol. 2), Belgrade, 1933.

mountain ranges, ravaged by the rigours of winter and the catastrophic droughts of summer, a land of herds and unsettled existence, which ever since the Middle Ages, and perhaps before (particularly Herzegovina and Montenegro), has poured its men and animals down on the foothills, towards Moravian Serbia with its poorly drained fluvial beds, towards Sumadija whose forests were formerly impenetrable, towards Croatia-Slavonia to the north and as far abroad as Sirmia. One could hardly imagine a region more primitive, more patriarchal and, whatever the charms of its civilization, in fact more backward. In the sixteenth century this was a combat region, a frontier zone facing the Turks. The *Zagorci* were born soldiers, bandits or outlaws, *hajduk* or *uskok*, 'nimble as deer', their courage was legendary. The mountain terrain lent itself to their surprise attacks, and any number of folk songs, the *pesma*, glorify their exploits: the beys they trounced, the caravans they attacked, and the beautiful maidens they carried off. That these wild mountains should spill over towards Dalmatia is not surprising. But the invasion showed none of the anarchy of the East and North, It was disciplined and carefully filtered by the lowlanders. The flocks of the *Zagorci* met a well-organized resistance: they might overrun Lower Albania, but not the narrow fields and gardens of the coast. They managed to penetrate in only a few places, in particular by way of the Narenta valley. As for the men, they were tamed by the new environment. The brigand became the gendarmes' auxiliary. A possible colonist, he might be directed towards the islands and, even more likely, through the efforts of Venice, towards Istria, where there were more empty fields than anywhere else.[176]

For here, the invader had come face to face with an exceptionally stable and well-ordered civilization, unused to movement, or at any rate to the massive migration and wild flights of the mountain region, a closely knit rural civilization, patiently constructed by hacking out terraced gardens, orchards, vineyards, and fields where the hillside was not too steep. A series of urbanized villages and small towns with narrow streets and tall, closely packed houses was installed in the hollows, the *draga*, the promontories, the isthmuses of the coast. Here the people were hard-working and level-headed, comfortable, if not rich. For like anywhere else in the Mediterranean, only a modest living could be made. It was maintained by battling with nature, with the vast threatening Zagora, and with the Turks; in addition there was always the struggle against the sea. All this required coordinated activity, not people who were free to behave as they pleased. The peasant of Ragusa from the thirteenth century on was in the situation of a colonial settler, of a peasant in semi-slavery. In the

[176] The preceding remarks on 'metanastasic' movements are based on J. Cvijić. His pupils have pursued this problem of emigration from the Slav mountains, e.g., J. Mal, *Uskoke seobe i slovenske pokrajine* (The migrations of the Uskoks and the Slovene regions), Ljubljana, 1924, shows how this migration was used in the organization of the Turkish, Venetian and Austrian military zones. R. Busch-Zantner, *op. cit.*, p. 86, draws attention to the Albanian pressure which determined the Serbian migrations towards the north – Albanian and not Turkish pressure.

fifteenth century a cadastral register reveals the similar situation of the peasants round Spalato. In the sixteenth century around the Venetian towns of the *altra sponda*, the fearful farmers had to have the protection of the soldiers. Work gangs of peasants would set off in the morning and return at night under the protection of the troops.[177] This would hardly encourage individualism or peasant unrest, of which there is however some evidence.[178]

The whole of Dalmatian society moreover was dominated by hierarchy and discipline. One has only to think of the role of the noble families of Ragusa. Even in recent times an entire leisured class of *Sjor* or *Signori* existed above a proletariat of humble gardeners and fishermen. 'A fisherman', says Cvijić, 'fishes for himself and for a *Sjor* with whom he is closely associated. The *Sjor* considers him as almost one of his household and the fisherman refuses to sell his fish to anyone else.' 'These societies are so stable,' Cvijić goes on to say, 'that they are as if petrified, fixed once and for all.' This is both true and false, for what we have here is a stable kind of humanity rather than a stable society. In fact, socially, the peaceful foothills develop, change, and progress, particularly when the foothills are in Dalmatia, or on the edge of the Catalan massif, which we might equally well have taken for our example. Their case is complicated by the fact that they do not, like the *castelli romani*, overlook a narrow and limited plain, but onto the sea, which makes their position at the same time easier and more complicated. For the Dalmatian strip is linked by the Adriatic to Italy and the world: it is wide open to outside influence. Venice, which dominated it politically in the sixteenth century, penetrated it with its triumphant civilization, without even trying.

The hills. We meet the same problem when we turn to the hills, particularly the hills of tuff or tertiary limestone which man occupied early and soon brought under control: the hills of Languedoc; the hills of Provence; the hills of Sicily; the hills of Montferrat, those 'islands' in northern Italy; the Greek hills whose classical names are famous; the hills of Tuscany, with their celebrated wines, their villas, and villages that are almost towns, set in the most moving landscape in the world; the *Sahels* of North Africa, well-known in both Tunisia and Algeria.

Between the sea and the Mitijda, up against the miniature Massif

[177] J. N. Tomić, *Naselje u Mletackoj Dalmaciji*, Niš, 1915, vol. I, 1409–1645, a short study of the bonds of personal and economic dependence of the peasants in the Venetian possessions in Dalmatia. This regime tended to spread to the islands and the Istrian interior. The Turkish peril caused human losses which Serbian immigration from Bosnia and Herzegovina could no longer compensate. It led to the organization of compulsory militias against attacks, whether from Turks, corsairs, or bandits. On Venetian Dalmatia in the sixteenth century, V. Lamansky, *op. cit.*, especially p. 552 for the exodus of Dalmatian soldiers as far abroad as England, and their employment in the fleet and army of Venice, as well as on foreign boats, where they were attracted by better conditions than were to be found in the Venetian fleet.

[178] Documents read at the Archivio di Stato at Venice, reference not noted.

Central of the Bouzareah, the Sahel of Algiers is the basic component of the *Fahs*, the Algiers countryside.[179] It is an urbanized countryside, divided among the estates of the Turks of Algiers, and shares the dialect of the nearby town, a narrow 'oasis' among the 'nomadic' dialects[180] that surround the urban centre. These hills, cultivated, equipped, and drained – the canals from the Turkish period have been rediscovered in our own day[181] – are lush and green. The gardens, the pride of many Mediterranean towns, are magnificent here, surrounding the white houses with trees and running water. They won the admiration of a Portuguese captive, João Carvalho Mascarenhas, in 1627.[182] His admiration was not feigned: Algiers, a corsair town that grew like the American colonies, was also a town of luxury and art in the Italian fashion at the beginning of the seventeenth century. With Leghorn, which grew up in the same way, it was one of the richest towns of the Mediterranean, and one of the most disposed to convert its wealth into luxury.

A superficial reading of these examples might suggest that the problems here were of a simple nature and above all particular to these regions. The fresh evidence produced in René Baehrel's recent work on Lower Provence in the seventeenth and eighteenth centuries[183] should warn us against such a notion. Viewed in detail, this fragile economy of terraced crops on the hillside is infinitely complex and variable with the passage of time. Between its low retaining walls the bank of earth, known as the *restanque*, or more often *oulière*, is broader or narrower depending on the slope of the hillside. 'Vines were planted on the edge of the *oulière*, trees more or less everywhere'; between vines and trees grew wheat, oats mingled with vetch (for the mules), and above all vegetables ('lentils, peas, *farouns*'). These crops were forced to compete with each other according to market prices; they also had to compete with the produce of neighbouring regions and be incorporated into the richness or poverty of a larger-scale economy than their own. Around Vicenza at the end of the sixteenth century the countryside was all of a piece, made up of 'uninterrupted gardens', although it covered plains, valleys, and *monti*.[184] In the interior of Bas-Languedoc, on the other hand, there are innumerable barren hills that are not worth the trouble of making *rompudes* (clearings).[185] A stony *pech* is often abandoned when times are hard. For the expenditure of human effort on terracing crops does not always pay.

[179] H. Isnard, 'Caractère récent du peuplement indigène du Sahel d'Alger', in *2e Congrès des Soc. sav. d'Afrique du Nord*, 1936.

[180] On this subject cf. G. Millon, 'Les Parlers de la région d'Alger, in *Congrès des Soc. sav. d'Afrique du Nord*, 1937.

[181] M. Dalloni, 'Le problem de l'alimentation en eau potable de la ville d'Alger', in *Bulletin de la Soc. de Géogr. d'Alger*, 1928, p. 8.

[182] Bernardo Gomes de Brito, *Historia tragico-maritima*, Lisbon, vol. VIII, 1905, p. 74.

[183] René Baehrel, *Une croissance: la Basse-Provence rurale, fin du XVIe siècle – 1789*, Paris, 1961, p. 125.

[184] Marciana Library, Venice, 5838, C II, 8, f° 8.

[185] E. Le Roy Laduric, *op. cit.*, p. 223 ff.

In short, we should not exaggerate the importance of the hillside civilizations, relatively few in number. Sometimes they hold the longest established human population of the Mediterranean, and the most stable landscapes. Some people, Lucien Romier for one,[186] have seen the focal point of Mediterranean civilization, its only creative source, in the hills; but this claim carries with it dangers of oversimplification. We should not be so led astray by the examples of the hills of Tuscany or Languedoc that their clear waters make us forget the other springs which have nourished the great Mediterranean body.

3. THE PLAINS

It is even more easy to be mistaken about the role of the plain in the Mediterranean. If we say mountains, it suggests austerity, harshness, backwardness, and a scattered population. If we say plain, it suggests abundance, ease, wealth, and good living. In the period we are studying, and with reference to Mediterranean countries, the suggestion is likely to be misleading.

There are certainly plenty of plains in the Mediterranean, large and small, installed between the Pyrenean and Alpine foldings, often resulting from a collapse followed by silting up: the age-long work of lakes, rivers, or seas. It is hardly necessary to stress that, whether they are great or small (and only about ten are of any significant size, regardless of their resources), whether they are near or far from the sea, the plains have a totally different aspect from the highlands surrounding them. They do not have the same light, the same colours, the same flowers, or even the same calendar. When winter lingers on in Haute-Provence or in 'Daufiné', it 'lasts no more than a month' in Lower Provence, 'so that even in that season, one may see roses, pinks and orange blossom'.[187] The ambassador de Brèves who, on 26th June, 1605, went with his travelling companions to see the cedars of Lebanon, was astonished by the differences effected by the altitude: 'Here [on the mountains of Lebanon] the vines were only just beginning to flower, as were the olive trees, and the wheat was just turning yellow; and at Tripoli [on the coast] the grapes were growing, the olives were already big, the wheat had been harvested, and all the other fruits were well advanced.'[188] A Flemish traveller, Peter Coeck of Alost, accompanies with illustrations his report in 1553 of the difficulties he encountered besides the 'rain, wind, snow, and hail', crossing the mountains of Slavonia. 'When one reaches the lowland countryside', everything improves: 'Greek women

[186] *Plaisir de France*, 1932, p. 119–120: 'the spirit of the Midi was formed on the hills' and not 'on the mountain sides which were then too poor and at periods deserted'. On the people of the hill country, see Isabelle Eberhardt, *Notes de route*, 1921, on the Tunisian Sahel (p. 221), or Marcel Brion on Tuscany and 'its landscape of human dimensions', *Laurent le Magnifique*, 1937, p. 282

[187] Anon. (Claude de Varennes), *Voyage de France, dressé pour l'instruction et la commodité tant des Français que des étrangers*, Rouen, 1647, p. 136.

[188] *Op. cit.*, p. 56–57.

. . . bring to sell to travellers all sorts . . . of useful supplies and provisions such as horse shoes, barley, oats, wine, bread or round loaves baked in hot embers.'[189] Similarly, Philippe de Canaye in 1573 was glad to reach the smiling plains of Thrace after the snow-covered mountains of Albania.[190] Many others have like him rejoiced at the pleasant sight of the warm plains that appear so welcoming.[191]

Or so they appear. They must have been easy to bring under control when they were of small proportions.[192] Man immediately took possession of the rising ground, strategic hillocks, the fluvial terraces,[193] and the foothills of the mountains; here he established his large, compact villages, sometimes even towns. But at the lowest point of the basin, always threatened by the waters, a dispersed habitat was often the rule. This is how Montaigne saw the plain of Lucca, and Pierre Belon the plain of Bursa; this is how we can still see the plain of Tlemcen, which was already being farmed in Roman times: in the centre, gardens and irrigated fields; on the borders, orchards and vineyards; further away the range of famous villages – the same spectacle that Leo Africanus had before his eyes in 1515.[194] And as if by virtue of Thünen's law of circles, the largest estates of extensive culture were situated farthest from the centres of population.[195]

When they were larger, the Mediterranean plains were far more difficult to conquer. For a long time they were only very imperfectly and temporarily taken over by man. Only recently, towards 1900,[196] was the Mitidja, behind Algiers, finally claimed for cultivation. It was not until after 1922 that Greek colonization eventually triumphed over the marshes in the plain of Salonica.[197] And it was on the eve of World War II that work

[189] B. N. Estampes (Od. 13, pet. in-fol): *Les moeurs et fachons de faire des Turcz . . . contrefaictes par Pierre Coeck d'Alost l'an 1533.*

[190] Philippe de Canaye, sieur de Fresne, *Le Voyage du Levant*, 1573, ed. H. Hauser, 1897, p. 40.

[191] Cf. V. Bérard, *La Turquie . . .*, p. 93: for the contrast between Albania with its mountains, its 'violent, earth-stirring' rivers and its passes guarded by *dervendjis*; and Macedonia with its peaceful waters and wreaths of mist. Cf. Paul Bourget, *Sensations d'Italie*, 1891, p. 89–90, for the transition from Tuscany to Umbria; Tuscany may be wild but the air is pure, while over the chestnut trees and vineyards of Umbria hangs the pall of mist and fever.

[192] On the early occupation of the small plains, I agree with H. Lehmann, 'Die geographischen Grundlagen der kretisch-mykenischen Kultur', in *Geogr. Zeitschr.*, 1932, p. 337. Similarly in the Middle East, it is reasonable to suppose that the smaller oases were the first to be settled by man.

[193] Pierre Vilar, *op. cit.*, I, p. 223.

[194] *Op. cit.*, p. 243 ff. G. Marçais, 'Tlemcen, ville d'art et d'histoire', in *2e Congrès des Soc. savantes d'Afrique du Nord*, vol. I, 1936.

[195] G. Neimeyer, *op. cit.*, p. 28. A far-reaching observation. The rural space is organized as a function of and starting from the urban settlement, whether town or village.

[196] On this point see Julien Franc, *La Mitidja*, Algiers, 1931, and E.-F. Gautier, 'Le phénomène colonial au village de Boufarik', in *Un siècle de colonisation*, Algiers, 1930, p. 13–87.

[197] J. Ancel, *La plaine de Salonique*, 1930.

was finished on the draining of the Ebro delta and the Pontine Marshes.[198] In the sixteenth century, then, the big plains were not all rich, far from it. By an apparent paradox, they frequently presented a spectacle of misery and desolation.

Let us take them in turn. The Campagna Romana: a semi-desert, in spite of a further attempt at settlement begun in the fifteenth century. The Pontine Marshes: a roaming ground for a few hundred shepherds and a refuge for herds of wild buffalo; the only abundance here was of wildlife, all kinds of game including wild boars, a sure index of minimal human habitation. The regions of the lower Rhône valley were equally deserted, hardly affected by the few riverside 'improvements' of the previous hundred years.[199] The plain of Durazzo was completely empty; it still is today. Even the Nile delta was only very thinly populated.[200] And the mouth of the Danube was as it has remained to this day, an incredible marshland, a tangled amphibious world, with floating islands of vegetation, muddy forests, fever-infested swamps and, living in this hostile environment where wildlife thrives, a few wretched fishermen. In 1554 Busbecq was passing through the plains beyond Nicaea in Anatolia where there were no villages or houses; it was here, he noted that 'we saw also the famous goats from whose fleece or hair . . . is made the well-known cloth known as camlet', which tells us he was nearing Ankara.[201] The inland plains of Corsica, Sardinia, and Cyprus at the same period were a scene of desolation. On Corfu, the *provveditore* Giustiniano travelled over an almost deserted plain in 1576.[202] The marshes at Biguglia and Urbino in Corsica were a festering sore.[203]

Water problems: malaria. But we need not complete the list of plains that had not reached prosperity in the sixteenth century. For a plain to become rich required prolonged effort and the solutions to two if not three problems. First, there was the problem of flooding. Mountain regions are sources of water: that water normally collects in the plains.[204] In winter,

[198] On the Ebro delta, E. H. G. Dobby, 'The Ebro Delta', in *Geogr. Journal*, London, May 1936. On the Pontine marshes, Schillmann, 'Die Urbarmachung der Pontinischen Sümpfe', in *Geogr. Wissenschaft*, 1934.

[199] P. George, *op. cit.*, p. 296–299, 310–322, 348. From the twelfth to the sixteenth century, the Camargue became increasingly unhealthy, p. 606.

[200] J. Lozach, *Le Delta du Nil*, 1935, p. 50.

[201] *Op. cit.*, p. 46. Another example near Adrianople where 'a large area of flooded country is formed where the rivers converge', *Turkish Letters*, p. 88. In Ignacio de Asso, *Hist. de la economía política de Aragon*, 1798, (re-ed., 1947) cf. details of the 'pantanal' of Benavarre (p. 84), the plains of Huesca (p. 72–3) of Saragossa (p. 94 ff.) and Teruel (p. 186).

[202] B.N. Paris, Ital., 1220, fol. 35.

[203] Philippe Leca, *La Corse . . . op. cit.*, p. 213 and 270; J. de Bradi, *op. cit.*, p. 25.

[204] In the rainy season, the plains become lakes or fields of mud (J. J. Tharaud, *La Bataille à Scutari*, 1927, p. 53, on the Albanian plains); the Boyana overflows its banks to make mud-flats and marshes, (*ibid.*, p. 148).

which is the rainy season, plains tend to flood.[205] To avert disaster their inhabitants must take precautions, build dams and dig channels. Even so, there is not a plain in the Mediterranean today, from Portugal to Lebanon, that is not threatened by the danger of flood waters. Even Mecca disappears under torrential rains in some winters.[206]

In 1590 widespread floods submerged the Maremma in Tuscany devastating the sown fields. At that time the Maremma was, with the Arno valley, the chief grain supplier of Tuscany. The Grand Duke was obliged to go to Danzig (for the first time) in search of grain, without which it would not have been possible to bridge the gap. Sometimes violent summer storms alone can produce similar disasters, for water from the mountains rushes down very quickly, almost as soon as it has fallen. Any river bed dry in summer can become a foaming torrent in winter, within a few hours. In the Balkans the Turks built high hog-backed bridges without piles, to give as free a passage as possible to sudden rises in the water level.

When the waters reach the flats, they do not always run smoothly to the sea. Waters from the Alban and Volscian hills form a stagnant stretch about 30 kilometres wide, the Pontine Marshes. The reasons for this are the flatness of the plain, the slow flow of water, and the high line of sand dunes barring the way to the sea. In the case of the Mitidja, the plain, which is bordered to the south by the Atlas, is literally shut off on the north by the hills of the Sahel, only imperfectly breached by the Oued El Harrach and the Oued Mazafran, to the east and west of Algiers. In fact there is almost always stagnant water at these low levels. And the consequence is always the same: 'Acqua, ora vita, ora morte': here water is synonymous with death. Where it stands it creates vast stretches of reeds and rushes. At the very least, in summer it maintains the dangerous humidity of the marshes and river beds, from which come the terrible swamp fevers, the scourge of the plains in the hot season.

Before the use of quinine, malaria was often a fatal disease. Even in a mild form it led to a reduction in the vitality and output of its victims.[207] It

[205] As they were in 1940 in the south of Spain; in January 1941 in Portugal, in February 1941 in Syria; in October 1940 in the Ebro basin (newspaper reports). There were floods at Córdoba on 31st December, 1554 and 1st January, 1555, Francisco K. de Uhágon, *Relaciones históricas de los siglos XVI y XVII*, 1896, p. 39 ff.

[206] Gen. Éd. Brémond, *op. cit.*, p. 17; by the same author, *Yémen et Saoudia*, 1937, p. 11, note 6.

[207] There are countless useful works on malaria. For a bibliographical guide, see Jules Sion, 'Étude sur la malaria et son évolution en Méditerranée' in *Scientia*, 1938, and M. Sorre, *Les fondements biologiques de la géogr. humaine*, 1942, as well as the excellent article by M. Le Lannou, 'Le rôle géographique de la malaria' in *Annales de Géographie*, XLV, p. 112–135. It would be interesting to be able to measure and chart the rise of malaria during the last world war in the Mediterranean when there was a shortage of quinine. For its history, the most important works are: Angelo Celli, 'Storia della malaria nell' agro romano' in *M.R. Ac. dei Lincei*, 1925, 7th series, vol. I, fasc. III; Anna Celli-Fraentzel, 'Die Bedeutung der Malaria für die Geschichte Roms und der Campagna in Altertum und Mittelalter' in *Festschrift B. Nocht*, 1927, 2 pl., 1 map, p. 49–56; 'Die Malaria im XVIIten Jahrhundert in Rom und in der Campagna, im Lichte zeitgenössischer Anschauungen' in *Arch. f. Gesch. der Medizin*, XX, 1928,

wore men out and led to frequent appeals for labour. It is a disease that directly results from the geographical environment. Plague, carried from India and China by long-distance travellers, although greatly to be feared, is only a passing visitor to the Mediterranean. Malaria is permanently installed there. It constitutes the 'background to Mediterranean pathology'.[208] We now know that it is directly linked to the anopheles and haematozoa of the *plasmodium* species, the pathogenic agents of malaria of which the anopheles are only the carriers. Of the country round Aigues-mortes, in about 1596 Thomas Platter said, 'it is so infested with mosquitoes in summer that it is pitiful'.[209] This is the malarial complex known to biologists and connected in fact with the overall geography of the Mediterranean plains, which are the only region seriously and persistently infected, mountain fever being insignificant in comparison.[210]

In order to conquer the plains, then, the unhealthy water had to be dealt with and malaria reduced.[211] The next task was to bring in fresh water for the necessary irrigation.

Man has been the labourer of this long history. If he drains the marshes and puts the plain under the plough, if he manages to produce his food from it, malaria retreats. The best remedy against malaria, says an Etruscan proverb, is a well-filled pot.[212] But if the drainage and irrigation channels are neglected, if the mountains are too quickly deforested, altering the conditions of the flow of the streams, or if the population of the plain falls and the peasant's hold on the land is relaxed, then malaria spreads again and paralyses everything. The plain will soon be reduced to its original marshy state: it is an automatic counter-improvement. This was

p. 101–119; 'La febbre palustre nella poesia' in *Malariologia*, 1930. On malaria in the Crimea, cf. Comte de Rochechouart, *Mémoires, op. cit.*, p. 154.

Some details for the sixteenth century: Cyprus had such a bad reputation for fever that in transport contracts signed with pilgrims to the Holy Land, sea captains had to agree not to put into Cyprus for more than three days, Reinhold Röhricht, *Deutsche Pilgerreisen nach dem Heiligen Lande*, 1900, p. 14. According to G. Botero, *op. cit.*, there are fever-ridden swamps near Salses, p. 5; unhealthy towns are Brindisi, Aquileia, Rome, Ravenna, Alexandria in Egypt, I, 1, p. 47. Albenga on the Genoese coast possesses a very rich plain 'ma l'aria n'è pestilente', p. 37. At Pola, the townspeople leave the town in summer because of fever and return in winter, Philippe Canaye, *Le voyage du Levant, op. cit.*, p. 206. Was it malaria from which the queen of Spain suffered at Segovia in August, 1566? (Celestin Douais, *Dépêches de M. de Fourquevaux, ambassadeur de Charles IX en Espagne, 1565–1572*, Paris, 1896–1904, III, p. 10); Philip II had an attack of fever in Badajoz, M. Philippson, *Ein Ministerium unter Philipp II*, Berlin 1895, p. 188.

[208] M. Sorre, *op. cit.*, p. 388. In September, 1566, all of Spain was racked with fever (Fourquevaux to the queen, Segovia, 11th September, 1566, Douais, *op. cit.*, III, 18.)

[209] *Journal of a Younger brother*, trans. Seán Jennett, 1963, p. 89.

[210] Jules Leclercq, *Voyage en Algérie*, 1881, was struck by the ravages wrought by malaria in the lowlying regions of Algeria and wrote, p. 178: 'If Europeans cannot live in the valleys, why do they not build mountain villages'?

[211] One of the problems arising from choosing Ankara as the Turkish capital, in quite recent times, was the malaria prevalent in the neighbouring plain: Noëlle Roger, *En Asie Mineure*, 1930, p. 46.

[212] Quoted by M. Sorre, *Fondements biologiques*, p. 344.

apparently the case in ancient Greece. It has also been suggested that malaria was one of the causes of the decadence of the Roman Empire. This theory is perhaps somewhat exaggerated and too categorical. Malaria progresses when man relaxes his efforts, and its dreaded return is as much a consequence as a cause.

It does seem, however, that there have been in the history of malaria, periods of greater and lesser virulence.[213] There may well have been an increase in marsh fevers at the end of the Roman Empire. That there was another increase towards the end of the fifteenth century is attested by Philipp Hiltebrandt, who unfortunately does not give his sources. Fresh pathogenic elements made their appearance at this time. Along with the *treponema pallidum*, the recently discovered Americas contributed to the old Mediterranean world *malaria tropicalis* or *perniciosa*, which had hitherto been unknown. Pope Alexander VI himself was possibly one of its first victims in 1503.[214]

It is very difficult to pronounce with certainty. Antiquity and the Middle Ages must have witnessed a disease something like *malaria tropicalis*, but it was certainly less dangerous, since Horace crossed the Pontine Marshes without harm in spite of mosquito bites;[215] and more particularly, since in September, 1494, the army of Charles VIII – 30,000 men at the lowest estimate – encamped safely around Ostia, in a particularly dangerous site. But these examples are hardly sufficient to formulate, let alone to solve the problem. We need far more precise documentation of the history of malaria than we possess at the moment. Was it malaria or dysentery that decimated Lautrec's troops in July, 1528, in the flooded countryside around Naples?[216] We need precise knowledge of the regions that were seriously affected by it in the sixteenth century. We do know that Alexandretta, which served as a port for Aleppo from 1593, had to be abandoned later because of fever. We know that Baiae, on the gulf of Naples, which in Roman times was a resort for leisured high society, and which was described as a charming place by Petrarch in a letter to Cardinal Giovanni Colonna in 1343, was deserted by its population, fleeing from fever, in the sixteenth century. But we have only incomplete records of even these particular cases. Of Alexandretta we know that the town was later reoccupied by English and French consuls, and that it has survived; but how? and under what conditions?[217] As for Baiae, is it not because it was already in decline, at least two generations before Tasso

[213] W. H. S. Jones, *Malaria, a neglected factor in the history of Greece and Rome*, London, 1907.

[214] P. Hiltebrandt, *Der Kampf ums Mittelmeer*, 1940, p. 279. Leo X, who was fond of hunting, also seems to have succumbed to an attack of malaria (Gonzague Truc, *Léon X*, 1941, p. 71 and 79). And did not Dante himself die of malaria, as Guido Cavalcanti had twenty years before? (L. Gillet, *Dante*, 1941, p. 340.) As far as we know, that is.

[215] P. Hiltebrandt, *op. cit.*, p. 279.

[216] Bernardo Segni, *Storie fiorentine . . . dall'anno 1527 al 1555*, 1723, p. 4.

[217] J. B. Tavernier, *The Six Voyages*, p. 55, mentions the 'standing pools' of Alexandretta, in 1691.

landed there in 1587, that fever was able to take such a firm grip?[218] On the other hand we should note that about twenty years before Columbus, in 1473, the Venetian fleet, which was operating along the Albanian coast during the first siege of Scutari, was decimated by fever and had to put into Cattaro to recover. The *provveditore* Alvise Bembo died; Triadan Gritti came close to death. Pietro Mocenigo decided to go to Ragusa 'per farsi medicar'.[219]

Nevertheless one cannot escape the impression that there was a fresh outbreak of malaria in the sixteenth century. Perhaps it was because at this time man was running ahead of the enemy. During the whole of the sixteenth century, as indeed of the fifteenth, he was in search of new land. Where was there a more promising prospect than in the shifting marshes of the plains? And precisely the greatest danger lies in the first disturbance of infested regions. To colonize a plain often means to die there: we know how many times the villages of the Mitidja had to be resettled at the beginning, before the plain was won over from fever in the painful struggle of the nineteenth century. The internal colonization which was carried out throughout the Mediterranean in the sixteenth century also took its toll. It was particularly marked in Italy. If Italy took no part in the great movement of colonization of distant territories the reason is perhaps partly to be sought in her preoccupation with reclaiming all available land within her own frontiers, from the flooded plains to the mountain peaks. 'Italy is cultivated right up to the mountain tops,' wrote Guicciardini at the beginning of his *History of Italy*.[220]

The improvement of the plains. To conquer the plains has been a dream since the dawn of history. The vessel of the Danaides might be a folk-memory of the introduction of perpetual irrigation into the plain of Argos.[221] The inhabitants of the shores of Lake Kopais began to encroach

[218] K. Eschmid, in Werner Benndorf, *Das Mittelmeerbuch*, Leipzig, 1940, p. 22. A propos of the extension of malaria, what lies behind the following remark by Stendhal (*Promenades*, II, 164) 'M. Metaxa, I believe, a celebrated doctor and man of wit, has drawn a map of the places affected by fever'?

[219] A.d.S. Venice, Brera 54, f° 144 v°.

[220] Francesco Guicciardini, *La historia d'Italia*, Venice, 1568, p. 2 (Peaceful Italy) '*cultivata non meno né luoghi più montuosi et più sterili, che nelle pianure, et regioni sue più fertili*'. Cf. the astonishing observations of Montaigne, *op. cit.*, p. 237, around Lucca, since about fifty years ago, (1581) vines have been taking the place of 'woods and chestnut trees' on the mountains, p. 248; and 'this method they have of cultivating the mountains right up to the peak'. I am not therefore in agreement with Michelet's eloquent remarks, *La Renaissance*, Paris, 1855, p. 31–32. Ph. Hiltebrandt, *op. cit.*, p. 268, sees the problem in the same light as I do. The Italians took part in the great discoveries – Venezuela is after all, little Venice – but the Italian population was not short of space at this period; the bourgeoisie was not interested in the world beyond the Mediterranean horizon; and finally, the Peninsula was not troubled by the religious disturbances which drove Englishmen and Dutchmen overseas.

[221] Herbert Lehmann, 'Die Geographischen Grundlagen der kretisch-mykenischen Kultur,' in *Geogr. Zeitschr.*, 1932, p. 335.

upon its marshy edges at a very early date.[222] The network of underground canals covering the Roman Campagna, of which archaeologists have found traces, dates back to Neolithic times.[223] We know too of the primitive works of the Etruscans in the narrow plains of Tuscany.

Between these early attempts and the vast 'improvements' of the nineteenth and twentieth centuries mentioned above, the struggle was never abandoned although it may have been relaxed at times. Mediterranean man has always had to fight against the swamps. Far more demanding than the problem of forest and scrubland, this colonization is the distinguishing feature of his rural history. In the same way that northern Europe established itself or at any rate expanded to the detriment of its forest marches, so the Mediterranean found its New World, its own Americas in the plains.

Throughout the sixteenth century, as indeed in the fifteenth, many improvement schemes were under way with the limited means available to the period: ditches, trenches, canals, low-powered pumps. In the following century Dutch engineers perfected more efficient techniques.[224] But the Dutch engineers had not yet made their appearance in the period under discussion. The inadequacy of means therefore limited the undertakings. The marsh was attacked sector by sector, which led to many failures. In Venetia, in the Adige Valley, Montaigne in 1581 came across 'an infinite expanse of muddy sterile country covered with reeds',[225] formerly ponds that the Signoria had tried to drain, 'to put under the plough . . . ; they lost more than they gained by trying to alter its nature', he concluded. Similarly whatever the 'press' of the period – the official chroniclers – might say, the enterprises of Grand Duke Ferdinand in the Tuscan Maremma and the hollow of the Val di Chiana were not a success.[226]

In the Maremma the grand dukes, from Cosimo on, tried to create a grain-producing region (the equivalent on a grander scale of what Genoa attempted in the eastern plain of Corsica). To this end measures to encourage population were taken, advances were offered on capital and yield,

[222] August Jardé, *Les Céréales dans l'Antiquité grecque*, 1925, p. 71, references to Strabo. A. Philippson, 'Der Kopais-See in Griechenland und seine Umgebung,' in *Zeitschr. der Gesellschaft für Erdkunde zu Berlin*, XXIX, 1894, p. 1–90. P. Guillon, *Les Trépieds du Ptoion*, 1943, p. 175–195.

[223] M. R. de la Blanchère, 'La malaria de Rome et le drainage antique,' in *Mélanges d'Arch et d'hist.*, published by the French School at Rome, II, 1882, p. 94 ff.

[224] Was the first of these 'Hollanders', these northerners, the engineer – or *dijkmeester* – whom the *nuncio* sent to Ferrara at the request of the Pope in 1598, and who seems to have been thinking of using windmills to drain the water. *Correspondance de Frangipani*, published by Armand Louant, 1932, Vol. II, Brussels, 13th June, 17th June, 25th July, 13th August, 1598, p. 345, 348, 362–3, 372.

[225] Montaigne, *op. cit.*, p. 138.

[226] A. von Reumont, *Geschichte Toscana's*, I, p. 358 ff. On the same subject, O. Corsini, *Ragionamento istorico sopra la Val di Chiana*, Florence, 1742; V. Fossombroni, *Memorie idraulico-storiche sopra la Val di Chiana*, Florence, 1789; Michelet, *Journal inédit*, p. 169–170. In the sixteenth century there was an unsuccessful attempt to improve lake Castiglione, A. von Reumont, *op. cit.*, I, p. 369.

manpower was recruited and here and there drainage schemes carried out. Grosseto on the Ombrona was then becoming a port for the export of grains to Leghorn. The reasons for the semi-failure of the scheme were spelled out long ago by Reumont in his *History of Tuscany*.[227] The grand dukes were pursuing two contradictory ends. They were creating a grain-producing plain, which entails great outlay, and setting up a monopoly of the purchase of the grain for their own advantage, that is for selling at a low price. What they should have done was to throw the market open to the competition of all the Mediterranean buyers. For these improvement schemes were expensive and the return on them, the *utilità*, was not always worth the outlay. In 1534 the Orators of Brescia pointed out to the Venetian Senate that 'to divert and contain the waters requires infinite expense; so much so that several of our citizens have been ruined through wanting to further such enterprises. Besides the initial expense of bringing the water, there is the continual cost of maintenance, so that when it is all reckoned there is very little difference between expense and profit.'[228] In this case evidently the people of Brescia were producing arguments and pleading poverty to avoid paying too many taxes, but it is nevertheless true that improvement schemes were large undertakings which required much financing. Ideally they were undertaken by governments.

In Tuscany it might be an 'enlightened' government that took charge of them, or as in 1572, a prince from the ducal family, the future Grand Duke Ferdinand who was interested in possible improvements in the marshy Val di Chiana.[229] It was on the initiative of the Duke of Ferrara that what came to be called the *grande bonifica estense* was set up in the Valle di Ambrogio in 1570, in the heart of the vast marshy region of the Po delta. It was hindered by subsidence and the return of the infected waters and finally condemned by the same *taglio* of Porto Viro that in 1604 gave permission for Venice to divert the course of the river Po to the south via the open breach.[230] At Rome it was the pontifical government;[231] at Naples, the viceroy who initiated an official project for draining the great marshes

[227] I, p. 366 ff.

[228] A. Zanelli, *Delle condizioni interne di Brescia, dal 1642 al 1644 e del moto della borghesia contro la nobiltà nel 1644*, Brescia, 1898, p. 242–3.

[229] A. von Reumont, *op. cit.*, I, p. 363–364. Still in Tuscany, in about 1550, there was a scheme to improve the marshes of Ansedonia (G. Venerosi Pesciolini, 'Una memoria del secolo XVI sulle palude di Ansedonia' in *La Maremma*, VI, 1931). H. Wätjen notes that in the reign of the Grand Duke Ferdinand, a major preoccupation in Tuscany was the draining of the marshes, *Die Niederländer im Mittelmeergebiet*, 1909, p. 35. On an improvement plan for the Sienese Maremma proposed to the king of France in 1556, cf. Lucien Romier, *Les origines politiques des guerres de religion*, 1913–1914, II, p. 397–398.

[230] Hansjörg Dongus, 'Die Reisbaugemeinschaft des Po-Deltas, eine neue Form kollektiver Landnutzung', in *Zeitschift für Agrargeschichte und Agrarsoziologie*, October 1963, p. 201–202; C. Errera, 'La bonifica estense nel Basso Ferrarese', in *Rivista Geogr. Ital.*, 1934, p. 49–53.

[231] On the improvements in the papal states in the time of Pius V, Pastor, *op. cit.*, XVII, p. 84.

of Cherranola and Marellano near Capua.[232] At Aquileia it was the Imperial government.[233] In Turkey from the little we can see, it seems that land improvement was the work of enterprising noblemen who created new villages of serfs – *čiftliks* – particularly from the seventeenth century on, in the low-lying marshy regions as well as in the Durazzo plain or on the edge of the Vardar.[234] These are large villages, easily recognizable from the hovels clustering around the tall master's house, that towers and watches over them.

In the West, too, a series of improvements were the result of individual initiatives by wealthy capitalists. It was they who in the sixteenth century established rice fields in the lowest parts of Lombardy which developed so quickly that they were certainly exporting their produce to Genoa in 1570, and perhaps even earlier. A former patrician of Venice – struck off the list of nobles, as the result of injustice, according to him, but still possessed of a good fortune – tried to lay sacrilegious hands on the Venetian lagoons. The authorities were alerted and became worried. Could anyone seriously be thinking of transforming the lagoons into cultivable land? Were not changes in the level to be feared? The enterprise was classified as undesirable.[235]

The capitalists led the way in lower Languedoc too, with the great drainage works beginning in 1592 and carried on with more or less energy and success until about 1660–1670. Identical works had been begun near Narbonne in 1558, when they began to drain the pools. But at the end of the century with the first embankments around Lake Launac, the movement gained speed. Provençal engineers, specialists in hydraulics and disciples of Adam de Craponne, lent their assistance. A 'group' (Bernard de Laval, Dumoulin, Ravel) directed this operation and the following ones, also in the Narbonne area. It was Laval, lord of Sault who provided the original sum of money, and later the 'supplements'.[236]

These improvement schemes arose in reply to the needs of the towns, whose population in the fifteenth and sixteenth centuries was steadily

[232] B. N. Paris, Esp. 127, f° 20 v° and 21. This was a scheme which was considered by the 'Camera' in 1594, but eventually abandoned. However the Count of Olivares was very interested in it. The authorities were prepared to farm out the works.

[233] On a possible drainage scheme at Aquileia, Giacomo Soranzo to the Doge, Vienna, 7th August, 1561, G. Turba, *Venet. Depeschen*, 13, p. 191.

[234] At any rate this is how I interpret the book by Richard Busch-Zantner, *Agrarverfassung, Gesellschaft und Siedlung in Südosteuropa*, Leipzig, 1938, whose argument is somewhat obscured by the wealth of material. As I see it, for him, unlike Cvijić, the *čiftlik* is not an ancient type of village dating back to the Middle Ages (p. 104–5) but a recent type, set up in the sixteenth century and becoming more widespread in the seventeenth. It is therefore a village born of modern colonization and improvement. It is generally situated right down in the plains, near the waters of lakes and valleys and frequently exposed to flooding (p. 124). Ömer Lütfi Barkan agrees with my interpretation.

[235] R. Cessi, 'Alvise Cornaro e la bonifica veneziana nel sec. XVI', in: *Rend. R. Acc. Lincei, Sc. Mor., St. e Fil.*, VIth series, vol. XII, p. 301–323. Reviewed by F. Braudel, in *Ann. d'Hist. Sociale*, 1940, p. 71–72.

[236] E. Le Roy Ladurie, *op. cit.*, p. 442 ff. Adam de Craponne, 1519–1559, built the canal named after him which irrigated the Crau in about 1558, between the Durance and the Rhône.

increasing. The urgent need for a food supply impelled the towns to develop crop cultivation all around them either by taking over fresh ground or by extending irrigation. This gave rise to many disputes but also to some fruitful agreements. 'We should achieve a good supply of water by diverting the Oglio,' say the Orators of Brescia in 1534, 'but it would lead us into endless litigation with the people of Cremona, not to mention the risk of assassination of which we have already had some experience.'[237] In 1593 the Rectors of Verona, with the support of Venice, had the works of the Mantuans to retain the waters of the Tartaro demolished; this was followed by long-drawn-out wrangles.[238] In Aragon in the eighteenth century the towns were still involved in disputes, each trying to obtain the precious sources of irrigation from its neighbours.[239] On the other hand, from the fifteenth century on, riverside communities cooperated with each other on the drainage works of the Lower Rhône valley, works which would in any case have been unthinkable without the capital provided by Italian immigrants and the labour force from the Alps.[240]

Whether pursued in cooperation or in competition, the efforts made by the towns were successful. They created, within reach of the central markets, the vegetable gardens and wheatfields they needed. A Venetian ambassador passing through Castile concluded that it was cultivated only around the towns. The wide *paramos* where sheep grazed and the *secanos* reserved for wheat, yellow plains where even the houses built of earth can hardly be distinguished from their background, appeared to him to be stretches of barren countryside. Around the Castilian towns on the other hand he had seen the green patches of irrigated land. At Valladolid, orchards and gardens bordered the banks of the Pisuerga. In Madrid itself, Philip II could only extend the Prado by buying up vineyards, gardens and orchards: we have the deeds of sale to prove it.[241] At Toledo, the Vega 'striped with trees and crops' is under the town walls. The same link between town and agricultural effort is found in Provence. New land was brought into cultivation in the sixteenth century at Mandelieu, Biot, Auribeau, Vallauris, Pégomas, Valbonne, Grasse, Barjols, St. Rémi, St. Paul de Fogossières, and Manosque. Market gardens were developed all along the Durance valley.[242] In lower Languedoc '*orts* and irrigated

[237] A. Zanelli, *op. cit.*, p. 243.
[238] A.d.S. Venice, *Annali di Venezia*, 11th April, 1593 ff.
[239] I. de Asso, *op. cit.*, p. 72–73.
[240] P. George, *op. cit.*, p. 292–294.
[241] Purchases in the direction of the Vega Gate, towards the new Segovia bridge, beyond Manzanares, around the Real Casa de Campo which Philip II had converted. See in particular Simancas, Patronato Real, deeds of sale, nos. 3142 to 3168.
[242] Pierre Imbart de la Tour, *Les origines de la Réforme*, I, Melun, 1949, p. 218. We still have to distinguish between genuine improvement and the colonization of new land in general. The movement towards land reclamation began in France, as it did in England, in the middle of the XVth century (René Gandilhon, *Politique économique de Louis XI*, 1940, p. 147). The improvement schemes in the Savoy domains are described somewhat briefly in the rather derivative work by F. Hayward, *Histoire des ducs de Savoie*, 1941, II, p. 40.

meadows in fact form only a minute proportion of the land holdings, as in Spain': they are 'well-watered, restricted to the urban belts where the *seigne* is situated – the draw well which alone accounts for 30 per cent of the value of a garden'.[243]

A large-scale transfer of urban investment to the countryside was therefore taking place.[244] The search for new land for cultivation became of public concern from the end of the century. Olivier de Serres, in his *Théâtre d'Agriculture*,[245] gives full instructions on converting marshy land. But the task was only tackled piecemeal. The striking fact about the history of the whole undertaking is the incredibly long time it took to bring the plains to life. Yet the work, hardly complete in the sixteenth century, had begun hundreds of years previously. This is true of all plains: of Murcia and of Valencia, of Lerida, Barcelona and Saragossa, of the Andalusian plain and the Po valley, the *campagna felice* of Naples and the Conca d'Oro of Palermo or the plain of Catania. Every generation contributed its strip of land rescued from the waters. One of the merits of the government of Pietro di Toledo at Naples was to have drained the marshy *Terra di Lavoro* near the city, between Nola, Aversa, and the sea, and to have made of it, according to one chronicler, 'la più sana terra del mondo', with its canals, its trenches, its fertile crops, and its drained fields.[246]

The small plains were the first to be conquered. The plains of the coastal massif of Catalonia had been claimed by man for his precious crops as early as the high Middle Ages. The digging of the *cequies* dates back traditionally to the reign of Hacam II. There is nothing to prove that they are not older still. It is quite certain however that Lerida, which was reconquered in 1148, had already been made fertile by the Clamor canals; that Tortosa had its irrigation channels from the time of the Arabs; that Camarasa, when it was reunited with the County of Barcelona in 1060, also had its water trenches. Following the example of the Moslems, the counts of Barcelona for their part set up the irrigation system of the territory covered by the town itself, and of the Llobregat plain. It is to one of them, Count Mir (945–966), that the famous *rech* of the Barcelona county is attributed – the *rego mir* – as well as the construction of another canal, from the Llobregat to Cervello. The legacy was received, preserved and continually added to by later generations.[247]

There was a similar progression in the case of the plain of Saragossa, an important zone of *tierras de riego*, 'irrigated lands'. The foundations were already established when the Moslems were expelled from the town in 1118. But after the original operation, the works were developed and

[243] E. Le Roy Ladurie, *op. cit.*, p. 86–87.
[244] This is surely one aspect of the economic crisis of Barcelona – its bourgeoisie invested its money in land, not wishing to risk it any further in maritime ventures.
[245] Drainage by hen's foot trenches' (*pieds de gélines*), Olivier de Serres, *Pages choisies*, 1942, p. 64.
[246] 'Vita di D. Pietro di Toledo' in *Archivio Storico Italiano*, IX, p. 21–22.
[247] F. Carreras y Candi, *Geografia General de Catalunya*, Barcelona, 1913, p. 471–472.

extended. Thus the Grand Canal was projected in 1529, work began on it in 1587, and it was finally completed in 1772, at a time when the entire plain of Aragon, under the influence of the agronomists of the age of enlightenment, was revising and completing its irrigation network.[248]

The example of Lombardy. But the best example of these progressive conquests – because it is the clearest to see – is that of Lombardy.[249] Let us leave aside the higher regions: on one side the Alps, unproductive above 1500 metres, stony masses with terraced pastures and forests between 700 metres and 1500 metres; on the other, the Apennines, whose raging torrents rush down to the plains in winter, rolling stones and boulders in their swirling waters, but in summer dry up completely so that there is no water either for irrigation or consumption. As a result the Apennines above 1000 metres are as barren as the Alps above 2000 metres; in summer they afford only a few tufts of grass fit for goats and sheep.

Between these two ramparts, lower Lombardy is a complex of hills, plateaux, plains and river valleys. The hills are the region of vines and olives, and even citrus fruits grow near the great Alpine lakes. There are 'plateaux' in the true sense of the word only in the North. First a plateau without irrigation, a rectangular block defined to the south by a line joining Vicolungo and Vaprio, on the Adda, covered with barren stretches of scrubland and given over to growing mulberry trees; a low, irrigated plateau comes next, forming a triangle whose southern side runs from Magenta on the Ticino to Vaprio on the Adda, and where wheat, mulberry trees, and pastures are plentiful.

The most interesting feature of the Lombardy lowlands is the vast alluvial plain, between this plateau and the foothills of the Apennines, in other words the bottom of the bowl, the classic zone of rice fields, pasture lands, and equally important, of artificially created prairies. The selling price of hay has even been used as the basis of an attempt to show the general movement of prices in Milan in the sixteenth century.[250]

Man has entirely transformed this plain. He has flattened the land, eliminated the swamps and made intelligent use of the water brought by the rivers from the Alpine glaciers. The regulation of the water began in at least 1138 with the works of the Benedictine[251] and the Cistercian monks, at Chiaravalle Abbey. In 1179, work began on the *Naviglio Grande* which was finished in 1257 by the *podestà* Beno Gozzodini. The waters of the Ticino were now brought to Milan by an artificial river nearly 50 kilometres

[248] Esp. I de Asso, *op. cit.*, p. 94 ff.

[249] The following relies particularly on the remarkable article by S. Pugliese, 'Condizioni economiche e finanziarie della Lombardia nella prima meta del secolo XVIII', in *Misc. di st. it.*, 3rd series, vol. XXXI, 1924, p. 1–508, which contains in the opening pages not only a good geographical description of Lombardy but also much information relating to the sixteenth century.

[250] A. Fanfani, 'La rivoluzione dei prezzi a Milano nel XVI e XVII secolo', in *Giornale degli economisti*, July, 1932.

[251] E. Lucchesi, *I Monaci benedettini vallombrosani in Lombardia*, Florence, 1938.

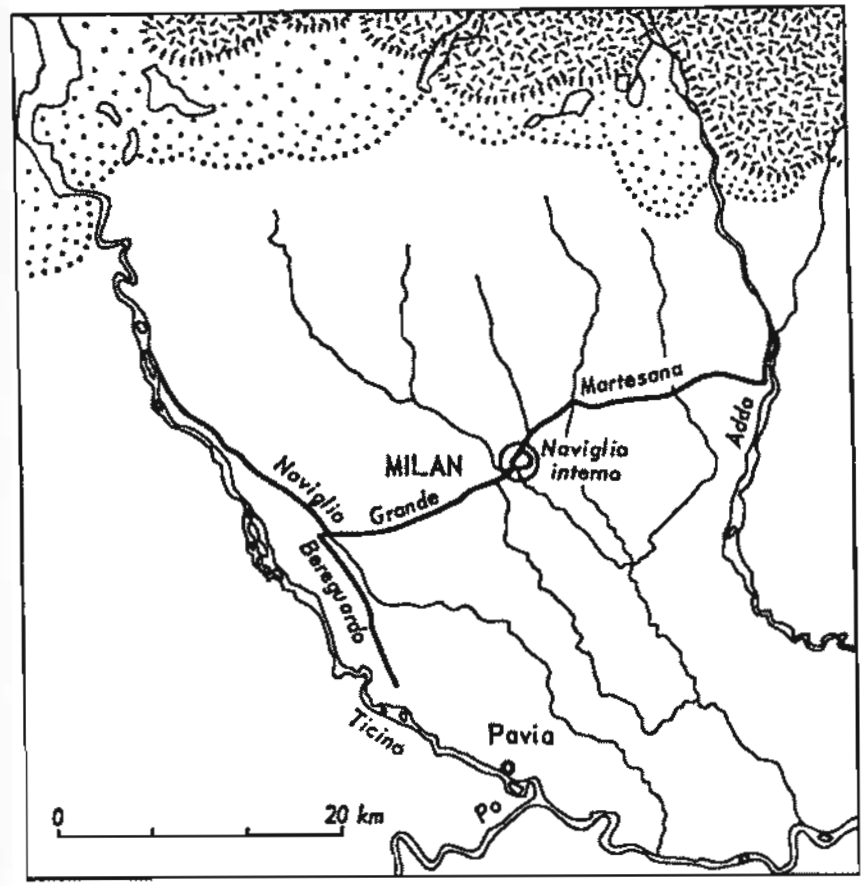

Fig. 3: *The great canals of the Lombardy plain*

From Charles Singer, *History of Technology*, 1957, vol. III. The dotted area indicates morainic deposits and hills preceding the Alps.

long which could be navigated and used for irrigation. Before 1300 the Basca *roggia* was diverted from the Sesia; later it would be tapped to feed the Biraga, Bolgara, and other *roggie* that irrigated the Novarese and Lomellina. In 1456 Francesco Sforza built the Martesana canal, over 30 kilometres long, bringing the waters of the Adda to Milan. It was widened in 1573 to make it navigable. Since Ludovic the Moor had already linked it with the *Naviglio Grande*, in 1573 the two great lakes of Lombardy, Lake Como and Lake Maggiore, were brought into communication at the very heart of the state.[252] Milan now became an important waterways centre, which enabled it to receive wheat, iron, and in particular wood, at less

[252] S. Pugliese, *art. cit.*, p. 25–27.

expense, and to ship off to the Po and Ferrara the large artillery pieces made in its foundries – in fact to compensate for its major disadvantage of being a town surrounded by land.[253]

Even this evidence, which only concerns waterways, shows how slow the process of land reclamation was. It was accomplished in stages, each one corresponding to the installation of different social groups, so that the three Lombardies were encapsulated one within the other, each representing a different group of people. Upper Lombardy, the mountainous, pastoral region, which in the north comes close to the zone of the *brughiere*, is the country of small peasant proprietors, poor but free, devoting their lives to producing all their needs from their land, including the poor wine of their vineyards. Lower down on the well-watered plateau of the upper plain, the region of springs (*fontanili*) and grassy meadows, begins the ecclesiastical and noble property. At this level, a little higher than the plain itself are to be found the castles, the tenant farmers, and the monasteries shaded by their tall trees. Lower down again are the rice fields belonging to the capitalists.[254] Their revolutionary initiative resolved the problem of cultivating the flooded fields. Economic progress was assured – but at the price of social misery.

Rice growing in Lombardy meant the enslavement under terrible conditions of workers who were unable to voice any effective protest since they were not organized. Rice fields do not require labour all the year round, but large numbers of casual workers for a few weeks, at the times of sowing, transplanting, and harvest. This kind of agriculture depends entirely on seasonal migration. It hardly requires the landowner to be present except for paying wages and overseeing the gangs at work. Centuries later Cavour would go to his property in Leri in nearby lower Piedmont, personally settling wages and rising at dawn to supervise the labourers.[255]

This is true of almost all the crops grown in the plain. Land which is easy to work, where the furrows can be drawn up with a line, lends itself to the regular employment of oxen or buffaloes, animal mechanization. It is only at the season of harvest and grape gathering that it calls for the massive recruitment of mountain labourers. After a few weeks of work these

[253] G. de Silva to H.M. 17th April, 1573, Simancas E° 1332.

[254] A. Schulte, *op. cit.*, I, 252, thinks that rice-growing was introduced to Lombardy from Spain before 1475. Rice was exported to Germany for the first time by a native of Basel, Balthasar Irmi. On the introduction of rice by Louis XII, Marco Formentini, *Il Ducato di Milano*, Milan, 1876, II. p. 600 ff. On the problem in general, S. Pugliese, *art. cit.*, p. 35.

[255] Maurice Paléologue, *Un grand réaliste, Cavour*, 1926, p. 21. On the larger question of the need of the plains for agricultural labourers, cf. the example of Languedoc (Georges Lefebvre, *La Grande Peur de 1789*, Paris, 1957, p. 17); at the time of the French Revolution the agricultural labourers of Bas-Languedoc came from the Causses and the Black Mountain. Another example is that of Thrace whose labourers come from Upper Bulgaria and did so in the seventeenth century too according to Herbert Wilhelmy, *Hochbulgarien*, Kiel, 1936, p. 325. Thessaly, (which we know exported grain via Vólos) relied on central Greece and even Attica for its labour force, Vandoncourt, *Memoirs on the Ionian Islands*, 1816, p. 215. On these two Balkan examples see R. Busch-Zantner, *op. cit.*, p. 94.

labourers return home. They are the true rural proletariat. But the peasant farmer who settles in the plain is often in very much the same situation.

The Spanish enquiry of 1547[256] on property in Lombardy indicates that the peasants possessed less than 3 per cent of the land in the fertile lower region, while the poor land on the hills was very largely in their hands. Nothing could indicate better than these figures the conditions of life in the plain. Here the peasant lived off very little, in deplorable conditions of health and hygiene. He had masters and what he produced went to them. Often a newcomer, a simple man from the mountains, he might be cheated by the landowner or his steward. In many ways he was a kind of colonial slave, whatever his precise position in law.

Big landowners and poor peasants. We were comparing the converted plains of the Mediterranean with the cleared forests of northern Europe. Like any other comparison this one has its limits. In the new towns in the forest clearings of the North there grew up a more free civilization on the American pattern. One of the problems of the Mediterranean, and one of the causes of its traditionalism and rigidity, was that (apart from a few regions where colonization encouraged agrarian individualism[257]) newly-acquired land remained under the control of the wealthy. A pick and an axe might be enough in the North, as it was later to be in America, to make the soil productive. In the Mediterranean rich and powerful landowners had an essential role to play, increasingly so as small-scale improvements were abandoned in favour of extensive, long-term schemes. The goal could only be achieved by holding ranks under a discipline possible only through a rigid social order. How could Egypt or Mesopotamia have been cultivated by independent peasant farmers in the sixteenth century? In Spain the traveller passing from the *secanos* to the *regadios* – from the dry to the irrigated zones – left behind a relatively free peasant to find a peasant slave. Spain had inherited all the great irrigation networks from the Moslems after the Reconquest, taking them over intact along with the labour force of *fellahin* who were necessary to keep them in good order. The Lerida plain was still being worked by *fellahin* in the sixteenth century; *fellahin* were farming the Rioja in the Ebro valley; and *fellahin* were to be found in Valencia, Murcia, and Granada: *fellahin* or, more accurately Moriscos, whose Spanish masters cared for and protected them in the same spirit as they would their livestock and exactly as they were to protect their slaves in the New World.

The plains were the property of the nobleman.[258] One has to go down to the Portuguese *veigas* to find the houses of the *fidalgos*, the *solares* with

[256] S. Pugliese, *art. cit.*

[257] P. George, *op. cit.*, p. 354.

[258] To the nobleman and even more, to large estates even when the plain had not been improved. This was so almost up to the present day (R. Pfalz, *art. cit.*, in *Geogr. Zeitschrift*, 1931, p. 134): before the recent improvements, 38 per cent of the land of the *Campagna* had belonged to four big landowners; while 'in general the mountain regions are the reserve of smallholders' (*ibid*). Jules Sion, *La France Méditerranéenne*

their great coats of arms.[259] The vast low-lying plain of the Sienese Maremma, a real fever trap, is, like its neighbour the Tuscan Maremma, dotted with noblemen's castles. Their anachronistic silhouettes of tower and keep conjure up a whole society, the crushing presence of the feudal landlords who dominated the country without even living there, for these residences were only their temporary abodes. Most of the year the masters lived in Siena, in the huge town houses still standing today, palaces into which Bandello's lovers find their way, with the ritual complicity of the servants, up staircases leading to the great attics where sacks of grain are stored, or along corridors leading to the rooms on the ground floor, always a little neglected.[260] We can follow them into the houses of these old families to relive the comedies and tragedies whose dénouement would take place in secret in the old castle in the Maremma, far from the town gossip and family control. Isolated from the world by fever and the sultry heat, what better place could there be for putting to death, according to the custom of Italy and the century, an unfaithful wife – or one suspected of being so? The climatic explanation would have delighted Barrès. But was there not also an element of social complicity, which allowed the murderer almost total impunity in the low lands where he was absolute master? Was the plain the rich man's fief to do as he liked with?

'In the plain,' writes Robert Montagne[261] of the Moroccan Sous of today, 'the distance between rich and poor increases rapidly. The former own gardens, the latter work in them. The irrigated fields yield in plenty cereals, vegetables, and fruits. Another source of wealth is olive and argan oil, which is transported in goatskins to the northern towns. The greater proximity of markets encourages the introduction of foreign produce, so that the life of a *notable* in the Sous plain tends to become similar to that in the other provinces where the Maghzen has always reigned. But at the same time, the life of the labourers in the gardens, the *klemmas*, becomes increasingly wretched.' This seems to have been the rule in the Mediterranean plains. A considerable distance separates rich from poor; the rich are very rich and the poor very poor.

1934, p. 143, makes a further distinction. 'The regions where there are the largest number of holdings are the hilly areas where farming is relatively archaic and the yields (today) are poor; large estates are the rule in the plains with their superior yields, particularly the lands recently reclaimed at great expense from the marshes'. On this subject, see G. Niemeyer's information, *op. cit.*, p. 29–30 and 59, on the contrast between Córdoba, an old centre with large estates and Carlotta, a new town founded in the eighteenth century, where the land was divided up into many holdings. I personally think that a considerable role was played by the monocultures which took over in the plains (wheat for instance in the past) and tended to lead to the creation of large estates.

[259] P. Descamps, *Le Portugal. La vie sociale actuelle*. Paris 1935, p. 14. Near Vieira, in the Minho 'the mountains are democratic; lower down, by the time one reaches Vieira, one finds the *fidalgos* belonging to ancient noble families. There are still *solares* at Vieira and in a few parishes'.

[260] M. Bandello, *op. cit.*, I, Novella 12.

[261] *Op. cit.*, p. 48.

Large estates have remained the rule in the plains. Here, the seignorial system – which is often the façade for large estates – found natural conditions for survival. In Sicily, in Naples, in Andalusia, the entailed estates of the noble landowners have been handed down undiminished right up to the present day. Similarly, in the great eastern plains of the Balkans, in Bulgaria, Rumelia, and Thrace, in the grain and rice producing regions, the Turkish regime of large estates and serf-villages took strong root, whereas it more or less failed in the mountains of the West.[262]

There are many exceptions according to locality and circumstances, such as the early Roman Campagna, or the present day peasant democracy of Valencia, or those of Ampurdán and Roussillon. 'These plains,' writes Maximilien Sorre of the latter two[263] 'have always been the land of small and medium-sized farms.' For 'always', read 'in modern times'. In fact we do not know what was happening in these lowland districts before the agrarian troubles of the fourteenth century, above all before the great collective irrigation schemes, even those undertaken for example by the Templars of Mas Deu, in the Roussillon basins of the Réart and Cantarane. What is clear is that we have a rule and a number of exceptions – not the only rule nor the only exceptions. In Provence 'it is rare to find a rural proletariat, except in the plain of Arles, which is divided into a number of great estates'.[264] In Catalonia there was a prosperous peasantry, at least after 1486.[265] Perhaps if an overall explanation is to be flexible enough, we shall have to reconsider at length the deceptively simple notions of small property and large estate (large or powerful?); to distinguish between plains according to their size and whether they have been divided up or not; and, above all, there should be research to discover whether – and with what logical explanation – there have been successive alterations in the system of property owning and farming: whether land has been subdivided, brought back under one holding, only, perhaps, to be divided up again. In one place it may be the size of the population; in another the implantation of new crops, the introduction of tools, or their continued use; elsewhere the extended impact of the nearby towns that has continually upset the geographical and social order of the lowlands; while in other regions, the tyranny of the wheatfields and the swing-plough (according to Gaston Roupnel), and the use of oxen has helped to maintain the established order and the power of the rich. This is the great

[262] J. Cvijić, *op. cit.*, p. 172. On the Bulgarian peasant, his work and his comparative well-being in the fifteenth century, his carts drawn by yoked oxen or buffaloes, see Ivan Sakazov, *Bulgarische Wirtschaftsgeschichte*, Berlin-Leipzig, 1929, p. 197; the peasant of the plain, much more than either mountain dweller or townsman, is attached to his environment. On the Nile delta, J. Lozach, *op. cit.*, p. 38. On the desolation there in the sixteenth century, *ibid.*, p. 50.

[263] *Pyrénées méditerranéennes*, p. 245. NB in the Camargue, which is an analogous case, the great estates owned before the Revolution, by the Knights of Malta, J. J. Estrangin, *Études archéologiques, historiques et statistiques sur Arles*, 1838, p. 307.

[264] P. Benoit, *op. cit.*, p. 26.

[265] Pierre Vilar, *op. cit.*, I, p. 575 ff.

value of the pioneering work of Emmanuel Le Roy Ladurie[266] on the peasants of Languedoc, between the fifteenth and the eighteenth centuries. Who would have thought, before his research, that this rural order was to such an extent the result of a combination of social, demographic, and economic circumstances, and therefore constantly subject to change and alteration? The problem will now be to find out whether the timetable of the successive peasant orders of the Languedoc is applicable to the other coastal regions and if we shall find some of them ahead, some lagging behind, but the majority keeping pace. We are far from knowing the answer at the moment.

Short term change in the plains: the Venetian Terraferma. We can attempt to follow these short-term changes in one example at least: Venice.

The low-lying regions of the Venetian countryside, which are also the richest and most populated, were the object of frequent improvements beginning before the end of the fifteenth century. We can guess at their scale without unfortunately knowing their geographical extent or their precise chronology. These costly schemes that began so early do not usually seem to have brought any advantage to peasant farmers or village communities.

At first sight there could be nothing more reasonable than the usual course of these improvement schemes, kept to an unvarying programme over a period of centuries, under the prudent procedures, generally governed by precedent, of the Venetian administration, which after 1566 was in the hands of the *Provveditori ai beni inculti*.[267] Every improvement, every *ritratto*, established for a defined area of obviously marshy land a programme of various hydraulic works: dykes built or to be built (*argile*), entry points for water (*presi*), and canals and trenches for distributing irrigation streams (*scalladori*). Sometimes small craft used the canals that had already been constructed and a toll was established, which partially recouped the expense. But in the short term, the owners of the land had to pay for these costly installations, at the rate of one or two ducats per *campo*,[268] depending on whether the land was cultivated, and whether it bore vineyards or only trees. If a landowner was unable to pay his contribution when it fell due, half of his property was exacted in payment, which indicates that the debt per *campo* was not insignificant.

The *ritratto* was sometimes the responsibility of one of the city's

[266] See above, note 58.

[267] Daniele Beltrami, *Forze di lavoro e proprietà fondiaria nelle campagne venete del secolo XVII e XVIII*, 1961, p. 67, gives the date as 1574; until there is more evidence I incline to the date 1566 given by Andrea da Mosto, *Archivio di Stato di Venezia*, 1937, vol. I, p. 168: the *Provveditori* appear to have been introduced then with the responsibility of supervising crops and drainage and promoting agricultural activity by the setting up of land 'companies'.

[268] A little over one third of a hectare, but the *campo* varies from one region to another; in the Vicentino it is equivalent to 3862 sq. metres, D. Beltrami, *op. cit.*, p. 53, n. 2.

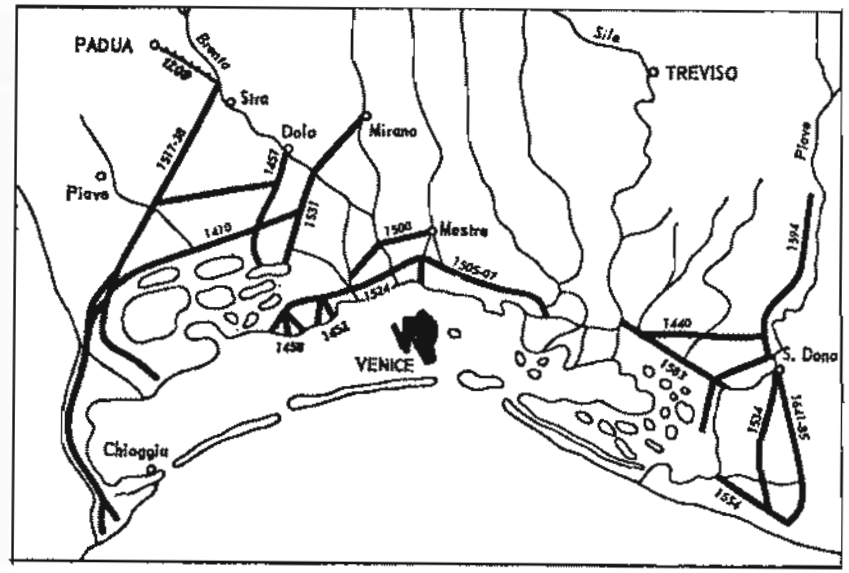

Fig. 4: ***The regularization canals safeguarded half of the Venetian lagoons***

The sketch map is oriented to the northwest. These works safeguarded the Venetian lowlands and the lagoons that surround the town. But the northern part of the lagoon has been largely filled in by deposits from the small rivers, the Piave and Sile, which can become torrential. All this region is covered with stagnant water. To the south, however, the Brenta was finally brought under control by successive works and the lagoon is tidal from Chioggia to Venice. From Arturo Uccelli, *Storia della tecnica dal Medio Evo ai nostri giorni*, 1945, p. 338.

communities (the *communità* of Este,[269] for example, or that of Monselice[270]; or it might be the property of a real syndicate of landowners who might have access to advances from the Venetian treasury at low interest rates (4 per cent); or, finally, the Venetian administration might take a hand in the enterprise, reserving the right, once work was completed, to sell any land that might fall to its share; the judgment sometimes took place on the Rialto. Each *ritratto* was divided, as ships were, into 24 'carats', or shares, and each carat was allocated in turn at public auction, or as we might say under the hammer of the official appraiser; the documents stipulate 'con la baccheta in terra del su in giù'.

Did all these impressive rules mean anything? One can glimpse something of the true situation here and there from setbacks or even real catastrophes. A *communità* might not be able to borrow enough to complete its works, so it would sell half the *ritratto* to its citizens, and the other half to any buyer who would pay the starting price (the auctioneer started

[269] Senato Terra 32, 16th September, 1560; 29th November, 1560.

[270] *Ibid.*, 27, before the 9th May, 1558.

from the highest price and then lowered the bids). It was frequent to find syndicates being set up by landowners who were *consorti* or *caratadori* (carat buyers). These were real merchant associations: it is not surprising to find the great names of the patrician families of Venice at their head. One document (15th February, 1557)[271] mentions a Hieronimo Dolfin (of the banking family) who with his associates was negotiating for the *ritratto* of the San Biasio valley, near Lendinara, between the lower Adige and the lower course of the Po, a project that was still at a standstill, however, at the beginning of 1561.[272] Two years later we find another patrician, Alessandro Bon, who has 'intrapreso a sue spese col permesso della Signoria, la bonifica di tutte le valle che sono tra Po e Bacchiglione';[273] his plans came up against the resistance, the 'unexpected obstacle of the *communità* of Rovigo'. We can only guess at this stage whether these were always large concerns: we do not know and only research into this area can provide the answer. However we know that when there was an accident, as on the 5th November, 1554, when a dyke burst near Rovigo, 30,000 *campi fertilissimi* were flooded; and as the breach was inadequately repaired, 40,000 *stara di formento* were likely to be short at the next harvest, as they had been at the previous one.[274] Therefore large interests were at stake and a great deal of money. On 11th December, 1559, one initiator of schemes, who unfortunately remained anonymous, proposed to build at his own expense a series of *ritratti*; he would take only one *campo* in ten in return.[275] Who was hiding behind this man of property?

Beyond these small details we know very little about the real situation of peasants and landowners in the Veneto, while we now have (by an accident of research) abundant information about the peasants of the Languedoc and their masters.[276] There is still a great deal of research to be done before we shall come near the truth, and then we shall have to weigh the evidence very carefully. What is the real significance, in relation to the overall variety of types of farming, of this effort at land improvement, the long-term triumph of the rice fields, starting perhaps in 1584, which was to assure the well-being of the patrician classes and the favourable balance of payments of the Signoria in the seventeenth century, with the added profits of silk production?[277] In any case, these vast projects are out of all proportion to the works of the *canalistes* of the Languedoc. Similarly, after the end of the sixteenth century, there opened in Venice for the beneficiaries of ground rent a period of even greater prosperity than any experienced by landowners of Languedoc round Montpellier or Narbonne. When Venetian wealth moved into the hinterland of the Terraferma, it exploited it skilfully. But we do not know enough for certain about these episodes in Venetian land history. All we know is that the peasants went into debt,

[271] Senato Terra 25. [272] *Ibid.*, 32. [273] *Ibid.*, 67.
[274] *Ibid.*, 23. [275] *Ibid.*, 31.
[276] See above, n. 266 and 58.
[277] Domenico Sella, *Commerci e industrie a Venezia nel secolo XVII*, 1961, p. 87 ff.

that the economy often remained archaic, that the communal lands were diminished. It would make a rewarding subject for research.[278]

Long term change: the fortunes of the Roman Campagna. Long term change is obviously easier to estimate. The Roman Campagna is a very good example of continuous large-scale change.[279] The peasant took possession of it in Neolithic times. Thousands of years later, under the Empire, the *agro romano*, which was then inhabited over all its area, was provided with large aqueducts. Malaria was not a great problem at this time. Disaster came with the Ostrogoths in the fifth century, when the aqueducts were breached. Only a century or two later could land reclamation be taken in hand again. Ostia rose from its ruins. The eleventh century brought another setback and further disasters; afterwards, once again, agricultural life began to prosper in the fourteenth and fifteenth centuries. Ostia was raised again, this time owing to the activity of Cardinal d'Estouteville. In the fifteenth and sixteenth centuries there grew up great noble estates with big farmhouses built like castles: the *casali*, which can still be seen today on the side of the main roads. Their massive dimensions are a sign of the insecurity of the plain, threatened by bandits always ready to come down from the mountains. These big, 'colonial' farms practised rotation of crops – wheat was their chief produce – and large-scale stock-farming. Their labour came from the Abruzzi mountains. But how permanent was this possession of the plain?

In the sixteenth century the situation was not very brilliant. The cardinals had their 'vines' in the Campagna, but they were situated on open hillsides, like the Casino of the Borghese on the Palatine. Benvenuto Cellini, who liked to hunt outside Rome, gives a detailed account of a long illness from which he only recovered according to him, by a miracle, and which seems to have been a particularly severe attach of malaria.[280] We should imagine the Campagna at this time with many waste stretches, swamps, and wild areas which were not much more than hunting grounds. Moreover, a vigorous and expanding pastoral community was coming down from the different parts of the Apennines and knocking at the gates of the city, as in the far-off days of its early existence. Notarial acts in Rome towards 1550 mention many stock dealers, among them Corsican immigrants.[281] Competing with foreign wheat as well, the agriculture of the plain deteriorated rapidly. In the eighteenth century things got even worse. De Brosses has left a harrowing account of the troubles of the plain, of the negligence of the

[278] On this vast problem see the pioneering work of Daniele Beltrami, *Forze di lavoro e proprietà fondiaria nelle campagne venete dei secoli XVII et XVIII*, 1961.
[279] I have followed the outline given by M. Sorre, *Les fondements biologiques de la géographie humaine*, p. 379 ff. See also, C. de Cupis, *Le Vicende dell'agricoltura e della pastorizia nell'agro romano e l'Annona di Roma*, Rome, 1911; Pfalz, art. cit., p. 133–134, and particularly Jean Delumeau, *op. cit.*, II, p. 521 ff.
[280] *Vita de Benvenuto Cellini scritta da lui medesimo*, English trans. Symonds, *The Life of Benvenuto Cellini*, London, Phaidon, 1949, p. 156–162.
[281] C. Trasselli, 'Notizie economiche sui Corsi in Roma (secolo XVI) in *Archivio storico di Corsica*, X, Oct–Dec., 1934, p. 576 ff.

landowners and the fevers that ravaged it.[282] 'The beginning of the nineteenth century finds the *agro romano* in a more lamentable condition than ever.'[283]

The strength of the plains: Andalusia. More commonly the fortunes of the plains were less troubled. Or perhaps they seem so to us because we know less about them. All the same there have been, between Roman times and our own, considerable variations in the occupation and exploitation of land in lower Tunisia, where there is abundant evidence of antique splendour. The same can be said of lower Syria or Macedonia, deserted for centuries and only revived since 1922, or the amazing Camargue, which has still not finished surprising us.

Whatever the truth, these great plains represent the essential agricultural history of the Mediterranean, the last, the most difficult, and the most magnificent of its successes – that is if one does not look too closely at the high cost in human terms of reclaiming them from the marshes. Each conquest was a great historical achievement, rich in consequences. So much so that one should always ask oneself whether behind any great event there is not, as an underlying cause, one of these important agricultural triumphs.

The most dazzling example of such success is that of the plains of lower Andalusia. In the sixteenth century this was one of the richest regions of the Mediterranean. Between the ancient Castilian shelf to the north and the forbidding mountains that form the Baetic Cordillera to the south, roll the gently undulating Andalusian plains with their meadows, sometimes, in the west, reminiscent of the fields of Flanders, their vineyards and vast olive orchards. Like all the other plains, it was conquered only gradually. In early Roman times, all the lower Guadalquivir was a marsh[284] comparable perhaps to the lower Rhône Valley in primitive times, or to the Mitijda before it was colonized by the French. But Andalusia, or Baetica, was fairly rapidly to become the heart of Roman Spain, a garden of towns that soon became too brilliant and overpopulated.

For the wealth of towns is the opposite of the wealth of plains. They specialize in a few products that bring profit, and depend in part on foreign goods for their daily bread. The Andalusian towns exported oil, grapes, wine, cloth, and manufactured goods and lived off North African wheat. Whoever owned the wheat had the towns more or less at his mercy. The

[282] *Lettres d'Italie, op. cit.*, I, p. 312–313. On the emptiness of the Roman Campagna. 'Today only peasants from the Sabine hills and the Abruzzi come from time to time to sow a few fields in the *campagna* and then go away again until harvest time'. The explanation President de Brosses gives of the causes of depopulation and particularly the responsibility of Sixtus V calls for some correction. Pastor thinks that if fever was on the increase it was possibly because of deforestation: the campaign against bandits in the time of Sixtus V was in fact accompanied by the systematic burning of the brushland which afforded them cover.

[283] M. Sorre, *op. cit.*, p. 398.

[284] Note the impression made on E. Quinet, *Mes vacances en Espagne*, 1881, p. 320, by the 'marshes' of the Guadalquivir. In fact these were the wet *latifundia* of the Marismas where half-wild bulls were reared, a vast region of flowery meadows in springtime.

Vandals, with their complicity, seized control of the wheat[285] in the fifth century. When Byzantium chased them out in the next century, Andalusia fell under its power. Later it offered no resistance to the conquering Arabs.

Every time it was 'conquered', Andalusia became the jewel in the new crown. It was the centre of an expanding Moslem Spain, which did not reach much of the northern part of the Iberian peninsula, but spread over North Africa, with whose coastline, rugged population, and turbulent history it was closely identified. In this garden of towns, there were two great metropolises: Córdoba and later Seville. Córdoba was the centre of learning for all Spain, and the entire Western world, whether Christian or Moslem, and both towns were capitals of art and centres of civilization.

Hundreds of years later, in the sixteenth century, this pre-eminence was still marked. And yet it had taken a long time to heal the scars caused by the Christian Reconquest in the thirteenth century, It had created in Andalusia, especially to the south, many desert regions which colonization, first military then pacific, had only gradually reclaimed. In the sixteenth century, the long labour of reclamation was still going on[286]. But even so Andalusia was still a splendid land: 'granary, orchard, wine-cellar and stable of Spain',[287] the object of the ritual praise of Venetian ambassadors in their *Relazioni*. To the blessings of its soil the sixteenth century added another gift: America was given to Seville in 1503 for almost two centuries. America, or rather the *Casa de la Contratación*, the fleets that sailed to the West Indies and those that brought back silver from Mexico or Peru, the trading colonies overseas, thriving and active. All this was given to Seville exclusively as a legal monopoly. Why? In the first place so that the profitable trade could be more jealously controlled – the rulers' chief consideration. Secondly because the route to America depended on the trade winds and Seville stood at the gateway of the trade winds. But behind this singular good fortune did there not also lie the weight of a town in a privileged position, so well served by the boats going down the Guadalquivir and by the famous carts pulled by four oxen? It was the great wine- and oil-producing plain that in part accounted for Seville's trade. It was for wine and oil from its slopes that the northern ships came from Brittany, England, Zeeland, and Holland, and not merely for salt from San Lucar – much prized for salting cod – and the produce of the Indies.

[285] E. F. Gautier, *Genséric, roi des Vandales*, Paris, 1932, p. 109.

[286] On these questions see the detailed study by Georg Niemeyer, *op. cit.*, p. 37, 56–57, for the ravages caused by the Reconquest beyond the Guadalquivir. The systematic colonization of Andalusia was hardly begun until the time of Charles III. It was first undertaken with German settlers (p. 57). For the gaps still remaining in 1767, see figure 8, p. 62 of the same work. There was only one episode of colonization in the sixteenth century: Mancha Real, founded in 1540 in the steppe of Jaen. NB the important observation p. 100, on the significance of age – and therefore of history – in the system of property-owning, accompanied by a comparison of an old community, Córdoba, with a new one, Carlotta, founded in 1767. For the export of oil from Seville, 60,000 to 70,000 quintals, see Pedro de Medina, *Libro de grandezas y cosas memorables de España*, 1548, f° 122

[287] G. Botero, *op. cit.*, p. 8.

Andalusia's wealth encouraged – not to say forced – her to look outwards. In the sixteenth century, Seville and the Andalusian hinterland, still half-Moslem and hardly half-Christian, were engaged in sending their men to settle whole areas of Spanish America. These areas still bear the mark of their origins. Carlos Pereyra has perfectly described it. Spain sent all her sons down to this southern region opening onto the sea.

We should therefore be rather wary of Pierre George's vivid phrase describing these plains as 'farming cells' near the sea. In fact these cells are far from being shut in on themselves. If they extend their influence, it is generally because the economy of the great sea expanses comes to their assistance, or more precisely takes them into its service and condemns them to producing crops for export. Olives and vines prospered in lower Andalusia in the sixteenth century simply because they were favoured by the enormous trade of Seville. Similarly, at the other end of the Mediterranean, almost outside our area, the expansion of wheat-growing in Moldavia and Wallachia in the time of Michael the Brave, at the end of the sixteenth century, and the strengthening of the feudal system which it produced, were connected with the demand created in the Black Sea by a grain trade then in a period of full expansion. There are other examples, outside the sixteenth century this time: the cotton and tobacco which led to the improvement of the plain of Salonica; madder, introduced to the County of Avignon in the eighteenth century, for which low-lying regions were drained and the last marshes eliminated; or the vines which in 1900 made the Mitidja healthy at last.

There is little room for doubt: the land improvement schemes of the plains could only be financed by an influx of big profits from trade, long-term and large-scale trade. And that, in concrete terms, meant the proximity of a big trading town with openings to the outside world and a stock of capital – a town that could afford to carry the risks and responsibilities of the undertaking. And it is precisely in the regions near big cities – Venice, Milan, Florence – that all the sixteenth-century improvement schemes we have mentioned have been situated. Similarly, under the influence of Algiers, towards 1580, a thriving agriculture was set up in the Mitidja. It may have been short-lived, for the plain had not at that stage totally eliminated the unhealthy swamps, but it began to produce for the expanding town and the luxurious houses of the Turkish and renegade corsairs – at a cost in human life we can only surmise – meatstock, milk and butter, beans, chick peas, lentils, melons, cucumbers, poultry, and pigeons. It provided the boats in the port with wax, leather and large quantities of silk. It had fields of wheat and barley; and Haëdo, who perhaps had not been to see it for himself, came to the conclusion that it must be a garden of Eden. Valencia was another city which accounted for the gardens surrounding it, and also provided them with manure. 'If the streets of Valencia are not paved,' writes an eighteenth-century traveller,[288] 'it is because their refuse mixed with the excrement with which they are only

[288] Baron Jean-François Bourgoing, *Nouveau voyage en Espagne*, 1789, III, p. 50.

strewn for a few moments, is carried at frequent intervals outside the walls to fertilize the adjoining countryside, and the people are convinced that if they were to pave them, they would deprive the great orchard, which surrounds Valencia on all sides, of one of the principal sources of its fertility.'

Any plain that is claimed for agriculture becomes an economic and human power, a force. But it is obliged to live and produce for the outside world, not for its own sake. This is both a condition of its importance and a cause of its subordination and its troubles. We shall see this in the case of Andalusia, which even before 1580 was forced to import northern wheat.[289]

4. TRANSHUMANCE AND NOMADISM: TWO MEDITERRANEAN WAYS OF LIFE

We have left to the last a description of the multiple problems of transhumance and nomadism, the regular movement of men and flocks which is one of the most distinctive characteristics of the Mediterranean world. We cannot attempt a total explanation of these continual migrations without looking eastwards and southwards beyond the Mediterranean peninsulas and without bringing into our discussion the pastoral life of the vast desert regions, which is why this topic – one not easily identified with any geographical region – has been postponed until now.

Transhumance.[290] There are several kinds of transhumance: geographers distinguish between at least two, possibly three.

[289] See below, I. p. 585 ff.

[290] To the historical dossier on transhumance we should add the documents relating to the grazing lands of the *presidios* in Tuscany (Sim. Secretarias Provinciales de Napoles, legajo no. 1, 25th January, 1566; 20th February, 1566; 5th March, 1566; 15th March, 1566). A letter from the Duke of Alcalá to the prince of Florence (copy, Simancas, 1055, f° 37) and the prince's reply (*ibid.* f° 66) on the subject of taxes imposed by the Tuscans on the migrating flocks which came to the *presidios* on the coast. An undated document in Italian, addressed to Philip II (probably in the same year 1566) mentions the attractions for sheep farmers of the grazing lands of the warm region of the *presidios* on the coast. The tax levied by the Tuscans on the way out towards these grazing lands was 10 lire per 100 head of stock, *di pecore, capre e altro bestiame* (Simancas, E°. 1446, f° 45). On the location of these pastures, cf. 24th August 1587, A.d.S. Naples ,Sommaria, fasc. 227. On the immense importance of the 'aduanero' of Foggia for transhumance, see B.N. Paris, Esp. 127, f° 61 and 61 v° (towards 1600) and the reference to the lengthy lawsuit of one of the customs farmers, the Marquis de la Paluda, whose excesses led to an action at law.

There is a great deal of geographical literature on the subject. Cf. the theory suggested by Deffontaines on the origins of transhumance (in the 4th edition 1935, of Jean Brunhes, *Géographie humaine*, p. 184); P. George, *op. cit.*, (355 ff.); Jules Blache's book, already mentioned, esp. p. 18 ff., 21, 31; P. Arqué, *op. cit.*, p. 43. An excellent summary of the problem in the Mediterranean, with a map showing the position in 1938 for the whole region, can be found in the article by E. Müller, 'Die Herdenwanderungen im Mittelmeergebiet', in *Peterm. Mitteilungen*, 84, 1938, p. 364–370 which gives a bibliography with particular mention of the great books by J. Frödin, *Zentral-*

In the first place there is 'normal' transhumance: sheepfarmers and shepherds are in this case people from the lowlands; they live there but leave in summer, which is an unfavourable season for stockraising on the plain. For these purposes, the mountains simply provide space. And even this space may often be the property of the peasant farmer from the plain, if more usually it is rented out to the mountain dweller. Arles in the sixteenth century, and possibly for four or five centuries previously,[291] was the capital of large-scale summer transhumance, controlling the flocks of the Camargue and especially of the Crau, sending them every year along the routes of the Durance valley to the high pastures of the Oisans, the Dévoluy, the Vercors, and even to the Maurienne and Tarentaise. This was a real 'peasant capital': it was where the 'capitalists' lived[292] – the top sheep farmers were still known by that name in recent times – and it was where notaries drew up and registered contracts.

'Inverse' transhumance in the sixteenth century was, for example, the kind found in Spanish Navarre. Flocks and shepherds would come down from the highlands, the *euskari*. The lowlands served only for marketing purposes, that is when there was a market. This transhumance was a frantic rush down from the mountains in winter – cattle and men hurried to escape the cold of the mountains and flooded into lower Navarre like an invading army. All doors were padlocked against these unwelcome visitors, and every year saw a renewal of the eternal war between shepherd and peasant, first on the way down, until the flocks reached the open plains or the wide grazing lands of the Bardenas Reales, and then on the way back. The Bardenas Reales are a stony steppe on the borders of Aragon, where winter rains provide rather meagre grazing.[293]

This inverse transhumance is also found in Calabria, where shepherds and flocks crowd into the narrow coastal strip during winter and spring. 'On the morning of Easter Day,' explains the Bishop of Catanzaro in June, 1549, 'some priests would go to the sea front, where there were many flocks, and were in the habit of celebrating mass on an altar made up of *formes* of cheese, afterwards blessing the cheese and the flocks and giving communion to the shepherds. The priest was then given all the cheese used to make the altar. I punished the priests who had held these services

europas Almwirtschaft, 2 vols., 1941, and Merner, *Das Nomadentum in Nord-Westlichen Afrika*, Stuttgart, 1937. The difficulty lies not only in cataloguing the different types of transhumance, but also in establishing its boundaries, the points at which it gives way in the North to the Alpine type of pastoral life and in the South to the nomadism of the Sahara, which amounts to a definition of the boundaries of the Mediterranean region. The recent studies by X. de Planhol (for full references see notes 301, 325–327) are decisive on this point.

[291] J. J. Estrangin, *Études archéologiques historiques et statistiques sur Arles*, 1838, p. 334 ff.

[292] Fernand Benoit, in *Encyclopédie des Bouches-du-Rhône*, vol. XIV, p. 628. On the role of the 'capitalists' see the brief but informative notes by Albitreccia, *op. cit.*, p. 256 ff.

[293] G. Desdevises du Dézert, *Don Carlos d'Aragon, Prince de Viane, Étude sur l'Espagne du Nord au XVe siècle*, 1897, p. 27.

and . . . forbade any others under pain of terrible penalties to dare to hold them in the future'.[294]

These are the two basic types of transhumance. There is also a third, less important, mixed type, which combines both summer and winter transhumance, where dwelling and starting point are halfway between summer and winter pastures. It is still practised in the Corsican Chataigneraie today.

In fact it is impossible to do justice to this complex phenomenon by rigid classification. Transhumance implies all sorts of conditions, physical, human, and historical.[295] In the Mediterranean, in its simplest form, it is a vertical movement from the winter pastures of the plain to the summer pastures in the hills. It is a way of life combining the two levels, and at the same time a source of human migration. These men may belong to one village or another, one rural – or non-rural – group or another; they may be simply shepherds, or they may, during one of their stays, hastily cultivate the earth, sometimes burning the scrubland in autumn to make crops grow more quickly;[296] they may have their homes in the hills or on the plains; they may or may not have fixed dwellings. In short there are many variations on the theme, but they are imposed by local conditions and are virtually unavoidable. One anecdote deserves mention. Coron, on the Greek coast, was in 1499 still a Venetian outpost. The Pasha of Morea wanted to prevent the Albanians and Greeks of the little town from sowing crops or grazing flocks on the territory of the Grand Turk. The *Rettori* of Coron merely replied *dolcemente*, 'Our flocks may go to your land in summer, but your flocks come to ours in winter.'[297]

Topographical relief and season are the two factors that broadly determine what can and should happen in particular cases. In 1498,[298] at carnival time, some *stradiots* carried out a raid near Pisa. Their haul was not surprising in winter near the sea: 300 head of large stock, buffaloes and cattle, 600 sheep, some mares, and some mules. Another raid near Zara, against the Turks, in January, 1526, resulted in 2500 animals being carried off.[299] A final example occurred in December, 1649,[300] when Morlachian raiders, led by a new chief, seized '13,000 head of cattle' near the coast of Dalmatia.

Nomadism, an older way of life. Transhumance, so defined, is simply one form of the Mediterranean pastoral way of life, alternating between the grazing lands of the plains and the mountain pastures; it is a regulated and on the whole peaceful form, the result of a long period of evolution. Transhumance even in its most disruptive forms only concerns a specialized population: the shepherds. It implies a division of labour, a settled form of agriculture with crops to maintain, fixed dwellings, and villages. The

[294] Buschbell, (article; reference mislaid) p. 7, note 1.
[295] Jules Blache, *op. cit.*, p. 22 ff.
[296] M. Le Lannou, *op. cit.*, p. 62.
[297] M. Sanudo, *Diarii*, II, column 577.
[298] M. Sanudo, *op. cit.*, I, column 898, Pisa, 1st March, 1498.
[299] *Ibid.*, XL, p. 816, Zara, 1st February, 1526.
[300] *Recueil des Gazettes*, year 1650, p. 88, Venice, 26th December, 1649.

villages may lose a part of their population according to the season, either to the plains or the mountains. Many documents of the sixteenth century mention these half-empty mountain villages, where only women, children, and old men remain.

Nomadism, on the contrary, involves the whole community and moves it long distances: people, animals, and even dwellings. But unlike transhumance, it has never been a way of dealing with enormous flocks of sheep. Even its largest flocks are scattered over a vast area, sometimes in very small groups. Today nomadism – which no longer exists around the Mediterranean in its residual state, it is true – consists of the knot of about ten people who might be seen round a fire at nightfall in one of the outer suburbs of Beirut; or at harvest time in Algeria, a few camels, sheep and donkeys, two or three horses, some women dressed in red, and a few black goat-skin tents amidst the stubble; or in the plain of Antalaya, in Pamphylia to the south of Taurus, about twenty tents, sometimes, but not often arranged in a horse shoe, the relic of a tradition which is slowly disappearing.[301]

Transhumance and nomadism seem to be activities dating from different ages. Is nomadism really an older way of life? Under our own eyes, throughout the desert and semi-desert zone that surrounds the south Mediterranean and continues into central Asia and beyond, the sedentarization policies of present-day governments have converted the old nomadism into a modified pastoral way of life (in the Sahara and Tripolitania, in Syria, in Turkey, and Iran), a way of life that is really transhumance, a division of labour. So the chronological order seems probable. One might add that in the context of the mountain regions of the Mediterranean, it looks as if inverse transhumance was practised earlier than what geographers call 'normal' transhumance.

This classification – nomadism, inverse transhumance, so-called normal transhumance – seems convincing. But things never happen as simply as an *a priori* model would suggest. The past has been richer in catastrophes and brutal revolutions than in slow evolution. Unfortunately catastrophes in these areas are less well-known than in the political arena.

In fact, when pastoral structures are studied in detail, inverse transhumance and normal transhumance often seem to operate simultaneously. In Haute-Provence[302] in the fifteenth and sixteenth centuries farmers from the upper regions (the richest and most numerous) and from the lower used the same pastures. In these conditions it is the system of property owning alone that distinguishes the two kinds of transhumance. This leads us out of the geographical context into the social context of property owning and even into politics. For the movement of flocks offered fiscal resources which no state could ignore, which it would hasten to organize

[301] Xavier de Planhol, *De la plaine pamphylienne aux lacs pisidiens. Nomadisme et vie paysanne*, 1958, p. 194.

[302] Th. Sclafert, *Cultures en Haute-Provence, Déboisements et Pâturages au Moyen Age*, 1959, p. 133 ff., esp. maps on p. 134–5.

and always protect. Between the Abruzzi and the Apulian Tavoliere, inverse transhumance was established as early as Roman times and explains the textile industries of Taranto. It survived under a fairly liberal system until 1442–1447, when Alfonso I of Aragon[303] organized it on authoritarian lines, with privileged and compulsory sheep routes, the *tratturi*, connecting tracks (*tratturelli*), resting pastures (*riposi*), and winter pastures, and, in addition, rules stipulating that wool or beasts had to be sold at Foggia and nowhere else, with payment exacted all along the line, naturally. Once this system was in place it changed little and was to be protected from the obstinate and regular encroachment along the routes by peasants, planting vines, olives and, in particular, wheat.

In 1548, over an area of 15,000 *carri* (one *carro* equals over 58 acres) situated in Apulia, royal grazing lands represented just over 7000 *carri*; besides this the authorities recovered 2000 *carri* in ploughed fields to which they were more or less entitled. The flocks which then averaged a million head of sheep, went up to an average of 1,300,000 head for the next ten years. And this number increased again, since in 1591 official records speak of 2,881,217 sheep, while regularly following years of high cereal prices (in 1560, 1562, 1567, 1584, 1589–1590, and 1591) the land through which the flocks moved was let out to peasants for six-year periods – the wheat yield from these fields fertilized by the passage of the flocks reached record figures of 1 to 20 or 1 to 30. This led to exciting 'candlestick' auctions[304] at Naples between would-be purchasers. Big interests were at stake: those of the taxation system for which the Apulian customs duties were an 'irreplaceable jewel', those of the wool and meat merchants, and those of the big sheep-farmers who were increasingly becoming distinct from the mass of small farmers. 'A *villano* of this province of the Abruzzi,' says a report addressed to the Catholic King, 'will have 10, 15, 20, or 30,000 sheep, which he brings every year to this customs post [in Apulia] to sell wool and beasts. Then when he has packed his saddlebags with gold crowns he goes home to bury his money; sometimes he dies leaving his treasure still in the ground.'[305] However, in the seventeenth century, and even more in the eighteenth, there was some concentration of property and an increase in the size of the flocks of the rich sheep farmers, and it *looks* as if the lowlands had the advantage: this is only an impression for which there is little verifiable evidence.[306] At any rate it gives an idea of the complexity of the problem.

[303] Josef Ivanic, 'Über die apulischen Tratturi in ihrer volkswirtschaftlichen und rechtlichen Stellung' in *Illyrisch-albanische Forschungen*, 1916, p. 389, ff.

[304] A.d.S. Naples, Sommaria Consultationum, 2, f^os 12 v° to 15, 13th March, 1563; 11, f^os 61 v° and 64 v°, 10th October, 1591. In 1561, the revenue from the *dohana delle pecore de Puglia* came to 164,067 ducats; in 1564 it was 207,474 ducats; in June, 1588 it was 310,853 (*ibid.*, 2, f^os 78–83, 8th October, 1564, and 9, f^os 426, 4th June, 1588).

[305] G. Coniglio, *Il Viceregno di Napoli nel secolo XVII*, 1955, p. 28.

[306] G. M. Galanti, *Nuova descrizione storica e geografica delle Sicilie*, vol. II, Naples, 1788, p. 287, 303, 305, and even better, A.d.S. Naples Sommaria Consultationum 41, f^os 99 to 101, 17th October, 1637.

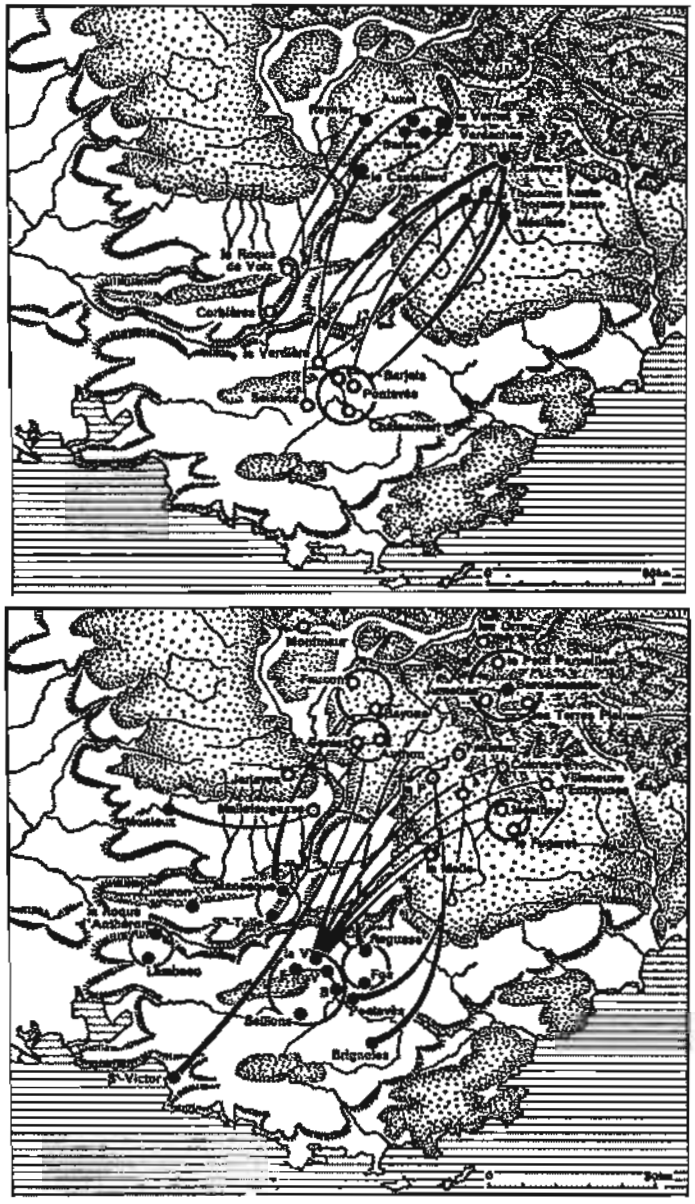

Fig. 5: *Winter and summer pasture of sheep in Haute-Provence towards the end of the fifteenth century*

Taken from Thérèse Sclafert, *Cultures en Haute-Provence*, 1959, p. 134 and 135, where the abbreviated place names are given in full.

The same duality is found in the Vicenza region – the *Vicentino*. The unpublished work of a sixteenth-century scholar, Francesco Caldagno,[307] describes it as a *habitatissimo* region, with no land uncultivated, a continuous garden sprinkled with big villages, almost towns, with their markets, commerce, and 'fine palaces'. It has everything: wood, which arrives in waggons or by water, and charcoal; the farmyards are stocked even with peacocks and 'turkey-cocks'. On the rivers and streams there are countless mills, sawmills, etc. In the irrigated meadows, thousands and even 'tens of thousands' of animals graze. Calves, kids, and lambs are abundant, and in summer this entire animal population is sent 'alli paschi della montagna'. This was normal transhumance which always stirred up trouble with the mountain dwellers about the letting and use of the high pastures; so there were quarrels with the Grisons about the 'Mandriole', a mountain rented by the *Vicentini*, which is hardly surprising. The men of Grisons had to drive their stock to the southern Alps and towards Venice,[308] where they sometimes settled as butchers. But the *Vicentino* had its own mountain people, in the section of the Alps known as the *Sette Communi*, with their woodcutters, their trappers, and also their crops and their own flocks, notably at Galio which possessed between 50,000 and 60,000 sheep. In summer they stayed on the pastures of the *Sette Communi*, in autumn they went down and scattered over the countryside of the Vicentino, the Paduvano, the Polesino, the Trivigiano, the Veronese, and even the Mantovano. This is proof that the vigorous pastoral life arising from the Vicentino plains did not have the monopoly of the area available for grazing. Everyone had his share.

Transhumance in Castile. Castilian transhumance is a good example upon which to test all our definitions. It has been described a hundred times. We are familiar with its conditions, its constraints, and its complexities.

We should immediately distinguish between 'long-distance transhumance' which can lead to treks of 800 kilometres, and short or very short-distance transhumance. We shall only be concerned here with the long-distance variety, which depended on the illustrious sheep-farming 'syndicate' of the *Mesta*, whose letters of privilege went back to 1273. As an eighteenth-century naturalist wrote, Spain has 'two species of sheep: the first kind, whose wool is ordinary, spend their lives in one place, do not change pastures, and return every night to the sheepfold; the others, which have fine wool, travel every year, and after spending summer in the mountains go down to the warm meadows of the southern parts of the kingdom, such as La Mancha, Extremadura, and Andalusia. This second species is known as the "itinerant sheep".'[309] Like all distinctions this is only approximate; the term 'itinerant sheep' should really be restricted to

[307] Marciana, 5838, C II, 8.

[308] A.d.S. Venice, *Cinque Savii*, 9, f° 162, 2nd March, 1605.

[309] Guillaume Bowles, *Introduction à l'histoire naturelle et à la géographie physique de l'Espagne*, trans. from the Spanish by the Vicomte de Flavigny, Paris, 1776, p. 470.

those that travelled, their precious fleeces smirched with red clay in the winter, to the 'utmost extremities' of Castile along the main roads, the *cañadas* on which there were a dozen royal tolls. But there was a subsidiary pastoral traffic along the secondary roads (*cordeles, veredas*). These flocks outside the main stream of circulation varied according to the season. They were known as *ganados travesios*, or *riberiegos*, or *merchaniegos* when they were on their way to the sheep fairs (*mercados*). A long, painstaking struggle was carried on by the royal authorities to extend their control beyond the main routes. It explains the sharp rise, until 1593–1599,[310] of taxation on sheep, but this is not our problem.

Our problem is to visualize this large-scale transhumance according to the *cañadas*, the map of which we have reproduced from Julius Klein's classic book,[311] repeated movements along the axes north-south and south-north. No uncertainty is possible. In spite of the vast range of movements (often horizontal, or through breaches in the mountains) what we have here is not a case of nomadism, since the sheep are accompanied by professional shepherds and by them alone, the *rabadanes*, master-shepherds and under-shepherds, armed with slings and long crooks, taking with them only their mules, a few horses, their cooking pots, and their dogs. There is no sign of an entire population on the move. We can even say without hesitation that this was a case of inverse transhumance. The fine-wool flocks travelled from the northern highlands to the southern plains. Flocks and farmers (both big and small) hailed from the North and particularly from the four big 'sheep cities' that upheld in the Cortès the powerful interests of the *Mesta*: León, Segovia, Soria, Cuenca. The whole system depended moreover on the capacity of the summer pastures, i.e. the northern ones: in the South, the vast empty plains of Extremadura, of La Mancha and of Andalusia allowed unlimited expansion.[312] So if the Castilian flocks did not cross the symbolic Portuguese frontier, it was not merely because of the opposition of their vigilant neighbours but also because they did not need the space, although the Castilians grumbled about the restriction.

This said, we are not for the moment concerned with the multiple quarrels between peasant farmers and shepherds (which were particularly marked when the flocks went back up to the hills); nor with the distinction between long-distance and short-distance flock movements. The question of the folded flocks, *estantes* or *travesios*, involves towns outside the orbit of the *Mesta*, such as Salamanca, towns, that is, where there was a local aristocracy of landed gentry and farmers. Neither are we concerned with the disputes between the *Mesta* pressure group and jurisdiction hostile

[310] Modesto Ulloa, *La hacienda real de Castilla en el reinado de Felipe II*, 1963, p. 222 and the excellent chapter p. 215–223.

[311] Julius Klein, *The Mesta: a study in Spanish Economic History 1273–1836*, 1920. See A. Fribourg, 'La transhumance en Espagne' in *Annales de Géographie*, 1910, p. 231–244.

[312] Jacob van Klaveren, *Europäische Wirtschaftsgeschichte Spaniens im 16. und 17. Jahrhundert*, Stuttgart, 1960, p. 200 ff.

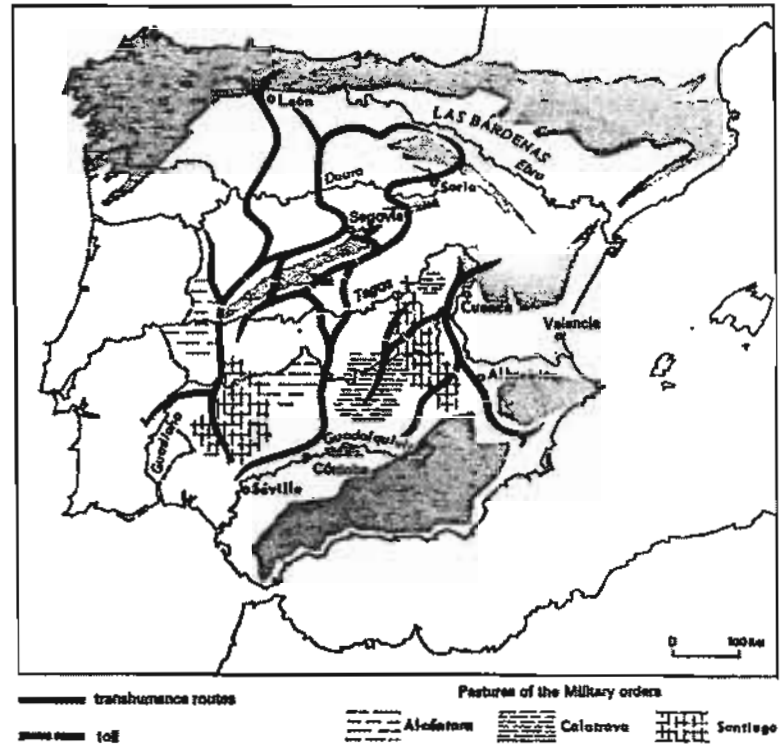

Fig. 6: *Castilian transhumance*

According to Julius Klein, *The Mesta, a Study in Spanish Economic History 1273–1836*, Cambridge, 1920, p. 18-19.

to its judiciary privileges; nor with the fight over the tolls between the state, the towns, the high nobility, and the Church. Yet all these well-known factors, taken together, indicate the complexity of the system of transhumance, based as it was on other systems and only comprehensible in the light of a long process of earlier evolution. Sheep-breeding meant more to the Iberian economy, says one historian, 'than the olives, grapes, copper, or even the treasures of Peru'.[313] And he is right. We should see in this much more than the generalization of the *merino* sheep, in the fourteenth century, the result of crossbreeding between Spanish sheep and sheep imported from North Africa. A whole combination of circumstances and the concurrence of the international situation were necessary

[313] Roberto S. Lopez, 'The origin of the merino sheep' in *Jewish Social Studies Publication*, vol. 5, New York, 1953, p. 161–168.

for the establishment (and rise until about 1526 perhaps) of the *Mesta*. If it had not been for the European crisis of the fourteenth and fifteenth centuries, the attraction of the probable low price of Castilian wool, the well-known drop in exports of English wool, and the thriving textile industry of the Italian towns, the great rise of sheep farming in Castile and its millions of itinerant sheep would have been impossible and unthinkable.[314]

In short, the case of Castile with its spectacular expansion leads to unambiguous conclusions. Any transhumance presupposes complicated internal and external structures and weighty institutions. In the case of Castilian wool, it involved towns and markets like Segovia; Genoese businessmen who bought up wool in advance and, like the Florentines, possessed vats where the fleeces could be washed, not to mention the Castilian agents for these big merchants, the transporters of the bales of wool, the fleets that sailed from Bilbao for Flanders (controlled by the Consulate of Burgos), or the consignments sent off to Alicante or Málaga, destined for Italy; or even to take an everyday detail, the indispensable salt which had to be bought and transported to the grazing lands for the flocks. It is impossible to explain Castilian transhumance outside this wide context, of which it was both product and prisoner.

Overall comparisons and cartography. The analysis of any example, whether important or not, seems to lead to similar conclusions.

1. All the cases studied in any detail show that transhumance is markedly institutionalized, protected by safeguards, rules, and privileges, and somewhat outside society, as is shown by the situation of the shepherds, who are always a race apart. Some studies, relating to southern Germany it is true,[315] underline this 'untouchable', outcast aspect of the shepherd, and this in itself is revealing. And one admirable description of the lives of the migrating shepherds of present-day Provence[316] takes the reader into a totally separate world and civilization.

Obviously precautions on behalf of or against transhumance may vary from region to region, but they are always there. Around Arles, in the Crau, some of the regulations were abused to the advantage of 'foreign flocks'; the municipal council deliberated the question in 1633 and authorized the captain of the watch to organize the necessary inspections and to levy a special tax to reimburse himself. The Parlement of Aix endorsed the ruling. We need not press the point: an order had been established.[317] At Naples at the beginning of the seventeenth century.[318] the principal office outside the big city was that of the customs officer at Foggia. It was he who distributed grazing lands, issued summonses, levied the rents for pastures. Or in his absence, the administration was represented by a

[316] Jacob van Klaveren, *op. cit.*, p. 200 ff.

[315] Wolfgang Jacobheit, *Schafhaltung und Schäfer in Zentraleuropa bis zum Beginn des 20. Zahhunderts*, Berlin, 1961.

[316] Marie Mauron, *La transhumance du pays d'Arles aux grandes Alpes*, 1952.

[317] J. F. Noble de la Lauzière, *op. cit.*, p. 461, 1632.

[318] B.N. Esp. 127 f° 61 and 61 v°, undated, beginning of the seventeenth century.

president of the Camara who went to the district twice a year, *al modo de la Mesta*, says an anonymous report. Whether fair or not, this comparison is symptomatic. Similarly in Aragon, pastoral life was governed by a Mesta with its privileges like that of Castile, but so far its archives have not tempted a historian.

2. Secondly, all transhumance is the result of a demanding agricultural situation which is unable either to support the total weight of a pastoral economy or to forgo the advantages it brings, and which therefore offloads its burdens according to local possibilities and the seasons, to either the lowland or the mountain pastures. Any logical study should therefore begin with this basic agricultural situation. It is this situation that determines the separation between shepherds and peasants. A first step towards understanding the large-scale pastoralism of which the Tavoliere of Apulia is the terminus and the Abruzzi the centre of departure, would be to note the positions at both high and low levels of the settled peasantry. In the case of Castilian transhumance we have noted the dominant role of the North and its entrenched peasant farmers. In the Vicentino we should think of the *paese habitatissimo* of the lowlands. And under our very eyes, in North Africa and Turkey or in Iran, we have the example of a rise in population and advances in agriculture breaking up a formerly pastoral way of life. What is happening today happened in the past too.

3. The only way to see beyond a series of particular instances is to project all known cases of transhumance on to a map of the whole Mediterranean region. This is possible for our own period, and was done in 1938 by Elli Müller, whose map we have reproduced, expanded, and simplified.[319] For the past, we have to reconstruct it from successive fragments. The transhumance routes – about 15 metres wide – bear different names in different regions: *cañadas* in Castile, *camis ramaders* in the Eastern Pyrenees, *drayes* or *drailles* in Languedoc, *carraires* in Provence, *tratturi* in Italy, *trazzere* in Sicily, *drumul oilor* in Rumania. The remaining traces of this network indicate an overall geography whose message is clear. In the Mediterranean region in the sixteenth century, transhumance was confined above all to the Iberian peninsula, the South of France, and Italy. In the other peninsulas, the Balkans, Anatolia, North Africa, it was submerged by the predominance of nomadism or semi-nomadism. Only one sector of the Mediterranean possessed a sufficiently rich agriculture, large population, and vigorous economy to have been able to contain pastoral life within strict boundaries.

Outside this area everything becomes more complicated. But the skein of contradictions is not explained so much by geography, which is important of course, as by historical precedent.

Dromedaries and camels: the Arab and Turk invasions. History provides some far-reaching explanations. To the east and to the south the Mediterranean suffered two invasions, in fact two series of prolonged upheavals

[319] See below, fig. 7.

that altered everything. These were the two 'gaping wounds' spoken of by Xavier de Planhol: the Arab invasions which began in the seventh century and the Turkish invasions which began in the eleventh: the latter coming from the 'cold deserts' of Central Asia, accompanied or reinforced the spread of the camel; the former, coming from the 'warm deserts' of Arabia, aided, if not explained, by the spread of the dromedary.[320]

The two beasts of burden differ from each other in spite of obvious similarities and possible confusion. The West persisted in confusing them, not without some excuse: Savary in his *Dictionnaire de Commerce* (1759) defined the dromedary as 'a double camel,' which is certainly not the case. They are two quite different animals: the camel, originating in Bactria, is unaffected by cold or height; the dromedary, from Arabia, is an animal of the sandy deserts and warm zones. It is practically useless for climbing mountain paths or withstanding low temperatures. Even during the cool nights of the Sahara or Arabian deserts its master takes care to have its head sheltered under the canvas of the tent. Hybrids obtained by crossing camels and dromedaries in Turkestan towards the tenth century, played only a local role.

The ecology of the two animals is of capital importance. A fairly large frontier zone separates their respective habitats, stretching between a line running along the southern edge of the Zagros and the Taurus (which is the decisive boundary) and a more hypothetical line running from the eastern tip of the Black Sea to the south of the Caspian Sea and the bend of the Indus.[321] Very roughly, this zone is the Iranian plateau, cold during winter. The dromedary did penetrate into this zone, of course, and participated in the active caravans that in the sixteenth century centred around Ispahan.[322] The dromedary even got as far as India and fetched prices there equal to or slightly higher than the horse[323], proof that it was something of a stranger there. In fact, neither the plateaux of Anatolia nor the Iranian highlands were really open to it, and if the Arab conquest failed in Asia Minor, if it was never very assured in Persia, the reason is largely to be sought in the inferiority of the dromedary.

In any case, the two zones each have a separate history.

From Syria to the Maghreb the Arab invader disregarded the high lands. He left alone to their fate the old, dry mountains of the interior, facing the desert, which man had colonized early in time, such as the Aurès in North Africa; and he skirted the edge of the deserted mountains bordering the sea, where an abundant rainfall accounts for the thick forests of

[320] Apart from his thesis, quoted above note 301, the articles by Xavier de Planhol are essential reading: 'Caractères généraux de la vie montagnarde dans le Proche-Orient et dans l'Afrique du Nord' in *Annales de Géographie*, 1962, no. 384, p. 113–129; and 'Nomades et Pasteurs', I and II in *Annales de l'Est*, 1961, p. 291–310, 1962, p. 295–318. I am indebted to these excellent studies.

[321] This is based on the information in Emil Werth, *Grabstock, Hacke und Pflug*, 1954, esp. p. 98.

[322] British Museum, Royal 14 R XXIII, f° 22 (About 1611).

[323] J. Savary des Brulons, *Dictionnaire universel de commerce*, 1759, I, column 804.

antiquity long respected by man. The forests, therefore, served as refuges for the native populations fleeing before the Arab conquerors. From the eighth to the ninth century the Maronites and Druses settled in Lebanon; they cleared the ground and set up their states. In North Africa the Kabylias were settled from the tenth century, and particularly from the eleventh century on, after the great push forward of the Hilalian nomads.[324] 'Bedouinization' following the Arab conquest spread all over the land in between these mountains, whether early or lately settled, like a flood cutting off the mountain tops as islands. So an often archaic way of life was isolated in these high places, of which some characteristics (the ox as a pack animal, irrigated valley crops, grain stored in the attics, troglodyte dwellings where men and animals huddle together) have persisted up to or very nearly up to our time.

In the mountains of Asia Minor, and to a lesser extent in the Balkans (where there were many exceptions), the invasion of the Turkish camel drovers meant violent upheavals, often without intermission, but of a completely different nature. An aggressive form of nomadism became established, wherever it was possible, up as far as the highest regions of the mountainous zones, above the upper limits of the forest. Perhaps it was because of 'what the term *yayla* – summer stay – means in the Turkish language and culture, where the notions of coolness, icy running water, and luxuriant pastures combine to form an image of Paradise'.[325] As soon as spring arrives there is a great move to leave 'winter quarters, *pirelendi* . . . flea-ridden . . . and full of vermin', and above all to get away, to take to the road. A Turkish proverb, freely translated, says 'a *Yürük* [a nomad, walker] does not need to go anywhere, but needs to be moving'.[326] obeying traditional urges as much as, if not more than geographical necessities.

The vast history of this nomadism is confused and difficult to disentangle. It has its own imbroglios, but it is also at odds with the eternal opposition of the settled peasants; it has to overcome, or go round, or break through the barriers they set up, and often to yield before their silent advance. In Asia Minor from the thirteenth to the fifteenth century the nomadism of the shepherds was gradually rejected, regularly eliminated from the plateaux and hollows of the interior, and pushed out to the mountainous margins and peripheral plains, 'almost deserts', which had relapsed into 'unhealthiness and neglect' for centuries, 'a plague-ridden brushland in summer': the plains of Cilicia, of Pamphylia, the valleys of the Meander and the Gediz. In the sixteenth century the Turkish government was constantly disciplining the *Yürüks*, forcing them to settle by land concessions, and condemning the most recalcitrant to work in the mines or fortifications, or deporting them, to Cyprus for example, which was Turkish after 1572.

But the task was never-ending. If nomadism declined in western Anatolia,

[324] X. de Planhol, *art. cit.*, in *Annales de Géog.* 1962.

[325] X. de Planhol, *art. cit.*, in *Annales de Géog.* 1962, p. 121.

[326] X. de Planhol, *De la plaine pamphylienne*, *op. cit.*, p. 202.

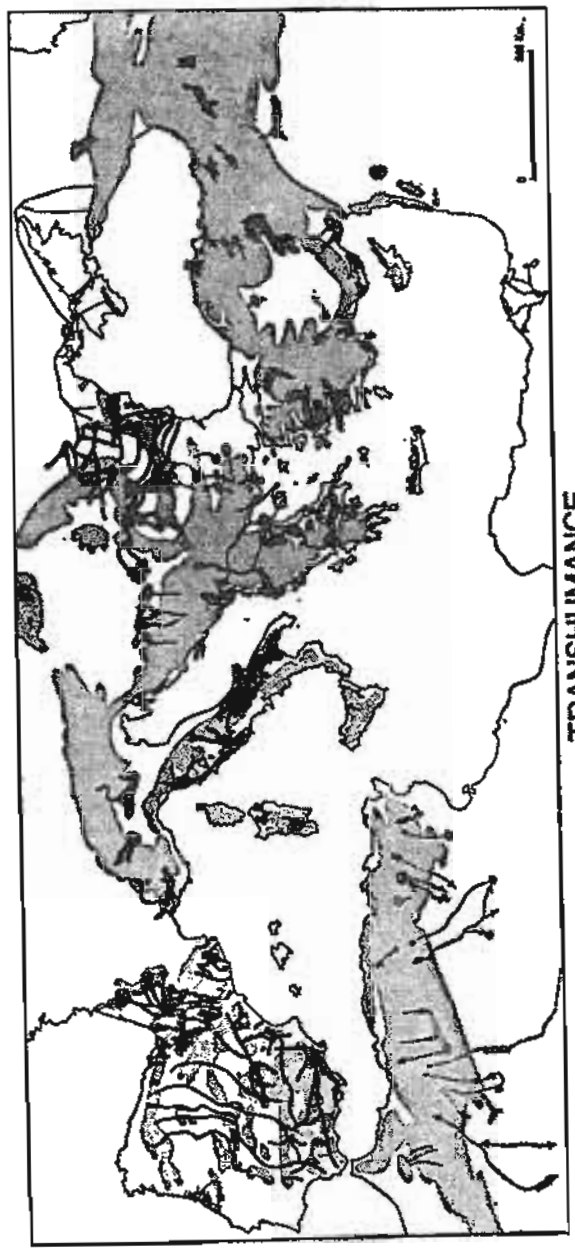

Fig. 7: Transhumance in modern times
From Elli Müller, 'Die Herdenwanderungen im Mittelmeergebiet', in *Petermann's Mitteilungen*, 1938.

it prospered in the East, where the nomads coming from Asia bear the generic name of Turkmenes. To this day, in the Anatolian steppes, the Turkmenes roam between Aleppo and Damascus; and the problem of their settling at one end or the other of their journey still remains. Starting in the sixteenth century, and particularly in the seventeenth, Ottoman governors and tax collectors gave a great deal of attention to the Turkmene nomads, who had never been troubled during the grand period of Turkish expansion earlier. What interested the Sublime Porte was collecting taxes and recruiting cavalry. The bitter struggles against the Persians led to the withdrawal towards Iran of the Shiite tribes; the Sunnites on the other hand advanced westwards and renewed the nomad stock of the *Yürüks*. So we find a tribe which was in 1613 in Karaman, to the southeast of Konya, seventy years later as far up as Kutahya. There were even groups that crossed over to Rhodes. There was one final renewal. The gaps left to the east were to be filled again, as the Kurds broke out of their isolation in the mountain tops. In the nineteenth century they 'start up again the great north-south migrations between the high Anatolian plateau and the southern Piedmont of Taurus', proof that there are cycles in the nomadic way of life, with astonishing halts, periods of integration and settlement and new departures.[327]

Nomadism in the Balkans, Anatolia, and North Africa as witnessed by western observers. It is, of course, an over-simplification, if a permissible and even necessary one, to explain everything in terms of invasions – the invasions of the seventh century and their consequences and those of the eleventh century and their consequences. The dromedary was already to be found in the Sahara and North Africa before the Arab invasions and the camel had reached Anatolia before the first Seldjuk advance. But the explanation is on the whole correct. The Mediterranean, where the hot and cold deserts cutting through the continental mass of the Ancient World come together, witnessed the survival – though attenuated and domesticated by the stubborn resistance of the peasantry – of the 'natural' nomadic way of life from Asia.

The survival of these ancient patterns of living completes the portrait of the Mediterranean peninsulas in the sixteenth century – the Balkans, Anatolia, North Africa – where transhumance, as defined by western sources, was pushed aside, driven to marginal areas, or considerably modified. This perspective is essential to the understanding of some of these 'mountain islands', independent but isolated, regarded with suspicion and having very little access to the outside world, such as the Jebel Druz, a self-governing enclave from which 'raids . . . on Moors, Turks and Arabs'[328] were launched without warning, or Kabylia – the kingdom of

[327] The preceding details are all taken from X. de Planhol, 'Géographie politique et nomadisme en Anatolie' in *Revue internationale des Sciences sociales*, XI, 1959, no. 4.
[328] François Savary, comte de Brèves, *Relations des voyages de monsieur . . . tant en Terre Saincte et Aegypte, qu'aux Royaumes de Tunis et Arger*, 1628, p. 37.

Cuco as the Spanish texts call it – which had its independence but not freedom of movement. Its rulers sought in vain, notably at the little beach of Stora (near the present-day site of Philippeville), to make contact with the Spaniards.[329] In North Africa the pattern was relatively simple. Every summer, the long-distance nomads would drive their flocks to the sea; at the approach of winter, they would return to the South and the Sahara. When the flocks returned to the lowlands they had left the previous autumn, these mountain people would pause for a while in their travels. There was nothing of the sort in Anatolia, as we have seen, nor in the Balkans, where transhumance and nomadism both intermingled and clashed. In the eastern part of the Peninsula, the Turkish government more or less deliberately installed colonies of nomads, the *Yürüks* of Asia Minor, in the hope of persuading them to adopt a sedentary way of life and thereby strengthen the Turkish military defences. And they were by no means the only nomads in the vast Balkan peninsula.

These clear departures from the Italian or Spanish pattern did not escape western observers, either in the sixteenth century or later. The movements of the nomadic (or rather semi-nomadic) shepherds made similar impressions on Diego Suárez,[330] the soldier-chronicler of Oran, on the Fleming Busbecq, on that admirable traveller Tavernier, on the enquiring mind of the Baron de Tott, and on Chateaubriand's English contemporary, Henry Holland. The most vivid description is Holland's recollection of his meeting in 1812 with the rough shepherds of Mount Pindus,[331] who were driving their flocks over what was then the semi-deserted plain of Salonica or along the shores of the Gulf of Arta, a sort of inland sea with shallow waters. Every year when summer came they would set off back to the mountains. These were certainly nomads since they took with them women and children. Behind the long procession of sheep, whose speed dictated that of the rest, came the convoy of horses, up to a thousand at a time, all laden with household goods and camping materials, tents – and young children sleeping in baskets. There were even priests accompanying their flocks.

They were nomads too whom Busbecq[332] saw near Ankara, in the region of the angora goats and the fat-tailed sheep known in North Africa as Barbary sheep. 'The shepherds who look after these flocks spend day and night in the fields, and take their wives and children about with them in wagons which serve them for houses, though they sometimes put up small tents. They wander over wide stretches of country seeking out the plains or high ground or valleys according to the time of year and the available pasture.' On the borders of Armenia and Chaldea, 'four leagues from the

[329] Fernand Braudel, 'Les Espagnols en Algérie, 1429–1792', in *Histoire et Historiens de l'Algérie*, 1931, p. 245–246.
[330] See below, p. 177.
[331] Henry Holland, *Travel in the Ionian Isles, Albania, Thessaly, Macedonia during the years 1812 and 1813*, London, 1815, p. 91–93.
[332] *Op. cit.*, p. 47.

city of Erivan', writes Tavernier[333] towards the middle of the seventeenth century, 'are high mountains where the Natives that inhabit the hot and sun-burnt Countries towards *Chaldea* come twenty thousand together to seek out good pasturage for their Cattle and about the end of Autumn return again into their own country'.

Again there can be no doubt in this case. In the following century the Baron de Tott saw the same Turkmene nomads, but his account may puzzle us a little. 'The people,' he writes, 'who in the winter inhabit the centre of Asia and who stretch even into Syria in the summer to feed their flocks with their arms and baggage are thought to be wandering tribes, but are in fact no more so than the Spanish shepherds who follow their sheep during eight months of the year throughout all the mountains of Andalusia.'[334]

This brings us to the question of a useful definition and it can be quickly answered. The confusion between the *rabadanes* of Castile and the Turkmene shepherds is possible, though only on first sight, if one remembers the enormous distances travelled by the 'itinerant' flocks of the *Mesta*. The Turkmenes do not travel greater distances, but they take their families and dwellings with them and that is the difference. Besides the discussion centres round the use of the word 'nomad'. We might bear in mind that the learned word 'nomadism' does not appear in Littré's dictionary and that he only gives an example dated 1868 for 'transhumance'. The words 'transhumant' and 'transhumance' are of recent derivation: the Bloch-Wartburg dictionary (1960) gives the earliest use of the words as 1803. While the word 'trashumante' is found in the writing of Ignacio de Asso as early as 1780[335], it does not seem to be a very ancient word on the other side of the Pyrenees either, and *trashumancia* still does not exist. But this is straying from the argument.

Cycles spanning the centuries. Throughout the present chapter we have noted the extremely slow pattern of oscillation, whether from nomadism to transhumance or from mountain dwelling to settling in the plain. All these movements require hundreds of years to complete. While a plain is coming to life, overcoming its dangerous waters, organizing its roads and canals, one or two hundred years may pass by. Similarly from the time when a mountain region begins to lose its population until the moment when the economy of the plains has absorbed as many waves of immigration as it can use, another one or two centuries may have passed. These are processes which span the centuries and can only be grasped if the chronological field of study is extended as far as possible.

History usually only concerns itself with the crises and high points of these slow movements. In fact, these points are only reached after immense preparation and are followed by interminable consequences. It sometimes

[333] *Op. cit.*, *Persian Travels*, p. 14.
[334] *Memoirs of the Baron de Tott*, II, 349.
[335] *Op. cit.*, p. 109, 112, 251, 295.