

BONNER GEOGRAPHISCHE ABHANDLUNGEN

ISSN 0373-0468

Herausgegeben von

H. Hahn - W. Kuls - W. Lauer - P. Höllermann - K.A. Boesler

Schriftleitung: H.-J. Ruckert

Heft 80

Christian Bromberger

**Habitat, Architecture and Rural Society
in the Gilân Plain (Northern Iran)**

1989

In Kommission bei

Ferdinand Dümmlers Verlag - Bonn

Christian Bromberger

**Habitat, Architecture and Rural Society
in the Gilân Plain (Northern Iran)**

BONNER GEOGRAPHISCHE ABHANDLUNGEN

ISSN 0373-0468

Herausgegeben von

H. Hahn W. Kuls W. Lauer P. Höllermann K. A. Boesler E. Ehlers

Schriftleitung: H.-J. Ruckert

Heft 80

Christian Bromberger

**Habitat, Architecture and Rural Society
in the Gilân Plain (Northern Iran)**



1989

In Kommission bei

FERD. DÜMMLERS VERLAG · BONN

—Dümmlerbuch 7630 —

**Habitat, Architecture and Rural Society
in the Gilân Plain (Northern Iran)**

by

Christian Bromberger

with 20 figures, 8 maps and 43 photographs

In Kommission bei

FERD. DÜMMLERS VERLAG · BONN

 *Dümmlerbuch 7630*

Gedruckt mit Unterstützung der UNESCO

Titel der französischen Originalausgabe:

Habitat, Architecture et Société rurale dans la Plaine de Gilân (Iran septentrional).

Alle Rechte vorbehalten

ISBN 3-427-76301-3

© 1989 Ferd. Dümmlers Verlag, 5300 Bonn 1

Herstellung: Richard Schwarzbald, Witterschlick b. Bonn

TABLE OF CONTENTS

INTRODUCTION: GILÂN OR THE INVERSE OF IRAN	7
A paludal hell	9
A cleared forest	12
A varied range of productive activities	16
System of landholding and stratification of the peasantry	18
Original ways of life	20
THE RANGE OF SPATIAL INSERTIONS: TWO MAJOR UNITS OF SOCIAL AND TERRITORIAL AFFILIATION: THE HOUSE (<i>xone</i>) AND THE QUARTER (<i>mahalle</i>)	23
The house, the enclosure, the household group	25
The neighbourhood community	34
The quarter (<i>mahalle</i>)	34
Beyond the quarter: the locality, the canton, the region	38
THE SALIENT FEATURES OF TRADITIONAL RURAL ARCHITECTURE	46
THE GILÂN BUILDING	51
Ecological constraints and architectural responses	51
Building materials	53
Building techniques	55
Foundations and bases	55
The walls	58
The roof	61
Roof and ridge covering	64
Technique and aesthetics	67
Building procedures	70
DISTRIBUTION OF SPACES AND WAYS OF LIVING	72
Living in Gilân: seasonal rhythms of occupying space	72
Interior arrangements and specialized spaces	76
Masculine, feminine: the invisible barriers	81
The symbolic dimensions of the dwelling	82
THE OUTBUILDINGS: FUNCTIONS AND SIGNS	85
CONCLUSIONS	95
Outline of a typology	95
Gilân dwellings today and tomorrow	97
NOTES AND REFERENCES	101
BIBLIOGRAPHY	103

Drawings, maps and diagrams by Patrice FONTAINE, after sketches by the author, except where otherwise indicated.

Photographs by Christian BROMBERGER

The vernacular terms have been transcribed phonetically according to the system established by G. LAZARD (*Grammaire du Persan Contemporain*, Paris, Klincksieck, 1957) and used by most specialists in Iranian studies. The consonants *b, d, f, h, j, k, l, m, n, p, s, t, v, z* are pronounced as in English. The following have a different value <indicated in brackets>: *g* (always "hard"), *r* <rolled>, *q* <uvular plosiv>, *x* <'ch' as in Scot's 'loch'>; *š* is like English 'sh' and *c* like 'ch'; *ž* is like the 's' in measure; ' indicates the glottal plosive, corresponding to the check in the voice substituted for *t* in lockney. The vowels are close to the following in English or French: *a* as in 'fat', *â* as in 'father', *e* as in 'bed', *o* as in French 'beau', *u* as in 'foot', *i* as in 'bee', *ɛ* is the central vowel found in 'guttural' (or French 'je') and is characteristic of the dialects spoken in northern Iran. Diphthongs are indicated by adding *w* or *y* to the vowel: *aw, ow, ey*.

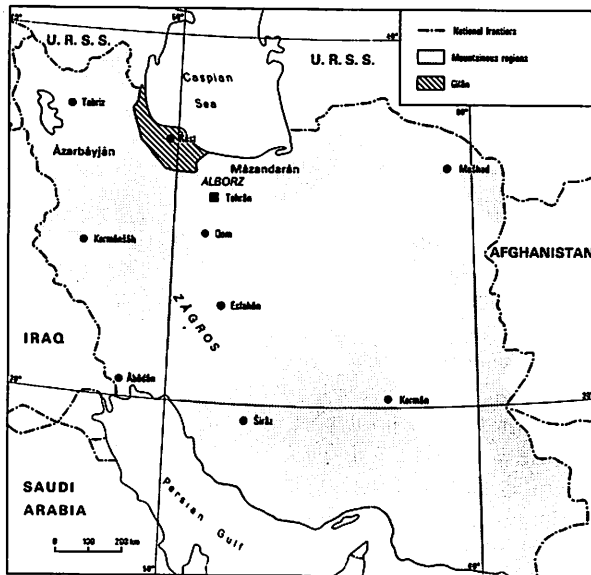
The architectural terminology of the original French generally conforms to that established by J. M. PEROUSE de MONTCLOS (ed.) in his *Vocabulaire de l'architecture, Principes d'analyse scientifique*, Paris, Ministère des Affaires culturelles, 1972 (2 volumes) and by O. AURENCHE (ed.) in his *Dictionnaire illustré multilingue de l'Architecture du Roche. Orient Ancien*, Lyon, Maison de l'Orient, 1977.

INTRODUCTION: GILÂN OR THE INVERSE OF IRAN

The Gilân and Mâzandarân provinces form a world apart in the territory of Iran. From the heights of the Alborz to the shores of the Caspian Sea they present a green countryside crossed by innumerable rivers and streams, contrasting strongly with the ochre coloured arid spaces of central Iran. "If you find yourself on the summit of one of our mountains," say the Guilani, "you will become double. That half of your beard that is turned towards us will become moist and will give off the perfume of our flowers, while the other half will remain dry and dusty like the thistles in those deserts that extend behind our mountains"¹. The fact is that the ridge of the Alborz, whose peaks overlooking the Gilân range from 2.500 to 3.700 metres, separates two universes that are radically different as regards countryside and climate, as well as the productive activities and way of life of their inhabitants. In the Gilân province there is only one gap that breaks this mountain barrier, that of the Sefid Rud (the "White River"), that splits the province in two, one half being dominated by the continuous range of the Tâleš in the northwest, the other by the Dalfak, Kiramkuh and Somâm massifs to the southeast. This gap, which links Rašt, the capital of Gilân with Manjil and on to the towns of the Iranian plateau, long provided only poor communications. Marshy in the north, winding, narrow, steep, "often resembling a staircase"² in the south, the "road" along the Sefid Rud was improved for vehicular transport only at the end of the 19th century, in a period when Russo-Persian trade was being stepped up. Until that time supplies were carried in extremeley difficult conditions using pack animals only. Mules were used almost exclusively, the wet climate and muddy soil of Gilân always having been obstacles to the widespread use of dromedaries.

A world cut off from central Iran by the barrier of the Alborz, Gilân is open to the Caspian Sea which has been at different periods in history the principal trade route between the province and foreign countries. It is through this sea route, extended through the Caucasus and Black Sea to the Mediterranean and Western Europe, that the Genoans imported Gilân silk as early as the 13th century. This Caspian trade reached its apogee in the 19th century, when numerous foreign companies (Russian, French, Italian, Greek) set up in Rašt and took control of the greater part of the silk market. The proximity of the Russian Empire and the ascendancy it held over northern Iran in the 19th and early 20th centuries have indeed greatly marked the economic and political history of the region. Local architecture here and there bears the trace of this past dependence: several buildings in Rašt and Anzali, the main port of Gilân, are replicas of urban buildings of the Caspian coast and the plains of southern Russia. Two methods of roofing houses in fact spread from the southern regions of the Russian Empire at the end of the 19th century: curved tiles laid on their convex face, and tin, often surmounted by a decorated skylight and bordered at the base by a scalloped edge³.

However, these foreign influences, to which we shall return, are very unevenly represented throughout the region and are of little significance in the architectural



Map 1: Gilân in relation to the rest of Iran.

landscape of the province as a whole. The originality of rural buildings in Gilân is due above all to the specific ecological constraints and the particular productive activities and ways of life of its inhabitants. People's activities and lifestyles vary considerably between the mountains of the Alborz and the shores of the Caspian. Within the province (*ostân*), which extends over 14.711 km² (0,8 % of the total area of Iran), a distinction can be made between three main geographical and human areas, with very different rural dwellings. First, the arid slopes of the Alborz which cover the southern districts of the province (*šahrestân* of Rudbâr, canton of Deylamân, heights of the Eškevar, etc.) where wheat and barley growing dominate. Second, the mountains, covered with dense forest and capped by alpine meadows, mainly devoted to animal grazing. Third, the coastal plain, enclosed by the piedmont of the low foothills of the Alborz, where rice growing and the cultivation of other tropical crops are the main activities. The present study is devoted to this last area, the cradle of a totally distinct civilization in the Iranian world⁴.

Situated below sea level, the Gilân plain forms a narrow strip in the northwest and east of the province, but broadens considerably in the central part, south of the Anzali lagoon and in the huge alluvial delta formed by the Sefid Rud. Just a few kilometers (two to seven) wide at the northern and eastern ends of the province, it expands to 30 and 40 km in the *šahrestân* of Fuman, Rašt and Lâhijân. It is this central plain (*dašt-e-Gilân*) that gave its name to the whole of the province and forms its administrative,

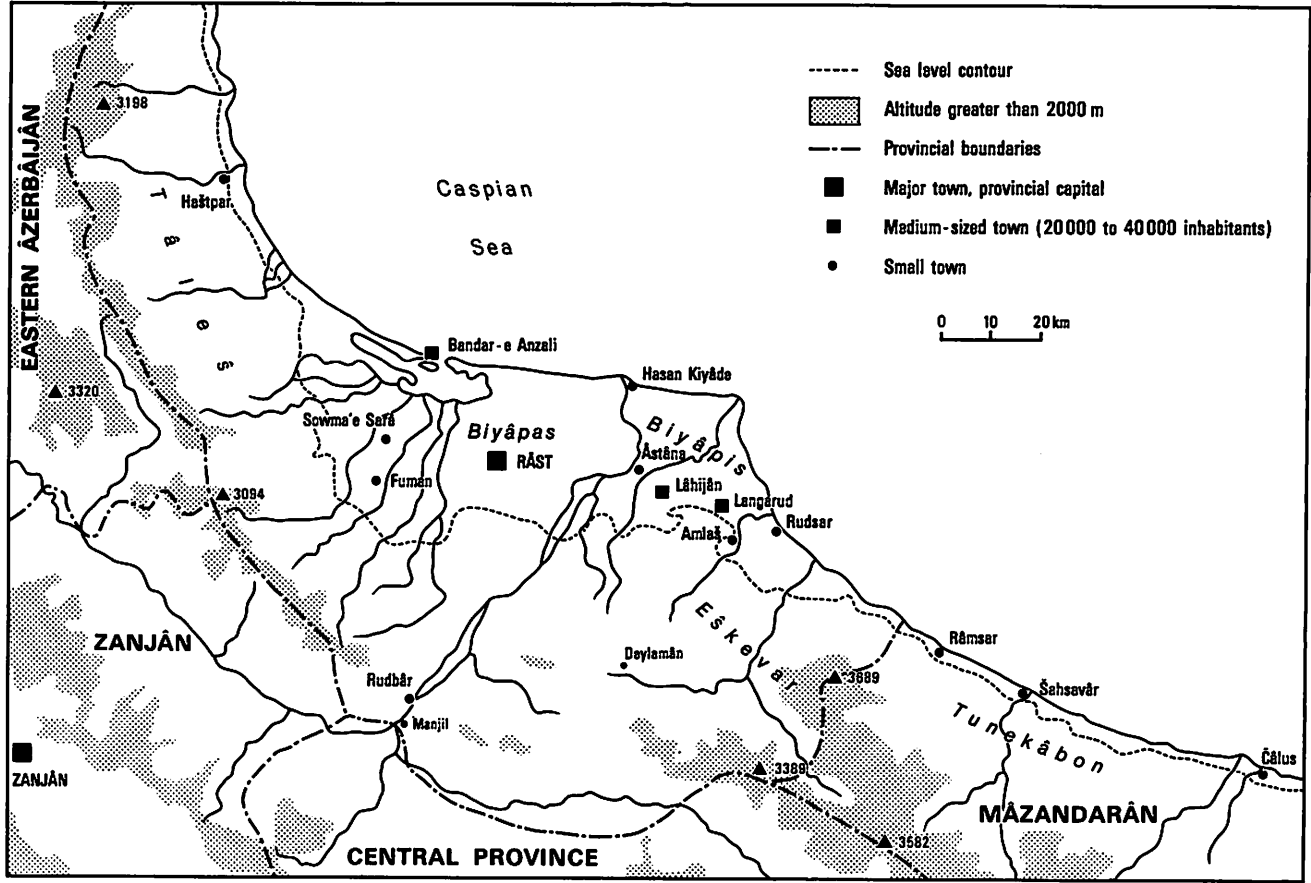
commercial and religious centre. It includes the two biggest towns in the *ostân*, Rašt and Lâhijân, and the main mausoleum of the region, Âstâne Ašrafiye, which, situated on the banks of the Sefid Rud, in the centre of the plain, is the religious capital of Gilân. The inhabitants of this plain and its eastern extension are the only people in the entire province to call themselves *Gil*, *Gilak* or *Gil-ε mard* ("men of Gilân"), names, each with its own peculiar nuance, that identify two features: the use of a *specific* language, *gilaki*, which belongs to the northwestern branch of the Iranian languages, and the practice of crop growing in the lowlands (as opposed to pastoral activities in the mountainous regions). If the people of the northwest coastal plain call themselves *tâleš*, this is because they speak a different language from their southern neighbours, *tâleši*, which is also spoken in all the wet mountain areas of western Gilân.

Within their plain, the *Gilak* distinguish between two more or less symmetrical regions, separated by the Sefid Rud: the *Biyapiš* ("on this side") to the east and the *Biyapas* ("on the other side"), to the west, each dominated by a town, Lâhijân to the east, Rašt to the west, the two successive capitals of the province. This opposition is not just a relic of past political divisions; the Sefid Rud still remains a cultural dividing line⁵, of which the inhabitants of the province are clearly aware. For them, the Âstâne bridge is the boundary between two variants of the Gilaki language, *gilaki rašti* being spoken to the west and *gilaki lâhijâni* to the east. In the domain of material culture too, there are significant differences on either side of this "frontier". Rice growing techniques and the morphology of rural houses, to which we shall return, present a such remarkable contrast between the *Biyapas* and the *Biyapiš*, that it cannot be explained simply in terms of geographical influences.

In its climate, vegetation and resources, the Gilân plain does in fact exhibit a certain unity. Two conflicting pictures emerge from the accounts of travellers who have spent time there: one is that of a paludal hell, with a suffocating climate; the other that of a paradise, because of the luxuriance of the vegetation and the diversity of agricultural products.

A paludal hell

Lord Curzon tells us that during the rainy season the ground becomes a swamp of stagnant waters: "Pestilential vapours rise from the rotting vegetable matter; every manner of reptile infests the swamps and a cloud of mosquitos and insects spins in the air. No European could live for long in these damp low-levels where there is no elasticity in the air, and an ever present sense of suffocation. What the acclimatised Gilâni can stand (...) is perilous even to other Persians. There used to be a proverb which (...) might be translated: 'Vedi Guilân e mori'". Travellers have noted with horror the most spectacular effects of "this hothouse atmosphere" with its "noxious air"⁶. Chardin tells us that "rust is so sudden and so active that I have seen my arms rust four hours after they being cleaned and oiled", and "after putting a sheet out to



Map 2: Gilân province

air during the night, it was dripping in the morning without a drop of rain having fallen”⁷. Hanway reports that rust is such a problem that a watch can scarcely work⁸, MacKenzie, in the middle of the 19th century, drew up an impressive list of the diseases due to the humidity of the Gilân summer climate: malignant fevers, rheumatism, dysentery, etc., and of the harm done to man and animals by insects; gadflies in such proliferation that they “drive the animals mad”⁹, bugs, fleas, ticks, etc., but above all mosquitos, vector of the malaria that was the main scourge of the region throughout the centuries until its complete eradication during the last thirty years. In order to escape from these harassing conditions, the farmers of the piedmont used to desert their habitat during the summer, taking their few cows to clearings in the upper reaches of the forest. Whole families migrated to take this cure of *havâxori* (“taking a bowlful of air”) leaving just one member or a hired hand to look after the irrigation of the ricefields. In July 1920, when Gilân was the theatre of a revolution, a British agent was surprised to observe this desertion by the inhabitants of the plain and the piedmont to the east of the region: “The villages are completely deserted. Just a few men remain to look after the ricefields, but by far the majority of the population is scattered in the *yeylâq* (summer pastures). Further east, in the Câlus valley, one single family remains in the plain over a distance of 40 miles. As a result it is impossible to find any food. The mosquitos and gadflies make life unbearable until September.” In these circumstances it is easy to understand that Gilân was looked upon as a hell, a repugnant place of exile for those who were sent to work there. “When the king makes a man of some repute governor of Gilân, people ask one another whether he has committed murder or robbery to be sent to govern Gilân”, reports Chardin¹⁰.

The climate of the Gilân plain is in fact characterized by exceptionally high rainfall and humidity. Cut off from the influence of the steppes by a mountain barrier, the province is subject to very high precipitation by air masses from Siberia that take up moisture when crossing the Caspian Sea. It is in the Anzali region, also reached by rain-bearing winds from the northeast (*sartuk*) and northwest (*daštevâ*) that the precipitation is highest: an annual average of 1.755 mm. Rainfall decreases somewhat towards the centre of the plain (1.262 mm in Rašt, 1.086 in Fuman). The rains are most abundant in autumn, falling continuously for days on end, turning the yards of the houses into ponds difficult to negotiate and the rural paths into impassable quagmires, and forcing the inhabitants to stay indoors for long periods. In even summer, downpours are far from rare, often brought by land breezes charged with moisture after crossing the swamps. Though the Gilân sky is rarely blue, and distant landmarks almost invariably hazy, the climatic reality of the region is far from presenting the apocalyptic — and purely imaginary — picture painted by Ibn Hauqal at the end of the 10th century: “It even happens,” he reported, “that the rain continues without interruption for a whole year, and the sun is never seen”¹¹. The humidity remains high throughout the year and at all times of day, ranging between 70 and 90%. As for the temperature, this varies much less than in central Iran, the average being 5°C in January and 25°C in July, but this apparently moderate range does not exclude

snowfalls in winter and very high maximum temperatures in summer (over 40°C), which are difficult to bear in view of the high humidity.

It is easy to see the constraints that these climatic conditions impose on local architecture. The humidity favours the putrefaction not only of timber used for construction but also of stored crops. It causes the breakdown of daub wall facings, through the growth of mosses and weeds. The diluvian rains wash away the bases of buildings, which have to be isolated from the muddy soil, and seriously damage roofs, which have to be replaced periodically. The sticky summer heat and the bothersome mosquitos make those inhabitants who have to stay in the plain sleep on high platforms or verandahs exposed to the land breeze that cools the suffocating atmosphere at night. At the other extreme, the violent blasts of winter and spring foehn (*garmiš*) blowing from the west or southwest can dry everything up in a few hours, cracking walls and bringing the risk of fire. They also cause the rapid melting of mountain snows, causing floods in the low-lying Caspian lands. Faced with these constraints, the *Gil-e mard* have found a number of architectural solutions whose effectiveness will be interesting to compare with that of the modern construction techniques that have become widespread in the Caspian plains over the past twenty years or so.

Gilân owes the density of its hydrographic system, the luxuriance of its flora and fauna and, at least in part, the variety of its agricultural resources, to this humid subtropical climate. "Perhaps nowhere else in the world," says Rabino, "are there so many rivers, streams and torrents as in the Caspian provinces"¹². These innumerable watercourses, bearing alluvial deposits, often come up against a high barrier of coastal dunes and thus go to feed the lagoons (*mordâb* "dead water") and the swamps, "sources of dank and deadly exhalations"¹³ that dot the Caspian plain. Elsewhere, the rainwater penetrates the soil, forming an easily-accessible water-table, so that the wells dug in each household enclosure, or perhaps to serve several houses, are only a few metres deep and the method of drawing the water is rudimentary: the water-table can be reached by simply tying a bucket to a rod two or three meters long. The most hydromorphic soils are found round the Anzali lagoon and, above all, in the Sefid Rud delta. In autumn the water-table can reach the surface, joining the rainwater to form pools and quagmires, this *gel* ("mud") being significantly considered by many to be the etymon of the name of the province (*Gilân*). These are further constraints to be taken into account by builders when choosing building land and preparing foundations.

A cleared forest

In 1850, Chodzko was still able to write: "The Ghilan is nothing but an inhabited forest"¹⁴. The forest indeed extended to the shores of the Caspian Sea before being almost entirely cleared for agriculture in the coastal plain. Boreal in its species, tropical in its density and variety, this forest was dominated by big trees, 30 to 40 metres high, which still dot the countryside here and there and are found in bigger



The yard of an enclosure during the autumn rains
(Sefid Rud delta).

patches in the northwest plain of the province. A variety of oak, native to the Caspian forest (*Quercus castaneaefolia*, locally called *mâzu*), the common elm (*Ulmus campestris*, *le*), maple (*Acer insigne*, *pelet*), hornbeam (*Carpinus betulus*, *feq*), *Parotia persica* (*anjili*), Siberian elm (*Zelkova crenata*, *âzâd*) are the main species of these tall trees¹⁵. Smaller fruit-bearing trees, some of them wild and indigenous, complete this forest vegetation: false-lotus (*Diospyros lotus*, *arbe*), *Gleditschia caspica* (*leleki*), resembling the acacia, whose pods are used by stock farmers to supplement the feed of ovines during the winter, quince (*Cydonia sp.*, *beh*) fig (*Ficus carica*, *anjir*), which can be as much as 10 metres tall, medlar (*Mespilus germanica*, *Konus*), walnut (*Juglans regia*, *âquz*). All these species are found in the gardens surrounding the rural houses. The undergrowth of this forest is particularly dense, with patches of box-tree (*Buxus sempervirens*, *šemšâd*), ferns, brambles, holly, creepers clinging to the tree trunks and wild vines (*Vitis vitifera*, *raz*) "festooned from one tree to another, dark and as thick as a ship's hawser. A man could cross these aerial bridges," says Chodzko, "without bending them. The grapes are black, small and bitter, but not unpleasant. To pick them it is necessary to climb into the treetops"¹⁶. This flora, once extremely abundant, is further enriched by the plants that grow near the swamps and the big reservoirs (*sêl*, *estaxr*) contrived for irrigating the ricefields, and in the low alluvial valleys. The paludal vegetation is made up of innumerable varieties of reeds and rushes, that the women use to make mats, baskets, and more recently hats. In the

low valleys there are also alders (*Alnus glutinosa* and *subcordata, tuse*), poplars (*Populus caspica, sefid peler*), wild mulberries (*Morus alba, tut*) willow (*Salix, fek*) and also leleki (*Gleditschia capisca*), stunted trees that can stand up to the winds blowing over the coastal ridges.

The habitat and architecture of the region owe their most original features to this luxuriance and diversity of vegetation. Unlike the houses of central Iran, built mainly of mineral materials (baked or unbaked bricks, daub, etc.), the rural dwellings of Gilân have a timber frame, are covered with vegetable materials (rushes, rice straw), and are surrounded by fences made of branches and reeds. The variety of forest species makes it possible to take maximum advantage of the different qualities of building timbers, a subject to which we shall return. The omnipresence of tall trees has influenced behaviour and gradually brought about highly original patterns for the organization of space. The *Gil-è mard* are *climbers*, used to climbing to the treetops to gather fruit and sometimes to rest in the hottest part of the summer. The children perch in trees to watch the games (as they once watched bull fights) being played in a meadow on the edge of the hamlet. Tiger hunters¹⁷ used to hide in the branches to await their prey. The Gilân revolutionaries in the period 1915-20 hid there to ambush the Russian and British troops¹⁸. Another example of their attraction to this world between earth and sky is the very strongly rooted tradition in Caspian Iran of rope-walking spectacles, nowhere near so popular in other parts of the country. Like the tall trees that surround it, the house of the Gilân plain is often built according to a vertical plan, with several storeys, the most prized space being that immediately under the roof. To reach this height it is necessary to climb stairs and ladders. This design of domestic space with its emphasis on height contrasts with the dwellings that predominate in central Iran, where the rooms are usually arranged horizontally around a central courtyard.

The denseness of the forest, together with the difficulty of moving along muddy paths has also resulted in an original organization of the habitat, which differs in all respects from the morphology of the grouped villages of the Iranian plateau. The houses of the plain are more scattered, with loosely-knit hamlets (*mahalle*) located near the ricefields. This original structure of the habitat is to be seen as the result of gradual clearing of the forest in isolated concessions. The conversion of forest land to agriculture in Caspian Iran has never been undertaken on the initiative of the village community or in a cooperative way. It has always been a case of peasant families clearing a few acres with the agreement of — or at the instigation of — the land-owners, who in these circumstances granted favourable conditions to their subjects (*ra'yat*). "When it is a matter of establishing a ricefield in dense jungle," write Rabino and Lafont, "the owner pays the cost of clearing and preparing the land, and in the first year takes only half the usual rent(...) very often the rent continues to be slightly reduced for the next few years"¹⁹. The implantation of the habitat has thus accompanied this gradual conquest of the forest, made necessary by very rapid population growth during the last century²⁰. A witness to history, this scattered habitat is also suited to several functions. While in central Iran the grouped village was able to meet



Mahalle in the Tâleš plain, where belts of forest remain.
Ricefields in the background.



Wild duck hunter's shelter on the Anzali lagoon.

the needs of collective defense against the attacks of nomadic tribes, the peoples of Caspian Iran have never had to face such a threat. On the other hand, the protection of the ricefields against the ravages of animals (in particular wild boars) and the many operations required for the proper production of rice (the number of days of work needed for a hectare of rice is estimated at 160 for women and 105 for men)²¹, and the difficulty of moving on paths frequently reduced to quagmires have made it necessary to build the houses close to the fields.

A varied range of productive activities

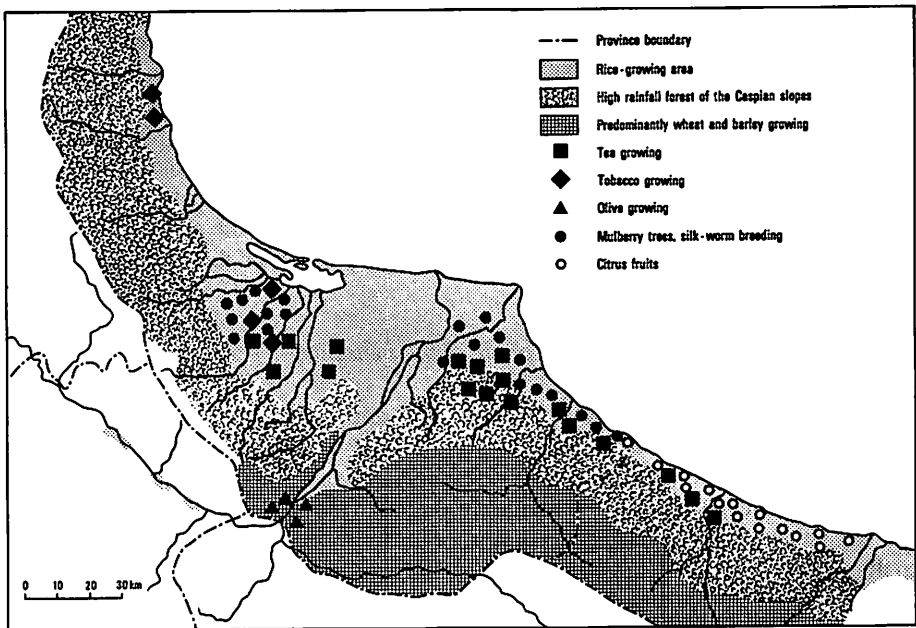
In compiling a catalogue of production, separate mention must be made of two predation activities: waterfowl hunting on the paludal stretches of the low country, and fishing in the lagoons, river mouths and the sea, activities that occupy a privileged place in the regional economy.

No less than 327 species of bird that use the swamps and ponds of Gilân as a permanent or temporary habitat have been identified²². The peasants hunt mainly ducks and teals, using guns, dip nets, trap nets, snares and occasionally night beats in which they dazzle their prey with lanterns and catch them by hand. Sometimes the hunter is "posted", i.e. he is concealed in a hide and uses either a gun or a net that he operates from the hide, causing it to drop on bird that has landed on the water. These precarious shelters (*kume*) constitute the most rudimentary form of regional architecture.

They are marginal constructions (by virtue of their position in space, their precarious nature and the fact that occupation is sporadic), like the traditional shelters of the lagoon sailors and fishermen. The Caspian shores are famous above all for the sturgeon fisheries and the production of precious caviar, but there is also a substantial regional and national market for other varieties of fish, in particular surmullet, salmon and carp. Paradoxically, however, this remunerative activity is almost entirely out of the hands of the local population, as fishing is the monopoly of a state owned enterprise which employs mainly Azerbaijan Turks who migrate seasonally from their highlands to the Caspian shores²³. A few *Gil-ε mard* only fish illegally, either by building dams in watercourses or by using cast nets in the lagoons and ponds.

For the peasants, these two secondary activities count for little compared with the region's two main riches, rice and silk.

Rice-growing accounts for almost half the cultivated area of the province and is virtually a monoculture in the alluvial plain of the Sefid Rud. It fashions the space by turning the countryside into a mosaic of paddy fields surrounded by low dykes and determines the rhythm of peasant life, with the single annual crop ²⁴ requiring attention from the spring equinox to the autumn equinox, the multifarious tasks of the hot season contrasting with the period of rest, with long lazy evenings of talk in the cold season. Rice is by no means a subsistence crop whose entire product is consumed by the peasant household, but an activity mainly aimed at the market (Gilân is the coun-



Map 3: Land use in Gilân and western Mâzandarân.

try's main rice granary and about 60 % of the local production is transported by circuitous routes to regional markets and central Iran). The rice-growing area has considerably increased since the second half of the 19th century, first to meet a strong demand on the Russian market, then a substantial increase in rice consumption in all provinces of Iran. Ricefields thus gradually ate away the forests, but at the same time extended the mulberry plantations used for the production of a quality silk that was much sought after by European merchants until the end of the last century. Silkworm breeding, which suffered from the ravages of pebrine in the 1860s, then the competition from Far East silk and the invention of man made fibres, remains today as a far from negligible, profitable secondary activity, which fits in fairly well with the calendar of agricultural activities (from the end of April to the beginning of June). Silk production continues to flourish in the Fuman region, and above all in the eastern plain (from Âstâne to Rudsar)²⁵.

On top of these basic activities there are other crops, also mainly cash crops, which vary from one micro-region to another: citrus fruits in the eastern plain; tea, introduced at the beginning of the 20th century, in the hills of the Lâhijâni country and Fuman; tobacco, grown in the west of the province since the end of the 19th century; groundnuts around Âstâne; wheat and barley, which complement ricegrowing in the piedmont areas. This range of resources is further enriched by countless varieties of fruit and vegetables, some of which are sold by the peasants. Mention must also be made

of another recent and profitable activity that has developed since the nationalization of the forests (1963), limiting wood-cutting: tree plantations (alder, poplar, etc.) to supply the timber required for both rural and urban construction, a market that is expanding rapidly because of the very high rate of population growth in the region. Lastly, stock farming occupies only a modest place in the activities of the plain, and takes forms radically different from those observed in central Iran: bovines predominate (cows for milk production, oxen for work in the fields), then there are horses as pack animals and a lot of poultry. The cow can be considered as the emblematic animal of the region, a role filled elsewhere in Iran by the sheep or the dromedary.

System of landholding and stratification of the peasantry

The condition of the peasant in the Gilân plain appears much less difficult than that of his counterpart in central Iran. This — entirely relative — wealth of the local peasantry is due both to the generosity of the humid environment and to a status that is less disadvantageous than that of the peasants of the plateau. Until 1962, year of the beginning of the Agrarian Reform introducing a process of distributing the land to the peasants in return for reimbursement, the dominant production system in Gilân, as in the majority of Iranian provinces, was of the feudal type, where landowners, large and small, often absentee landlords, shared among themselves the agricultural land that was cultivated by peasants, tied to them by contracts, under the control of overseers (*mobâšer*) who represented the owners. If we simply stopped at this type of general consideration, however, as many writers have done, it might be concluded that the organization of production in Gilân was similar to that in other regions of the country. There were in fact very considerable differences if account is taken of the nature of the contracts tying the peasants to the landowners: tenant farming (paying a fixed rent in cash or kind) was very much more common than share-cropping (sharing the crop equally between the owner and the peasant), and the first formula was far more advantageous for the producer, since it left him with the benefit of about two thirds of the rice production. This relatively privileged position of the peasant in the Gilân plain is to be seen as the resultant of a twofold mechanism. First, the amount of work invested in rice-growing is much greater than that required, for example, to cultivate wheat or barley, so it is not surprising that the exploitation system was more favourable to the peasants in this rice-growing fringe of Iran. Second, the Gilân landowners could not justify substantial levies on the crops because of what might be called their functional weakness: their role in the organization of production was minimal; they did not finance the irrigation works required, as was the case in central Iran, nor did they perform any protection function (against attack by nomadic populations for example). Thus the peasant could enjoy certain advantages, much more rarely conceded in other parts of the country. "The worker", wrote Rabino at the beginning of the century, "pays no rent for his cottage. His cows and sheep can graze freely on any land that is not under crops. He can cut wood in the jungle, i.e. in the non-cultivated

area of his owner's land, and sell it for his own profit. He can burn charcoal without anyone preventing him. He can grow vegetables around his house and sell them or use them as he will, and he disposes of fruit that grows in abundance and of poultry that he raises"²⁶.

This peasant world is nevertheless still highly stratified, as it was before the Agrarian Reform, not so much because of the legal status of the producers as because of the size and quality of the holdings they cultivate. In 1960, there were in the whole of the present *ostân*, 137.000 farms sharing 248.000 hectares of cultivated land. The average size of a farm was thus in the order of 1.8 ha, and without any doubt significantly less in the rice-growing plain, for this overall figure includes the farms of the arid slopes of Gilân, dedicated to the extensive cultivation of wheat and barley, and hence very much bigger. At that same date, 92 % of the holdings were of less than 4 ha and covered 66.5 % of the total cultivated land. A distinction can be made between three broad categories of holding:

— Micro-holdings (less than one hectare), where the volume of resources is just enough to feed the family working the land, a hectare of rice paddy producing on average two and a half tons of polished rice, i.e. a little more than is needed for the annual consumption of a *gil-e mard* family (an adult eats approximately 1 kg of rice per day, this being the traditional staple food for the three meals of the day).

— Medium farms of 1 to 3 ha, which made up 54 % of the total holdings in 1960. Such an area makes it possible to accumulate surplus production, part being stored and part sold, the size of this latter share varying considerably according to the fertility of the soil and the particular weather conditions of the crop year. Holdings of this size generally remain family farms, but it is not rare to hire for the whole of the rice cultivation season a *mazdur*, a landless peasant, or a seasonal migrant from the mountainous frontier regions of Gilân.

— Farms of 3 to 4 ha are less common (7 % of the total) and already count among the farms permanently employing hired labour.

However, it is only on the big farms, often devoted to tea or citrus growing, that the work is strictly divided and hierarchized among several wage labourers under the authority of a steward. These big farms, which may have up to 50 ha, make up only 8 % of the total holdings, but cover almost one third of the agricultural area of the region. It goes without saying that this agriculture is virtually exclusively commercial and speculative.

This summary typology needs to be refined and completed. Refined because a similar area of land may be more or less productive according to the nature of the soil, the cultivation method and the possibilities for irrigation (the rice yield per hectare thus varies in a ratio of one to two between the marginal regions of the northwest and the piedmont and the central part of the delta which provides the best conditions for rice-growing). Further refined, because among the small and medium peasants, those who possess draught animals or a motorized cultivator are in a privileged position as compared with those who have to hire them for ploughing and harrowing the ricefields. Completed, because the peasant population includes a significant number

of landless labourers (*xošnešin*) (approximately 8 % in 1960). Further completed because the Agrarian Reform, implemented in three stages between 1962 and 1968, has had the effect of considerably modifying the size of the holdings and further widening the gaps between the various levels of the peasantry. Under the old land-owning system, the custom was for the farm to remain within the same peasant family without being divided, one son taking over his father's tenancy contract while his brothers and sisters were forced to emigrate, to occupy subordinate positions in the village society (*xošnešin*, for example) or, with the approval of the landowner, to clear an uncultivated area. As has been well demonstrated by E. Ehlers²⁷, this custom favoured a certain stability in the size of farms and of the agricultural population. The peasants' access to ownership has been accompanied by a return to Islamic law regarding the sharing of property, the land now being split up among the different children, resulting in the fractionalisation or even the atomisation of farms. This phenomenon is obviously most marked in the biggest families, where houses now huddle together in the family enclosure or nearby, representing so many households who have shared the paternal farm. The differences between the classes of farmers have thus been widened. Some once prosperous farms have been dismembered, while others have remained intact (notably when there has been only one male heir).

This stratification, old and new, of the peasantry can be discerned in the diversity of types of dwelling and farm building. This correspondence between architectural variants and differences in status in the rural world (from the big landowner of yesterday to the small peasant farmer or day-labourer) will be shown and exemplified below.

Original ways of life

This survey of production conditions would not be complete without pointing out three original, and mutually independent, features of peasant life, which have affected the behaviour patterns, and gradually the ways of life in the Gilân plain:

— *the subordinate and fluctuating nature of the regional economy.* Crop specializations in Gilân have developed and relayed one another as a function of market demand abroad, then in central Iran. The peasant world was thus introduced very early to the market economy, and has been swift to switch to other crops according to fluctuations in crop prices and ready whenever possible to speculate on products (rice, for example), whose prices may vary very considerably from one year, or even one season of the year, to another. Here there is no rural community forming a sort of insular microcosm, organizing production and focussing the interests of its members, but, on the contrary, a scattered peasantry turned towards external markets and forming personal links with the world of towns and trade. This situation of dependence or even subordination with respect to outside regions or nations has, on the other hand, hampered the development of processing activities. Such has been the case with silk, where the local craft industry has always been minor, dealers buying the raw material (raw silk, or even the cocoons), to send to their companies' factories.

— *agrarian individualism*: while community structures are traditionally strong in the villages of central Iran (periodic redistribution of the land among the members of the community, cooperation in various agricultural operations), the fabric of collective practice is very much more loosely woven in Gilân and is limited to a few cooperative tasks made necessary by irrigation and the need to defend the fields against predators.

— social behaviour and the distribution of male and female roles are marginal with respect to the predominant pattern in Iran and in the Near East generally. Violence in inter-personal relationships and criminal behaviour are far less frequent in Gilân than in the other regions of the country. Many travellers have noted the affability of the *Gil-ε mard*, "the small number of crimes in this part of Persia"²⁸ and the rarity of theft and the settling of scores. The style of relationships both within and outside the family is less formal than in the communities of the Iranian plateau and the sense of honour and virility is given less importance. This style of relationship between individuals seems to us to match the type of agriculture practised by the *Gil-ε mard*: both rice-growing and silkworm breeding are painstaking and delicate activities, requiring careful attention in a restricted space, thus contrasting with the more impersonal and distant operations involved in cultivating wheat or barley and even more with the husbandry, based on relationships of domination, of large flocks of ovines²⁹.

It should be added that the relative abundance of resources in Gilân limits the occasions for conflict over the appropriation or use of scarce resources. The violent disputes between peasants over the management of scarce water supplies or the use of communal land, so frequent in the arid zones, appear only in very mild form in the Caspian world. The important part played by women in agricultural activities and the very small degree of sexual division of spaces within the dwelling are other striking features, original to the Gilân way of life, that have struck many travellers, such as MacKenzie³⁰ and Rabino, who notes: "they (the Guilek women) work much more than the men"³¹. The patterns generally applicable to Mediterranean and Near Eastern civilizations, opposing the masculine to the feminine, the public to the private, craft work to home production, work in the fields to management of the humid world of the gardens, all have to be very significantly modified when speaking of the sexual division of roles in Gilân society. There is no lack of examples to confirm the very particular status of women in Caspian Iran: they sometimes make pottery using the wheel, a sophisticated technique that is the prerogative of men in the ancient world³²; they receive agricultural wages higher than those of the men (though admitted for more unpleasant tasks); they participate very fully in the work of the fields and the management of the farm; they share, apart from a few minor exceptions to which we shall return, the same domestic spaces as the men. In our opinion, this original situation is due to two sets of factors: the weak influence of the way of life dominant in central Iran in this region of refuge, which was protected from the medieval invasions and long escaped the influence of the civilization of the Iranian plateau, and the large-scale participation of women in productive activities in a humid environment where agricultural tasks are very similar to those involved in horticulture.

Lastly in this general presentation, we must stress the particular demographic condi-

tions of the Caspian lowlands. No agricultural region of Iran is more densely populated than the Gilân province. In 1976 there were approximately 1.600.000 inhabitants, the great majority of them (72 %) in rural areas. The huge migratory movements towards the towns and the "depeasantization" that have been the most striking features of development since the 50s, have affected the Caspian world much less than the other regions of the country. So in Gilân there are still seasonal migratory movements from the town to the country at the peak agricultural periods (tea-picking, rice harvest, etc.). The average population density of the *ostân* is 107 inhabitants per km², but in the rural areas of the delta it can reach as many as 225 or even 300 per km², where the intensive work in the rice fields requires an abundant labour supply. Over the period of a century — in which the regional population has increased by over 500 % — population growth and the development of rice-growing have gone hand in hand. The recent history of the implantation of the habitat and of the agricultural landscape bears the traces of this demographic pressure, which is now coming up against a scarcity of clearable land.

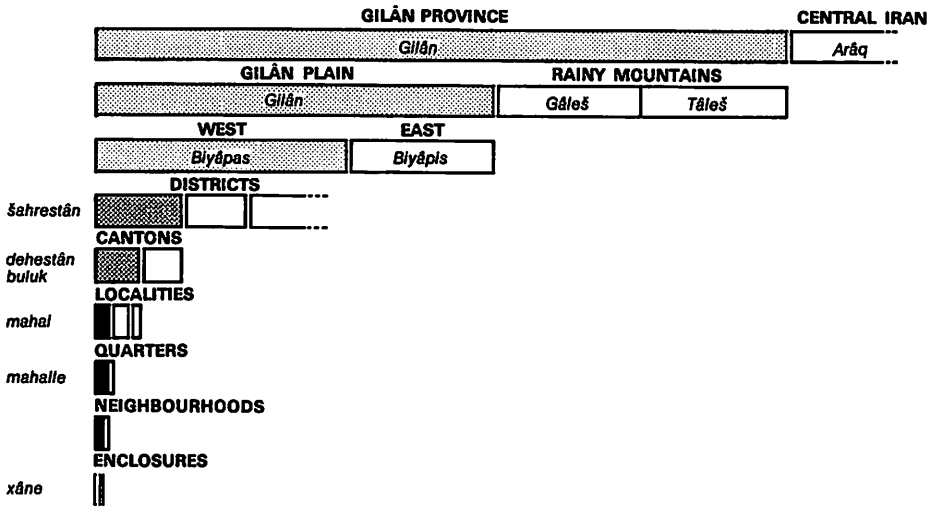


Figure 1: How the different units of territorial affiliation in Gilân province fit together.

THE RANGE OF SPATIAL INSERTION. TWO MAJOR UNITS OF SOCIAL
AND TERRITORIAL AFFILIATION:
THE HOUSE (*xone*) AND THE QUARTER (*mahalle*)

While the cultivated land of central Iran is organized around grouped villages, in a concentric pattern of gardens and orchards, irrigated fields, rain-fed crops and pastures, the rural space in Gilân looks extraordinarily confused, without any orientation or recognizable pattern: interlacing paths lead to houses buried in the greenery, scattered around ricefields or forming very loose-knit hamlets where there is nothing to indicate the limits. Such confused, sharpless and undefinable forms of habitat are difficult to handle and control for the authorities, always anxious to subdivide the territory in order to better control men and administer things. Whether it is a matter of holding a census, installing communal equipment or organizing police surveillance, the government's task is singularly complicated by the nebulous structure of this habitat which cannot be reduced to a few simple units and will not fit into a systematic pattern. The difficulties encountered by different administrations having carried out censuses since the 1950s are eloquent in this respect. M. Bazin notes that in part of Asâlem canton (Tâleš plain) the number of localities recognized and used by different censuses ranges from 11 to 59³³. During the last years of the imperial regime, an attempt was made to impose on this space a regular, geometric organization that would have made it possible not only to group community services, but also to have better control over the rural population. A 1973 project envisaged the construction of small towns (*šahrak-sazi*) which would have brought the neighbouring rural population together. This programme was in the end never implemented, but it is easy to imagine what the immediate and longerterm consequences would have been: the destruction of a habitat whose scattered nature, as we have seen, suits several functions; the establishment of big agricultural units turning the population into wage labourers, in the same way as programmes implemented in Xuzestân. The traditional configuration of the habitat, together with the abundance of the vegetation that hides it and the complexity of the paths serving it, also offers ideal refuge conditions for fugitives, dissidents and outlaws, and very favourable terrain for guerilla activities. A land of refuge and of dissidence, Gilân is the only one of all the provinces of Iran to have been the theatre, in modern times, of a peasant revolution directed by urban elites. The confused topography of the province was one of the factors that made this insurrection possible, and above all, its repression long, uncertain and very difficult.

While from the outside this space looks disordered and resistant to logical division, on the inside it is organized in units that fit into one another according to a principle of *territorial segmentarity*.

The smallest cell of social and spatial insertion is constituted by the family enclosure, surrounded by fences and containing the house, the kitchen garden and the farm buildings and opening up to the rice paddies. The term *xâne* (*xone* in gilaki) designates equally well the house, the enclosure as a whole and the household that



An enclosure in southern Tâles: house and rice barns.



An enclosure in the Lâhijân region: house, rice barn, silkworm nursery.

lives in it. This smallest segment coincides with the basic unit of production and consumption in gilâni society.

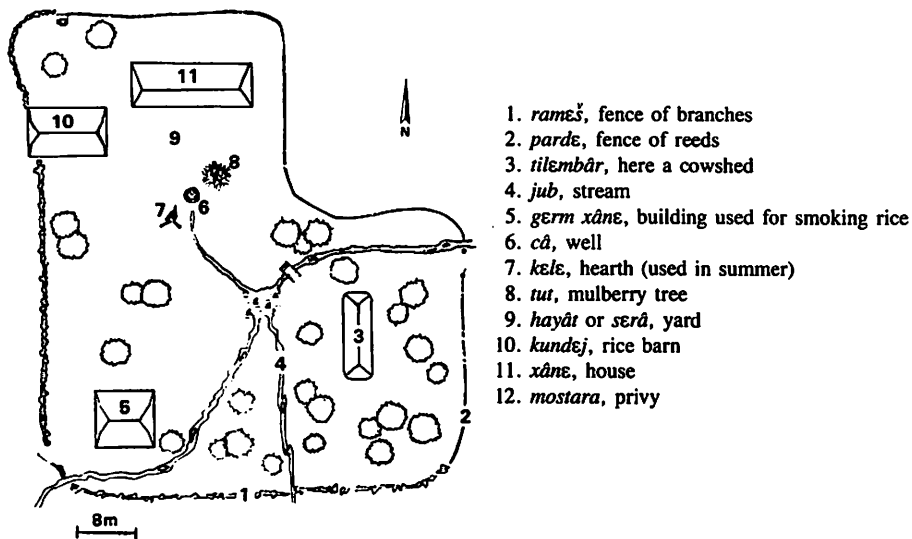
How does this house, a material and social reality, appear in detail?

The house, the enclosure, the household group

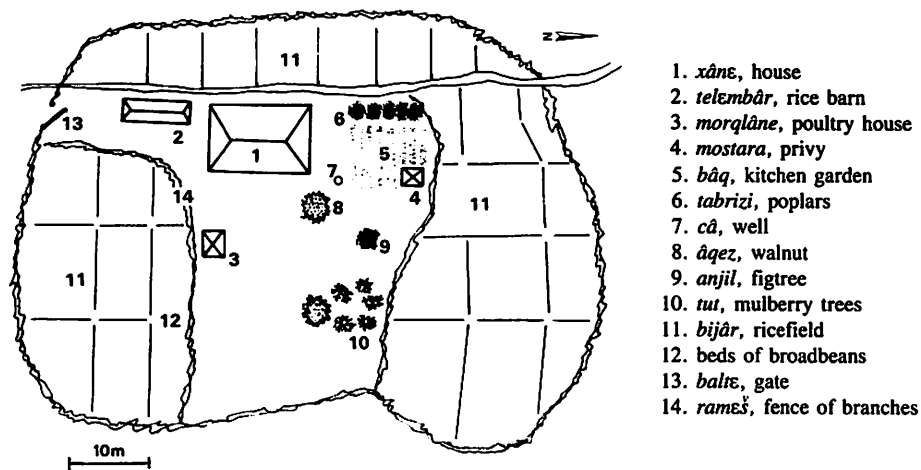
Each enclosure is surrounded by a fence that both marks the boundaries of the domestic space and protects the gardens from wandering livestock or the ravages of predators. Depending on the micro-region, the fence may be of bundles of reeds bound together by plaited strands (or nowadays by wire), of thin branches intertwined round pickets, or of horizontal poles fixed to posts. In the heart of the central plain, where these three types of fence coexist, there is a specific term for each of them: *parde*, *ramêš*, *capar*. Elsewhere, one or other of these words is used to refer to the fence, regardless of its mode of construction. The fence, whose height can vary according to the fortune of the resident, is broken either by a removable barrier or by a gate of branches (*balte*) or, in the case of the most prosperous farmers, by a double door, affording access to the enclosure. This entrance is sometimes covered by a porch, totally without any function other than to demonstrate the wealth of the household.

The size of the enclosure is another indicator of socio-economic differentiation within the rural world. At Sadeh, in central Gilân, it varies between 200 m² (in the case of the *xošnesin*) and 2,800 m² (for the wealthiest farmers, owning 4 hectares of ricefields). Whatever its size, the enclosure appears as a sort of microcosm bringing together all the means of production and equipment necessary for working the farm and for family consumption. This is a strikingly original feature in the world of rural Iran: in the villages of the interior, activities such as fetching water, watering the livestock and doing the washing, mean daily visits to communal facilities; the *ham-mâm* (public bath) is a meeting place, no traditional house having a bathroom. In Gilân, on the other hand, drawing water and bathing are private affairs: the well (*câ*) is virtually a constant feature of the enclosure landscape; many houses in the Sefid Rud area have a bathroom installed on the back of the verandah (*fâkon*) that surrounds the building.

What does this enclosure contain, in detail? Very often an orchard, source of fruit for family consumption: it contains peach, apple, plum, medlar, walnut, fig, citron and pear trees, alongside which, depending on the micro-region, orange or cherry trees may be found. A few mulberry trees, whose leaves are used to feed silkworms, often border the yard. Poplars, a source of wood for construction purposes, sometimes complete the range of vegetation. Part of the enclosure is occupied by a kitchen garden (*bâqce*), growing different varieties of green beans, broad beans, cucumber, marrow, aubergine, tomatoes, water-melons and melons, garlic, onions, lettuce, potatoes and several types of herb (*sabzi*), used to season the stews and *polo* (a dish of rice associated with other ingredients). The rice nursery is sometimes

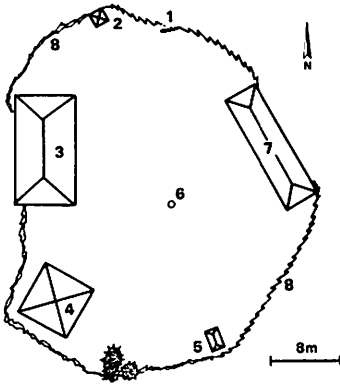


a. Domestic enclosure in Fešteke (Rašt district)



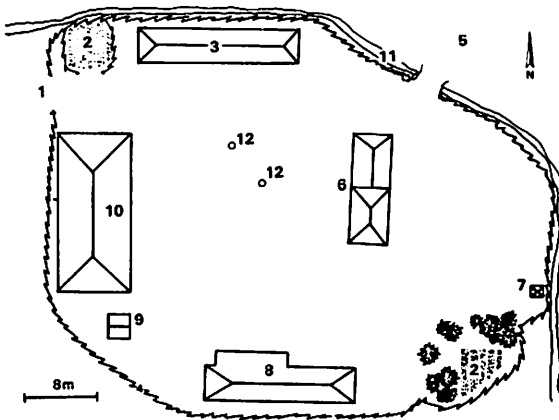
b. Domestic enclosure in Sarâvân (southern edge of Rašt district)

Figure 2: Types of enclosure.



1. *balate*, entrance
2. *jâ'i*, privy
3. *xâne*, house
4. *konduj*, rice barn
5. *kork-lâne*, poultry house
6. *câ*, well
7. *telambâr* and *tâvile*, rice barn, and cowshed
8. *parde* and *capar*, fences

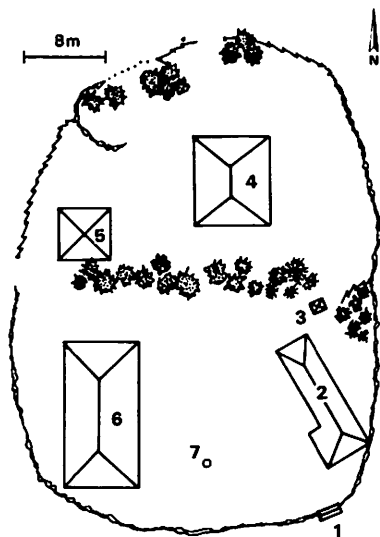
c. Domestic enclosure in Sadeh (interior plain of central Gilân, Rašt district) (after S. Geran-Pay, 1980)



1. *balate*, entrance
2. *bâqce*, kitchen garden
3. *telambâr* rice barn
4. *parde*, fences
5. *bâq*, orchard
6. *tâvile*, and *fel-xâne*, stable and rice drying house
7. *mostara*, privy
8. *gâce* and *ambâr*, cowshed and store
9. *kork-lâne*, poultry house
10. *xâne*, house
11. *jub*, stream
12. *câ*, well

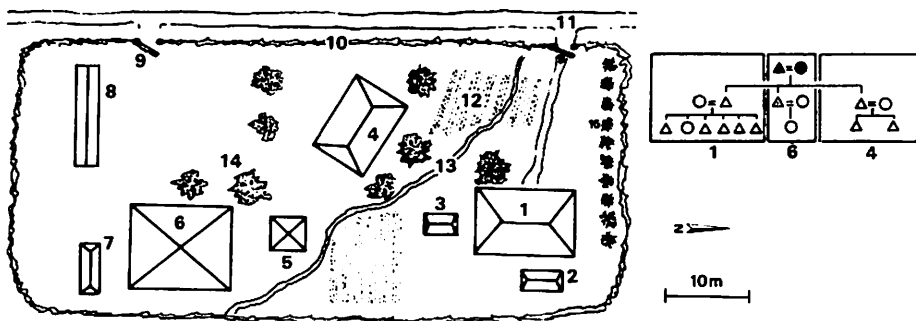
d. Domestic enclosure in Sadeh (same source)

Figure 2: Types of enclosure.



1. *balate*, entrance
2. *ambâr* and *tâvile*, store and cowshed
3. *jâ'i*, privy
4. *xâne*, son's house
5. *konduj*, rice barn
6. *xâne*, father's house
7. *câ*, well
8. *bâq*, fruit garden

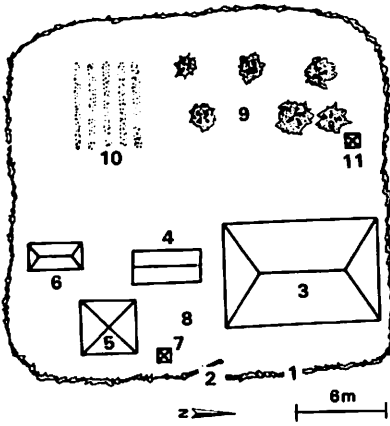
e. Enclosure with more than one household in Sadeh (same source).



1. *xâne*, eldest son's house
2. *tâvile*, cowshed
3. *telembâr* silkworm house and rice barn
4. *xâne*, youngest son's house
5. *kenduj*, rice barn on posts, belonging to the father
6. *xâne*, father's house
7. *tâvile*, cowshed
8. *telembâr*, silkworm nursery
9. *balæ*, barrier, entrance
10. *capar*, fence of branches
11. *kuce*, path
12. *bâq*, kitchen garden
13. *jub*, stream
14. fruit trees
15. *tut*, mulberry trees

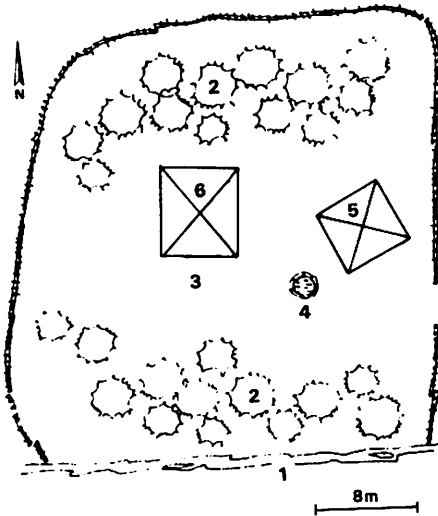
f. Enclosure with several households in Lâskuhkalâye (Sefid Rud delta)
The genealogical tree shows the composition of the three households.

Figure 2: Types of enclosure.



1. *capar*, fence of branches
2. *balte*, barrier, entrance
3. *xone*, house
4. *telembâr*, silkworm nursery
5. *kundej*, rice barn on piles
6. *tâvile*, cowshed
7. *ordak-jâ*, shelter for ducks
8. *hayât*, yard
9. fruit trees
10. *bâqce*, kitchen garden
11. *mostara*, privy

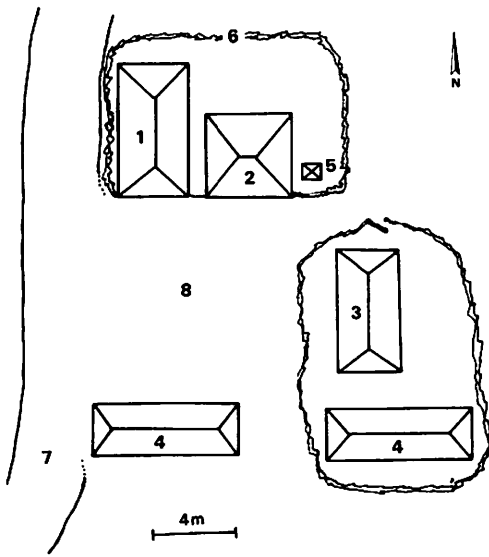
g. Domestic enclosure in Katesâl (hills of the Lâhijâni country).



1. *jub*, small canal
2. *bâq*, orange orchards
3. *xonepiš*, yard
4. *câ*, well
5. *kundej*, rice barn on piles
6. *xone*, house

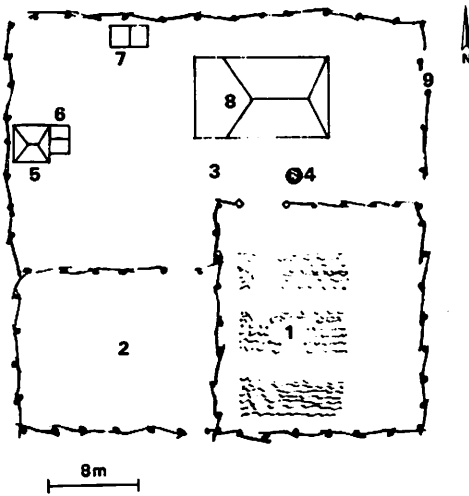
h. Domestic enclosure in Qâsem Âbâd (eastern plain).

Figure 2: Types of enclosure.



1. *ka*, house
2. *sâra-ya kutâm*, platform used by people during the summer
3. *kuruj*, rice barn
4. *tâvile*, cowshed
5. *korg-a lun*, poultry house
6. *ramēš*, fence of branches
7. *kuce*, path
8. *kapiš*, "before the house", yard

i. Domestic enclosure in Nilâš (piedmont of southern Tâlesš).



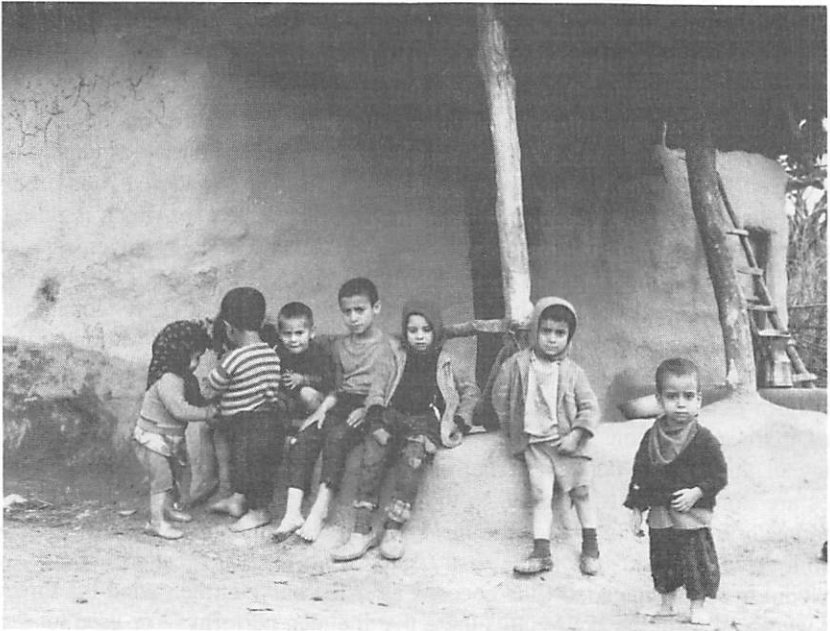
1. *tomajör*, rice nursery
2. *bâq*, kitchen garden
3. *hayât*, yard
4. *quye*, well
5. building housing the *tanir*, the bread oven
6. *töla*, barn and cowshed
7. *mostara*, privy
8. *ev, öy*, house
9. *capar*, fence of branches

j. Domestic enclosure in Nomandân (piedmont of northern Tâlesš).

Figure 2: Types of enclosure.

situated within the enclosure, as in the northeast of the region, but more often the peasants install it in the very heart of the ricefields, near the replanting area. The enclosure thus appears as an island of greenery whose luxuriant vegetation sometimes extends its ramifications over the roofs of the farm buildings: it is not rare to see marrows growing on the bundles of rice straw covering the silk-worm shed or the cowshed. However, there is no sign of a jumble with no semblance of order. The distribution of the trees and buildings within the enclosure is generally in accordance with two main principles: not spoiling the view of the front of the house, and hiding from the view of both passers-by and the inhabitants, those spaces that are less attractive (privy, poultry house, cowshed, etc.), while the more noble farm buildings (silkworm nursery, rice barn) are exposed to view. The nature, number and size of the outbuildings vary very considerably according to the productive activities and wealth of the farmer, as we shall see. Here it will suffice to make a rapid inventory to illustrate the diversity of crop specializations: virtually all the enclosures have a building for storing the rice harvest; this basic minimum is completed in the north of the province by a special installation for threshing the rice harvest (a covered area) and, in the region of Rašt, by a separate building for drying paddy. In the silkworm growing areas, the silkworm nursery (*tešembâr*) occupies a place of honour in the enclosure, but in places where silkworm breeding is only a secondary activity, this is not a separate building but is integrated in one that also serves as cowshed and tool shed. In the region of Fuman the special buildings are joined by one for drying the tobacco leaves. In the piedmont lands where wheat and barley are grown there is a separate building for the bread bakery (*tanur*), which also serves as a summer kitchen. The cowshed and stable are rarely integrated with the buildings of the dwelling, but are erected on the edge of the enclosure or behind the house. One or more poultry sheds, housing a numerous and noisy mixed flock (chickens, ducks, turkeys and geese), are scattered round the yard or, in the marshy areas of the delta, under the floor of the house, which is raised one or two metres above ground level. Lastly, we should mention the arrangements for the comfort of the household: privy, generally separate from the house, platform (*lâm* or *kutam*), again separate from the house, where people install themselves for meals and for rest in the hot weather, in the north of the province as in western Mâzandarân. The enclosures of the richest farmers, who grow several crops, may thus have as many as seven farm buildings dotted about the yard. There is just one important activity that leaves no trace in the constructions of this peasant microcosm: tea growing, for the processing of this crop is completely out of the hands of the farmers; once picked, the leaves are immediately transported to the processing plants.

The enclosure not only houses the means of production and the harvested crops, it is also a place of work. It is in the yard (*xonepiš*, *hayât*, *serâ*) that the women install their loom to weave mats, sort the cocoons after the harvest, then wind the thread on large wheels to form the skeins. It is there that the men perform — or used to — most of the work of processing the rice: threshing the harvest (by crushing under the hoofs of the livestock or beating with the flail in former times, procedures now replaced by the use of threshing machine that most of the farmers hire), husking and polishing of



The enclosure: place of work and sociability.

Above: weaving a mat in the shade of a tree.

Below: neighbours, brothers and cousins, ... not yet concerned about the division of the patrimony.

the paddy using a *pâ-dang* (a foot-operated pestle with metal teeth), operations now mechanised in industrial rice factories. The enclosure can also be the site of hunting activities, the peasant stretching a net beneath the floor of the rice barn (*kundej*), built on posts and pulling a string to release it when a wild bird comes to eat the grain he has scattered as bait.

The disposition of the buildings and the density of activities is even more complex when there are several houses in the same enclosure. This is still a minority situation, even though, as we have seen, there is now a tendency towards the fragmentation of holdings and houses have sprouted up since the introduction of the Agrarian Reform. Although neighbours and relatives, the families living in the same enclosure do not form a collective production unit; each household has its own land and sometimes even their own specialized buildings. Relationships of mutual aid between houses in the same enclosure are dense, daily, but rarely take on a really cooperative form. To understand these balkanization mechanisms, the individualization of space and the sprouting up of dwellings in the same enclosures or on neighbouring land, it is necessary to examine the complex functioning of transmission of the family property and domestic cycles. As a rule, according to Islamic law, the sons inherit a share twice as big as the daughters, but customary practice largely goes against the law. On marriage the boys receive from their father a parcel of ricefield and, usually, a building plot, which may or may not be within the paternal enclosure, this property forming a sort of pre-inheritance. According to the proverb, the father has three obligations with respect to his son: have him circumcised, arrange his marriage and provide a house. The son who has remained last in his parent's home and has looked after them in their old age is the only one who will inherit the family home. As for the daughters, according to custom they have only minor rights on the property: they virtually never receive a house or patch of ricefield; their trousseau (*jahâz*) and an orchard given by the father, is, in practice, the maximum they can expect. While the majority of the sons today stay in their quarter of origin and make their property fructify, the majority of the daughters, on the other hand, marry outside the family and the locality (*mahal*). These marriages permit the farming households to extend their network of relations throughout the regional society. What are the effects of these customary practices on the forms of residence and organisation of household groups?

First, residence is en général "viri" and "neo-local" (in other words the wife goes to live in her husband's home, a house built on land having belonged to his father); it is sometimes patrilocal (where the married son remains in the paternal home, he and his wife occupying the upper storey of the family house), and very rarely ux-orilocal: the husband goes to live with his wife's parents, but this is only in the case where the latter have no male heir; it is well known that servitudes attach to these "son-in-law marriages" in predominantly patrilineal societies: the social identity of the son-in-law is erased in favour of that of the parents-in-law; in Gilân, however, this situation is less difficult to support than in other societies attaching more importance to the sense of virility.

As custom privileges the individual rights of the male heirs to the detriment of the

continuity of the patrimony, it is not surprising the majority of houses shelter simple households, while in 14 % of cases more than one married couple share the same house. These multiple households are generally of the descending type, i.e. they consist of aged parents and one of their sons and his family, but sometimes there are two married brothers, each occupying one floor of the house with his family, the elder brother the ground floor, the younger one the upper storey, but these different forms of grouping do not necessarily mean community of work and joint management of the farm.

The size of the peasant households also bears witness to the rapid growth of the regional population: 61 % of households have more than four children. In an enclosure with three houses, each owned by a brother, there will thus be a good dozen cousins, too young as yet to worry about the future sharing of the patrimony, turning the shared yard into a playground.

The neighbourhood community

The second circle of social insertion of individuals is formed by the neighbourhood community, which includes all the enclosures within sight or sound. These neighbours are sometimes brothers or cousins (sons of brothers) who have shared the same farm or cleared the same parcel of land near the paternal home. But these bonds of neighbourship are not always superimposed on links of kinship, and this relative dissociation of kinship and co-territoriality is in fact an original feature of Gilân rural society, as compared with the rural communities of central Iran, and all the more so the nomad tribes, where fractions of patrilinear lineages occupy common quarters or encampments. Paradoxically, this neighbourhood community, fulfilling important social and economic functions, does not have a specific name. It nevertheless forms a framework for mutual help and daily intercourse. Relatives and neighbours join together to build or rebuild certain parts of the house, help one another for rice or cocoon harvesting. The women invite their neighbours to try their latest culinary preparation, to celebrate the end of the hard work of weeding (*vijin*) the ricefield with a light meal, or to taste the first fruits of the coming harvest by eating *jukul*, a dish based on still green rice grains. The children move from one house to the other, and the young boys pass the greater part of their time together, installing themselves alternately in one or other of the different dwellings to talk, play cards, pass the evenings, sleep.

The quarter (mahalle)

It is here, beyond the minimum segment constituted by the house, that we find the major unit of social and territorial affiliation in Caspian Iran. It is structurally defined by opposition to the equivalent units surrounding it (other *mahalle*) and by its integration into the immediately superior unit, the *mahal* (the locality). A *mahal* thus groups

together several *mahalle*, each designated by its own toponym completed or preceded by the generic toponym of the locality. Often the references to the names of the *mahalle* are topographical in nature: in many *mahal* there is a distinction between upper (*Bâlâ mahalle, X.-e Soflâ*), middle (*Vasat mahalle*) and lower quarters (*Pâ'in mahalle, Jir mahalle, X.-e Olyâ*). With the exception of the piedmont areas, where these topographical indications do indeed reflect a difference in altitude between the quarters, the difference between "upper" and "lower" refers to no special feature of the terrain, but indicates the relative positions of the different hamlets with respect to the mountains and the sea: the lower quarters are those closest to the sea and the upper quarters closes to the mountains, even though the locality itself may be situated several tens of kilometers from either of them. In the colloquial language, *bâlâ* means in fact both up and interior: a guest is invited to "*Biyâ bâlâ*", "come up", an invitation to sit down at the end of the room, the most noble part of the inhabited space, as we shall see.

The quarter, which may include just a few dozen houses or as many as several hundred, is first and foremost an irrigation unit. The peasants whose ricefields (*bejâr*) are adjacent are tributary to the same source of water, a tertiary canal (*nahr*), the final stage of a complex system of derivations from a river or principal canal (since the introduction of a modern irrigation network). The irregularity of the flow used sometimes to be compensated by the addition of water (run-off, or stemming from a

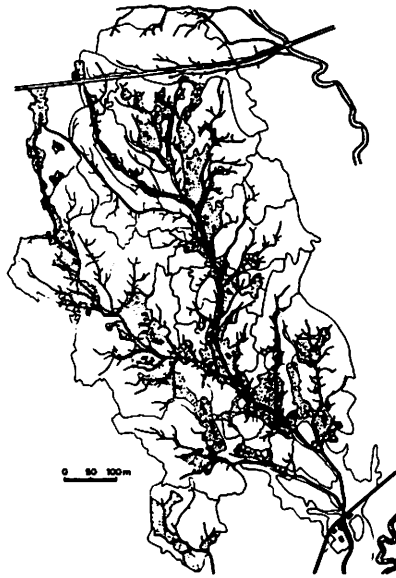


Figure 3: Irrigation and distribution network of the habitat. The hamlets are loosely scattered near the tertiary derivations. The rectangles indicate dwellings, the dotted area the total habitat. Map drawn on the basis of data supplied by P. Bessagnet on the village of Nabideh (central Gilân), in *L'étude sociologique des villages du Guilan par la méthode de la photographie aérienne*, Tehran, Institut d'Etudes et de Recherches Sociales, 1960.



Piedmont *mahalle*. In winter the ricefields "sleep" and the animals can graze on the stubble.

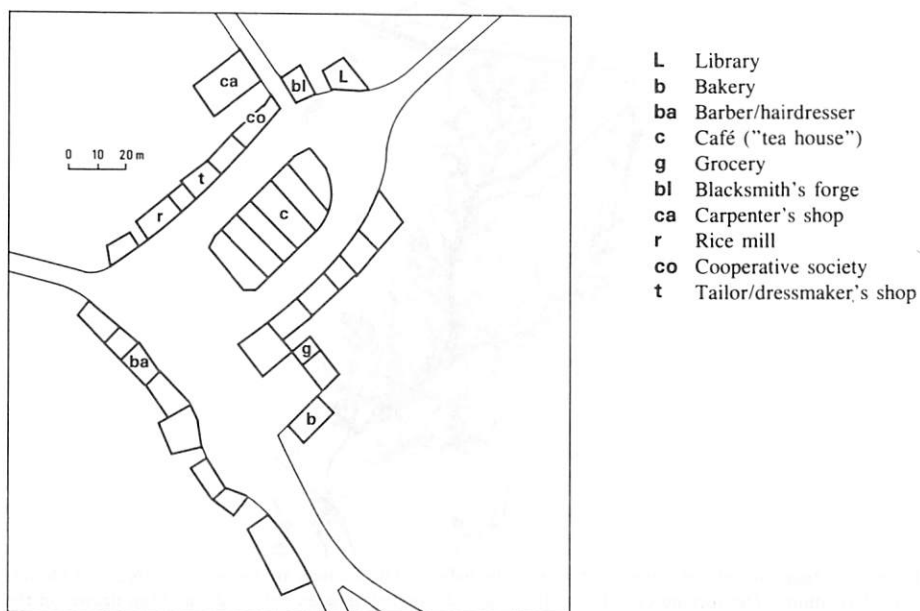


Figure 4: Main square and *bâzârce* of a big *mahalle* in the Sefid Rud delta.

temporary excess of irrigation) stored in huge reservoirs (*səl*), the only communal property at the level of the *mahalle*. The maintenance and cleaning of the *nahr* and distributaries (*lāju*) at the beginning of the rice growing season is a collective task, directed by the *ostâd-e âbâvar-e mahalli* ("local master irrigator"), elected each year by all the farmers of the *mahalle*. This key figure in the life of the local community is also responsible for seeing that the water is fairly distributed between the peasants and for supervising the exploitation of the secondary resources of the reservoirs: rushes cut for roof coverings or mat weaving, feed for the livestock. The relative cohesion of the *mahalle* can also be seen through the collective practices associated with rice-growing, though their density varies considerably from one region to another. In the northern part of the plain, strongly marked by the communal traditions of the neighbouring wheat and barley civilizations, the peasants group their nurseries together in a central point of the *mahalle*³⁴; near the forests, the threat of damage by wild boars makes it necessary to guard the ricefields at night as soon as the grain begins to form, the peasants of the same *mahalle* taking it in turns to keep watch or clubbing together to hire a watchman. A *bijârkutam* ("ricefield platform") installed in the middle of the fields serves as lookout post. The watchman lights a fire under his shelter, shouts, bangs on a copper plate with sticks, and shakes a rope strung across the field to jangle the various metallic objects hung from it, all in order to discourage the boars who can do considerable damage. When these deterrent measures prove to be insufficient, big beats comprising several dozen men are organized, still at *mahalle* level, to kill as many boars as possible. Lastly, among these community practices, mention should be made of the common pasturing of livestock on the after-math (*varzeki*) of the ricefields: once the harvest has been brought in, bovines and horses can freely graze in the fields, which are no longer protected by fences.

The majority of *mahalle* are also endowed with commercial and institutional establishments that confirm their autonomy and identity: the "*bâzârce* (small bazar) groups around a square one or more grocery shops/"tea-houses" (*dokkân*), poles of sociability and news centres, where the men spend the greater part of their day during the slack season, the barber's shop, one or more rice mills (which are never collective property), a few craftsmen's workshops and, in the biggest *mahalle*, an agricultural cooperative. Many quarters have a council and a "village" chief, their own primary school, mosque, cemetery, *emâmzâde* (mausoleum of one of the descendants of the twelve *imâms* of shiism) and lastly their own ceremonies during the months of mourning commemorating the martyrdom of the second and third *imâms* (Hasan and Hoseyn).

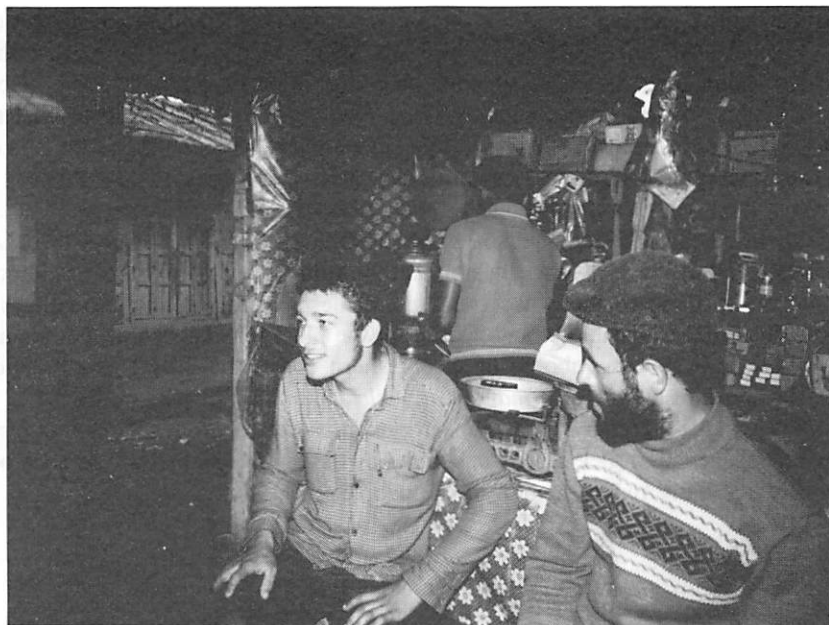
Between neighbouring *mahalle* (or sometimes, in the case of very big localities, between several groups of neighbouring *mahalle*), relations are tense, marked by rivalry, antagonism and aggressiveness. In daily life, people avoid going into the neighbouring quarter, where they are regarded as strangers. They like running down the population of the nearest *mahalle*, emphasizing their faults, and few relationships are formed. Marriages between members of neighbouring *mahalle* are remarkably rare, though the matrimonial area of each quarter with other localities of the region, near or far,

is extraordinarily dense and diversified. Any collective facility envisaged for a number of *mahalle* is perceived and treated locally as an object of antagonistic rivalry. If it is a question of setting up a community clinic or a school, people try to annex it for their own quarter, and the solutions adopted very often reflect this tension: a number of buildings for community use are located at an equal distance from two hostile *mahalle*, in the no man's land that forms the vague frontier between the two. The reasons for this rivalry are to be found in very general mechanisms, common to most societies, but also translate more localized concerns. On the one hand, it is to be seen as a means of differentiating the *mahalle* from its closest neighbour, and really the one that most resembles it, which is set up as a pole of repulsion to better bring out the excellence of the local group; on the other hand it can be seen as the manifestation of competition for predominance within the locality. Lastly, it can be seen as reflecting the conflict of interests between the "upstreamers" and the "downstreamers" (both depending on the same secondary canal), a conflict that can become bitter in the case of shortage.

Beyond the quarter: the locality, the canton, the region

The next higher unit of social insertion of individuals, as we have said, is the *mahal*. The meaning of this word, which can be translated as place, locality, district, is itself revealing: it does not confirm the association between the local soil and the habitat, like the words *deh* or *âbâdi* in Persian, but simply designates a piece of territory. Does this mean that the reference to the *mahal* is inexistent, meaningless, merely nominal as against the State's administrations? The reality is more complex. Seen from the inside and in everyday life, the *mahal* is not a functional unit, but it becomes one when individuals emerge from their normal framework of life and introduce themselves to other individuals of the same canton but not of the same local origin, vaunt the products of their soil on a more distant market or go with a group to some regional sanctuary for a big religious ceremony. It is significant that the *daste* (groups of penitents) from neighbouring *mahalle* then form but a single processional group, bearing a single standard, symbolizing, above and beyond the divisions, the unity of the locality when confronted with the outside world.

In this hierarchy of insertions, a special place has to be attributed to the canton (formerly *buluk*, now *dehestân* in official parlance), whose main town is the scene of bustling commercial activity by shopkeepers (*dokkândar*) and above all by traders (*bâzârî*) who enjoy rental income in addition to the profit on their dealing and speculation on food crops. These centres are all the more flourishing if they are the site of a weekly market, which attracts considerable numbers of itinerant vendors (*bâzârmaï*) and constitutes a concrete demonstration of the micro-regional unit, several hundred people coming there on foot, by motorcycle and in minibuses. Lastly, simply for memory, we would mention the higher units of territorial affiliation, to which individuals refer when they travel in the province, demonstrating consciousness of their



A break in the *mahalle* "tea house"-grocery.



Haggling over the price of a mat at the weekly canton (*dehestân*) *bâzâr*.
Șanderman (southern Tâleș).

cultural identity and differentiating themselves from the inhabitants of distant cantons. The *šāhrestān*, i.e. a district, with a big town as its capital (there are eight in the Gilān plain), often serves as support, by composition or derivation, to collective identifications, so that people will say *Gil-e Fuman*, *Languardi*, to mean that they belong, not to a town, but to a district. We have already seen that the Sefid Rud cuts the central plain into two roughly symmetrical parts. To the west is the Biyapas and to the east the Biyapiš, each dominated by a town, Rašt and Lāhijān respectively. To situate themselves in the regional space, people present themselves as Rašti or Lāhijāni, thus recalling the historical division and the competition for regional hegemony, the antagonism between these two fractions of the province. Lastly, to express the twofold condition of inhabitant and peasant of the plain (as opposed to the mountain populations and their neighbours of the northern coast, the *Tāleš*), the individual will designate himself as *Gil-e mard*, *Gil*, *Gilak*, etc.

However, in the hierarchy of these insertions, it is certainly the *mahalle* that forms, beyond the basic unit of belonging constituted by the house, the major reference point in the life and daily representation of the people.

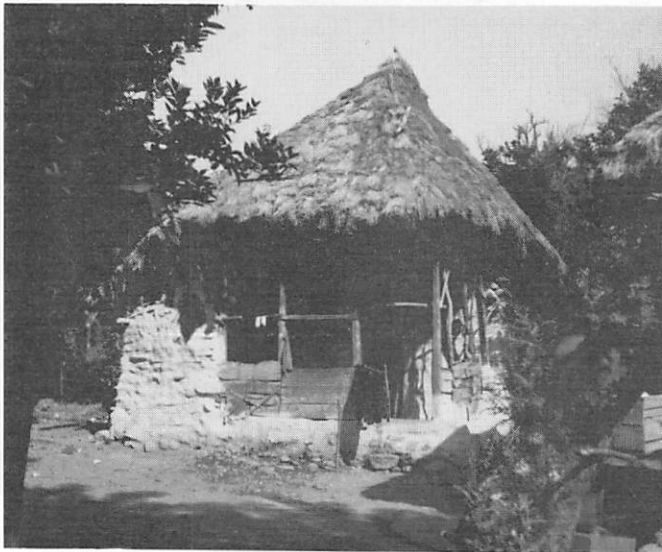


Small farmers' single-storey rectangular houses.
Above: southern Tāleš plain.
Below: hills of Lāhijān.

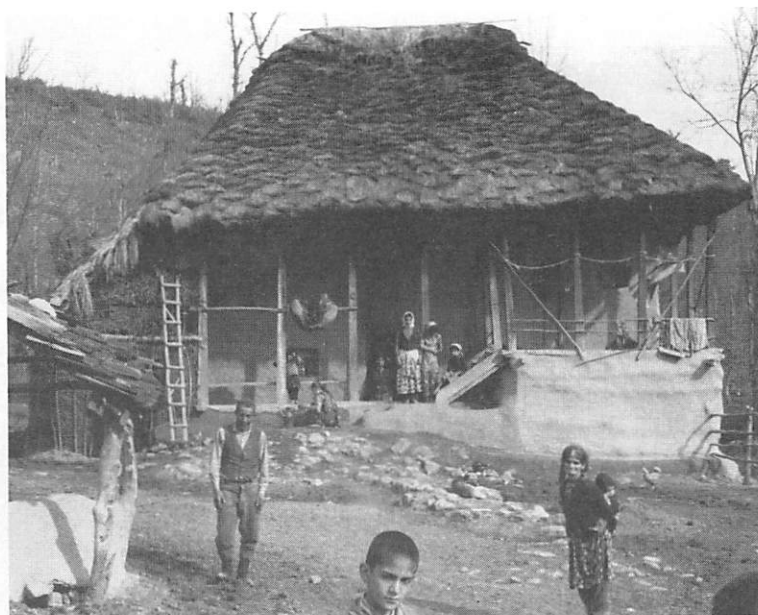
Small farmers' houses.



House of the Sefid Rud delta
(note how it is raised above the
ground)



House of the eastern plain, with a pointed roof.



Hipped roof houses with *talâr*.

Above: house on the southern Tâleș piedmont in the first days of spring.
Below: house of the Rașt region, belonging to a rich farmer.



Above: house of the southern area of the Rašt district, with two *talâr*.
Below: Single-storey house with the verandah extended down one side.



Two-storey houses with pointed roofs in the Sefid Rud delta.
Note how they are raised above the ground.

THE SALIENT FEATURES OF TRADITIONAL RURAL ARCHITECTURE

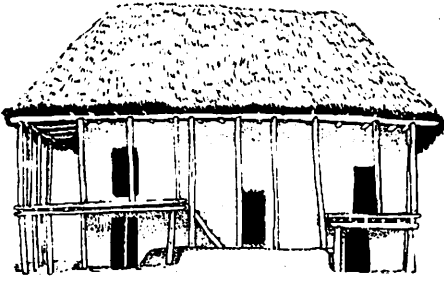
Although there are considerable differences according to micro-region and the material wealth of the residents, the rural houses of the Gilân plain and piedmont nevertheless share a set of common characteristics, a system of material and formal features and of rules for organizing the domestic space that define the identity of the vernacular architecture.

The essential features are as follows:

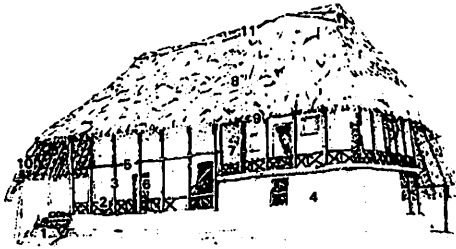
- The dwellings and farm buildings are, as we have said, located in an enclosure, surrounded by a low fence. While the houses of central Iran are hidden behind the blank walls that hem them in, the dwellings of Gilân, on the contrary, offer their façade to the view of the outside world. This is a completely original feature which would be "unthinkable" in the traditional Persia of the plateau³⁵ and is the expression of a fundamental trait of Gilâni ways of life and culture: the predominance of the open over the closed, a trait that fashions not only architectural design and ways of living, but also such things as relations between individuals and women's vestimentary behaviour. One of the architectonic consequences of this original way of treating the domestic space is the outstanding place occupied by the house in the overall architectural landscape of the *mahalle*: while in central Iran, the constructed landscape offers to view only blank walls or the excrescences of dwellings (domes, terraces, etc.), here it is the houses themselves that form the visible texture of the habitat. The presence, in the enclosure of a garden, of many trees, like a domesticated forest, and the very location of the house near the fields are features that blur the division, so sharp in the Iranian plateau, between the domestic space and the spaces of nature and of agricultural work: the Gilân house fits into a continuum between nature and culture.
- The framework of traditional houses (foundations, wall studs, roof frame) is of wood, with mineral elements (stone, pisé) or mainly mineral (daub), playing only an ancillary role in the construction. The use of wool leads to complex works (layers of logs and small beams for foundations, various forms of timberframing for the walls, complicated roof frame structures), but the techniques are fairly rudimentary: traditional architecture ignores — or uses only extremely rarely — the roof truss technique (with tie beam and principal rafters) for roof building, or the assembly of wooden structures by mortise and tenon (in the majority of cases pieces are held together by vegetable lashings or, more recently, nails). This wooden architecture, often of very complex morphology (perhaps by very virtue of its technical rusticity), is the work of specialists, carpenter-joiners, who, throughout Caspian Iran, direct the construction of houses, with the ancillary tasks (preparation of materials, wall facing, preparation of sheaves for the roof covering) being done by the family, helped by relatives and neighbours.
- Morphologically, the dwellings of the Gilân plain and piedmont are distinguished by three features: the buildings are raised above the ground, the roof always has four sloping sides, and there are one or more verandahs on the façade. The buildings are

raised to insulate the living space from the damp soil. Various techniques are used to create a healthy space (ranging from a few tens of centimeters to about two metres) between the muddy ground on which the foundations are built and the floor of the house. The morphology of the roof — hipped or pointed — resting mainly on rows of posts independent of the walls means that the finished building cannot readily be extended, either vertically or laterally. Through its architectural structure, the Gilân house forms a complete whole to which extra rooms or annexes can be added only after dismantling part of it first. Basically, the Gilân house is a non-evolutive construction, unlike the houses of the plateau, whose blank side walls and terrace roof make it easy to make additions, notably by extending outwards. The presence of a verandah (*ayvân*) on the façade is not, of course, a feature specific to the dwellings of Gilân, as many examples are found not only in the ancient and classical architecture, but also in the ordinary houses of many areas of Iran. More original, on the other hand, are two forms of verandah often met with in the architecture of the province: the first completely surrounding the house on the lower floor level and sometimes the upper, the second forming a loggia (*talâr*) on the upper floor of the building, on just along part of the façade and the adjoining side wall. These verandahs, like the posts supporting them, are arranged on the façade according to rhythmic patterns that are similar for the majority of houses of the same type (single-storey, two-storey with a continuous verandah on each level or two-storey with a loggia on the upper floor). This limited series of rules governing the spatial arrangement gives gilâni architecture a common stylistic identity.

— Lastly, just as much as the materials and morphology of the constructions, the way of occupying the domestic space also distinguishes the vernacular architecture, which cannot be reduced to an inventory of technical procedures or formal characteristics. Most of the rooms do not have a permanent function, but are used differently according to the season: the arrival of the hot weather is accompanied by a shift of the members of the household from the downstairs rooms to the upper storey and from the interior to the exterior. If we superimpose everyday practice, seasonal practice and the rules governing the occupation of space according to generations, it can be seen that the symbolic framework of the house is ideally organized along three axes: the first leading from bottom to top, the second from the right to left of the façade, and the last from the back to the front of the house. The two poles of each of these axes denote opposing values: thus the bottom contrasts with the top as does the cold season with the hot, the older generation with the younger (as we have seen, when two related families share the same house, the younger one occupies the upper storey), a semi-public universe exposed to the eyes of all with the world of secrets and precious provisions. The left-hand side of the façade shelters the reception space, the right-hand side the winter kitchen, symbolizing the grouping of the family and domestic intimacy. Lastly, the back of the house is the place for the less attractive activities (here is the toilet, the rubbish disposal, and sometimes a cowshed incorporated into the building), the front is naturally the part that is offered to view, the seat of noble activities (of both production and consumption). In this preliminary survey, the last point that must



a. Rectangular house with a hipped roof (Sarâvân, southern edge of the Rašt district: corresponding enclosure plan, Fig. 2b).



1. *pilē*, steps
2. *dēstēk va sorâhi*, balustrade
3. *sutun*, post
4. *divâr*, wall
5. *dēstēk*, pole used for clothes drying
6. *bar*, door
7. *talâr pilēkân*, steps leading to the roof space
8. *kulēš*, rice straw
9. *egân*, plate supporting the roof frame
10. *sercub*, rafter
11. *dēstēk*, ridge pole

b. Rectangular house with a hipped roof covered with reeds (Feštēke, Rašt plain: corresponding enclosure plan, Fig. 2a).



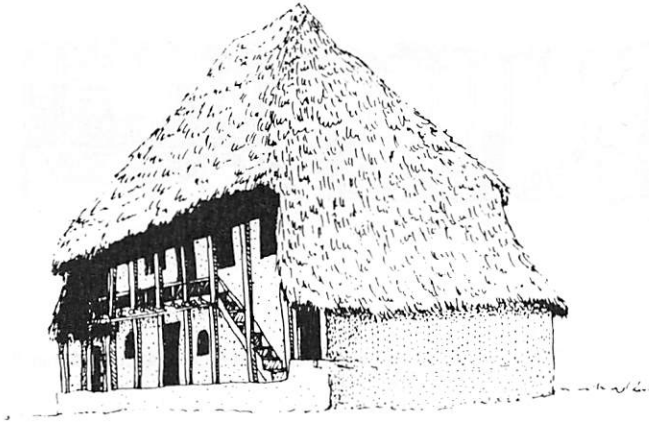
1. *dârverja*, log
2. *sagbar*, "dog's door"
3. *sutun*, post
4. *dēstēk*, pole used for clothes drying
5. *divâr*, wall
6. *bâmdâr*, joists supporting the roof frame
7. *kulēš*, rice straw

c. Square house with a pointed roof covered with rice straw (Qâsem Âbâd, eastern plain: corresponding enclosure plan, Fig. 2h).

Figure 5: Houses of the Gilân plain.



d. Rectangular house with a hipped roof covered with rice straw and shingles (Nomandân, northern Tâles: corresponding enclosure plan, Fig. 2j).



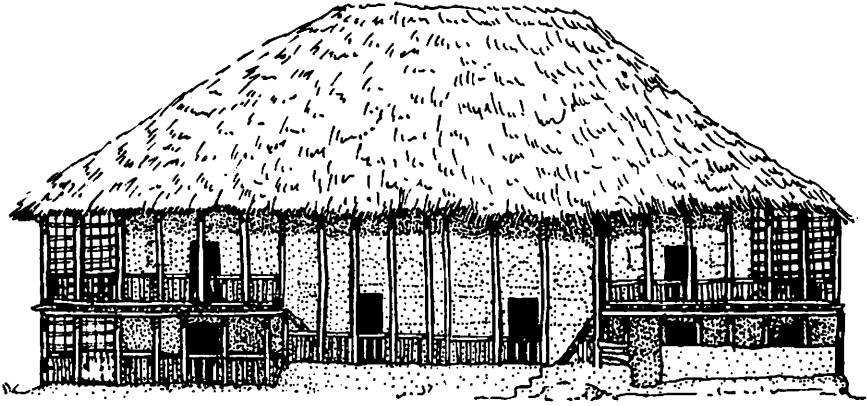
e. Rectangular house with a hipped roof covered with rice straw (Katesâl, Lâhijâni country: corresponding enclosure plan, Fig. 2g).



1. *divâr*, wall
2. *qâpi*, door
3. *penjarayeri*, opening
4. *idor*, post
5. *taxte*, shingles
6. *kulaš*, rice straw
7. *môhra*, "swelling": foundations

f. Square house, raised well above the ground, with a pointed roof (Komâcâl, Sefid Rud delta).

Figure 5: Houses of the Gilân plain.



g. Rich farmer's house with two *talâr* in Sadeh (interior plain of central Gilân) (after S. Geran-Pay).

Figure 5: Houses of the Gilân plain.

be mentioned is that one of the most striking features of domestic behaviour in Gilân is the relative undifferentiation of the inhabited space between the sexes, while a strict division between masculine and feminine spaces shapes the architectural design in central Iran and in the majority of islamic areas.

Those common features may be modulated differently according to the micro-region and the type of rural buildings that coexist on the scale of a single establishment. These variants, which fit into a common frame of reference, may affect building materials and techniques, the ways of occupying and perceiving the inhabited space, the form and size of the outbuildings, but all these buildings have to meet, through their morphology and their arrangement, the stringent constraints placed on the construction by the ambient conditions.

THE GILÂN BUILDING

Ecological constraints and architectural responses

The climatic and pedological conditions of the Gilân plain make this region one of considerable constraints from the architectural standpoint. The construction of a dwelling — i.e. a micro-environment to efficiently protect people, animals and harvests — has to meet a number of requirements imposed by very unfavourable ecological conditions: hydromorphic soils, violent rains and winds, very high humidity levels, winter cold, summer heat and a proliferation of insects and parasites. What solutions does the traditional vernacular architecture employ to relieve the inhabited space from the ambient constraints?

These solutions may be in the form of building methods, or ways of arranging the space, or again in the behaviours adopted by individuals in response to the season, the weather conditions or the hour of the day. In order to insulate the inhabited space from the wet ground, to keep it clean and prevent domestic animals from entering, the houses are raised off the ground. Hardwoods, homogeneous and with good resistance to rotting, are used to build foundations and bases; the violent rains impose steep roofs, overhanging at the eaves to prevent water from running down the walls, dissolving the facing and causing mosses to grow on the daub, and to further combat this latter risk, salt is added to the filling and facing materials. The humidity jeopardizes the safe storage of sheaves of rice in the barns, so a "chimney" (*havâkeš*: "that draws the air") is built in the centre of the stacks to provide ventilation and dry the grain. To escape the humid heat that prevails in summer, the inhabitants install themselves in loggias on the upper floor of the house, or on a separate platform built near the house. They sometimes light a fire under this platform to discourage the mosquitos, these unavoidable companions of any stay in the Caspian low country. In the hot season, the women set up the kitchen in the yard, in the shade of a tree or a rice barn. Conversely, during the winter, the family gathers in a downstairs room of the house heated by wood. The violent winds impose a number of precautions: secure fixing of the roof frame, vigilant watching of fires, which if fanned can rapidly spread in houses made essentially of vegetable materials. In order to protect the harvest and the silkworms from rodents, the posts of the rice barns are fitted with wooden rat-guards, the sheaves are covered with a kind of nettle whose odour discourages mice, and the base of the posts of the silkworm nursery is smeared with tar. Lastly, the fence of the enclosure protects the garden from cows, horses and wild boars, and a gate stops the poultry from gaining access to the verandah (*ayvân*) of the house.

These techniques and arrangements are remarkable responses to the constraints imposed by the environment, but they are not enough to insulate the building indefinitely. This *relative* precariousness of the construction is at least partly due to the short life of some of the traditional materials. Roof coverings of bundles of rushes have to be replaced every five or six years, and those of rice straw, which frays much more



The *gâlisâz* at work before the autumn rains.

quickly, every two or three years. A specialist, the *gâlisâz*, does this work before the torrential autumn rains. If the roof is too steep for him to work safely, he leans on a little bench roped to the ridge pole of the roof and the bundles or sheaves needed for the repair are passed to him by means of another rope. Every year, before *No-ruz* (the beginning of the Iranian year at the spring equinox), the walls also have to be carefully refaced to repair the cracks and erosion caused by the rain. The total life of traditional buildings appears to be relatively short, and a rural dwelling over a hundred years old is something of an exception. Of the 33 houses studied by S. Geran-Pay in Sadeh³⁶, 9 are less than 30 years old, 12 are 30 to 50, 7 from 50 to 100 and only 5 over 100 years old. The rather ephemeral existence of Gilâni buildings is certainly partly due to the fragility of the materials used, but this is not the complete explanation of the situation. Firstly, it is scarcely surprising to find a predominance of recent dwellings in a region where the population has grown rapidly over the last 50 years. Second, while the traditional buildings require regular repairs, their foundations and framework, like those of most wooden constructions, can remain stable for several centuries. Lastly, the short life of this vernacular architecture is largely due to factors that are independent of the traditional method of construction, two of which should be mentioned here, the one being a very recent phenomenon and the other having a long-term origin in the history of mentalities. First, in recent decades many Gilâni peasants have abandoned their traditional house, not because it was old and falling

down, but in order to demonstrate their modernity and social promotion by building houses of parpens and concrete, which incidentally frees them from the regular repair work. Second, attachment to the ancestral home, so firmly anchored in many societies of the ancient world, is not a very widespread attitude in rural Iran. "It is well-known," Massé rightly remarks (after many travellers, including Chardin and Jaubert), "that the Persians do not repair their houses, but prefer to build new ones. According to a popular belief, building prolongs a man's life, and it is better to leave an old house, over-full of malignant influences"³⁷. Thus the short life of the traditional house, as we witness it today, is due as much to the social and symbolic values with which men endow their dwellings as to truly technical factors.

Building materials

The building materials for traditional rural houses are taken from the surroundings, close to the site, and do not undergo any complex technical processing.

Wood, the essential material, used to be cut freely in the forest or nearby copses, but, since the nationalization of the forests in 1963, the acquisition of building timber is subject to authorisation from the administration. This restriction has brought a great increase in trade in timber and a multiplication of tree plantations (especially poplars) in or near the enclosures. For load-bearing timbers (logs and beams for the foundations, beams, studs and posts supporting the wall and roof frames, king-posts supporting the ridge pole), durable hardwoods are traditionally used: mulberry, carob, oak (*Quercus castaneaefolia*), but above all the Siberian elm (*âzâd*), "the preferred tree of the natives"³⁸, appreciated both for its rotproofness in watery environments and for religious reasons which give it a particular symbolic status: the cult of trees, and especially of the *âzâd*, whether or not associated with sanctuaries (*emâmzâde*), remains steadfast in Gilân. It is not without significance that the frame of the house should be formed by beams taken from this protective tree. For non load-bearing or light load-bearing members (timber frame of the walls, rafters, lathes, etc.) lighter woods, easy to work, but of less compressive strength are used: poplar, elder or false lotus. It is the poplar, with its regular trunk, that is often used for log cabin type construction, one method among others, as we shall see, of building walls. Where houses are covered with shingles or boards, i.e. in the piedmont region overlooking the plain, the carpenters cut these wooden tiles from the trunks of lime or oak. There may thus sometimes be a dozen different species of timber used in building a single house. A striking feature is that these different varieties of wood are given no special treatment before being used. Impregnating the timber seems to be unknown, and the wood is often felled then left to dry for only a few weeks before being used.

Flexible vegetable materials are also extensively used in traditional construction; since the vernacular architecture is generally speaking ignorant of assembly by the use of mortise and tenon joints, the role of vegetable lashings is particularly important in holding the frame together. Cords (*veris*) of sapwood or rice straw, made by the

women, are used to fix the rafters to the purlins and the battens to the rafters and yet again to attach the sheaves (*dastε*) that cover the roof. These sheaves may be of rush (*gāli*) or rice straw (*kuleš*); the region where rush is used extends considerably inland from the coastal swamps where this material grows in abundance, so that the houses on the first hills of the Lâhijâni hinterland are thatched with rushes bought in bundles from the peasants of the coastal hamlets. It is true that technically and economically the use of *gāli* has several advantages: first, as we have seen, this material is more durable and homogeneous than the *kuleš*; second, people prefer to keep the rice straw for other uses, and in particular as an essential winter feed for the bovines. It takes no less than 4.000 sheaves of straw to cover the roof of an average-sized house, which is roughly the amount produced by 3.000 to 5.000 m² of rice crop. The byproducts of rice are also used for making the daub used to face walls and cover floors: the riddled clay is wetted, then energetically pounded with the feet, then either chopped straw (*kuleš*) or rice husks (*fεl*) and beards (*colpil*) or the waste from bran (*kepek*, *sup*) are added, these elements serving to temper and strengthen the cohesion of the daub. The *kuleš-ε gel* ("rice straw mud") constitutes a fairly rough mix which is used for the daub of the walls and all the infrastructure work. On the noble parts of the building (floors of rooms, façade) it is covered with a smoother and more homogeneous daub made with the husks and beards of rice or bran (*fεl-ε gel*, *kepek-ε gel*).

The mineral elements play only a secondary role in the construction of this "framework house"³⁹. The daub, as mentioned above, is used to fill in the wall framework and for facing, but it also serves to make unbaked bricks (*xεšt*), formed in wooden moulds (*qāleb*) then dried in the sun. These bricks, a vital element in the rural architecture of the Iranian plateau, are used only in limited quantities and very sporadically in the Gilân plain. They are sometimes used to fill the timber-frame of the walls and in rare cases to build the foundation. As for baked bricks, they are never seen in peasant buildings, being reserved for urban houses, or in the country for certain noble buildings: mausoleum, caravanserai, big landowner's house. The only "traditional" material that is the product of a complex manufacturing chain outside the work site is the tile (*sofāl*), and even this is a recent tradition, borrowed from the Russian Empire at the end of the 19th century, which has not spread beyond the north-west of the province. There are 26 tile producing yards spread over 15 localities in the Tâleš coastal plain⁴⁰. These tiles, shaped on concave wooden formers, dried, then baked in huge rectangular ovens, are of quite a different morphology from the semi-cylindrical tiles that cover the urban buildings of Gilân⁴¹. Widely flared, they have a lip (*dokme*) on the convex face so that they can be fixed without mortar on the roof battens, and one of the edges is extended so that they fit together. This original form of tiled roof, found in various regions of Russia and as far away as Finland, finds its extreme southern limit in Gilân. Among the materials of mineral origin that are used in building, mention should also be made of salt, used, as we have seen, to prevent the proliferation of mosses on the walls, and lime (*âhak*) sometimes mixed with the daub to enhance its cohesion and durability, or used in a very liquid

form to whitewash the façade, a job done by the women, using small brooms, on the eve of the new year. Lastly, stone, a rare material in the clayey plain, is used only to reinforce the foundations.

Building techniques

Foundations and bases

The house being raised above the ground is a constant feature of vernacular architecture, but the extent varies considerably, depending on how hydromorphic the ground is. In the marshy plain of the Sefid Rud delta, the floor of the house is one or even two metres above the muddy soil. This space under the house proper forms an extra room used for various purposes: a tripod may be put there for cooking on, the washing is hung there when it rains, the poultry house and perhaps the cowshed are installed there; in the case of the richer farmers this space under the floor is nowadays a garage for the car or light van. In the other regions of the plain, the house is raised less (50 cm to 1 metre), and no empty space is seen under the building. On the piedmont, where the ground is firmer, there is a further reduction in the height (20 to 50 cm). A particular method of building the foundations is associated with each case.

In the delta region, the ground is first flattened and beaten with a flail (*jâku*), then a platform of stone and daub (*kuleš-ε gel*) is built and covered, by hand or using a trowel, with *kuleš-ε fêl*. The main aim of this platform is to protect the piles of logs and beams that support the building from the damp. Two big logs (*bēnadâr*) are laid on these rows of piles in the sense of the longer dimension, then beams (*serakeš*) are laid across the *bēnadâr* to form the base of the floor. There are several variants of this method of raising the building, depending on its shape and size: houses organized with a vertical emphasis (height greater than the length, pointed roof) rest on piles of four or five layers, while horizontally organized houses (length greater than height, hipped roof) rest on lower piles. The degree of insulation, the height of the platform and the foundations, can also be indications of the relative wealth of the households.

In the more inland plain, a wood-framed base — much more rarely unbaked brick — constitutes the foundation of the house. The usual method is to set short vertical posts (*pâkune*), maintained by stones and daub or a mortar of sand and lime, in trenches 50 cm to 1 metre deep, then to lay four big beams (*zir-nâl*) across these posts to form the base of the house. From this basic minimum there are several methods of constructing the floor of the house. The simplest is to fill the space enclosed by the *pâkune* with daub (*kuleš-ε gel*) up to the height of the *zir-nâl*, then a layer of *fêl-ε gel* to give the floor the required smoothness and homogeneity. In most cases, however, a floor is built on joists (*xâl*) which rest on the *zir-nâl*, or possibly a more sophisticated assembly on an additional row of beams (*nâl*) supported by the *zir-nâl*. This floor, made of short battens (*zēgâl*) covered with several thin layers of daub, is

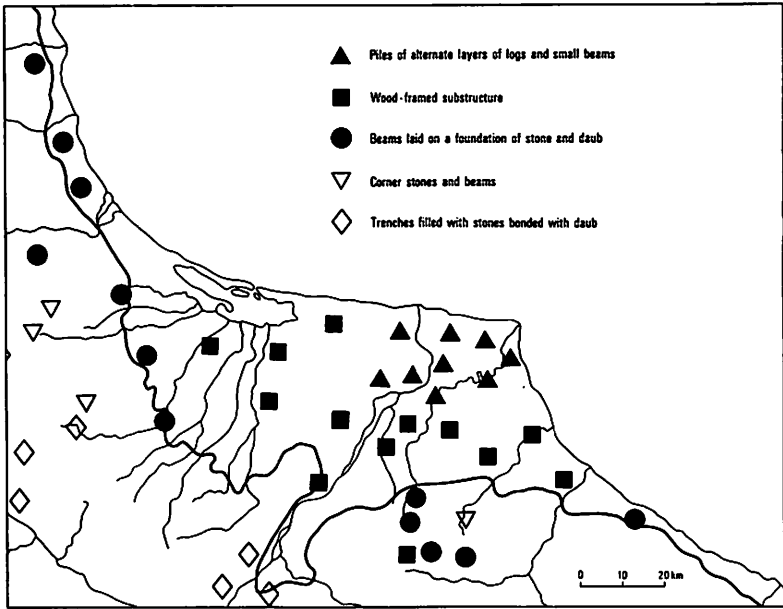
not in contact with the foundation filled with *kulēš-ε gel*, but insulated from it by a layer of air.

In rare cases these foundation walls of wooden posts are replaced by unbaked brick (*xēšt*) walls. This technique is no doubt a borrowing from the building methods of central Iran; oral tradition reports that it came to Gilān from Āzarbāyjān⁴². It is not at all widespread, being limited to old houses belonging to wealthy farmers or landowners.

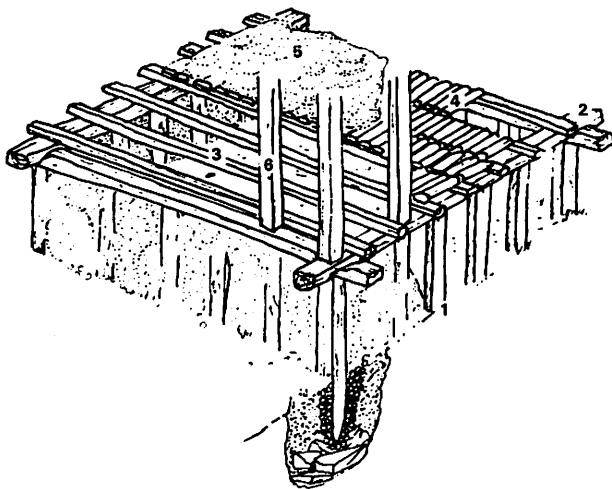
These variants in the foundation structure cannot be seen once the building is completed, the rows of posts or the beds of brick being covered by thick layers of daub.

On the piedmont, the foundations consist of superimposed layers of stone and daub laid in shallow trenches (about 50 cm for a single-storey house), these foundation walls being extended slightly above ground level. Four big, roughly squared beams are laid on the walls to form the base of the wall frames. The floor is formed by modest layer of stone and daub covered by a smooth layer of daub (*fēl-ε gel*, *gel-ε kar*).

Several of the farm buildings are also raised off the ground: the rice barn (*kundēj*) or sheaf house (*kuppah*) may be perched on posts two to three metres high; the working part of the silkworm nursery (*teḷembâr*), the bed where the silkworms are bred, is situated about one metre above the ground. The only buildings not raised of the ground are the sheds where the harvest is temporarily stored, the stable (*gâce*) and

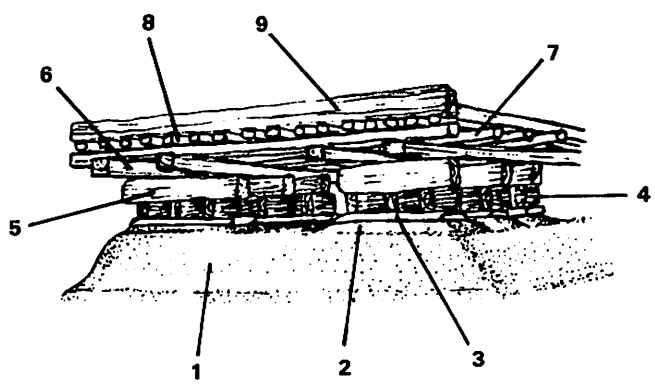


Map 4: House foundations and bases.
 The black symbols indicate various ways of raising the house above the ground



- 1. *pākune*, foundation posts
- 2. *zir-nâl*, beams
- 3. *xâl*, joists
- 4. *zegal* or *vêle*, floor battens
- 5. daub
- 6. *sutun*, post

a. Wood-framed substructure



- 1. *xâk* and *cine*, foundation of stone and daub
- 2. *pâken*, base
- 3. *zi*
- 4. *rit*
- 5. *ketel*
- 6. *benadâr*
- 7. *sêrakesî*
- 8. *nâl*
- 9. *zir-nâl*

b. Alternate layers of logs and small beams

Figure 6: House foundations and bases

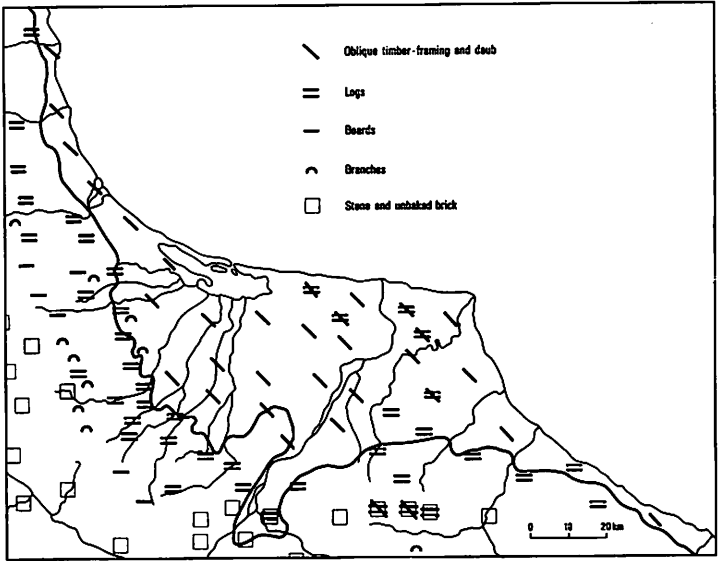


Foundations and base of a house in the Sefid Rud delta region.
Substructure of stone and daub, pile of alternate logs and beams.

the cowshed (*tâvile*). It is necessary to go to the forest piedmont (outside our area of reference), where the mountain stock farmers spend the winter, to find really original buildings designed to protect the livestock from the wet ground: in the *vâne* or *kulom*, the ovines, and sometimes even the bovines, are housed on the upper floor, which they reach via a ramp, while the farmers or herdsmen live on the lower floor of the house⁴³.

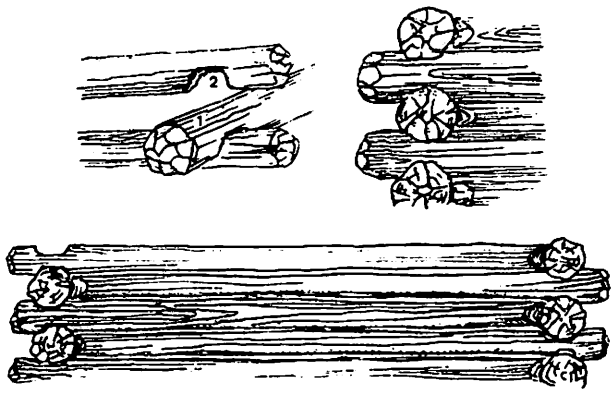
The walls

Gilaki vocabulary distinguishes, within the generic term *divâr cubi* ("wooden wall"), between several types of construction: *zegme'i* or *verjini*, *sakat-sari*, *zigali*. The first two terms denote the superposing of logs (*zegme* or *verjin*), notched at the ends to make them fit at the corners. This method of building is seen in the wooded piedmont, but also in the Sefid Rud delta, in the areas of the plain where there are still adequate supplies of building timber. This particularly strong type of construction is often the mark, in the Gilân plain, of an old, wealthy house of several storeys. The second two terms (*sakat-sari*, *zigali*) designate two distinct forms of timber-framing, the most widespread method of building walls. In the first case, long sloping poles are fixed to either side of the plates (*nâl*) and corner-posts (*sêkat*, *sutun*) that form the framework of the wall. In the second, small horizontal or sloping nogging pieces



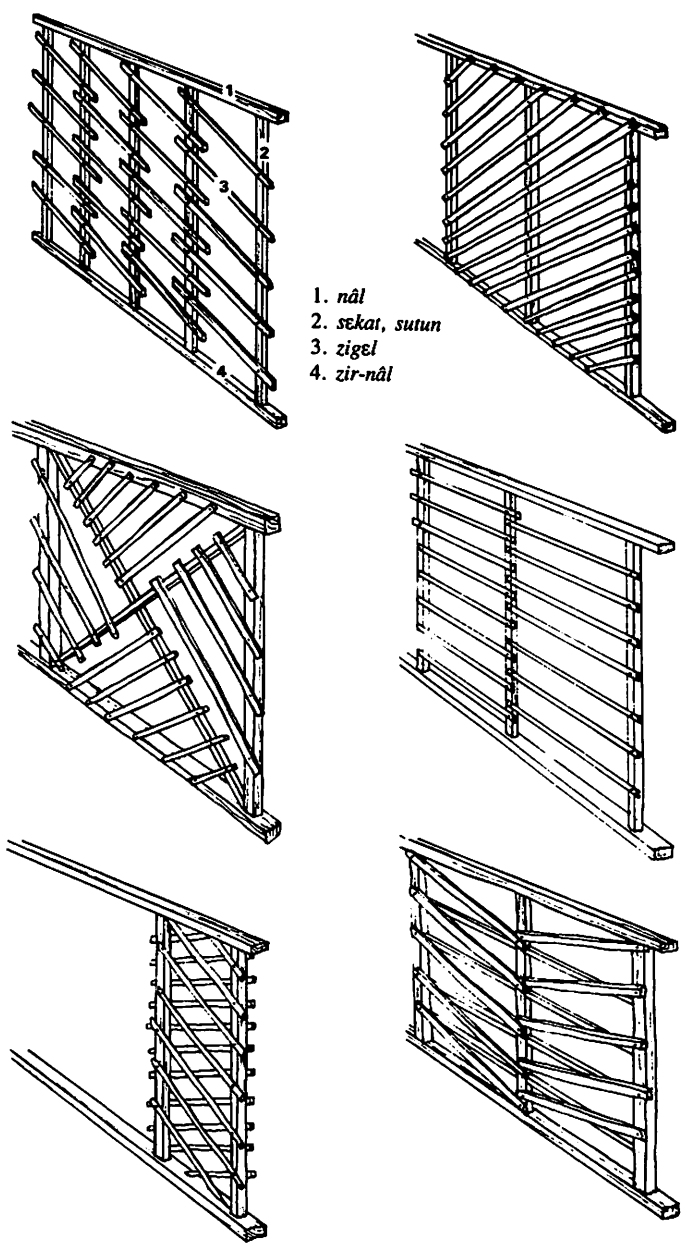
Map 5: Distribution of the main types of house walls.

Log walls are always covered with daub in the plain, never in the alpine meadows (summer chalets).



a. Method of assembling log walls

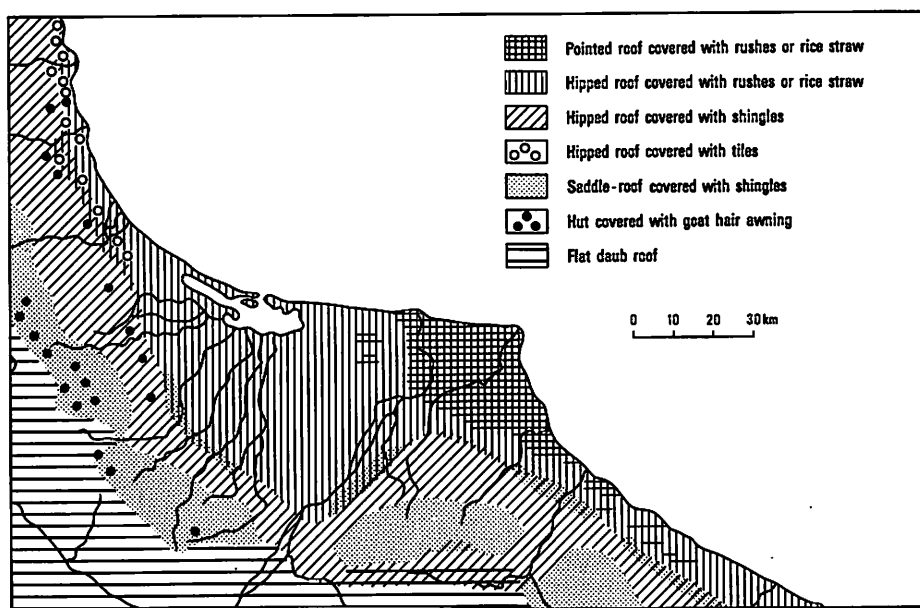
Figure 7: Types of wall.



- 1. *nâl*
- 2. *sakat, sutun*
- 3. *zigel*
- 4. *zir-nâl*

b. Various forms of timber-framing

Figure 7: Types of wall.



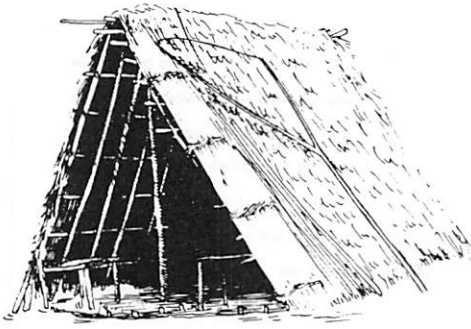
Map 6: Distribution of roof types and covering materials.

As in the other maps, architectural forms are shown for the whole province, not solely the area under study.

are used. The gaps are filled in with daub, or exceptionally with unbaked bricks, and the whole structure, whether of logs or timber-frame, is covered with a facing. The façade is almost always finished with a fine coat of daub (*fəl-ε gəl*), while the side and back walls, not offered to public view, receive simply a rough coat of *kulεξ-ε gəl*. Only wealthy houses are evenly and carefully finished on all sides.

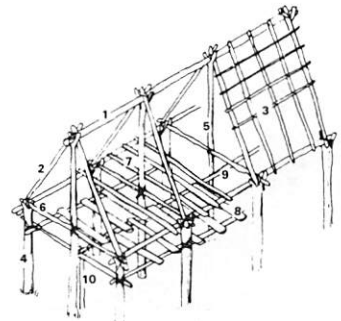
The roof

Construction of the roof frame is the trickiest part of the building process, and gives rise, as we have seen, to assemblies that betray a certain rusticity in carpentry techniques. A distinction can be made between three main types of roof, whose slope may be more or less steep according to the type of covering to be used (relatively shallow slope, in the order of 20 %, for tile or shingle roofs, much steeper, 40 % or more, for rush or rice straw thatch): the saddle roof, technically the simplest, used only for small constructions (temporary hunter's hut, silkworm nursery, etc); the hipped roof, of which there are several variants; and lastly the pyramidal or pointed roof.



a. Wildfowl hunter's saddle roofed hut (*kume*) in the Anzali *mordâb* (lagoon).

1. *xardâr*, ridge pole
2. *sarcu*, rafter
3. *lule*, batten
4. *kulepâye*, post
5. *sarseket*, centre post
6. *kalseket*, tie-beam
7. joists forming the bridge (*pord*) on which the breeder moves
8. beams forming the base of the *ket* (bed) where the silkworms are installed
9. *žegardâr*, horizontal beam supporting the bed
10. *pâkune*, post supporting the *žegardâr*



b. Internal morphology of a saddle-roofed silkworm nursery.

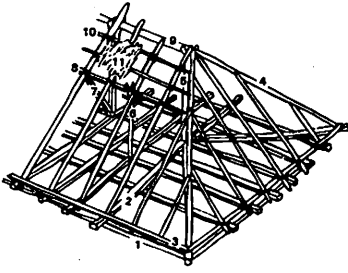
Figure 8: Saddle roofs

The saddle roof

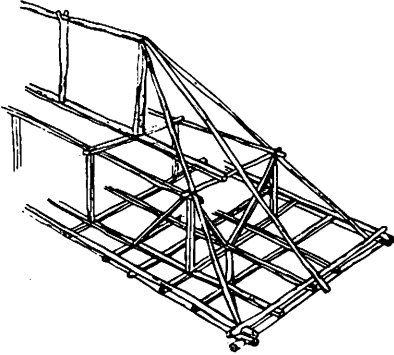
The *kume* (which wildfowl hunters on the lagoons use as hides and huts) is the most elementary form of architecture found in the Gilân plain. A light ridge pole rests on a row of vertical stakes planted in the ground and reeds (*ney*) sloped against the ridge pole from both sides form a roof resting directly on the ground. The roof of the silkworm nursery (*telembâr*) is built on the same principle: the ridge pole (*xardâr*) rests on a row of forked central posts (*sarseket*, "roof columns") while the rafters (*sarcu*, "roof wood") rest on two beams (*kali*) laid on two symmetrical rows of posts (*kulepâye*) along the sides. The bundles of rushes or rice straw thatch are attached to evenly-spaced reed battens (*lule*). Two principles used in this primitive construction are also found in more sophisticated structures: joining pieces of wood vegetable lashings (posts, ridge-pole, rafters and battens are held together by *veris*, rice straw cords), and using posts and king-posts to support the ridge pole.

The hipped roof

This is the type of roof most commonly found in the plain, and corresponds to a rectangular ground plan of the building, characteristic of the vernacular architecture. There are three variants, more or less complex depending on the size of the roof and the loads to be distributed.



1. *egân*, plate supporting the roof frame
2. *vâšan*, joists supporting the attic floor
3. *cešan*, pole plate resting on the *vâšan*
4. *sêrcub*, rafter
5. *xârdâr*, upright king-post supporting the ridge pole
6. *kulek*, upright strut supporting a purlin
7. *capdas*, diagonal strut supporting a purlin
8. *das*, purlin
9. *xâr*, ridge pole
10. *lulê*, batten
11. *dastê*, sheaf of rush or rice straw



Roof of the *sandoq* type.

Figure 9: Hipped roofs.

In the case of certain farm buildings (*ambâr*: store, *tâvilê*: cowshed) the roof frame is still primitive in form, being very similar to that of the saddle roof described above: the ridge pole and rafters rest respectively on centre posts and the walls of the building formed of posts capped by a horizontal beam. At the ends of the building the rafters, equidistant at the base, come together at the apex where they join the ridge-pole and are supported by a king-post.

The structure becomes more complex in the case of a house roof. In this case it is not the walls but the row of posts (*sutun*) supporting the verandah (*ayvân*) of the building that bear the oblique forces and loads of the roof frame and covering.

Four big horizontal beams (*egân*) form the base of the roof frame. On the façade they always rest on the *sutun* of the verandah, while at the ends and the rear of the house they are supported either by similar rows of posts (a common method in the central plain where the houses generally have a verandah all the way round) or directly on the walls (the usual method in the piedmont establishments, where the walls are more often loadbearing). Joists (*vâšan*) supporting the floor on the roof space are laid on these wall plates and also support the pole plates, which are four more horizontal beams (*cešin*). The ridge pole (*xâr*) is then mounted, supported at each end by stout vertical king-posts (*xârdâr*) with forked ends, which rest on the joists and are held upright by diagonal struts. The purlins (*das*: "hand") are also supported by upright and diagonal struts (*kulek* "shoulder", *capdas*) whose size decreases from the

ridge to the base of the roof. The rafters, often notched at the base so that they can be fixed more securely, are thus supported by the *cešin*, the purlins and the ridge pole, and to them the battens (*lule*), that are to receive the covering, are tied with plaited cords.

This type of roof frame becomes more complicated, in a way is doubled, when the area to be covered is bigger. In this case a box-like construction (locally known as a *sandoq*: "chest") is built on the joists. This is made of uprights (*xârpâ*: "feet of the ridge pole") supporting four big purlins and a central beam that in turn supports a row of forked uprights (*xârdâr*) that carry the ridge pole. The different components of this structure are held in place by a number of diagonal struts.

Although these structures are technically limited, they nevertheless distribute the load and oblique forces evenly between the walls and the posts (*sutun*) supporting the verandahs. The loads are in fact not great, as the covering materials are light and do not require very robust infrastructures. It is perhaps for this reason that the inhabitants have never felt the need to find and develop more sophisticated and efficient ways of building roofs.

The pointed roof

This covers square based buildings: rice barns perched on piles in the centre and east of the coastal plain, tall houses in the Sefid Rud delta.

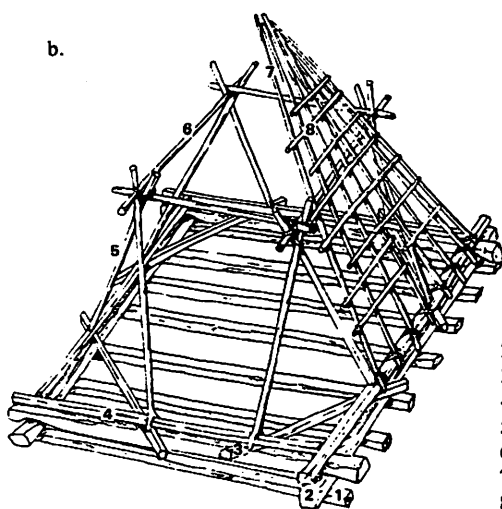
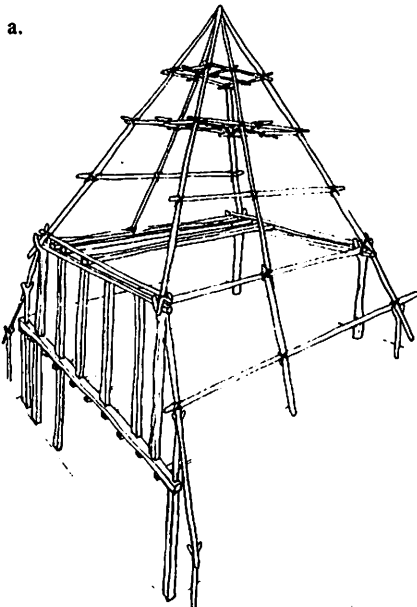
The simplest formula is to join four corner rafters (*serbaš*) together at the top, with their bases resting on the corner posts or, in the case of a house, on the base of the roof frame (beams supported by the posts carrying the verandah or by the walls). The corner rafters are also joined by purlins (*cašin*), forming reinforcing squares at different heights of the pyramidal structure. The intermediate rafters, equidistant at the base and coming together at the apex of the roof, are fixed to these purlins. A second technique is to construct a vertical triangle at each corner of the base of the roof. These triangles, formed of two poles (*leng*: "leg"), forked at the bottom to fit on to the pole plate (*perâcub*), carry four purlins. The rafters then rest on the pole plate, are supported by the purlins, then meet at the apex of the roof. Battens (*ajâr*) fixed to the rafters form the support for the roof covering.

As with the other types of roof frame, the different members are joined together by plaited cords, by the form of the piece itself (forked end of poles, for example) or by nails.

Roof and ridge covering

Roof and ridge covering techniques vary according to the materials used.

Bundles (*daste*, *mošre*: "handful") of rush or rice straw cover the roofing battens to form a covering that is even in appearance, without ridges. To obtain this result, the thatcher (*gâlisâz*) starts his work at the lowest level, then overlaps succeeding rows by half their length. He fixes them in place by passing a cord (*pic*) alternately over and under the bundles and tying it to the rafters. Covering the ridge raises no



1. *vășan*, joists supporting the roof frame
2. *nâl*, pole plate resting on the *vășan*
3. *bâlak*, short diagonal supporting the *perâcub*
4. *perâcub*, pole plate
5. *leng*, slanting poles forming a triangle
6. *garzatâj*, purlin
7. *sercub*, rafter
8. *ajâr*, batten

Figure 10: Two variants of the pointed roof.



Above: Inside of a roof covered with rice straw.

Opposite: Tiled roof.

Below: Roof covered with shingles and rice straw.



Roof covering of small boards (Tâleș piedmont)

special problems: on hipped roofs the bundles are placed over the ridge pole and held down on either side by a horizontal pole, and on pointed roofs a thick bundle (*guf*) is placed astride the apex. In former times this final bundle was protected by a *pošt-ε gεmεj* ("upturned cooking-pot"), nowadays by a tin can. The *gεmεj*, a feminine cooking utensil, denotes the prosperity and fecundity of the house. It is not without significance that the Gilāni dwelling should be capped and protected by this feminine symbol.

Roofs covered with small boards (*taxte*) and wooden shingles (*late*), which are thicker, are quite distinct in appearance: the boards are nailed on to the battens to form a regular scale-like pattern, with hollow wooden tiles covering the hip rafters and ridge pole, while the shingles are wedged in groups between two battens, partly and irregularly overlapping one another. Sometimes stones are placed on the shingles to stop them flying away in strong gusts of wind, and the shingles precariously balanced across the ridge pole are always held down by stones.

Tiles, as we have said, are fitted to the battens on their convex face; mortar is used to fix them, on the concave face this time, only on the hips and ridge. This is the only case in which mortar is used to fix roofing in local building practice.

Technique and aesthetics

A pleasing aesthetic effect is sought in the composition of the façade of the house, either by exploiting the qualities of the materials used, or through adding decorative elements or again by giving a particular harmonious order to the salient parts of the building.

The smooth, even daub that covers the façade may be coloured through adding yellow or red ochre (*zεrd-ε gεl*, *sorx-ε gεl*), or the whole façade may be given a coating of white clay or a coat of lime white-wash. Sometimes the façade is decorated with geometric or vegetable designs, traced with a darker ochre than that used for the facing. "Nowhere else in Persia", notes Anet, "have I seen the tree used like this as a decorative motif on the façade of houses"⁴⁴. Its presence should not really surprise when we consider the place the tree occupies in popular beliefs. It is most often the cypress, the ancient cosmological tree, whose representation has been perpetuated in this province where the dominance of the vegetation shapes men's practices and beliefs⁴⁵.

The most remarkable elements in the decor of the façade are of wood: the balustrades (*sorāhi*) of the verandahs are made of rough planks in the poorest houses, but form sophisticated embellishments to the houses of the more wealthy: the balusters may be crossed, arranged like the rays of the sun (*xoršidi*) around a semi circle, carved in herringbone patterns, curved, etc. The capitals at the top of the verandah posts (*sutun*) are sometimes finely carved, but in the peasant houses of the plain it is very rare to find the windows in the form of rosettes or trellis work, with small multicoloured panes, which are the jewels of urban architecture in the mountains and found in sanctuaries throughout the province. The only openings in traditional houses are double doors and simple window openings (*darbace*) to admit light and air to the rooms.

The harmonious equilibrium of the façade depends first of all on the regular spacing between the posts supporting the *ayvân*, which are usually three *alêš* apart (i.e. three "cubits", or about 1 m 50, the *alêš* being the peasant's traditional unit of measurement). This impression of symmetry is often reinforced by the central position of the door, opening to the only room, or by the even arrangement of openings on each side of the centre of the façade when the house has two rooms on the lower floor. These effects of horizontal symmetry, which could give an overall impression of monotony, are combined in the majority of houses with a vertical or oblique organization of the façade. In the first case, the arrangement of features on the lower floor is repeated vertically on the upper and covered by a steeply sloping pyramidal roof (two storey houses of the delta region). The result is a tall, graceful building, organized on an emphatically vertical pattern. In the second case, that most widespread on the Gilân plain, the façade is organized according to an ascending oblique pattern. The steps (*peš*) leading from the yard to the *ayvân* are virtually always located on the right hand side, the *talâr* (loggia on the upper floor) usually flanks the façade on the left hand side. The ratio between the length of the *talâr* and of the *ayvân* corresponds to one of a very limited number of harmonious relationships. Often the part of the *talâr* extending along the façade occupies one third of the total length, sometimes one quarter, and more rarely one sixth. Nothing seems more to clash with these harmonious principles than a house whose *talâr* covers half of the façade. In

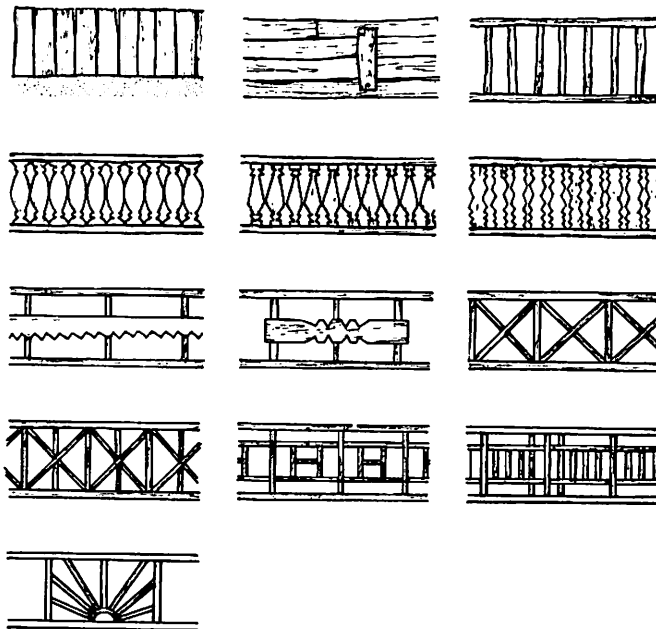
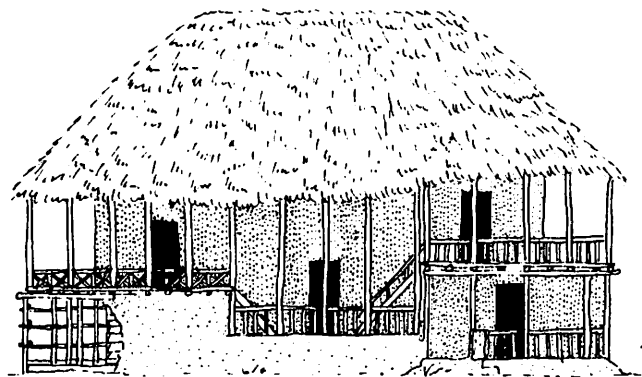


Figure 11: Types of balustrade
(progressing from the most rustic to the most complex)



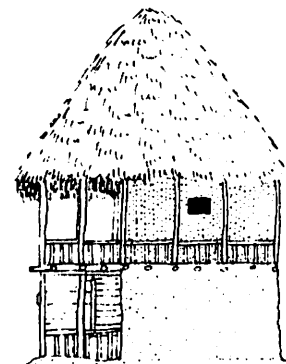
A

1. *ambâr*, store room
2. *otâq*, winter room
3. *otâq*

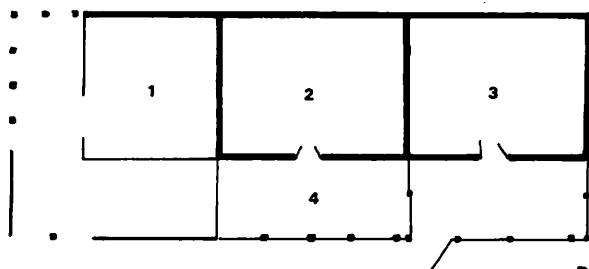


B

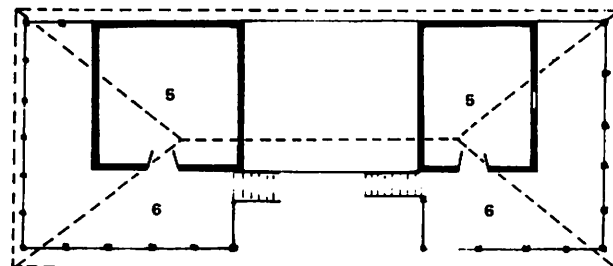
4. *ayvân*, verandah
5. *talâr-otâq*, *talâr* room
6. *talâr*



C



D



E

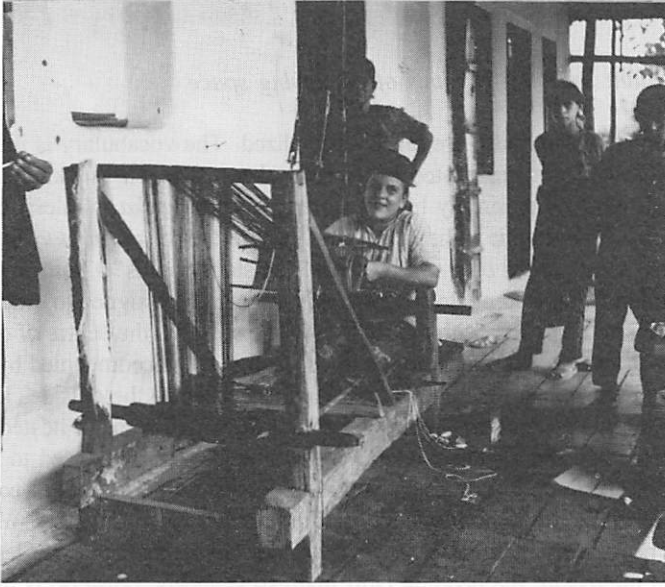
Figure 12. House built on a double oblique pattern (Sadeh, central Gilân plain, after S. Geran-Pay)

some cases, two *talâr* flank the building: they are arranged symmetrically on either side of the centre of the façade, which is then organized according to a double oblique pattern. It is as a function of this ascending organization of the building that the hierarchy of occupied spaces is organized, and that, as we shall see, the different practical and symbolic statuses of the rooms are defined.

Building procedures

It is often thought in the west that traditional houses are built by the inhabitants themselves. The example of Gilân, like that of most societies in the ancient world, belies this legend. Only hunter's shelters (*kume*) and light buildings (silkworm nursery) are built by the users, though even then they call on a specialist for difficult tasks (roof covering, for example). The foreman (*ostâd*) who directs all the work of building a house in Gilân is not the mason (*bannâ*), as in central Iran, but the carpenter-joiner (*najjâr*). Assisted by one or more aids (*arrekeš*: sawyers), he prepares the timbers, erects the wall and roof frames, makes and installs the doors. Each locality, each major quarter, has at least one *najjâr*, who generally has a small farm in addition to his building trade. It is only for large buildings that a mason is called in to prepare the daub, fill in and face the walls, build the niches in the rooms, and build the steps leading from the yard to the *ayvân*. More generally, these operations and all the labouring jobs on the site are performed by the future resident and his immediate family, with the neighbours occasionally joining in. Both men and women participate in the work. There are thus between five and ten adults working on the site, and thanks to this concentration of labour the construction time is relatively short: ten days or so for a modest single-room house, two to three months for a big two-storey building. The time at which the work is done has to be carefully chosen: autumn and winter being excluded because of the weather conditions, there remains only spring and summer, but building work must not be allowed to interfere too much with the major rice-growing operations, and advantage cannot be taken of the very end of the summer, even though there is less agricultural work then, as there would be a danger of the torrential autumn rains quickly washing away the fresh daub.

On completion of the work, a meal and sometimes a wrestling match between the men of the quartier (*košti mahalli*) brings together all those who have participated. Through the exchange of services and of talk to which it gives rise, house-building is an occasion that clearly demonstrates neighbourly mutual help (*hamkâri*) and sociability.



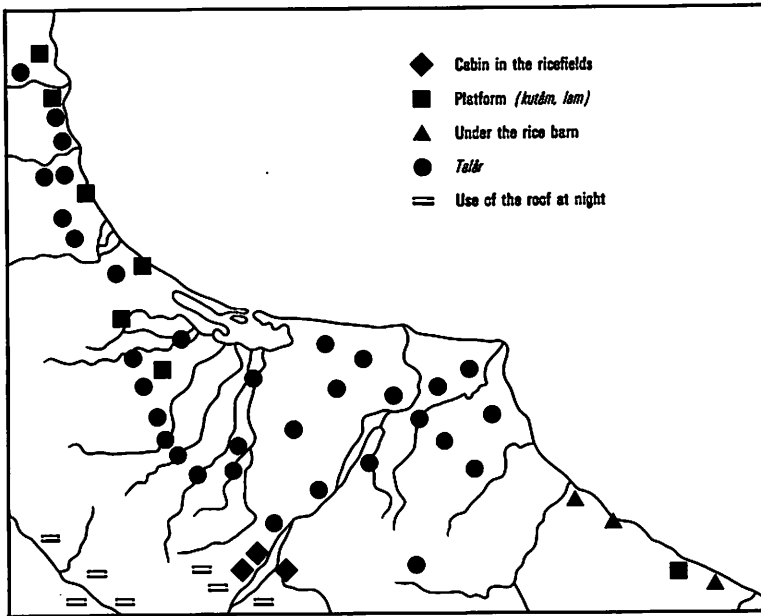
Different uses of the *ayvân*.
Weaving floss silk, preparing rush cords.

DISTRIBUTION OF SPACES AND WAYS OF LIVING

Living in Gilân: seasonal rhythms of occupying space

The main rooms of the house are rarely specialized. The vocabulary is illuminating on this point: they are not designated by functional terms (such as "kitchen", "dining-room", "bedroom"), but simply by the generic term *otâq* (*ka* in *tâleši*) completed, if necessary, by a topographic indication. Thus people talk of *pâ'in otâq* (*jirka* in *tâleši*) ("downstairs room"), *bâlâ otâq* or *talâr otâq* ("upstairs rooms", "talâr room"). These rooms are not in fact differentiated by permanent functions assigned to them, but instead constitute each in their turn, with the rhythm of the seasons, the centre of domestic life. The passage from the cold season to the hot season is thus accompanied by a migration of the residents from below to above and from the inside to the outside. In winter, the family eats, talks, sleeps in the downstairs room, the only one to be heated. The movement of the women during the preparation of a meal is thus reduced to a minimum. From No-Ruz, the *ayvân* becomes the centre of domestic life, a space of commensality, rest, feminine work (weaving floss silk, plaiting rice straw cords, etc.). When summer comes, the people install themselves on the *talâr*, cooler and a little less mosquito-infested than the *ayvân*: the bedding (soft mattresses, sheets, bolsters) is installed there and meals are eaten there. This trying to keep cool bursts apart the space of women's everyday work: to escape the heat, the women set up the cooking tripod in the yard, in the shade of a tree, in the *šigil* (the space under the house in the delta region), under the rice barn, etc., so that to prepare a meal they have to make several trips between the yard and the upper floor of the house. These trips are further complicated when the house is flanked by two *talâr*: people use the southern one during the evening and night when the mountain breezes come to cool the air, and the northern one during the day, to take advantage of the sea-breeze.

The status, practical and symbolic, assigned to the *talâr* (and the adjoining room: *talâr-otâq*) warrants some discussion, for of all the spaces in the house these are without doubt the most prized. It is there that at the height of the sweltering summer people feel *râhat* ("comfortable"), far from the labour of the fields, the quarrels of the *bâzâr* or of the nearest town, sources of *zahmat* ("pain, worry, trouble"); it is there that guests are entertained until late in the night. This world raised in the air, cool, reproduces in miniature the nearby mountains, towards which it often faces. The seasonal migration to the *talâr* thus appears as a substitute to a summer stay in the mountains, a materialisation of the desire of all Gil-ε mard: to leave the sticky heat of the low country to take a breath of fresh air (*havâxorî*) in the verdant mountains. This connection between the *talâr* and a mountain in miniature is established, clearly or confusedly, by the users themselves: they sometimes define this high place — or the platform (*lam*, *kutâm*) which replaces it in the *Tâleš* plain — as a *kolbe-ye yeylâqi* ("cabin in the summer pastures"). S. Eškevari notes, in fact, that the stock farmers and peasants who have had to renounce a summer migration to the mountains have



Map 7: Preferred quarters during the hot season.

immediately built a *talâr* on their house or a *lam* in the yard⁴⁶. This world in the air is also that of secrets, of confidences, of essential supplies to be protected from the eyes of others. It is here that people meet to deal with intimate business, dangerous subjects, here that the few books are stored and the precious documents kept.

Not all the houses have a *talâr*, however. In the central plain this pleasant space is sometimes a distinctive sign of the wealth of the residents: the poorest houses have no *talâr*, while those of the richest farmers proudly exhibit two well-equipped ones. However, is it possible to agree with Javâdi⁴⁷ who states that it is an architectural element reserved to former family mansions (houses of the *kadxodâ*, village chiefs, *mobašer*, stewards or feudal intermediaries, and of *xorde mâlek*, well-off smaller landowners)? Observing houses today, one is soon convinced that there is a much broader social distribution of *talâr*. Only the houses of landless peasants or micro-farmers have none. At Sadeh, for example, of a sample of 40 dwellings, only six had no *talâr*, while seven, belonging to rich farmers with over two hectares of ricefields, had two⁴⁸. It is nevertheless possible that in the older rural society, the *talâr* was seen as a kind of privilege reserved to landowners and their intermediaries, as was the case in France, where only this class was allowed to build towers or dovecotes, the difference being that in Gilân this privilege was not based on any codified law. An old peasant from Sarâvân, a locality on the southern edge of the Rašt district, explained that before the Agrarian Reform the landowner (*mâlek*) rarely allowed his peasants

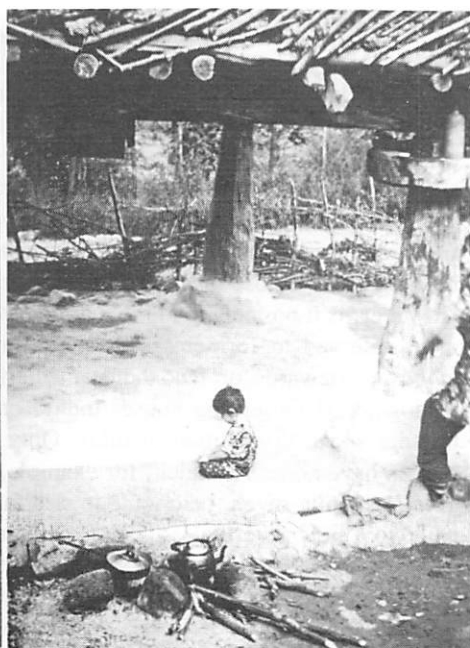
When there is no *talâr*, people install themselves:



on the *ker*



in a well-ventilated room



under the rice barn

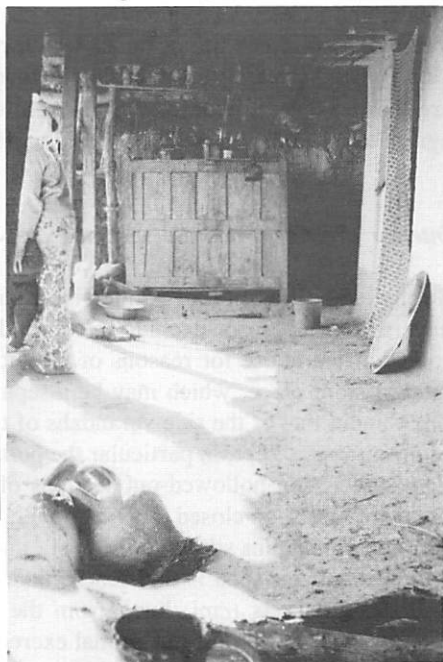
Arrangements for the production and storage of rice.



Germination of the rice seed in baskets hung from the ceiling of the *ayvân* (southern Tâles̃ plain).



Chest and jar for storing polished rice in a kitchen/store (northern Tâles̃)



Chest for storing polished rice in a corner of the *ayvân* (Lâhijân region).

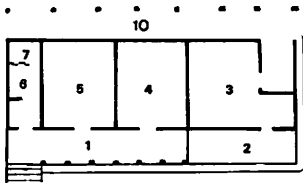
(*ra'yat*) to flank their house with a *talâr*. It is true that in this region of Gilân the major constructional work was at the expense of the owner, who therefore had every reason to want to limit the size of the building and any extensions.

How do people spend the summer in houses without a *talâr*? They install themselves under the *ayvân*, or under the *kæt* which extends it on one side of the house. In the traditional houses this is a kind of poor man's *talâr*.

On the edge of the plain, to west, south and east, the *talâr* and its substitute the *kæt* are much more rarely seen, giving way to summer installations separate from the house. In the Tâleš plain and in western Mâzandarân, families establish their summer quarters, as we have seen, on a platform (*lam*, *kutâm*), built a few steps from the house. In the western Gilân plain people happily install themselves on mats in the shade of the rice barn, whose supports and floor take on new functions. The big wooden discs that form rat-guards are used as food shelves; the floor joists are used to support the four cords of the new-born baby's crib, or to hang household linen and clothes. These are examples, among others, of the functional plasticity of the installations, so characteristic of the mode of living in Gilân. Lastly, mention must be made, among these summer arrangements, of the cabins located in the middle of the ricefields. This form of double habitat is found only on the southern edge of the ricegrowing plain, in the district of Rostemâbâd, and is connected more with the demands of the work than with the search for comfort. These cabins (*magar*) are in fact used to house implements, to rest between two bouts of work, to prepare the meals, and to keep an eye on the rice stacks after the harvest. Their presence is due to the particular conditions under which rice-growing developed in this fringe of the Gilân plain. Recently established in former beds of the Sefid Rud, these paddies are located several hundred metres from the permanent habitat which borders its old agricultural land, devoted to wheat, barley and olive growing.

Interior arrangements and specialized spaces

Strong as the tradition of residential mobility following the annual cycle may be, it nevertheless does not exclude the specialization, seasonal or permanent, of certain rooms of the house for reasons of production. Every house, big or small, has some kind of store place, which may be a separate room (*otâq-fâkon*, *ambâr*) or simply a place under one of the side verandahs of the building. It is often here that the reserve of provisions is kept, in particular the polished rice, stored in big wooden chests (*sandoq*, *ambâr*), in hollowed-out sections of tree trunk (*kande*, *mukol*) closed by a lid or, more rarely, in closed jars (*kuze*)⁴⁹. It is also here that people keep the paddy seed (*jo*), i.e. rice grains still with the husk, that has been selected for the future plantings. At new year this seed is moistened, then put to germinate, either in sacks or closed rice straw baskets (*cipi*) hung from the beams of the *ayvân*, or laid on mats and covered with rice straw and animal excrement to protect the seed from the cold. Two or three days later, sowing in the rice nurseries commences.



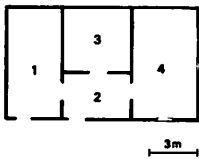
A. Lower floor



B. Upper floor

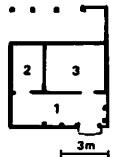
a. Feštēkē (see Figure 5b)

1. *ayvân*, verandah
2. *otâq ayvân-e ziri*, "room under the *ayvân*"
3. *tâvilē*, stable
4. *âtešxun otâq*, "room of the fire"
5. *otâq*, room
6. *otâq fâkun*, store room
7. *hammâm xâne*, bathroom
8. *talâr*, loggia
9. *talâr otâq*, "talâr room", where people stay in summer



b. Nomandân (see Figure 5d).

1. *datâ*, kitchen
2. *ayvân*, verandah
3. *darzevi* "room of the sheaves", where the rice is dried
4. *tanabi*, well-ventilated room where people stay in summer (substitute for *talâr*)

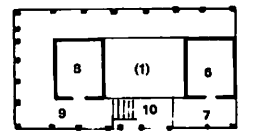
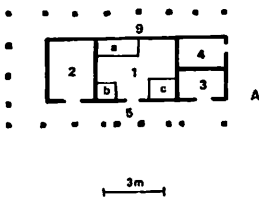


c. Qâsem Âbâd (see Figure 5c)

1. *ayvân*, verandah
2. *peŕvâkun*, corner of the *ayvân* arranged as granary and store room
3. *xone*, living room

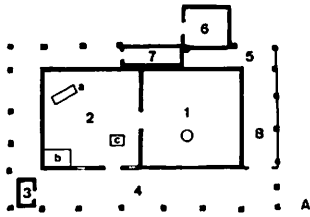
d. Sarâvân (see Figure 5a)

1. *âtešotâq*, "room of the fire", winter living room.
This room goes right up to the roof and is used for drying rice. It holds:
 - a. a set of shelves (*raf*)
 - b. a raised hearth (*geŕ-e-ojâq*)
 - c. another similar hearth
 2. *jirotâq*, "downstairs room"
 3. *jirotâq*, "downstairs room"
 4. *tâvilē*, stable
 5. *ayvân*, verandah
- B. Upper floor
6. *talâr otâq*, "talâr room"
 7. *talâr-e geli*, "talâr in mud", exposed to the north
 8. *talâr otâq*, "talâr room"
 9. *talâr*, exposed to south
 10. *ayvân*



The difference between modest houses (b, c) and those of richer farmers (d, and especially a) is easy to see.

Figure 13: Layout of rooms



e. Katesâl (see Figure 5e)

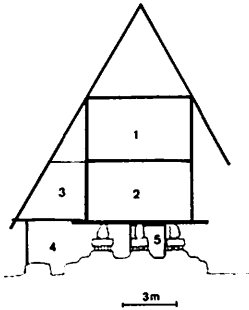
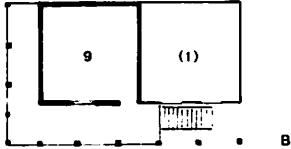
A. Lower floor

1. *dud otâq*, "room of the smoke", going right up to the roof and used for drying rice
2. *pâ'in otâq*, "downstairs room", winter living room, containing:
 - a. *garre*, cradle
 - b. *sundoq*, wooden chest used for storing polished rice
 - c. *ojâq farangi*, "foreign hearth", stove
3. *ambâr*, big rice chest
4. *ayvân*
5. *fâkon*, part of the verandah used as a lumber room
6. privy
7. *hammâm xâne*, bathroom
8. fuelwood store

B. Upper floor

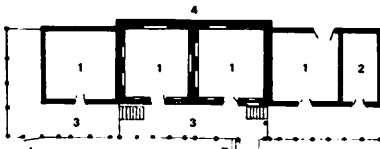
9. *talâr otâq*, "talâr room"

Note that here the *talâr* is exceptionally situated to the right of the façade



f. Komacâl (see Figure 5f)

1. *talâr-otâq*, married son's room
2. *otâq*, parents' room
3. fuelwood store
4. *şigil*, space between the ground and the floor of the house, where the stable is located
5. *morq-lâne*, poultry house



g. Sadeh (see Figure 5g).

A. Lower floor

1. *otâq*, "room"
2. *ambâr*, store
3. *ayvân*, front verandah
4. *fâkun*, back verandah, store room

B. Upper floor

5. *talâr-otâq*
6. *talâr*

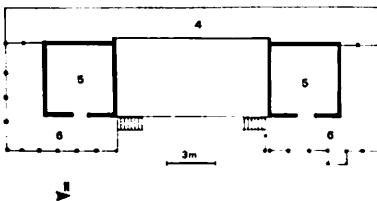


Figure 13: Layout of rooms

One room of the house, often the central room, may be devoted for a few weeks of the year to smoking (*dud dâdan*) the rice. This speciality of the Caspian provinces of Iran consists of drying the harvested sheaves or the paddy grain before threshing or husking. According to the Gil-ε mard, smoking has several virtues: the rice keeps better, then the smoked grain swells more during cooking, separates better and has a special aroma. Two techniques of drying are traditionally used in the province, each involving specific arrangements in the house⁵⁰:

— The first method is to hang the sheaves (*darz*) *before threshing* in a heated place, generally the main room of the house, which is then called the *dud otâq*, *âteš otâq*, *fel otâq* ("smoke room", "fire room", "rice husk room"). The sheaves are either placed astraddle poles or beams that join the roof purlins (the usual method in the Sefid Rud delta) or they are laid horizontally on trays covered with daub placed half-way between the floor and the roof (method often used in the north of the province). In the second case only the ears extend beyond the tray and are subjected to the direct action of the smoke. On the floor, the fire is regularly fed with a mixture of wood and rice husks which produces a great quantity of smoke. Combustion has to be slow and even, and it takes seven to fifteen days to dry ten *xarvar* (about 1.3 tons). Too rapid drying carries the risk of the grain cracking during husking, and also the risk of burning the house down. To prevent these risks, all the greater when the straw is directly exposed to the heat, the sheaves are hung as high as possible, so that the *dud otâq* of the houses in the delta extend right up to the roof, while the other rooms occupy only one storey.

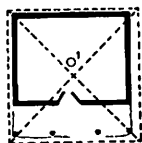
— The second method, found all over the interior plain, is to dry the paddy grains (*jo*), either by spreading them on trays covered with daub, or by placing them in containers (wooden boxes or bowls made of cow dung) which are themselves placed on trays or on shelves. The combustion method and time is similar regardless of whether smoking is before or after threshing.

The impact of this practice on domestic life in autumn can easily be seen. The asphyxiating atmosphere of the *dud otâq* makes the inhabitants of the house install themselves either in another room or under the *ayvân*. The rice husks used as fuel generate so much smoke that in former times they were used to punish delinquents: "A curious, and somewhat barbarous use of rice husks is as follows", note Rabino and Lafont at the beginning of this century, "when a villager has committed some offence, the local mayor sometimes condemns him to be shut in a closed room where a rice husks fire has been lit for half an hour, an hour or two hours, depending on the seriousness of the offence. This punishment is called *fal-é dud* ('rice husk smoke')"⁵¹.

These rice-drying facilities may be separated from the house and become an independent building (called *buj-xâne*: "rice house" or *germ xâne*: "hot house"). This is only very rarely the case in the wettest part of the delta, where the sheaves are hung under the roof of the house, and further west, in the region of Rašt, only the wealthy farmers have a drying house separate from the dwelling, but the presence of a *buj-xâne* in the enclosure is much more common in the interior plain and in western



a.

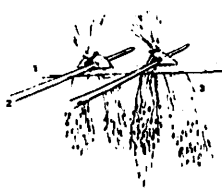


2m

buj-xâne, "rice house" (a) separate building, where cow dung containers (b) filled with paddy are placed on trays, and dried by the smoke from a hearth (1) burning wood and rice husks.



b.



c. Another drying technique:
suspension of sheaves of rice over the hearth in one of the rooms of the house.

1. *xârek*
2. *xârekcu*
3. *darz*, sheaf

Figure 14: Installations for drying rice.

Mâzandarân. An example among others of the different significance that may be attached, according to the context, to the same building is that in one place the *bujxâne* may denote wealth and social success, whereas in another it has no distinctive connotation whatever.

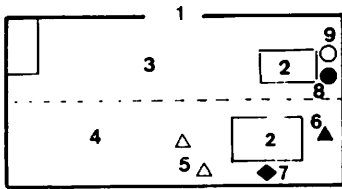
While the requirements of production may require the specialization, permanent or temporary, of some rooms of the house, the coexistence, within the same house, of several generations may also lead to fragmentation of the domestic space. The case is clear where two related couples live under the same roof: the younger couple then occupy the upper floor (*talâr* and *talâr-otâq* or verandah surrounding the house), and the older couple the lower floor. Seasonal migration between upstairs and downstairs is then limited by this privatization of the two floors. The same principle of dividing the space between the generations may apply within a nuclear family: sometimes the boys, when they reach puberty, sleep in the *talâr-otâq*, even in winter, while the parents, the girls and the young boys spend the night in the downstairs room. The right to a private space is one sign among others of the relative autonomy that the society grants to adolescents.

This juggling with space which consists in allocating such and such a room to such and such a new use, depending on needs, would be impossible and unthinkable if specific installations, such as fixed furniture, had set well-defined functions for the different rooms once and for all. There is none of this in the dwellings of Gilân. The

only interior fixtures are recesses in the walls, where lamps and provisions can be kept, or perhaps photographs commemorating a pilgrimage. In the downstairs room, and perhaps in other rooms used during the winter, there is a hearth (*kêle, ojâq*), a shallow cylindrical cavity, raised above floor level and surrounded by a low daubed wall where utensils can be stored. This serves both for cooking the food and for heating. This basic arrangement may be supplemented by a wood-burning stove. Apart from these few fixed items, the furniture consists of light units that can easily be moved from one room to another. If by virtue of its external morphology the Gilâni house can be defined as non-evolutive, its internal composition offers a functional plasticity that allows multiple adaptations.

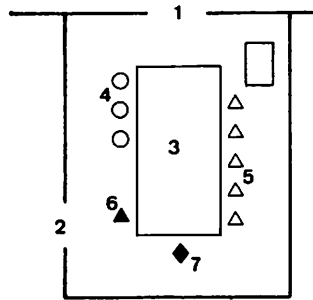
Masculine, feminine: The invisible barriers

While the distinctions between generations or age groups bring about a specialization of the rooms, there are paradoxically no spaces reserved exclusively for men or women. The lack of sexual differentiation of the rooms in the house is, as we have said, a striking feature of the Gilân way of life. In central Iran, the women are in fact jealously hidden away from the world in a special room, the *andarun*. In the Caspian area, on the other hand, they share the same spaces as the men, do not hesitate, to



a.

- 1. door
- 2. cloth
- 3. feminine space
- 4. masculine space
- 5. sons
- 6. master of the house
- 7. male guest
- 8. mistress of the house
- 9. daughter



b.

- 1. door
- 2. door opening on another room
- 3. cloth
- 4. mother and young girls
- 5. young boys
- 6. master of the house
- 7. male guest

Figure 15: Positions of people during a meal (two examples)

speak to male guests even if they are not close relatives — behaviour that has earned them an absurd reputation for frivolity. Can it be said, however, that there is no sexual division of the space within the dwelling? The fact is that there are invisible boundaries, i.e. never materialized by a wall or door, separating the women from the men in everyday life, even though they are in the same room. Here is an example:

It is winter, six o'clock in the evening. The husband pushes open the door of the downstairs room where the wife is busy preparing the dinner. The young children quickly fold their legs under them, the adolescents furtively put their cigarettes out. Silence falls. The father goes straight to the end of the room and sits down, leaning back against the wall. The young children go to the maternal space, while the adolescents place themselves at a respectful distance from their father, without ever leaning on the wall. Only the guest, if there is one, has the same privileges as the master of the house. After a moment of formality, during which there are a few polite exchanges, the atmosphere becomes more relaxed, but until the end of the evening nobody will cross the invisible boundary separating the men's space from that of the women and young children. Sometimes a separate cloth is spread for each category, but usually men and women eat at the same cloth, but do not leave their assigned places. If for some reason it becomes necessary to cross this frontier, it is a young boy, belonging to both the paternal and maternal worlds, who plays the role of mediator between the two microcosms.

The lack of sexual differentiation of the rooms is thus not the same thing as a confusion of the masculine and feminine spaces. When a family comes to visit, the husbands often install themselves at the end of the *ayvân*, the women at its entrance, reconstituting the two micro-societies.

The symbolic dimensions of the dwelling

It now remains to discuss the links that people establish between their house and the larger universe of their beliefs and their representation of the world. There are two ways of approaching the world of the symbolic: the one is to list the rites that aim to protect the house, the significance that individuals explicitly attribute to the objects, noises, shadows that people the domestic universe; the other is to identify the patterns and values that organize the constructed space, of which the individual is frequently only vaguely conscious. It is thus possible to distinguish between an "overt" symbolism that is clearly visible and a "covert" symbolism that has to be decyphered. The relative importance of these two modes of symbolic expression, which are of course not exclusive, varies significantly from one culture to another. Certain cultures exhibit a wealth of symbols in the form of material representations or ceremonies (as is the case with a great number of African cultures), while others, conversely, express their values more implicitly through forms whose meaning has to be decyphered. What is the situation in Gilân? The Gilâni are certainly not Bambaras, and while there is no lack of protection rites and symbolic objects in the décor of the house, they are

perhaps less important for an understanding of the values attached to the house than an examination of the formal and conceptual patterns that form the structure.

There is a set of rites and practices aimed at protecting the house from malignant influences: from the evil eye (*bad cešme*), evil genies (*jen*) and bad fairies (*pari*). When building commences, an animal is traditionally sacrificed to the accompaniment of formulae invoking divine protection, gestures and words aimed at consecrating the constructed space. The dwelling, as we have seen, often rests on layers of *âzâd* (Siberian elm) beams, to which the Gilâni attribute a protective value. The house is capped, as is sometimes the rice barn, by a *pošt-ε gmej*, a female symbol to ensure prosperity. Particular importance is attached to the presence of two animals reputed to bring luck: the grass snake (*šâhmâr*) (it is said that a house without a grass snake is not a house) and the pigeon (*kaburar*) (a pigeon house is often built in the enclosure). Against the *jen* which are thought to haunt the underneath of the house, the yard is strewn with fragments of metal objects which make them run away. In the course of the yearly cycle and the life cycle, there are a number of rites aimed at guaranteeing the prosperity of the house. On the first day of each month there is a tradition of fixing a branch from an evergreen tree to a post of the *ayvân* or to the door lintel, to symbolize the destiny wished for the family. A person who has a "light foot" (*sabok-pâ, pâ-damu*), i.e. who is lucky, is often asked to perform this ritual gesture. On the Wednesday preceding the new year (*cahâr šambesuri, kul-kule câršambe* in gilaki), people in certain cantons insist that somebody having a lucky foot (*xošqadam*) is the first to tread the floor of the house, thus inaugurating the new year under the best auspices. Among the numerous propitiatory rites surrounding marriage, some are aimed at ensuring the prosperity of the house and its occupants. When they arrive at the conjugal home, the couple go round the well, into which they throw coins, three or seven times; they often plant a fruit tree, whose first fruits they eat together. During the marriage ceremony, a cloth is spread before the bride and on this are placed eggs, honey, cakes, candles (symbols of virility), a mirror (symbol of water and of fecundity), a Koran, needles, green leaves — all objects that in their different ways denote domestic prosperity.

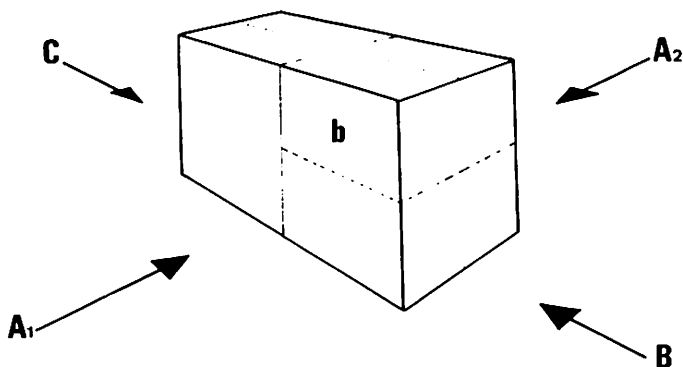
However, just as it is these symbols that establish a network of relations, positive or negative, between the house, the vegetable and animal worlds, the family and supernatural beings, it is patterns of organization of the inhabited space that translate the hierarchy of values attached to the dwelling.

The Gilân house, as we have seen, is organized according to an ascending pattern, the higher spaces being more esteemed, in the image of the noble parts of the body. The foundations are the feet or legs of the house (*pâ, lang*), the roof is its head (*ser*: "head"), the kingposts that support the roof are the shoulders (*kulek*). This analogy between the house and the human body is common enough — there is nothing more usual than to create technical terms on the basis of comparisons with parts of the body. It nevertheless confirms the hierarchy of spaces in the perception and conceptions of the Gilâni. Comparing the formal rules of arrangement of the façade of the house, the distribution and specialization of the rooms according to the seasons of the year

and of life and the values attached to each part of the house, it can be seen that the whole building is symbolically organized according to three axes whose extremities denote opposing values. The top symbolizes the hot season, youth, secrecy, the intimacy of love and the complicity within a given age group; the bottom the slack season, the weight of years, a semi-public world that has little to hide. The right-hand side of the house is occupied, on the lower floor, by the winter kitchen, place of family gathering; this is opposed to the left-hand side, space of masculine reception at the end of the *ayvân* or on the *talâr*. Lastly, the front is opposed to the back, as the clean to the dirty, the noble functions of production and consumption to the disposal of rubbish, the exhibited to the hidden. Thus the morphology of the Gilân house resumes the cycle of the seasons and of life: the ascending pattern which leads the young generations from below to above is reversed in the winter, etc. The architectural forms are thus clearly not only responses to constraints, and witness to a certain level of technical development, but are also organized according to indissolubly mingled stylistic and conceptual patterns where one can read the most intimate ethnic experience, a vision of the world.



A civilization of climbers — a child perched on the roof space of the house



A₁ Façade: clean space, place for noble activities, exposed to view.

A₂ Back of the house: place for less attractive activities, hidden.

B Space for hospitality.

b Summer space, world of youth, of secrets.

C Semi-public space world of old age, winter, and daily life.

Figure 16: Formal and semantic organization of the house

THE OUTBUILDINGS: FUNCTIONS AND SIGNS

Two farm buildings warrant particular attention because they symbolize the two major productive activities of the plain: the silkworm nursery and the rice barn. The former was long perceived, at least until the end of the 19th century when silk was still Gilân's most important product, as the building emblematic of the regional identity. There were few travellers in the last century who did not comment on, describe and even sketch it. The second exhibits a great variety of forms according to the micro-region, but also from one enclosure to another within the same establishment. Its morphology demonstrates at the same time a local style and the socio-economic status of its owner.

The silkworm nursery (*telembâr*) is generally a separate building, of light construction, as we have seen, made of a frame of vertical posts on which the rafters rest. The roof, which descends very low, is covered with rice straw or rushes. The walls are also covered with a thick layer of boxwood branches, reeds or rice straw, forming a veritable curtain right round the construction. The only opening (at one end), reached by a ladder, is closed by a piece of cloth. The aim of these arrangements is to keep the cocoonery in darkness and at an even, fairly high temperature (about 25°C). Inside the building are two trays: above, the bridge (*pard*), an open-work construction across which the silkworm breeder (*noqâni*) crawls to feed the silkworms, who lie on the bed (*ker*), a rough tray covered with rice straw, about 50 cm below the bridge. It is

Modello d'un **TILIMBAR** Persiano



Figure 17: Sketch of a silkworm house by an Italian expert (about 1860)

here that, during the month of May and early June, the breeder raises his silkworms (*kerm-e abrišam*), regularly bringing them mulberry branches. The ration has to be increased and given more frequently as the silkworms grow. The bed of litter also has to be changed regularly to keep the cocoonery clean. This cleaning (*kune*) is done from below, while the worms remain attached to the latest mulberry branches fed to them. At the end of their fifth stage, the silkworms, until then gluttonous, gradually give up eating. The breeder then quickly puts up branches of willow (*bid*), boxwood (*semšâd*) or bracken (*keraf*) on which the silkworms crawl to spin their cocoons (*pile*). The cocoon harvesting — picking the cocoons off the branches, sorting and packing them — the crowning operation in a hectic cycle of work, proceeds in an atmosphere of collective joy, with relatives and neighbours participating. On this occasion the breeder's wife prepares a special meal.

The size of the *telembâr* is an immediate indication of the importance of silkworm breeding in the overall equilibrium of the farm and perhaps of the wealth of the family. The size of the silkworm nursery is generally measured in terms of the number of rows of vertical posts (*sutun, seket*) that form its frame, so that a three *sutun telembâr*, the sign of a modest silkworm breeder, is opposed to a ten *sutun telembâr*, the sign of large-scale production. When silkworm breeding is simply a sideline, the cocoonery is no longer a separate building, but forms part of a multipurpose building, perhaps also housing the cowshed and stable, each section being separated off by partitions.

The actual method of silkworm breeding in Caspian Iran warrants some comment. It is an activity that demands a certain physical fitness and agility — it is necessary to climb a ladder, and crawl along the bridge to reach the functional part of the building, which is high up. This work is done by the men, while in most parts of the ancient world, silkworm breeding, a maternal task if ever there was one, is the task of the women, who are helped by the children. Is this further confirmation of the original distribution of activities between the sexes in this topsy-turvy world? Perhaps, but it should not be forgotten that silkworm breeding was the main productive activity in Gilân until the end of the last century, so that it is not surprising that it was, and still remains through force of habit, an essentially masculine affair.

Several factors, ecological, economic and stylistic, may account for the extraordinary variety of types of rice barn found in the province, and sometimes within the same establishment. Let us now consider these buildings, whose functions may be as varied as their forms.

The form most generally found in the north of the province and in the central plain to the west of the Sefid Rud is the barn built directly on the ground (called *kuruj* or *telembâr* in areas where silkworm breeding is practiced little or not at all). It is a light building, morphologically related to the silkworm nursery, but closed on all sides and covered with a hipped roof. This type of building is ill-suited for storing rice sheaves⁵², for if kept long here the harvest is subject to mildew, rotting and attack by rodents. If laid on the ground, the sheaves cannot remain intact more than two or



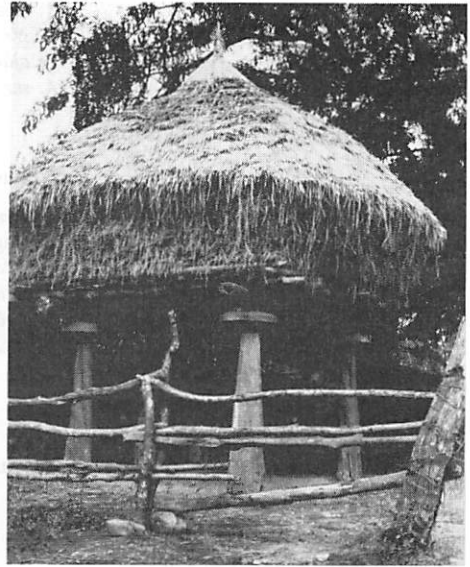
Imposing silkworm nurseries near Âstâne.



Before the silkworm nursery (southern Tâleš valley).



kundej (eastern Gilân plain)



kuppah (western Mâzandarân)



telebâr (Rašt district)



a. Barn set on the ground, *telebâr* type (Rašt district).

1. *kulēseket*
2. *ser seket*
3. *ajâr*, fixed lattice of branches before the entry
4. *ser*, "head", roof

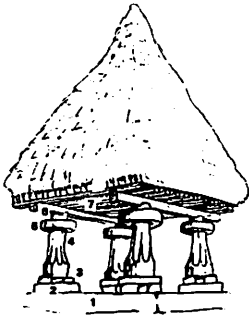


b. Barn set on posts, *kundej*, in the form of a house (eastern plain).

1. *xâne* and *cine*, stone and clay foundation
2. *leng*, "jamb", post
3. *kula*
4. *sutun*
5. *zigâl*
6. *ser*, roof

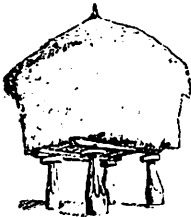


c. Barn set on posts, *kuti*, ogive-shaped (Paresar region, western plain)



d. Rice barn on posts, *kundej*, pyramid-shaped (Lâhijâni low country).

1. *xâk* and *cine*
2. *rit*
3. *taxte*, board
4. *lige*, post
5. *par*, rat guard made of a wooden disc
6. *lâr*
7. *vâšan*
8. *perâcub*

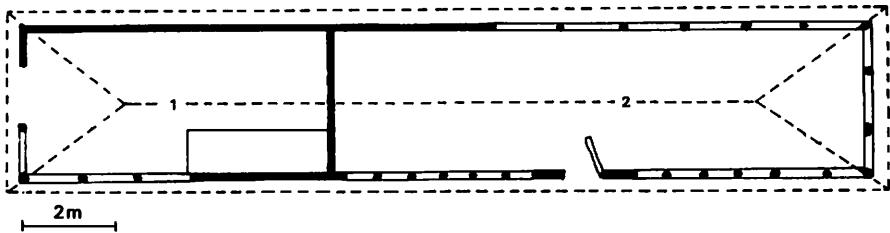
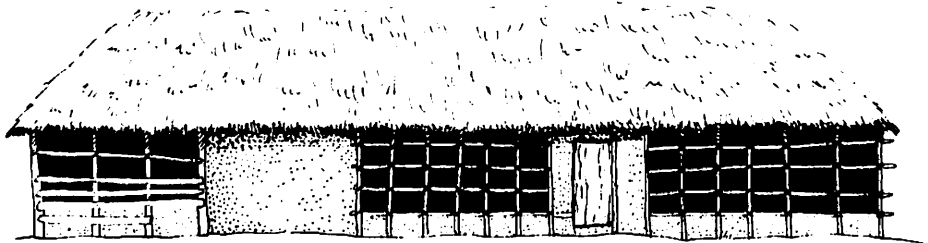


e. Covered rice stack on posts *kuppah* (western Mâzandarân).

Figure 18: Types of rice barn.

three months, i.e. the time required to thresh the whole of an average harvest of a small farm (30 to 40 quintals). Peasants who want to keep their harvest longer than this have to use other methods — more or less effective — to isolate and protect the rice. One method is to put a layer of straw on the ground before storing the sheaves, adding the branches of a kind of nettle whose odour discourages mice; or a row of logs is put down to insulate the harvested crop from the ground, or again the rice is stored on a grid of joists resting on short vertical posts. The barn is ventilated — essential if the risk of the moist grain rotting is to be avoided — simply by holes or openings in the walls. However ingenious the arrangement may be, the harvest can rarely be preserved intact more than a few months. However, barns built directly on the ground may have several other uses at the same time or during successive seasons of the year. Sometimes, in addition to the harvest, the barn is used to store agricultural implements and animal feed. Sometimes, once the harvest has been cleared out the barn becomes a cowshed or is temporarily fitted out for silkworm breeding. The metaphorical use of the word *telebâr* bears witness to these multiple uses: "*telebâr na kon!*" ("don't make a mess/don't be so untidy") one might say to a child who does not put his things away.

Barns built on piles (*kundej, kuti*), installations raised in the air, are much better suited for storing the grain. They take various forms: pyramidal in the Sefid Rud delta, in the form of a house in the eastern plain, circular or ogival in the districts of Pesar and Gil Dulâb to the west of the province, an island of barns on piles in an area where those built directly on the ground predominate.



1. *tâvile*, cowshed
2. rice barn

Figure 19: Dual-purpose *telebâr* (central Gilân) (after S. Geran-Pay).

Protected from the humidity of the soil and attack by rodents (round wooden rat-guards being placed at the top of the piles), these barns provide good conditions for storing the sheaves. To further improve these conditions, a chimney is left in the centre of the stack from base to apex to ensure continuous ventilation and drying. As we have said, this chimney is called *havâkeš* ("that draws the air") in Gilaki. One can but be struck by the resemblance between this arrangement and that developed in recent years by agronomists, who recommend, for proper storage of the harvest, ventilation by ambient air in the same way as by the *havâkeš*, which, by the way, none of them bothered to go and examine.

According to the Gil-ε mard, the rice sheaves can be kept intact in the *kundej* for a period of up to five or even seven years, depending on the weather conditions. Unlike the *telebâr*, the barn on piles has no other function than to store rice.

Two other forms of store, very much in the minority in the province, should be mentioned. First, the *kuppah*, found only on the eastern fringe of Gilân, but the dominant form in Tunekâbon, is a simple platform raised, like the *kundej* on piles fitted with wooden rat-guards. The stack of sheaves is simply covered with a layer of straw sufficient to protect it from the rain, and the storage period is not more than one year. Second, in the north of the Tâleš plain, where rice-growing is a recent activity and production negligible, the sheaves may be stored in one room of the house (*darz-aka*: "sheaf-room") before being rapidly threshed and husked.

How can we explain the distribution, and sometimes the coexistence within the same area, of the two main types of storage in the region, the *kundej* and the *telebâr* and their variants?

There are four main types of factor that may explain this at first sight confusing variety: ecological, economic, historical, and finally stylistic.

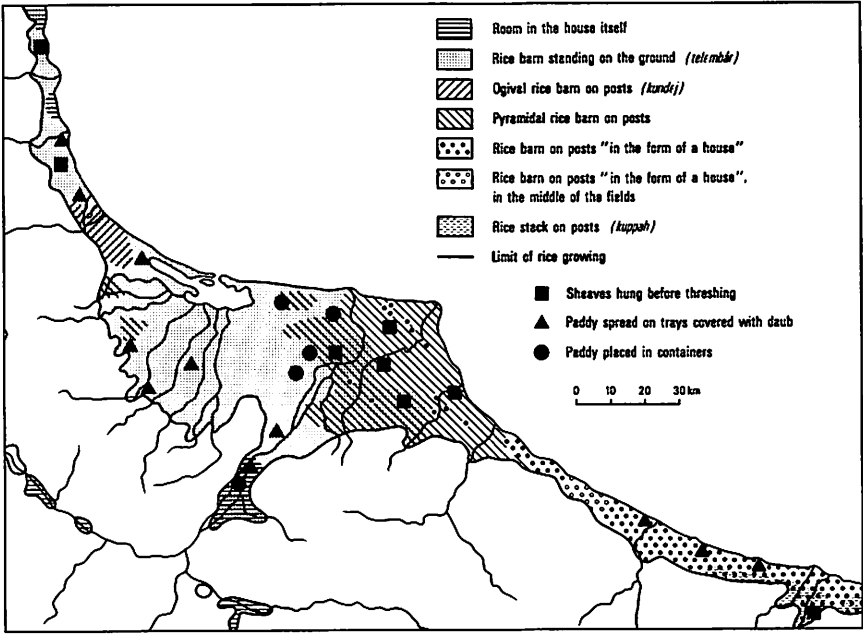
— The dividing line between the types of *kundej* and *telebâr* corresponds more or less to two natural limits: a *pedological limit* between highly hydromorphic soils (delta region) and less waterlogged soils (area to the west of Rašt), and a *rainfall limit* between the very high rainfall areas (regions of Rašt, the delta, Lâhijâni low country and the eastern plain) and areas with a lower rainfall (Fuman, southern fringe of the rice-growing plain). One could thus assume that in the wettest regions the barn on piles is the obvious solution, but this explanation is only partly true and does not take into account the variety of situations in individual localities.

— In the centre of our region, in fact, the two types of barn coexist. To the east of the Sefid Rud, the *kundej* is the majority type, while to the west the *telebâr* is most widespread. How is this relative coexistence to be explained? It is certain that a farmer's choice of one solution rather than the other is not arbitrary, but is the expression of a storage policy that he has adopted as a function of the area and nature of the land that he cultivates. It should be recalled here that the price of rice can vary very considerably from one season or one year to another. For example, a kilogramme of rice is one third more expensive in spring or early summer than in the autumn just after the harvest when there is an abundant supply. Small farmers, often in debt, are forced to sell their harvest as quickly as possible, while the better-off

farmers on the contrary can afford to store the greater part of the crop, selling it later, in seasons (spring, summer) or even in years when demand is high and supply limited. Under these conditions it is scarcely surprising that the small farmers generally have a *telembâr*, while the wealthier ones store their harvest in a *kundej*. For the small farmer, a barn perched on posts would be a ridiculous luxury, a building with no purpose. What point is there in having a building where the harvest can be stored for a long time if it is necessary to sell it within a few weeks of harvesting? On the contrary, the *telembâr* offers them several advantages: it is less expensive, it is not necessary to call upon a carpenter to build it, unlike the *kundej*, but above all, the *telembâr* can be used for different purposes at different times of the year, so that it may be now a barn, now a storeroom, now a cowshed, now a silkworm house.

Kundej and *telembâr* are thus sure indicators of the stratification of the peasantry in the central part of Gilân. For a farmer in this region, having a *kundej* is the sign of success, building a *kundej* is a mark of social promotion.

— Ecological and sociological explanations do not in themselves entirely explain the distribution of the two main types of rice barn, however. Why is the *telembâr* the dominant form in the Rašt district and the *kundej* the main one in the Lâhijân, while rainfall, hygrometry, importance of ricegrowing and structure of farms are all similar in the two districts? And furthermore, why are there barns on posts in the cantons of Pesar and Gil Dulâb to the west of Biyapas, in an area where the barn on the ground predominates?



Map 8: Distribution of the main types of rice barn and different methods of drying rice.

As we have seen, the Gilân was long divided into two parts, Biyapas and Biyapiš, each subject to the authority of a different governor. This historical division comes on top of a cultural division that roughly follows the course of the Sefid Rud. On either side of this frontier, linguistic, cultural and agricultural practices change slightly. The maximum spread of our two types of barn also corresponds to the limits of these spaces. The geographical distribution of the two types should no doubt be seen as one consequence, among others, of former political divisions that gradually influenced the processes of cultural differentiation and particularization. But then what can be said about the unexpected presence of barns perched on piles, in the shape of an ogive, in some cantons of the Tâleš plain where otherwise the *kuruj* is king? It can hardly be seen as a simple phenomenon of having spread from Biyapiš, as this unusual form of rice store is not found there. The answer no doubt lies in a combination of borrowing and invention: a borrowing of the general principle of the raised barn from the Gilâni of the east, and invention of the particular form, which according to oral tradition was developed by local carpenters about two centuries ago⁵³.

— Lastly, to explain the distribution of most types and variants of barn on the scale of the province as a whole, it is necessary to take into account technical and stylistic factors that functional, historical and geographical analyses would prefer to ignore.

The barn is generally built on the same architectural model as the house it is next to. Morphologically speaking, it is a house on a reduced scale. The shelter for the harvest, and this fact is not without significance, is in the image of man's dwelling. This similarity is very largely confirmed on examination of our sample. The rectangular *telembâr* with a hipped roof mirrors the house of the west of the province. The *kundej* of the delta have a square base and a pyramidal roof, like the houses of the Lâhijâni low country. Those of the eastern plain have a less steep roof, like the houses scattered along the narrow rice-growing fringe of this part of Gilân.

The differences between these barn types and variants are thus the product of complex determinants (ecological, economic, historical and stylistic), that often overlap. None of these factors on its own could account for the presence or absence of a particular form at a given point in the province. The same building, a given variant of the *kundej* for example, may, depending on the local context in which it fits, inform the observer immediately about the socio-economic status of its owner, or simply confirm that he belongs to a well-defined micro-region. The architectural form appears as a complex synthesis between functions and symbols whose relative weights may vary even within the same regional space.

CONCLUSIONS

Two questions remain unresolved at the end of this presentation: first, is it possible, and according to what criteria, to classify the dwellings that have been analysed, when each type of building is characterized by a whole range of variants, that frequently cannot be reduced to a few simple formulae; second, what future is there for these traditional houses in a world that has deeply changed over the last thirty years?

Outline of a typology

A nucleus of features, formal and functional, defines the identity of the house of the Gilân plain and rice-growing piedmont, and distinguishes it from the architectural forms of central Iran. Let us briefly recapitulate these common denominators: the house and its outbuildings are located in an enclosure bounded by fences built of vegetable materials; the house is raised off the ground; its walls are of wood covered with daub; the façade is then faced with a smooth, even coat of clay mixed with rice husks; the roof has four sides; the roof frame rests at least partly on a row of posts independent of the walls; all houses have a verandah on the façade (*ayvân*), providing access to the different rooms; these are rarely specialized and each becomes in turn, according to the season, the centre of domestic life. Each enclosure also contains, in addition to a well, installations, integrated with or separate from the house, for storing and drying the rice. The frame of the house is built by a specialist, the carpenter-joiner.

These common characteristics are differently arranged according to the micro-region, as can be seen on our maps showing the distribution of materials, building techniques and ways of using the inhabited space. What types can be distinguished when these data are superposed?

In the first place, the house of the plain can be distinguished from that of the piedmont, each being differentiated from the others by a series of features: the nature of the foundations, the slope of the roof, much less steep when the covering is shingles, the role of the walls in the architectural equilibrium of the construction (the walls being of more loadbearing importance in the piedmont than on the plain), the nature of the fences surrounding the enclosure, always of wood in the piedmont, at least partly of reed in the plain, etc.

Within the area of the plain itself, it is possible, through successive specifications, to isolate several variants; thus in central Gilân a clear distinction can be made between two groups of houses, those of *Biyapas* and those of *Biyapiš*. The former have a rectangular ground plan, are built on a terrace with a wooden frame that is invisible from the exterior and are covered with a hipped roof; when they have a verandah on the upper storey, it never surrounds the house, but occupies part only of the façade; the building used to store the sheaves of rice is generally a barn built directly on the ground; the rice is dried after threshing by placing the paddy on containers that are

set on trays covered with daub. To the east of the delta, on the other hand, the houses stand on visible assemblies of logs and beams; their ground plan is generally square, the roof pointed; the upper storey verandah surrounds the entire building; the prevalent form of the rice barn is a construction perched on four posts; the rice is drying by hanging the sheaves under the roof, etc.

Within each of these two groups it is possible to discern several variants, bearing witness to micro-regional particularities. Thus the form of the installations for summer living leads to a distinction, in Biyapas, between two variants, those flanked by a *talâr* (to the south and east), and those equipped with a *lam* or a *kutâm* (to the north and west). A study of specialized buildings would lead to further refinement of his typology: enclosure containing a tobacco drying house, a silkworm nursery, etc.

Do we have to stop at this identification, somewhat problematical, of regional types and variants, a differential geography of forms of dwelling? This would be to neglect other factors, social factors these, that have a great influence on the differentiation of architectural forms within a single point in space. These socio-economic factors can play a distinctive role — and hence serve as typological criteria, in two very different ways: either a given feature has the same significance throughout the regional space, or, on the contrary, its significance varies according to the local context into which it fits. In the first group, where the same forms always correspond to the same meaning, belong the following features which, from north to south and from east to west of the plain, indicate the wealth of the dwelling: a careful *fêl-ε gel* facing of the four walls of the house, sculpted balustrades, a domestic space of at least two rooms, a floor covered with carpet rather than simply with mats, a cowshed separate from the house, etc. In the second group, where the same forms may or may not, *depending on the context*, play a distinctive role on the sociological level, are elements such as tiles (very widespread in the extreme north but limited to wealthy dwellings in the south of the Tâleš plain), the barn raised on posts (common in Biyapîš, but indicating wealth in the Rašt plain), a rice drying house separate from the house (sign of prosperity in the neighbourhood of Rašt, common in several cantons of the interior plain and western Mâzandarân), the *talâr*, whose presence signals, depending on the place, very modest comfort or prosperity, etc.

In the final analysis, a typology should therefore be based on the combination of regional and social criteria. It should aim to identify, in addition to a general geography of types, significant configurations where the micro-regional and socio-economic factors interlink. To give a few examples: the enclosure of a small farmer in the Rašt district would be distinguished by the co-occurrence of the following elements: rectangular house with a hipped roof, faced with *fêl-ε gel* on the façade only, with no more than two rooms of which one is temporarily specialized for drying paddy in containers, a verandah on the lower floor, but no *talâr*, a barn built directly on the ground, used for storing rice, but also for other purposes, a cowshed integrated with the house, etc. Conversely, the enclosure of a rich farmer of the lâhijâni low country would boast the following: two storey house, with a verandah round both levels, raised about two metres off the ground, a pyramidal roof, three or more

rooms, of which one specialized for drying the suspended sheaves of rice, all the house walls faced with *f&l-ε g&l*, an imposing *kundej* perched on posts, a cowshed separate from the house, a silkworm nursery with six to ten rows of posts, etc.

The comparative analysis of these configurations, of each of their elements, reveals the complex significance with which the architectural forms are endowed. These forms are at one and the same time technical products, formal and material responses to the environmental constraints; systematic status identification marks, regional and social emblems; symbolic forms, the translation of mental patterns and value systems. These are the different aspects we have endeavoured to explain in the preceding pages.

Gilân dwellings today and tomorrow

It is fashionable these days to plead strongly in favour of maintaining vernacular architecture. The problem is that this kind of argument virtually never comes from those who are in daily contact with and actually live in traditional houses. The international expert, who often has only a very superficial knowledge of the region, the esthete who admires the harmony and style of local construction, and the resident, who often has to put up with a number of disadvantages in everyday life, tend to be on very different wavelengths. The former thinks in terms of maintenance, conservation, renovation, while the latter thinks only leaving the traditional house and cannot understand anyone singing its praises.

In thirty years, the local architecture of Gilân has changed very considerably. This movement has accelerated in the last ten years, and has not been slowed by the Islamic revolution. In 1982, during my last stay in Gilân, I saw that establishments I had known at the beginning of the 70s had been completely transformed: the traditional houses had become sheds and families now lived in modern houses, located at the front of the enclosure in order better to hide the vestiges of the past. What is this neo-gilâni architecture like? In its present form does it offer a satisfactory answer to the needs of its residents?

The house now stands on pillars of unbaked brick or more usually *parpens* (*buluk*, from the French "bloc"), made on the site with sand and cement imported from central Iran⁵⁴. The walls are often built on the same type of *parpens*. Foundation pillars and walls are sometimes covered with a «roughcast in a pastel shade (veronese green, sky blue, pink, yellow)» but frequently just show «the bare *parpens*»⁵⁵. The use of a sheet galvanized iron roof covering (*halab*) is widespread, and as a result the form of the roof has been considerably modified. While rush or rice straw thatch required a very steep roof, the sheets of iron can be used with a much shallower slope (which means a simpler roof frame and lower cost). The house now has only one habitable level, whose rooms communicate and are specialized (kitchen, bedroom, reception room, etc.). In the most modern houses the windows are placed on all sides of the building.

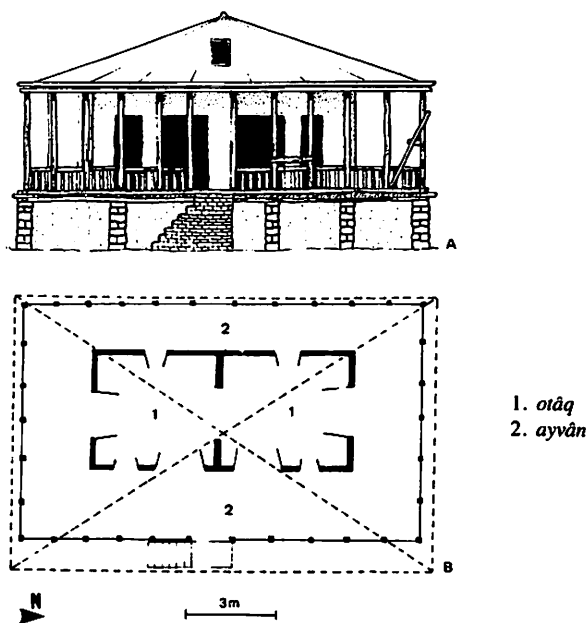


Figure 20: Neo-gilâni house. Parpen pillars, baked brick steps, galvanized iron roof. The rooms, on the same level, open on all sides of the house.

It is easy to see the modifications brought about by such changes: the materials are now bought rather than being taken from the surroundings; the building operation is no longer in the hands of the traditional foreman and specialists: the brick-maker/brick-layer has replaced the carpenter-joiner, the iron roofer (*halabsâz*) has replaced the thatcher (*gâlisâz*); the ascending pattern that ruled the formal and conceptual organization of the house has been changed: all the useful space is now concentrated on a single level; the house is open to the exterior in several directions, while the doors of the traditional house were all on the façade. The seasonal shifts within the house, formerly the general rule, are now much more limited, with only a move from the specialized rooms to the *ayvân*.

What are the advantages — and disadvantages — brought by these changes?

The house is now more expensive, costing about three times as much as a traditional house with the same number of rooms. The materials are no longer produced by the future residents or by local craftsmen. However, this modern building has one undeniable advantage for the inhabitants: it is no longer necessary to undertake very frequent renovation, in particular rethatching. But the iron roof, while it reduces the risk of fire, "amplifies the noise of the rain"⁵⁶, and is by no means a good insulation against the summer heat, as was the traditional roof covering of rice straw or rushes. The specialization of rooms, a pattern imported from outside, does not correspond to local custom. The richest people, for example, like to show off a sort of display room,



"Neo-gilâni" house (eastern plain).



The end of an architecture. In front of the old house a new one in parpens and baked bricks (Sefid Rud delta).

with a table, chairs, armchairs and buffet. It is then used to receive guests formally, but when the guests are more intimate, all this cumbersome furniture is pushed into the corners, just leaving the carpet where people eat, sit and sleep. The modern system of specialization of rooms is thus replaced by the traditional one of spatial polyvalence. Lastly, it should be noted that, while the overall appearance of the house has been transformed, it has not been radically modified: the building is still raised off the ground, the roof is lower but it still has four sides, the *ayvân* remains on the façade, etc. This modern architecture thus still bears the hallmark of the provincial style, but on the other hand it has largely wiped out the variants that were characteristic of each micro-region.

All in all, it is not possible to make a very positive assessment of this development. But in order to evaluate these recent modifications is it enough to try to analyse objective costs and benefits? The problem is not posed in such strictly functional terms. Living in a modern house in Gilân, as in many regions of the world, is not simply a matter of seeking more comfortable living conditions, but is also a demonstration of rejecting a past of work and suffering and appropriating the signs — often illusory — of emancipation. These are feelings that are difficult to understand for the well-off, who tend to look nostalgically back to a "past" they have never experienced and see it as a golden age.

NOTES AND REFERENCES

1. Cited by Chodzko (1849, IV: 260). Full references for the works and articles cited in these notes are given in the Bibliography.
2. According to Lord Curzon (1892, reprinted 1966, I:34).
3. On the spread of this type of roof covering in the Russian Empire, see the section on housing and the map of the main types of roof in the atlas *Russkie* [The Russians] (Avanetsov *et al.*, eds, 1967).
4. For a description of the whole region, see Bazin and Bromberger (1982); the maps illustrating this publication cover an area going considerably beyond the rice-growing plain and piedmont of Gilân. So the contrast between this latter area and the mountains and arid slopes of Alborz will be clearly shown.
5. For a discussion of the line of this frontier and its origin, see Bromberger (1979).
6. Chodzko (*op. cit.*: 261).
7. Chardin (1711, reprinted 1829, vol. VI: 109).
8. Hanway (1762, part III: 190)
9. MacKenzie (1859, fol. 33 and 158).
10. Chardin (*op. cit.*: 109).
11. Ibn Hauqal (Kramers and Wiet, eds. 1964: 371).
12. Rabino (1915-16: 46).
13. Curzon (*op. cit.*, I: 361).
14. Chodzko (1850, I: 295).
15. This description is inspired by the very detailed analysis of the vegetation given by M. Bazin in his fundamental work on the Tâles³ (Bazin, 1980).
16. Chodzko, (1850, II: 64-65).
17. Anonymous (La chasse aux tigres [Tiger Hunting], 1849, I:361-364).
18. On this fascinating episode in Iranian history and on the history of the *jangali* (forest dwellers) movement there are but few works. See in particular Kazemi and Abrahamian (1978: 284-293) and Chaqueri (1983).
19. Rabino and Lafont (1910: 135).
20. According to Chodzko's estimates, there were 289.000 inhabitants in 1850, and according to those of Rabino, 339.000 in 1915. The *ostân* now has a population of roughly 1.600.000.
21. On a non-mechanized farm (according to Sahami, 1965: 52). Rashid and Shaeri (1977: 13), for their part, estimate that each hectare of ricefield gives rise to 40 days of female labour and 60 days of male labour on a mechanized farm. This estimate appears to be far below the actual figure.
22. See Bazin (*op. cit.*, I: 91).
23. See Bazin and Bromberger (1982: 37-39).
24. The climatic conditions do not allow two rice crops a year as is the case in some parts of the Far East. On rice-growing in Gilân, see Bazin and Bromberger (printing).
25. On silkworm breeding and silk crafts in Gilân, see Bazin and Bromberger (1983).
26. Rabino (*op. cit.*: 25).
27. Ehlers (1971: 299).
28. Churchill (1879: 702).
29. For some very perceptive suggestions on this homology between the treatment of plants and animals on the one hand and social relationships on the other, see Haudricourt (1962).

30. MacKenzie (*op. cit.*: fol. 18).
31. Rabino (*op. cit.*: 28).
32. On pottery in Gilân, see Achouri (1977).
33. Bazin (*op. cit.*: I: 100-101).
34. See Bazin (*op. cit.*, I: 32-34) and Bazin and Bromberger (1982: 25 and map 11).
35. In the words of A. Upham Pope (1964-65, III: 1219). For this author red brick is "omnipresent" in Gilân and Mâzandarân building (*ibid.*: 1222), one example among others of the ignorance — not infrequently haughty — of certain classical orientalists with respect to popular culture.
36. Geran-Pay (1980). This author provides a very considerable amount of original data concerning traditional architecture in central Gilân.
37. Massé (1938, II: 369).
38. Chodzko (1850, II: 65). On the symbolic status of trees in Gilân, see Bazin (1978).
39. In the words of Bazin (1980, I: 164).
40. See Bazin and Bromberger (*op. cit.*: 75-78).
41. There is evidence that hollow tiles have been used in the region since the Middle Ages at least.
42. Geran-Pay (*op. cit.*, I: 86).
43. For a description of these herdsmen's houses, see Bazin (*op. cit.*, I:86).
44. Anet (1924: 133).
45. See Bromberger (1974: 49-50).
46. Eškevari (1975).
47. Javâdi (1964: 115-116).
48. Geran-Pay (*op. cit.*, I: 39-76).
49. On the storage of polished rice, see Bromberger (1979: 172).
50. On these techniques, see Bromberger (*op. cit.*: 170-171).
51. Rabino and Lafont (1911: 35).
52. On the deterioration of rice stored in barns built directly on the ground, see Bromberger (*op. cit.*: 166).
53. Bazin (*op. cit.*, I: 141).
54. Bazin (*op. cit.*, I: 167).
55. Bazin (*ibid.*).
56. Bazin (*ibid.*).

BIBLIOGRAPHY

- ACHOURI, T., *La poterie artisanale au Gilân*, Aix-en-Provence, thèse de IIIème cycle, 1977.
- AMIN FARSHIAN, M., *Un enclos public dans l'Iran caspien* (Proposition pour un centre de services dans un quartier du Gilân), Nancy, Mémoire de 3ème cycle, Unité Pédagogique d'Architecture, 1983.
- ANET, C., *Feuilles persanes*, Paris, Grasset, 1924.
- AVANETSOV, R.I., ALEXANDROV, V.A., BROUK, S.I. and al., *Russkie, Istoriko-etnografičeskii atlas*, Moscow, Nauka, 1967 (3 vol.).
- BAZIN, M., Le culte des arbres et des montagnes dans le Tâleš (Iran du nord-ouest), in *Quand le crible était dans la paille... Hommage à P.N. Boratav*, Paris, Maisonneuve et Larose, 1978 (pp. 95-104).
Le Tâlech, une région éthique au nord de l'Iran, Paris, A.D.P.F., 1980 (2 vol.).
- BAZIN, M. and BROMBERGER, C. (with collaboration of ASKARI, A. and KARIMI, A., *Gilân et Āzarbāyjân oriental, Cartes et documents ethnographiques*, Paris, A.D.P.F., 1982,
Abrišam, in *Encyclopaedia Iranica*, vol.I, fasc. 3, London, Boston..., Routledge and Kegan Paul 1983, (pp. 229-236).
Berenj, Rice, *ibid.* (sous presse).
- BROMBERGER, C., Habitations du Gilân, *Objets et Mondes*, t.XIV, fasc.I (pp. 3-56), 1974.
Dis-moi quelle est ta grange... Variations microrégionales et différenciations socio-économiques des techniques de conservation du riz dans la province du Gilân (Iran) *In Les techniques de conservation des grains à long terme*, I, Paris, C.N.R.S., 1979 (pp. 161-184).
- CHAQUERI, C., *L'Union soviétique et les tentatives de soviets en Iran*, Paris, Antidote, 1983.
- CHARDIN, J., *Voyages du chevalier Chardin en Perse et autres lieux de l'Orient*, Paris, Lecoq (Nouvelle Bibliothèque des Voyages), 1829 (rééd.).
- (La) Chasse au tigre dans les provinces transcaspiennes, *Nouvelles annales des voyages*, 1849, t.I (pp. 361-364).
- CHODZKO, A., Le Ghilân ou les marais caspiens, *Nouvelles annales des voyages* (1849, t.IV, pp. 257-271, 1850, t.I, pp. 193-215 et 285-306; t.II, pp. 61-76 and 200-209, t. III, pp. 68-93).
- CHURCHILL, H.A., Report by Consul Churchill on the Trade and Commerce of Ghilan for the Year 1877, in *Reports from their Majesty's consuls ... During the Year 1878*, London, Foreign Office, Harrison and Sons, 1879 (pp. 693-702).
- CURZON, G.N., *Persia and the Persian Question*, London, Frank Cass and Co, 1966 (2 vol.) (rééd.).
- EHLERS, E., Agrarsoziale Wandlungen im Kaspischen Tiefland Nordpersiens, in *Deutscher Geographentag Erlangen-Nürnberg*, 1-4/6/1971. Tagungsbericht und wissenschaftliche Abhandlungen (pp. 289-311).
- EŠKEVARI, K.S., *Ta'ammoli dar maskan-e Heydar Alât* ("Research on dwelling in Heydar Alât"), *Honar va Mardom*, n° 156, 1354/1975 (pp. 43-52).
- GERAN—PAY, S., *Habitat rural en Iran. Etude des unités d'habitation à Sadeh-Gilân*, Paris, Thèse de doctorat de IIIème cycle (Université de Paris IV), 1980 (2 vol.).
- HANWAY, J., *An Historical Account of the British Trade over the Caspian Sea...*, London, 1753 (4 vol.).
- HAUDRICOURT, A.G., Domestication des animaux, culture des plantes et traitement d'autrui, *L'Homme*, II, 1 (pp. 40-50).
- Ibn HAUQUAL, *Configuration de la terre* (ed. and transl. by KRAMERS, J.M. et WIET, G.), Paris, G.P. Maisonneuve et Larose, 1964 (2 vol.).

- JAVADI, M.H., *Banâhâ-ye karâne-ye jenubi-e daryâ-ye Xazar* ("Dwellings of the southern shores of the Caspian"), Tehran 1343/1964.
- KAZEMI, F. and ABRAHAMIAN, E., The non-revolutionary peasantry of modern Iran, *Iranian Studies*, IX, 1978 (pp. 259-304).
- MAC KIENZLE, C., *Narrative of a journey from Resht in Gilan through Mazandaran to Astarabad during the winter and spring 1858-59*, manuscript Foreign Office, (London).
- MASSE, H., *Croyances et coutumes persanes*, Paris, A. Maisonneuve, 1938 (2. vol.).
- POPE, A. Upham, Domestic architecture in *A Survey of Persian Art*, vol. III (The architecture of the islamic period), Tokyo, Meiji-Shobo, 1964-65.
- RABINO, H.L., Les provinces caspiennes de la Perse. Le Guilân, *Revue de Monde Musulman*, t. XXXII, 1915-16.
- RABINO, H.L. and LAFONT, D.F., La culture du riz au Guilân (Perse) et dans les autres provinces du sud de la Caspienne, *Annales de l'Ecole Nationale d'Agriculture de Montpellier*, t.X (1910) (pp. 130-163), t. XI (1911) (pp. 1-52).
- RASHID, A. and SHAERI, H., *The rice economy of an iranian village*, Tehran, Centre for Agricultural Marketing Development, 1977.
- SAHAMI, C., *Le Guilân*, Paris, P.U.F. (Pub. de la Faculté des Lettres et Sciences Humaines de l'Université de Clermont-Ferrand, fasc. 22), 1965.