MACEDONIAN DOMESTIC ARCHITECTURE

THE NORTHERN GREEK HOUSE
IN THE 18th & 19th CENTURIES

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1985
To my parents
I declare that this thesis is my own original work.

Dimitrios M. Dolgyras
June 1985
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**CHAPTER 6.**

THE ARCHETYPAL FORM OF MACEDONIAN ARCHITECTURE

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ABSTRACT

This thesis is primarily concerned with describing, evaluating and formulating a style of domestic architecture which is known as Macedonian. In doing so, 18th and 19th century houses of northern Greece are examined, their social, cultural and economic setting is commented on and their origins and creators are investigated. For the latter a comprehensive but succinct note about the Byzantine house and building legislation is made, a subject which is less known by those involved in architectural studies, as, until now, they have been more familiar with the monumental Byzantine creations.

Of the findings and questions which arise in the course of the thesis, those directly associated with the theory and practise of architecture are chosen for discussion. Particularly those which throw light on the field of study of architectures of peoples which result from one or more tradition applied by popular builders rather than architects.
The study of Macedonian, as any study of past architecture is part of the general architectural interest in investigating the built environment in terms of man's needs. Some contemporary needs are completely new, some are modified but others are no different to those of the past—a house is still a house.

Regardless of what building process a house is produced under or whether it evidences technological innovations, it is man's reaction to varying socio-economic and physical settings. Thus, an architecture, like language, costume, customs etc., is peculiar to the people that produced it. But the phenomenon per se of man's reaction to a setting is of great value to architects. That is to say, the wisdom to be gained from studying different architectures, past or present, goes beyond, for example, socio-economic considerations and tackles the problem of dwelling and living itself.

Nonetheless, the architecture of a people must first be observed keeping in mind the socio-economic and physical settings in which it was produced if it is to become meaningful and to be of value for a better understanding of houses as complex objects. It is this that the present thesis attempts.
Macedonian architecture, as a case of study, is of particular interest to contemporary architectural thinking. The period of the 18th and 19th centuries, to which the thesis refers, must on no account be considered as static, that is, the structures built in that period are not somehow arrested in their development. On the contrary, they are evidence of a continuation of the Byzantine building tradition. The import being that, in studying this period of Macedonian architecture we reap the benefits of a long history of development; solutions which satisfied two peoples – the Macedons and the Byzantines. In addition, we have at our disposal an archetype, a model house, which was capable of elaboration and application not only to the needs of different individuals, classes, trades etc., but also to different physical conditions, climates, sites etc.

It should be remembered that Byzantium stood astride West and East demonstrating a successful, working amalgamation of the two disciplines. Likewise, Macedonian architecture occurred in that very region where the West and the East meet, both in the geographical and the cultural sense, a Christian country occupied and ruled by Muslims; it issued from a society of many subcultures, not unlike our own society in which people speak with different voices. We architects must learn to encourage controversies,
co-operation and interchanges among the many. One prime way of doing so is to examine and understand man's past solutions and to make use of them within the contemporary frame.

The thesis consists of six chapters. Of them, the first three are basically an account of the Macedonian domestic architecture, seen, initially, from a town and then from a house perspective. While presenting this architecture, however, a few points concerning the arguments involved in the development of the thesis are accentuated or discussed; although the discussion usually remains on a surface level, so as not to alter the character of these three chapters which is descriptive rather than explanatory.

The last three chapters are those from which the thesis derives its substance and where its arguments are driven home. Although, in the presentation of the Macedonian
society and the Byzantine house, these chapters are in part descriptive, it is here that Macedonian architecture is understood in terms both of socio-economic factors and of precedence. In other words, here, in the second half of the thesis, the object house becomes meaningful.

More specifically, chapter one deals with the layouts of Macedonian towns. It discovers those features which seem to be universal regardless of the size and topographic particulars of the towns. Special interest is shown in the Macedonian town block. This feature of the town layout not only demonstrates an inner arrangement which is decisive for the house design but also, in conjunction with the street network from which it is inseparable, guides the outcome of the town layout itself.

In chapter two the Macedonian houses are described by selecting those of their features which characterize them; precisely those features which attribute the Macedonian identity to a house. No attempt is made to account for idioms and variations which occur in the different regions of the province, as the effort is to establish a model representative of all Macedonian houses of the 18th and 19th centuries. This, incidentally, is the difference between the study in hand and others dealing with the presentation of the architecture of separate regions or vil-
lages and towns of Macedonia. This chapter does, however, proceed in distinguishing certain categories of house. These categories are not formal considerations— they all account for a single, typical house, but view it as different manifestations of the socio-economic classes of owner to facilitate a better understanding of the reasoning in the final three chapters.

A classification of the plans of the Macedonian house comprises chapter three. This classification has a double purpose: to enable a crystallization of the typical Macedonian house plan and to illustrate the way in which a fixed articulation of spaces is sustained irrespective of any increase or decrease in their number or rearrangement of their placing on plan.

Chapter four begins with a description of Macedonian society with an eye to the multi-national synthesis of the population, divisions such as conqueror and conquered or Muslims and Christians and with a particular concern for the orientation of the population towards new economies that emerged along with the bourgeoisie in the beginning of the 18th century. All these affected the town layout and the house in specific ways which are analysed and discussed in the course of the chapter. Particular interest is also shown in the Greek-Macedonian family and the way
in which its institutionalized character is manifest in the design of the house.

The fifth chapter is twofold. First, by accounting for the Byzantine house, building legislation, architects and builders' guilds, it shows that the origin of Macedonian architecture lies in its Byzantine past. Second, it takes a look at the guilds of builders and the building trade in general in Macedonia. This chapter is particularly interesting in that it tackles the issue of domestic rather than monumental Byzantine architecture which, in contrast to the latter, is less known despite having guided the shape of Macedonian architecture, not to mention the domestic architectures of peoples in the greater Balkan area as well as in the Near East down to Palestine and the Sinai peninsula. Furthermore, chapter five provides evidence which may be applied to the Macedonian process of building and, by extension, to any process where architecture is in the hands of traditional builders.

Finally, the arguments of the thesis, and especially those of chapters four and five, are extended in chapter six. The latter is concerned with the Macedonian building task; penetrating the inner world of the traditional builders, while, simultaneously, commenting on traditional architecture and emphasizing that its maintenance was a conscious result rather than a lack of initiative or imagination.
CHAPTER ONE

THE LAYOUT OF MACEDONIAN TOWNS

1.1. Macedonia and its population.

1.1.1. Historical notes.

With the fall of Thessaloniki in 1430 followed by the fall of Constantinople in 1453, the Ottoman Turks proceeded to conquer Macedonia. Town after town was taken until the conquest was completed before the end of the 15th century. Some towns were razed to the ground and some were left half deserted as the population fled to the hills for safety. Others, however, went on working under the Turkish law.

Despite Turkish dominance, peace and order was not established. Throughout the 16th and 17th centuries Macedonia suffered disturbances of one kind or another, whether local skirmishes or major battles. Frequent raids by hordes of marauding Albanians contributed to the general instability and uncertainty. As a result, there was a continuous movement of population seeking safer locations in which to dwell, thus new villages in remote and naturally protected sites were established. Some people found refuge in those towns which had meanwhile been refortified and were protected by Turkish troops; others went abroad to Europe. (1).

Agriculture and commerce were kept to a minimum, not only because people feared losing everything to raiding par-

ties, but also because they did not wish to encourage the greed of the Turks. Consequently, people lived in a state of poverty which was reflected in their dwellings, (2). They were small and of a very poor standard; even those few who could afford better houses deliberately left the exterior uncared for in an attempt to mislead the Turks, (3).

This situation in Macedonia went on well into the 18th century. However, from the middle of that century onwards, the raids gradually ceased and a series of internal and foreign events led to a certain stability permitting a reawakening of Greek commercial ventures, (4). The Greeks who had gone abroad returned home rich, foreign trading resumed, local businesses became established. Many towns developed specialised industries. For example, in Kastoria and later in Siatista they made furs, in Veria linen floor covers for use in public baths and in Ampelakia cotton threads that were in great demand in Europe, (5).

Favourable trading locations and skilled craftsmanship producing a steady flow of goods and experienced merchants able to place them in profitable markets were the main factors of town growth. Thus, Macedonian towns became centres of trade and started to grow. Many of the poor and small Greek dwellings were replaced by big, comfortable houses. Several mansions appeared, evidence not only of the wealth but also of the privileged positions of their owners: the wealthy Greeks not only managed to 'acquire' certain positions in the Turkish governmental machine, (6), but, most importantly, also managed to run their own affairs independently. Although the privileges were restricted to church officials, businesses dealing with the authorities and a few administrative positions, (7), when properly handled these positions

(2) Simopoulos, 1976, p. 346.
(3) Ibid, pp. 16, 371 and 669.
(4) Ibid, p. 17.
(6) In the Ottoman Empire every position, privilege or office was bought. There were no salaries, on the contrary, every official bribed his superiors in order to keep a certain position, (Simopoulos, 1976, p. 670, footnote 1).
(7) Porter, 1763, pp. 136-165.
became very profitable to their Greek holders. Soon, the Greeks took almost all the internal trade of Macedonia into their hands and, after the French revolution, half of the foreign trade went into Greek hands too, (8).

As a result, a Greek middle class was created which gave a boost to the revival of Macedonian towns. In parallel, many of the educated Greeks together with the lettered clergy commenced a campaign to spread Greek ideals, the Orthodox faith and the history of the Greek nation from the ancient times to the more recent Byzantine era.

Meanwhile, the Turkish dominance was still there with its negative and stagnant attitude towards progress and industrialisation, its frequent wars with the West and with Imperial Russia, its heavy taxes and various oppressions against the Greeks. Despite all of these, the renewed material and spiritual forces that emerged during the second half of the 18th century moved decisively towards a renaissance which, by the middle of the 19th century, was quite evident in the Macedonian towns, (9). The city of Thessaloniki and towns like Kastoria, Veria, Ioannina, Monastiri, Krousevo, Meleniko and others, (fig. 1), prospered and became the cultural and commercial centres of Macedonia.

1.1.2. The ethnological fabric of towns.

The population of Macedonian towns ranged from 15,000 to 30,000, (10). For example, the population of Veria in 1831

(8) Simopoulos, 1976, p.17. See also p.181, footnote 2: The French, thanks to their philo-Turk foreign policy, had managed to take over most of the Turkish foreign trade. After the French revolution, however, Turko-French relations were not the same and the Greek commercial fleet managed to overrule the French.

(9) A more extended discussion of the Turkish authorities, the Greek communities and other social and economic issues appears in chapter 4.

(10) With the exception of Thessaloniki, the population of which, in 1768, was 65 to 70,000. Thessaloniki was as big as Manchester or Liverpool. Being the most important trade and military centre of Macedonia, Thessaloniki's population consisted of a plurality of nationalities, mainly Turks, Greeks and Jews, while many 'Franks', (the name given by Christians and Muslims to West Europeans), also lived and worked in Thessaloniki, (Simopoulos, 1976, p.693).
Fig. 1 Map of Macedonia showing its most important towns during the 18th and 19th centuries. The indicated boundaries are the present national ones, (drawn by the author).
was 18,000, (11), that of Kastoria in 1875 was 15 to 20,000, (12), while in Serres and Ioannina it was about 30,000, (13). The majority of the inhabitants were Greek and Turkish, but there were also minorities of other nationalities such as Slavs, Albanians, Jews and Gypsies, (14).

The distribution of the Greek, Turkish and other populations in the towns varied. For example, in Siatista, Naousa, Veria and Kozani there was a Greek majority, (15). In Floria, however, in the beginning of the 19th century, there were more Muslims, (Turks and Turko-Albanians), than Greeks, (16). Nevertheless, Greek was the predominant nationality in Macedonia as a whole; it believed the Orthodox faith, spoke the Greek language and was Greek in its social and cultural behaviour, (17).

There was a tendency for the different nationalities in each town to concentrate in different districts. In Veria, for instance, in the East part and in most of the South, only Greek families were to be found, while a sector near the centre of the town was Jewish, (18). In Kastoria, most of the Turkish families lived near the entrance to the town, (19). However, although there was a tendency for people of different nationalities to gather together, there were certain areas with a mixture of nationalities. For example, in Ioannina, from the East part of the town to the North, there were several neighbourhoods with a mixture of Greeks, Turks and Jews, (20).

It has been observed that the separation of nationalities in Macedonian towns became obvious only after new people came to inhabit them: after the incomers had taken all available space within the main bodies of the towns.

(17) For the ethnographic constitution of Macedonia during the Ottoman occupation see: Cousinery, 1831; Dimitsas, 1870-1896; Weigand, 1924 and Leak, 1835.
(18) Moutsopoulos, 1967, p. 43.
(usually defined by the town walls) they began settling outside in separate ethnological groups. (21). This resulted in congeries of districts each formed out of the particular needs and purposes of its inhabitants, e.g. religion, language and customs, but each supplemented the other in common needs and purposes, e.g. trading, cultural exchange and municipal affairs.

However, sometimes the significance of nationality was surpassed by social status or similarity of business so districts with mixed nationalities were formed representing the wealth or business of their inhabitants. For example, in Thessaloniki the richer Greeks, Turks, Jews and Franks lived in their own district along the Eastern shore of the town, (22). In Kastoria those who were in guilds dealing with the same trade formed their own districts, (23).

Although the various districts could be identified by the nationality, the business or the economic status of their inhabitants, distinguishing between them visually was difficult, sometimes impossible, because they were not spatially separated in the town layouts, i.e. there were no peripheral streets or open spaces between. More importantly, the buildings were similar; even the more notable ones were not designed as overpowering manifestations of wealth, but were merely bigger than the average and would exhibit their wealth in the interior rather than exterior decoration, in an attempt by the inhabitants to conceal their wealth, (24).

The building types were also the same for all nationalities. Occasionally, the only distinction between Turkish and Greek houses was that the former, in some cases, carried

(23) Moutsopoulos, 1962, p.34.
(24) Simopoulos, 1976, p.664: The rich Greek merchants, inside their houses, dressed in silk and furs and enjoyed every luxury; outside their houses they dressed in common clothes pretending they were poor.
inscriptions from the Koran.

Another reason for the lack of clear demarkation between districts was the purchase and sale of properties. In this way one nationality would penetrate the district of another and, after a series of purchases or sales, the size and capacity of a district would change. An interesting example which, on the one hand, proves that one nationality did not mind moving into houses which were built and inhabited by another and, on the other hand, shows that houses of different nationalities were basically similar, is an 18th century Jewish house in Veria which was, at a later stage, used by a Turkish judge. The only thing thought to be necessary in order to transform a Jewish house into a Turkish one was the replacement of the Jewish inscriptions on the exterior with Turkish, (25).

The taking over of certain key buildings, especially the seizing of churches which were converted into mosques, (26), by the Turkish authorities caused the most disturbance to the structure and borders of a district. For example, until 1590, the centre of the Greek community in Thessaloniki was the district around the Rotonda, the circular Byzantine cathedral. When the Rotonda was transformed into a mosque in 1590, the district disintegrated and broke up into smaller neighbourhood units, as Christian families moved away from the mosque while Muslim ones moved in. That situation lasted until 1880 when the Greek community used the church of St. Athanasios as its focal point. Ten years later, in 1890, the district started to grow towards the central market which apparently served as an additional point of interest for the district's inhabitants, (27).

(26) Ibid., p. 45: With the addition of a minaret many churches were converted into mosques.
An intrinsic characteristic of Macedonian towns, namely the fluctuation of their districts' borders, in normal circumstances, would affect the sizes of the districts, or, in extremes, would result in the dislodgement of districts from their initial location. A dislodged district would either be absorbed by other neighbouring ones, or would re-organise itself, intact, or in smaller pieces, at other locations in the town, (28). Of course, this could take considerable time. The districts of Veria were reduced from 16 to 12 in about 50 years, (29), though not due to any population decrease. In fact, the number of families increased, (30). As more families came to town, more houses were built which increased the capacity of some of the already existing districts, but caused the dislodgement of others. Thus, the population of Veria grew while the number of its districts decreased. Hence, the number of districts in a town is not indicative of its size. This can be seen in comparing different towns. For example, around the middle of the 19th century, Ioannina had twice the population of Veria despite having 20 and 16 districts respectively, (31).

There were, however, a few examples of districts with well defined borders. The most characteristic example was the Jewish district in Veria. The buildings on the border line of that district were arranged in such a manner as to leave two points of entry, (32).

Generally, the only way to locate the positions of districts in the town layouts is to trace buildings or places after which the districts were named. In most cases, these buildings or places were used as foci in the districts' development.

In figure 2 there are fourteen such foci on a plan of Kastoria. In the table below the plan, the corresponding

(28) The houses were evacuated by the members of a community and were taken by the members of another community; the term 'district' is used in a qualitative manner.
(29) Delacoulonche, 1858, p. 43: In 1850 Veria had 16 districts. Struck, 1908, p. 34: In 1908 Veria had 12 districts.
(30) Struck, 1908, p. 29.
(32) Moutsopoulos, 1967, p. 44.
Fig. 2 The districts of Kastoria, (Moutsopoulos, 1962, p. 27). The districts' foci, borders and classification added by the present author.
districts are grouped according to the type of focus they are named after: seven churches, three markets, one mosque, one street with tanneries, one tower which once was part of the town walls and one bath house. In addition, Kastoria has two districts which are named after their inhabitants' nationality, i.e. Turkish and Jewish. These districts are defined by their Turkish and Jewish houses correspondingly. Finally, Kastoria has three more districts which are named after important people in the town history. It is impossible to trace their foci and one can only rely on the knowledge of the local people, who indicated those areas circled on the plan in fig. 2.

1.2. The space in towns.

1.2.1. Impressions.

The impression of a Macedonian town afforded by a single glance from a distance is that of a building heap. However, by moving the eyes back and forth one begins to assimilate the parts and the intricacy of the whole acquires a qualitative coherence based on the repetition of patterns, textures and colours, (figs. 3 and 4). All buildings are variations of a common type, some smaller, some bigger. Most of them are two storey high but there are some three-storeyed buildings, too. Their lower parts display the plain stone of their construction while their upper parts are plastered white, in contrast to the sienna tint of the roof tiles. All buildings have low pitched roofs projecting over all their sides, and their windows are uniform rectangles set out in groups of three or four. The tallest of the buildings are no higher than trees such as cypresses, poplars or oaks which interpose with a variety of shades of green. Dominant structures or superstructures are absent. Only a few minarets jut out here and there, but, with their slim, pointed shape, are no more obtrusive than cypresses.

Each town is built within a unique topography. Its layout blends successfully with it by following the land contours, using the local materials and assuming shape from the advantages offered or the limits imposed by the features
Fig. 3 A view of Kastoria, (Moutsopoulos, 1962, p. 114).
Fig. 4 A view of Veria, (Moutsopoulos, 1967, illustration part, p. 8).
of the site, (figs. 5 and 6). In a way, Macedonian towns let nature flow through them rather than mastering or organizing it within them or keeping it outside their border. The denser a town became, the more buildings, streets etc. would replace features of the landscape such as trees, rocks, streams and fields. However, a large part of the landscape is, nonetheless, kept intact within the town due to the way the buildings and streets are arranged.

Figure 7 shows a plan of Kastoria: apart from one open area (indicated by the letter H on the plan) which in fact is a steep hillside, there are no other open spaces in the layout of the town.

The natural environment is not 'preserved' in large open spaces within the town, such as public parks, but flows through the yards of the houses. Looking closer at the plan in figure 7, it can be seen that the town blocks are of irregular shape, they vary in size and they are arranged in what seems to be a haphazard manner. The spaces resulting from the juxtaposition of the blocks seem to provide the street network. This can also be seen in figures 8 and 9.

A juxtaposition of irregular blocks enables the landscape to conserve its initial form, i.e. the form it had before the town grew. It can be argued that the blocks assumed irregular shapes from the non-geometrical arrangement of the features of their sites, such as rocks, trees and streams, or, to put it differently, a geometrical shape is not the best with which to enclose a piece of virgin land. Along the same line of thought, a street network based on a gridiron will almost certainly spoil a landscape, while a system of short, zig-zagging and curving streets will do much less harm to it. In this sense, therefore, parts of the natural environment are preserved within the variable shapes of the blocks, as the latter are arranged in an inter-locking and inter-dependent manner. The parts of the natural environment within the blocks do not give the impression of separate, discontinuous pieces, such as individual garden-like plots, but they depict the greater landscape, of which they are parts, in a chain-link fashion.

There are no large open spaces, wide streets or peri-
Fig. 5  Panoramic view of Kastoria, (Moutsopoulos, 1962, p. 44).
The town's form has been guided by the limits of its site.

Fig. 6  View of Kastoria from the South lake shore,
(Moutsopoulos, 1962, p. 113).
Apart from a few roads for vehicular traffic the town has preserved its original layout.
Fig. 8 Part of Kastoria's plan in the neighbourhood of St. Nicolaos, (Moutsopoulos, 1962, p. 28).
On the right, the area of the house blocks has been shaded, (by the present author).

Fig. 9 Part of Serviotis district in Kastoria, (Moutsopoulos, 1962, p. 53).
On the right, the area of the house blocks has been shaded, (by the present author).
pheral streets to disturb the continuity in the layout of Macedonian towns. The ratio between built and non-built space is stable throughout and it amounts to 30-40%, (fig. 10).

Public buildings do not have open spaces: mosques are situated along streets together with houses, or on street junctions which have been widened slightly to accommodate them, while churches are not placed on streets but behind houses. Markets are situated along a single street or on street junctions and other public buildings such as bathhouses or offices are treated just like the houses.

In fact, the public open space in Macedonian towns is restricted to that provided by the streets and is rather limited as the latter are narrow and short. It is also suppressed by the encroaching walls of the houses: with their yards stretching behind them, towards the centres of the blocks, the houses are built on the perimeters. They are either built continuously, i.e. next to each other, (fig. 11), or apart; in the latter case, stone walls reaching up to the first storey level complete the closed perimeters of the blocks, (fig. 12).

So, the space in the streets of towns, the only public outdoor space, cannot be described as open, because of its narrowness and its upright confinement by the tall walls of the buildings. It is a sheltered space though, cool in the hot summer days and protected from wind in the winter. It also provides protection from rain as the projections of the buildings' upper storeys and jutting out roofs cover a considerable part of the street near its edges, (fig. 13).

However, private open space is plentiful. Behind the high walls, the yards are a luminous green surprise as soon as the gates are opened: flowers, vegetables and orchards are cultivated there, (fig. 14).

As yards are usually joined towards the centres of the blocks, a sizeable open space is created from where the houses take sunlight and air. This space, however, is hardly visible from the streets, as it is surrounded by houses and high yard walls. Seen from its streets a Macedonian town seems stuffy and overcrowded. Seen from its yards it is light and comfortable. One has, therefore, two different
Fig. 10 The non-built space in a part of Serviotis district, (see fig. 9), has been shaded to be compared with the built space. This is a dense area of Kastoria: 40% of the site is built, (shading by the author).
Fig. 11 Houses in Siatista built continuously, (drawn by the author).

Fig. 12 Houses in Siatista, (drawn by the author).
Fig. 13 Typical views of a Macedonian town - a street in Veria, (drawn by the author).

Fig. 14 G. Sforzos mansion in Ampelakia, (drawn by the author).
impressions of space in a Macedonian town, (fig. 15).

The buildings act as barriers between the streets and the yards. Towards the streets they are almost totally closed on ground floor level, by means of solid stone walls and heavy wooden gates, (fig. 16). On the upper floor level, however, they have many windows, especially on their projecting parts, thus catching all possible views onto the streets, (fig. 17). Towards the yards the buildings are open on both ground and upper floor levels. Colonnades, balconies, large windows and thin walls built with wood and clay all open onto the yards, (fig. 18).

Apart from their role as barriers between streets and yards, the buildings play an intermediary role, too. For the people who live in them, they act as links between the public and private spaces. From the upper floors the inhabitants have direct visual and aural contact with the streets. To grasp the high degree of such contact, one needs only to compare it with the poor street contact which the inhabitants of houses with front gardens and those of apartments above third floor level have.

With the positioning, therefore, of the houses between public and private open spaces, two things are achieved: the yards are truly private while the houses are in close contact with the streets.

1.2.2. The streets.

The interspaces resulting from the juxtaposition of blocks of buildings provide the street network. Consequently, the streets are short, winding and of variable width, as they merely follow the perimeters of the blocks. One notices that streets, almost always, meet at 'T' junctions, that is, crossroads are rare or non-existent. Whether this is deliberate or not is difficult to decide. Nevertheless, it can be argued that 'T' junctions rather than crossroads are more likely to occur when blocks of non-uniform size and shape are placed next to each other.

The average width of streets is 3.50 to 4.50 metres. However, there are some very narrow passages, 2 metres wide, (fig. 19) and occasional widenings up to 6 metres, (fig. 20). The width of streets is measured from the base of the buil-
Fig. 15 On the left, public open space; on the right, private open space. Two distinctly different impressions of the town, (drawn by the author).
Fig. 16 Solid walls and heavy gates on the ground floors towards the streets, (Moutsopoulos, 1967, illustration part, p. 74).

Fig. 17 Many large openings on the upper floors towards the streets, (Moutsopoulos, 1967, illustr. part, p. 118).

Fig. 18 The openness of the houses towards their yards, (Moutsopoulos, illustr. part, p. 67).
Fig. 19 Plan of Sofou street in Veria, (Moutsopoulos, 1967, illustration part, p.26).

Fig. 20 Plan of Kontogeorgakis street in Veria, (Moutsopoulos, 1967, illustration part, p.27).
ding walls as there are no pavements. The streets are metalled either with pebbles or with flat stones of irregular size and shape. The surface is engineered so that the two sides of the street slope towards a central, open gutter. Occasionally, however, streets have a central ridge with gutters along their edges. In this case, rudimentary pavements prevent the gutter water from seeping into the foundations of the houses, (fig. 21).

The projecting upper floors of the buildings on both sides of each street give shelter from rain or sun. There are cases where the projecting roofs of opposite buildings cover the greater part of the streets, leaving a narrow gap along their axes, (fig. 22).

On hilly sites, the streets follow the natural slope of the ground. When the slope is too steep, accessibility is facilitated by broad steps, easy for animals, like donkeys, horses and cows, to climb. One may observe that just as streets of today are made to suit wheeled traffic, those of Macedonian towns were made to suit animals. The broad steps are not the only evidence: the quoins of buildings that are situated on junctions of narrow streets are cut out to a height equal to that of a loaded animal, so that it can go round the corner comfortably, (33). Also, gates of houses on narrow streets are often placed obliquely in relation to the street axes so that animals can be led through them without any difficulty, (34).

It has been suggested that streets on hilly sites resulted from paths used by animals and people, (35). Although this may be true to some degree, it does not explain why steps had to be engineered so that animals could climb a steep slope, or why people made sharp bends in their streets, something uncomfortable and unnatural for a moving animal. These are indications that, although streets have features which respond to animal traffic, they are not tracings of

Two options for street gutters. On the left, a central gutter; on the right, two edge gutters.

animal paths. But even if some streets did coincide with old animal paths this was rather fortunate: "Those who refer to the winding streets as mere tracings of the cow path do not realise that the cow's habit of following contours usually produces a more economical and sensible layout on hilly sites than any inflexible system of straight streets", (36).

It has also been suggested that the streets did not follow any rules in their making, (37), or that they were accidental, (38). Such suggestions usually denote lack of evidence, i.e. when one cannot find proof of any rules one tends to assume that the streets are accidental. In any case, it is unreasonable to suggest, on the one hand, that they are accidental and to admit, on the other hand, that they are practical and in complete harmony with the environment and with the habits of people: "The street network in Veria, as in other towns of Macedonia, gives a charming impression which is not unjustifiable but is based on the complete harmony, (of the street network), with the natural environment, with the habits of people and on the practicality in the arrangement of streets and houses", (39). It is wrong to assume that the harmony of the streets with the buildings in every Macedonian town is accidental. On the contrary, just because in every Macedonian town streets and buildings are in harmony the streets are not accidental.

The suggestion, made earlier, that the streets resulted from the juxtaposition of blocks of buildings was not meant to imply that the streets were gaps, left over, between blocks. It was to point out that the streets did not exist in their own right, but they were attached to the shape of the blocks' perimeters. Their lengths, widths, axes and junctions were determined by the juxtaposition of the blocks. If the streets are viewed separately from the blocks of the towns they ap-

pear as devious, grudging passages. But when viewed in their context they become purposeful and harmonious with the environment.

As discussed in more detail later, Macedonian towns did not follow a gridiron plan in their making. Therefore the streets were not pre-determined or thought out before the appearance of the blocks. As the towns grew slowly and new blocks were added to their layouts, streets started to take shape, bending and zig-zagging inbetween the blocks. The various shapes of the blocks and their small size resulted in a rather complex street network. As one street's length was very rarely carried on to another, long, straight streets are non-existent. Instead, many short, bending streets meeting at 'T' junctions provide the pedestrian with a plurality of alternative routes. While a slow curve is the natural line of a pedestrian, (40), short cuts through narrow lanes are one's time saving ways and natural habits. With its ever changing direction, the street network of Macedonian towns appears to be suitable for the everyday pedestrian needs. One must not forget that it was not meant for anything else. It was not meant to be for wheeled traffic, neither for any sewage system, nor for electricity poles, nor religious processions and military parades. The latter is a very likely reason why Macedonian towns do not even have at least one long, wide, central street: "broad streets are not a mere by-product of wheeled chariots or carriages; religious processions and military parades, both have need of them", (41).

The complex street network at first sight brings confusion. One who is unfamiliar with a particular street network of a town loses sense of direction; the streets become a labyrinth. This, of course, was not a problem for the inhabitants of a particular town, but one for newcomers and intruders. Once the latter had made their way into a town, they could not easily and quickly get out. Meanwhile, the

inhabitants, knowing their way about the town, would take cover or round the intruders up and fight them from advantageous positions. This is what happened, for example, in the revolution in 1821, when Greek patriots made their way into the gypsy neighbourhood in an attempt to capture Veria: they found themselves surrounded by the enemy who was firing at them from the gates and windows of the houses. The patriots set fire to a few houses, but, eventually, they were forced to withdraw, (42). So the Macedonian street network provided the inhabitants of towns with a means of resisting invasion. This quality of twisting streets in between blocks of buildings arranged in an irregular mode must have been recognised by the Macedonians. Centuries before, Aristotle had pointed out that "The whole town should not be laid out in straight lines, but only certain quarters and regions: thus security and beauty will be combined", (43).

For Aristotle beauty in towns was the result of planning in straight lines. Alberti had a different idea and recognised the visual values of the continuously curving streets with their gently blocked yet ever-changing vistas, (44). In any case, the visual quality of a Macedonian town is not the main subject of this discussion. Although highly admired and recognised, the visual quality will be left in the background for the purpose of disclosing other characteristics which explain, on the one hand, the highly complex structures of towns and, on the other hand, establish an understanding of the towns on a base other than picturesqueness: "...to find higher qualities than picturesqueness in vernacular and primitive architecture", (45), "it is vital that we discover the property of old towns which gave them life...", (46). In the following discussion about the blocks of buildings we continue that understanding of Macedonian towns which is based on observation and comparison of facts.

1.2.3. The house blocks.

Figure 23 is a plan of a block of buildings in Veria. It contains eleven buildings which make it a rather densely built block as most in Veria, or in other Macedonian towns, contain two to five buildings, (47). However, this is a comprehensive example as it includes a church and a shop, on which certain observations may be made. The shaded spaces 'C' and 'G' represent the approximate positions of houses that had been demolished by the time this plan was drawn, (48). The rest of the plan is clear and one can see the buildings and their yards on ground floor level and also those parts of the yards that are covered by the upper floors of the buildings, as indicated with doted lines. Nine of the buildings are houses (including the two shaded spaces) and one a church and one a shop (bakery). The block is divided by stone walls into separate, private plots. There are nine plots, the border lines of which are shown in figure 24.

It can be noticed that, apart from 'x', all plots are arranged on the perimeter of the block, having, in consequence, at least one of their sides adjacent to the street from where there is access to each site. Plot 'x', however, as it has no proximity to any street, is accessible via a pathway that runs between 'h' and 'g'. Most of the plots have one gate each, nevertheless, 'a', 'b' and 'h' have two each. There is an explanation for the second gate of 'h' (to be discussed later) but the second gates of 'a' and 'b' seem to be secondary or auxiliary. Indeed, looking at figure 23, in both houses, the first gate leads into the covered part of the yard where the staircase to the house is located, while the second leads directly into the open yard. The former may thus be considered as the front gate and the latter as the back, so to speak, of the house/yard complex.

The sizes of the plots vary since bigger buildings need bigger sites. This, of course, is an obvious statement, however, its possible implication that smaller buildings need smaller plots does not apply to certain modes of planning (past or present). What must be emphasised is that in

(47) Compare this block with the blocks in figs. 8 and 9.
(48) The plan was drawn sometime before 1967.
Fig. 23 A block of buildings in the Christ neighbourhood of Veria, (Moutsopoulos, 1971, p. 164).
(Present author's numbering).

Fig. 24 An outline of the plots' arrangement inside the block of fig. 23.
The arrows indicate the entrances to each plot, (drawn by the author).
the Macedonian mode of planning and, in any given block, one does not find a large building in a plot which is smaller than that of a smaller building. In addition, what may also be observed is that some of the buildings of the block could do with some extra open space, like, for example, the house on plot f, whereas there is no building in the block which seems too small for its plot, in comparison with the neighbouring buildings. This may imply lack of space in general, but may also imply a conscious attempt of the Macedonians to take no more space than actually needed for each particular building. In fact, the space needed for a building is small in relation to the building's volume, because its ground floor area is usually smaller than that of its upper floor(s). In most of the buildings the upper level projects over a considerable part of their yards, supported by wooden pillars. Thus, roofed-over spaces are added to the open spaces of the yards. A comparison between the two drawings in figure 25 shows how much space is gained on ground floor level by such a design.

In figure 24, one notices that apart from the sizes, the shapes of the plots vary, too. Actually, the shapes of certain of them are rather irregular, e.g. plots f, x and e. However, their irregularity is counterpoised by the positioning of the buildings, e.g. the location of house 'J' makes sense of the irregular boundaries of e and f with x and thus makes them inconspicuous, (fig. 23). It can be suggested that the shape of the plots is positional, in other words determined by the position of the buildings themselves. One tends to agree with this because, as discussed later, the layout of the block, as seen now, is not the result of a single building operation, but that of at least as many consecutive operations as there are buildings in the block.

Although this particular block, chosen for an example, seems to be final and unable to accept any more buildings, other blocks, and there are many to be found in Macedonian towns, could accept more buildings and, as a result, manifest an altogether different site arrangement. Consequently, the shapes of the pre-existing plots would be altered. Thus the irregularity of certain boundaries within the block may be
Fig. 25 Above, the remaining open space after the projection of both ground and upper floors of the buildings. Below, the remaining open space after the projection of the ground floors only, (drawn by the author).
explained as adaptations that were thought to be necessary when newer buildings were to be placed next to older ones. Of course, one must not misunderstand the above suggestion and assume that what seems to be irregular in the present state of the block is the result of upsetting a pre-existing regularity. On the contrary, with the addition of new buildings a number of the pre-existing irregularities were eliminated, others remained, while some new ones appeared. We are not in a position to attest which irregularity is older and which newer, because there are no plans of different phases in the block's formation. However, we know that certain buildings were built on parts of other buildings' plots and thus caused an alteration of the plots' shape. For example, the church, 'I', which is discussed later.

To continue with the observation of the block, it can be noticed that each building occupies one or more sides of its plot. More specifically, each building occupies the side or sides of the site that are adjacent to the street(s). Consequently, the remaining open areas stretch behind the buildings towards the centre of the block. These are the yards of the buildings each of which has a covered and an open part. The covered one is paved and is the point of entry through the street gate. This may be observed on houses A, B, D and F. The open part is left unpaved as it is the actual garden of the buildings where various plants are grown.

Although yards are separated by head-high stone walls, there are certain doorways that make communication between yards possible. There are five such doorways: between yards b and x, a and g, f and x, g and x, and finally, between yards e and d. It is possible, therefore, to move from one end of the block to the other without having to go out of the block, around and in again through somebody else's front gate. Nevertheless, it has been suggested, (49), that these doorways were not to be used except in emergencies: in the case when the front gate of one's property was violated these doorways served as a back door escape route through the neigh-

(49) Moutsopoulos, 1967, p. 47.
bours' properties and from there out to the street on the other side of the block. For example, from yard a one could go to g and from there to x where one had the choice of going either to f or to b. Apart from being used for escape, the doorways also served as a means of safe communication between the inhabitants of the block. Especially during the night hours when circulation on the streets ought to be avoided, (50). In any case, the size of the doorways shows that they were not to be used ordinarily. In figure 26 there is a photograph of such a doorway together with a sketch showing an average man and woman next to it. People had to make an effort to go through this doorway, while for a donkey or a cow it would be impossible.

The same kind of high walls that separate the block from the streets separate neighbouring buildings within the block. Whether this is done for privacy as well as for security is a subject to be dealt with later. What must be noted at present is that the dividing walls serve a double purpose: they separate properties and they are the buildings' own external walls on ground floor level. As a matter of fact, most of the total length of the stone walls in the block is used to define the ground floor space of the buildings and to support their upper storeys. Only a very small part of the total length of the stone walls serves exclusively as a property divide. This can be seen in figure 27: it is apparent that the bodies of the buildings themselves do most of the dividing within the block, as well as on the perimeter of it where the detachment from the street is more desirable. If we consider those parts of the stone walls which beset the actual ground floor areas of the buildings, we notice that these areas are open towards the centre of the block and closed towards its perimeter. The buildings succeed in looking towards the centre of the block, on ground floor level, while managing to avoid direct viewing of one

(50) See chapter 4, section 4.1.3.
Fig. 26 A doorway providing communication between neighbouring yards in a house block in Veria, (Moutsopoulos, 1967, illustration part, p. 16). The sketch on the right, (drawn by the present author), shows the relative size of the doorway to people.

Fig. 27 Outlines of those lengths of the stone walls which are integral to the buildings on ground level. The arrows indicate the direction in which the open sides of the buildings face, (drawn by the author).
another. For example, in figure 27 it can be seen that A, B, C, D, F and G have absolutely turned their backs to the streets; K faces away from A; J presents its back to E and F and E to F. At the same time C, B, K and J have an oblique view of each other. A very similar situation appears on the upper floors of the buildings because, as discussed in more detail when the design of the houses is examined, most of the openings, (windows, balconies, doors etc.), of the upper floors are on those sides of the ground floors that are open as described above.

It can be suggested, from what has been observed so far, that, even if the plan of the block is the result of at least as many building operations as the number of the buildings, there were laws which were followed in the arrangement of the buildings within the block. One such law was that public buildings belonging to the block should, in no circumstances, be accessible from inside the block, but only from outside, from the street. The bakery, indicated by H in figure 23, has one door and one window both facing the street. It has no other openings towards the group, because it is not supposed to communicate with it, (51). If outsiders attempted to enter the other buildings through the bakery they would find it impossible. Even if the baker himself lived in one of the houses of the block he could not have access to the shop from his house. He would have to go from his house to his shop via a public space: out to the street and then into the shop. In this way, not only would the baker's house be protected from trespassers, who could easily enter it from the bakery, but also the houses in the block would be safe. For the same reason the bakery's yard, h, does not communicate with the block, but is accessible only from the street.

The church, I, inside the block, is a small one and was probably used only by the inhabitants of this group of houses, as most of the blocks in a town had their own churches, (52). Building churches inside the blocks, rather than

(51) See chapter 5, section 5.3.6.
(52) Moutsopoulos, 1967, p.47.
outside in a public opening, was a product of necessity: with the Ottoman occupation, most of the big churches were altered into mosques, (53). Although the Ottomans allowed the Christians to follow their own religion, they forbade the building of new churches and the restoration of the old ones, (54). Therefore, the Greeks built small, inconspicuous churches within the shelter of the houses where they would not offend the Ottomans. Any view from the streets was obstructed by the much taller houses on the periphery of the blocks, (55).

With churches situated behind houses, certain problems arose in relation to the inner arrangements of the blocks, because, firstly, churches should have accesses to the streets so that the privacy of the yards would not be disturbed, secondly, churches required some open space and, finally, they had to be accurately orientated.

The open space is for certain ceremonial needs, e.g. part of the Easter mass takes place outside. The sanctuary must face Eastwards, which means that the church entrance can be on any but the East side, preferably on the West, opposite the sanctuary. The church is the only building in the block for which orientation is a predominant positional factor; the houses disregard orientation, but consider the rules which have been discussed earlier pertaining to the block's formation.

A long pathway, therefore, along the back of the bakery has been created in this case so that the privacy of the houses' yards would not be disturbed, with the exception of houses K and J at the centre of block which share the same pathway. It is also observed that these two, unlike the others, do not each have a private yard, but share yard x. It has been noticed, (56), that in cases where a church stands in the centre of a block, the dividing walls between houses are abolished and the free area is automatically joined, creating an inner

(53) Ibid, p.47.
(54) Souciat, 1775, p.291. See also Simopoulos, 1976, p.214.
(55) The churches within the blocks did not have bellfries that would certainly give away their presence and anyway the Turks allowed only so many bells per Christian community.
court yard. The necessary open area needed by the church's ceremonial functions is thus created. It must be kept in mind that the church was built after the houses, at least those on the perimeter of the block, as churches were not allowed in the open. So, when the need for a church occurred, space had to be provided from the private space of the houses' yards. Very possibly, yards g and f were bigger before the building of the church. Of course, this is only conjecture but it is very probable that certain buildings of the block had to give part of their property to make space for the church, just as the two houses J and K sacrificed their privacy to provide the church with an open space.

As good Christians, those of the inhabitants of the block who lived right next to the church and especially those who virtually had it in their back garden were rather privileged, (i.e. not in terms of property value but of spiritual comfort).

To give or work for a holy purpose was a privilege indeed. Travellers in Macedonia have noted and admired the Greek devotion to their religion. One of them writes that, as soon as the Greeks of Constantinople (57) managed to get permission to restore one of their churches that had been almost totally burned to the ground, about 3,000 of them practically rebuilt the church within the period of ten days that the Ottoman permission prescribed. No one asked for money or other reward. The privilege to work or spend for God was the highest and only reward (58).

From just this example one gathers that needs of the church came first and all the other needs in the block second. Therefore, that the houses J and K do not have private yards is due to a priority of needs rather to any anomaly or exception.

From the inward looking arrangement of the house group and from its closed perimeter, the block may be regarded as

(57) The Greeks of Constantinople were not different from the Greeks of Macedonia so whatever remark on the character and on the Christian faith of Greeks outside Macedonia is valid for the Greeks of Macedonia, too.
an 'island', an isolated space in the layout of the town. This is true especially if one considers it from a two-dimensional point of view. However, with the third dimension applied, things appear rather different. Figure 28 shows how close the upper floors of opposite houses come over the street between two blocks. This nearness enables direct aural and visual contact between the people of opposite houses though living in different blocks. Contact was carried to the extreme when people passed various objects or food through opposite windows by means of long-handled shovels, (59), (fig.29). It can thus be noted that the degree of neighbourliness is higher between opposite houses in different blocks rather than between houses of the same block. This is the result of separation between properties and private and public space, too, on ground floor level by means of the high stone walls, whereas on upper floor level, where actual living takes place, neighbours have close contact with each other.

1.2.4. Sanitation and municipal affairs.

Most Macedonian towns were more what we call a country town than a crowded city today. They were sufficiently small to have quick access to the open, agricultural land, while, despite narrow streets, their houses were placed in rather comfortable plots, parts of which were used for vegetable growing, orchards and livestock.

Most of the waste was organic since it did not include tin, glass, plastic or paper. However, towns did not have a proper sewerage network. Open gutters carried the dirty water from the yards of the houses onto the streets where it was collected in the open street gutters. As most towns were situated on hilly sites, the slope of the streets enabled the waste to flow away and either end up in a nearby stream or collect in puddles where it would dry up and most of the organic waste would decompose and mingle with the earth.

(59) Tsamisis, 1949, p. 191.
Fig. 28 Houses on Megalou Alexandrou street in Veria, (Moutsopoulos, 1967, illustr. part, p. 37).

Fig. 29 Artistic impression of a Macedonian street scene, (drawn by the author).
Rubbish from houses and shops was discarded onto the streets. From there it was spasmodically removed, because organized official bodies to see to the cleaning of the towns appeared towards the end of the 19th century. Before then, however, there is evidence of the existence of street cleaners. It can be assumed that they were paid by the towns' different ethnological communities which, as discussed in chapter 4, financed community schools and hospitals, or by the wealthier households, as the latter paid water-bearers to provide them with drinking water, to which we come shortly.

It is worth mentioning that the stray dogs did a good job of removing what would disintegrate, e.g. carrion, or what would not mingle with earth. Many travellers in Macedonia were astonished by the number of dogs that wandered in the streets. One of the travellers explains that people allowed dogs to multiply for two reasons: firstly, because their dung was used in tanning and, secondly, because they cleaned the streets of all rubbish. The traveller adds that vultures flying above the towns during the day would come down at night to complete the dogs' cleaning operation.

In any case, things could not have been very bad, at least not in all parts of the towns: most of the rubbish would occur at markets, but there it would be gathered by the shopkeepers to a heap and burned. Things were bad in some parts of certain towns, especially in the more densely populated districts of the big towns and cities like Thessaloniki. For example, the Jewish district of Thessaloniki was never clean, because the street cleaners never went in there to sweep up and because of the crowding together of the Jews.

It is from such crowded districts of the towns that epidemics usually started. Many died from outbreaks of plague or cholera. In Thessaloniki alone, eight plague visitations are reported in the 18th century and three cholera outbreaks in the 19th century. Crowding and uncleanliness, however,

(60) Vacalopoulos, 1963, p. 113: In Thessaloniki, a municipal council was established in 1869 and succeeded in gaining approval to use convicts to sweep the streets.
(61) Ibid, p. 83.
(64) Ibid, p. 108.
were not the only cause of epidemics. Very often epidemics were brought into the towns by ship-board passengers from other harbours of the Turkish Empire, especially from Asia Minor and Egypt, (65). Overcrowding and uncleanliness facilitated the spread of 'ship-board epidemics' and were the cause of many deaths, e.g. most victims were in the Jewish district of Thessaloniki, (66).

However, apart from the cities, in most Macedonian towns and especially in the inland ones, epidemics can't have been catastrophic, as conditions could not have been that unwholesome. Travellers mention that diseases and epidemics were rather rare and many apparently vibrant and healthy children played about the streets, (67). The most common of diseases were the venereal ones and the most common of epidemics was the plague, (68). When the latter occurred a number of measures were taken to prevent the spread of the epidemic, like burning clothes and personal belongings of the infected, taking them to special disinfection chambers situated outside the towns and setting guards in front of the houses of the infected so that the healthy people would not come near, (69).

Most of the common diseases were handled successfully by doctors. Although doctors with a formal education were rare, (70), the folk doctors, with their practical skills, were successful most of the time using their own methods and medicines, some of which seemed to work better than those of properly trained doctors, (71). Doctors were highly regarded by the people. In certain towns, like Ampelakia for instance, they were paid with community money, (72). Some towns had

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(65) Ibid, p.108.
(67) Sonnini, 1801, p.146. Sonnini thinks that people were healthy thanks to the good climate. We believe that it is quite likely that most of the people who survived infancy were healthy.
(68) Egmont, 1759, p.207.
(69) Ibid, p.169; also see: Olivier, 1801, pp.124-126.
(70) Hasselquist, 1766, p.34.
(72) Bjornstaehl, 1780, vol.4, p.348 onwards and vol.6, p.128 onwards.
community funded hospitals where patients were treated free of charge, (73).

The most characteristic provision for public hygiene was the good number of bath houses. There people would acquire an almost sterile cleanliness through sweating and steaming. Everybody had such a bath at least once a month, (74), some went even more often as it was also a social occasion, a meeting place and a unique chance, especially for women, to get together, (75).

Public bath houses were a necessity in towns, as houses did not have private baths. The supply of domestic water was problematic for those houses which did not have a well in their yards and relied on a communal spring or well. The supply of drinking water was also a problem, as not all springs and wells were suitable and for most houses the spring or well would be distant. Hence, the task of carrying drinking water and distributing it to the houses was undertaken by certain people as a job, paid by the householders, (76).

We therefore see that, despite the privacy and isolation suggested by the high stone walls and despite the apparent separation of the inhabitants into districts, common needs in towns like epidemic prevention, nursing of the sick, bathing, water supply etc. were of municipal concern. All these brought people in close contact and it was not just the market places or business transactions that engendered communication between people of different nationalities, between the rich and poor, old and young and between men and women. Macedonian towns must have had a more lively social structure than one might suspect from looking at their decayed remains or at those buildings where people still live (though with water and electricity supplies, modern bathrooms, radios and television which, it can be argued, cause more isolation than the

(74) Ibid, p. 236.
(76) Riedesel, 1773, pp. 169-171. See also Simopoulos, 1976, p. 307: Every rich household employed its own water-bearer.
stone walls or the enclosed blocks).

Public hospitals, fountains and bath houses, markets, transactions out in the open and bakeries with ovens for public use brought people out into the narrow streets where they almost bumped into each other. Macedonian towns must have had a more thriving social environment and a more rural character than that depicted by their now empty lanes and neglected yards. This can be seen in the popular painting in figure 30: one feels the nearness of nature to the town; hills, trees, water and birds. The presence of ships and boats suggests the busy trading activities of the inhabitants. The houses appear clean and tidy—there is no sign of gloominess or of unwholesome conditions. Although this is an artistic impression it may well not be too far from reality.

Fig. 30 Artistic impression of an unknown 'Macedonian' town, G. Sforzos mansion in Ampelakia, (Moutsopoulos, 1975, p. 31).
1.3. On the production of the town layouts.

Macedonian towns originated either as small settlements adjunct to medieval or earlier castles, (fig. 31), or as settlements on remote mountain locations, (fig. 32), where the Greek population found refuge from raids and persecutions, (77). The medieval or earlier castles were built, for strategic purposes, on high or otherwise naturally protected ground. Therefore, the site of castle or refuge settlements was usually hilly and irregular. Since the irregularity of each site was of variable character, each town grew on unique topography producing a unique layout.

Nevertheless, when one views all the different layouts of Macedonian towns in succession, it looks as if they have been produced under a single process which was guided by a single principle.

Before beginning to explore the process of production of the towns, it must be noted that, apart from their sites' natural characteristics, there was no geometric system or framework to act as a generator or controlling influence on their layouts. Towns are composed of a framework of streets and plots, but in the case of Macedonia this framework was the result of an interaction between streets and plots which were indefinable before the towns came into existence and were subject to continual change during their building.

To avoid confusion in a later stage of the discussion, where it is argued that the towns grew in relation with what already was on site, it must be noted here that the connection between the newer elements and the older ones of the layout was not orthogonal which might be inferred from the word 'framework'. For example, the house in figure 33 has used

(77) Hewzey, 1860, p. 205: A refuge settlement as such was very appropriately named 'Katafigi', refuge; its Greek inhabitants, before the Turkish persecutions lived on the plains, but when persecuted they moved to a mountainous location where they built Katafigi. This settlement grew to contain 250 houses.
Fig. 31  The layouts of Ioannina and Kastoria in relation to their castles, (Michaelis, 1977, p.196 and Moutsopoulos, 1968, pp.78-79).

Fig. 32  An old engraving showing Ampelakia on its mountainous site, (Moutsopoulos, 1975, p.4).
Fig. 33 A house in Veria using the old castle walls for its ground floor, (Moutsopoulos, 1967, illustration part, p. 6).

Fig. 34 Plan of Kastoria. The dotted line indicates the position of the castle walls, as depicted by their remnants, (Moutsopoulos, 1968, pp. 78-79).
the old castle wall as its ground floor wall, but has changed the direction of its upper floor façade. The tall medieval tower, which could be seen till the beginning of the 19th century right in the centre of Veria, (78), had houses all around it but none was in an orthogonal relation with it.

After the cannon's destructive capacity had put towers and castles out of use, they were left unattended, their masonry was used for other buildings and their location was ignored and then lost in the interaction between the elements of the growing towns. A good example of how towns grew near old castles, but ignored the directions which the castle walls indicated, is the layout of Kastoria. As can be seen in figure 34, though some buildings seem to follow the wall which is to the South West, elsewhere buildings, plots and streets are arranged independently of the lie of the walls. It can even be argued that the buildings along the South-West wall are guided by site contours and only coincidentally by the direction of the walls. The guiding influence of the site contours on building arrangement is obvious on the North lake shore.

Not only did the towns lack a directing framework in the producing of their layouts but neither did they exhibit a central figure, such as a square or symbolic superstructure, to act as a focus in the towns' formations, as, for instance, the cathedral in European medieval towns. This was predominantly due to the fact that the town districts focused, as we saw earlier, on their own point of interest, on their own, so to speak, centre.

However, with the fluctuation of the district borders, which would cause alternative foci for the districts, the layouts of towns would on the one hand acquire a continuity, a uniform structure, and on the other hand they would exhibit a flexibility, a capacity to reform themselves disregarding borders, or castle walls, or even land contours as is evident from the streets.

(78) Cousinery, 1831, p. 69.
This was possible partly due to the combination of the following factors: there was no town plan or gridiron, the borders of sites were loose, plots had no uniform shape and there was no sewerage system to be followed. Nevertheless, the layout of the towns manifested an integrity which was based on the fact that the interaction of its elements, i.e. buildings, plots and streets, was manifold and diversifiable. The elements that structured the layout were, by their own virtue, cohesive and not held by the external force of a larger framework imposing a fixed, static street network, definite open spaces and squares, monumental and symbolic superstructures and so on. The layouts of Macedonian towns owed their integrity to the resilience and the capability of their elements to remain structured without a permanent supporting system. This allows us to suggest an analogy between the layout of Macedonian towns and an amoeba: an amoeba manages to be a complete structure without a supporting framework.

Even the blocks of buildings with their closed perimeters were not permanent elements of the layout of towns. With the addition of new buildings the blocks would grow, change shape, or two neighbouring blocks would join together to form a single one, even if this meant the loss of a street. When the keeping of a street was thought to be necessary, (79), the joining of two neighbouring blocks would be engineered above it, (fig. 35).

The interaction, therefore, of the elements of the town’s structure was multiple; there were many ways for the elements to be connected with each other and when disconnected, other ways of connection would be near at hand. How was this possible without a supporting framework? Although there is evidence that some measure of forethought was taken into account for the disposition of the elements, there is little evidence of forethought for the layout as a whole. There is little to suggest ‘planning’, that is selecting the site, ensuring some form of water supply, deciding on the lines of

(79) Decisions as such were taken by neighbours or by the communities as the authorities showed no concern. See chapter 4, sections 4.1.4. and 4.2.3. and chapter 5, section 5.5.4.
the main streets, subdividing into blocks and plots for various kinds of buildings, arranging access to each plot by means of a system of secondary streets or footpaths and setting aside space for a market and churches, (80). Conventional planning also lays down rules as to how a town should expand and develop. A town can thus be built virtually in one operation. Its form has been predetermined.

In contrast, towns without planning cannot be built in one operation and their further development is not predetermined. Macedonian towns started from a point of incentive e.g. a castle or a refuge settlement, and grew little by little, from need to need, in all possible directions. The measure of forethought in their making applied only to how new elements of the layout would fit older, pre-existing elements. In other words, towns developed according to what already existed, with a series of adaptations, as needs arose. The adjustments concerned not only the artificial but also the physical environment. With limited technological means, the elements had to be made to fit the physical environment.

For example, the streets were provided with steps in order to fit the slope of the ground. Only minor changes to the physical environment were made. In figure 36, for example, one notices that the sloping site has hardly been disturbed with levelling operations, so, as a result, the two lower floors of the mansion are much smaller in volume than the two upper floors. One sees how the sloping site has been used to complement the building: The West façade makes it appear a grand four storey high, full size structure. But we know that this is not true, as only the two upper floors are as big as they appear to be. It can therefore be noted that, there was minimal disturbance to the physical environment which was used to compliment and/or supplement the elements of the town and, as the elements were made to fit it, towns became integrated closely with their sites.

(80) Burke, 1977, p. 47.
Fig. 35 Two examples from Kastoria where neighbouring blocks have been joined above the street, (Moutsopoulos, 1962, p. 28).

Fig. 36 Papaterpos mansion in Kastoria, (Moutsopoulos, 1962, p. 59).
In short, Macedonian towns, although lacking a supporting framework or planning, grew and shaped themselves by seizing a series of opportunities provided by the interaction of their elements and by the particular features of their site. So their layout was allowed to flow in the way the elements and the site directed it, along easy paths or around sharp angles.

Topography, however, and the interaction between buildings, blocks and streets were not the sole factors that produced the layouts of Macedonian towns. We have referred to these to emphasize the absence of a gridiron or a preconceived plan and to show one side of the coin. On the other side the factors had to do with the ethnological fabric of towns, the inhabitants being divided into conquerors and conquered, Christians and Muslims and with the appearance of a new class, the bourgeoisie, and the orientation of the inhabitants towards new economies. But, as these are socio-economic factors the subject of the production of the town layouts is continued in chapter 4 after the Macedonian house itself has been examined in the following chapters.
CHAPTER TWO

THE DESIGN OF THE MACEDONIAN HOUSE

2.1. Categories of houses.

2.1.1. The hypothesis.

In Macedonian towns, the differences between the houses of the poor and those of the rich do not lie in the design, but in the number and size of their rooms and other spaces, in the quality of construction and the extent of decoration. There were not certain types of houses for the poor and others for the rich. Since they all used the same house types, poorly or richly executed, the differences in the size, quality of construction and extent of decoration between the houses should not be considered as indications of different house types.

Social class is a concept which denotes different social levels in society. One can use many criteria for class distinction such as status, prestige and family lineage, but one must be aware of the ambiguity that each of these concepts leads to.

For Marx, the criterion for class distinction is economic, which in itself may be ambiguous when it encounters the process of production in society, (1). The external criterion of material possessions, however, is not ambiguous when used for class distinctions of economic nature. For example, if

(1) For example, how does one classify those who stand outside production? In the 'Communist Manifesto' Marx identified classes in relation to the means of production, thus his criterion was economic. But Marx never specifically defined 'economic'.
houses in general are to be used as the external criterion of people's material possessions, one may distinguish three classes: the lower, the middle and the upper, keeping in mind that these classes refer to financial standing only.

On this basis, the houses can be grouped in three categories: the first category representing the houses of the lower class, the second those of the middle and the third the houses of the upper class.

Most belong to the first category, as the majority of Macedons were of the lower class; they formed the populace. Thus, we will call the houses in the first category popular houses. Those of the middle class, which, as noted in the previous chapter, grew in size from the middle of the 18th century onwards, bourgeois houses and, finally, the houses in the third category will be called mansions.

These categories are introduced to enable a decision to be made upon which characteristics of the Macedonian house are permanent, or fixed and not additional, incomplete or absent, depending on the financial standing or on the personal needs of their users. For example, the fireplace, which is a fixed element of the interior design, is absent in many popular houses. This is evidence of poverty. Certain mansions exhibit an excessive amount of decoration, that is, additional decoration to that characterizing the majority of the Macedonian houses. This is evidence of their users' personal choice and financial ability to indulge it.

2.1.2. The categories.

a) The popular houses are usually situated within the area once defined by the castle walls. In those towns which did not have a castle as a basis, the popular houses are tightly grouped around mansions, (see chapter 4, section 4.1.2.). They occupy small plots and, usually, are built continuously, sharing side walls. Their yards are at the back in direct association with the ground floors. People of the popular class were peasants, labourers, conveyors etc. and many kept animals, consequently some parts of the ground floors were used for stabling purposes and some for storage.
The upper floors have a minimum of rooms. Some popular houses have mezzanines which characteristically have very low ceilings, (fig. 37a).

The houses of this class were built cheaply and few of them survive. By cheaply it is meant that stone walls are limited, they are built of random rubble and are no thicker than needed to withstand the incumbent upper floor. Most walls are of the 'frame type', (see section 2.3.3.), and the wooden parts of the house, i.e. joists, posts, trusses etc., are crudely cut and irregularly spaced. The poorest of the popular houses may have no ceiling, that is, the roof joists are visible, and they very rarely have fireplaces, as the building of fireplaces was expensive. Finally, they have no carved decoration on their wooden elements or paintings in their interior.

b) Bourgeois houses are found both amidst the popular and on the peripheries of towns where they are not built continuously and can have spacious plots. Their ground floor was used for storage and as a working area for the manufacturing of goods, as the middle class were merchants, tradesmen or manufacturers and their houses were also their workshops. Occasionally, the working area occupies part of the mezzanine, too, but the latter was primarily used for winter living, as discussed more thoroughly in section 2.3.3.12. Finally, the upper floor was exclusively for living purposes, (fig. 37b).

In the bourgeois house the ground floor walls include the height of the mezzanine and they support the house on two, three and, sometimes, on all four sides. Their masonry is of coursed rubble built to a thickness of up to one metre. The wooden elements of the house are evenly cut and skilfully joined with tenons. Pillars, balustrades, staircases, window cases etc. are carefully constructed and carry some carved decoration. The livings quarters have ceilings, built-in cupboards and parts of the walls are covered with wooden panels, usually rectangular, similar to the inlaid panelling of the doors. The living quarters also include fireplaces, the number of which is presumably an indication of the owner's wealth.
c) The mansions were usually built in comfortable plots, in the outer parts of the towns. They are free standing and at a distance from neighbouring houses, are at least as large as, but more often larger than, the bourgeois houses. The floor referred to as mezzanine in the previous two categories is tall enough in the mansions to be regarded as a first storey, rather than an intermediate stage between ground and upper floors. Thus, what was considered to be the upper floor of the popular and bourgeois houses finds itself the second floor of the mansions. It was not unknown for the larger mansions to have a third storey, too. The owners of the mansions were rich landowners, merchants, or big manufacturers. Thus, the ground floors contain large store rooms and cellars and extensive workshops where many employees worked. Workshops are also found on the mezzanines.

The builders of the mansions exercised all their best skills in the construction of these buildings such that they strike us with their finesse and distinctive quality. Externally, the fine construction of the front gate gives the first hint of distinction, while, on entering the yard, the façade rises gracefully mastering all views with its elaborate staircase, sometimes made of stone rather than wood, with its balustrades and colonnade and its long rows of windows and lights, (fig. 37c).

Internally, there are carved decorations on almost every wooden element, (on doors, windows, balustrades, cupboards, ceilings etc.) and murals on the walls. The amount of decoration, especially in the main living quarters, is sometimes excessive. The luxury of their interiors alone places these houses in a separate category.

Generally speaking, it is possible that the best popular houses would be as good as poor bourgeois ones, or wealthy bourgeois houses elaborate enough to claim a place in the mansion category. In such cases one must show more care in categorizing the houses. But there is a clear distinction between the popular ones and the mansions, as evidenced not only by the simplicity of the former and elegance of the latter, but also by their respective frugality and
Fig. 37 Categories of houses; three examples from Ioannina.

a. Economou popular house, b. Stamata bourgeois house,
extravagance. For example, the crudity of the wooden pillars, the stone stairs and the masonry of the popular house in fig. 38 is obvious. One also notices the absence of balustrades. In contrast, the delicacy of the wooden pillars, the balanced staircase, the elegant balustrade and the fine masonry of the mansion, in the same figure, promote its graceful appearance.

Despite the different panelling in the sets of windows of the popular house in fig. 39, it appears pleasant to the eye and temperate and true to its simple construction. In contrast, the interior of the mansion in fig. 40 appears to suffocate under the load of decorations on its walls, ceilings and windows. Although the decorations manifest great craftsmanship, their extent seems extravagant.

The bourgeois houses represent an intermediate stage, between the popular and the mansions. They do not exhibit the frugality of the popular houses, however, they retain a similar moderate and simple construction. Fig. 41 shows the clear definite lines of the elevation, as much in the tall, slim pillars as in the floor and roof joists. The staircase is light but efficient. The windows of the upper floor are not of uniform size, but their panelling is treated in a uniform manner. There is certainly no magnificence in the elevation of this bourgeois house, but there is no lack of thoroughness. In their interior, the bourgeois houses exhibit the handsomeness of the mansions, but they are not extravagant in decorative elements. Inlaid wooden panels form simple geometric designs, but usually plain wooden staircases are contrasted with plain plastered walls and luminous window panes, (fig. 42).

Having briefly outlined the differences between the categories of houses, a discussion follows showing that these differences do not affect the basic design of the houses. The discussion is carried out in a twofold manner. Firstly, from a viewpoint emphasizing the articulation of spaces in the houses and, secondly, by looking at those characteristics which seem to be common to all three categories.
Fig. 38 Above: a popular house in Kalandra, Chalkidiki, (Moutsopoulos, 1971, p. 373).
Fig. 39 Lioukas popular house in Siatista, (Michaelis, 1977, p. 284).

Fig. 40 Manousis mansion in Siatista, (Moutsopoulos, 1971, p. 275).
Fig. 41 Karageorgiou bourgeois house in Veria, (Moutsopoulos, 1967, illustration part, p. 190).

Fig. 42 The best reception room of Sapoutzoglou bourgeois house in Veria, (Moutsopoulos, 1967, illustration part, p. 141).
2.2. The articulation of spaces.

2.2.1. The yard and the difference between a Macedonian house and any given court house.

The earlier examination of the houses within a town block shows that the yards are well defined, providing secluded spaces surrounded by the bodies of the houses and by additional high walls, shutting in all views, as much towards the streets as between the yards.

More specifically, in any plot, the main house occupies one side while its auxiliary spaces occupy a second and sometimes a third side. Therefore, the whole building acquires an 'L' or a 'U' shaped plan, embracing the yard. This arrangement may, to some degree, be associated with a courtyard house arrangement which is distinguished by its introversion, in other words, "...the house turns its back to the street and faces upon a private, internal court", (2). Consequently, the court becomes spatially a focal point, it acquires a more intimate relation with the other spaces of the house and "...acts as an extension to surrounding covered terraces and the rooms beyond", (3). The court becomes a room outdoors.

The atrium house of Ancient Greece and Rome, the traditional Chinese and Japanese house, the traditional Muslim house and the patio house of Spain and Latin America all evidence the courtyard arrangement in which the court serves as an outdoor room, (fig. 43). However, it does not function similarly in all cases. For example, in tropical countries, the application of the principles of radiant heat and cooling dictate that the height of the court should be greater than any of its plan dimensions, (4), while in contrast, in northern climates, to admit the long rays of the northern sun into the house, the court needs to be wide and open rather than deep, (5). Furthermore, the court in the Orient has long been given a formal expression, representing the essence of Nature if not its image. Again, the Muslim court

Fig. 43  Examples of court houses, (Rapoport, 1969, p. 82).

Fig. 44  Typical court house settlement in Marrakesh, (Koenigstberger et al., 1973, p. 204).
has a religious basis and a formal expression of Paradise, (6). Despite some apparent and some not so obvious differences between various types of court houses, they all share certain characteristics which can be summarised in the following observations:

1. The court is hardly ever adjacent to the street, as part of the building interposes between the two.
2. On entering a court house, one does not come directly to the court but, either in an indirect way, (fig. 4-3, a, c and d), or through some other closed space of the house, (fig. 4-3, b). So, not only is the court invisible from the street when the front gate opens, but it also acquires a more intimate, private quality as an inner room of the house.
3. The court is not usually adjacent to the courts of neighbouring houses. Buildings interpose between the courts within a town block of court houses, (fig. 4-4).
4. The court has a regular, usually rectangular or square, shape which matches the rectangular shape of the other rooms in the house.
5. From it there is access to almost every other room of the house on the ground floor. In fact, the court plays the role of the 'central hall' of the house, therefore,
6. it is usually situated in the centre of the house so that most rooms may have a direct access to it.
7. The building surrounds the court at one height, i.e. either one or two storeys all around the court.
8. The court house has only a few openings towards the street and these are small. In contrast, it has more openings towards the court and these are considerably bigger than those to the street.
9. The court is not visible, or hardly visible, from neighbouring houses either in the same block or across the street.

The above observations do not apply to, in fact some of them are contrary to, the characteristics of the Macedonian house:

(6) McHarg, 1975, p. 75.
1. The Macedonian yard is very often adjacent to the street, sometimes on two and even three sides.

2. On entering the house, even when the door is below the upper floor, one usually has a clear view of the yard, (fig. 45).

3. The yard is usually adjacent to those of neighbouring houses in the block. In fact, the yards in a block stretch towards its centre.

4. The yard does not have to be of regular shape. Very often it is rather irregular, which has not always to do with the irregularity of the house but of the neighbouring houses or streets.

5. From the yard there is access to almost every room of the house on ground floor level. However, it does not play the role of a central hall in the main house, which occurs on upper floor level(s).

6. The yard is not situated in the centre of the house. In most cases it stretches towards the back or the side.

7. Even when the main house and its auxiliary buildings embrace the yard they do not do so at equal heights. Always, the main house, with the living areas, is higher than the auxiliary buildings and it may have up to three storeys, while the auxiliary buildings remain at ground floor height.

8. The Macedonian house has many openings on upper floor level, equally big towards the street and the yard. Only on ground floor level has it few, small openings towards the street but big ones towards the yard.

9. The yard is visible from the upper floors of neighbouring houses, whether the latter belong to the same block or not.

What seems to be the only relationship between the court house and the Macedonian can be described in terms of everyday use of the open space. Fig. 45 shows that the lavatory, the kitchen and the storage are accessible from the yard. Functions, therefore, that are associated with those spaces had to be carried out via the yard. Thus, the latter is a room outdoors, but this role is restricted to the ground floor area of the house. The upper floor is as important as,
Fig. 45  Evangelou popular house in Florina, (Moutsopoulos, 1971, p. 30):
1. lavatory, 2. storage, 3. tavern,
4. covered walk, 5. kitchen, 6. yard.

Fig. 46  Sapoutzoglou bourgeois house in Veria, (Moutsopoulos, 1967, illustration part, pp. 178, 179).
if not more important than, the ground: It is the main living area and has only visual connection with the yard through the gallery, (fig. 46). The main living rooms are usually facing in the opposite direction, towards the street, unlike the main living rooms of the court house which always face the court even when they are situated on upper floor level.

The yard is undoubtedly an important space of the ground level of the Macedonian house. However, it is arguable how important the yard is for the upper level. There are examples of houses where the lavatory is not situated in the yard, but on an upper floor. Also, the auxiliary spaces, (storage, stable etc.), instead of being spread along one or more sides of the yard, are all gathered under the main body of the house. Finally, cooking also takes place upstairs; the notion of 'kitchen' as a space which is mainly utilised for everyday cooking purposes, does not apply to Macedonian houses, as pointed out later.

Therefore, in many houses, certain spaces that, as much with their accessibility from the yard as with their position on its periphery, vindicate the yard as a room outdoors, are gathered under or within the body of the main building. Consequently, the yard remains an open space surrounded by its walls and is used for gardening, vegetable growing, orchards etc. What remain to justify the yard as an intimate enough room outdoors are the high stone wall that surrounds it, the stout gate which serves as the house's front door and the yard's direct access to the auxiliary spaces of the ground floor.

2.2.2. The covered walk and the gallery.

The space which takes over the yard's intermediate role is the foreground of the area under the upper house. It will be referred to as the 'covered walk'.

The covered walk usually interposes between the yard and the auxiliary spaces and also, in a vertical sense, between the upper house and the yard or the auxiliary spaces. We say 'vertical' because the staircase leading to the upper house is always situated within the covered walk and
it penetrates the floor of the upper house. Thus, the covered walk has such a position in the design of the Macedonian house which enables an indirect succession from the closed to the open and vice versa.

In certain cases, the yard gate, instead of opening directly into the yard, acquires a new position opening onto the covered walk. This heightens the importance of the latter in the design of the house. Fig. 4.7 shows that, as the gate opens directly onto the covered walk, from where all auxiliary spaces of the ground level are accessible and, via the staircase, there is access to the upper level of the house, the covered walk becomes a rather important feature of the Macedonian house design. In such an arrangement the yard loses its importance or, to put it differently, its value for the design of the house.

The gathering of all spaces of the ground level under the main house and the positioning of the gate to open directly onto these spaces create the alternative arrangement in the design of the Macedonian house - the single building arrangement, where the open side or sides of the covered walk are closed with walls. A large hall is thus created, (fig. 4.8).

The staircase leads to a large space on the upper floor from which all other rooms are accessible. As in the case of the covered walk, this space can be either open or closed towards the yard. When closed, however, the whole length of the wall towards the yard is perforated by large windows and lights, allowing ample daylight inside. Usually, it is a long rectangular space and one long side looks on the yard. We will refer to this as the gallery, (figs. 4.6 and 4.7), (7). Possibly, it would be more direct, instead of the term 'gallery', to use the Macedonian name. However, as in different localities they name it differently, it is difficult to decide which one to chose. Some of the names are 'axatos', 'doxatos', 'krevati', 'mesia' and 'iliakos', (8). These all

(7) For the architectural use of the term gallery see: Briggs, 1959, p. 142.
Fig. 4.7 Mumoglou bourgeois house in Veria, (Michaelis, 1977, p. 290).

Fig. 4.8 Sapoutzis mansion in Kastoria, ground floor plan, (Moutsopoulos, 1962, p. 41).
denote different qualities of the gallery, e.g. 'iliakos' indicates that sunshine is allowed into the gallery and 'mesia' that it is the space through which one enters the upper part of the house.

Finally, the rooms open off the gallery and practically never communicate with each other. Most of them look onto the street rather than the yard. They are designated as separate enclosures, contrary to the openness and flexibility that occurs in the design, as much of the gallery as of the lower part of the house between the covered walk, the yard and the auxiliary spaces.

To summarize what has been so far discussed on the articulation of the spaces of the Macedonian house, two general options can be distinguished: one where the yard plays an important role in a similar way to how the court plays a role in the articulation of the courthouse spaces, and the other where the covered walk assumes more importance. These two options have to do with the articulation of spaces on the ground level of the house. That of the upper level remains stable, irrespective of what happens on ground level. Fig. 49 shows diagrammatically the possible connections between the spaces of the Macedonian house.

2.3. The fixed characteristics.
2.3.1. Preliminaries.

Fixed characteristics are those which, morphologically, attribute the Macedonian identity to a house. One may, to a certain extent, look at these characteristics isolated, but there is always, then, the possibility of missing the overall morphology of the house, because it is not only the form of each of the characteristics that can be considered Macedonian but the overall result (the house) and the way the characteristics are combined and interlock to create the Macedonian 'form'.

Generally speaking, the Macedonian house is a tall structure which looks even taller because it is usually viewed from very close to, i.e. from a short, narrow street. This image is enhanced by the projections on the upper level and by the greatly projecting roof. The house clearly
Fig. 49 The articulation of spaces in the Macedonian house, (by the author).
exhibits two parts, the lower and the upper. The separate uses of these parts have already been discussed. The distinction is made clear in the appearance of the house: the ground part is strongly built with stone and has only a few small openings towards the street. On this solid base rests the upper part, consisting of one or two storeys and having large openings and a light overall appearance.

The illustrations shown so far set a basis on which to discuss the Macedonian house from a morphological point of view. Fig. 50 shows representations of the Macedonian house, the characteristics of which have been exaggerated and presented in a similar manner to the way popular artists of that time drew their buildings, (fig. 51). The characteristics that dominate the morphology of the Macedonian house, as much with their form and structure as with their location in relation to the body of the house and its yard, are namely the stone wall, the frame wall, the gate, the upper floor projections, the windows and lights, the wooden supports, the covered walk, the gallery, the staircase and the roof. These characteristics occur in all three categories of house (popular, bourgeois and mansion) and their relation and interposition in the body of the house is stable, even when the house is subject to deformations due to the irregularities of the site, the street network or neighbouring plots, (fig. 52).

Very characteristic and typical of the Macedonian house is also the furnishing of the rooms on the upper floor. The furnishing is fitted on the walls and floor, it is an integral part of the rooms, arranged in the Macedonian way. The interior design of the rooms on upper floor level may be considered as an additional characteristic of the Macedonian house, to be examined last and separately from the other fixed characteristics. This is so as to be able to make a few cautionary notes regarding the categories of the Macedonian house in relation with the fixed room design and extent of decoration.

Before examining the fixed characteristics one by one, a fundamental point concerning the façade of the house must be made: by façade one commonly understands the 'face' or
Fig. 50 Artistic impression of the Macedonian house, (Moutsopoulos, 1962 and 1975 front covers).

Fig. 51 A 1798 mural from the interior of G. Sforzos mansion in Ampelakia, (Moutsopoulos, 1975, p. 23).
Fig. 52 The fixed characteristics of the Macedonian house.
Above: Gounaris popular house in Veria, (drawn by the author).
the principal front of a building,(9). The Macedonian house displays two faces: one to the street and the other to the yard. The street façade is characterised by its stone built lower part and its light, variably projecting upper part. The yard façade has an open lower part and an open or closed gallery on its upper part. Although we are used to regarding the street façade of a building as its principal front, this conception does not coincide with the Macedonian one, which attributes the same amount of importance to both the street and yard façades: in Macedonian building both are treated with equal care.

2.3.2. The stone wall.

The appearance of the stone wall depends on whether its masonry is of random or coursed rubble. It depends, too, on whether the stones have been dressed with hammer and chisel, in which case a better fit is accomplished and there is an even effect of successive, horizontal layers. The stone wall, however, is characterized by the timber which is incorporated in its mass: at intervals of between 80 and 100 centimetres, wooden beams, approximately 10 by 10 centimetres, run the length of the wall. These beams come in pairs which are secured by transverse wooden ties equal in length to the width of the wall, (fig. 53). This technique in the construction of the stone wall ensures a correct distribution of the incumbent walling's weight to the ground and provides a more elastic behaviour and, consequently, increased resistance to earthquakes, which were not rare in Macedonia,(10).

The stone wall is built to a thickness of 65-85 centimetres and runs the perimeter of the house plot. That part of the wall that embraces the yard is built to just above head height, while the part on which the main house rests is usually mezzanine level high or sometimes reaches the base of the upper floor. The stone wall is for exterior purposes, that is, for those sides of the house and its yard

(9) Briggs, 1959, p. 128.
adjacent to the street or neighbouring houses. It is very rarely used as an internal wall unless the weight of the superimposed house demands a strong base. Similarly, the side or sides of the house facing the yard are only built of stone when the upper house needs a strong base.

The stone wall is usually left exposed both externally and internally. On the exterior it looks fine as it is, there is a certain attraction in the plain masonry and the exposed timber. The uncoated surface serves as a demarcation between the ground and the upper area of the house. It also has the satisfying psychological effect that the heavier part of the house firmly supports the lighter, while the feeling of security and well guarded privacy is no less important. Internally, it is not necessary to coat the wall as it faces either auxiliary spaces, like the stable and storage, or the yard.

2.3.3. The frame wall.

The frame wall is used externally for the upper floor(s) of the house, and, internally, for both ground and upper floors, as a space dividing wall. It is a wooden skeleton composed of posts, beams and struts, which are no thicker than 5 by 7 centimetres. The spaces between are either filled with small stones, tiles and mud, or, alternatively, they are covered with laths or planks, (fig. 54). Both sides of the wall are plastered with a mixture of mud and straw or flax, or a mixture of lime and finely cut fodder or, rarely, sand mortar, (11). The finished wall is 10-20 centimetres thick.

The advantages of both variations of this kind of wall are thinness and lightness; the latter being particularly so with the lath covered rather than the mud and stone filled skeleton. Thus, it can be built safely on top of the various projections of the floor boarding of the upper house and is economical on space.

When whitewashed it contrasts with the exposed posts on the house quoins, the exposed girders between floors, the

(11) Ibid, p. 66.
Fig. 53 Top: types of Macedonian masonry.
Bottom: the incorporated timber technique:
a. beams, b. ties, (drawn by the author).

Fig. 54 Frame wall: the spaces between the skeleton, (a),
are filled with small stones, tiles and mud, (b);
alternatively, they are covered with laths or planks, (c), (drawn by the author).
window frames and the sienna of the roof tiles, so that the upper house appears joyful and light.

2.3.4. The gate.

Unlike the front door of contemporary houses, that of the Macedonian house is one and the same with the yard gate. Since the yard must be regarded as closely associated with the other spaces of the house, especially with those of the ground floor, the yard gate is the front door. Its role is manifested by the robust construction which establishes it as the safest door of the house.

The gate has two stout panels which open towards the yard. These are hinged on strong posts which are securely held by the wooden beams of the stone wall. They are made of thick planks nailed on a frame of horizontal and diagonal timbers, are reinforced with broad studs and they are secured with one or more heavy bars from inside. These bars sliding horizontally into special sockets in the stone wall each time the gate is opened, (fig. 55).

The gate needs to be double so that, when fully open, loaded animals may have enough room to go through into the yard or the covered walk. The inhabitants have a clear view of the gate from the side windows of the upper floor projections. Not only can they see who is knocking on their front door, but they can also speak with the caller and decide whether to open it or not. As the mezzanine has no projections over the street and, consequently, no side windows, the viewing of the gate is achieved using windows having protective bars bowing outwards permitting one to lean out, (fig. 56).

The robust construction of the gate matches the stone wall: just as the latter is left uncoated revealing its plain but strong construction, so the gate is plainly but strongly structured. Its appearance shows its strength, as it is the only spot from where trespassers could penetrate the house.
Fig. 55 Examples of gates: a. from Siatista, (Michaelis, 1977, p. 263), b. from Veria, (Moutsopoulos, 1967, illustration part, p. 77).

Fig. 56 Bassaras mansion in Kastoria: view of the gate showing how it can either be watched from a nearby window with bowed protective bars, or from a side window of an upper floor projection, (drawn by the author).
2.3.5. The projections.

The most prominent characteristic of the street façade is the projections of the upper floor. The joists and boarding of certain rooms of the upper floor are extended towards and over the street, held by braces which rest on the beams of the stone wall. The resulting platform is usually rectangular in plan, though in a few cases it is triangular or round. It is enclosed by frame walls bearing sets of windows and, often, lights, (fig. 57). In Macedonia an upper floor projection is known as 'sachnis', (12), or 'iliako', a term which denotes its exposure to sunlight (as in the case of the gallery, discussed in section 2.2.2.) or 'ta-vlato', denoting its wooden construction, (13).

Let us see how the upper floor projections serve the Macedonian house. Firstly, for houses in small plots, built next to each other, where the ground floor must have a minimum area so that some space is left for the yard, the upper floor projections are a means of increasing the area of the living quarters of the house upstairs.

Secondly, a projection increases the sunlit area of a room. As shown by fig. 58, the area which a projection adds to a room is a sunlit area, even when the sun is at a sharp angle in relation to the street façade, thanks to the side windows of the projection.

Thirdly, the upper floor projections, with their side windows, widen the view from the rooms. Specifically, the inhabitants can have full view of the street, as mentioned earlier, can check their gate.

Finally, the projections are a means of giving the rooms of the upstairs house a regular (rectangular) shape, when the downstairs has an irregular shape due to topography, neighbouring plots and street network. This use of the projections is illustrated by fig. 59.

(12) In Turkish, 'sahnis', 'sachnisin' or 'sehnisin', (Dogan, 1975, p. 414).
(13) From the Latin 'tabulatum', (Dimitrakos, 1964, under 'ταβλωτόν').
Fig. 57 Upper floor projections of houses in different towns, (Michaelis, 1977, pp. 198, 240; Moutsopoulos, 1971, p. 251; Moutsopoulos, 1962, p. 34).
Fig. 58 The sunlit area of a room without or with a projection, (drawn by the author).

Fig. 59 Projections used to correct the irregular plan of the ground floor. Emmanouel brothers mansion in Kastoria, (Moutsopoulos, 1962, pp. 76, 77).
2.3.6. Windows and lights.

The windows can be distinguished into those of the ground and those of the upper level of the house. The former are smaller than the latter and are protected by metal bars driven into their frames. Sometimes the bars bow out towards the street so as to facilitate a side viewing, (fig. 56).

The heads of the ground level windows are either straight or curved. The curve varying from gentle to a complete semicircle. The glazing of these windows is usually a recent, 20th century, addition. They were not, originally, glazed but were provided with shutters opening inwards.

The upper level windows are usually divided by wooden mullions and transoms. Initially the weather was kept out by means of shutters like the ones that the ground level windows had. Glazed panels for the upper windows were introduced towards the end of the 18th century and are of the sash type where the top panel is fixed and the lower slides upwards.

The windows of the upper house are usually rectangular, with the heads of their frames broader than the jambs. Occasionally, however, the heads can be greatly curved but they never curve to a semicircle. Very characteristically, and in contrast with the ground level windows, the upper level ones are often arranged in sets in which heads and sills extend from one window to the next and visually unite them, (fig. 60).

It must be noted that the sills of the windows of the upper house are about 50 centimetres above the floor, so that, when sitting on cushions or low divans placed by them, one can see outside. We will come to the rooms' interior design later, but, at present, it is important to observe that the windows on the street façade of the house are not always placed at equal heights above the girdle which separates the lower from the upper house, but at different heights depending on the various levels of the flooring of the rooms behind them, (fig. 60). It can be suggested that this, together with the grouping of the windows, produces an interesting visual effect and safeguards the façade from repeti-
tion and regular spacing, as far as the window arrangement is concerned.

The lights provide the interior with extra daylight. In fact they are the only source of light when the window shutters are closed, especially before the glazing was introduced, when the shutters would have been more often closed to keep the weather out. With the introduction, however, of glazing, the lights lost their daylight providing role and were used for decorative purposes. Thus we find them more often in the bourgeois houses and the mansions and in those of their spaces where decoration was more desirable.

Lights are rectangular with either flat or semicircular heads. Sometimes the heads form a segmental or pointed arch. They are always situated above windows - they do not occur on their own, (14). The windows of a room either all have lights above them or none do. This produces a 'matching' effect, as much in the room itself as on the façade of the house where the windows of different rooms are grouped separately. Therefore, one can guess the number of rooms behind the façade by observing the grouping of windows, their different levels in relation to the girder on the top of the stone wall and by noticing which of the windows are accompanied by lights, (fig. 60).

2.3.7. Wooden supports.

The term wooden supports refers to the posts, columns, joists, braces and other timbers which are used for supporting purposes. There is extensive use of wooden supports in the structure of the Macedonian house, (fig. 61). On the street façade, the Macedonian character is manifested by the braces which hold the upper floor projections. The braces are usually placed at equal intervals under a projection, rest on one of the stone wall's beams and support a girder at the end of any projection. Similar girders, 20 by 15 centimetres, where the floor joists rest, run the length of the

(14) Unless the creation of windows is not possible or desirable. See chapter 5, section 5.3.5.
The only example we know where lights do not accompany windows is the west street façade of Gounaris popular house, Veria.
Fig. 60 Tzidos bourgeois house in Veria, street façade, (Moutsopoulos, 1967, illustration part, p. 198). The dotted line indicates the different levels of the rooms, (room spacing and floor line added by the present author).

Fig. 61 Axonometric drawing of Sior Manolakis mansion in Veria, showing the extensive use of timber in the Macedonian house, (Moutsopoulos, 1971, p. 203).
stone wall emphasising the demarcation between the lower and the upper house.

Also, the quoins of the upper floor expose the posts of their frame wall revealing that the strength of this wall lies in its wooden skeleton and adding variety to the overall look, (fig.62). Perhaps the exposure of the wooden supports shows a desire to exhibit, rather than conceal, the structural elements of the house. This is more evident on the yard façade where one can observe how the joists and posts bear the load of the house. With the exception of the colonnade of the gallery where the columns are placed at regular intervals, the posts of the covered walk are placed where needed for an even distribution of the incumbent house's weight. Also, there are only as many posts as needed, measuring 15 by 20 or 20 by 20 centimetres, which suggests that the builder had a good knowledge of the behaviour and capacity of wood. An equal distribution of the bearing forces not only saves on timber but also obviates the securing of the posts on the ground. Thus the joists just rest on the posts and the latter, in turn, on flat stones which protect them from the dampness of the soil, (fig.61). This flexibility at the joints neutralizes distortions and other consequences which would have resulted from the pressure of horizontal forces, like earthquakes for example.

The capitals are wooden and oblong, placed parallel to the supported joist. They are thinner towards their ends to give an even distribution of the weights from the joists through the posts. In the case where there are no capitals, the contact between post and joist is secured with a pair of wooden ties tenon joined with the post, giving the impression of a capital. Finally, it is interesting to notice that a corner capital does not have equal lengths on either side of the post: it is longer at the inner side; more evidence of the builder's knowledge of wooden structures, (fig.63). There is evidence, therefore, that such knowledge has allowed the builder to produce an economic, elegant and simple structure which has proved to
Fig. 62 Manousis mansion in Siatista, (photographed by the author).

Fig. 63 Examples of capitals, (b,e,f), and capital-like ties, (a,c,d). On the right, a corner capital. (Moutsopoulos, 1971, pp. 394, 395).
be strong through the years. The houses are 100 to 200 years old and in most of them it is not only their stone walls that hold them but also their wooden supports, (fig.64).

2.3.8. The covered walk.

Section 2.2.2. shows the role of the covered walk in the articulation of the spaces of the ground floor of the Macedonian house. From a morphological point of view, the walk produces an opposite effect on the yard façade to that which the stone wall produces on the street façade. In other words, the 'void' of the covered walk makes the upper house look as if it is suspended in the air while on the street façade, the upper house rests gracefully on the 'solidity' of the stone wall, (fig.65).

In the case where the covered walk is fully open to the yard, there are two demarcation cues, (besides the fact that the covered walk is roofed), which make concrete the difference between the semi-open and the open, between the separate uses of the two spaces and the degree to which one is related to the other. These demarcations are, the paving of the covered walk and the posts that support the upper house on its side towards the yard. The walk is paved either with flat stones or pebbles. Darker or lighter pebbles were used to create geometric or other patterns in a decorative manner. The posts are occasionally spaced at regular intervals creating a colonnade where the paving stops, (fig.66).

In the case where the covered walk is closed, its paving extends into some part of the yard, partly re-establishing the continuity which has been interrupted by the dividing wall that has replaced the colonnade, (fig.67).

Whether open or closed to the yard, the covered walk is the space associated with the ground level activities of the house. It therefore has a simplicity in its design, a 'spartan', inornate look, (fig.64).
Fig. 64  G. Sforzos mansion in Ampelakia: the covered walk, (1983 Calendar of the Commercial Bank of Greece). The wooden supports date from 1787.

Fig. 65  Hatziantoniou popular house in Veria, street and yard façades, (Moutsopoulos, 1967, illustration part, p. 158).
Fig. 66 Plan of the covered walk and yard of Hatzis bourgeois house in Veria, (Moutsopoulos, 1967, illustration part, p. 96).

Fig. 67 G. Sforzos mansion - ground floor plan, (Moutsopoulos, 1975, p. 15).
2.3.9. The gallery.

It has already been noted that the gallery is always on the yard façade of the house and that it gives access to all the other rooms of the upper level. As in the case of the covered walk, the side of the gallery towards the yard can be either open or closed. When open, it is provided with an elegant colonnade and balustrade, (fig. 68); when closed, the colonnade is replaced by a set of windows and lights, (fig. 69). Occasionally, the two are combined: the colonnade and balustrade remain while very closely behind them come the windows and lights. Thus, the largest part of the gallery is indoors with a long strip of it outdoors creating a loggia, (fig. 70).

A question that arises from the fact that in some houses the gallery is open and in some closed, is whether this was determined by the climate of the different regions in Macedonia, or whether it was optional, or fashionable, depending on the period in which they were built. Siatista is located on high ground and its houses exhibit closed galleries; those of Veria, which is on lower ground than Siatista and has a milder climate, exhibit open ones. However, in Ioannina, they have either open or closed. More specifically, those houses in Ioannina built after 1820 usually have closed galleries, while the older houses have open, (15). In Ampelakia too, the older houses (18th century) had open galleries, (16), which, in a later period, were closed, like the case of G. Sforzos mansion, (17). So, one may conclude that the period in which the houses were built rather than climate determined whether galleries were open or closed. It may also be noted that the open gallery was followed by the closed, something to be remembered in the classification of the house plan in chapter 3.

Fig. 68 Open gallery in a Verian house, (Moutsopoulos, 1967, illustration part, p. 67).

Fig. 69 G. Sforzos mansion in Ampelakia - yard façade, (Moutsopoulos, 1975, p. 13).

Fig. 70 Bassaras mansion in Kastoria - yard façade, (Moutsopoulos, 1962, p. 15).
2.3.10. The staircase.

It is not so much the form of the staircase but its position in the house and the way it connects the floors which is characteristic. In most houses, the staircase is situated within the covered walk and leads onto the gallery, the heart of the upper house. It does so through an opening in the floor. The opening is usually provided with a wooden 'lid', hinged on the floor, which can be locked and secured only from upstairs. It provides extra security for the living quarters of the house and, of course, keeps out the draught from the semi-open covered walk.

The staircase has a simple construction, a pair of strings with treads at regular intervals, (fig. 71). However, it can have risers and a proper balustrade with carved balusters, as in the richer houses. Also, the first few steps can be made of stone to prevent the wood being in contact with damp ground.

Apart from a very few mansions, the staircases of which become a strong element in their design for purely decorative reasons, the staircase in most houses, (popular, bourgeois and mansions), is a light, inconspicuous structure: it is there for its main function, to connect two levels. It occupies the least possible space, because it is usually narrow and steep, even in those houses where space is no problem.

2.3.11. The roof.

The construction of the roof, in general, is one of tiles or slates carried by wooden battens and rafters which, in turn, are supported by purlins. Roof trusses are used where needed (i.e. for spans greater than 6 metres). It is unnecessary to go into further structural details, but rather concentrate on those features of the roof which are fundamental to the Macedonian character of the house.

The Macedonian roof slopes up from all sides of the building, i.e. there are no gable walls. The angles of the slopes are not over 25°. Multiple hips enable the roof to account for the irregularities of the house plan and the upper floor projections, (fig. 72). The eaves project consi-
Fig. 71 Simplest form of Macedonian staircase, (drawn by the author).

Fig. 72 Plan of the roof structure in Vafidis house in Veria, (Moutsopoulos, 1967, illustration part, p. 55).
derately all around the house. They are supported by brackets which are characteristically exposed and, in certain examples, they reach lengths up to 1.40 metres. Sometimes, over the quoins of the building, the eaves are rounded, producing an effect of roof continuity, especially when the plan irregularities and the upper floor projections produce a fragmentary roof plan, (fig. 73).

As roof gutters were not used, the projecting eaves prevent rainwater from falling on the walls or directly onto the foundations of the house. From an aesthetic point of view, the eaves provide a definite finishing line for the vertical rise of the house and they match the upper floor projections, especially in the way their brackets jut out similar to the way the floor joists of the projections are exposed and held by the braces, (fig. 73).

2.3.12. Interior design and decoration.

In the discussion of the articulation of spaces in the house, reference is made to a few aspects of how the spaces were used by the inhabitants. This section elaborates and concentrates on those features of the interior design that are characteristic of the Macedonian house and of the manner in which it was used.

The ground area of the house was for storing and working purposes and its use varied depending on the profession of the owner and, thus, on the category (i.e. popular, bourgeois, mansion) of the house. Nevertheless, the 'kitchen' of the house is situated on the ground floor and is accessible either from the yard or the covered walk. The term kitchen is not really appropriate because it could lead one to confuse the Macedonian with the contemporary. The former is basically a space where bread was kneaded, once in so many days, and food provisions were generally prepared and stored. Bread was baked in special ovens, i.e. closed receptacles made of stone and mud, (fig. 74), which are usually situated out in the open yard. When such an oven was lit for the baking of bread, food would also be cooked there. The well, too, is not situated in the kitchen, but out in the yard or in the covered walk. However, there are occa-
Fig. 73  Sior Manolakis mansion in Veria - street façade, (Moutsopoulos, 1971, p. 205).

Fig. 74  Oven in the house of Zogas house in Veria: elevation, section, plan, (Moutsopoulos, 1967, illustration part, p. 209).
sions in which either the oven, or the well, or even both are included in the kitchen, as, for example, in Samaras mansion illustrated by fig. 75. In this example one notices that the oven was combined with a fireplace, where the cooking of food is more convenient. Nevertheless, food was not cooked there daily, because it was also cooked in the everyday, or family, rooms which are situated in the upper area of the house, (18). Therefore, the Macedonian kitchen need not be equipped with cooking and water supply facilities and was not used daily. For both these reasons it is situated in the ground area of the house near the yard and the covered walk which contain the oven and the well, but which, at the same time, are not designed for everyday living.

The upper area of the house is designed for living purposes and its inner arrangement is basically the same whether the house is popular, bourgeois or mansion. Generally speaking, the spaces of the upper part of the house are distinguished into those designated for summer and those for winter use. They are further distinguished into private and reception rooms, (19).

The summer spaces are always situated on the top storey while the winter ones are in the mezzanine, with the exception of the 'best' winter room which is on the top. Thin frame-walls, many openings and high ceilings are characteristics of the summer spaces which can either be individual rooms or specially designated and furnished 'recesses' in the gallery. In contrast, thick stone walls, fewer openings and low ceilings characterize the winter spaces, as expected, since the latter are situated in the mezzanine, (fig. 76).

The living spaces are not meant to cater for the various aspects of living separately, i.e. each of them is not designated for a single purpose such as eating or sleeping. So, one does not find bedrooms, dining rooms etc. Everyday dining, sleeping and, often, cooking occurred in certain rooms of the house that can be called everyday living or family rooms. The poorer of the houses have only one

Fig. 75 Samaras mansion in Ampelakia - ground floor plan, (Moutsopoulos, 1975, p. 65).

Fig. 76 Stamatas bourgeois house in Ioannina, (Michaelis, 1977, p. 205).
such room which is not always provided with a proper fireplace, but may have a specially prepared 'corner', called 'furnello', that can accept a fire, but has no chimney, and was used for cooking, (20).

The reception spaces are bigger and more decorated than the living ones. This is why they are called best rooms. In the popular houses there is only one reception room; in the bourgeois and mansions there are more than one, amongst which the best winter and summer rooms that are always situated on the top storey. The reason for the best winter room being situated on the top floor and not on the mezzanine, together with the other winter spaces, is that, as a reception room, it is only proper that it be on the storey which is more decorated and looked after. Besides, the mezzanine also includes working spaces. For example, that of the house in fig. 76 includes spaces where leather was tanned, (21) - it is unconventional for a reception room to be situated next to a tannery.

Finally, the gallery served as a reception space, too. It was there where all the big social gatherings, parties etc. took place. This was only natural, as the gallery is the biggest of all spaces in the house and the best lit, too. It lacks heating, though the crowd and the wine must have made up for that. In the gallery, particularly of the mansions, there is a specially arranged 'stand' for the musicians, (22). It is either situated beside the staircase landing, as, for example, in Aivazis mansion in Kastoria, or it is situated above the staircase, as in Tsiatsiapas mansion, also in Kastoria, (fig. 77). The ends of the projections of the gallery are arranged as sitting recesses, usually secluded by a pair of columns and balustrades, (fig. 78). Therefore, the musicians stand and the recesses of the gallery are discreetly out of the way, leaving a free central space which, in the everyday living, served as a circulation area giving access to the rooms and, on special occasions, served as a dancing and merrymaking hall.

(20) Ibid, p. 203.
(22) Moutsopoulos, 1962, p. 17.
Fig. 77 The musicians' stand above the staircase in the gallery of Tsiatsiapas mansion in Kastoria, (Moutsopoulos, 1962, p.46).

Fig. 78 Sitting recess in the gallery of the top storey of Natzis mansion in Kastoria, (Moutsopoulos, 1962, p.38).
Elements of the interior design such as the musicians stand and the recesses of the gallery are found in the richer of the houses, i.e. the mansions. The popular houses and some bourgeois ones do not exhibit such elements. However, all categories of houses exhibit a standard design in their everyday and reception rooms. Thus one may talk about fixed characteristics of a room's interior design. These are the fireplace, the cupboard and the low divans.

a) The fireplace was for heating and cooking purposes; for the latter it occurs even in the summer rooms where heating is unnecessary. However, the decorative value of the fireplace itself, or of it in combination with the other furnishing of the rooms, must have been desirable and a necessary supplement to the interior design. This can be assumed from 'fake' fireplaces that occur in certain houses, that is, decorative hearths without chimneys, (23). Also, the fact that the fireplace in the so called 'eagle room' of G. Sforzos mansion in Ampelakia has never been 'smoked', either by heating or cooking, so that the fresco inside its hearth would not be ruined, (24), proves its decorative value for the room.

The construction of fireplaces was expensive, (25). This is why the poorer of the popular houses do not have any, or have only one. The richer the house is, the more fireplaces one finds. They must have been a sign of wealth, because some of them were used only rarely, if at all. Still in Macedonia and in the rest of Greece, there is an expression "είναι από καλό τζάκι", (he/she comes from a 'good fireplace', i.e. a good home), which shows how the fireplace was an indication of wealth and, consequently, it served as a measure of wealth and status.

b) The cupboard can be the common type with a series of shutters opening towards the room interior, or it can be of the walk-in type. In both cases it is fixed on the wall where the door is so that, after opening the room door, one can walk straight to the cupboard without actually

(24) Moutsopoulos, 1975, p. 76.
(25) See chapter 5, section 5.5.1. See also Michaelis, 1977, p. 203.
entering the room. This is because the cupboard, apart from serving the room as a space where various objects, coverings etc. were kept, was also a 'secret' space from where the young girls could watch the guests from behind latticed openings, (fig.79). They did so sitting on a raised platform, inside the cupboard, which they reached with a ladder, (26). The façade of the cupboard towards the room is treated with wooden panels arranged geometrically. It also carries niches, where small objects, drinks, various offerings for guests etc. were placed, and shelves which close with hinged shutters. It is worth noticing that the cupboards are placed against the interior dividing walls. Thus, sound and heat insulation is achieved. Also, as the side of the cupboard faces the door of the room, (fig.79), direct views from the gallery into the room are blocked.

c) The low divans are always placed along the walls and preferably under the windows so that, when seated, one is able to look out. During the day the inhabitants sat or lay on the divans, at night they slept there, after having made them up using the appropriate coverings and pillows which were kept in the cupboard. It must be noted that the divans themselves and the way they were used, either for sitting or lying on, is an important point of difference between the Eastern and European ways, the European way meant eating while sitting on chairs around a table and sleeping in beds, (27). According to the Eastern way, the divans were where one sat to eat, or lay back to relax, talk, or sleep. One sees why in the Macedonian house there was no distinction such as bedrooms or dining rooms.

The arrangement of the fixed characteristics of a Macedonian room is also predetermined: the fireplace is situated either between two windows or between two niches of the wall. On either side of the fireplace there are divans bearing mattresses dressed with colourful coverings and cushions. Finally, the cupboard usually occupies the wall opposite the fireplace, that is, the wall along which there is no

(26) This and other socio-cultural matters are dealt with in chapter 4.
(27) European or 'Franc' way: Simopoulos, 1976, p.329.
Fig. 79  The cupboard of the best winter room in Stamatas bourgeois house in Ioannina, (Michaelis, 1977, p. 47; plan drawn by the present author).

Fig. 80  Examples of room interiors: left, the best summer room in Tositsas mansion in Metsovo; right, a room in Violas bourgeois house in Metsovo, (Michaelis, 1977, p. 253).
Apart from the fireplace, the divans and the cupboard, which are permanently fitted on the walls and floor, the only additional furniture was a low round table placed in front of the fireplace where food, coffee and refreshments were served; the occasional chest, where clothes and linen were kept and, finally, thick carpets that covered the floor, (fig. 80).

In most houses, at least in their best rooms, the walls are panelled. The panelling starts from the floor and stops at the heads of the windows. It matches that of the cupboard and of the window shutters, so that when the latter are closed a 'soft' wooden surface embraces the room on all sides and a warm atmosphere is created. It must be noted that the panelling of the cupboard is at equal height to that of the walls so that all round the room it stops level with the heads of the windows.

It was noted earlier, that, the gallery, in everyday living, is used for circulation and gives access to the various rooms of the house. As the rooms hardly ever communicate with one another, each functions as a separate unit and exhibits the standard interior design. It can be noted that, this design creates a particular recess for sitting and lying which is distinct from the circulation space of the gallery. This is usually emphasized in the rooms themselves by the raising of the recess: the space which includes the divans and the fireplace is raised by one step, so that the room may acquire a circulation and a recess area. On entering the room one took off one's shoes, (28). This was only appropriate in order to proceed into the recess which was covered with the best carpets and various other clean coverings where people sat or lay. The distinction between the two areas of the room is further emphasized by a pair of columns and balustrades, (fig. 81).

The change in level between the circulation area and the recess was made by placing additional planking on top

Fig. 81 The best summer room in Tsiatsiapas mansion in Kastoria, (drawn by the author).

Fig. 82 Top storey plan of Tsiatsiapas mansion in Kastoria and projection of the ceiling decoration on plan, (Moutsopoulos, 1962, p. 237).
of the actual floor, consequently the ceiling of the spaces below remains flat. The patterns of the ceiling follow the different floor levels and contribute to the distinction between the circulation areas and the recesses, (fig. 82). Such ornate ceilings, however, like those in fig. 82, are found only in the mansions. Here, decorative patterns, murals etc. continue on the walls and reach down to the panelled dado, (fig. 83).

In the mansion, the lights are also ornamented: they bear two fixed panels, an external and an internal. The external is divided into small panes by gypsum bars, usually arranged diagonally. On the internal, small panes of coloured glass are set in an ornate framework, also made of gypsum, used very finely and skilfully for the creation of decorative patterns which, in combination with the different colourings of the glass, produce a striking effect, (fig. 84). The daylight through the coloured lights creates a unique atmosphere, appreciated more when experiencing it rather than having it described.

Concluding the description of the interior design, we have found that most of a room's furnishing is permanently fitted, predetermined and unmovable. As the way of life and the habits of the occupants did not require specially designated rooms for the different aspects of living, a fact which enabled a certain flexibility in the choice of rooms depending on the season of the year, the design of the rooms is typical for each and every one of them. It also accounts for all categories of house. The only difference is that the mansions have a lot of ornamentation. Such ornamentation cannot be considered as a fixed characteristic of the Macedonian house, because, although we are not in a position to attest whether people of the popular and bourgeois classes would have embellished their house interiors had they had the financial comfort of the upper class, it can equally be argued that, maybe the mansion owners liked to surround themselves with, what they considered to be, nice things in profusion, whereas the owners of the bourgeois and popular houses had different views on the matter. Furthermore, as much of the ornamentation of the mansion is copying baroque, Arabic,
Fig. 83 Ornate interior of the best summer room in Natzis mansion in Kastoria, (Moutsopoulos, 1962, p. 16).

Fig. 84 Lights - internal view: a. and b. from Siatista, (Michaelis, 1977, p. 278); c. from Kastoria, (Moutsopoulos, 1962, p. 16).
Helenistic and other motifs, it can be argued that it shows the desire of their owners to keep afresh memories that they alone had from their travels abroad to big, wealthy and prosperous cities; to keep afresh the different kind of art (i.e. not Macedonian) that they had experienced and had been attracted to and, finally, to keep afresh the freedom they had experienced: a consolation in their society which was under the Ottoman yoke.
CHAPTER THREE

CLASSIFICATION OF THE MACEDONIAN HOUSE PLANS

3.1. Premises.

In discussing the articulation of spaces in section 2.2. of the previous chapter the plan of the Macedonian house is shown diagrammatically. To facilitate a fuller comprehension of the plan, this chapter is concerned with placing the variable number of spaces on plan. That is, certain 'plan types' are established so as to classify the Macedonian houses with regard to both the number of their spaces and the way these are placed on plan for the realization of the given articulation which remains unchanged. For example, in any given house one notices the same articulation in which a gallery gives access to rooms, of which the number and their position in relation to the gallery may vary. All possible plan arrangements that are manifest by the individual floors of the Macedonian houses are covered by the plan types introduced here.

This house plan classification is based on certain observations from the study of the Macedonian house:

a. From the simplest plan to the more elaborate, the notion of an open or semi-open, colonnaded space placed along a closed, inner one is evident. In other words, a covered walk or gallery faces the yard and gives access to rooms at the back of the house, (fig. 85).

b. These rooms are divisions of a broad fronted enclosure, a cell, which can be either single spaced or can have up to three major divisions. By 'major divisions' it
is meant that these do not communicate directly with each other, but only via the gallery, and thus remain relatively autonomous. A modification can occur where the middle of the three divisions may be fully open to the gallery, (fig. 86).

C. As a broad fronted enclosure, the cell's length is always greater than its depth. The length is, however, limited to a ratio of 3:1. That is, its length can be up to three times its depth meaning, in turn, that its maximum of three divisions can be approximately square in plan, (fig. 87).

d. The gallery can have up to three sides open: the front only, the front and one end or the front and both ends. The term 'open' is here intended to include the cases which are glazed, too, (1), (fig. 88).

e. This limit on the length of the cell places a limit on the number of spaces, i.e. basically four spaces consisting of three major ones in the cell plus the gallery. Should the need for more spaces arise, these are taken from the gallery. More specifically a fifth and sixth major space can be created by dividing off first one and then the other end of the gallery; the centre always being left free, whether completely open to the yard or bearing windows. Alternatively, instead of making the additional spaces at the expense of the gallery, rooms may be built out from the long open side, the front, of the gallery at both ends, (fig. 89).

An example of typical plans manifesting the observations a, b and c above is shown in fig. 90: the ground and upper floors of that particular house express the notion in which a long covered walk and gallery, respectively, are placed along broad fronted cells, in this case, each divided into two, non-communicating major spaces. The cell's length is greater than its depth. The way in which one end of the covered walk or gallery can be used for an extra room, as in observation d, is shown in fig. 91.

We note, therefore, that the floor plan types of the Macedonian houses arise from a broad fronted cell with a

(1) As seen in chapter 2, section 2.3.9, open galleries of the 18th century were followed by glazed ones in the 19th century.
Fig. 85  The covered walk or gallery giving access to an inner space, (shaded).

Fig. 86  Divisions of the cell. A: single spaced, B, C: two divisions, D: three divisions, E: as D but middle division open to the gallery.

Fig. 87  Dimensions of the cell.

Fig. 88  Degree of openness of gallery. a: both ends closed, b, c: one end closed, d: all three sides open.

Fig. 89  a, b, c: spaces taken from the gallery, d, e, f: additional spaces built out from the front of the gallery, g: variation of f where the gallery colonnade is placed in line with the additional spaces.

(All figures drawn by the author).
Fig. 90  Tsalbouras popular house in Tirnavos, (Megas, 1946, p. 66).

Fig. 91  Chatzisalatas popular house in Agia, (Megas, 1946, p. 78).

Fig. 92  Patounas popular house in Agios Akakios, (Megas, 1946, p. 44).
gallery along its front. This is illustrated by the house in fig. 92 which is the result of two consequent building operations: the shaded walls show that, initially, the ground and upper floors each had three rooms. With the later addition of the rooms taken from the left ends of the covered walk and gallery respectively each floor acquired a new total of four rooms.

Based on the observations a, b, c, d and e, a taxonomy of the house floor plans places them in five groups, depending on how the cell is divided. Each of these groups can consist of 29 plan types, depending on the number of open sides (three, two or one) and closed spaces (one or more, whether within the gallery or added on to the front of it) which comprise the gallery:

![Diagram of floor plans]


GROUP C, Plan-types C1-C29.
GROUP D, Plan-types D1-D29.

GROUP E, Plan-types E1-E29.
3.2. Examples of plan types.

Example 1.

Tsiatsiapas mansion, finished in 1754 in Kastoria. The plans of the floors of the mansion are evidence of a direct application of the notion of a broad fronted cell with a long gallery on its front. There are a ground, mezzanine and two upper storeys.

The plans of the ground, mezzanine and the first upper storey are equivalent to plan type D2, that is the cell is divided into three spaces while the covered walk of the ground floor and the galleries of the mezzanine and the first upper floor run the full length of the building and have blind, closed, left ends, right and front ones bearing windows. The second upper storey manifests plan type E1 where the cell has its middle space open to the gallery, the latter having windows and lights on all three sides, (fig. 93).

Example 2.

Sapoutzis mansion, built near the end of the 18th century in Kastoria. There are a ground, a mezzanine and two upper floors. Of them, the ground is equivalent to plan type C4 where the cell is divided in two spaces, a large one on the left and a smaller on the right, and the covered walk has a room at its left end. The first upper floor manifests plan type D14: the cell is divided in three major spaces (of which the left is sub-divided in two) and the gallery has one room on its left while its right end is blind, (fig. 94).

Example 3.

Saraphopoulos mansion at Pinakates on Mt. Pelion. The ground floor manifests plan type A2, where there is a single spaced cell and the covered walk has a blind left end. The mezzanine and upper floor are both of plan type B4, that is, the cell has two major spaces and the gallery a room on its left end, (fig. 95).
Fig. 93  Tsiatsapas mansion in Kastoria, (Moutsopoulos, 1962, p. 20).
Fig. 94 Sapoutzis mansion in Kastoria, (Moutsopoulos, 1962, p. 42).

Fig. 95 Saraphopoulos bourgeois house in Pinakates, (Dimakopoulos, 1981, fig. 156).
Example 4.

The ground and upper floors of Ioannidis mansion in Ioannina are both of the type D17, where the cell is divided into three spaces, the gallery having two rooms, one at its left and the other at its right end. One notices that the cell on the upper floor appears to exhibit five spaces, but actually it is the middle and the right major divisions which are each sub-divided in two smaller spaces, (fig. 96).

Example 5.

Figure 97 shows a popular house at Paliouri village of the Chalkidiki peninsula. Unfortunately, there are no plans of the house but one can see that it is typical of the arrangement in which the gallery has two rooms, one on each end, while its front is open. The same arrangement accounts for the previous example 4, a fact which confirms that there were not different plan types for the different categories of house.

Example 6.

The ground floor of Alexiou mansion in Siatista, with a single spaced cell and two major spaces on either end of the covered walk, manifests plan type A17 (the small room on the right cannot be considered as a major space). The upper floor of the mansion is plan type E17 since the cell is divided into three major spaces of which the middle one is open to the gallery, (fig. 98).

Example 7.

The mezzanine of Neratzis mansion in Kastoria is plan type E22 where the middle space of the cell is open to the gallery and the latter has two spaces projecting from both ends (left and right) of its front. The upper floor differs from the mezzanine in that the middle space of the cell is not open to the gallery. Thus, the upper floor is representative of plan type D22, (fig. 99).

Example 8.

Mitousis mansion in Kastoria, built near the end of the 19th century, has a D26 mezzanine and an E26 upper floor.
Fig. 96 Ioannidis mansion in Ioannina, (Michaelis, 1977, pp. 209, 210, 215).

Fig. 97 A popular house in Paliouri, (Moutsopoulos, 1971, p. 373).
Fig. 98  Alexiou mansion in Siatista, (Michaelis, 1977, pp. 271, 272).

Fig. 99  Neratzis mansion in Kastoria, (Moutsopoulos, 1962, p. 22).

Fig. 100  Mitousis mansion in Kastoria, (Moutsopoulos, 1962, p. 22).
That is, both the galleries of the mezzanine and upper floor have similar arrangements, though the arrangement of the cells varies, (fig. 100).
CHAPTER FOUR

MACEDONIAN SOCIETY & THE BUILT ENVIRONMENT

4.1. Aspects of the Macedonian society.

4.1.1. Preliminaries.

The goal of the work in the first three chapters is the description of the Macedonian town and house and the outline of their features. Little attempt is made to see this architecture through the patterns of life that it sheltered. The object of this chapter is to study those patterns that were characteristic of the Macedonian society and to project them onto the picture that is formed from the description in the previous chapters. In this manner, a dry description of the kind "...the lower part of the Macedonian house is heavy and solid while its upper part is light with many large windows..." will cease to be a straightforward report of what our eyes see and will become the embodiment of many interdependent meanings which the architecture of a people has.

The creation of an architecture is a complex phenomenon. All the explanations are variations on a single theme: a people with certain attitudes, ideals and skills respond to a certain physical environment. Its responses are due to social, cultural, ritual, economic, physical and other factors which affect the form of the architectural product. The latter can be explained in terms of these factors and so become meaningful.
However, since patterns of culture, rituals and social behaviour are always associated with those of previous generations, architecture too should be looked at in view of past structures. The degree of dependence on past generations must be measured. Therefore the architecture of a people can be looked at in two ways: Firstly, whether it makes concrete a people's aims, desires and needs which are due to social, cultural, ritual, economic, physical etc. factors. Secondly, whether it reacts to the architecture of previous generations as if the latter was the actual environmental stimulus.

This chapter is concerned with Macedonian architecture in the first sense, as the aims, desires and needs of the population of Macedonia during the 18th and 19th centuries were deeply influenced by social and economic factors so that the urban structure of towns was organized around new socio-economic systems. Chapters five and six deal with Macedonian architecture in the second sense, that is, to explore its origin and its dependence on previous generations.

A sociological fact which was significant for Macedonian society is the diffusion of certain traits: although this society was composed of nationalities with different cultural backgrounds, human imitativeness and socio-economic processes resulted in a certain 'cultural' integration. For reasons which are not difficult to explain, as discussed later, although this integration allowed, on the one hand, the establishment of a co-operative and symbiotic society, it was never, on the other hand, complete enough to create a single culture, a culture that one would have called 'Macedonian'. Each nationality had its own distinctive traits, as well as some in common with the others, like those of costume, of techniques and of economic exchange. For example, Greek and Turkish men were dressed in the same style but wore different turbans, (1). Nevertheless, the different nationalities had impressed distinctive goals and motivations upon these traits such that, although ostensibly similar, they in fact had a different significance for each nationality.

(1) Simopoulos, 1976, pp. 308, 788.
For example, the presence of women’s quarters in Greek and Turkish houses served different purposes, i.e. the Greek ones were not harems. An elaboration on the subject of cultural integration is not intended at present, neither is an examination of the distinctive traits of each nationality. However, certain common characteristics will be outlined in looking at the Macedonian society as one of symbiosis, where the groups are unlike and the relations of mutual dependence are complementary.

4.1.2. A new urban class - An example.

In the beginning of the 18th century the urban structure was reorganized around new socio-economic systems. This was due to the emergence of a new urban class, the bourgeoisie. Its involvement with commercial affairs and with the manufacturing of specialized commodities accelerated the social rhythm of the towns. The population was orientated towards new economies and thus adjusted itself to a new social structure that was reflected in the structure of urban space.

A family that started the business of dying cotton threads, for example, designated the ground and mezzanine areas of its house for this purpose. With the expansion of the business, not only had the working spaces of the house become larger, but also more working hands had to be hired. The poor agricultural population provided the workers who were needed, as, for them, this was an opportunity to secure a higher as well as a steady income. Many families started their own business that either dealt with the production or the further conveyance of commodities to the big commercial centres of the Turkish state, or to the markets abroad. Soon production became a town affair, where the workshops and the

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(2) For a further discussion on the diffusion of traits in a cultural integration see: Benedict, 1971, pp. 174-177.

(3) Whereas in 'commensal' societies the groups are alike and the relations are supplementary, (Bullock-Stallybrass, 1977).

(4) A town’s prosperity was based on the production of a single product rather than a variety. This can be explained by the fact that, whether due to local skills or resources, the quality of a certain product was superior to that of similar products found elsewhere. Thus it was in great demand in the home market as well as foreign ones and the town concentrated on the production of this success-
storing spaces became organic elements of the houses, and the manufacturers, merchants and workers were all inhabitants of the town. The town itself became the production space and not the surrounding fields, as the agricultural activities were replaced by the industrial and commercial. The town grew bigger, so did the houses; but most importantly, the form of the town, in general, and the form of the house, in particular, was no longer dictated predominantly by the topography and the culture of a land worker, nor by the divergence between conqueror and conquered, (5), but by the new urban social and economic transformations.

A good example, illustrating these transformations on a town scale, is the case of Ampelakia. Before the bourgeoisie appeared, the town plan followed, firstly, the topographical and, secondly, the social factors. The centre of the town was by the old church, built in 1580, and the rest stretched along the contour lines, eastwards and westwards, and along the path leading to the valley below. With the emergence of industry and commerce, the manufacturers and the merchants combined their homes, workshops and storage spaces in big mansions, some of which were built by the old centre while others created a new centre towards the west side of the town. The workers built their homes in small groups around these mansions. Thus a bipolar plan was created in which the involvement of the inhabitants with the mansion-workshops was clearly reflected. Meanwhile, as the population turned from agriculture to industry and commerce, the town was in need of food, clothing etc. that the nearby countryside could no longer provide. Therefore, shops began to appear providing not only the essentials but also additional commodities which the increased living standards of the population demanded. A commercial centre was created in the most suitable position, between the two urban centres, (fig. 101).

Besides Ampelakia, other towns witnessed similar influences on their urban structures from the emergence of full product. For example see: Moutsopoulos, 1975, pp. 29-36, on the art of dying cotton threads in Ampelakia.

(5) See discussion in section 4.2.1.
Fig. 101 Layout of Ampelakia, (compilation of three drawings from Rizikares, 1981, pp. 35, 38, 39; circles by the present author).
the bourgeoisie. But, in those towns which were inhabited by various nationalities and not exclusively by a single nationality, like Ampelakia or Siatista for instance, formal elements of the townscape, such as the grouping of the houses into blocks, neighbourhoods etc., were not only dependent on the position of the mansion-workshops (in other words dependent on socio-economic factors) but on socio-cultural factors too. The position of a church determined the formation of a Greek neighbourhood, while the position of a mosque excluded the proximity of a church.

In order to examine the interdependence between architecture and social, cultural and economic aspects, we must first discuss the aspects themselves. Especially those that are related with the symbiotic, interdependent, character of the Macedonian society.

4.1.3. The Turkish authorities.

Since the time of the first settlement of the Turks at the close of the 14th century, the territory of Macedonia was divided into 'hasses', i.e. public lands belonging to the sultan, to his family and to the Turkish élite, and into larger or smaller fiefs, which belonged to the Turkish cavalry soldiers, (fig. 102). Fiefs were also given to certain notables of Greek or Slav descent, all of whom had converted to Islam, (7).

Militarily and politically, Macedonia was divided into 'sanjaks', provinces, each of which was headed by a 'bey', (8). Also, each of the larger towns had a 'pasha' acting as governor of the town and of those towns and villages in its environs. The pasha had mainly political authority while the military and the judicial authority belonged to the 'aga' and the 'mulla' respectively. Other officials were the various 'mütesellims' who were appointed by a pasha as acting

(6) See section 4.2.2.
(7) The ancestors of these landowners were holders of military fiefs of Byzantine Macedonia who did not resist the Turks and offered their services to the sultan, so that their fiefs would continue to be recognized. By the 17th century they had all converted to Islam, (Vacalopoulos, 1973, pp. 100, 102).
(8) Darco, 1922-1923, pp. 197, 198 and Todorov, 1953, pp. 196-197. 'Bey' was a political and military Turkish title, (Dimitrakos, 1964, under 'umâns').
governors of the towns in his jurisdiction and the 'kadis' who had judicial power,(9).

The beys and the pashas enjoyed a certain autonomy within the Ottoman state. They could run their affairs independently, so long as they paid the due share of the taxes collected to the sultan and were able to have an army ready at the disposal of the State whenever required. Thus the different provinces of Macedonia depended indirectly on State policy, but directly on the policies of the various beys and pashas, a fact which explains the variability of conditions from one province to another. However, the prime concern of the Turkish authorities was their own enrichment, which they managed by means of heavy taxation levied upon the 'rayas' (the non-Muslim subjects of the Turkish state) and by various devious or extortionate devices which became a continuous burden on the rayas,(10). The result of the heavy taxation and the corrupt Turkish authorities was that, up to the first half of the 18th century, the rayas avoided any obvious initiative in production. They neglected agriculture, did not build rich houses and in general did not try to attain something which they would not be allowed to keep,(11). Furthermore, whether due to the incapability or the indifference of the Turkish authorities to establish security, especially in the country, in towns lacking a strong army guard and, not rarely, in towns with such a guard, it was not uncommon for a variety of plunderers to enter towns virtually unchallenged,(12). The security of one's home be-


(10) The tricks which the Turkish authorities used in order to extract money from the rayas were known as 'avanies', a word of Italian origin meaning 'slanders', (Dimitrakos, 1964, under 'aβαβιά!'). The Turks, with a slanderous accusation towards individuals or whole communities, would demand either heads or money. For examples see Simopoulos, 1976, pp. 180, 190, 322, 670, 692.

(11) Beaujour, 1800, p. 177 and Simopoulos, 1976, p. 16.

(12) Albanian or Greek brigands and Turkish soldiers who had deserted or who were returning from various fronts were a continuous threat to towns. Added insecurity were the rebellions or the conflicts of the various pashas in the general climate of the decline of the Ottoman empire, (Mertzios, 1947, pp. 155, 156, 170, 174, 271, 272, 274, 277). A characteristic example of the lack of action on the part of the civic authorities against such plundering is an incident in Mona-
came one's own affair, and thus was the situation up to the 20th century, (13).

It must be noted that there was a great number of Christian brigands: to escape the harshness and unjustness of the Turkish authorities, many peasants found refuge in the mountains from where they occasionally descended to pillage the villages and towns. The sentiments which most marked the Christian brigands, or 'Greek Kleptides', (14), were a sympathy for their persecuted fellow countrymen and an intense hatred for their Muslim conquerors. The Kleptides were active all over southern Macedonia (i.e. the parts embraced by the present day Greek frontier). There were Muslim brigands too, the 'Hayduks', whose activities concentrated on northern Macedonia (present day Yugoslavian territory) (15). The Kleptides came to be the terror of the village and town populations. They held the most critical passages of the mountainous Macedonian land, something which made travelling a very risky business. Big caravans guarded by armed men provided some measure of safety, (16). However, despite their plundering, the Kleptides became legendary, (fig. 103), for their actions against the Turks and especially against the representatives of the Turkish authority, thus they were often supported by the Christian communities. The Turks, unable to track them in their mountain refuges, were forced either to bribe them, so that they kept off, or to make certain of their bands lawful and hire them to keep other more ignoble parties of marauders away, (17).

stiri: 500 Greek brigands entered this big town and, by breaking down the gates of the market hall, seized cloth of a high value and made it out undisturbed, (Celebi, 1899, p. 574).

(14) 'Kleptides' is a Greek word literally meaning 'thief'. This is how they are termed in the Turkish documents too.
(16) Ibid., p. 150; also Lampros, 1911, p. 281.
(17) These hired armed bands were known as 'Armatoli'. They were not always with the law and they never lost their ties with the groups of Kleptides from which they came, especially in periods of clashes or disagreement with the Turkish authorities, (Paparigopoulos, 1903, pp. 602–608). For a more extensive discussion on the Kleptides and the Armatoli see Vasdravelis, 1948.
Fig. 102 'Sipahis', Turkish cavalry soldiers, (Fallis, 1951).

Fig. 103 Greek Klephtes, (Pouqueville, 1826, frontispiece).
4.1.4. Community administration.

From the early times of the Turkish occupation, the population of a town would divide into communities. The members of each community were of the same nationality and religion and they would elect a council which handled any aspect, civil, social, economic etc., concerning the community's welfare. The members of such a council, known as the notables, elders or 'cotsabasides' (18), were chosen democratically and there was usually one from each guild or from each district of a community (19). This facilitated the management of public businesses and also the allocation of the funds that were to go to the community's expenditure on the town, or to a special fund to meet the extortions and 'avanies' of the Turks (20), or to bribe the authorities for the acquisition of certain privileges (21). The council also represented the community in its affairs with the Turkish authorities, such as for the payment of taxes. The latter was perhaps the main reason why the Turks did not discourage the formation of these councils, as the tax collection became a much easier job for them. Finally, the council dealt with judicial and other social problems and the needs of the community's members. Only when a member thought that he/she had been treated unjustly by the council would he/she seek justice from the Turkish authorities (22).

The communities of the towns became the counterbalance of the Turkish authorities. Certain communities managed to acquire privileges and strength so that they not only flourished, but overcame the burden of the Turks with evident results on the towns, as discussed in sections 4.2.2. and 4.2.3.

(18) Paparigopoulos, 1903, p. 576.
(19) Papageorgiou, 1894, p. 280. Sometimes the inhabitants of the districts were members of guilds equal in number to the districts, as in Kastoria (Vacalopoulos, 1973, p. 261).
(22) Ibid, pp. 165, 560, 579, 692-693.
4.1.5. The clergy.

The distinction of a town's population into Christians, Muslims and, occasionally, Jews did not coincide with the ethnic division and especially with the division of the population into communities. This was because, on the one hand, the Christians were the Greeks, Slavs, many Albanians etc. and, on the other hand, a number of them had turned Muslim. We have seen that the synthesis of a given community was characteristic of the nationality of its members as well as of its members' religion. Those of the Greeks, for example, who had converted to Islam, would form their own community which was characteristically distinguished from another Muslim community, that of Albanian or Jewish Muslims, (23).

The religious leaders of a community, the clergy, provided support not only for the safe keeping of their flock's religion but also for the purity of the community's ethnic consciousness. They cared for the preservation, within the community, of the customs and cult which were associated with both worship and national character, (24). The clergy were the first to start teaching, initially in private and later in community schools, using religious texts and, in the case of Greek schools, the writings of Ancient Greek, Byzantine and even Latin authors, (25).

The religious leaders of a community co-operated with the community council. They also managed public money and charitable foundations, (26), and, unlike the council, they were in contact with fellow communities of the other towns.

(23) Like the 'Vallahades' in western Macedonia. They were Greeks who had converted to Islam but kept their Greek customs and even had a respect for the Christian churches which they kept in good repair. Between their communities and the neighbouring Muslim ones there were many obvious differences, (Vacalopoulos, 1973, pp. 346-353).

(24) Very characteristically, an eminent man in religion and Greek education, Kosmas of Aetolia, was asking the Vlach speaking inhabitants of certain Greek villages to speak only Greek amongst themselves, (Vacalopoulos, 1973, p. 375).

(25) Pennas, 1953, pp. 31-32; also Papageorgiou, 1894, p. 286. A few Greek schools started to appear in the middle of the 17th century, but many more appeared from the middle of the 18th century onwards. This coincided with the economic and cultural flourishing of the Greek communities, (Vacalopoulos, 1973, pp. 359-378).

As regards the Greek communities, this was done through a network of bishops, archbishops and patriarchs throughout Macedonia, (fig. 104).


Community administration and religious guidance set the basis of distinction between the nationalities and prevented the levelling of customs and traits and the mixing of languages and religions. It was the wealth from the communities industrial and commercial enterprises, however, which enabled a gradual rise in the general level of culture. This, in turn, made worthy use of the surplus money in the foundation of schools and in the development of the arts, (27).

From education and works of art people learned about their national history. For the rayas, this was of the utmost importance since they learned that Macedonia was their land, that their nationality was not something to be ashamed of, but, on the contrary, to be proud of and that the Turkish occupation was burdensome yet transitory. In the actual words of an observer of that time: "Le Grec regarde la Grèce comme sa patrie propre et le Turc une bête incommode mais passagère", (28).

The reawakening of the national consciousness reached the people's hearts and their communities were eager to discriminate themselves from the other communities in their towns. Their desire to acquire a national consciousness and thus to separate themselves from the milieu is best illustrated by the case of the Koutsovlachs. Originally nomads and later merchants, the Koutsovlachs settled abroad, speaking Vlach, a language in its own right of Latin origin, (fig. 105). Coming from western and central Macedonia and Thessaly, they represented the native populations who had been Latinized, (29), but had maintained marked Greek affiliations and were thus also known as Grecovlachs. They were proud of their Greek ancestry, they often referred to their

(28) Beaujour, 1800, p. 52.
Fig. 104  E. Voulgaris, teacher in the Academy of Kozani, 1753–1759, (Sardelis, 1968, p. 28).

Fig. 105  Koutsovlachs or Macedonovlachs in front of their nomadic shelters, (Papadimitriou, 1977, p. 127).
glorious Greek past and recorded the names of the great figures of Ancient Greece and the Fathers of the Church, (30). They sent money to their homeland for the building of schools and churches and those who returned home adorned their houses with paintings whose subjects were inspired by Greek models, (fig.106).

4.1.7. Religious, linguistic and ethnic absorption.

Despite the efforts of the communities and the clergy to preserve the cultures of the nationalities, a parallel phenomenon to that of the cultural integration (which is briefly discussed in the opening pages of this chapter) was the absorption of the religion, the language and even the national consciousness of one nationality by another. The phenomenon was partial or, sometimes, complete, and it occurred for various reasons. Of them, the most important were: survival (e.g. becoming a Turk was one way to avoid the extortions and even death); majority versus minority (i.e. minorities were to suffer most) and choice (i.e. certain nationalities with a weak or confused national consciousness would choose from what was available).

The absorption was initiated with the conversion of religion and the change of language, being completed with the adoption of the customs and culture of a certain ethnic group.

Conversions to Islam were the most common, as the rayas sought relief from the various oppressions of the Turks and the acquisition of the privileges of the Muslims, (31). However, the conversion to Islam was not on its own capable of the cultural change of a nationality, as, for example, in the case of the Vallahades (who are mentioned in the section on religion) or the case of the Jewish Muslims of Thessaloniki, the 'Donmes', who complied with formalities of Muslim religion and at the same time practised a form of Jewish

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(30) Popovic,1937,pp.18,19,170,179.
(31) The Muslim subjects were not as oppressed as the Christian ones, they were not taxed as heavily, their children were not abducted for the Turkish military corps, they could easily take positions in the Turkish authorities and they were generally considered as first class citizens. (See Paparigopoulos,1903,pp.467-474).
a. Amazon

b. Aristotle

c. Temple of Zeus in Athens.

Fig. 106 Paintings from rich Koutsovlachs' mansions: a and b from Tsirilis mansion at Nymphaeum; c from D. Keratzis mansion in Siatista, (Vakalopoulos, 1973, pp. 491, 492).
mysticism,(32).

The change of the language of a nationality was sometimes the result of the change of religion, as in the case of the Donmes,(33), but usually it was due to the predominance, in a certain area or town, of the language of another nationality,(34). Often a dialect would be spoken which would have much in common with the respective languages of two nationalities. For example, some of the observers of that period had difficulty in distinguishing between Serbs and Bulgars as, in certain places, they spoke a dialect which was the product of both their Slavic languages. The mixture of Slavs varied from place to place, sometimes the Bulgarian influence predominating and sometimes the Serbian,(35).

Language, on its own, as religion, was incapable of affecting the people's national consciousness, which, in its turn, was not always based on the background of a nationality but sometimes was a matter of choice. Apart from the case of the Koutsovlachs, which have already been referred to, a characteristic example of ethnic absorption due to choice was the Slavic speaking portion of the population of Edessa and its environs. It was easily assimilated by the Greek portion because it chose the Greek education and civilization, for which it had a special respect, and wished to be called Greek,(36). Therefore, one sees that language should not be taken as a criterion for people's ethnic consciousness but its feelings and leanings. This was grasped by those observers who did not distinguish the Slavic speaking portion of the population of Edessa and its environs from the Greek,(37).

4.1.8. Locality.

The degree of absorption varied from town to town depending on local conditions. Locality, however, affected the cultures of the various nationalities in an additional way: the townsfolk, regardless of their cultures, developed a bond

(33) They spoke Turkish having abandoned the language peculiar to Castille, which their forebears used to speak, (Ibid, p. 91).
(36) Cousinery, 1831, p. 245.
(37) Beaujour, 1829, p. 273.
between one another and the town which resulted, on the one hand, in a way of thinking and acting that was characteristic of the particular town and, on the other hand, it united the townsfolk into circles of mutual aid and understanding. This bond is best illustrated by a poem that was written in 1821 by eight pupils of the 'School of Kozani', (38), as an expression of gratitude to the teachers of the school and, by extension, to Kozani:

We, the foreign students who have benefitted, want to perform our duty as one body, we are eight in all, we attend lessons and we wish to become nurtured in education, some of us are Epirotes, some Albanians, some Estiaeotes from Thessaly and some Macedons, nevertheless, we recognize Kozani as our present home and the contributors to this school as the foundation of progress, for the love and care which you give to us all as though we were your own children, we profess our gratitude, we proclaim our debt and we pay our homage with respect.

The poem is dated February 27, 1821 and it is signed by the eight students, (39).

Although these students were only temporary inhabitants of a town and their circumstances somewhat special, the ties which they formed with the town can be regarded as analogous to those which the 'ordinary' inhabitants formed. The latter shared certain feelings and behaviours arising from their common interest: the town itself. Matters of common concern such as fires, epidemics, security, hygiene, embellishment of the town, commercial exchange and everything else that had to do with their common fate as inhabitants of the same town, (fig. 107), gave them that which can be referred to

(38) This school was founded in 1809 from capital raised by various businessmen abroad, (Liouphis, 1924, pp. 79-80). Other schools appeared in Kozani much earlier, all financed by natives of Kozani who had businesses abroad, (Vocalopoulos, 1973, pp. 437-441).

(39) From the historical archives of the University of Thessaloniki. (Translated from Greek by the author).
as social ties of locality. Thus, despite the religious, linguistic, ethnic and other differences between the nationalities of a town, it is not surprising that, for example, the Greek, Bulgarian and Serbian inhabitants of Gynaikokastro "were rejoiced in a peaceful and cultured life", (40); or that "the admission of novices into the tanners' guild of Thessaloniki was celebrated by the entire city with honorary declarations and much feasting and drinking, quite independently of class or religion", (41); or that every manufacturer in Thessaloniki began work in the morning with the words "the manufacturer is a friend of God", (42).

4.1.9. Commercial activity.

Of the reasons that caused the industrial and commercial flourishing of Macedonia, the most important were the treaties of Passarowitz in 1718 and of Belgrade in 1739 which established a favourable commercial exchange between the Austro-Hungarian and the Ottoman Empires, (43). The Serbs in northern Macedonia and the Greeks in southern took the opportunity to participate in commerce, to acquire both wealth and social power, (44). Thessaloniki became the principal trading centre where raw and processed cotton, wool, tobacco and certain commodities from the different Macedonian towns were exported, while serge, various textiles, Bohemian glass, ironmongery and gilt articles were imported, (45).

Besides the trading with the Germans, the conglomeration of commercial activities in Thessaloniki and the facility of its port, attracted the French, English, Venetians, Dutch and Swedes, who established consulates in Thessaloniki and employed Greeks and Jews as their commercial agents, (46). The rest of the Macedonian towns had their own commercial representatives for Western Europe. Representatives are

(40) Moschopoulos, 1938, p. 504.
(42) Vacalopoulos, 1963, p. 86.
(44) Ibid, p. 289.
(45) Svoronos, 1956, p. 181.
(46) Maximos, 1945, pp. 73-74; Svoronos, 1956, pp. 148, 166, 173, 179;
mentioned in Serres, Siatista, Kozani, Ioannina, Ochris, Kastoria and Kavala. These were mostly Greeks but included some Albanians, (47). The Greeks, in turn, established commercial firms in various countries, such as Austria, Hungary, Germany, Romania, northern Italy, Russia, and many of their compatriots followed them, thus Greek communities appeared in various towns of all these countries, (48).

Meanwhile, the Turkish authorities were busy imposing taxes on the merchandise and collecting commissions in return for their facilitating, or at least not hindering, the raya merchants' affairs. The agas, to whom the fertile plains of Thessaloniki and Serres belonged, had forbidden the peasants to export cereals directly. They were obliged to sell their produce to the agas, at the lowest prices, who then sold it at great profit, (49). Transportation over land was a difficult task too, as the Klephtes commanded the passes, so, as previously mentioned, the transporting of goods could be done with a reasonable degree of safety only in big, armed caravans. Incidentally, the transportation business was entirely in the hands of the Greeks and the Grecovlachs (Koutsovlachs), (50), commercial correspondence also being carried out in Greek, (51). Sea-trading, too, was risky due to piracy, (52); nevertheless, it was virtually a monopoly of the Greeks, that is, conducted mainly by Greek ships. This was especially true after the French revolution when the French ships, which were their main competition, lessened their activities, (53). It is remarkable how the Greeks managed to get involved in such rigorous commercial activities whilst subjected to the continuous fear of losing everything, living as they were under the Turkish yoke.

Within the interior of Macedonia trade was conducted through trade fairs. Mainly Greek, Jewish and Turkish retail

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(48) For a further discussion and relevant bibliography about the Greek commercial communities abroad see Vacalopoulos, 1973, pp. 379-425, 473-495.
(49) Aime-Martin, 1838, pp. 79-80.
(50) Lyritzis, 1952, p. 17; see also Cousinery, 1831, p. 18.
(53) Ibid, p. 17.
Fig. 107 Lamp lighter in Thessaloniki, (Folk Archives of the University of Thessaloniki).

Fig. 108 Trade-fair in Paramythia, (Papadimitriou, 1977, p. 49).
merchants,(54), operating in Macedonia, Albania, Serbia and Bulgaria bought or exchanged goods and carried them to the trade fairs of the various villages and towns. The local trade fairs were held annually on a prescribed date and were an occasion not only for business but for social and cultural contact between the nationalities and between people from different parts of Macedonia,(fig.108). Let us pause for a moment to illustrate the ethnic variety that occurred at these gatherings and, at the same time, to note the various behaviours characteristic of merchants of different nationalities: "The Turkish merchant awaited his customer cross-legged and addressed him politely only when there was hope of profit. The Greek merchant was generally the most flexible. His style was to eloquently praise his merchandise and do his best to hoodwink even the most wary customer. The Armenian, in contrast, was stolid and calm until the moment the money was produced, at which point he lost his composure and fell to temptation. The Turk would rarely settle for less than ⅔ of the asked price whereas the others could be beaten down to ¼ ",(55).

With their commercial activities, the rayas, especially the Greeks, began to accumulate fortunes and to climb the social ladder. Businesses run exclusively by merchants of a certain nationality, not only became profitable for the merchants themselves, but had a direct effect on their ethnic communities of their home towns. The successful merchants built churches, schools, hospitals etc. for their communities. Even those regarded as second class citizens, the Jews for instance, who were despised by both Greeks and Turks,(56), succeeded in surviving and even obtaining privileges thanks to the exclusiveness of their businesses. The Jews of Thessaloniki were the sole manufacturers of the cloth used for the Jannisaries' uniforms and thus attained a certain tax rebate,(57).

(54) Svoronos, 1956, pp.210-211.
(55) Dallaway, 1797, pp.76-77.
(56) Simopoulos, 1976, p.180. The regarding of the Jews as second class citizens had reached its extreme in Edessa, where the dwelling of Jews was forbidden on penalty of death,(Cousinery,1831,p.18).
(57) Vakalopoulos, 1963, p.86. The Jannisaries were a special Turkish military corps.
The travels of the merchants and their long stays abroad had an effect on their taste, education and culture and lessened their feeling of being the underdog, raya, of the Turks. They carried back with them many of the things they found abroad and their wealth as much as their improved taste and education had a direct effect on their houses and towns.

4.2. Society and town.

4.2.1. The influence of the authorities on the towns.

Turkish authority was evident in the appearance of the towns. From the early times of the subjection of Macedonia, when most of the townsfolk fled to the hills, the Ottomans proceeded to seize the best houses that belonged to present or absent townsfolk. The most impressive churches were turned into mosques and the largest of the monasteries housed Turkish officials and troops.

The Turks must have preferred those town quarters that were on the higher ground, (58), as both the citadel and its immediate heights provided security and a vantage point from where the rayas on the lower ground would be under constant supervision and rebellions or disorder could be handled from a strong position. The placing of the Turkish quarter in and near the citadels of Thessaloniki, Kastoria, Ioannina, Ochris and Kavala, (59), were manifestations of the Turkish authority and sovereignty in those towns, (fig.109).

Other manifestations were the minarets, dominating not only the churches next to which they were built, but the towns too, as they sprang up higher than any other building. From up there the monotonous chant of the 'muezzin', the Mohammedan official who announces the hours of prayer, was a

(58) Aime-Martin, 1838, pp. 72-73; see also: Souciet, 1755, pp. 267, 273-275.

(59) For the Turks in the citadels of Thessaloniki and Kavala see Vacalopoulos, 1973, pp. 309-310, 228; of Ochris see Celebi, 1928, pp. 736-737; of Kastoria and Ioannina see chapter 1, section 1.3. It must be noted that the citadels and fortified towers of other Macedonian towns that were not used by the Turks were destroyed as possible strongholds of the rayas in cases of rebellion.
Fig. 109 Turkish mosques, mansions and houses in the castle of Ioannina, (Dimacopoulos, 1981, fig. 159).

Fig. 110 Left, Prophet Helia's church as a mosque in Thessaloniki, (Dimacopoulos, 1981, fig. 12). Right, a mosque in Edessa, (Vacalopoulos, 1973, p. 504).
continuous reminder of who was in charge,(fig.110). The predominance of the Turkish element reduced the differentiation of the other nationalities from the urban point of view: the rayas, humbled and despised, either mixed or grouped ethnically, inhabiting the flat ground below the citadel. Their settlements were thus situated on the periphery, in the suburbs, so to speak. These quarters were appropriately known by the Turkish word 'varosh', meaning suburbs, which to the Turks carried the additional meaning of 'the area where the conquered Christians and Jews live', (60). In the varosh, the houses were small and poorly constructed. Even those rayas who were richer in comparison to the others left the exteriors of their homes unattended in an effort to conceal their wealth from the extortionate Turkish authorities.

The Christians congregated into neighbourhoods embracing their tiny churches. As the wealth of the rich was concealed from the outside world by the inferiority of their homes, so was the cultural wealth protected by the formation of houses around the churches. This was not so for the Jews. While the Turkish authorities did not allow the siting of churches on the streets they did not bother about the synagogues, (61). Therefore, while the siting of synagogues did not create any real planning problem for a Jewish neighbourhood (synagogues and houses were treated as equal) the churches became a planning limitation for the Christian neighbourhoods.

Churches had to be hidden among the houses, thus, as the Christian houses came to embrace them from all directions, care was taken to have the main streets as far as possible from the churches and not to have streets converging at them.

The extreme manifestation of such planning limitation was the seclusion of churches in the centre of house blocks.

(60) Vacalopoulos, 1973, p. 519. See also Cousinery, 1831, p. 159 and Leak, 1835, pp. 201, 206. It must be noted that the suburbs were either within the town walls, as in the case of Thessaloniki, (Vacalopoulos, 1973, p. 309), or outside, as in the case of Kastoria, (chapter 1, fig. 34).

As in the description of a house block in chapter 1, this positioning of the church affected the inner structure of the block by the removal of the stone walls that divided the properties within. Thus, the space which was needed for the Christian ceremonies was created.

Nevertheless, the creation of space, it can be argued, was not the only reason for the removal of the walls. By comparing the general layout of a monastery, (fig. 111), with that of a Christian block comprising a church, (fig. 112), not only does one find an apparent similarity, but one is also inclined to find parallels between the monastic attitude to the outside world and that of the households of the block to the world of another religion; also, between the relationship of the monks with the monastery church and that of the block's households with their church, and so on. One may consider that the peripheral walls of both the monastery and the block served equivalent purposes as regarding the separation of what there was inside from that without. Also that, as the cells of the monks viewed the church as the symbol of their faith and of their mode of life, so the households paid their respect by removing the walls between them and the church.

Meanwhile, apart from the churches, the other monuments of the towns' Byzantine past, e.g. arcades, hippodromes, statues etc. that were not used by the Turks, lost their significance with respect to the town layouts and stood in ruins merging with the rayas' settlements, (fig. 113).

4.2.2. The influence of the bourgeoisie on the towns.

From the 18th century, the commercial and industrial enterprises of the Macedons and the accumulation of their wealth germinated a new form of urban structure. The occurrence of mansion-workshops and the orientation of the townsfolk towards professions associated with those mansions and with the further trading of their products brought many transformations to the urban structure and form. We already have an idea of these transformations from the example of Ampelakia in the beginning of this chapter. Let us now see things in more detail.
Fig. 111 The monastery of Kastamonitou, Chalkidiki, (Beylie, 1902, p. 69).

Fig. 112 Artistic impression of a Christian block of houses containing a church, (Drawn by the author).
Fig. 113 Byzantine ruins, merging with the rayas' settlements in Thessaloniki, (Cousinery, 1831, facing pages 32 and 28).

Fig. 114 The yard of N. Argyres mansion in Ioannina, 1820, (Dimacopoulos, 1981, fig. 160).
Bigger and better houses appeared in parallel with a variety of shops and workshops. The communities spent money on schools, churches, fountains and streets. The bourgeoisie began to stand out from the masses and the richest of its members, irrespective of their nationality, began to settle in beautiful mansions with big gardens, matching those of the Turks, and often even better, (fig. 114), in separate quarters of the towns, (62). The bourgeoisie, having escaped the poverty and misery, enjoyed relative freedom in many respects, (63), which was reflected by their comfortable houses and quality neighbourhoods. This phenomenon was universal in those towns where the Turkish element was minor or absent, (fig. 115). In Siatista, for example, which was entirely Greek, up till 1800, there were 200 commercial businesses conducting a lively trade with Austria and Venice. There were about 1700 houses, well constructed, "in an air of leisure and cleanliness such as one could find nowhere in Turkey", (64), (an example is given in fig. 116).

Therefore, while before the emergence of the bourgeoisie the urban structure and form was defined by an antithesis between conquerors and conquered which was manifested by the superimposition of the Turkish quarter onto a 'flattened varosh', the emergence of the bourgeoisie brought about a change which can be seen as the transference of a town's centre of gravity from the Turkish quarter on the high ground to the new commercial quarter on the lower ground. This is clearly illustrated by the layout of Kastoria where the main body of the town is towards the Greek quarter, on the east side of the Turkish by the citadel, (65). Also the antithesis between rich and poor houses, or quarters, no longer represented the division between Turks and rayas but between social classes irrespective of nationality.

(62) See chapter 1, section 1.1.2.
(63) The bourgeoisie were allowed to have schools, ring the bells of their churches go around on horseback, wear good clothes, not to step down off the footpath whenever they met a Muslim etc. They were not compelled to abide by the restrictions which the Turks had imposed on the rayas. The Turks turned a blind eye as a gratauity for their profits from the wealth of the bourgeoisie, (Vasalopoulos, 1963, p. 101 and Simopoulos, 1976, pp. 179-180, 579).
(64) Pouqueville, 1826, p. 78.
(65) See chapter 1, figs. 2 and 34.
Fig. 115 Portaria on Mount Pelion, 18th century, (Dimacopoulos, 1981, fig. 141).

Fig. 116 Kanatsoulis mansion in Siatista, (Michaelis, 1977, p. 276).
A determining factor of the town layout was the market place. Its position had a direct effect on the siting of the merchants' and manufacturers' houses which, as we know, included their shops and workshops. Furthermore, the market place as a convergence of commercial streets, a junction, was a significant feature of the street network in its vicinity. It was thus acknowledged by the townsfolk who called it 'charsi', a Turkish word meaning 'the place of many streets with shops', (66). As the streets converged to a point, an opening was created which, although it was not strictly a commercial centre in itself, because the shops were on the streets, (see fig. 117), served as a meeting place, a point of reference for the townsfolk, (67). The market place had, as an integral part of its form, its property of meeting place for the different nationalities who came through the converging streets from the various quarters of the town.

In addition to such open markets, certain towns also had covered ones, i.e. market halls. There were market halls in Thessaloniki, Serres, Veria and Monastiri, (68), and were known by the Turkish word 'bezesten', conveying the meaning of 'a big covered space with shops and stalls', (69).

Let us take this opportunity to describe the bezesten of Thessaloniki. It was a large and impressive structure made of stone, with a lead roof and heavy iron doors; "Whoever entered this house of commerce was literally dazed and confused by the smells of nutmeg, ginger and other burning spices. Their sweet-smelling fumes, like thin spider's webs, drifted languidly in the still air, weaving an atmosphere of oriental folk-tale and magic", (70).

(66) Dimitrakos, 1964, under 'γοαροί'.
(67) In a folk song from Kastoria one notes: "...word was out all over town, from Doultsio up to Tsarsi; and to the Great Gate...", (Megas, 1961, p. 196).
(69) Dimitrakos, 1964, under 'μπεζεστενι'.
(70) Vacalopoulos, 1963, pp. 85-86.
Fig. 117 Artistic impression of the market place of the Macedonian town, (drawn by the author).

Fig. 118 Above: the market hall of Thessaloniki. Below: of Serres. (Vacalopoulos, 1973, pp. 251, 521).
One infers that the superstructure of the market halls must have been important for the towns' figuration. However, due to a lack of descriptions of the market halls' immediate surroundings, there is not sufficient evidence for us to know whether they stood out alone, in the open, and how the streets and houses were arranged around them, (71).

Nevertheless, not all the business premises of a town were included in the bezesten, (72), and there must have been an interdependence between the shops inside and those outside. We can thus assert that the bezesten must have been sited at a junction of commercial streets as the focus of all commercial affairs, the 'temple' of all merchants and manufacturers.

This parallelism should not be considered an exaggeration because we have seen how the commercial and industrial flourishing affected the destiny of the townsfolk and the layout of towns. One wonders whether the market halls today are memorials of the Turkish rule or of the Bourgeoisie along with their mansion-workshops. The form of the bezestens is predominantly Turkish, (fig. 118), but they did not have the same symbolism that the minarets had, turning the churches into mosques and dominating the skyline of the towns. The bourgeoisie had created a state within a state. The market halls and the commercial streets were the symbols of its power within the towns.

The mansions, shops, workshops and markets of the bourgeoisie were on one side of the coin that affected the layouts of towns. The other side belonged to the communities.

(71) The bezestens of Thessaloniki and Serres, which function to the present day, have undergone changes to their initial form due to repairs and various alterations and the old town around them has undergone deep transformations by the modern buildings and street network.

(72) From Souciet, 1755, p. 291, one learns that the bezesten of Thessaloniki stood amidst the other shops of the market.
4.2.3. The influence of the communities on the towns.

The communities' task was to protect their members' economic interests, culture and religion. On the urban level, this was done by the division of the towns into ethnico-religious quarters, e.g. Greek, Turkish, Serb etc. These quarters emerged from a gradual rounding up of the various neighbourhoods and districts which lay intermingled in the towns.

Within their quarters the communities developed individual characters. These were derived, on the one hand, from the ethnic and religious constitution of each community which was evident from their places of worship, ceremonies, processions, social occasions, inscriptions and ornamentation of the house exteriors, languages, costumes, gestures, racial behaviouristics etc., (fig119). On the other hand, the individual characters of the communities were derived from local parameters, that is, the main occupation of their members and their educational, financial and social status; parameters which varied from town to town.

The individual characters of the communities brought a diversity to the urban image. Nevertheless, the notability of certain communities, either because of their size or because of the socio-economic power or both, came to dominate this image. For example, Yenitsa had a famous Muslim township, (73), Thessaloniki had acquired a Jewish flavour, (74), (fig.120), but for almost all the other towns, the Greek communities were the protagonists. As discussed in 4.1.9., most of the merchants of the bourgeoisie were Greeks, (fig.121). From their long association through trade with Western Europe, they had acquired a great desire for everything connected with progress, wealth and wellbeing. A taste for luxury and an ambition to possess the finer things of life had been introduced to them. They embellished their houses in splendour and elegance. "They had become refined and had acquired the ambition to live a more urban existence and to become well educated", (75). This gave such a great impetus

Fig. 119 Costumes, (Castellan, 1812, opposite pp. 97, 106 & Vascalopoulos, 1973, p. 450).
Fig. 120 Thessaloniki Jews, (Vacalopoulos, 1963, plate VIII).

Fig. 121 Greek bourgeois women and child, (Kyriazis-Nikolinakos, 1976, p. 97).
to every branch of craft, that the Greek quarters exhibited a marked style that has become known as the Macedonian.

One wonders what the contribution of the other, non-Greek communities was. Did not they too play a role in the formation of the Macedonian style? The answer is not decisively: the Turks were not, in the main, merchants or manufacturers but land owners, money lenders and soldiers, (76). Despite their wealth, they did not spend as much time abroad as the Greek merchants did. The Turks had established their authority over the rayas who were working for them, they did not seek to change their circumstances. Furthermore, they were busy with hostilities of varying kinds and degrees of severity, (77).

Secondly, the Jews, and especially those of Thessaloniki, the only city where they were in a majority, although they managed to create a considerably powerful and self-governed community in the first century after the occupation of Macedonia, began to degenerate slowly but steadily from the 17th century, so that in the 18th century, apart from the rich, who had a few fine houses, most of their community members lived in poverty and misery. Conversely, the Greek community of Thessaloniki had taken over most of their commercial affairs, (78).

Finally, the other Slav communities, e.g. Serbs and Bulgars, made their presence known but only in northern Macedonia and their built environment was greatly influenced by the Greek communities.

(76) Vacalopoulos, 1963, p. 98; see also section 4.1.3.
(77) The Turks were busy repelling the Albanian incursions, protecting themselves from the attacks of the Klephtes and with local conflicts between pashas of different regions and war with Russia (1768-1774). See Vacalopoulos, 1973, pp. 190-216, 272-279, 322-345, 495-515 and 563-566.
4.3. Family and house.

4.3.1. Certain features of the family.

The Macedonian family had a multiform character; besides being a domestic group, it was an economic, productive and property owning unit, a quasi-political association and a religious community.

The family business and property did not belong to its head but to the family as a whole, in a co-operative fashion, where the father or brother was the trustee. As an economic unit, the family's aim was to become self-sufficient, with a division of labour organized about its business and property. Its members invariably acted together in matters of family politics. Each member's work and behaviour was entirely committed to the family's finance, prestige and reputation for honour. Inside one's family one found support, affection and moral obligation. Outside, suspicion, insecurity and even hostility. From the individual's point of view, the community was divided into those who were family and kinsmen and those who were strangers. So much so that, were an individual to seek help or shelter from 'strangers', the community would assume that his family was not strong, well-organized or moral or, alternatively, that he had been rejected by his family. Besides, the family was obliged to help and support its members and, in addition, any insult to an individual member was regarded as an insult to the whole family, the male members of which were then required to avenge in order to restore the family's pride. Families cared passionately about their pride and prestige, the judging of which was in the hands of the community. For this same reason, the welfare of a family's business and property was not solely the basis of its physical existence, but also the source of its pride and prestige.

As a religious community, the family had its own icons and other objects placed in a specially designated corner of the house. (79) In the popular mind, the family was a re-

(79) See fig. 124.
flection of the Holy Family. Thus, a father should have wisdom and foresight, a mother compassion, a son courage and respect, a daughter virginity and so on. Through reference to this Divine Model, the family participated in a reality that transcended individuality. Everyday life came to possess an intrinsic validity. There was a set way to do things, everybody's jobs were prescribed and they were expected to do them, no more no less, (80).

With these general features of the family in mind, we turn now to see how the house itself reflected the multiform character of the family.

4.3.2. House and seasonal weather.

The biological needs of the family regarding seasonal weather were satisfied by the provision of winter and summer quarters. As seen, in the second chapter, in those houses with a mezzanine and an upper floor, the mezzanine was arranged for winter and the upper for summer living. Thus the former had small spaces, with thick stone walls, a low ceiling, few small openings and a fireplace. In contrast, the latter had large spaces with light walls, a high ceiling, many large openings and the fireplace was not expressly for the purpose of providing warmth but decoration.

These two floors, mezzanine and upper, although part of a single house, were, since their use was restricted solely to winter or summer respectively, separate apartments and were regarded as such. Hence, in the various examples, one finds them having separate staircases and washing basins, (fig. 122). Similarly, toilets, apart from those which, as a rule, are positioned in the ground area, appear on the mezzanine and on the upper floor too, (fig. 123). Also, the familiar arrangement of gallery and separate rooms is repeated as much on the mezzanine as on the upper floors. It is noticed, too, that the gallery of the mezzanine, in some examples, faces

(80) This information about the multiform character of the Macedonian family comes from an essay, (Campbell, 1970, pp. 39-69), on kindred in a Greek mountain community of Zagori district, the observations and conclusions of which are generally valid for a Greek family.
Fig. 122 Axonometrics of the upper floor and of the mezzanine of the Chatziantoniou bourgeois house in Veria, (drawn by the author).
Fig. 123 Above: upper floor plan of Kanatsoulis mansion, Siatista, (Michaelis, 1977, p. 268).
the covered walk which is naturally more protected from
cold draughts than the open yard onto which the gallery of
the upper floor looks. In other examples the gallery of
the mezzanine is closed while that of the upper floor is
open,(fig.124).

The desire to create two separate and autonomous apart-
ments, one for winter and one for summer, was not always ful-
filled however, since it was dependent on the financial ca-
pabilities of the family. There are examples without a mez-
zanine floor at all. Here the winter and summer living had
to share the upper floor: the winter rooms are placed in
the depths of the house, away from the open gallery. In this
case one can see that the separation of the house into win-
ter and summer apartments occurs on the same floor rather
than between floors,(fig.125).

Living in different quarters of the house according to
season was not a particular problem for the family from the
point of view of needing separate apartments which, to our
contemporary mind, should have had areas especially designated
for functions such as cooking, eating, sitting, sleeping etc.,
to be met separately.

4.3.3. House and private life.

The second chapter points out that spaces within the
Macedonian house were not designated for one use only, i.e.
either for cooking, sitting, sleeping etc., but for a multi-
purpose use. Cooking could be done in the fireplace and
eating carried out near it, while the divans of the room
provide for both sitting and sleeping in turn,(fig.126).
Furthermore, furniture such as dining tables, chairs and beds
which indicates a particular use was absent from the Macedo-
nian house.

Having said this, however, each space of the house was
intended for a certain use. This use was not associated di-
rectly with particular biological needs of the family, such
as eating, sitting or sleeping, but was associated with the
family's code of behaviour, its conduct, as much within it-
self as towards visitors and guests.
Fig. 124 D. Sforzos mansion in Ampelakia. Above: mezzanine plan. Below: upper floor plan. (Moutsopoulos, 1975, pp. 33, 34).
Fig. 125 Upper floor plan of a house at Kato-soudena, Zagori, (Stara, 1981, p. 120).

Fig. 126 Artistic impression of a room interior, (drawn by the author).
The spaces of the house were divided into living areas, used by the family in its everyday life, and into reception areas, used predominantly when visitors and guests arrived. On the one hand, of the spaces that the family had for private use, the everyday rooms, the women's quarters, those where food supplies were prepared and stored and those that housed the family business were the most important when regarding the house as a regularized pattern in which the activities of the institutionalized family occurred. On the other hand, all reception and guest rooms modified the house pattern with regard to the family's code of behaviour and conduct with the rest of the community.

Let us begin with the spaces that were for private use. The everyday winter room was the only one where all the members of the family gathered during the cold winter days, to keep warm by the fire, prepare food and eat, talk with one another and, eventually, for most of them, to sleep in the warmth of this very room. One may consider the everyday winter room, with all the family around its burning fireplace, as a consolidation of the warmth and security which the family offered its members. They had worked hard all summer to prepare for the cold of the winter months. Food and wine had been stored, fire-wood gathered and most repair jobs completed before the onset of winter, when social affairs were curtailed and the towns themselves often cut off by snow. The townsfolk stayed in their homes and kept warm. The warmest place of the house being the everyday winter room, the family gathered there, thus facilitating the reinforcement of family ties.

While all this was able to happen in the winter, in the summer everybody was busy and, consequently, it was not feasible for all the members of the family to congregate at one and the same time in the everyday summer room. Furthermore, as the latter was a much more open space than the winter one it did not create the appropriate atmosphere for a family retreat.

We have noted that inside certain walk-in cupboards of the house there was a raised platform from which the young girls had a view of the interior of the reception rooms,
The girls could observe the guests through latticed openings while remaining, themselves, unseen. These raised platforms and latticed windows owe their existence, as features of the house, to a pattern of behaviour that prohibited guests from seeing the girls of the family while, nonetheless, allowing the converse. This was so because if a man's eyes met those of an unmarried girl her purity was considered to have been spoiled, (81). Furthermore, every Turk was allowed, by law, to grab any Greek woman and keep her for as long as he wished, (82). Thus, care was taken to keep women, especially young girls, out of sight. Both these explanations for the hiding of women seem to lead to a single conclusion about the existence of walk-in cupboards with latticed windows: the safeguarding of a daughter's virginity which, according to the Divine Model, noted in section 4.3.1., she was expected to possess.

Besides the cupboards with the latticed windows, there were rooms serving as women's quarters. They are mentioned by the observers of that period and, sometimes, they can be recognized by the latticed windows above their doors, (83). These quarters provided a retreat where the women could do their chores such as weaving, knitting, dress-making; they could occupy themselves with their beautification and other aspects of their femininity and talk women's talk undisturbed by the presence of men. They also served as a place to where women, especially the young ones, could withdraw when visitors, who were not supposed to meet them, arrived.

Unlike the harem of the Muslim house, the women's quarters of the Christian house were not intended as a place of confinement for the women or as a place where they were kept all the time. On the contrary, apart from when guests arrived, the women went to their quarters only when they chose to and they were free to go outside the house, whether to go to the public baths, visit relatives, or fetch water from the

(81) Simopoulos, 1976, p. 293.
(82) Ibid. With an old Turkish law, a Turk could get permission from the authorities to 'marry' a Greek woman for a certain period of time. This was abolished in 1672 but only for a while.
public fountain, (84). Furthermore, the fact that there were no fires in the women's rooms, in most examples, suggests that they were not expected to stay in them for any great length of time. Rooms for women are to be found in the large bourgeois houses and in mansions, whose owners had the economic means to provide spaces especially for their women, (fig. 127). The popular houses, with their limited space, do not usually have women's quarters and it can be assumed that when visitors arrived the young girls temporarily retired to any little box-room of the house.

As already established, the ground area of the house comprises auxiliary spaces for stabling, storage, bread-making etc., (fig. 128). 'Auxiliary' as regarding the everyday mode of living. In fact these spaces were vital for the family's upkeep, but they were not for everyday use.

The area where bread was kneaded and the oven were used periodically, providing a supply of bread for several days. It should be reiterated, (85), that food was not prepared daily in the oven and the space containing it was not the 'kitchen' of the Macedonian house. The pre-heating of the oven took a few hours and a fair amount of wood, hence it was only lit once every so many days. Bread-baking was an opportunity to bake other kinds of food too, but daily cooking was done in the fireplaces of the everyday family rooms. There was no kitchen as such in the Macedonian house. Consequently, spaces marked as 'cooking areas' or 'kitchens' in the illustrations of various publications ought not to be considered as such, in the contemporary sense. The small spaces, especially those lacking a fireplace, should be considered as utility rooms where, more likely, food was prepared and kept, the cooking and eating being done in the everyday rooms; and in the case of full-sized rooms with a fireplace, they should be taken as the everyday rooms themselves. The example in fig. 129 lends support to this argument about the lack of a 'kitchen' in the Macedonian house. The plan shows that the subsequent occupants found it ne-

(85) See chapter 2, section 2.3.12.
Fig. 127 Left: upper floor plan of Tzidos house in Veria. Right: upper floor plan of Natzis mansion in Kastoria. (Moutsopoulos, 1967, fig. 195 and Moutsopoulos, 1962, p. 38).
Fig. 128 Ground floor plan of D. Sforzos mansion, Ampelakia, (Moutsopoulos, 1975, p. 32).

Space 7 is marked as 'kitchen' and 12 as a later, additional kitchen.

Fig. 129 Upper floor plan of I. D. Aivazi mansion, Kastoria, (Moutsopoulos, 1962, p. 111).
cessary to build an additional room, room 12, at a much later date (20th century) for use as a kitchen. This strongly suggest that the previously existing one, room 7, was not adequate, that it was, as we have said, simply a utility room, a walk-in larder, rather than a kitchen.

Just as the oven was only lit now and again, so the family only went downstairs to the storage spaces periodically for a supply of goods. The storage spaces of the ground floor were filled with provisions, e.g. grain, oil, wine, to last a whole year.

Stabling areas are found only in the houses whose owners possessed working animals, e.g. mules for transporting, and only very rarely for pleasure or specific purposes, e.g. horse-riding. It was quite common, however, to find homes having a small space for a pig and chickens which would provide meat for the family. The positioning of the stabling spaces affects that of the toilet on the mezzanine or upper floor which is often situated directly above the stable for easier drainage, (fig. 130).

When a family was occupied either with trade or craft, a shop or workshop, respectively, with its relevant/accompanying store rooms were included in the house design.

As we know from chapters 1 and 2, a shop constitutes part of the ground floor of a house, but, for security reasons, does not communicate with it, (figs. 23 and 45). However, a workshop and the store rooms for either a shop or workshop, are part of the house, often quite a sizeable part, at the expense of the living spaces, with which they have direct communication. Fig. 131 shows the ground and mezzanine floors of a bourgeois house, the family of which were tanners. Most of the space on the ground floor, including the oven and well, was used for the washing of the hides and their initial processing, while most of the mezzanine space was used for the subsequent stages in the tanning process and the hanging of the hides to dry. Apart from a small gallery and the everyday winter room of the mezzanine, the living areas of the family are on the upper floor. The oven employed for the processing of hides was one and the same as that used by the family for domestic pur-
Fig. 130 Mezzanine and ground floor plans of Sior Manolakis mansion in Veria, (Michaelis, 1977, p. 292).

Fig. 131 Stamatas bourgeois house, Ioannina, (Michaelis, 1977, p. 205).
poses. The space of the workshop, therefore, coincides with, or overlaps, the bread-kneading, food preparing etc. domestic space. Furthermore, the workshop on the mezzanine communicates directly with the everyday winter room. Working and living were not considered as two separate functions, but occurred side by side in the design of the Macedonian house.

Another characteristic example is shown by fig. 132. Here too, the workshop, for the dying of cotton threads, communicates directly with the oven space, which was similarly used both for the craft and domestic purposes. Not only this but the oven space is nearer to the workshop than to the family's winter quarters as it was used more often in the dying of cotton threads, while, for domestic use, as mentioned earlier, only every so many days. It can be seen, furthermore, how the workshop and the many storage spaces have taken up all the ground and most of the mezzanine area.

4.3.4. House and guests.

Let us turn to the reception and guest spaces of the house. It is noted that, from the individual's point of view, the community was divided into family and strangers. It follows that once the visitor had been checked at the front gate and allowed to enter, he should not penetrate the family's private quarters, but should be kept as far away as possible. The gallery is the first space which one encounters emerging from the staircase, thus it was appropriate as an intermediate ground on which the family, coming from the inner rooms, could receive the visitors, from outside.

The degree to which visitors were permitted to penetrate the house is very characteristically manifested by the position of the musicians' stand in the gallery. We have seen that the stand is situated near or above the staircase, in other words it is as near to the way out as it can be.

Other reception spaces are the best summer and winter rooms. They are accessible from the gallery, as any other room of the house, but they are the ones nearer to the staircase, (fig. 133). It can be said that the best rooms are one
Fig. 132 Euphemiaides mansion, Ampelakia:
a. Ground-basement plan.
b. Ground-mezzanine plan.
c. Upper floor plan.
d. Section AA.
(Moutsopoulos, 1975, pp. 58, 59, 62).
Fig. 133 Above, mezzanine plan, and, below, upper floor plan of Emmanuel brothers mansion in Kastoria, (Moutsopoulos, 1962, p. 77).

Fig. 134 Prounis bourgeois house in Metsovo, upper floor plan, (Michaelis, 1977, p. 246).
step closer to the inner house, to the family's private quarters, (fig. 134).

A comparison of the best and the private rooms of the family brings out a noticeable difference in their decoration and general quality of finish. The best rooms are more cared for and the family put its finer items in them, (86). This special treatment given to the best room is much more evident in the mansions and bourgeois houses than in the popular ones. Nevertheless, the care taken over the best room is particularly demonstrated, in the popular houses, by the fact that the sole fireplace of the house appears in the best rather than the everyday room. This can be explained, in accordance with the introduction of this section, as resulting from the family's passionate regard for their pride and prestige, the judging of which was in the hands of the visitor and guest, as representatives of the community.

4.4. Typical models of the house categories.

In the beginning of the second chapter Macedonian houses are grouped into three categories, i.e. popular, bourgeois and mansion. Thereafter, for all houses used as examples there has been a note of their category, so that, with the above discussion on the house as a consolidation of the family's multiform character, the reader can form as accurate a picture as possible of the Macedonian house in its three categories, or variations, of the same basic pattern. The final touches are put to this picture by summarizing what is characteristic of each category, creating, thus, a comprehensive impression for the popular, the bourgeois and the mansion house.

4.4.1. Popular house.

People of the popular class were generally poor. They were laymen, odd job men, ploughmen, conveyers, small shop ow-

ners etc. A characteristic of the typical popular house is its limited space, as true for the yard as for the main building. Resulting from the poverty and density of the 'varosh', the popular house shares two sides with the neighbouring houses, while another faces the street and the fourth the yard. From the front gate one enters the covered walk which is open to the yard. The oven is in the open and the toilet is sheltered in a cheap wooden shed. One or two spaces communicate either with the yard or with the covered walk and they serve for stabling or storage. The staircase penetrates the planking of the upper floor and leads to an open gallery which gives access to a couple of rooms — one for everyday living and one for best. The typical popular house may, at the most, have one fireplace which is preferably put in the best room. Most of the summer living is done in the covered walk, the yard and the gallery. The rooms themselves are used mainly in the winter, thus they have only a few windows, (fig. 135).

4.4.2. Bourgeois house.

Situated initially in the varosh and later in positions that were guided by the ethnic quarters, on the one hand, and by the market place, on the other, the bourgeois house does not have too much open space available to it. People of this class were mainly merchants and manufacturers; space for a shop and/or a workshop was needed, while the social life of the family demanded more space for visitors and guests. Therefore, the typical bourgeois house uses most of its plot for the main building and leaves a small portion of it for an open yard. In addition, it introduces a mezzanine floor and upper floor projections for the enlargement of the interior, while the plan of the house is irregular as it stretches in different directions to optimize what space is available.

Depending on the profession of the owner, the ground floor may have a shop with its own entrance from the street, most of the other spaces of the ground floor being accessible from the covered walk and a few from the yard. The oven is included in a space which is used for both domestic
Fig. 135  Typical popular house - artistic impression drawn by the author.

Fig. 136  Typical bourgeois house - artistic impression drawn by the author.
purposes and for the family's craft. There is a cellar and storage but there are no stabling spaces, apart, maybe, from a small pigsty. The toilet may be positioned on the ground floor but it is more likely to be found on the mezzanine, nearer to the family's winter quarters. The gallery of the mezzanine is closed towards the yard though it can be open towards the covered walk. It gives access to two or three spaces, one of which is the everyday winter room with a fireplace. The others are for winter use, auxiliary and there may be a workshop too. The upper floor is firstly for receiving guests and secondly for summer use by the family itself. Thus, most of its rooms are for visitors and guests. These are a large gallery, the best winter and best summer rooms. There is also an everyday room and, possibly, a small one for women, (fig.136).

4.4.3. Mansion.

The upper class, on top of their wealth, had various privileges, too. They were able to buy large plots in various distinguished positions in the towns and build detached houses with spacious yards. As there is more than enough space under the main body of the mansion for all the auxiliary spaces, the yard functioned more as a garden than as a space for activities associated with the oven or the toilet and, in any case, a rich mansion was more likely to be attacked by thieves thus everything is gathered, literally, under one roof. The covered walk, in the typical mansion, is closed on all sides and has a secure door which provides extra security with the front (yard) gate. The covered walk gives access to the oven room, to various cellars and storage rooms and it, itself, is comfortable enough to be used as a gathering place for members of a guild to talk business with their 'president', the mansion owner, who may have a raised platform as a business office at one end of the covered walk.

The mezzanine is usually as big as the upper floor, sometimes even bigger to include spaces for a workshop, for the manufacturing of commodities, to accommodate many workers. It has a large gallery, one or more rooms for the
Fig. 137 Artistic impression of the typical mansion:

I: street façade,
II: upper floor plan,
III: mezzanine plan and
IV: ground floor plan.

(Drawn by the author)
family's use and a best winter room. The plan of the mezzanine usually follows the plan of the upper floor and, unlike that of the bourgeois house, it serves both family living and reception purposes equally, thus it is a self sufficient seasonal apartment and has a separate workshop, too.

The upper floor is entirely for summer use and it carries all the luxuries and fine craftsmanship and decoration for a comfortable and distinguished mode of life. The gallery is open, it has raised recessed platforms, a musicians' stand and gives access to rooms, each of which has a character, an atmosphere of its own. Adjacent to the gallery are the women's quarters with latticed windows looking onto the gallery, (fig. 137).
CHAPTER FIVE

THE ORIGIN OF MACEDONIAN ARCHITECTURE AND
ITS PRACTITIONERS

5.1. Introductory notes.

Having presented the architecture that occurred in Macedonia in the 18th and 19th centuries and having discussed the relevant social, cultural and economic issues that manifested it, we turn now to examine its origin and creators. This chapter will show that the Byzantine domestic architecture set the foundation for the development of the Macedonian one in the 18th and 19th centuries. It can be argued, that the architecture in Macedonia from the Turkish occupation in the 15th century until the 18th century, although containing elements of Byzantine technology, remained in an embryonic form until the new social and economic conditions that appeared in the 18th century gave it the appropriate boost to reach its maturity.

It must be noted, however, that concurrent with the embryonic or basic architecture prior to the 18th century, there was the architecture of the rich Turkish villas, mansions and palaces which although a minority architecture nevertheless, as it copied the Byzantine past, proved valuable to the continuation of the Byzantine building tradition, (1).

(1) Because the Greek builders continued to practice their skills according to the Byzantine tradition. See section 5.5.
It should also be noted that the Ottoman Turks, a nomadic people, had no architecture other than the tent, (2), so, consequently, adopted the technologies and forms of the places in which they settled, (3). It has already been mentioned that they used those buildings they did not destroy for their own purposes, (4). Perhaps the best example of such appropriation is the 'transformation' of St. Sophia into a mosque: all the Turks did was to whitewash the frescos of the interior and to erect four minarets on the corners of the building. Regarding the adoption of the 'style' of buildings that the conquerors found where they had settled, the mosques they built in Constantinople may be referred to, six in all and all in the Byzantine rather than in the 'Muslim' style, but furnished with minarets, (5).

That the Turks adopted local architectures can be attributed not only to their being a nomadic people, but also to the fact that, as warlike people who became feudal lords, they were not involved themselves in the art of building, (6). Instead they used local builders who, in turn, built in the way they were accustomed, using the Byzantine technology they were familiar with.

We do not want to imply that the Turks did not offer anything in the shaping of Macedonian architecture. Merely the fact that they were the rulers suggests that they influenced the architecture just as they did certain expressions of social life, (7). But their effect on the former is manifest on the monumental rather than the domestic side, e.g. in mosques with their minarets, public fountains and bezestens, though even here, as pointed out, the Byzantine style dominates the Muslim.

On the domestic side, the most prominent influence appears in the interior of houses and, to be more precise, in the interiors of the living rooms: Turks had the habit of

(2) About the Ottoman architecture in general see: Montani, 1873 and Saffet, 1938.
(3) Briggs, 1959, pp. 222, 347.
(4) See chapter 4, section 4.2.1.
(5) Briggs, 1959, p. 347. The Arabic word 'Muslim' is generally adopted by scholars to describe the architecture produced by the followers of the religion of Islam, (Ibid, p. 221).
(6) See chapter 4, sections 4.1.3 and 4.2.3.
(7) For examples see Simopoulos, 1976.
sitting cross-legged or on their knees; this goes back to their nomadic tent life. Thus, in a living room, instead of chairs they had thick carpets on the floor and low divans where they lay or sat cross-legged. As they sat on the floor, the room had to be divided into a sitting and a walking area. The sitting area, surrounded by divans, was raised approximately 20 cm from the walking one and elements such as railings, gratings, columns or arches were put between to emphasize the separation, (8). On entering the raised platform shoes had to be left on the walking area of the room; here one finds analogies between the sitting area and the interior of a tent or mosque which the Turks entered barefooted. Nevertheless, the Byzantines used divans in their living rooms. This can be inferred from a room in the Byzantine house to which the texts refer as the 'τρίκλινο', the 'three-bedded', (9).

One sees that, however convincing the tent analogy appears to be, divans were not a Turkish innovation. The use of cushions, carpets etc. is associated with Turkish habits, but one must be critical before suggesting that the Turks introduced them - steam baths are generally known as Turkish baths, but the Byzantines had them and before them the Romans, (10).

Therefore, although the furnishing of the living rooms of the Macedonian house can be associated with Turkish tent habits it must not be regarded as a Turkish innovation. In any case, this, probably single, Turkish mark on the Macedonian house does not make it Turkish, because, as argued later, the Macedonian house is throughout directly of Byzantine origin.

(9) Miklosich-Müller, 1860-1890, 2.52, 3.20, 3.52. See also Migne, 1857-1866, 40.32.
(10) Choisy, 1929, p.79.
5.2. Domestic architecture prior to the 18th century.

Disregarding the few mansions belonging almost exclusively to the privileged Turks, before the 18th century most of the population lived in small, poor houses. This population was mainly agricultural and a typical example of their architecture is the Doliani house, (11).

This has a single spaced ground floor only. The walls are built of stone and mud with pairs of wooden beams at intervals of 70 - 80cm. There is no wooden floor; instead a layer, 10 - 15cm thick, of clay soil, carefully pressed and flattened, was laid. The same material was used regularly to maintain the evenness of the surface. The absence of a ceiling leaves the roof structure exposed on the interior. The latter was constructed using oak beams, as trusses, on which thinner logs rest providing a boarding to support the flat stones which complete the structure. There is no fireplace, but in the centre of one of the four walls a square of stones indicates where the fire was lit. The smoke wandered freely within the interior and found its way out through a rectangular hole in the roof, directly above the fire, and through the tiny cracks between the roof stones.

There are one or two small windows, measuring 50 by 70cm, without glass panes but having wooden shutters that open towards the interior. There are niches in the walls that were used as shelves. Occasionally, the Doliani house has an oven which is situated opposite the fire square. Finally, there are no divans, hence the family sat and slept on the ground.

This house, with time, acquired another room and bigger windows. The wall niches were dressed with wooden panels and closed with doors. The stone square became a proper fireplace, on either side of which wood panelled recesses appeared. Lastly, the house acquired a wooden ceiling, though it still did not have a wooden floor nor divans. These began to appear in the 18th century, together with the addi-

(11) The village of Doliani in western Macedonia was formed out of neighbouring Byzantine settlements in between 1450 and 1500, (Stergiadis, 1981, p. 112).
tion of an upper floor and many other alterations which gave the house the form familiar to us,(12).

The brief description above gives an idea of how the Macedonian house was before the 18th century, when it began acquiring its final form which one should not assume was discovered anew, or was the result of an 'evolution' of that simple, single spaced Doliani house. As soon as their finances improved, people used the archetypal form of the Byzantine house to create the architecture of the 18th and 19th centuries.

5.3. Byzantine house and relevant building legislation.

5.3.1. Number of storeys.

The Byzantine house had either just one storey, in which case it was called 'χαυδόγεων', low to the ground, or two storeys of which the lower was called 'κατόγεων' and the upper 'ἀνώγεων', while the two storeyed house itself was called 'ἀνώγεοκόκωγον',(13). It could also have a third storey; in this case the middle one was called 'μεσόγεων', middle floor – mezzanine,(14).

A house with three or more storeys,(15), was considered by certain Byzantine observers to be extravagant. They criticized the owner as much for being vain as for depriving the neighbouring houses of their air, light and view,(16). A multi-storeyed house might have been a sign of the wealth of its owner, but it might also have been nothing more than a continuation of the Roman tradition in which the middle class was housed in five and six storeyed buildings,(17).

(12) All information about the pre-18th century Doliani house from Stergiadis, 1981.
(13) Coucoules, 1954, pp. 261-262
(15) Byzantine texts often refer to three, four and even five storeyed buildings. See: Chrysostomos in Migne, 1857-1866, 58.522; Life and works of Palladios in Migne, 1857-1866; Tzetzis, 1826, 5.17.618; Armenopoulos, 1851, 2.4.28.
(17) Beylie, 1902, p. 4.
5.3.2. Distances between buildings.

The Byzantine codes, (18), for the safeguarding of one's air and light prescribe that between multi-storeyed buildings a distance of 12 Byzantine feet, (19), was the minimum allowed (code 45) while between single storeyed buildings this distance could be reduced to 10 B.ft (code 23). More particularly, in the case of two facing buildings, one of one storey and the other of two, the addition of a second floor was allowed on top of the single storeyed building only if the distance between it and the second storey of the facing house was at least 10 B.ft (code 28), (fig. 138).

For the safeguarding of one's view the codes prescribe much bigger distances between buildings. According to codes 47 and 51, four types of view were to be taken into account in the siting of buildings within a town: views of the sea, mountains, public gardens and public works of art. Thus, if a building was to be placed between another and its view of

(18) The term 'code' was first used in the Roman legislation (codex, -icis) as a collective title for Imperial laws. In the Byzantine Empire, the term had a similar use, hence the 'Codex Theodosianus' and the 'Codex Justinianus' issued in Latin by the emperors Theodosius and Justinian in 438 and 529 respectively. The Justinian code was supplemented and improvised several times before his death in 565. The whole collection of Justinian legislation is generally known as 'Corpus Juris Civilis'. After Justinian other Byzantine emperors issued similar legislations written in Greek and not using the Latin 'codex' as a title. Collections such as those by Leon Isavros in 740, Vasilios the Macedon between 870 and 884 and, finally, Leon the Wise and his son Constantine before 911 known as the 'Βασιλικά' (Royal). Supplements continued to be issued until 1345 when the legislator Constantine Armenopoulos gathered and taxonomized the collections of laws and edited a digest of laws known as 'Σύνταγμα', Exavivlos. (See Eleftheroudakis, under 'κώδικα', 'Ιουστινιανός', 'Βασιλικά' and 'Αρμενόπουλος'.

The Exavivlos is used as reference for the present work. More specifically, each code is identified by three numbers, the first indicating the book, the second the chapter and the third the code itself. All codes concerning this study are in book two, chapter four of the Exavivlos, thus each code will be referred to with its third number only, e.g. instead of writing code 2.4.45 we write code 45.

(19) In the Byzantine system of measurement one 'πούς', foot, is the length of a large human foot which is equivalent to 0.3083 metres. See Dimitrakos, 1964, under 'πούς'. Hereafter all distances are given in Byzantine feet (B.ft).
CODE 45
DISTANCE BETWEEN MULTI-STOREYED BUILDINGS.

CODE 23
DISTANCE BETWEEN SINGLE-STOREYED BUILDINGS.

CODE 28 (FIRST PART)
DISTANCE BETWEEN A TWO-STOREYED BUILDING AND THE ADDITIONAL SECOND FLOOR OF A SINGLE STOREYED BUILDING.

Fig. 138 Schematic representation of codes 45, 23 and 28, as interpreted by the author.

CODES 47 AND 51
DISTANCE BETWEEN BUILDINGS WHEN ONE BUILDING COMES BETWEEN ANOTHER BUILDING AND ITS VIEW OF MOUNTAIN OR SEA.

CODES 48 AND 49
DISTANCE BETWEEN BUILDINGS WHEN ONE BUILDING COMES BETWEEN ANOTHER BUILDING AND ITS VIEW OF PUBLIC GARDENS OR WORKS OF ART.

Fig. 139 Schematic representation of codes 47, 51, 48 and 49, as interpreted by the author.
the sea (code 47) or a mountain (code 51) the former had to keep a minimum distance of 100 B.ft from the latter; whereas, in the case of the viewing of public gardens or works of art (codes 48,49), the former had to keep a minimum distance of 50 B.ft from the latter, (fig.139).

Finally, the viewing, or overlooking, of one's premises by another situated on a higher level was not illegal in the Byzantine legislation (code 50), (fig.140). It is clear from this code that buildings of various heights could be built near each other. However, ones of a different quality of construction, e.g. a rich house and a poor one, should be built at a distance. The latter is prescribed in the second half of code 28. According to the first half, which appears earlier in figure 138, there should be a distance of 10 B.ft between an additional second floor of a one storeyed building and its two storeyed facing building. Should the additional floor have, however, been of an inferior construction to that of the facing building, the distance of 10 B.ft would double to 20. The doubling of this distance, according to the code, safeguards the appearance of the well constructed building from the less well constructed one opposite it. The distance of 20 B.ft between such buildings of different quality applies to all heights of building, (fig.141).

5.3.3: Materials and measures against fire risk.

A variety of materials was used for the construction of Byzantine house walls: stone, brick and wood, either separately or in combination. A favourite combination was that of several layers of stone interrupted by rows of brick at regular intervals, (fig.142).

What characterized a Byzantine wall, however, was the method of construction called 'ιυαντωνα', (20), in which latticed timbers were incorporated in its mass at regular intervals, (21), (fig.143,a). Lastly, the Byzantines also built walls using only wood. A wooden wall comprised a skeleton

(20) Chrysostomos in Migne, 1857-1866, 56.44 and 56.666.
(21) Choisy, 1929, p.7: "Les murs Byzantins se distinguent (par les) longrines et (les) traverses de bois incorporées dans leur masse".
**CODE 50**

OVERLOOKING OF LOWER PREMISES.

Fig. 140  Schematic representation of code 50, as interpreted by the author.

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**CODE 28  (SECOND PART).**

DISTANCE BETWEEN THE STOREYS OF BUILDINGS OF DIFFERENT QUALITIES.

Fig. 141  Schematic representation of the second part of code 28, as interpreted by the author.
of vertical posts which supported horizontal planks, (22), (fig.143,b). Such walls must have been popular in the cities, as indicated by two observations. First, wood would have been appropriate for multi-storeyed buildings because of its lightness, its strength and the convenience of handling. Second, fires often broke out in the cities, spread fast and destroyed whole sectors. Had the major material of house building not been wood, fires wouldn't have been as catastrophic as many reports describe, (23).

To prevent the transmission of fire, the Byzantine legislation was very explicit and specific as to the positioning of workshops etc. at certain distances from domestic and public buildings, taking into account especially the direction from which the prevailing winds blew. Thus, codes 15, 16, 17, 18 and 19 deal separately with bakeries, potteries, gypsum or lime kilns, dye-houses, blacksmith's workshops etc. where ovens of various types were in prominent use.

With particular regard to domestic buildings, ovens were not supposed to be positioned on the ground area which was directly under the main body of the house, (24). The placing of ovens or open fires against or relatively near a wall which was shared with a neighbouring house was also forbidden by code 70. Finally, according to code 65, private buildings had to be built at least 15 B.ft away from public ones so that neither of them was in danger, as the code explains, meaning in danger of fire transmission, (fig.144).

5.3.4. The roof.

The roof of the Byzantine house was either flat or sloping, depending on the climate of the different regions of the Empire. When flat, the roof was covered with a thick layer of earth and was known as 'δώμα', (25). The pitched

(23) Chrysostomos, in Migne, 1857-1866, 62.77, 90.
(24) Leon the Wise, 1893, 18.3.
(25) Eustathios of Thessaloniki, 1825-1830, 1125.57, 1547.32 and 1669.19. Earth covered flat roofs are in use in the Aegean architecture. Occasionally, the tiled roof was called 'δώμα' by the Byzantines. See Coucoules, 1954, p.273.
Fig. 14.2 Byzantine walls, (Choisy, 1883, p. 9).

Fig. 14.3 a: Byzantine latticed wall construction (Choisy, 1883, p. 117).
b: A wooden wall, as interpreted by the present author.

Fig. 14.4 Schematic representation of code 65, as interpreted by the author.
roof was either a single slope, a slope in two directions or a double slope in each direction and was covered with clay tiles. The covering material rested either upon wooden battens or layers of lead, which were known as 'χαρτία', papers, (26), or upon layers of hide. These in turn rested on wooden rafters. The application of lead or hide in this way must have been an older technique than that of using wooden battens. This can be assumed from the fact that the Byzantines used the terms 'ὑποχάρτιωσις' (meaning the underlaying of 'χαρτία') and 'πέτσωμα' (deriving from the application of hide) indiscriminately for the use of lead leaf or wooden battens, (27), and of wooden battens, (28), respectively.

By considering the etymology of building terms which have, with time, lost their original meaning and have been applied to a different technique, one may explore the course of a building tradition. For example, one sees that for some reason the Byzantines abandoned the hide and turned to wooden battens. The two techniques, however, must have had something in common thus the term 'πέτσωμα' continued to be used in the application of the battens, although other terms were available: 'σανδιώτι ςτέγη' or 'πεταυρόστεγον', both meaning roof with planks - battens, are Byzantine terms which were used for the wooden batten technique. The term 'πέτσωμα', however, was preferred by the Byzantines and, later, was exclusively used by the Macedons although we do not know of any examples where hide was used in the roof construction in Macedonian architecture. It is thus suggested that the Macedonian wooden batten technique is the continuation of the Byzantine.

The sloping of roofs was achieved by means of wooden trusses involving pairs of rafters which were known as 'ψαλίδια' or 'ψαλιδώματα', scissors, (fig.145). A pair of rafters symbolized two fighters or wrestlers, (29). They were commonly known as 'προοφιλούντες', the literal meaning being

(29) Eustathios of Thessaloniki, 1825-1830, 1326.18.
leaning on and embracing each other, but in usage meaning locking, in fight, with each other, (30).

5.3.3. Floors, structural elements and staircases.

The floor of the ground storey was either plain earth, (31), earth and pebbles well compressed and levelled, (32), or was fully covered with flags, raw bricks or pebbles, (33). It could also be covered with planks which were laid upon joists, (34), though this technique was more commonly used for the floors of the upper storeys. The joists were laid on a number of wooden beams driven into the walls and were supported by columns or square-sectioned pillars built either of stone or brick, or, more commonly, the beams were supported by wooden posts, (fig. 146).

A square-sectioned pillar, built of stone or brick, was called 'πινυφός', according to code 30, which deals with the problem of replacing a square masonry pillar with a column. The code prescribes that in order to replace a pillar which supports the weight of an upper storey with a column, the latter should have a diameter equal to half the width of the former. If the pillar is situated on an upper storey (i.e. it supports the roof only) the code does not specify dimensions but stipulates that a layer of latticed timber, (35), at least eight fingers, (36), thick should be interposed in the stone mass of the column, (fig. 147).

(30) Ibid, 1326.64. In various parts of Greece the rafters are called 'μαχαίδας', fighters. In France they are called 'battants' (Coucoules, 1954, p. 271) while 'batter' is what the English call the inclination of a tower. It can be seen that the Byzantine symbolism has continued to apply to Grecian architecture, while it can be argued that it applies to foreign architecture, too. Whether the French term 'battants' denotes a Byzantine tradition in France or expresses a symbolism which is embodied in domestic architecture regardless of locality and nationality is a matter of separate study and investigation.

(31) Miklosich-Müller, 1860-1890, 6.40.

(32) Ibid, 6.41.

(33) Coucoules, 1954, p. 278.

(34) Ibid, p. 278.

(35) It is the technique known as 'μυάλωμα' in which latticed timber was incorporated in the mass of a stone wall, as discussed in section 5.3.3.

(36) In the Byzantine system of measurement one 'δάκτυλος', finger, the breadth of a human finger. 8 fingers are equal to 1/2 B. ft or 0.1541 metres (Armenopoulos, 1851, 2.4.12).
Fig. 145 Byzantine trusses, (Choisy, 1883, pp. 146 and 147).

Fig. 146 Byzantine wooden floor on posts, (Choisy, 1883, p. 144).

Fig. 147 Schematic representation of code 30, as interpreted by the author.
We may look beyond the technical nature of this code and appreciate how building skills progressed. Bulky pillars were replaced by thinner and more elegant columns which were capable of bearing the same load. It can be argued that things were learned sequentially in the building tradition which moved step by step over the course of time. Thus, the Macedons reached the point of using rather tall, thin wooden posts that bore considerable loads, as noted in chapter two and illustrated with figs. 41, 61 and 68.

The floor to floor communication was achieved by means of interior wooden staircases, (37). These came through square openings in the floor which were often provided with wooden lids called 'καταρράκται', (38), that could be secured from upstairs. Exterior staircases, however, were not rare and those made of stone or marble also served to embellish the house, (39).

The codes refer to the wooden staircases in two instances. First, according to code 56, staircases leading from the street to house overhangs were forbidden, with a view to avoiding fire transmission. Second, according to code 74, the building of a staircase against a wall common to neighbouring houses was allowed, because, as the code explains, on the one hand a wooden staircase does not harm the wall and, on the other hand, its removal is easy. The latter remark can give rise to certain speculations as, for example, to whether a wooden staircase was considered by the Byzantines a fixed, permanent element of the house design, or an additional one, an accessory, so to speak, which, like a boat ladder that one has no further use for once one is aboard, does not play a decisive - if any, role in the design of the house. There must be a connection between the 'easily removed' notion which the Byzantines had about the wooden staircase and the fact that in the Macedonian house the staircase was built last and had a light, rather insignificant and cheap construction even in the richest of houses.

(37) Beylie, 1902, p. 201.
(38) 'Καταρράκται', 'falls' as they fall down to close, (Wagner, 1874, 109.106), or 'ἀπέθεσθαι', the term implying that they can be pulled up, (Bustathios of Thessaloniki, 1825-1830, 1921.19).
(39) Chrysostomos, in Migne, 1857-1866, 57.51.
5.3.6. Windows.

The Byzantines distinguished between two types of window, those exclusively for admitting daylight and those which also provided a view. The former were called 'φωτιστικά θυρίδες', light-holes, (40). The latter 'παρακυπτικά θυρίδες', a term derived from the verb 'παρακύπτω' which, for the Byzantines, denoted the act of bending over the window for viewing purposes, (41). Consequently, the sill of such windows could not have been higher than waist level. They were oblong rectangles with a flat or curved head, could be glazed and were provided with shutters and/or bars, (42).

The codes refer to both types of window on many occasions in matters concerning mainly the light, view and privacy of one's premises. Before looking at these codes, it must be noted that the Byzantine building regulations always respected what had been built in older times, that is, they took for granted what was 'old', while it was for the newly built buildings to obey the regulations conforming to the old, (43).

Code 55 prescribes that if the distance between two facing houses is 10 B.ft, windows of the bend-over type are not allowed, unless they were built in older times. Light-holes, the code continues, are allowed so long as they are positioned 6 B.ft above the floor in the house interior, i.e. above eye level, (fig. 148). Code 55 ends with a note according to which the raising of the floor, that is, the construction of a raised platform in the house below the light-holes, is not allowed, because then, the light-holes could be used for viewing purposes, (fig. 149).

(40) This is the term used in the codes. It was applied to the small rectangular or circular openings of the wall above eye level. The light-holes could be latticed and hence called 'διαφωτισμένοι', perforated, (Procopios, 1905-1913, 4.1).

(41) This is the term used in the codes. A wall without such windows was called 'τυφλός', blind, (Armenopoulos, 1851, 2.4.33).

(42) Beylie, 1902, p. 201.

(43) A discussion on the conscious effort of the Byzantines to preserve their building tradition appears in chapter six, section 6.2.
CODE 55

POSITIONING OF WINDOWS ON OPPOSITE BUILDINGS BUILT AT A DISTANCE OF 10 B.FT.

Fig. 148 Schematic representation of code 55, as interpreted by the author.

CODE 55 (FINAL NOTE)
PLATEFORMS FACILITATING VIEWING FROM LIGHT HOLES NOT ALLOWED

Fig. 149 Schematic representation of final note in code 55, as interpreted by the author.

CODE 53
WINDOWS ON OPPOSITE BUILDINGS BUILT AT A DISTANCE OF 20 FEET OR MORE.

Fig. 150 Schematic representation of code 53, as interpreted by the author.
One may assume from code 55 that, in the case of facing houses, the direct viewing of one from the other at a distance of 10 B.ft was not allowed. However, at a distance of 20 B.ft, direct viewing was allowed, as indicated by code 33 which permits viewing windows on facing houses that are this far apart, (fig. 150). Code 33 also notes that the distance of 20 B.ft is considered by the Byzantine legislation as 'adequate for privacy'.

Finally, code 35 deals with the problem of building a new house against one of the walls of an 'old' house. If the wall in question carries light-holes which are the only means of lighting for the old house, then the new should be built 3¾/4 forearm's, away. If, however, these light-holes are not the only means of lighting for the ancient house, i.e. the ancient house receives light from other windows or light-holes on other walls besides those on the wall in question, then the new house can be built against this wall and block the light-holes, (fig. 151).

5.3.7. Doors and gates.

It has been suggested, (45), that the main, or principal, façade of the Byzantine house faced either the street or the yard. This suggestion is established by the distinction which the Byzantines made between a door and a gate. One could enter a house through its 'θύρα', door, (46), and this must usually have been the case where the front façade looked onto the street. Alternatively, one entered firstly the house yard through the 'πυλών', gate, (47), and then the house, via its yard; that is, in the case where the front façade looked onto the yard.

It is important to this study to explore whether the positioning of one’s house to face the street or the yard

(44) In the Byzantine system of measurement one 'πήρος', the length of a forearm, is equal to one and a half B.ft, or 0.4624 metres, (Armenopoulos, 1851, 2.4.12).
(45) Gerland, 1915. See also Coucoules, 1954, p.279.
(46) Hesseling-Pernot, 1910, 1.84.
(47) Chrysostomos, in Migne, 1857-1866, 49.240. 'Πυλών' the term used in the codes; see Armenopoulos, 1851, 2.4.63.
was a matter of preference, or whether it resulted from the realization of the State regulations. Two virtues which the Byzantines recognized in a house were whether it was 'εὐδαίμον καὶ εὐθήλιον', (48), that is, well ventilated and sunlit. A house which faced the street was not likely to be awarded either one of these virtues, as the narrowness of the street and the resulting proximity of the opposite houses blocked both the air and the sunlight. Therefore, if one wanted a well ventilated and sunlit house, the latter should face the yard which kept the neighbouring houses at a relatively greater distance. At the same time, however, the street traffic with the relevant events, like street merchants, processions, people's social exchanges and arguments was very interesting for the inhabitants of the houses who not only viewed all these street events but played an active role in them, either when calling the street merchants or when talking and arguing with the passers by, (48). A house which faced the street was in accordance with the way of life in the Byzantine towns; it complied with what one may call a 'dialogue' between the street and the houses: The hero in a Byzantine text, sat in a room "...οὐ ἀνεώγεσαν πολλά θυρίδων στόματα ἐξω που περί τὴν λεωφόρον χασιμόμενα", that is, a room "whose many mouths of windows were open towards the street", (49).

Was it, however, always possible for every house in a Byzantine town to be well lit and ventilated and to face the street? From what has been seen so far, from those codes which safeguarded one's view and privacy by establishing minimum distances between houses by permitting or prohibiting the opening of windows accordingly, one is led to the assumption that the positioning of a house façade was not always a matter of choice but one of complying with the building regulations. One may conclude that acting according to the regulations came first and by choice second: code 52, which deals with the distances between a house overhang and a private or public building (see fig. 155)

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(49) Prodromos Theodoros, p. 117.
notes that if one does not comply with the prescribed distances the overhang will be demolished and the house turned over to the royal treasury.

Let us return to our discussion about the door and gate of the Byzantine house. As noted, the door led directly into the house while the gate led into the yard. In both cases, the door or gate, had the same function: they were the front door of the house at which a visitor knocked, (50), could be secured from the inside, (51), and carried symbols and paintings that were intended to guard and protect the entrance of the house, (52).

The door and the gate were among those elements of the house to which most attention was paid regarding safety and decoration. Their wooden leaves were strengthened with broad headed nails, (53), and carried copper, (54), or even gold, (55), ornaments. Stone posts, (56), completed the luxurious image. Such ornamentation can be regarded as an exhibition of one's wealth and social status. In fact, the exhibition of the gate in particular was accentuated by its projection beyond the yard wall, into the street. Such projection was not only detrimental to the street but also raised arguments between neighbours who competed with each other over the appearance of their houses, (57). Thus, the State, with code 63, forbade the projection of gates to a distance greater than that to which water dripping off the house roof fell, (fig. 152).

When making efforts to impress the onlooker with the appearance of one's house it is quite logical to start with the first element that comes to the attention of the pedestrian: the front door. This is especially true in the case of the gate where the house did not face the street

(51) Ibid, pp. 285-286. Door or gate were secured with locks, latches or bolts.
(52) Beylie, 1902, pp. 39, 88. Paintings with subject the 'Mavryia Ἡ Νορταπέα', Virgin-on-the-door, were the most popular, (Coucoules, 1954, p. 280).
(53) Palladios of Hellenoupolis, in Migne, 1857-1866, 34, 1194.
(54) Beylie, 1902, p. 201.
(55) Gregorios of Nyssa, in Migne, 1857-1866, 44.656.
(56) Chrysostomos, in Migne, 1857-1866, 56.557.
Fig. 151 Schematic representation of code 35, as interpreted by the author.

Fig. 152 Schematic representation of code 63, as interpreted by the author.

Fig. 153 Schematic representation of codes 25 and 26, as interpreted by the author.
and, consequently, was not viewed from there. So, it can be argued, the appearance of the gate reflected the appearance of the house façade. As it is unlikely that the gate was projected onto the street for any functional reason it can further be argued that the gate replaced the façade of the house; reflected the impression that the façade would make were it facing the street.

To end the discussion about the front door, the last three codes associated with it are considered: codes 25 and 26 are concerned as much with the visual cleanliness as with the safe and comfortable movement in the space before a house front door. They thus prescribe that the entrances of taverns or stables should not be placed directly opposite a house front door, but diagonally, (fig. 153).

Code 31 prescribes that a yard should have only one gate leading either to the street or to a neighbouring common yard from where there is access to the street. The code continues that a workshop or warehouse should have either one door leading into a common yard or one leading into the street, (fig. 154). These regulations, as the code explains, are aimed at minimizing the risk of trespassers using one's premises to enter other neighbouring premises. From code 31 one realizes that the Byzantine house either had direct access to the street, via its front door, or indirect access, via a common yard, a yard that is, which was shared by at least two neighbouring houses each of which could also have their own private yards.

5.3.8. Projections.

The term 'Ήλιοκός' was used by the Byzantines to denote that space of the house which was exposed 'to the sun', (58). The position of this space in the house was not fixed, neither was its form: it could appear on the upper or ground floor, towards the street or the yard and could be rectangular, round etc, (59). It was usually, however, rectangular, positioned on the upper floor, projected towards the street.

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(58) Noailles et al., 1944, pp. 372-375.
1. If 'B' desirable then 'A' must close.
2. Either 'D' or 'E'.

Doorway between a private yard and a common yard & doorway of warehouse or workshop adjacent to a common yard.

Fig. 154 Schematic representation of code 31, as interpreted by the author.

Code 52
Distance between an overhang and opposite building.

Fig. 155 Schematic representation of code 52, as interpreted by the author.
and was made of wood, (60). In the codes it is referred to as 'δέκτος ἐκπετασμένος ἔξωσις', the jutting out platform, or simply as 'ἔξωσις', platform, as well as 'ηλιακός', (61). This overhang, so to speak, was enclosed by walls and roofed, but allowed the sunlight in by means of windows opening in all possible directions. As it was projected over the street it came rather close to the opposite buildings. This, in conjunction with its wooden construction, made it a potential fire transmission element of the house. We may suppose that code 52 demands a minimum distance of 10 B.ft between an overhang and a building opposite, or even 15 if the opposite building happened to be a public one, for the prevention of fire transmission, (fig. 155). For probably the same reason, code 32 demands a minimum distance of 10 B.ft between facing overhangs, one of which was old and the other new, (fig. 156). Here, again, one notices that the building regulations make exceptions in cases where older buildings are concerned. This interpretation is chosen because, if we recall that the distance of 20 B.ft between facing windows is considered, by code 33, as 'adequate for privacy', then the 10 B.ft distance between the windows of facing overhangs, as prescribed by code 32, should not be taken as a violation of code 33. Since there is no code concerning the distance between facing overhangs and code 32 specifically speaks about the distance between an old and a new overhang, we may conclude that the Byzantine regulations seek to find solutions in cases where older constructions are preventing the new from complying with the building legislation. On the one hand the regulations recognize the old buildings, i.e. they recognize tradition, but on the other hand the regulations recognize one's desire, or right, in building a new house, to have windows, overhangs etc., as the old houses have. Thus, returning to code 32, just as the old house has an overhang so the new house has a right to one too, even though it may approach the window of the old overhang at a distance of less than 20 B.ft, provided, however, that this

(60) The wooden construction of the projection is depicted by another of its names, 'ναβάμβαν', which is derived from the Latin 'tabulatum'. See Coucoules, 1954, p.291.
(61) Armenopoulos, 1851, 2.4.32.
CODE 32

DISTANCE BETWEEN FACING OVERHANGS.
OF WHICH ONE IS OLD AND THE OTHER NEW.

Fig. 156 Schematic representation
of code 32, as interpreted
by the author.

CODE 56

EXISTING OVERHANGS ABOVE STREETS 10 B.FT. WIDE

Fig. 157 Schematic representation of code 56,
as interpreted by the author.
distance is not less than the 10 B.ft prescribed for the prevention of fire transmission.

Finally, code 56 forbids house projections over streets 10 B.ft wide, but allows the projections that were constructed at an earlier time, as long as they are raised 15 B.ft above the streets and they are not supported by columns, wooden posts or walls, so as not to lessen the widths of the streets or restrict the air ventilation. Staircases leading from the street onto the projections are prohibited by the same code, as they would also be a fire transmission risk, (fig. 157).

5.3.9. Interior arrangement.

With the exception of code 55 which, as seen in section 5.3.6., forbids the building of raised platforms below light-holes, there are no regulations concerning the interior of the Byzantine house. It is not possible to form a precise picture of the interior plan, but the names of the most important spaces, rooms, and the order in which they appeared within the house are known. Thus an idea of the interior arrangement can be formed.

Having established that the yard gate was in fact the front door of the Byzantine house, it follows that the yard was one space of the house interior, (62). In the yard, there was a stone built bench, called 'πεζοδόλλιον', (63). It was there to facilitate dismounting, (64), thus we learn that horses were ridden into the yard and, apparently, the gate was high enough for this. There was also a well in the yard, (65), or, lacking underground water, there were appropriate ditches, rain-water collectors, known as 'κισοερως', cisterns, or 'ουβροδέκτας', rain-water collectors, (66).

The interior of the main building of the house was dominated by a large space known as 'τρίκλινον', three-bedded, (67). It served as a reception space where men, as a

(62) Often, especially in the northern provinces of the Empire, the yard was roofed; see Beylie, 1902, p.74.
(64) Guilland, p.90.
(66) Ibid, pp.315-316.
(67) Ibid, p.294. Also known as 'οάλα', salon; see Beylie, 1902, p.58.
rule, accepted their guests. It was very rarely used by the women who resided in their own quarters, the 'μνημειώδης', (68). The 'τρίκλινον' gave access to a number of smaller chambers, some used as sleeping rooms and others as sitting rooms for the women. These were called 'κοινώνες', bedrooms, (69), 'κοινούκλια', cubicles, (70), or simply 'δωμάτια', rooms, (71). Inside them there were 'δωμάτια', shelves, where various objects were kept, (72), and 'στίβαδες' or, more commonly 'πε-ζούλλια', benches, along the walls, (73).

Byzantine texts often refer to the 'μαγειρείον' or 'παρακελλίον', (74), the space, that is, where food was prepared. The exact position of it is unknown; the term 'παρακελλίον', however, which is derived from the words 'παρά', near, next to and 'κελλίον', cell, denotes a small space which is adjunct to the main spaces of the house. Although one cannot be certain, it may be assumed that this food preparing space could be one of the auxiliary spaces on the ground floor of the house, accessible from the yard, since the oven, 'φούρνος' or 'καμίνι', has been noted as being positioned near the main building and near the gate, (75). It was not necessary for the 'μαγειρείον' to be upstairs because food was also cooked in the 'ἐστία', (76), an open fire, lit in a specially designed corner in one of the living spaces of the house.

Finally, the Byzantine house contained a toilet which was known as 'ἀπώπατος', the closet, 'ἀφεδρών', seat, or 'ἐξεδρα', stage, (77). The latter indicates that the toilet

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(68) Miklosich-Müller, 1860-1890, 3.57.
(69) Ibid, 3.21.
(70) Beylie, 1902, Supplement, p. 12.
(72) Hesseling-Pernot, 1910, I, 203 and IV, 27.
(73) Eustathios of Thessaloniki, 1827-1832, 1546.61.
(76) Hesseling-Pernot, 1910, IV, 131; Eustathios of Thessaloniki, 1827-1832, 129.45.
(77) For the term 'ἀφεδρών' see Justinian, 1872-1877, 8.10. See also Armenopoulos, 1851, 2.4.46. For the term 'ἀπώπατος' see Justinian, 1872-1877, 8.10 and Polydeukis, 1872, p. 127. For 'ἐξεδρα' see Coucoules, 1954, p. 311.
could be projected outwards, apparently from an upper storey: vertical ceramic pipes carried the waste to a private drainage system which, in turn, guided it to the public sewers, (78). It was forbidden for the dirty waters and other waste to be disposed of onto the street or onto a public space, (79).

5.4. Byzantine building trades.

5.4.1. Guilds of skilled workmen.

In Byzantium, house building was carried out by organized teams of workmen. Each team worked under a contractor, known as 'ἐργολάβος', (80), who entered into agreements, oral or written, (81), with house owners, and included skilled men, the 'μοίστορες', masters, (82), and unskilled, the 'ὀπέρος', assistants, (83).

The masters were divided, according to their skills, into various specializations: masons, plasterers, painters, marble craftsmen etc, (84). The contractor, as leader of the team, was also known as 'πρωτομαχος', chief master, (85). Chief masters and masters belonged to special guilds known as 'συστήματα', (86), which were recognized by the State as professional with certain prescribed rights and obligations some of which we now come to examine.

If a stone built house collapsed, though not due to earthquake or other disaster, within ten years of its construction, the contractor was obliged to rebuild it at his own expense. Likewise, with a dry stone built house the contractor had to rebuild it, at his own expense, should it collapse within six years of its construction. Those who did not obey were punished, (87).

(78) Armenopoulos, 1851, 2.4.80.
(79) Ibid, 2.4.82.
(82) Choisy, 1883, p. 175.
(83) Boor, 1888, 440.20.
(84) Moutsopoulos, 1967, p. 52.
(85) Choisy, 1883, p. 175.
(87) Leon the Wise, 1893, 22.4.
Once a contractor with his team had agreed to build a house they were obliged, by law, to finish it, as long as they were being paid by their employer, the house owner. The contractor and his team were allowed, by law, to stop their works and appeal to the Prefect, (88), only if the employer ceased paying them, (89). If, however, the employer was paying the contractor regularly, he and his team had no right to leave the building unfinished, unless they compensated the employer. In the case where they left the building unfinished without compensating the employer, the latter could appeal, in the presence of witnesses, to the Prefect who, in turn, punished the contractor and the men, (90).

The Byzantine legislation concerning the guilds had its roots in the Western Roman Empire, (91). However, although in the West the building profession was hereditary and obligatory, that is, a son was obliged by law to follow his father's profession, in the East things were more flexible, (92). The profession was not hereditary and, in the Justinian code, there are regulations concerning the rights of the builders encouraging, rather than obliging the builders to work and prescribing a hierarchy within the teams, that is, all masters should come under chief masters, (93). That the profession was not hereditary suggests that building skills could be learned by anybody willing to be apprenticed to a master. One may suppose that it was from the 'διάδωρος', the assistants mentioned earlier, that the apprentices most probably sprang.

The right to appeal to the Prefect in the case where an employer stopped payments shows that any matter concerning the building profession or the internal organization of a guild could be freely brought to the law. In fact, the State encouraged other teams to take over an unfinished job only in the case where this was due to the initial team's fault and not the fault of the employer, (94).

However, although the Justinian legislation appears more flexible than the Western Roman one in matters conser-

(88) High ranking officer, warden of the city - 'praefectus urbi', Dimitrakos, 1964, under 'Επαρχος'.
(89) Leon the Wise, 1893, 61.62.
(90) Justinian, 1872-1877, 8.10.
(91) Choisy, 1883, p.177.
(92) Ibid, p.175.
(93) Ibid, p.175.
(94) Justinian, 1872-1877, 8.10.
ning the rights of the builders, it does not give them complete freedom of action but obliges them to obey the commands of their chief master to whom the State gives most of the responsibility for a building task, (95). Thus, with the establishment of a hierarchy the State manages to control the builders indirectly, via the chief master.

We should note that the builders took pride in their profession. Although guided in their work by the chief master, they were able to express their own personal style, within limits and mostly in decorative or minor elements of the building. The pride the masters took in their piece of work is manifested by their personal inscriptions on it, (fig. 158). It is interesting to note, too, that although specialized masters existed, a master as member of a team that had undertaken the construction of a particular building also worked on many different jobs in the construction besides the ones relevant to his specialization. The mark of the same master has been found not only on elaborate elements such as capitals of columns, but also on the plain stones of the walls of the same building, (96).

The Byzantine guilds will be elaborated on in the discussion about the Macedonian guilds which, as we shall argue, developed within the paradigm of their predecessors. This discussion comes after a brief note about the Byzantine architects.

5.4.2. Architects.

The architects, besides their important role in the shaping of the Byzantine monumental architecture, guided domestic architecture, too.

Their guidance is manifest by their 'σχάρια', drawings,

(95) Choisy, 1883, p.181.
(97), and by their wax models, (98), which the contractors followed in the building of houses. Although it can be supposed that architects were employed only on important houses, their designs would have influenced the other, less important ones, since people always want to emulate the big and famous. In other words, an architect designed house would have become the model for other houses. This suggestion is supported by the fact that a Byzantine architect was, above all an engineer; thus he was commonly known as such - 'μηχανικός', (99). As an engineer the architect would find structural solutions which, in their turn, produced forms. The rising of domes on pendentives from a square base was a structural solution which the architect Anthemios invented and applied in St. Sophia in Constantinople, (100). This solution characterized every other Byzantine church built thereafter. Another structural Byzantine element was the dosseret, a block placed on the top of a capital of an arch in an arcade to assist in supporting the voussoirs. This, too, was a structural solution creating form. Although these examples apply to monumental architecture, they illustrate the point we want to make about how the role of the architect as engineer determined the shape of Byzantine architecture in general and domestic in particular. For the latter, we have already referred to code 30 (the replacement of a square pillar by a column) which may serve us now as evidence of how the architect moulded domestic architecture with his structural solutions.

Besides engineering, the architect, on behalf of the State, came to prescribe codes, many of which have been discussed in the previous section. The general title of the complete set of these codes reads that they are the work of an architect, (101). Although it follows that a man who prescribed codes must have had a high general level of education, the architects did not get that part of their

(98) Gregorios of Nyssa, in Migne, 1857-1866, 46.665.
(100) Bowyer, 1973, pp. 22-23.
(101) The architect Julian Ascalonites, (Armenopoulos, 1851, 2.4.12).
education that concerned their profession from schools of architecture, (102). The architectural profession was passed on from father to son, it was hereditary, unlike the profession of the builders. The fact that an architect came from a family of architects, on the one hand, and the existence of a hierarchy within the guilds, on the other, meant that the building profession was controlled by only a few people: architects and chief masters. This may explain the tremendous stability of architecture which throughout the duration of the Byzantine Empire underwent only minor transformations, (103).

5.5. Macedonian building trades.

5.5.1. Building agreements.

As in Byzantium, during the occupation of Macedonia by the Turks, the building of houses was undertaken by teams of builders. A number of masters with their assistants were led on the construction site by their chief master following an oral or written agreement between the chief master and the employer, the owner of the house to be built. Let us examine two such agreements, (104). The first was written by a man with a poor standard of literacy who also served as a witness; he was grocer and tailor of Vithos village near Kozani where the building took place, (105):

"The architects Kostas Tzoumanis and Kostas Tsionumas have agreed to build for Demos Tsiotsios an "ἀψυωκαταγάγαυ" (two storeyed house), using stones, mortar and flagstones which they will bring to the construction site. Three doors will have frames made of hewn stones, while the rest of the doors and the windows will have plain posts and hewn lintels. The architects will also construct the casements, the panels and the roof and will deliver the house in good order. In the living room they will make a fireplace with hewn stones. Demos (the owner) promises to pay

(104) The agreements were composed in Greek, as the building trade was in Greek hands. Even in cases where house owners happened to be Turks, the agreements were in Greek. See, for example, the agreement between master-Nicolas and the Turk Abdul Selim in Moutsopoulos, 1967, p.63.
(105) Moutsopoulos, 1967, pp.61-62; the text is a free translation from Greek by the present author.
3½ piastres, (106), per yard. The walls will be 75cm thick near the foundations and 70-65cm at their upper part. The owner promises to provide mortar and water. The architects will dig for the foundations. Demos promises to provide lunches, dinners and tools for the craftsmen; also gunpowder and tools for the quarry. The above has been written for the security of both the architects and the owner.

16 April 1890

The architects have received two Turkish pounds in advance.

The architects  
Kostas D. Tzoumanis  
Kostas E. Tsioumas

the owner  
Dimitrios Tsiotsios

Georgios Papazises, witness.

Also the upstairs fireplaces will be built by the masters and will be priced accordingly."

On the back page of the document the architects have signed that on May 10th, 1890 they received another ten Turkish pounds. Also, on the back page, there is a list of clothes and other items such as blankets and material.

One notices that the two undertaking the building are referred to in the agreement as 'architects'. It has been suggested, (107), that, during the 18th and 19th centuries, chief masters liked to call themselves 'τέκτωνες' or 'ἄρχιτέκτονες'. The former word is a general title for a maker, a craftsman, one who constructs something, whether one is a builder, carpenter, potter etc. The latter is initially a general title for a chief craftsman, one who leads a team of craftsmen, (108). This pair of titles corresponds to the pair 'μαίστωρ', master, and 'πρωτομαίστωρ', chief master. It can be argued that the 'τέκτων' and 'ἄρχιτέκτων', of Greek origin, and the 'μαίστωρ' and 'πρωτομαίστωρ', of Latin origin, (109), were synonymous terms in use in Macedonia during the 18th and 19th centuries; 'μαίστωρ' and 'τέκτων' both meant master, while 'πρωτομαίστωρ' and 'ἄρχιτέκτων' meant chief

(106) Turkish coin; 100 piastres were equal to one Turkish pound. See Dimitrakos, 1964, under 'γρόσι'.
(108) Dimitrakos, 1964, under 'τέκτων' and 'ἄρχιτέκτων'.
(109) Under both words in Dimitrakos, 1964.
master; the latter did not mean 'architect' neither in the sense in which the Byzantines understood it, nor in the sense that we understand it today, (110). In Macedonia the term architect denoted the hierarchy within a building team. The equivalent of the Byzantine architect, as presented earlier, did not exist in Macedonian domestic architecture. The Macedonian chief masters did not have the general education of the Byzantine architect. While the latter was able to compose regulations which tackled many more items than just those referring to the building profession, or was able to draw and engineer new forms, it is not certain whether the Macedonian chief master was even literate - this agreement was composed by the village grocer and tailor, himself only semi-literate, for the parties concerned.

Macedonian domestic architecture 'lacked' the equivalent of the Byzantine architect. The question is whether it needed one. Paying closer attention to the wording of the agreement one notices 'ἀνωγωγατηγία'. The term means a two storeyed house and is a variation of the Byzantine term 'ἀνωγεσκατωγον', (111). The Greeks of Macedonia in the Ottoman Empire were descended from those of the Byzantine Empire and therefore continued to use a Greek term which, as in Byzantium, denoted a house that consisted of an upper and a lower floor. The point of emphasis, however, is that with this term the Macedonian builders understood much more than just a house with an upper and lower floor. They understood the particular way in which the upper floor was combined with the lower; they understood the principal spaces of each floor and their arrangement and they knew the house form that was produced by the particular, the 'given' morphology of specific house elements. In short, when the Macedonian builders referred to the term 'ἀνωγωγατηγία', they referred to a particular house design. Nowhere in the agreement is there even a hint of the design of the house to be built, not even about the number of spaces or rooms. The agreement mentions merely that certain

(110) Neither, that is, an 'engineer' from a family of engineers, nor a graduate from a school of architecture.
(111) See previous section 5.3.1.
openings would be built with hewn stones. The latter indicates the quality of the construction, translated into more labour and skill required by the builders who would be paid accordingly.

The house owner had a choice in the quality of construction, but had no choice in the design of the house. The latter was fixed, it was established during the Byzantine period by architects and by the State building regulations, (112). Byzantium had created an 'archetype', (113), that the Macedons used for their domestic architecture as they would use the drawings of an architect. Thus, it can be argued that architects were rather unnecessary in Ottoman Macedonia.

That the builders knew the design of the house and everything related to its construction is supported by the fact that they not only built the walls but also constructed all other parts such as the roof, door panels, window casements and the fireplaces, as we read in this agreement. The lack of job separation that occurred in the Byzantine guilds, continued in the Macedonian ones. Masters of different skills are referred to as members of single teams, but there is no evidence that there were teams exclusively of roof-makers, plasterers etc. Each team contained the different skills that were required for the completion of a house and all masters were involved in the construction of all parts of the building; there was no division of labour, no apportionment, something which, we believe, enabled a builder to see a building through its construction, to appreciate it as a whole and to avoid misfits that would possibly occur if the different workmen of specialist skills undertook separate parts of the construction at its various stages. Also, the builder who starts a house and sees it through to the finish becomes attached to his object, cares

(112) The Byzantine methods of construction and design were preserved within the Macedonian guilds which were a continuation of the Byzantine ones. See section 5.5.2. and further elaboration in the final chapter.

(113) The notion of 'archetype' or 'archetypal form' is established in the final chapter.
for its good construction and is proud of the result, as the inscriptions of the builders on the houses, to which we will come shortly, prove.

In the continuation of the agreement we read that the owner will pay $3\frac{1}{2}$ piastres per yard. Consequently, the total amount of money would be calculated when they measured the finished house. During the building of the house, however, the contractors received certain installments as is seen in the postscript of the agreement.

The agreement ends with a few additional notes from which we may point out, firstly, regarding the thickness of walls (agreed at 75cm thick at the ground level and 70-65cm thick at the upper) it was within the 65 - 85 centimetres range which was practised in Macedonian house building. Secondly, regarding the items that the owner was obliged to provide the builder with (water, mud, gunpowder and tools) one should consider this as part of the particular agreement and not as a general practice, because in others the builders undertook the responsibility for providing these items. Thirdly, the digging of the foundations was always a builder's job. It is mentioned in this agreement because, apparently, the owner was not to pay extra money for the digging. Finally, we read that the owner agreed to feed the builders. Food provision can be considered as part of an agreement, but was also a way, especially when food was good and accompanied by alcoholic beverage, of encouraging the builders to work harder and better. This, too, was the purpose of the clothes, blankets etc. which are listed on the back page of the agreement and which may be considered as gifts from the owner to the builders, (114).

This agreement is one of the most expansive, that is, one which, besides the fee arrangements, also contains a few items concerning the quality of construction of the house. Usually, the agreements between owner and contractors only briefly tackle the fees and do not refer to the house itself at all, even if the house were to be an elaborate man-

(114) Such gifts were customary, they were expected by the builders who, occasionally, demanded them. See footnote 149 in Moutsopoulos, 1967, p. 62.
sion. This is the case in the second sample agreement which concerns the building of Misios mansion in Ioannina, (fig. 159). It was composed by the owner himself, (115):

"The undersigned has agreed with master-Nicolas Georgios Vourbianites that he will build the walls of our house and that for payment I am to give 5 piastres and 10 paras, (116), per day for each of the men and 2 piastres and 25 paras for each of the lads plus 1 piastre per week for everybody. Master-Nicolas is obliged to have six to ten good craftsmen and as many lads as he needs as well as animals, for which he will receive the same amount of money as for the lads. For mutual security there are two copies of this agreement, one for myself and one for master-Nicolas.

September 27, 1843, Ioannina
A. Misios

I, Master Nicolas Vourbianites, promise to bring men, lads and things as above."

In this agreement, too, the design and method of construction are not mentioned, although the agreement concerns the building of an elaborate mansion. It can be assumed that the 'given' design or the 'archetype' with which the builders were equipped was capable of elaboration and application to the three categories of house, i.e. popular, bourgeois and mansion, (as in chapter 3, figs. 96, 97).

To round off the examination of the agreements one notes that in the second the builders were to be paid by the day and not by the yard, as was the case in the first. One also notes that the contractor, besides receiving so much money for each of his men, also received additional money for each of the lads, the assistants, and money for each of the animals used for the carrying of the building materials.

5.5.2. Guilds of builders.

Let us now concentrate on how the Macedonian guilds of builders were organized. Despite the fall of Byzantium, the guilds did not disappear as a form of social life, but

(116) Forty 'paras' were equal to one piastre. Dimitakos, 1964, under 'γρόσι'.
became even stronger,(117). The Turkish authorities gave the members of guilds the status of citizen, the privilege of possession, of buying and selling and the right to seek justice in public court,(118). The preservation of the guilds suited the Turks for the purpose of maintaining skilful, organized craftsmen who could be used for their own buildings, e.g. mosques, mansions and bezestens, and, in emergencies, for castle repairs, bridges etc., (fig. 160). At the same time, taxes from building licences were orderly and easily collected from the chief-master who conducted all affairs between the guild and the Turkish authorities,(119). Each guild was administrated by a council composed of masters, members of the guild. The council elected one of its number as president. The latter was assisted by a secretary who, in turn, was assisted by a 'κηρος', caller, whose main job was to gather the members to the guild's meetings,(120).

A guild was at the same time a workers' syndicate, a religious brotherhood and a solidarity group: as a workers' syndicate it had its annual banquet and a service for the dead, a souvenir from older days, the 'collegia funeratica' of their Byzantine ancestors. As a religious brotherhood it united its members by means of a series of duties within the Christian Orthodox religion, though with pagan roots. Finally, as a solidarity group, each guild had a fund for its members and honorary members,(121).

The number of members varied from one guild to another. That of Ioannina, one of the biggest, had about 450 members, (122). The construction of various works was undertaken by a number of men, the latter varying depending on the size of the job. For houses, ten to twenty men were usually enough. On bridges, mosques etc. up to a hundred men were employed, (123). Each team, small or big, that undertook a particular job was known as 'παρέα', or 'μυστηριες', (124), that is,

(124) Ibid, p. 52.
Fig. 159 Misios mansion in Ioannina, (Michaelis, 1977, p. 215).

Fig. 160 Papastathis bridge at Drisko, Macedonia. Built by Macedonian builders. (Moutsopoulos, 1976, p. 399).
'company' and 'gang' respectively.

It must be pointed out that the members of a guild came from different neighbouring places. Most of them from remote villages on hilly sites. Just as there were villages and towns occupied with the production of a certain commodity, (125), so was the case with the builders: there were certain villages providing builders and, furthermore, builders specialized as masons, carpenters, painters etc., (fig. 161). The villages in the western part of Macedonia, (fig. 162), manned the guilds that acted throughout the province and even beyond it, (fig. 163).

It must also be pointed out that building activity started with spring and ended before the winter. At the end of winter a company of builders, with their tools, provisions and animals, left the village to travel to where the chief-master had, during the winter, found a job for them. Every departure of the group had a sad ceremonial nature: the women, children and the old, with damp eyes, followed the men to the outskirts of the village and symbolically poured water on their path so that the men would find their way back. In contrast, when the men returned, before winter, all were happy and jolly. The men came with money and gifts and with a big ox, bought in the valley below whose meat would see them through the winter, (126).

In the remote villages on the hills that gave birth to most masters land was poor and living difficult. That is why the men were forced to learn a skill and to seek jobs away from home, in towns and villages on the plain; to travel far following dangerous trails and to deal with strangers, difficult employers, risking their payments and struggling to protect their rights in a fast falling and disorganized State run by conquerors. Although they availed themselves of the privileges given to them by the State, things were not easy for the Greek 'rayas' of the guilds in a race and class conscious society. What chance, for

(125) See previous chapter, section 4.1.2.
Fig. 161 Villages that have provided specialized craftsmen. (Adapted from: Moutsopoulos, 1976, map between pp. 356 and 357).

Fig. 162 Cities in which there were guilds of builders. Shaded are the areas that manned the guilds in the cities shown on the map. (Adapted from Moutsopoulos, 1976, map between pp. 400 and 401).
Fig. 163 Routes that teams of builders from various villages followed in their search for work. (Adapted from Moutsopoulus, 1976, map between pp. 368 and 369).
example, did a Greek chief-master have of finding justice in court when opposing a rich house owner who happened to be a Turk? The guilds relied more on themselves than on the State to protect their profession. There was an agreement between guilds that no team would finish what another left unfinished because its employer did not pay them regularly, (127). Such co-operation between guilds, even of different nationality, is illustrated by the hospitality that Bulgar builders, from the village Derbe, were shown by their Greek colleagues during the summers around 1875 when they descended into Thessaloniki to collaborate with Greek guilds in various works, (128).

A fact confirming the struggle of the builders for their professional existence in the Macedonian society and, at the same time, identifies them as a brotherhood, a separate social class of people with common interests, knowledge, skills and traditions that needed to be preserved amongst themselves is the special 'language' they spoke, (129). In those days people, usually of the popular class, who needed to safeguard the skills of their professions or to hide their existence in society while identifying their equals spoke various 'secret' languages. For example, tailors, charlatans, bankers or thieves, prostitutes and drug addicts all spoke different secret languages, (130). The language of the builders had a rather rich vocabulary that consisted of Greek, Slavic and Turkish words which were used with their meanings changed so that the builders were able to communicate freely while the rest of the world was unable to understand, (131).

(128) Choisy, 1885, p. 175.
(129) Bogdanopoulos, 1952.
(131) Some sentence examples of the builders' secret language appear in Moutsopoulos, 1967, pp. 59-60. These sentences give insight to the world of the builders:
- The owner did not give us any money, how can we work?
- It's raining and we cannot find a job.
- How many yards did you build today?
- Make the wall strong so that it won't fall.
- Here comes the boss!
- The boss is watching us!
Let us now look at each of the members of a team of builders separately and in a hierarchical order. First, the chief master, head craftsman, contractor or 'architect'. His main task was to find jobs for the team. As we have seen, the chief master entered into oral or written agreements with various employers. He also got the building permit by paying the relevant fee to the 'Maymar-bass', the Turkish architect, who was positioned in every city and whose only job was the issuing of building permits and the collection of fees, (132). The chief master was responsible for paying and feeding his men, from the payments and food that he received from his employer, and of course he was responsible for his men's work. Finally, it can be said that the chief master took special pride in the house that he and his men had built. Good evidence of this is the inscriptions, on several houses, with the chief master's name, the date on which the house was completed and, often, including words of praise for the beauty or the quality of the house, (133), (figs. 164, 165).

Second in order came the masters. Skilled and experienced men, often specialized, e.g. roof framers, masons and wood carvers, but capable of more jobs than just their specialization. To become a master one had to follow an apprenticeship and then to be tested within the guild, (134). Thus, the faculty of training and qualifying new masters may be added to the qualities of guilds, as working religious and co-operative institutions. Although there is no appropriate evidence giving the nature or the content of the qualifying exams for a master, it can be argued that for

- Come to eat everyone.
- Master, what do we have for lunch?
- We eat bread, meat, beans, fish and most often beans and greens.
- Here comes the contractor who is building the house.
- Let us rest.
- The boss (house owner) is going to build a large house.
- Let the lad fetch us some water.

(Present author's translation).

(133) Another reason for the inscriptions may be that the chief master wanted to get another job for the future. He was advertising, however, a successful continuation of the building tradition, as argued in chapter 6, section 6.3, rather than an original, personal creation.
"This pentagonal and beautiful house was founded by Ioannis Zerbicos in the year 1787, May, and painted by the same (man) and decorated by master L. L. at the expense of the honourable Mr. Georgios Sforzos who enjoys all God's goods, 1798."

"1742, February 6
Georgi(os) Pavli(s)
mas(ter) Geor(gios) Michalis"

Fig. 164 Above: inscription from G. Sforzos mansion, Ampelakia. (Moutsopoulos, 1975, p. 23).
(Translations from Greek by the present author).
"This house was built at the expense of Constantine Alexiou, born and raised in the very city of Siatista, and by the hand of Michael from the town of Louvron in the year 1760 July 10th."

"Year 1797
Loles, Master."

Fig. 165 Above: inscription from Alexiou mansion in Siatista. (Moutsopoulos, 1976, p. 390)
Below: inscription from Krasoulis mansion, Ampelakia. (Moutsopoulos, 1975, p. 52).
(Translations from the Greek by the present author).
such a qualification, after the apprenticeship, one should not only have become a skilful worker but should also have complied with the internal rules, customs and ceremonies of the guild and, of course, should have been able to speak the builders' secret language. The test to qualify as a master was a Byzantine tradition, (135), that continued to apply to the Macedons. It has been implied that gradually the test was forgotten, (136). If we accept this implication we would rather put it that gradually the test had died out as a formality because there is no evidence for its abandonment. It can be argued that exams for mastership had not died out in practical terms, that is one did not become a master without the assent of the other masters in a guild, or even in a team, without them agreeing that the candidate had acquired, after a long apprenticeship, the relevant skills and had abided by the guild's canons.

Last in order were the assistants, 'τισιράκια', (137), apprentices, 'μαθητικόδια', (138), or simply lads, 'μαθιά', (139). By combining the information from these terms one learns that the lowest members of a building team were youths who did auxiliary work while learning the skills.

Life in a team must have been hard for the assistants: not only did they help the masters in their work, but were also their servants; they minded the animals, did all the fetching and carrying and, on Sundays, when all the masters were resting, they did the laundry, (140). It was probably more difficult for the assistants to endure several years of hard work than to acquire the craft. How long an apprenticeship lasted is not known. One can suppose, however, that it ended when the apprentice was as good as his teacher. This took several years because of the way skills were transmitted from master to assistant. Basically, skills can be transmitted only by example, not by precept, (141). This

(137) Hadzimichalis, 1953, p. 283.
(139) See the second agreement in section 5.5.1.
(141) Polanyi, 1969, p. 54.
needs a lengthy practical training and the lengthier the training the better, until a time comes when the apprentice is at least as good as his teacher.

The youths joined a team as assistants to earn their daily bread and to maybe, one day, succeed in becoming masters. Why did the elder masters give away their skills? One must not forget that times were difficult, jobs rare and a team travelled a good many miles for jobs. Would not the newly fledged masters be a threat to their livelihood? The reason they accepted apprentices is rather simple. Apart from the lengthy time needed to become a skilled craftsman, apprentices were cheap labour and, after a few years, they were not only cheap but also quite skilful. Also, as in the second agreement presented earlier, the employer paid extra money to the chief master for each of the 'lads' involved in the building. Furthermore, in the same agreement, the chief master was paid an equal amount of money for each animal as for each lad. The parallelism is illustrative: the master not only used them both for carrying building material but was also able to up his fee on their account. All he gave in return was food for both and 'education' in small doses over a long period to the lads.

5.6. Closing remarks.

We have seen that the precedent of Byzantine architecture, on the one hand, and of the Byzantine guilds, on the other, led the course of Macedonian architecture and its builders. If one accepts that Byzantium created a tradition in building, then that tradition was followed by the Macedons. There is, however, a difference between the two architectures in their practice: Byzantine architecture was a combined product of Greek, Roman and others of the Orient, (142), modified and improved by architects. The latter succeeded in creating a style that, although springing from their architectures, managed to acquire a character of its own and thus be identified as a stage in the general world

(142) Choisy, 1883, pp. 1-6.
development of architecture, (143). In Byzantium, the building trade and the builders themselves were under State supervision which, by including the architects' building regulations in its legislation, managed to impose a style and method of building which basically remained unchanged throughout the duration of the Empire. However, the heavy punishments that the codes imposed, in cases where one did not comply with them, imply that it was not rare for the codes to be disobeyed. Thus, it can be argued that that architect and code prescribed architecture did not remain completely stagnant, but developed at a slow pace thanks to the deviation from the rules done as much by the owners of houses as by the builders.

Despite what one might have expected, after the fall of the Byzantine Empire and with the chaotic conditions that followed it, instead of taking that opportunity to free itself from the imposing regulations, the building trade continued to manifest them in its products. What had happened was that, in keeping the regulations, the Byzantine guilds had learned to build in a particular way which produced a specific style. The style was adopted by the Macedonian guilds which were the natural successors of the Byzantine ones, as the former adopted the internal organization of the latter. It can be said that for the Byzantines the codes were on an obligatory level but for the Macedons they moved to a deeper level of respect for tradition. A tradition which satisfied a society composed of different nationalities, religions and financial standards, because it was equipped with an 'archetype' that was capable of being adjusted, elaborated and applied to different purposes.

(143) Briggs, 1959, p. 18.
CHAPTER SIX

THE ARCHETYPAL FORM OF MACEDONIAN ARCHITECTURE

6.1. Similarity and differences.

Macedonian architecture seen as a number of fixed characteristics arranged in certain identifiable ways has been examined in this thesis and a discussion of its origins and of its socio-economic and geographical settings has also been presented.

What may be called the endemic or indigenous character of this architecture is consequent upon a certain pattern in which finite number of elements are arranged in a finite number of combinations. In other words, the possible arrangements of elements, such as the front gate, staircase, gallery, projections, windows and lights are limited. As a result, all houses are, in certain ways, alike; they are members of the same family.

At the same time however, the houses serve different classes of owner - which may be grouped in the categories of popular, bourgeois and mansions. They also occur in various topographies and are confronted with numerous physical factors, such as shape, size and gradient of site, neighbouring properties and street network, orientation, ventilation and view. As a result of both their category and the physical factors the houses appear different.

This phenomenon of the houses being different yet alike can be explained in terms of the builder applying a given architectural 'pattern' to the socio-economic and physical settings.
Let us consider this pattern which is responsible for the similarity of the houses. Each of its elements has an identifiable structure and recognizable form. However, the same element, for instance an upper floor projection, does not appear identically on all houses: it may have a rectangular plan, exhibit five windows and lights and rest on four braces; while another may have a triangular plan, three windows without lights and two braces. They are both structured similarly and recognized as such (as projections), but any overhang without windows or braces cannot be called an 'upper floor projection', at least not a Macedonian one.

Thus, an element of the pattern demonstrates flexibility of form while being confined to limits which safeguard its integrity by preventing form fluctuations from resulting in excessive distortion. In order to put across the notion of a different version of the same thing or form, the elements will be referred to as variants.

In the pattern, the variants are arranged in certain ways. In other words, they are related and interrelated with specific 'connections'. For example, when a side window of an upper storey projection serves the observation of callers at the front gate, there is a connection between that projection and the gate: they must be near each other so as to enable aural and visual contact between caller and inhabitant. If the front gate is moved away from the upper floor projection, the latter must be moved also. This places a limit on how far the gate can be moved from the main body of the house, (fig. 166). The example illustrates that there can

Fig. 166 Example of possible arrangements of variants in view of the limits on their connections, (drawn by the author).
be different possible arrangements of the variants, so long as the connections between them are not distorted or lost: no Macedonian house has a yard gate far from or out of sight of the main body of the house.

One may, therefore, see that, just as the variants’ forms can fluctuate within limits, so can their arrangement be altered to a certain degree, as long as the variants lose neither their integrity nor their connections. Thus, the pattern is manifested in a large variety of individual houses which, consequently, maintain their integrity as a whole. In this sense the houses are alike.

It was necessary for the builders, however, to comply with the peculiarities of the site and with the requirements of the house owner. Let us consider the site.

In any individual case, the overall pattern was the same, but the site was almost always different. A combination of the irregularity of neighbouring plots, the curving and zig-zagging of the streets and the steep gradients and uneven surfaces of mountainous locations made it difficult for the builders to comply with predominant characteristics such as plan type, views to the street or yard, privacy, security and ventilation. In short, the application of the pattern on such sites was problematic. It has already been discussed how topography was responsible for the shaping of town blocks, the engineering of steps in the streets and the creation of multi-storey façades. But there was apparently a conscious effort of the builders to persevere even in awkward site conditions. An illustrative example is the twisting of the upper storeys in relation to the lower ones when the latter had been obliged to take on an undesired shape or orientation.

Although in every individual case the site was different and often produced difficulties for the builders in their effort to maintain the architectural pattern, the requirements of the house owner do not seem to have been a problem for them. It was discussed in chapter five how, in his written or oral agreement with the builders, the owner states whether he wants a better construction, with dressed stone, extra fireplaces etc., and he prescribes the number of
rooms according to his needs. The fact that in no agreement is the design of the house mentioned leads us to believe that the builders came prepared with a design to meet the requirements of the owner and that the owner already knew the broad features of this design. The past experience of builders was accumulated and preserved within the guilds so that every individual case was a recurrent rather than a new phenomenon. That is why the thousands of houses in Macedonia evidence only a few plan types (those taxonomized in chapter three) from which the builders chose the one suitting each individual case. That plan type would satisfy the requirements of the owner about the number of rooms. As far as the quality of construction was concerned, the builders were capable of varying it as required, charging higher prices for better construction, as in the case of hewn lintels, or special prices for special structures, as in the case of fireplaces. Thus, with better materials, more fireplaces and extra decoration, any given plan type could be manipulated to suit the lower, the middle or the upper class and be transformed into a popular house, a bourgeois one or a mansion.

It can thus be said that the Macedonian domestic architecture was produced by means of a pattern with which the builders were equipped, or, to put it differently, the Macedonian building process was characterized by precedent where every individual case was for the builders a recurrent phenomenon and not a new confrontation. This preparedness released the builders from having to think of a new design to satisfy the requirements of the house owner and allowed them to concentrate on the site.

Although it is not possible to enter the minds of the builders, an analysis of what that pattern was will be attempted; where it came from and why it was manifested on such a large variety of individual houses, for different socio-economic classes on very different sites and so forth. It will be shown that the builders were consciously preserving a building tradition which was inherited from the Byzantines.
6.2. The old schema.

In chapter five it was shown that the State building regulations, the codes, were, to a great extent, responsible for the shaping of the environment built by the Byzantines. In answering the question of the State's intention in imposing the codes, one may suggest two possibilities. First, the State wished to safeguard municipal health and welfare. Thus it prepared codes dealing with fire precautions, privacy, ventilation, view and with the secure construction of buildings. Second, the State wished to safeguard building tradition.

It is evident in code 54, where it is pointed out that when a street is found wider than twelve Byzantine feet, which was the minimum width allowed, one cannot occupy with one's house the extra existing width (i.e. to reduce the width to twelve feet) but one is obliged to preserve it as it is. The code ends with the remark "...τῇ πόλει σώζεσθαι τὰ οἰκεῖα." In a free translation, this means that the character, or that which makes the city what it is, must be safeguarded. With code 54 the State declares its intention to preserve the image of a city and at the same time implies that the codes are not made to change a city's character, but to preserve it, (1).

That the State wished, with the codes, to safeguard a building tradition rather than change it is expressed by

(1) Armenopoulos, 1851, 2.4.54:

"...Ὅτε μέσου ἄνωτος στενώπου ἡ πλατείας οἴκοδομεῖ τις τῶν ἑαυτοῦ οἶκων, ἐι καὶ πλέον ἐχεί τῶν δώδεκα ποδῶν ἡ τῶν στενώποι ἡ τῆς πλατείας μέτρον, μὴ ἀφαίρεσθω τὸ περιττὸν καὶ τῶν ἱδίων οἰκῶν προστίθεσθω οὐδὲ γὰρ ἐπὶ βλάβη τοῦ δημοσίου τῶν δώδεκα πόδας ἦπερ τῆς διάταξις, ἀλλὰ τῶν στενώποι τῶν δώδεκα ποδῶν εἶναι τῶν μεταξὺ τῶν οἴκων ἀέρα, ὥστε δὲ πλέον τὸ τῆς δύσμης εὑρέθη ἢ τῆς πλατείας μέτρον, μηδὲν ἐξ αὐτοῦ ἀφαιρεῖσθαι, ἀλλὰ τῇ πόλει σώζεσθαι τά οἰκεῖα." When building one's house in a lane or a street the width of which is greater than twelve feet one does not take off the extra width nor include it in one's property. The law does not prescribe the distance of twelve feet for public harm, but so as not to constrict the air between the houses. When the width of a lane or a street is found to be wider one does not take anything off it but safeguards that which is of the city. (Translation by the present author).
code 50. This code deals with the problem in which some citizens prevent others from erecting buildings which may overlook lower premises (see chapter five). It is declared that such prevention is against the law and it is also explained that as the forbears did not consider overlooking a crime, since most old buildings do in fact overlook lower premises, so the present State, too, does not consider it a crime. (2) One sees that although the codes were made by architects, they do not intend to introduce new rules or architectural patterns, but are based on precedent. In other words, the building legislation intended to preserve a building tradition and this is only to be expected since, as noted in chapter five, architectural knowledge was a family matter. (3) Although most codes appear as State commands (that was the conclusion reached in chapter five), they in fact are a decoding, a realization of a building tradition as it was known to the generations of architects who closely observed the buildings of their fathers.

(2) Armenopoulos, 1851, 2.4.50:

"Γινεσ των φιλοπραγμάτων και φθονερών κωλύειν ἐπιχειρούσι τοὺς οίκους κατασκευάζοντας καί μέλλοντας κατοπτρείς ἀπὸ τοῦτο ποιεῖσθαι τοῖς γείτονισιν: οὔτε τοῖς νόμοις εἰρήτοι, οὔτε μὴν ἀπὸ τῶν παλαιῶν οἰκημάτων ὁμώμεν, ὡς οἱ παλαιοὶ ταύτην ἀδικίαν ἐλογίζοντο. Βλέπουν γὰρ πάσας σχεδοῦν εἰπεῖν τὰς οἰκίας ἀλλήλας κατασκευάζωσας, καί οὐδὲ εἰς φθόνος τοὺς παλαιοὺς κατείχεν· ήθεν καὶ ήμεῖς τὴν τῆς κατοπτρείας οὐ λογιζόμεθα βλάβην. Ἐκαστος οὖν τῶν νομιζότων ταύτην εἶναι βλάβην, συγκαταβοίλον μὲν τῷ κτίσοντι, οὕτως δὲ τὰ έκαστος ἀφολιζότων οἰκήματα, καὶ ἄθεωρα φυλαττέω, εἴτε διὰ τῶν δυοικίων καλομείνων καγκέλων, εἴτε διὰ τῶν σωρτῶν ὥσπερ αὐτὸς βουληθεύτην οὐ γὰρ δίκαιον δι’ ἔτέρου βλάβην τὰ έκαστον τινα ἀφολιζεῖσθαι.

Some invidious and meddlesome people attempt to prevent the building of houses which will overlook neighbouring premises. There is no such law, however, and, as we observe in the old houses, neither did the old people consider it a crime. For we see that almost all old houses overlook each other and this did not disturb the old inhabitants. Therefore we, too, do not consider overlooking a crime. Whosoever considers it a crime must excuse the builder and take it upon himself to safeguard his own house and prevent viewing into it; whether with the so-called hinged or sliding shutters or in any other way which suits him. Because it is not right to harm another person by making him block off his own windows. (Translation by the present author).

(3) For the role of the architects in Byzantium see chapter five, section 5.4.2.
After code 54 has pointed out that the character of towns must be preserved and code 50 has shown that the codes intend to continue the architectural example of the predecessors, code 61 states that one is obliged to follow the "τύπον", type, and "κατάστασιν", condition, of the former houses and safeguard the "παλαιόν σχήμα", old schema, too, (4).

Let us explore the meaning of these terms, (5). Initially 'τύπος', type, referred to the impression or the mark produced by a blow or a hit; especially to the mark of a seal. From this it came to mean any work of art which was produced by the hammering of metal or by the chiselling of stone: 'τύπος' referred to an impression on any material, as much to a picture as to a statue. Thence, metaphorically,'τύπος' was any mental picture produced by the sense organs - an impression.

From this initial meaning of an impression, either physical or mental, 'τύπος' was used to express such notions as form, the shape in which something appears, the draught or model which one uses to produce something, the prototype, the paradigm. By extension 'τύπος' was also used in notions such as character, physiognomy, summary, quick description of something and, generally, as a tool for the acquisition of a general idea, or impression, of something.

We are not in the position of knowing with certainty which of its shades of meaning is intended by the code. Nevertheless, it appears that the general notion of 'impression' is quite suitable. We believe that when the code speaks

(4) Armenopoulos, 1851, 2.4.61:
"Εάν πεούνια οίκον διανεύων βουτηγαί ιψώσω τίς τούς τού γείτονος φωσίόν ή ἔτερον τι ποίησιν ἐπί βλάβη τοῦ γείτονος, διανεύων αὐτοῖς καὶ τούς τύπους καὶ τήν κατάστασιν τῶν πρῶτων οἰκημάτων καὶ τό παλαιόν σχήμα φυλάττειν." One who, in renovating, wishes to build up a dilapidated house, interfering with the light of, or in any other way harming, the neighbours, is obliged to follow the type and condition of the former houses and safeguard the old schema. (Translation by the present author).

(5) All information relevant to the meaning of 'τύπος', 'κατάστασις', and 'σχήμα' from Dimitrakos, 1964, under those words respectively.
of the 'type' of preceding houses, it speaks of their appearance, as much as this is impressed on the body of the houses themselves as it is impressed on the mind of the viewer. The houses themselves become the models, the paradigms; the mental impression, or picture, of the houses is the summary, the general idea of what they are or appear to be.

Regarding 'κατάστασις', the accepted translation of which is 'state' or 'condition', there are, similarly, various nuances of meaning to consider. Condition here should be taken to mean the situation in which the houses find themselves relating to their manner of existence in time and space rather than to their state of physical upkeep. That is, 'κατάστασις' refers to the arrangement of the buildings, their external circumstances and environment as well as to the arrangement of their constituent parts.

The environment of a house, of course, involves neighbouring buildings and its situation in relation to these. It should also be mentioned that although we have pushed aside the importance of the state of physical upkeep, this is not to say that it plays no role in the understanding of 'κατάστασις'. The intention was to shift the emphasis from the narrow meaning, commonly understood from the English 'condition', to the wider one, implied by the Greek 'κατάστασις'. We know that the Byzantines did pay attention to the physical condition of the houses from the fact that the codes make certain stipulations regarding the renovation of old buildings, (6).

Many are the meanings of the word 'οχήμα', schema, in the Greek language; of those that are relevant to our case, some refer to the form of things as perceived by one's senses and some refer to the character of things. The former group of meanings deals with the appearance of things, the way things are impressed on us solely by our senses, like 'empty boxes', void of meaning, detached from reality. As Plato put

(6) For example, code 45 begins: "One who renovates an old house is not allowed to alter the old schema".
See Armenopoulos, 1851, 2.4.45.
it: "...οὐ σχήματιν ἀλλ' ἀληθεία", not the schema but truth -
reality. The latter group of meanings refers to the charac-
ter of things, to their characteristic qualities, their ex-
pression, their particular physiognomy. Thucidides talks
about the schema of a town and Plato about the schema of a
State. They both mean the character of the town and State.

We may also refer to the verb 'σχηματίζω' which de-
rieves from the noun 'σχῆμα', in order to have a better un-
derstanding of what the word means in the Greek language.'Σχη-
ματίζω' does not simply mean to form, but also to be placed
in a particular posture, to take a particular shape, posture
or position, or even to take a certain form, to stand in a
certain way, to shape or give a particular form to something
and, finally, to arrange things so that they take the appro-
priate 'σχῆμα'.

One can see that the verb can be applied directly to
the architectural act which does not have as a result sim-
ply an object of a particular form, but also of a particular
character which is manifest in matters such as posture, po-
osition, manner of appearance etc.

From this analysis of the meanings and implications
of the words 'τύπος', 'κατάστασις' and 'σχῆμα' it is clear
that they are, all three, interrelated and in some aspects
synonymous. However, as is true with synonyms in general,
each word carries certain subtleties of meaning which the
others lack. In this sense, they are mutually complementary
in providing the comprehensive concept which the code must
convey if it is not to be misinterpreted. Having said that
the terms are interrelated, this does not mean that they all
carry equal weight or are of the same quality. A careful
reading of the code shows that 'τύπος' and 'κατάστασις' re-
fer directly to old houses, that is, existing ones, whereas
'παλαιῶν σχῆμα' does not represent any specific example nor
anything tangible; rather it is an abstract notion.

'Old schema', to the Byzantines, seems to have been an
all encompassing concept involving a mental impression pre-
sent in the minds of the builders as a result of the accu-
mulation of inherited schemata from all previous generations.
This innate entity being embodied more or less in the existing old houses of the towns which thus serve as particular examples, or physical manifestations, of the old schema and hence as guidelines for future buildings. One infers that the aim of the code is not to ensure that future buildings use existing houses as a blueprint but that they adhere faithfully to the essence of the inherited concept of which they are simply manifestations.

So, first and foremost, the codes state that the 'old schema' must be preserved. Thus, they endeavour to preserve the old style and way of building rather than create a new one. Although they prescribe rules as to how certain things must be done, e.g. distances between buildings, type and positioning of windows, heights and views, as discussed in the previous chapter, their prime intention is the preservation of the old schema.

Since the 'old schema' is not something concrete, however, but an inherited conception, it is not possible for the codes to lay down what exactly the buildings should be like, nor would they wish to do so. The codes give a set of rules which, if followed, will guide one to produce buildings which conform to the old schema, without making any direct stipulations as to what the finished product should look like. These rules, which serve to provide the builders with useful information or advice, prevent the creation of new styles. The codes themselves tell us that they were based on observations of instances in which the 'old schema' was manifest.

6.3. The making of tradition.

From the observation of instances in which the 'old schema' was manifest the Byzantines had formed an idea about it. Then they created codes in order to assist the builders in applying it. Maybe in the beginning the codes were State commands for the builders (and for the house owners, too) which they were obliged to obey - the heavy punishments for violators show that codes were being disobeyed. However, they must have gradually become a 'belief' for the builders and served them as rules and principles or truths.
Especially for the Macedons, the codes expressed truths of living in the sense that although there were no State codes forced upon them (nor punishments for violators) they insisted on building in the old way even when they were told by the authorities not to: after big fires had razed whole town sectors, identical houses and layouts were re-built, despite the fact that the Sultan himself urged them to avoid the extensive use of both wood and narrow lanes, the combination of which was hazardous in cases of fire, (7).

It was noted in the previous chapter that the builders, as members of a guild, held certain feasts of a ceremonial nature. With their participation in these, the builders affirmed the continuity of their existence but, at the same time, identified their guild with the antecedent ones, i.e. the ones of their fathers and forefathers - with the Byzantine guilds from which the feasts and all relevant rituals had descended to them. Thus, a reunion between the members of a guild and the members of antecedent guilds was achieved affirming that all members had the same beliefs, used the same language - secret from non-members - and, by extension, affirmed that they continued to use the same building rules and techniques.

It can be suggested that the application of the set of rules and truths that were preserved within the guilds comprised the 'tradition'.

Tradition is not the set of rules and truths, or the codes, themselves but their application: the codes were the Byzantines' interpretation of what was transmitted to them from their past. The same can be supposed for the Macedons: they interpreted their past within the context of their immediate problems which were different to those of the Byzantines. The subtle application by the Byzantines and Macedons of their respective interpretations was tradition. Thus, one can speak of Byzantine or Macedonian tradition and explore whether the latter has its origin in the former in

the sense that Macedonian rules and truths descended from the Byzantine ones—the codes.

The fact that the codes remained unchanged throughout the Byzantine era and were also valid for the Macedon builders, although certain social and economic aspects, like nationality, religion and class, had changed, comprises a primary characteristic of tradition: its application does not embrace criticism, but is confined to the task of preserving the doctrine of the master. This is evident in the way apprentices were taught. But one should not misunderstand the lack of criticism as a lack of consciousness of the builders. They were fully conscious of their dealings with individual cases and one can assume that they were rather critical in their effort to manifest the doctrine of the master in every individual case they dealt with. The task in which the builders were confined was to explore how to preserve tradition within given and changing socio-economic and physical contexts.

Each time, each individual case was modified by the builders, but the doctrine of tradition was not. As it remained unchanged in the builders' minds, it was of an intellectual imperative which was justified when the individual products manifested it. It can be argued that the builders' pride expressed by the inscriptions on the houses concerned their successful application of tradition and not their personal success—they were carriers of tradition not proponents of personal creation. To put it differently, in the guilds, practical training was combined with spiritual instruction; the builders' esoteric knowledge was executed by their skilfully trained hands, giving the meaning of the phrase 'traditional builders', when used in an architectural context.

It was noted earlier that tradition is the application of certain rules and truths which are transmitted from the past. In this sense, Macedonian architecture was traditional. But can anyone who applies such rules and truths make tradition? Or, can anyone besides the traditional builders apply such rules?
However necessary it has been to the modern world to define tradition, an understanding of it as a separate concept has not been achieved. This is mainly due to the fact that modern man searches for a separate concept in something for which the livers of tradition had no sense, (8). The Byzantines talked about the application of the old schema without saying what this was, but tried to communicate with each other with terms such as 'type' and 'condition' and by formulating codes with the application of which the 'old schema' could be manifested and preserved.

One must enter the world of tradition if one is to understand it and, further more, make it. The world of tradition separates itself from the rest, just as the members of the guilds did. Whoever does not abide by its rules and truths is an outcast. In the Byzantine vocabulary, those who do not abide by the old rules and truths are 'ἴδιονεροὶ' and 'φιλοπράγμωνες', that is, invidious and meddlesome, (9). They interfere with the order pertaining to tradition and, consequently, wish to bring the chaos which exists outside tradition.

Order in contrast to chaos in this context can be understood as unity and stability, but must not be mistaken for stagnation. Stability in the traditional world is maintained by an active process of re-realization of tradition, as in the ceremonial feasts of the guilds and in the conscious effort of the builders to manifest the old rules and truths in all individual cases.

Behind the world of tradition, in which the application of the tradition occurs in a cyclic process of re-realization, one senses that for the livers of tradition there existed another world, let us say an archetypal world of tradition. This can be inferred, on the one hand, from the effort of the builders to apply the old rules and truths to the socio-economic and physical setting in which they lived. In other words, this effort is, as was noted earlier, the inter-

(9) Armenopoulos, 1851, 2.4.50.
pretation of what was transmitted to them from the past within the context of their immediate problems. On the other hand, the existence of the archetypal world can be inferred from the fact that the society of the builders identified its existence with that of antecedent ones, or with the initial one, the one in which the rules and truths were first established - the archetypal world. It can be suggested that for the traditional builders the archetypal world was more 'real' than their own; the world in which the subsequent masters lived was a mere image, a model of the archetypal. Just as any house was a model with which a given master wanted to maintain tradition by manifesting its rules and truths.

It is unlikely, therefore, for anyone to be able to make tradition if he does not enter its world. The latter cannot be 'arrested' as a certain period of time in a given socio-economic and physical space, because it is not as real as it appears from any architectural study which cannot, by its nature, enter the minds of the masters to see the reality of their archetypal world.

6.4. The structure of the archetypal form.

So far, the discussion has referred to a pattern with which the Macedon builders were able to produce architecture. This pattern was associated with the Byzantine 'old schema' which was realized in a set of rules and truths, the archetypal world of tradition.

Whether using the word 'pattern' or the phrase 'old schema', one speaks of an all encompassing mental object the value of which is to illustrate to the follower of tradition an architectural theory or a technique. Let us call this mental object 'archetypal form', because it is of the archetypal world of tradition and because its application to architecture generates form.

The archetypal form can be formulated by identifying and understanding the shared characteristics, and their arrangement, of the models which were developed from it. The Byzantine codes are evidence that such an identification and understanding is possible. However, it is subjective: what is transmitted from the past is our own interpretation
of it at which we arrive in the context of our immediate problems and activities. Thus, any investigation of the structure of the archetypal form must to a degree remain speculative.

As a mental object, the archetypal form provides the data and relationships which will occur in the subsequent models. In this way, it operates as a basis for immediate creative action, it makes building possible. With the archetypal form, the builder knows what things are compatible or incompatible and what arrangements are possible or impossible. As soon as the Macedon builder had discussed the number of rooms, size and quality of construction with the house owner and had considered the physical factors of the site, he immediately proceeded to the building. The builder knew how to handle even the smallest things with a view to the archetypal form. Like a set of forces, the latter generated the entity which it defined, and it remained for the skilful hands of the builder to realize the entity.

But how does the archetypal form illustrate a theory or a technique to the builder? In other words, what structure maintains its integrity in different socio-economic classes and on very different sites?

Undoubtedly, the builder knew every single feature of the Macedonian house. He also had exact knowledge of how features were combined to make a house. Finally, the builder was aware of the limits on the manifestation of both the features and their arrangement. It follows that the archetypal form must account for all these.

Regarding the individual features, the archetypal form provides data from which inferences can be made. For example, from one of the names for an upper floor projection, one knows that it allows daylight into the house. Therefore one can infer that a projection must have windows. Another name for it shows its wooden construction and yet a third describes the way it juts out from the building, (10). From

(10) The names 'iliako', 'tavlato' and 'exostis' respectively. See relevant discussion in chapter 2, section 2.3.5.
such data one can infer what an upper floor projection is and how it can serve the house and its inhabitants.

Furthermore, the archetypal form would show what its features do not encompass. As we know from code 56, an upper floor projection cannot be supported with posts or pillars and cannot have stairs giving access to the street.

With these data and by observing the evidence in the already existing models, inferences could be made by the builders who would then be capable of 'visualizing' the individual features of the archetypal form.

However, individual features are not isolated, either in the builders' minds or in the models. Regarding the way the features are combined in the archetypal form, each of them is meaningless if isolated from the others. For example, a Macedonian staircase cannot be seen as a pair of strings with a number of treads. Such a thing is not of the archetypal form, but the impression assumed from an arrangement where one can ascend from a shaded covered walk through a hole into a sunlit gallery is, (fig. 167). This of course is one possible arrangement prescribed by the archetypal form. Other arrangements could be possible, too, while yet others would be impossible.

The archetypal form shows the builder what to do and at the same time it shows him what not to. The latter is particularly interesting. It is evident from the codes that in their majority they are prohibitive. No windows allowed when distance from opposite house is less than so much, no projections when street is too narrow, no raised platforms behind lights and so on, (11). But we know that the codes' intention is not to prohibit but rather to show what the archetypal form does not encompass. Any feature or arrangement whose presence or absence makes perceptible difference is an integral part of the archetypal form. It is thus equally important for the builder to know what is not as well as what is an integral part.

Finally, regarding the limits on the manifestation of

(11) See relevant codes in chapter 5, section 5.3.
Fig. 167 In the archetypal form features are not isolated from each other, (drawn by the author).

Fig. 168 Fresco from the interior of G. Sforzos mansion in Ambelakia, (drawn by the author).
Fig. 169 Flexibility in the manifestation of the archetypal form, (drawn by the author).
Fig. 170 Uniformity and interrelation of the various features. Artistic impression of an idealized Macedonian complex, (drawn by the author).
the features and of their arrangement, the archetypal form displays a flexibility which allows the builder to manipulate either the features themselves, or their arrangement, or both, with a view to the physical factors. Several examples were given in chapter three where one needs to examine carefully the individual houses in order to find the corresponding classified plan types. The latter are presented in an idealized shape, easy for one to cope with in one's mind. Probably the archetypal form was idealized in the builder's mind, (fig. 168), but there is no way we can be certain that it was.

One must not forget that the archetypal form provides the builder with data to enable him to realize it. It does not present the builder with a precise picture of exactly what the finished product should look like. If the latter occurred then the builder's hands would be tied from the moment he was confronted with a different site. While, in contrast, as the archetypal form describes to the builder an architectural theory or shows him a technique, he is free to try it on different sites and to criticize the result of his effort, (fig. 169). This is the notion of flexibility in the manifestation of the architectural form. The limits safeguard the uniformity of the features and their interrelation as these arise from their manifestation, (fig. 170).
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