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Epsm 48

THE NEW PALACE OF BAAL

I N

AIN-BAAL - LEBANON

Designed by :

SAMI ABD-UL-BAKI

B.S.C.E

A handwritten signature in black ink, consisting of a stylized, cursive script.

H O M A G E

I am duly grateful to Professor Yeramian whose assistance and instigations greatly helped the achievement of this work.

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- FORWARD -

Here after is the thesis required from a final year student in the Engineering department according to the regulations of the American University of Beirut.

Course number	525 - 526
Thesis Supervisor	Prof. K. Yeramian.
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Presented by	S. Abd-Ul-Baki; B.A., M.E.

- I N T R O D U C T I O N -

(Ain-Baal is a village to the South-East of Beit-Eddine,
and about 7 kilometers from.) *For construction*

It is well known for its ^Ggreek and Roman antiquities
and intermittent fountains and brooks.

It is owned by the Abd-Ul-Baki since the Fatimy Period.

Considering that the construction of a palace will be
a good and firm step in the restoration of the family glory, I
have taken in charge the design.

Due to Prof. Yeramian's suggestions I have chosen an
oriental design type, so that Classicism and orientalism will
cooperate hand in hand in the beauty of the place.

*Should appear
at the end*

- B I B L I O G R A P H Y -

- | | |
|--|------------------------------------|
| 1 - Churassanische Baudenkma"ler | E. Diez |
| 2 - Islamische Baukunst | (Ernest Wasmuth
& Sttar Kheiri |
| 3 - Die kunst der Islamischenvo"lker | E. Diez |
| 4 - American spirit in architecture | T.F. Hamlin |
| 5 - Encyclopedia Britanica | |
| 6 - Growth of English house | J.A. Gotch |
| 7 - Muhammadan Architecture
in Egypt and Palestine | (Martin S. Briggs |
| 8 - Smaller Italian Villas & Farmhouses | G. Lowell |
| 9 - The Alhambra | Albert Calvert |
| 10 - The Art of the Saracens in Egypt | Stanley Lane-Poole |
| 11 - The Columbia Encyclopedia | |
| 12 - Annuaire d'Architecture | I. Pitlenko |
| 13 - Dictionnaire raisonné de l'Architecture
Française. | Sauvageot |
| 14 - Histoire d'habitation humaine | Violet-Le-Duc |
| 15 - Larousse de XX° siècle | |
| 16 - Palais, Châteaux, Hotels et maisons
de France. | (Sauvageot |
| 17 - La Syrie Centrale | M. de Vogué. |

- HISTORY OF PALACES -

All through the ages, great personages and dignitaries have distinguished their residence by a certain luxuriance and somptuousness from those of the common people. These buildings are called palaces, name which comes from the Palatium, the Palatine Hill at Rome, which term was extended to the imperial residence during the life of Augustus.

In France Palais or palace is a stately building; used in two general senses:

a) A palace, that is, the official residence of a sovereign, or the usual and most important residence of a prince of the blood or other great lords.

b) A building for the public service, especially when of size and architectural importance.

In Paris, on the south bank of the Seine, the Palais Bourbon, built by Birardini, begun in 1722 as a private Hotel. It was greatly enlarged at a later time and was used later on as the "Chambre des députés". The Palais de Justice of Paris consists of a great mass of buildings of many dates, it is one of the most successful pieces of modern architecture in Europe and contains some important monuments.

In Italian cities, the Palazzo is a large separated residence of exceptional magnificence and extent. The cities of Italy are adorned by so many noble buildings, private Palazzi of the thirteenth and following centuries, that it is impracti-

ticable to give the names even of those most important or most celebrated; more over, it is rare to speak of a Palazzo by its name without also naming the city in which it stands, as the palazzi Farnese (occupied at present by the School of Architecture & archeology); of the Conservators (built by Michelangelo & his successors); of the Senator, Barberini, Borghese, Chigi, Torlonia, Raspiglioni at Rome;

The Palazzi contarini, Fasan Doria, of Ambassadors, at Venice, and the Palazzi Corsini, Patti, Riccardi, Capponi at Florence.

But the history of palaces is so bound to the history of houses that it is unavoidable to go through for a clear understanding of the evolution of palaces from the most remote ages to the present days.

PREHISTORIC DWELLINGS:

The shelters of prehistoric man certainly varied widely according to climate and available materials. It is obvious that Stone Age man, at least in the temperate climates dwelt frequently in natural caves, and even at this early time, made distinct attempts to decorate his residence as the cave paintings along the Garonne in France, and some in Northern Spain prove. There are evidences, also, that forest dwelling tribes and those in tropical countries early developed some sort of hut construction, probably by planting sticks in the ground in a circle, binding their tops together to form a cone, or in parallel lines to form a sort of a tunnel (as in Mesopotamia where palms are abundant and flexible), and covering the framework with thatch or leaves.

Such primitive constructions are still used in many parts of the world, as in Central Africa. The Wigwam type, or Chippewa houses, common to many American Indian tribes in which the covering is of skins rather than brush or leaves, or the dome shaped huts of the Indians of Tierra del Fuego, still preserve the same forms. The tent remains the dwelling of a big number of pastoral populations in the hot and desert regions of the Near East many tribes take shelter under a single roof tent supported at the angles by posts.

At some ancient time, the primitive cave dweller discovered that his cave could be enlarged and strengthened by constructing in front of it a wall of piled rock, and roofing the space between the cave and the wall with logs and skins. Growing skill in this type of construction led to the development of such elaborate cave dwellings as those found on certain river banks in the south-west of the U.S.A. whose date is unknown, but which are obviously far earlier than the Pueblo Culture. Violett-Le-Duc (Histoire de l'habitation humaine 1875) hypothesized similar combinations of cave and masonry dwellings as one of the Universal primitive forms of Aryans houses. Thus the hut is the parent form of all timber houses, and the cave dwelling of those of masonry. Most of these houses were of one room, but with the development of a more complete civilization, sub-division became necessary, and the plan was articulated. Many remains of floors and foundations of such groups of round huts, probably of straw in some case and of unbaked brick in others, dating from the Neolithic Age have been found through the Aegean World. Later elliptical forms with sub-dividing partitions appeared like

like that at Chamaizi in Crete of about 2000 B.C.

Another form of development characterizes late Stone and Bronze Ages villages of northern and central Europe, the so-called lake dwelling in which many rectangular houses, some of two or more rooms, were built upon a pile supported platform over a lake. Modern example of precisely similar types occurs along many of the rivers in Siam, Cambodia, and the Neighbouring Countries.

In European lake dwellings, not only does primitive frame construction - a development of the hut type - appear, but also the use of crossed logs overlapping at the corners - The typical log cabin construction.

EGYPT AND THE CLASSICAL ORIENT

In the much more civilized culture in the vicinity of the Aegean, two types of house plan made their appearance, the first is the block house with all of the rooms under one roof and in a compact block; the second is the house with or without a colonnade or open corridor.

Egyptian models of houses dating back to the early Empire show both types, but in Egypt the court type appears most frequently as a garden or stable yard enclosed by walls on two or more sides, (with the house proper forming an L-shaped was on the other two sides). Outside stairs to a flat roof are frequently shown in these models, and it is probable that houses of two

or more storeys were common in the cities.

The Egyptian palaces, that the kings had erected in hurry at the spot selected for their residence were of light construction, and disappeared with them.

We are better informed about the dwellings of the aristocracy made with baked brick and which are often shown in many tomb paintings of the Middle and the New Empire periods. In these "Soul Houses" as they were called, were found a central residential block, with or without a colonnaded peristyle court, surrounded by a formal garden, containing a pool and around whose enclosing walls are built the stables and store houses.

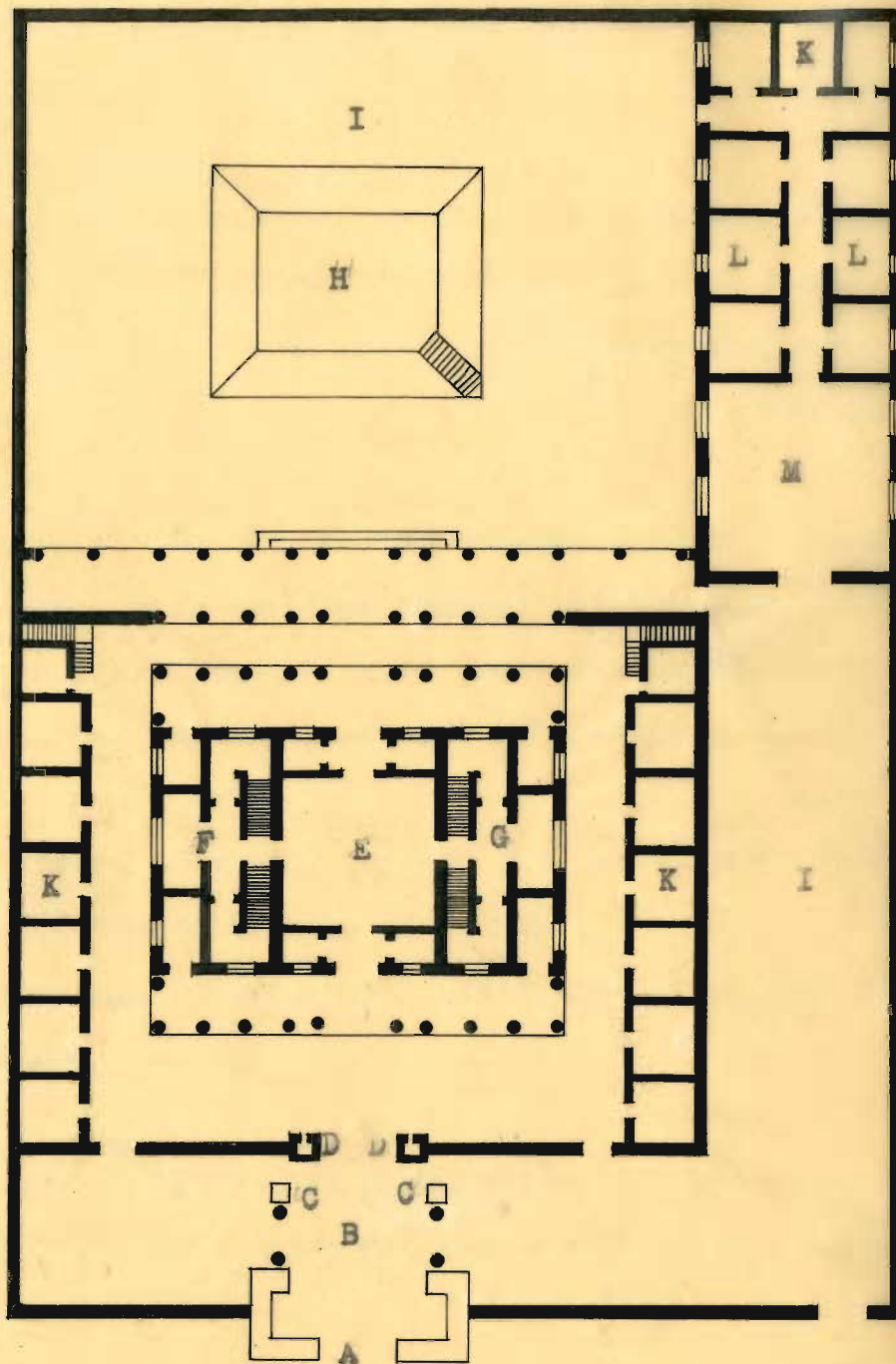
There is much use of large windows, columns awnings and a great luxuriance of decoration.

In the Aegean culture, both court houses and those in a single block are found. The great palaces Knossos and Phaistos (both c.2000 - 1500 B.C.), like the more highly developed and architectural palace at Tiryns (c.1200 B.C.) all have a court as their most important feature.

Moreover, many paintings and terracotta plaques show Cretan houses as cubicle blocks, often in 2 storeys, with flat roofs and many windows.

The early Mesopotamian, which remained fairly constant in form over at least 2000 years and probably more, throughout the Chaldean and Assyrian periods, was of three types.

- A : Pylon Gate
- B : Avenue of Sphinxes
- C : Obelisks
- D : Statues of Pharaoh
- E : Hypostyle Hall
- F : Living quarter
- G : Reception Quarter
- H : Pool
- I : Gardens
- K : Stores
- L : Stables
- M : Store for Carriages.



PLAN OF AN EGYPTIAN PALACE
from a tomb at Tel-El-Amarna.

The first, represented frequently in Assyrian bas-reliefs, is a development of the conical hut, constructed, apparently in unburned brick, & consists of a tall, narrow dome form, sometimes set on a small square base.

The second, also known from the reliefs was probably the country residence of the well-to-do, and is shown as a rectangular building or group of buildings with flat roofs buttlemented parapets, arched doorways, and many long low windows close to the roof, subdivided by colonnettes.

The third type, the city house, consisted of an assemblage of long narrow rooms, with walls of immense thickness arranged around one or more courts. Some of these rooms may have been barrel vaulted in brick, and the Architectural decoration was of the simplest.

Flat roofs were universal through out, this period, and large chambers were supported by rows of columns.

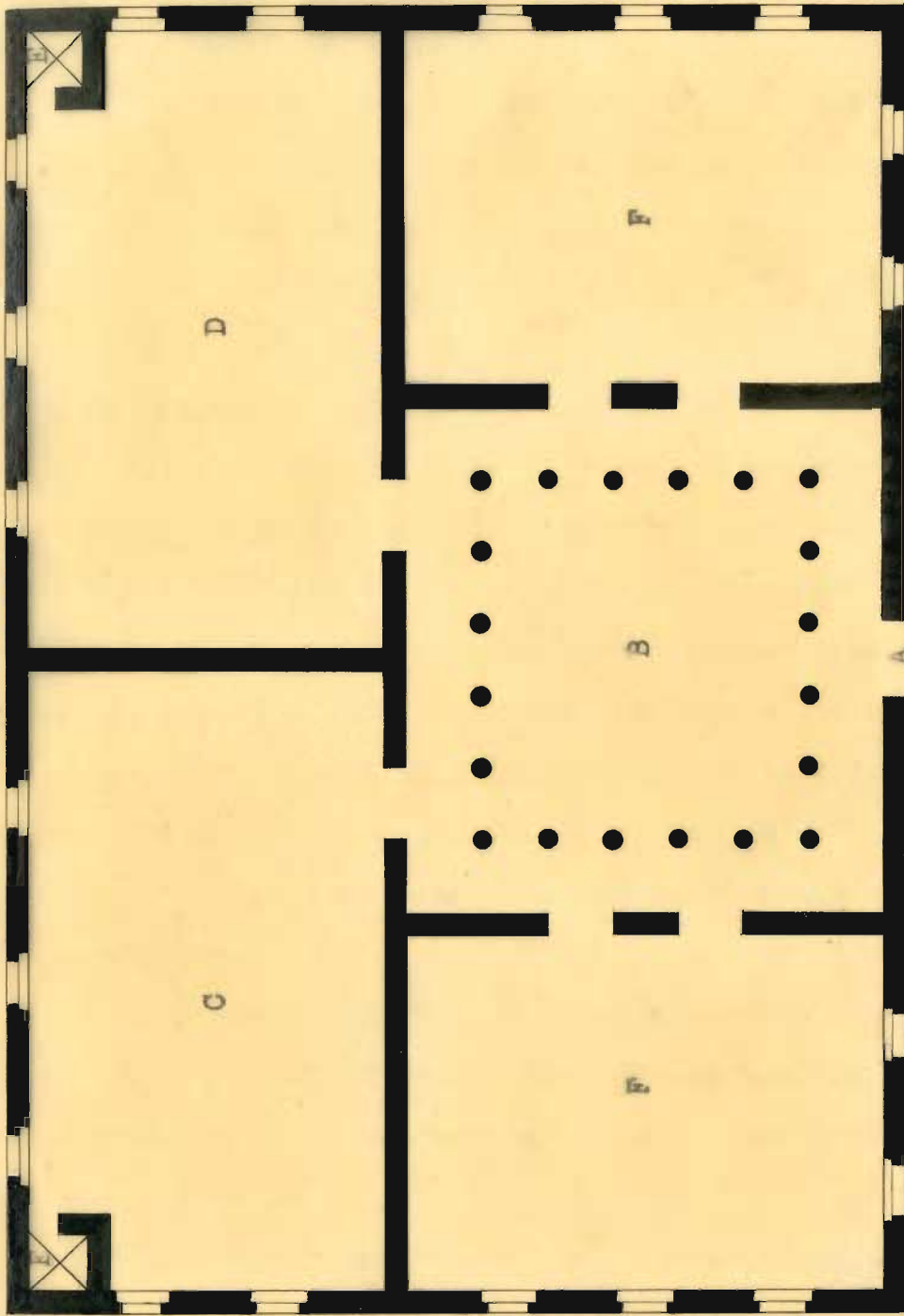
Most of the palaces were built after victorious wars to commemorate the memory of victories.

Classical :

In both classic Greece and Rome, the court type of residence, that had appeared in Assyria, was brought to its highest point of development.

GREECE :

Extensive remains of Greek Houses have been investigated especially at the Peiraeus, Priene and Delos. In almost all of these, the house consisted of a group of rooms around a central



- A: Entrance
- B: Peristyle
court
- C: Men's
quarter
- D: Women's
quater
- E: Tower
- F: Khan.

MESOPOTAMIAN PALACE

colonnaded court or peristyle.

In some there is indication of the existence of an upper storey. In the larger houses there was frequently a gallery across the front.

There are only few evidences of the division between the "andron" and the "gynaecium", the men's and women's quarters; either the women's apartments were on the second floor, or else the division was only architecturally expressed in the largest houses through the existence of two or more courts. The most important position, at the end of the court opposite the entrance, was reserved for the reception room and the chief bedroom or the "thalamos", the official centre of the house life.

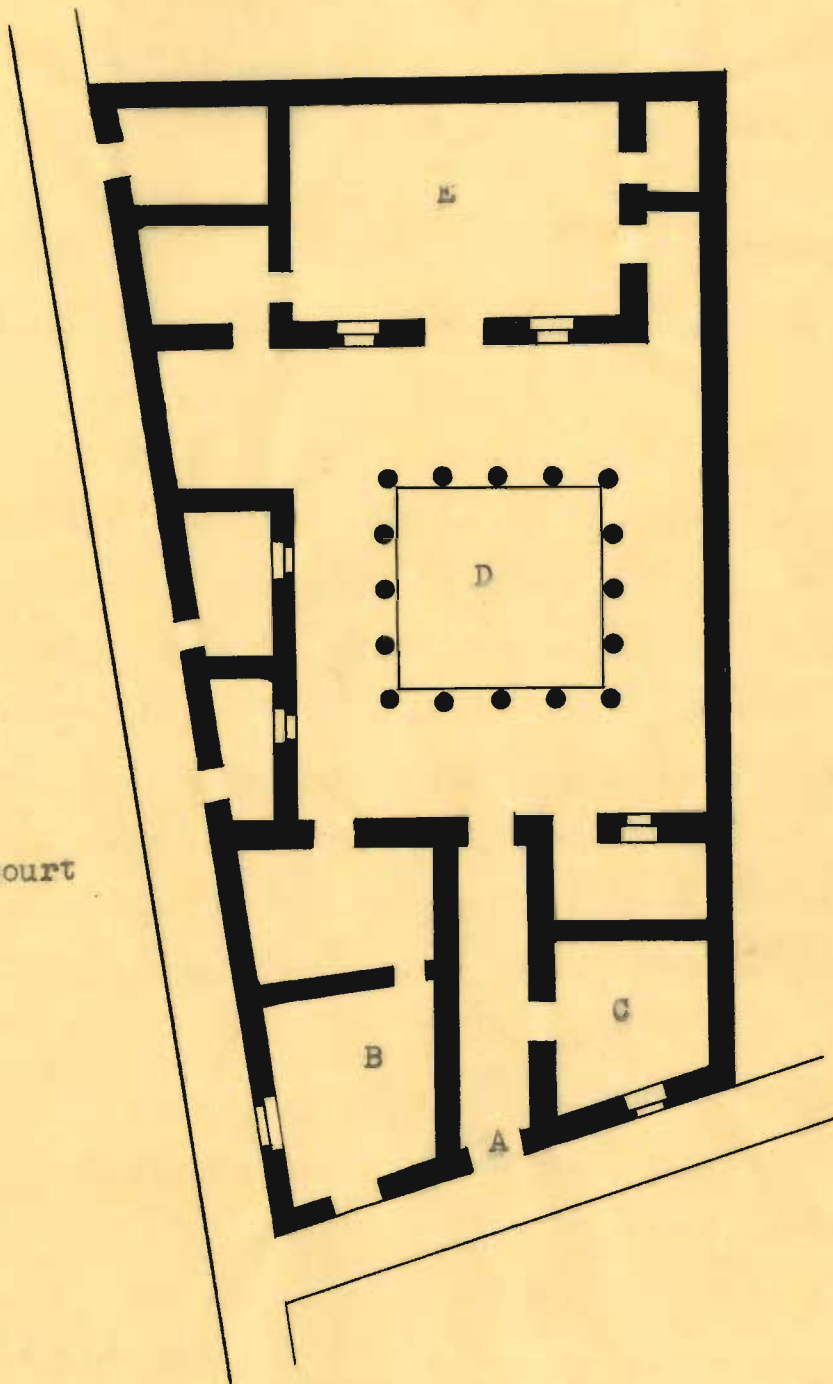
The remains of a large house of late Greek date exist at Palatitza in Macedonia. Here, not only were there multiple courts, but also long wings, or ranges of rooms, with colonnades along the front.

Likewise the Homeric palace is described having the court at the front, then the "adron" and the "gynaecium", and at the end opposite the entrance the "thalamos".

ROME :

In the Roman house the court idea was super imposed upon an earlier tradition of a single room dwelling with a hole in the center of the roof for light and ventilation, and health purposes - the primitive atrium - which (was containing) the statues of gods and the master's bed.

- A : Entrance
- B : Andron
- C : Gynaecium
- D : Peristyle court
- E : Thalamos



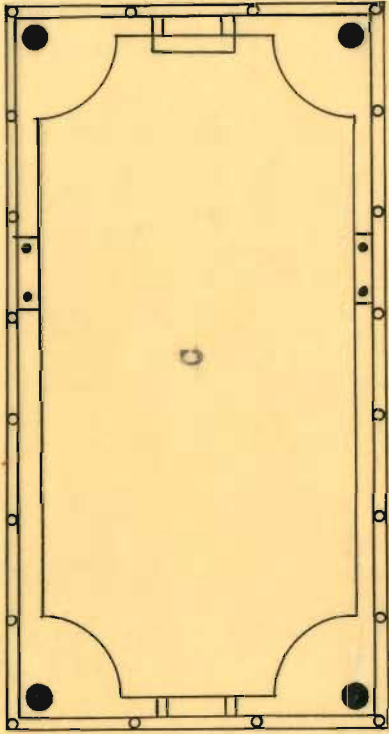
GREEK COUNTRY HOUSE

At DELOS

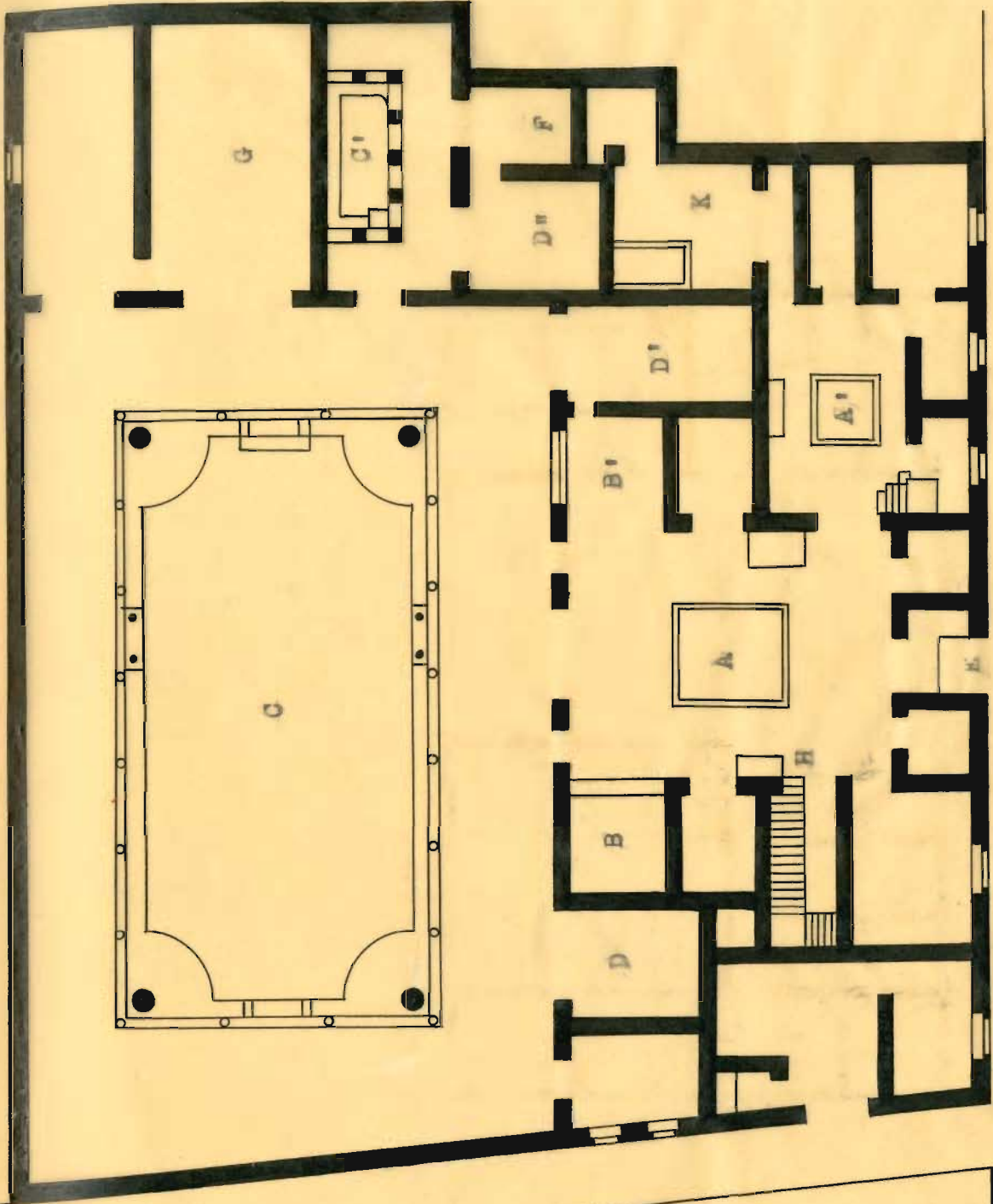
In the historic period, the atrium had already become primarily a court with the living rooms around it, and the excavations at Pompeii have proved that the second century before Christ at least, in Southern Italy, the typical Roman house comprised a colonnaded court as well. In the imperial period, the atrium with its surrounding rooms was reserved for business and official functions. Family life was centred in the peristyle, around which the various private apartments were opening.

Variant types of Roman houses were the great country house or villa which was a type of pleasure residence, so well described in the famous letters of Pliny The Younger concerning his villas at Tusculum & Laurentium, of which many restorations have been brought together by H. Tanzer (the Villas of Pliny the Younger, 1927). Remains of such buildings are found frequently throughout the Roman empire. The dwelling quarters consisting of a number of low buildings, provided both a variety of recreations for the owners and lodgings for great staffs of servants and slaves.

The farm-house type or villa rustica had its barns, oil and wine presses, storage rooms, orchards, vineyards, while the type used as a pleasure retreat (villa urbana) had gardens laid out upon rigidly formal lines and adorned with fountains and handsome sculptures.



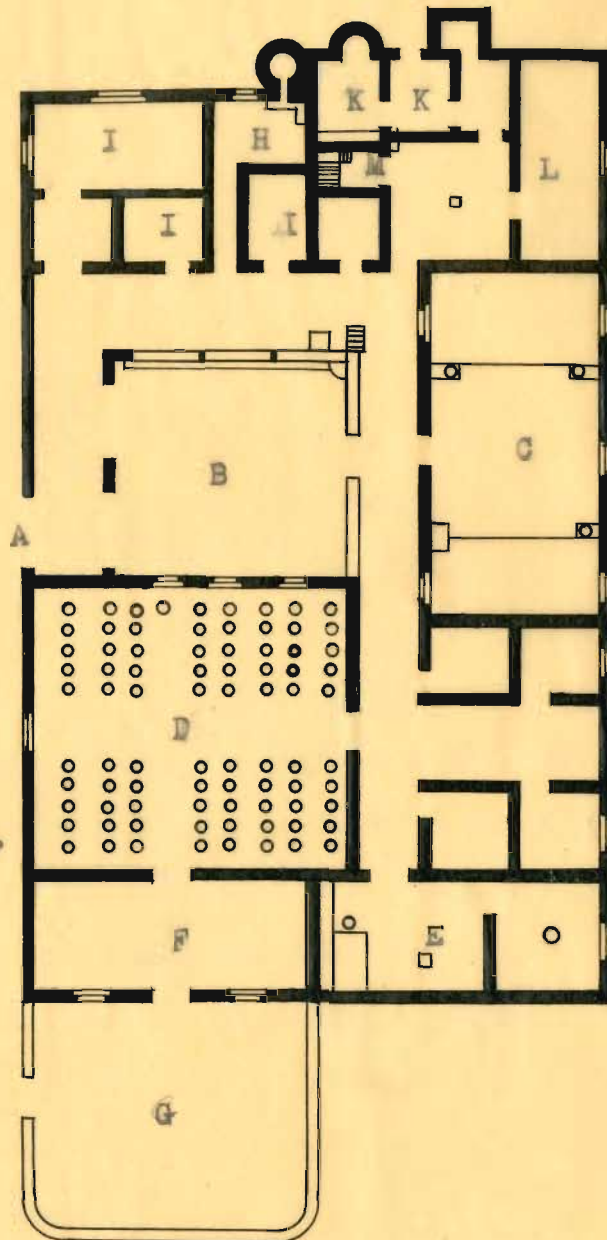
- AA': Atriums
- BB': Alae
- CC': Peristyles
- DD'D'': Dining Rooms
- E : Entrance
- F : Bed room
- G : Reception room or oecus
- H : Stairs to 2d floor
- K : Kitchen



ROAD

PLAN OF THE HOUSE OF THE VETII, POMPEII

- A: Entrance
- B: Court
- C: Oil Press
- D: Store for oil jars
- E: Wine press
- F: Stable
- G: Poultry yard
- H: Kitchen
- I: Dining room
- K: Baths
- L: Bed rooms
- M: Stairs for living quarters in 2d floor



A VILLA RUSTICA AT, BOSCORALE

The vast provincial farm establishment in N. Africa, that of the Laberii at Uthina shows palatial central residence with many wings to take advantage of the view and prevailing winds and separate small buildings for the farm.

The luxurious villa of Emperor Hadrian, near Tivoli, of which extensive ruins remain, is said to have covered more than seven square miles. Many noble works of arts were exhumed upon its site.

BYZANTINE EMPIRE.

Aside some palaces which were conserving the Roman plan; the byzantine house, from the beginning, emerges from the oriental type, and reminds the dwellings of the Vth and VIth centuries encountered in northern Syria (Sardjilla, Refada, Deir Sambil). They are of 2 or 3 storeys whose façade decorated with porticos and balconies communicates with a pretty wide court. In the ground floor is found a big reception hall, and the men apartments, the 1st floor, with its galleries and loggias is reserved for women and children.

The manuscripts and miniatures of the XI and XII centuries, the rare residences which remain from this period (Tekfun Serail at Constantinople, The Palace of Mœluic), show façades where the combination of white stone, red brick and colored marble give an elegant polychromic decoration. The building is sometimes crowned with a pitched roof and sometimes, is covered with a dome or simply with a flat roof.

Grammatical Construction?

The floor is covered with white marble or red tiles. The walls are sheathed with mosaics and paintings.

MEDIEVAL :

In the early Middle Age, the life and property insecurity, and the growth of towns and villages modified the conditions of architecture and produced a new development of house planning. The dwellings of great land lords became castles and manors which were fortified rectangular, masonry walled buildings, frequently with battlements, and surrounded by a moat. This central building was itself surrounded by barns, stables and other farm buildings, and the whole group enclosed by a wall surrounded by a moat. Ruined examples of this type have been studied carefully in France as Castera of St-Medard En Jalle, near Bordeaux (1st half of 13th century), Camarsac on the banks of the Gironde (early 14th century). All these are noteworthy in that they show a definite attempt to produce, however crudely, carefully thought out living quarters in which the idea of comfort plays an important part. One or more great halls was a necessary feature, furnishing the controlling element in the planning of castles from the 14th century on. As life became more settled and the need of defence less, the single rectangular block became inadequate and various schemes were adopted. In France the manor house of Xaintrailles near Nerac is a good example of the early 15th century.

Country house, on the other hand remained almost stagnant; as far as is known, the serfs' dwelling were mere huts with low walls, perhaps of masonry, or banked with earth and sods, and the roughest kind of thatched roofs.

This type persisted into the 19th century in the huts of transient workers like charcoal burners or bark peelers in England, and the sod house or dug-out of the Western plains of America.

By the 13th century this condition was beginning to change, at least in France, and the hut was replaced by stone farmhouses and cottages, often divided into two or more rooms with chimneys, fire-places and roofs sometimes of slate and sometimes of thatch.

The further feudalism retreated the more the country house developed, and by the late Gothic period, all over North Europe, the wealthier peasants lived in highly developed farms, usually taking the form of a rectangular enclosure, entered by a gateway and bordered by barns, storage sheds and the house proper which was often in two storeys and well finished with windows and chimneys. In France such buildings usually were of stone, but in Switzerland, Germany and Scandinavia, where wood was the common material, either in half timber, or in "log cabin" or chalet construction.

In towns, the walls offering a limited space forced an early development of compact planning in several storeys. Existing houses of the 13th century in Cluny show the Scheme. Each floor is divided into two rooms separated by a light court and connected by a gallery. On the first-floor was a shop with the kitchen behind, and stairs leading directly to the living quarters above. On the next floor was the main living rooms, with sleeping quarters behind, and above this, attics, under the roof. Usually there was a well in the courtyard and toilet accommodations are frequently found.

In general standard of comfort, these houses of the 13th and 14th centuries compare well with any built during the next 500 years, and it is noteworthy that the development during the 13th, 14th, and 15th centuries was merely one of increased size and greater elaboration of the façade. Examples of such houses with masonry fronts exist in France in many of the fortified towns of Gascony, such as the Bastide at Mont Pazier, and at Amiens, St. Antonin, Avalon, Provins; and in England at Lincoln, the rectory at West Dean in Sussex and elsewhere.

Especially noteworthy are the Musicians' House at Rheims (c.1240), famous for its niched statues of musicians and the simple elegance of the treatment throughout, with tall mullioned windows and an arcaded cornice.

In Italy where cities were more highly developed, town houses were even further advanced, and it was during this period that the typical north Italian city palace, built around an arcaded court with enormously high storeys, and many small coupled windows and frequently with a projecting battlemented parapet, took form. The special conditions of Venice produced there a more open type of design with a great use of long ranges of windows under gothic tracery, rich projecting balconies and walls sheathed in coloured marbles. These, like the French houses, were often long and narrow in plan, but one or two rooms deep, with a court at the back. In all Italian examples, and in most of those in France, the main living floor was reserved for shops and service rooms.

In North Europe, in the 14th and 15th century, more and more houses, both city and country, were being built of half timber, so that although stone or brick seemed to predominate in the 13th century town, it was half timber which predominated in the 15th century town as may be ^e seen to this day in portions of Rouen, Beauvais, Strasbourg, Hildesheim and Chester. The same period, moreover, saw the origin of the great burgher or wealthy free peasant's house, and the development of types for the nobility which were no longer mere castles or châteaux, but palaces primarily designed for comfort.

Of the important town houses, two still exist in perfect preservation, that now used as the Cluny museum at Paris

(1485-1490) and the house of Jacque-Coeur at Bourges (1450). In both of these there is to be observed a growing subdivision of area to give greater privacy and to separate the various functions of eating, sleeping and the social life. The planning is still, however, embryonic; with no grass of corridor circulation . The same subdivision and the same struggle for convenience and privacy characterizes the entire history of the (English) house from 1400 to 1700. At first, merely a great hall, with service rooms at one end and private rooms at the other, the house rapidly developed into a plan which in all respects is modern, with parlours, dining rooms, sleeping rooms etc., all carefully differentiated. The lavishness of interior finish by means of plaster and wood panelling is a note worthy feature. The beautiful manor of Campton Winyates (1520) (England) shows the type with the complexity and growing symmetry of the plan as well as the introduction of Renaissance ideas.

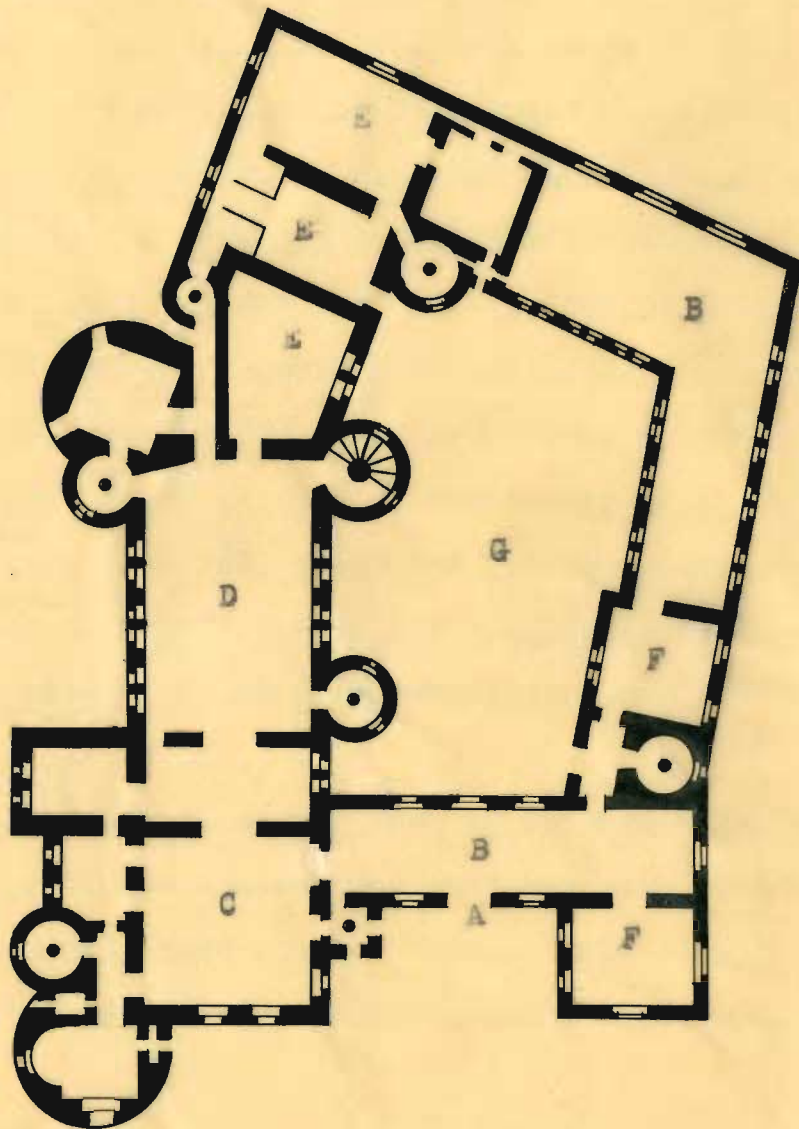
RENAISSANCE :

The Renaissance house throughout Europe was a compromise between two conflicting influences:

- 1°) The traditional development of convenient plan ideas
- and 2°) and the desire for classic symmetry.

In Italy, where the medieval large house had always been designed on monumental lines, the conflict was not strong, but in North Europe late Gothic plans were definitely assym-

- A: Entrance
- B: Galleries
- C: Salon
- D: Greathall
- E: Living quarter
- ~~P 2~~
- G: Court yard



THE 15th CENTURY HOUSE OF JACQUES COEUR
at Bourges - FRANCE.

trical, and the conflict was bound to lead to compromise. The best compromise was that achieved by the English during the late 17th and 18th centuries under the influence of Inigo Jones and his followers. In France, through the craze for Classicism and the influence of the court, convenience markedly suffered, so that there the average large 14th and 15th century house had infinitely more real comfort than that of the 17th or 18th century, there was however, a corresponding gain in elegance, and individual staircases, rooms etc., reached a standard in excellence of design, charm of detail, and beauty of execution which has seldom been equalled. There was also an enormous ingenuity in planning, a growing elimination of waste space and a remarkable integration of interior arrangement and exterior effect.

On the other hand, as the need of defense began to disappear, Castles, manors houses, and chateaux have been transformed into palaces and large country houses, following in every country the architectural ideals of its period, style and location.

Thus, in France, the Renaissance tendency towards early classic composition led to the gradual substitution of the rectangular block form, castles, by more informal types. Such a Chateau as Azay-Le-Rideau (early 16th century) is characteristic of the transition. In England the more informal ideals

of the Elizabethan and Jacobean periods controlled 16th and 17th century manor house detail. The most usual plan has a hall in the center with living quarters at one end and service rooms at the other. Later, as the desire for formality increased and the need for the hall diminished, more symmetrical block treatment became common. The greater number of these large houses were built between the street and a large garden with an impressive gateway leading to a courtyard and the house rooms beyond.

At that period the rooms began to take a definite destination: The toilet room, the salon, the dress room, etc. , made their appearance.

The Hotel d'Amelot, in Paris, by Boffrand and the Hotel Lambert, Paris, by Levau (1640) the Okwell manor in Berkshire and the great Chalfield manor in Wiltshire are typical. The finest of the interior, outside the royal palaces, are those of the Hotel Soubise (early 18th century) and the Hotel de Sevigné (c.1660) both in Paris.

Likewise, the classic villas, rediscovered along with the rest of the Roman past, furnished the Renaissance nobles with patterns for pleasure estates of their own. Many of these, especially in the neighbourhood of Rome, had hillside locations which called forth the fullest ingenuity of the garden designers and brought into being an art never since surpassed. Their unified

and splendidly pictorial compositions perfectly blended the formal qualities of the house, the incidental garden architecture and the fountains with the variable and irregular elements of nature. Numbers of fine villas remain from all periods of the Italian Renaissance, those of the Baroque designers displaying the most fanciful quality in their rich variety of garden frivolities - grotesque sculptures, grottoes lined with rock and shell decorations, fantastic water displays, and ingenious transition between the different levels. Isola Bella (1634-1714) on lake Maggiore is a striking example.

MOHAMMEDAN PERIOD :

In the Mohammedan world ecclesiastical and aristocratic buildings, such as mosques, mausoleums, palaces and castles greatly predominate. Middle class architecture is known only from a few excavations. The mosque (masjid) is the most original creation of the Mohammedan genius and the most commonly encountered. The tendencies in the development of the mosque appear in every detail in secular architecture.

Of the Palaces of the Caliphs at Damascus, Baghdad and Cairo, as of many others built in later times, we know only from descriptions. We are, however, acquainted with several of the country houses (badiya) of the "Ommayyads" in the desert to the east of the Dead Sea, including Qusair Amra with its vaulted baths adorned with frescoes in the later antique style. Another

old Persian type (hira) is to be found at Mshatta, in the same region and in Ukhaidir, and the Abbasid residence at Samarra in Mesopotamia. They are rectangular castles, from whose entrance one proceeds through a number of anterooms to the hall of audiences. Next come the princes' apartments and the harem; behind is a garden and perhaps soldiers' quarters on both sides.

With the downfall of the Abbasids, cities gradually assumed a type which, with its castles and its narrow irregular streets, resembled mediaeval European towns.

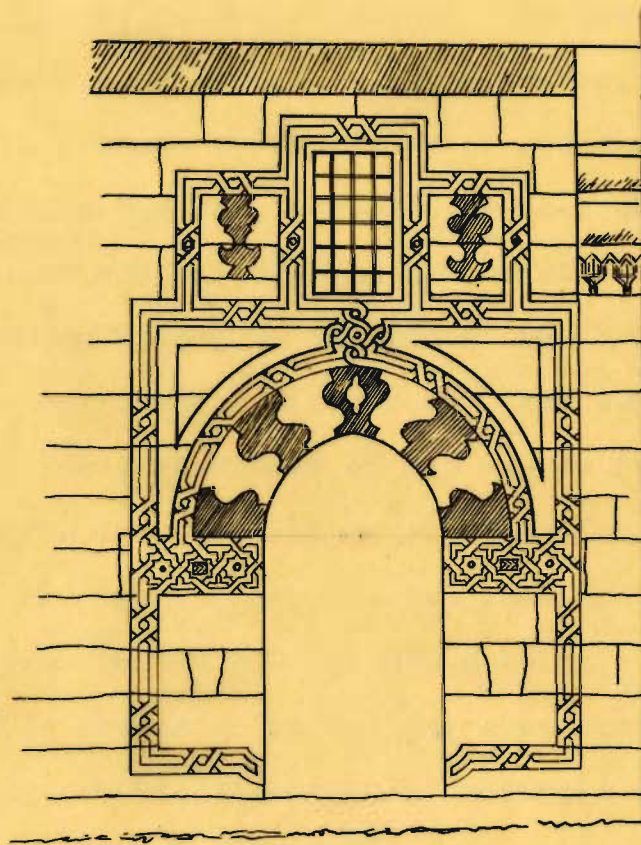
Fine example of such fortresses in a style closely akin to the European is to be seen in the Castle of Aleppo. The Alhambra, in Spain, is another such; the rooms of the castles are grouped in an irregular but very intimate style around courts and gardens, but-as in the Alcazar at Seville and in Maroccan palaces - are clearly divided into reception rooms, harem and Mashwar (Offices). The decoration is extraordinarily rich and luxurious. The plan of dividing the palace up into a system of courts and pavilions surrounded by gardens, as in the Safawid Castles - at Ispahan, and the Old Sarai at Istambul, was introduced from Persia; the living rooms small and adorned with frescoes (often erotic) and tiling, were grouped around one or more central iwans. In India, at Delhi, Agra, Lahore and Gwalior, separate pavilions were built on the castle walls, with a view over the valley and the cool river on one side, and over arcaded

gardens on the other. From these private apartments access was gained through a small door to an open hall with a gallery, on which the ruler gave public audience; this Hall (diwan-al-iamm) which was set apart for the grandees, was surrounded by a court yard where minor reviews were held and to which the common folk were admitted. It was reached from the gate on the town side by a passage flanked by offices leading to an outer court with soldier's quarters and a gateway with a bandstand (Naggara Khana).

Private houses are of extraordinarily varied types, but in all cases the living-rooms and reception rooms are separate from the women's apartments.

The houses (of rich men and lords) are generally two or three storeys high. The doors are often very tastefully ornamented; but there the external decoration generally ends, for the windows on the ground floor are generally but small rectangular apertures closed with lattice work (called Meshrebiyas) and set high above the reach of curious eyes, and even those on the upper stories are commonly small and plain.

The door generally opens flat against the side wall of the passage inside, and is confronted by the Mastaba or stone seat (sometimes replaced by dikka or chair of lattice work) on which the door keeper (bawwab) sits. Thence a passage which makes one or two sharp bends with the intention of foiling any attempt of inquisitive eyes to see into the interior through the door when it happens to be open, leads into a square



DOORWAY OF AN
ISLAMIC PRIVATE HOUSE

court unpaved, and open to the sky, in which is a tree shading the well or fountain. The four sides are lofty and are composed of the rooms of the house, with their beautiful Meshrebiyas or if only three sides are thus occupied, the fourth consists of a plain partition wall, dividing the house from its next door neighbour, and pierced by no aperture. The South side of the court is that on which the chief rooms of the mansion are built, for here the cool northern breezes can best be enjoyed. The rooms most accessible from the court on the ground floor are those which belong to the men of the household, and include the offices, stables, storerooms, and men-servants rooms, besides the reception-rooms of the master for his male guests. These last, in the best houses are three: the Mandara, the Makaad and the Takhtabosh. The two last are chiefly for summer use, the first is the general men's salon.

The Takhtabosh is nothing more than a recess in the corner of the court, supported by a single column, paved with marble and furnished with divans.

The Makaad is an open gallery, raised some eight or ten feet above the ground on the south or cool side of the court, into which it looks through three or four arches, open to the northern breeze.

The Mandara, is arranged in two-levels. A paved walk or floor, leading from the door, and ornamented with coloured

marbles, is called the durkaa, and its use is to receive the visitor's shoes before he steps up to the carpeted portion of the room.

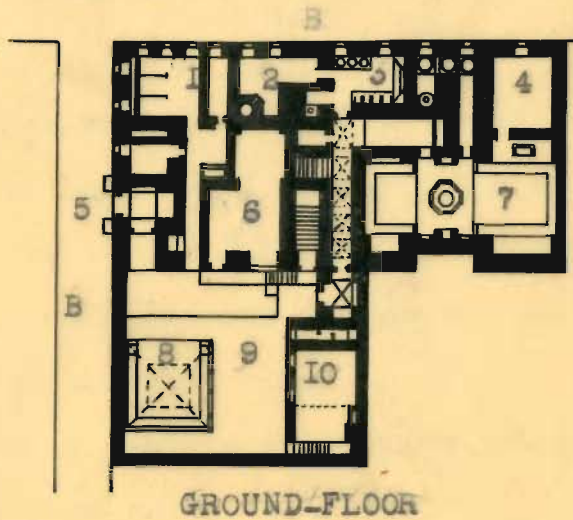
The Durkaa has often a fountain in the center, in the midst of a tessellated marble border. On one side of this narrow pathway is the room proper, to which the Durkaa supplies the place of a vestibule. There is no partition between the two, but the room is raised a step higher. The general plan of a reception room is thus to consist in a low pavement and a dais.

The dais, which is not a mere recess, but a spacious room, is furnished with divans running round the sides, raised from the floor by low stone slabs or wooden frames. Above the divan is a dado of mosaics, coloured marbles or tiles, broken only by the cupboards with little open arcades, filled with porcelain and earthenware vessels, by recesses, containing cushions for reclining, and at the end by the Meshrebiya over which is often a row of stained glass windows.

The ceiling is constructed of beams resting on corbels or cornices all of which are painted and gilt in arabesque designs, while the spaces between the beams are coffered in little compartments, each decorated with tasteful arabesque and floral designs.

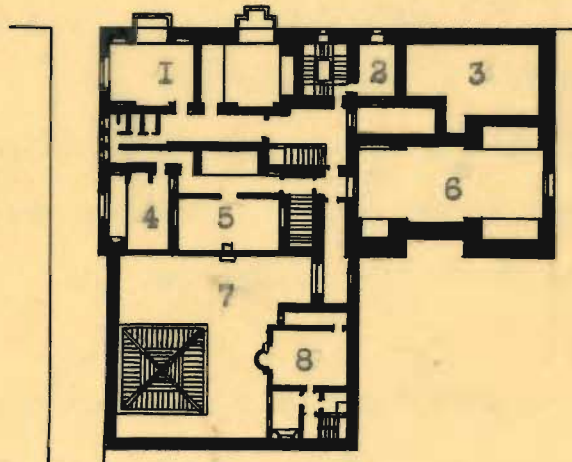
A small and carefully closed door conducts to the harem, or women's apartments, which are on the upper floors,

- BB: Steet
- 1 : Stable
- 2 : Bakehouse
- 3 : Kitchen
- 4 : Small Mandara
- 5 : Entrance
- 6 : Strangers' room
- 7 : Chief Mandara
- 8 : Makaad
- 9 : Court
- 10 : Servants room



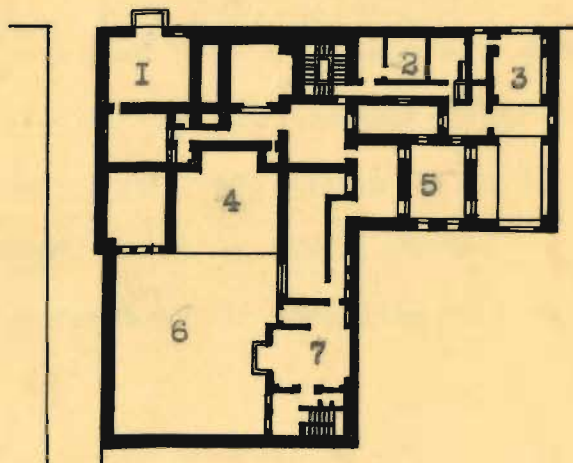
GROUND-FLOOR

- 1: Servant's rooms
- 2: Lnen room
- 3: Space over rooms
- 4: Men's rooms
- 5: Mandara
- 6: Space over chief Mandara
- 7: Courtyard
- 8: Strangers' rooms



FIRST FLOOR

- 1: Rooms
- 2: Baths
- 3: Harim
- 4: Space over Mandara
- 5: Space over rooms
- 6: Court
- 7: Strangers rooms



SECOND FLOOR

or in large houses, occupy a separate court to themselves.

Of the harim rooms the chief is the great Kaa or reception-room. This resembles the Mandara in its decoration but has a liwan or dais on each side of the durkaa instead of only on one side, and thus forms a double room.

There are also some smaller sitting-rooms and bed rooms and often a small sitting-room on the topstory.

The arrangement of the room is incapable of generalisation; they are built on every variety of plan.

The houses above described are those of ordinary gentlemen, but in the great periods of Fatimy and Mamluk in Egypt - to judge from contemporary records and the scanty remains that have come down to us - the palaces of the chief lords were much more splendid.

It is note worthy from the air conditioning point of view to outline the processes used:

In the West, where water is plentiful the halls are containing springs or pools,

In dry Mesopotamia and Persia, there are subterranean summer apartments with air shafts like conning-towers.

In India, quarters are transferred to lofty terraces exposed to the wind and surrounded by small ponds.

Since tetonic arrangment in architecture was confined

to the broad lines, a wide field was presented for ornament.

In the Ommayad period preference was given to the glittering glass mosaic and deep-shadowed pierced stone filigree-work, both common in Byzantium. With the victory of the sun-dried brick under the Abbasids, these were superseded by stucco facing sometimes moulded in the flat and in wonderful inscriptions in floral Cufic from Persia, all originally richly painted.

Later in the Turkish and Mongolian periods stucco gave way to the cheaper substitute for the more costly mosaic, in freestone or brick, but most often in faience tiling. The less important parts of the rough core of the wall, often quite carelessly put together, were overlaid with a particoloured mosaic of glazed bricks of varied shapes, making all kinds of twined patterns and formalized Cufic words endlessly repeated; while the major portions were covered with mosaics of tiles cut skillfully to the exact shapes of the prevalent patterns in harmonious colour-schemes, particularly blue, or in combination of faience ornament on a stucco ground (in relief) or friezes of inscriptions in incised stucco in the intervals of faience mosaic.

With the decay of ornament after the 16th century this type of mosaic was generally supplanted by square faience tiles with the decoration simply painted on them. Apart from

one or two magnificent portions of buildings, Syria, Egypt and the west were content with coloured stucco-work and mosaics of parti-coloured stone plaques, generally white and red or white and black.

MODERN :

The Industrial revolution produced a synchronous revolution in house design all over the world, especially in towns and cities.

With the introduction of heating, lighting and plumbing systems, the modern house was born and an involved new process of evolution commenced since ideals and aims have been totally different.

The intervening years have seen a curious condition resulting from the eagerness every where to embody within the house a maximum of mechanical efficiency combined with a reluctance to abandon the past traditions of planning and of architectural form.

In the design of these houses, waste spaces have been reduced and the problem of furnishing adequate communication and at the same time preserving privacy, has been to a great extent solved. Moreover the service arrangements have been simplified and perfected as that every possible waste of time may be avoided in serving meals or caring for the residence.

Interiors Construction

More and more as mechanical aids to comfort have been perfected by engineers and manufacturers, the modern dwelling has become in itself a closely integrated mechanism, utterly dependent upon its various heating, plumbing and ventilating contrivances and the supply of power for their proper functioning.

The present tendency^s seems to be almost universally towards the most radical and modernistic treatment with cubicle directness and simplicity replacing any search for a more esoteric or sentimental beauty.

This abandonment of all sentiments for past styles and traditional methods and materials; and the giving of an uncompromisingly frank expression to the technical aspects and modern planning of the structure, are directing towards "Functionalism" which is the world tendency.

SPECIFICATION LIST FOR THE PALACE.

RECEPTION QUARTER :

- 3 Salons
- I Salon for ladies
- I Entrance Hall or Vestibule
- I Hall
- I Drawing room
- I Dining room
- I Smoking room
- I Buffet
- 2 Toilets rooms for guests
- I Coat room
- I Open air dancing terrace.

OFFICE QUARTER :

- I Office for the lord
- 6 Offices for Manager and secretaries
- I Toilet room
- I Lockers room or cupboards in walls
- I Waiting hall
- I Office boy and Telephon Central room

I. Library and archives.

SERVICE QUARTER :

- I. Kitchen
- I. Pantry
- I. Pantry for washing dishes.
- I. Cuttlery
- I. Linen room
- I. Break fast room
- I. Lift for food to reception quarter
- I. Ironing room
- I. Sewing room
- I. Laundry room
- I. Central heating system installation room
- I. W.C. or Lavatory.

SLEEPING QUARTERS :

-a/ OWNER'S QUARTER -

- I. Bed room for the lord with a western bath room
- I. Bed room for the lady with " " " "
- I. Dress room for the lady

4. Bed-rooms with special bath rooms

I. Bed room with western bath room

I. Morning room

I. Music room

I. Familial hall or reading room.

I. Linen room

I. Sewing and ironing room

I. Gymnasium.

-b) NURSING QUARTER :

I. Nurse room with a special bath room

I. Nursery

4. Cupboards in wall for toys

-c) GUESTS' QUARTER :

4. Special bed rooms with special bath rooms

2. Special salons for special guests

3. Men dormitories for common people

I. W.C. room)
I. Bath room) for men

2. women dormitories for common people

I. W.C. room)
I. bath room) for women

I. Hall between men and women guest quarters

THE OWNERS QUARTER, NURSING AND GUESTS QUARTERS LEAD TO :

I. Living Hall

I. Green room or loggia.

DOMESTIC QUARTER :

a) Servants.

I. Butler's room

I. Dormitory

I. Lavatory

I. Salon.

b) Women servants:

1. Head Servant room

1. Dormitory

1. Lavatory

1. Salon.

c)

1. Dining room for service personal.

STORE ROOM QUARTER :

- a. Store for wood
- b. Store for coal
- c. Cool stores for fruits, vegetables and farm products..
- d. Store for oil
- e. Store for wine
- f. Store for cereals
- g. Store for fuel
- h. Room for Electricity generator.
- i. Stores and caves as much as the nature of the ground will allow.

GUARD'S AND GARDENER'S QUARTERS:

A small dwelling for the guardian and the gardener, near the main gate, Each composed of :

1. Bed room
1. Hall
1. Lavatory.

GARDEN :

- a. Kiosks
- b. Pergolas
- c. Banks and seats
- d. Special room for winter flowers.
- e. Store for tools.

TRANSPORT QUARTER :

- 1 - Garage for 8 cars
- 1 - Repairs shop.

FARM QUARTER :

- 1 - Stable for 14 horses
- 1 - Stable for 32 cows and oxen
- 1 - Stable for 100 sheep
- 1 - Poultry yard
- 2 - Horse boxes
- 3 - Loose boxes
- I - Harness room
- I - Carriages room
- I - Manure store
- I - Dairy.

REFINEMENT IN THE DESIGN.

" In art, precept is subservient; practice is supreme. The idea which may be hidden in a picture is of little moment it is the design, fully accomplished, which is prized. Its inspiration may become a light to shine before men, but it attains its paramount value only when realized." (1)

From the previous study, the difficulty in the design of an oriental residence to suit modern life and tendencies proceeding from the interior to the exterior is clearly outlined.

But the changing social conditions and advances in technological contributions, have given the problem flexibility. So slender isolated supports have released buildings from the limitations of masonry construction to thick walls and regularly spaced piers. New plastics and glass have given us new conceptions of the extent of space while the ability to heat and light our interiors more efficiently has imparted a different quality to the shelter in which we work, play, and rest.

When examining the designs, it comes out easily that the Aesthetic design works hand in hand to the end with the practical design, and out of this collaboration has grown the palace which has not only an appearance which is pleasantly related to

(1) Moorish remain in Spain - Albert Galvert - 1905.-

an orderly arrangement of elements and combination of function and structure.

This is secured by intuitive and conscious reasoning; thus the rectangular and circular shapes creates a diversity. The arches are in pleasing contrast to the rectangular openings; while the variety in the line direction has given life to the whole.

On the other hand, the varying sizes of the openings has broken monotony, while the surface treatment and the banding of white and black stone sheath the building with a sentimental vivacity.

The rhythmic repartition of masses and motifs reflects a sparkling harmonious movement. There is a movement of the theme as it travels across the façade of the palace. The eye pausing there to look at this detail and then going on to the next, attracted by the texture, shape and contour of the façade, The architectural arrangement of the parts which are brought into such a proper relation to each other suggests unity gaily accentuated by the presence of the central vertical massing.

The whole is contributing to express the character of the building, that of an oriental palatial residence.

Big words