A study of ironwork in the Balkans during the late Ottoman era

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Doctoral Research Thesis

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Acknowledgments

I would not be able to start this research without the financial aid of the Greek State Scholarships foundation. Institutions of this kind help people with limited means to have access to research.

During my years of research in four different countries I received help and advice from many people, about many and different issues. Yusuf Salman, in Istanbul, helped me to know architects and specialists who introduced me to other interesting people. Varban Todorov, in Sofia, helped me with his interesting remarks on my approach to history and advised me on facts about Bulgaria.

My special thanks also goes to my supervisor, Terry Rosenberg, who always helped me with his discussions, tutorials and more, very often in difficult circumstances and to my second supervisor Richard Kimbell. Ann Schlachter did always her best to resolve whatever problems I had with my studies and more. I would like also to thank Goldsmiths University for the assistance and the flexibility it has shown me during my years of study.

Special thanks to George Koumaridis, my critical reader, who made a lot of suggestions about my writings.

I am really grateful to my family for all kind of help they provide me. It is quite hard to support, anyway, a person who studies in a middle age.

A final acknowledgment and thanks to Dimitra Kofti for our common and adventurous itinerary.

Chapter one: Introduction and research methods

The present research is both a history of design of a category of objects and a data field for investigation and discussion of design theory of architectural elements. The category of elements is ironwork used on the external parts of the buildings, the facades and the fences, and the researched period and location is the late Ottoman era, 1850 – 1920, in the Balkans; a time and place of radical movements and turbulent social and economic conditions. The research is done with the intention to understand taste and trends in design and the objects of the public space. Therefore, the structure of this research is not only based on a presentation of interesting samples from the Balkan Peninsula but also on an analysis of ironwork from four cities that now belong to four different Balkan states. The focus therefore, is not only on analyzing important representative samples of ironwork, but also on analyzing the ironwork typologies and connecting them to the inhabitants, the economy and the society, the means of production and the urban geography. In other words, I think it is important not only to present the ironwork of a certain period but also to analyze it in relation to both its material and immaterial context.

This presentation of the historical context, the analysis and the theorization of the ironwork is done bearing always in mind the concept of change and trends in design and architectural elements. This means that items are presented not only in a static perspective but also in a dynamic one, focusing on the parameters of the form transformation and its implications.

The mechanisms of change and trends are associated with many material and immaterial factors which form a rather complicated phenomenon. This phenomenon, as many other social phenomena, cannot be described by absolute rules as in mathematics, but rather through a model theory, which may function as an interpretative platform.

1.1 Defining the field[1]

1.1.1 The choice of ironwork

The choice of ironwork as an object of research is not based only on my personal interest in this category of artefacts and the importance I think they might have for

1 I have not included bibliographical references in 1.1 given that the same issues are discussed with their full references in the second chapter.

designers, architects and generally for people investigating the cultural landscape and the urban space, it is also a choice based on some particular features such ironwork has that may help in analyzing the functions of the object in the public space.

The first important feature is associated with the public position of many ironwork items in buildings and constructions. Railings, doors and other metal elements, being a part of the building's façade, are the interface between the private and the public. They are the outermost point of the intimacy and the innermost point of the passers-by gaze. Thus, these elements have a special importance; they must not only fulfill their functional role but also show to the outsiders the desired image for the built object.

This is not a feature of the iron elements alone, ceramics, marble elements and plasterwork play the same role, they are parts of the façade too and they also function as an interface between the public and the private. However, the size of a thesis does not permit the examination of these categories of elements and they will be examined only as combinations or contradictions to the main object of investigation: ironwork.

I have chosen ironwork for a further reason; the rapid increase of its use during the late nineteenth and the early twentieth centuries. In contrast to the other categories of decorative, and also functional, architectural elements, the use of ironwork was very limited due to manufacturing difficulties that raised the price of the final product. After the industrial revolution, prices decreased and ironwork became cheaper, an outcome which facilitated the spread of its use on various constructions of different budgets and social strata. Differences in forms between different parts of the city, different cities, and different buildings in successive eras, may show how the form of the object is used and transformed in relation with the political, economic, social and technological environment. In case there is a high rhythm of fashion changes, something that happens with the ironwork of the examined period, observations concerning the trends of the object may be easier to analyze. Again, because of the limited size of the thesis, I include in the text only balcony railings and brackets, despite the fact that I have recorded and categorized all kinds of iron elements. This choice was intentional, because using more categories of elements, for example, doors or marquees, would limit the interesting results obtainable from inter-district and intercity comparison. Nevertheless, other iron elements are often briefly analyzed, along with elements made of other materials, in order to examine styles, combinations and trends.

1.1.2 The period: The late Ottoman Empire and its aftermath

Periods with high numbers of changes in trends are especially interesting for observing the mechanisms that create fashion and the late Ottoman era was such a period of very important transitions. It was the time during which the Ottoman Empire rapidly shifted from the Oriental to the Occidental ideals; a period during which Occidental fashions, ideologies, thoughts and aspirations massively entered the decaying empire and had an impact on every aspect of life.

This impact was not the same on each sector of activity, social stratum or place in the vast empire. Rapid transition, with differentiated rhythms, facilitates the possible revelation of how changes of trends and forms function in the social domain.

The great Ottoman Empire split into many national states, shown on Map 1, that aimed to shape their national and social identities. This pursuit involved the use of material and immaterial trademarks and symbols, either defined by social agreement, as with coins and flags, or by social action and implication, as with many other objects. Along with the fast transition towards the western models which occurred in the Empire, social transitions, either coming from Western Europe or originating from the interior, further intensified the high rhythm of trends' flows and transformation. In other words, at the turn of the nineteenth century the Ottoman Empire experienced transformational forces that had an impact on architecture and the urban landscape. Foreign and local influences created a fluid amalgam of short living and fast changing eclectic trends. Certainly, change and innovation is a general phenomenon of this world, however, during certain periods changes are faster, deeper and more fervent. The period in question in this research stretches from the 1850s, the period when the reforms leading to westernization were massively introduced, to the 1920s, the time when the Ottoman Empire collapsed and when population movements put an end to the Ottoman World.

1.1.3 The place: Balkans and the four cities

The changes were not exclusive to particular places in the Ottoman Empire, nevertheless, some places followed them sooner than others; some cities were more 'conservative' whereas others were in the vanguard of transformations. The Balkans and its cities were in the heart of this transition. The Balkan Peninsula was the last territory of the Ottoman Empire in the European continent, it was, geographically, the region closest to the source of innovation: Western Europe. In contrast to other regions such as Libya

which were also close to Western Europe, the Balkans were more religiously fragmented and more multicultural; accordingly identity contrasts and the desire for change desire were higher here, where more friction occurred.

Another important characteristic of the Balkans was the rise of nationalism and separatism. Although nationalism appeared all over the Ottoman Empire including in the Middle East, in the Balkans it was accompanied by a major renegotiation of identities in all sectors and activities of social life, a renegotiation manifested through social frictions and clashes. According to their aspired to affiliation, every individual, group or even an entire community, adopted, rejected or created the characteristics it judged as appropriate for its own identity; architecture being one of the fields of nationalist speculation. The foreign influence entering the Balkan communities was not applied directly to the urban environment but it was filtered through the ideas about identity and throughout, Balkan architecture always maintained a certain degree of autonomy and originality, just as it did with other arts, such as music or painting.

The Balkans consists of many regions and cities some of which are close to Central Europe and others close to Africa and, a thorough investigation of ironwork throughout the whole of such a large territory goes beyond the limits of this research. Therefore the focus is on the central, more turbulent and disputed area where, I believe, transformations and trends may be better examined.

The Macedonia – Thrace region is divided into four and belongs to four states which emerged from the Ottoman Empire; Greece, Yugoslavia[2], (later Former Republic of Macedonia[3] aka F.Y.R.O.M.), Bulgaria and Turkey[4]. Macedonia and Thrace have been the stage of ferocious fights and tensions; those between Greeks and Bulgarians for instance, reaching almost to the levels of a civil war between 1895 and 1905 when the area was still part of the Ottoman Empire. In like a manner, more or less during the same period, F.Y.R.O.M. Macedonians several times struggled for independence, claiming and constructing their national identity. The Macedonia – Thrace region remained under Ottoman rule until 1912, the year of the first Balkan War, when it was divided into four parts. Three of the parts were controlled by the Serbian, Bulgarians and Greek allies, the fourth, Eastern Thrace, remaining under the control of the Ottomans. In the light of this history, in this thesis I have decided to focus on four Macedonian – Thracian cities, cities

2 Named "The Kingdom of Serbs, Croats and Slovenes" during the interwar period.

3 There is an ongoing debate about the name of this country. Greece rejects the name "Republic of Macedonia" considering it an act of aggression. In this research, I avoid any kind of political judgment about the fact; I use the translated name this state uses for its self-definition.

4 Greece: Independence 1832, annexation of south Macedonia 1912. Bulgaria: autonomy 1878, unification with Eastern Rumelia 1885, independence 1908. Republic of Macedonia: Province of Yugoslavia 1912/13, independence 1991.

which, I believe, give good opportunities for investigating transformations and trends; these cities being Istanbul, Thessaloniki, Plovdiv and Bitola, shown on Map 1.2. I shall now briefly present the cities under research; a more detailed presentation is included at the beginning of each subchapter for each respective city.

Istanbul (Turkey) was the capital of the Ottoman Empire from 1453 to its end. Its name was Constantinople, during the Byzantine times and Konstantiniye, a great part of the Ottoman times., It was the capital of the Byzantine Empire for many centuries and it is still the most important city of Turkey. As a capital, it was the core of power and innovation, the city to which other cities in the Ottoman Empire looked. New trends and fashions, imported or local, usually started from here and, even though some cities of the empire were closer to Western Europe and to the rising influence from the West, it was Istanbul and its important district, *Pera*, which functioned as the principal gateway for Western influence. Of particular significance is that as the capital of the Ottoman Empire, Istanbul was a mosaic of the Empires' ethnicities and therefore a melting pot of the vast state's cultures.

Thessaloniki, (or Salonica – Greece. Its Ottoman name was Selanik), was always an important city. A major port, the only important port in Macedonia and Thrace other than Istanbul, it was a gateway to the interior and the exterior and during the Byzantine period was the cradle of movements and transformations. The city experienced some brief periods of decay during the eighteenth and early nineteenth century, nevertheless, after the *tanzimat* reforms the position of the city started to get stronger and in the second half of the nineteenth century, Thessaloniki was gaining a prominent position in the Ottoman Empire, surpassing in importance many other prominent and larger Ottoman cities. Cosmopolitanism and multiculturalism were the characteristic features of Thessaloniki; Jews, Turks, Greeks, Bulgarians, Armenians and many others lived and worked together in the city and during the nationalist struggles at the end of the century, Greeks, Bulgarians and Turks all claimed it for their ethnic states.

Plovdiv (Bulgaria) is an ancient settlement whose importance has varied over time. During a great part of the Ottoman period this importance was mostly of local significance but as national ideals were rising, the city entered the sphere of Bulgarian, and up to a certain degree Greek, ambitions. Thriving communities gave an important boost to Plovdiv (or Philippoupoli. Its Ottoman name was Filibe). The city was occupied in 1878 by the Russian army, which guaranteed autonomy for the entire region of Eastern Rumelia and for Bulgaria and the city became the center of the Bulgarian nation for some years until overtaken by the current capital, Sofia, and is now the second biggest city in

Bulgaria. Due to the regulations about the size of the thesis, I include a short chapter about this city in the appendices. I think that this decision is not harming the analyses and the conclusions, given that the main argument I want to sustain, through the case of Plovdiv, is that its relatively early separation from the other Ottoman cities led to a major differentiation on the ironwork used.)

Bitola (or Monastir in the Former Republic of Macedonia) is smaller in size and importance than the other three cities. It could be compared to towns such as Kavala or Edirne but there is something which made it significant during the nineteenth century. The rising interest western states had for the Macedonia region helped the city to develop and to become one of the most important in western Macedonia. Bitola is called the city of consulates and even now contains a large number of consulates[5]. Bitola was also home to one of the Military Academies of the Ottoman Empire, the one attended by Kemal Ataturk. One should also mention the contribution of the Vlach community and its merchants who, returning from their commercial trips in Western Europe, brought along many elements of innovation[6].

Due to the effort of the Ottomans to renovate and to strengthen their army and the infrastructures, many foreign officers and engineers were invited in the area and resided in Bitola. These events changed the aspect of the city which became an important center of the Macedonian hinterland. Later, when Macedonia got divided into national states, Bitola was found at the corner of Yugoslavia, near the Greco-Yugoslavian border, and started to decay.

I have chosen these cities because they are now located in the four countries into which Macedonia –Thrace region is divided. This will indicate whether national affiliation to the different states, states which came into being after a long period of coexistence under Ottoman rule, influenced the urban fabric and consequently architecture and ironwork. It will also indicate whether, and if so, how, being in a common country favors the circulation of ornamental elements and illustrate the different evolution of typologies and patterns after the formation of the nation states. .

Other cities such Edirne, Kavala, Skopje and Blagoevgrad, etc., could have been chosen, they are also important cities and in the same four countries. However, I have chosen the places where innovation and transformation first appeared in each area; cities in the vanguard of that time.

5 Nine consulates in a city of 100.000 people.

6 An important contribution to the development of the city is that of the Vlach community in Bitola. Many Vlachs were important merchants and therefore, significantly promoted the Westernization of the city bringing, from their trips, trends and mentalities.

1.2 Research questions and contributions of the research

As I have already mentioned, it was my intention to register the ironwork typologies in the four cities and to make comprehensive catalogues of iron elements in order to create a field of data for the research of the use of ornaments in the public space. Although this activity functions as an intermediate stage in this thesis, it is also an aim of the research. Besides two collections of railings in Thessaloniki and an undergraduate essay which do not have extended analyses of the ornaments and their combinations, there are no books, theses or specialist essays published in this field. Consequently, the registration of the iron wealth in these four cities is a primary aim. From this comes my first question:

1. ***Which were the ironwork elements and typologies used in the largest cities of Macedonia and Thrace during the late Ottoman era?***

In answering, I will argue that ironwork typologies were not equally widespread in the cities and, depending on various factors such as activities, populations and landscape of the districts, there are stark differences in the distribution of ironwork in the urban space. Political decisions, economic status and economic systems, social stratification and networks, technological methods and systems all impact on the elements. Thus, a question rising from this argument is:

2. ***How are the ironwork and ornamental elements distributed in the city and how do urban activities impact on them?***

As stated above, ornaments are distributed in the city in a non-homogenous way. The distribution of the elements is not similar for all objects; whereas some are found in all the districts of a city, others are concentrated in one district or even, in one street. Similarly, as some of them are found in great numbers on one style of façades, others are found in lower numbers in many styles of buildings. Viewed from this perspective, the city consists of sets of elements which are combined in various proportions through their different concentrations. Each kind of element, each typology has its own lifetime; it starts at a certain moment, it spreads and then disappears. However, these life–cycles do not coincide. Therefore, apart from spatial distribution, the facades contain a combination of

elements pertaining to different temporal cycles and, very often, to different styles. This raises two further questions:

3. ***What is the dialectic relation between the building's architectural style and the typologies of the ornamental elements of its façade?***
4. ***How are the different life – cycles of the objects combined and how do they interact as flows?***

Many of these factors relating to the distribution of the ironwork and the ornamental elements in the city and their combinations on buildings' facades are material e.g. technological methods, while others e.g. social networks, are immaterial and associated with urban activities. So, another point of interest may be the relation and the mutual implication of immaterial entities, such as social activities or symbolic capital to material ones, such as ironwork elements and ornaments. Therefore the question is:

5. ***In which ways might ironwork and objects of the public space function as immaterial factors in the social network[7]?***

The question above is the reverse of question 2. A main purpose of this research was to change the common perspective used to view the urban space and the architecture within it, and to seek a perspective which concentrates on the ornament and the minor element. Whereas the majority of the treatises approach the built environment from the more usual view, examining the architectural styles and seeing ornaments as a filling minor part, I will attempt to approach it the opposite way. I will focus on the minor – the ironwork – and I will examine how it serves different purposes and styles of the major - the architecture. The results of these questions may help to shed light on the mechanism of changing taste and trends. Thus, another question rising from the results of the previous questions is:

7 There is a very delicate point with the use of "non-material" and "immaterial" referring to non corporeal entities. This is connected to the philosophy of Dualism and the perception of the entities of the world. In this thesis, using the term immaterial I am not referring to the immateriality proposed by Plato in his theory of forms, which has a strong relation with design and architecture, but to the 'immaterial' as used in a Marxist perspective for that part of the object that is connected to its social implications and the discourses about it. Therefore, using the term "immaterial" instead of "non-material" I do not imply a metaphysical quality of the object, but I use a common term in its sociological perspective (see Thalberg, 1983).

6. ***What are the mechanisms that influence taste and create trends?***

All the above questions could be expressed in a more compact and general form as follows:

How do ironwork elements interact mutually and with their material and immaterial contexts as spatiotemporal dynamic sets?

The thesis also aims to contribute to a number of fields of research. The first of them, related to the first question, is research on architecture and the ornamentation during the late Ottoman Empire. In this field, the thesis can fill the gap made by the poor records of the architectural elements in the major Macedonian – Thracian cities.

Furthermore, the thesis may contribute to the theory of material culture, examining the role of the minor objects in the public space and their social implications. It could, therefore, be a contribution to research into the interaction of the immaterial and the material in the public space.

Finally, it might contribute to the theory of architecture and to the way the built environment is seen starting from the minor and looking from it to the major; this latter associated with the questions 3 and 4.

1.3 Methodology of the research[8]

The first step of the research was to gather a great number of ironwork samples. In this collection of data I have set some limitations. I avoided many religious and some state buildings, although I think that these buildings influence the designed environment through the propositions made by their forms. Other than when reference to religious or state buildings was necessary for the research, I decided to focus mainly on private, secular buildings, which are more associated with the mass production of artefacts.

The samples were gathered in the form of photographs[9] which required determining the location, within the four cities, of the areas which had a relation to the

8 Further details about the research methods, in more detail, are given in the respective appendix, due to size limitations set by the regulations of the University of London.

9 **Zamorra & Pombo (2007)** are concerned with the use of photography in the historical and sociological research and they apply it to their research both by taking photographs of remnants or by retrieving images from archives. They also use a methodology of parallel files comparing texts and images about places. They also have some kinship with my research in that they make tables of elements and details from both the mentioned archives.

research. These areas were situated within the limits of the actual city centers or, given that all the cities are now larger than in to the past, the 'historical centers'. This does not mean that the entire center of the cities was of interest; in many cases parts of the cities' old districts are totally modernized and they bear no resemblance to the image they had during the late Ottoman era.

A first step was to understand precisely the actual situation of the cities' old districts and to decide what I should photograph. (However, in Istanbul, which is by far the biggest of the four cities, the task of photographing its entire relevant area is not possible for one person only.) The manner in which the photographs would be chosen in order to display a proportion of the city's buildings without harming the correct representation of ironwork samples in the data, had also to be determined. A district could not be excluded if it would complicate the data by adding new typologies of ironwork; a case not only in Istanbul, but it was here that this necessity was greater. These limitations required knowledge of the city and inspection of all its parts.

There was a further reason for the long walks and the detailed explorations during my research. Although I was familiar the four cities, I knew that researchers usually standardize activities in the cities, haunting certain itineraries and omitting others. It was, thus, essential to explore the cities in detail and inspect their different areas in order to gain familiarity with their topography and materiality[10].

1.3.1 Photographing the object

The research required great numbers of images which would be later represented in their topological relation, described, analyzed and associated with social factors. There are already thousands of images from all the four cities in archives, nevertheless, their existence does not automatically resolve all the problems. The first problem has to do with the focus point of the image. Most of the previous photographing of the built environment has been done from the architectural point of view. From this perspective the building as an object, was at the center of the lens. The other elements were often accentuated or neglected in order to serve the image of the building, see for instance Figure. 1.1. Iron elements are sometimes clearly visible in these photographs and other times not,

10 The research of materiality is the key issue for **Edwards & Hart (2005)**. The two anthropologists discuss different approaches and researches which involved photography as a research method in an attempt to explore and to theorize on materiality. In contrast to many of the photographic researches discussed in their book, this current research is easier on a sense: Whereas researches which involve direct human activity require fast action and touch ethical issues, the research of ornaments do not have this difficulties. Railings and windows never refuse to pose for a photograph; they always "cooperate".

depending on what the photographer thought would be better for capturing the image of the building, or, more often, the street or the district. Sometimes, in narrow streets for example, photographers took good pictures of an entire building. In these pictures, although the general form of a railing may be seen, its design cannot be made out and there is no other picture of the iron element taken with a better zoom and from a better angle. The same happens with archival images. Many pictures I will use were obtained from archives, and they have been taken focusing on something other than the ironwork. While these images contain some degree of related information about the objects being researched, there was a need of images which would serve directly; the first motive for taking my own pictures.

A further reason which led me to take numerous pictures has to do with copyright. Most pictures are published under copyright laws which vary from country to country. These laws, stricter in Western Europe and less strict in the Balkans, significantly limit the number of pictures which can be reproduced from an archive or a book, without written permission or payment. In this research, given that photographs belong to Balkan archives, I follow the copyright regulations which are in use in the Balkan countries, nevertheless, it would have been impossible to obtain the great number of photographs needed just from archival sources without having serious problems with authors' rights.

The reasons which lead to the need of thorough city photographing do not stop here. Nothing could assure me that existing photographs sufficiently covered the urban space in a way which served my purposes. Since there is not a detailed catalogue of ironwork elements for any of the four cities, there might have been serious gaps in data. Furthermore, by simply using the image one has about the cities as gained as a passer–by, it is not easy to decide whether the existent material is enough for the investigation; many conclusions about the city and the architectural elements can only be made when one analyzes the pictures, compares, relates and contrasts them. While previous photographers, urbanists and others have chosen photographic practices that helped their pursuits, they did not necessarily help mine and it was, therefore, not only essential not to neglect any previous data, but also to gather my own material and combine it to older photographic material which might be of a help[11].

Practically, photographing the city helps in an additional manner; it is one of the best ways to learn the city's topography. Difficulties, minor oddities, surprises and generally all kind of small incidents that occur when photographing, are a perfect school

11 **Búxó & De Miguel (1999)** think photography has democratic qualities in that it brings to the present an equal instant of the past of all types of people. They find it an excellent way for researching the past because they give an analytical tool for systematic analysis.

for getting to know a city step by step and door by door. This knowledge does not only help to organize data but also to obtain the 'city experience'; a feeling that cannot be described by the photograph. The atmosphere of the city is more than its image. It is all the senses' experience, its activities, movements and feelings, all of which is beyond any photographic registration[12].

Technical details

Photographing in the city has some particularities and difficulties. Unlike tourist photographing or still life, the urban photographer who tries to obtain a representative image of the city has to take pictures in all its districts and streets, even in places where no one before had ever photographed. One main difficulty rising from this fact is that often s/he is viewed with suspicion and it would be really hard to move and work in the streets of these cities if I was not fluent in all four languages spoken in them. Language helps people to understand better why a stranger is taking pictures of their home or shop in a place where very seldom, or even never before, has anyone done the same thing. The issue is quite delicate. No written permission or authorities' assistance can help when, photographing in a remote district, the neighborhood gets suspicious. The only way to proceed in these cases is by explaining the reasons of the photography and the outline of the research. Threatening or neglecting local reactions can only harm the research and it was avoided throughout the fieldwork, despite the fact that giving explanations several times a day slowed down the pace. However, many of these street discussions turned out to be positive; many details which cannot be found in a bibliography, or important suggestions about further research, rose precisely from them.

Apart from the aforementioned, there were some more difficulties related to political issues. Political friction between Greece and the Republic of Macedonia made sometimes things difficult on both sides and political instability and violence in Turkey led me to persist in obtaining official permission for photographing in Istanbul despite that such permission is generally not given to photographers[13].

12 The dependence of the selection of the photographic subjects on the social context is discussed in **Bourdieu (1965).** The photographic shooting, the manner of showing its product and the aspect of life registered significantly changed in time. Bourdieu argues that photographs depend in all their aspects and parameters in social defined variables and therefore there is always a parameter of subjectivity in any photographic activity.

13 Permission is not given to individuals for city photographing in any of the four countries. However, I insisted to have such a document for Istanbul because of the size of the city and the often incidents (e.g. bombings) which could create severe problems. In Bitola and Plovdiv, although I did not obtain any permission I felt more comfortable because of their smaller size and the rapid way many people got to know my research. In Thessaloniki, which is my homeland, I could easy cope with oddities.

Taking pictures in the city has some more oddities. Streets, especially in the old districts, are very narrow, full of various objects and loaded with traffic. In these conditions the photographer needs to find quickly the perfect angles. S/he should target the whole building and its ornaments and note every detail about the location and whatever else could be important for the research. These notes are crucial, without a precise description of each item's coordinates, no topography of the object can be determined and no analysis can be achieved. However conditions are very seldom ideal; road signs cover the view, parked cars obstruct movement and people interfere in the frame.

There is another detail which makes the photography difficult; the position of the sun. Since time for taking pictures is not unlimited and repetitive itineraries in the same streets are a luxury, one was very often taking pictures against the sun. This difficulty is not without solution; shading and digital processing can enhance optic results.

1.3.2 Managing the image data

The photographs were taken in various itineraries in the city. I was marking the route I was following and I was numbering the images taken for each building, see Figure 1.2 and Figure 1.3, on the map I had always with me. In this manner I was covering areas, street by street and district by district. Once obtained, the images were sorted in various ways in order to facilitate analysis, comparisons and conclusions; see Figure. 1.4 and the insertion of information in files. I, therefore, classified the images in areas, Balat, Pera etc for Istanbul or Hamidiye and Cayir for Thessaloniki, and I created folders containing the iron images of each district. Later, using the images, I created excel files containing various data about the building, date of construction, budget, typologies of its elements, location and more, see Figure. 1.5. Thus, the buildings were 'translated' into data. In this way it was easy to sort the houses by any of their elements so as to see immediately, for instance, the high concentration of cast railings in Pera or the equal distribution of certain typologies all over Thessaloniki, see Figures 1.7 and 1.8.

Including these tables in the thesis was not possible. There are some 250 old buildings in Bitola and this resulted in 25 excel sheets alone for Bitola – the smaller of the cities – and 250 sheets for the four of them; a number which almost equals the pages of the text. The same happens with the maps: both maps of elements' and chronological maps. For example from Bitola: there are 40 frequent elements according to my research, and this makes 40 maps of distribution, see Figures 1.9 – 1.12.

I also formed chronological layers. In these layers I have successive periods of the city, e.g. one for the 1900s and another for the 1910s showing the same typology. Adding these layers to the maps, makes 400 maps just for the main typologies in a quite brief time period, two or three decades. I have, therefore, decided to follow in the thesis what is the common practice for books of architecture: I have used a great number of photographs, along with the text, in order to support my arguments. I have also used maps or tables when necessary.

Layers and symbols: the problem of classification

The excel files and the maps represent different typologies. This is an easy task when typologies are highly standardized, such as in the case of cast iron railings which are mass produced using identical moulds. In other cases, ironwork elements are far less standardized than is the case of wrought iron elements. Many wrought iron railings, for instance, are made of smaller standardized or unique scrolls. This practice makes wrought railings very difficult to classify due to the vast number of their possible variations. In this case there is not an absolutely objective solution. The way to classify ironwork comes through the understanding of the city and the knowledge of its ironwork elements. For example: there is a special part for a category of balcony railings, the curved bars railings in all the cities. One could say that the most prominent characteristic, the curved bars, is an obvious feature, which definitively identifies curved – bar railings among other wrought iron railings. In cities where curved – bars railings are scarcely used, such as in Madrid where they are less than 5%, they could possibly be considered as a variation of wrought railings. In the case of the Balkan cities, where they make up 30% to 35% of the whole, they can form a different group according to the material context of the city. Whether they will be a different division depends on a subjective decision and one's own perception of the city.

The same problem of classification occurs in the larger categories also. In the four Balkan cities of this thesis, curved railings are a significant part of the total number of railings, 30% - 35%. Although they all belong to a broad class of curved – bars railings, when one narrows down to the level of the city, one can classify them into four main categories, one for each city. Exceptions and overlaps between certain patterns do not reverse or challenge this classification. Narrowing down, one can find similar divisions within each of the four cities. A division may be broader or narrower based on how the

reader of the city reads in a particular context. This broader or narrower division is what in this thesis I call *typology.*

Even if the case of the highly standardized cast iron ironwork elements, a typology can be broader than a set of identical elements. In certain cases in all four cities, there are cases of a main pattern of cast element which has 50, 100 or 150 repetitions in the city, and a similar variant with 2 or 3 repetitions. In this case one could define a 'strict' typology of the absolute identical elements and a 'broader' one containing all the elements with a same concept, in this example 100 plus 2 or 3. As may be thought, a second typology would be strongly defined in case the second variant also had 50 or 100 repetitions.

Therefore, assortment and classification in taxonomies is context driven and subjective. It begins from main primary features and proceeds to secondary and tertiary details, sometimes going down to the level of a precise district or a specific workshop.

1.3.3 Archival research

After inspection of the cities' plans, of the respective bibliography and of the image of the urban landscape during the time period researched, it was easy to conclude that there is data missing. This missing data is from the buildings or the districts that, for various reasons, do not exist anymore. This void cannot always be neglected. Although in some cases omitting samples from a district does not harm general results, in other cases these voids are so important that they should be filled. The only way to complete these information gaps is by archival research. And photographic archives can give information about missing buildings and their elements, streets and activities.

Here is an example of this data retrieval. In 1917 a tremendous fire destroyed the 40% per cent of the old Thessaloniki, mainly the central and littoral districts. Elements from these parts of the city cannot be easily ignored, firstly because almost all Jewish districts were destroyed so evidence about them is missing, and secondly because the littoral avenue, which was the forefront of innovation, was completely devoured by fire.

There is another reason for which archival research is necessary; dating the elements. Archives contain not only important data concerning buildings and elements, but also information which could possibly shed light on how ironwork has changed over time[14]. It is, therefore, crucial not to leave the design research completely isolated from other parameters and in this, archival research is highly beneficial. Along with

14 The research of archives gave me access not only to architectural elements but also to other objects. Based on that material, I carried out parallel research on dress fashions and in signs and their languages in Thessaloniki and Athens. The results of these researches have been presented in conferences.

architectural elements, old pictures and texts include details about many other aspects of social activity and material culture. This information can be used in relation and comparison with architectural elements and the ironwork, so that interaction between fashions of material goods and ideologies could be investigated.

1.3.4. Oddities on applying the methodology; solutions and modifications

The application of planned methods never works as foreseen in theory; factors obstruct the research or make it deviate, necessitating practical solutions that help adapting the plan to the real conditions. In the course of this research several things changed the initial ambitions, requiring the modification of certain methodological details.

The first difficulty has to do with the construction dates of the buildings. Although, since the nineteenth century, Ottoman authorities kept registries for new buildings, these are very hard or impossible to find. The Balkan countries have experienced a very agitated and violent past. They experienced battle fronts of both the World Wars their lands, conflicts between them, civil wars, revolutions and social disorder and in the course of all these turbulent periods, many of the records have been lost or destroyed, either accidentally or on purpose. Balkan countries have lived through times of immense poverty which gave no chance of financing any kind of research projects limiting therefore, inquiries, the collection of statistics and archival plans and their maintenance, to the very essential.

It is, thus, an almost utopian hope to find a very compact and complete archive with all the buildings and their characteristics for each one of the four cities. Furthermore, even in the event that some archives existed with urban planning state authorities, permission to access them would usually be refused, particularly to a foreigner. Other ways of retrieving this information had to be used and since each city was a different case, so different retrieval methods have been invented.

In Istanbul, there are architectural archives which, though, cover only a part of the area of the city and register only certain buildings. The main books which most of the researchers use, and which I use in this research, are the city maps of Cervati brothers in 1882, the Goad maps of 1904 and the Pervitich maps of the 1920s; see Figure. 1.13. These maps and plans of properties and building types of Istanbul were designed for insurance purposes, necessitated in the past by the much more frequent, compared to nowadays, destructive results of fires. These maps contain no direct record of the construction date of the building. However, there are details about the materials used, the number of floors,

and other technical details and it is possible, therefore, using this information to understand whether a particular house is as described on the map. In this manner, the building can be dated within the time limits which two successive maps define.

In Thessaloniki, dating the old buildings is a little easier. Many of these buildings are protected and detailed catalogues have been published. There are also several good works on urban planning which give detailed information about dates and these are used in the research. However, problems exist in Thessaloniki also. There is no evidence for many buildings of 'minor' architectural importance, particularly in the western part of the city. The larger void of evidence concerns buildings destroyed by the fires of 1890 and 1917; archives and information about them are very partial and, quite often, nobody can now give any information about the identity of certain buildings in the center.

Fortunately, there are solutions for this problem. Observation of collateral details and objects may help a lot. It is known when the tramway was first used in the city and when it was electrified; it is known when city lighting was used and which type of lamps in each period and many other details concerning streets modifications, language of inscriptions and more, are also known. Thus, observing old photos and postcards and their details can help in dating the buildings.

In Plovdiv, I faced the same problem; difficulties of dating buildings and I used once again the methods described for Thessaloniki. Fortuitously, in Plovdiv other researchers had created personal archives of certain architects with details of their activity in the city, and in these archives, the buildings' dates of construction have been included, dates which give indirect information about adjacent buildings. If, for instance, one observes in a picture that the neighboring house is not yet built, one can assume that this house has a later construction date. There is another detail which often helps; buildings on certain streets were built within a very limited time period, a detail that can be obtained from maps and other sources. Similarities in other construction details may also help in strengthening these suppositions.

Details about construction dates are difficult to find in Bitola also requiring the use of the same methods. In Bitola, there is the higher percentage of buildings with their date of construction written on an external surface than elsewhere. This is some help but these buildings are relatively few. Many lateral and indirect methods, such as these mentioned in the previous paragraphs, have been used and more were developed according to Bitola's particularities, one of which being the observation of metal signs used by insurance companies and attached on the façade of the building. Since these companies'

activity period is known, buildings bearing the sign should be older than the date on which the companies stopped to work.

1.3.5. Activities during the fieldwork; collection and processing of the data

A large amount of photographic material was gathered. About 20.000 pictures shot in the four cities serve as my main data base which functions as a reference for creating the typologies' maps and layers. A small number of the photographs, the most indicative, were chosen as examples which accompany the text.

The next step in the data collection procedure, which brought more photographs, was the archival research and the pursuit of demolished buildings' images led me to a number of cities' archives.

For Istanbul, it was the archive of rare items, Nadır Eserler, the archives of restoration center of Istanbul University, KUDEB, the archives of the IRCICA center in the Yıldız Sarayı, the Institute Çekül Vakfı for Architecture and the Architects Association of Istanbul: see on Figure 1.14 – 16 sheets with details of buildings from the restoration program in Fener – Balat monitored by the Architects association – no details to be shown due to copyright restrictions.

For Thessaloniki, the archives were; the Hellenic Literary and Historical Archive, ELIA, the Historical Archives of the Municipality of Thessaloniki, the Benaki Museum Photographic Archives of Athens and the Historical Archive of Macedonia.

For Plovdiv, the National Archives and the National Archives of Sofia and in Bitola, the Maniaki archives of the Bitola University.

The photographic data was organized according to location and chronologically, details of the buildings having been inserted in Excel files and various parameters for each building, such as the iron parts, the size, the position of the buildings etc., have been registered. In this manner the data base could be searched using any of the elements as an independent variable. It was, therefore, easy, after registering thousands of buildings, to see the distribution of the ironwork elements in the city and to map both distributions and concentrations. The data base was also extremely helpful in order to search the combinations of elements on the same building or in an area.

Most photographs have been enhanced by means of trimming, color balance, light adjustment etc., a process necessary to produce high quality, descriptive images.

1.4 Structure of the thesis

This thesis has four chapters, their general outline being as follows:

- This is the end of the first chapter
- The second chapter gives a description of the social, economic, political and technological conditions of the researched period, sections 2.1 – 2.5. This framework is used in 2.6 in order to show the possible impact of these factors on the ironwork.
- In chapter three, I include the main bulk of the data. This chapter is divided into three similar parts, one each for Istanbul, Bitola and Thessaloniki with a much smaller part for Plovdiv being included in an appendix. All parts have the same structure; a general presentation of the city and its urban plan, an architectural guide and the ironwork. The subdivision for ironwork is, in its turn, divided into sections for different objects, railings, brackets etc., different typologies and different places. In these texts there is a technical and an aesthetic analysis of the ironwork, along with its connection to the function of the areas and the inhabitants. At the end of each part for each city, there are several case studies. Photographic appendices and appendices follow in a separate volume.
- In chapter four there is a theorization of the architectural elements and their use, 4.1, which serves as a tool for the analysis of ironwork in the social space, 4.2. The conclusion at the end of the essay is a summing up of the research and its outcomes, and is followed by 4.3 which is an outline of a theory for the objects of the public space.

Chapter two: The turbulent history of the Balkans; social, economic, political and technological transformations

2.1 The importance of the context on the production of artefacts

In this chapter, I will show some aspects of the social, economic, political and technological life of the late Ottoman era, that is, of the late nineteenth and the early twentieth century. This context may seem too broad; yet, I think, it should be that broad in order to describe the ambient in which the ironwork and its trends were produced. A change of government or a period of economic recession may seem irrelevant at a first glance. However, they both affect, through a chain of actions and reactions, a whole set of material and immaterial parameters even to the more minute.

It is, therefore, necessary to have knowledge of the broader framework although a direct connection may never been proved. The political change in the Ottoman Empire, for instance, affected the ironwork indirectly by affecting an entire chain: Type of government> constitutional monarchy> French impact on legislation> new urban laws and planning > wider streets > bigger facades> more space for visible ornaments> proliferation of the ironwork. This relation is very difficult, or even impossible, to be read the other way round. It would be too risky to try to view this relation in the opposite direction and to detect, on the proliferation of ironwork in a city, the transition to a constitutional monarchy. If one adds to this chain of impacts all the other relations that may have affected the ironwork, one way or the other, s/he could establish a set of impact-chains that function in the same direction from the wider to the narrower context.

The choice, of how broad the description of this context should be, is absolutely subjective. Since one could claim that the former conditions affect the latter, s/he could expand the context description to the deep past. My intention, in the present chapter, is to expand the description of the context, up to the point that will make obvious the transition of the Ottoman Empire and its society from the 'Oriental' to the 'Occidental' system[15]. The Ottoman Empire, within a period of a century, from being the most important and central country of the Middle East, which produced the vanguard trends for that area, became a

15 The impact of the changes, in laws and the modification of models and aspirations, has been widely researched all over the world. There are various good researches in Turkish. In my opinion Turks were the ones who better than all the others have researched the impacts on the social life, the material status and the objects. See for instance: **(Özer, 2005)**. In pages 20 – 24 Özer takes significantly into accout the 'conceptual' transitions, that is, how ideals and aspirations influence social life and affect the material part. Özer gives numerous examples of changes and westernization, yet, due to the different targeting of his research he does not analyse these examples further. **Кесякова (1999)** focuses on the connection of shifting social practices and the changes in the material status.

peripheral country of the West, following the latter's trends and evolution. This shift affected all the activities and the production in the Ottoman Empire. Nevertheless, it is very important to describe the entire framework that created the forces, which acting through a chain of interactions, reached down to the minor objects and to the ironwork.

2.2 The social changes; shifting the perspectives and the utopias

The *tanzimat*[16] period, between the middle century and the collapse of the Ottoman Empire in 1924, is considered as one of the most interesting of the Ottoman history. It is a highly interesting era not only because of the size and the importance of the Ottoman state in its contemporary context, but also because of the dramatic and rapid transformations occurred. The Balkans, and the other Ottoman lands, witnessed rapid and even violent changes in every aspect of the social life, especially in the nineteenth century. The Ottoman Empire, which possibly was the most powerful state in the world after the capture of Istanbul in 1453 and up to the time of its major expansion in 1683, started gradually to weaken and to lose its predominant position in the world scene. Although there is an ongoing discussion on the decay of the Ottoman state, there is a general agreement on some of the reasons which led to it. Here there are in brief some of them:

Misgoverment; the Ottoman Empire was governed by the Sultan, who had the absolute jurisdiction in legislative, judicial and defense issues. His council of *Viziers* with a great *Vizier,* as a 'prime minister', was leaving limited space for personal initiatives to other person than him. However, the sultans very often lived only in the restricted ambient of the court. Sometimes, they were imprisoned in a palace, during their brothers' reigning in order to avoid succession conflicts and after his death they rose to power. These weak persons were depending on people who wished power. Very often it was the *Valide hanim*[17]*,* the *Vizier* or a eunuch behind great decisions. These Sultans had complete ignorance of the limits, the possibilities and the needs of their lands and people and they were not interested to know. Their only world was the limited space of the palace and its people[18].

16 The *tanzimat* (regulations) were a series of laws concerning various sectors of social, political and economic life. The period of these innovative rules started in 1839 and continued for several decades until the 1870's. All of these laws had Western orientation, in the sense that they were inspired from) similar laws already in vigor in the Western countries, mainly France and Austria. In chapter 2.4, which includes an analysis of political changes, the tanzimat will be examined in more detail.

17 The Sultan's mother

18 See, for instance, in **Sugar (1993: 187 – 195)** and for a more structural description of the facts in **İskit (1962: 2477 - 2704)**.

Lack of expansion; in the seventeenth and the eighteenth century the Western European countries controlled several parts of the world. These countries settled colonies all around the globe and they were exploiting the wealth of overseas lands. The Ottoman Empire, though enormous in size, did not enter into this competition and remained limited to its constantly shrinking borders. While Western countries were gaining great power, materials and means of production, the Ottoman Empire remained limited to its internal resources and possibilities[19].

Separatism and fight for power; during the 18th century the power of the Sultan, though always enormous, was not anymore indisputable. Remote areas' governors, ethnic revolutionaries motivated by the ideals of the enlightenment and even certain parts of the governing mechanisms such as the *Janissaries*[20], claimed parts of the territories or a more significant role in exercising power. The Sultan's position was becoming more and more fragile and he had constantly to concede some of his privileges. The cost of these disputes and clashes was enormous both materially and immaterially. Despite the immediate and positive actions of some talented sultans, like Mahmud II, the decay was inevitable[21].

Conservatism; the Muslims, during the Arab and the early Ottoman era, were among the greatest thinkers of the world preserving and expanding the knowledge of ancient times, whereas in Europe, during the same period, religious obscurantism was attacking any kind of 'heretic' thought. Nevertheless, after the first decades of the 18th century things changed. The '*Pax Ottomana*'[22] immersed many fields of the Ottoman thought in stagnation. Western thoughts and innovations were very often considered with hostility. When, relatively late, the Ottomans tried to enter the vanguard of innovation and scientific thinking there was no remedy. Long time of disapproval and rejection had obstructed the way[23].

Economic recession; the Ottoman system was a particular type of a state controlled feudalism. In the meanwhile Western Europe was rapidly adhering to a nation state capitalism and then to a libertarian capitalism. In that period, the capitalist system was attributing more material wealth to the dominant groups and through them to the state. The economic recession of the Ottoman Empire, which is anyway judged in comparison to the economic status of the Western countries of that time, led to an increasing dependence of the former on the latter. The industrial revolution of the

19 ibid and **Stavrianos (2000)**.

20 Special armed corps. For a detailed history of these special troops and their function on the Ottoman state see **(Goodwin, 2001)** and especially **pp: 235 – 246,** for their violent dissolution.

21 See **Faroqhi (2006: 67 -72)**.

22 **Ortaylı (2003)** gives a detailed account of the term and what this meant in the social sphere, in practices and identities.

23 See **Şeref (2005: 417 – 429)** for an analysis of the contradictory forces of 'progress' and 'conservatism' in the 19th century Ottoman Empire.

Western countries did not find its similar intrinsic revolution in the Ottoman Empire. The revolution in the Ottoman Empire was mostly a massive import of production methods, means and know-how from the West for which high prices had to be paid[24].

The gap between the Ottoman Empire and the great powers of the West became more evident since the end of the 18th century. Step by step, the Ottomans were looking to the image of the 'advancing' and 'prospering' West and tried to react to the decay of their state[25]. It was a set of reactions depending on the social position and the ethnicity of each person or group. However, when someone was talking about progress and transformation the most common, almost exclusive, example was the West. Christians, such as Serbs, Greeks, Bulgarians and many others massively adhered to the idea of the 'nation' as it was perceived after the enlightenment[26]. Many of them stopped to consider themselves as citizens of the Ottoman Empire and started to see their communities as enslaved parts of historic nations, which suffered under the rule of the Muslim authority in stagnation and retrocession[27]. Despite dogmatic differences between Balkan Christians and the Western Europeans, the former found, in the West, a living example of how free Christian progressive states could prosper. The dialectics of the 'Nation' very often bridged, mostly superficially, differences between national classes. It was therefore evident, and this was proved later, that the new independent Balkan states would follow the Western example both for practical and ideological reasons[28].

Practical reasons turned many Muslims, and especially the Turks, towards the West. The Western example was, in the context of that era, materially and immaterially successful and this was broadly evident because of the increasing pressure and penetration of the Westerners in the Ottoman Empire. An increasing number of visitors of every kind were entering the Ottoman territories. These visitors were motivated by various reasons; travelers and geographers enchanted by the myths of the Orient, philhellenes on the quest of the ancient spirit, merchants and entrepreneurs trying to profit from entering one of the biggest states in the area[29] . The Ottoman Empire ceased to be just the mythic and delightful Orient to the Western eyes. It was a country with

24 The voluminous work of **İnalcik et al. (1997)** it is a major contribution both to the Ottoman and the world economic history of the recent centuries. See especially in pages **824-842** for more details and numbers concerning the late 19th century. Although balanced at a first glance, Ottoman trade had a qualitative disbalanced concering the knowhow invested on the imported products.

25 At this point, I should define that using the term "Ottoman" I do it in the most typical way. I use it for any citizen of the Ottoman Empire whichever his/her affiliation or beliefs might have been. Therefore, "Ottomans" in this thesis are all the subjects to the Ottoman authorities without further political or religious connotations.

26 For a comprehensive research on nationalism see **(Roshwald, 2001: 28 – 33).** Roshwald examines the cases of the big empires and their partition. In this enquiry the Ottoman Empire is a very prominent case.

27 For discourses on the national ideas and the adherence to the West see in **Castellan (1995: 314 – 330)**.

28 Ibid

29 See many interesting cases in the comprehensive research of **Σιμόπουλος (1975)** especially in the third volume. Through the narrations of foreign visitors many issues about the Ottoman and the Western dialectics rise.

negative and positive sides, beyond the orientalistic fable of lust and mystery. Seen from an Ottoman point of view, the arrival of many new visitors was an opportunity to see a living example of what the West was about[30]. This taste of the West was not anymore a narration told by the Ottoman merchants and scholars who were getting in contact with the big ports and capitals of the West, but also by the Westerners visiting Ottoman territories.

This acceptance of the Western models' ideas, in various aspects of life, led to a series of transformations in which most people were a part of. The sultans themselves started to 'modernize' their state, their subjects and even their own image.

The dress code of the sultans changed evidently with Mahmud II since his first years on the throne in the 1800's. The sultan frequently alternated between Eastern and Western dress code. This would be unthinkable a few years earlier, but Mahmud wished to show both to his subjects and the foreigners that he was a leader who, not abandoning the tradition, was ready to participate as equal in the contemporary political world scene. (See for instance on figure 2.1 the dress code swaps between oriental and occidental fashions by Mahmud II)

If the sultan was ready to give some space to this twofold cultural adherence, there was no obstacle anymore for people wishing to adopt Western trends and ideas to do the same, with much less fear of marginalization. These people were of every kind and origin. The new trends entered the Ottoman Empire firstly through the big cities, especially those which had better connections with the West, the ports, the caravan knots and later, the big railway hubs.

Mahmud II opposed and annihilated the opposition of the *Janissaries*, stopped many separatist movements but he was unable to stop the Serbian and the Greek revolutions neither did he avoid the Egyptian autonomy[31]. Mahmud was the first of successive sultans, who introduced massive transformations to the administration and the constitution. These innovations and new constitutions, partially dictated from the society itself, provoked major social changes, which in their turn further pushed the sultans to adopt new transformations in a kind of a vicious circle.

30 The phenomenon of orientalism was quite broad in many occidental countries during the second half of the 19th century. However, the orientalism current in arts, as **Germaner and İnankur (2002)** suggest, was a process on various levels. Some artists and artisans directly adopted or studied oriental patterns and forms and others created amalgams of mixed oriental – occidental styles. This practice involved participation in the artistic events of the Ottoman Empire and mainly of Istanbul. Yet, some other artists did not have any personal experience of the orient; they were just reproducing the other orientalists' versions of oriental styles. Furthermore, just like narrations about the West played an important role in the creation of the Westernizing forces of the Ottoman Empire, in like a manner narrations about the Orient and the Ottoman Empire seriously influenced Western orientalism.

31 **İskit (1962: 2917 – 2930)**.

A major boost to the 'westernization' ideal was the creation of the Greek state in 1832. The Western powers, under the influence of the classicism revival and the philhellenes, aided decisively the Greeks to defeat the Ottoman Empire and to create the first independent Christian state in the Balkans after many centuries of Ottoman rule. Great parts of the Greek population fully adopted the philhellenic, classicist view for the new state. The new governors of the Greek Republic and later of the Kingdom of Greece, either Greeks of the West and Russia, philhellenes or appointed foreign kings and administrative cadres, adhered to classicism. Athens became the capital of the new state in 1833. It was an unimportant regional city of 10.000 inhabitants, visited mostly by those interested in its unique antiquities. The new authorities made big plans for its reconstruction. These plans involved the new urban planning by Greek and Bavarian architects, the construction of voluminous public buildings and the introduction of a Greek classicist variant in architecture and ornamentation. Within some decades' time, Athens had already been transformed from a regional Ottoman city to an important center of neoclassicism. Only two or three buildings of the Ottoman past have been left and a tiny part of the old streets raster[32].

Athens served as an excellent example for people in the Ottoman Empire who desired a 'national culture' far from the Ottoman past and close to the splendour of the West. The Greek case of a young democracy, an independent national state, with a new European style capital, was an example for all ethnicities of how to form nations and states and claim a position in the European culture.

Some Ottomans, who did not claim adherence to a certain nation, also wanted to belong to the 'progress' of the West than to the 'fatalism' of the East[33]. This tendency further impelled authorities to adopt west - inspired laws, some of which regarded manufacturing, commerce and urban development. Nevertheless, it was not only the state that changed constitutions and regulations but also the citizens who often adopted foreign manners and fashions[34].

With Pera in Istanbul as one of the main epicenters, the use of French language started to spread already in the 1850s; a practice which became almost universal in the 1890s. The use of French was not merely a fact of Western penetration neither an act of facilitating foreigners in the city but also a way to denote the adherence to high classes

32 An excellent history of Greek architecture is given in **Λαγόπουλος (2004)**. The book covers many centuries of Greek architecture the 19th century comprised. This period is of big importance because it constitutes a deep section of an impulse to the future with many elements and concepts from the ancient past. Because the period this book examines is so broad, comparisons and explanations for the new Greek architecture and the Athenian phenomenon have been given.

33 For the Turkish nationalism in a class perspective see **(Özdalga, 2005: 13 – 26).**

34 These changes can be seen in newspapers of the late Ottoman era. I have given special attention to newspapers of Thessaloniki and especially to *"Faros", "Makedonia"* and *"Selanik"*.

and the vanguard through a highly symbolically capitalized practice[35] (see for instance on figure 2.2 and 2.3 the use of French language; this use is also evident on more images of this and other chapters).

During the second part of the nineteenth century, more Western habits became part of the Ottoman quotidian life. New men's clubs, summer holidays, entertainments and theatrical spectacles were novelties for the Balkan cities and they appeared firstly in Istanbul[36] and then in Thessaloniki, Plovdiv and elsewhere[37],[38]. During the same period dress codes were in a constant renegotiation as well. Upper classes first introduced western dress codes. During the late decades of the nineteenth century, members of the upper classes were more and more dressing the Western way, keeping Ottoman clothes for special uses. Other social strata followed. In the first two decades of the twentieth century, the 'dress image' on the streets of Salonica, Istanbul, Kavala and of other major cities was a mixture of oriental and occidental styles. By the 1930s, orient dress fashion had disappeared from the streets[39] (see on figures 2.4 and 2.5 some examples of mixed use of garments).

There is a remarkable mutual exchange of functions between the oriental and the occidental clothes. Western clothes were used for the special occasions such as big balls and soirees and eastern clothes for quotidian activities. Some decades later, western clothes were used for quotidian activities and eastern ones for special occasions. Nevertheless, these special occasions were not anymore the same. They were not big events like concerts or balls but rather folklorized traditional anniversaries[40].

All these systems of fashions, concerning different categories of objects and practices, were shifting towards the western models. However, this movement was not the same for all of them. Some systems, like dress fashion, had much more inertia than entertainment and the same happened with all the other systems.

35 A special chapter on these influences is dedicated in **Şeref (2005)** and especially on pages **462 – 463**.

36 **Bilici (2004)** gives many interesting examples of changes in the quotidian life, with an emphasis on domestic life and on coffee shops.

37 For changes in some aspects of sports and education see (**Fikret, 2004).**

38 For the rising Western influences on entertainment see **Sevengil (1993)**. See also **Заимова ред. (2007: 60 - 72)** for the Viennese styled coffee – shops of Bulgaria and their role in the social life as places of intellectual and artistic vanguard.

39 Rapid changes in dress codes were very common in the territories and the former territories of the Ottoman Empire. See the interesting analysis through a rich photographic database of **Φωτόπουλος (1999)**.

40 Through the archival material gathered for this researched I conducted a parallel much smaller research on garments in Thessaloniki during the late Ottoman era. The results were presented in the **"International Congress for Image and Appearance"** of the University of Murcia (19 – 21 November 2008) and can be found in the website of the proceedings: http://congresos.um.es/redu/index/search/authors/view?firstName=Dimitrios&middleName=&lastName=Charitatos&affiliation=&country= , entitled "Multiculturalismo urbano y occidentalización. Vestidos y trajes en salónica durante el último periodo otomano".

Architecture and its ornamental elements are a system with many subsystems, which were strongly influenced by the general west oriented tendency. The rhythm of changes in architecture was different from other material and immaterial systems and the same happens with its subsystems. This means that some people were living in Western European style buildings, they were dressing in a mixed fashion way and they were having an Ottoman style entertainment. It is, therefore, useful to take into account the general tendency towards westernization.

Social changes do not only imply changes in trends, although this is the main focus of this thesis. They also imply changes in social strata, in networks and relations. In these fields, changes in the Ottoman Empire were significant. The old privileged strata, which were associated with the feudal power of land owning and the army, were gradually fading out giving path to the emerging strata of entrepreneurs and merchants[41]. The transformation of the economic system, which will be later discussed, changed the distribution of wealth and power in the entire empire.

The *Ağalar*[42] *and* the other 'nobles' of the empire were emarginated by old guilds' members, some of whom made enormous fortunes after the loosening of the state control over production. In the meanwhile, legislative reforms provoked big changes in the administration and the people in charge. Engineers and scholars displaced old administrators and introduced further innovations into the public sector.

Social changes and transformations were sometimes silent and slow and other times violent and abrupt. Architecture was usually changing silently although sometimes clashes and suppression have changed the image of the cities. Architectural elements and the ironwork were smoothly following these changes. Even though there were no revolutionary changes in the ironwork field, ironwork followed all the gradual transformations

2.3 Economic changes

The Ottoman Empire, along with its general decay in the early nineteenth century, faced a severe economic recession. Some reasons of this decay have been already analyzed: weakness in competition, especially in overseas commerce, low application of industrial technology and inefficient tax collection.

While Western European countries, under the ideology of scientific positivism, were constantly applying new technological solutions to the production, such as in the

41 See **İnalcik et al. (1997: 895-933)**
42 Ottoman Muslim nobles

textile and mining industry, techniques in the Ottoman Empire remained unaltered during the first period of the industrial revolution. This difference in methods of production caused severe recession in the market of industrial products, which were produced far cheaper in the West. This fact gradually limited the Ottoman production into raw and agricultural products and to certain products of artisanry. With an important delay, several Ottoman strata started to react mildly after the 1850s, mainly by introducing techniques and machinery from the Western countries. This import of tools and know - how was very expensive. Ottomans citizens had to spend more and more giving their devaluating products in exchange to high prestigious and expensive Western goods and services[43].

Although the Ottoman Empire had some good universities, they were highly centralized and technological innovation seldom could be widespread through the educative system to the guilds. After the *tanzimat reforms,* technical schools and institutions were multiplied, but they seldom achieved to reach the European vanguard. Therefore, they were acting more as high vocational schools, nevertheless, with scarce results in invention. After the 1880s, active members of commerce and manufacturing introduced technical novelties in the Empire. The state did the same in a massive way. However, in order to reach the European level, a lot of infrastructure was necessary. This had two main impacts; the first one is that an 'army' of foreign engineers and specialists was invited by both the state and individuals in Ottoman lands, action which opened totally and definitely the frontiers to the far more powerful West and its ideologies and trends. The second result was that, given that the Ottomans could not invent and produce novelty, they were always depending on the West in order to keep in contact with developments.

Another field of important transformations concerns the social methods of production. The main system of production in the Ottoman Empire was based on the guilds. As elsewhere in Western Europe and other parts of the world, people of the same activity were forming constitutional organizations, whose members had the absolute privilege to produce a certain kind of objects or services. In the Ottoman state, guilds had a high degree of self government and a strict internal organization with distinctive degrees of hierarchy. The role of the state was to regulate prices and taxes so as to keep a constant flow of sufficient goods in a profitable price for both producers and consumers[44].

43 See more about economic institutions and money in the late Ottoman Empire in **Pamuk (2007: 19 - 40)**.

44 For a detailed registry of the laws regulating the function of the Ottoman guilds and the transformations occurred based on archival material see **Kal'a (1998)**.

One of the main changes caused by the *tanzimat* was the gradual loosening of the strict regulations of the guilds in such a way that constantly more people could enter each field of activity. During the second half part of the nineteenth century, the clash between protectionism and free market became severe and often obstructed commerce and manufacturing, usually in disfavor of the guilds. The guilds, in order to obtain the machinery and the know-how, which was essential for the 'modernizing' of production, had to be transformed in societies but this was often extremely difficult or impossible.

In some sectors, like food production, guilds, whose members were becoming free entrepreneurs, suffered harsh economic problems and financial annihilation. In other sectors, such as iron smithery, craftsmen remained independent until very late and they still are somehow till our days[45].

Guilds and freelancers in the Ottoman Empire were strongly influenced by the principle of the least effort. The artisan or the producer was producing the quantity of goods or services that would ensure him a decent living, without trying to expand his business, capitals or activities. Fought very tough by both, capitalism and socialism, the main economic systems of the twentieth century, this principle fade out much later; there are some rare examples even in the 1970's. Although as a personal choice the principle of the least effort has frequent comebacks, it was a dominant political view for broad social strata in the late nineteenth century [46].

This principle had a very significant impact, like any major economic principle, on production and consequently on the production of artefacts. Artisans and manufacturers of the same profession, in most Ottoman cities, were situated at the same place. Despite their geographical vicinity, which was getting slowly dissolved, manufacturers started to work for their own behalf without interferences from a central organization. The state kept its privilege to regulate maximum or minimum prices but not the privilege to interfere into the membership and the activity of the professions. Although in the 1880s guilds' producers were already free enough to expand their activity in a capitalistic manner through the mechanisms of competition, many of them preferred to maintain production and prices in those levels that would offer them a decent income and life in the new economic environment.

This quite common attitude of the producers resulted into a particular kind of free market in different sectors of activity. Some sectors, for instance dress fashion and clothes production, were more affected by changes. Foreign and local trends conquered the high

45 A very vivid description of the guilds and their transformations during the late Ottoman era in **Kal'a (1998b: 89 - 105)**, especially pages 89-105.

46 Many implicit and explicit references to the least effort principle as a part of the economic context in **Pamuk (2007) especially: pp. 29 – 30**.

strata oriented markets, though always along with the fashion proposed by some prestigious local tailors. In the sector of constructions, the influence of the brands was not the same. In some subsectors, like architecture, brand was quite important and associated with the name of the architect. In some other sectors, like tiles and ceramics production, foreign brands through import and local factories got, at the end of the nineteenth century, control of the market's major part.

In iron elements production, there is a great number of independent producers rather than one or more large scale companies. There is, nevertheless, a part of the production which was more industrialized. This is the production of standard cast iron parts used as ornaments in railings, doors and fences. Some foundries increased their size and started to produce massively certain architectural elements. However, they did never reached the size of international enterprises[47].

Imports, mainly from the Western European countries, covered some part of the total installed architectural elements, mostly in commercial areas and on prestigious residences. Thus, most of the production remained in Ottoman hands, though, under a strong Western European influence (both because of imports and changes in fashion).

At the end of the nineteenth century, the situation of the Ottoman economy further deteriorated. Despite good performances in certain fields, like tobacco and textile, high expenses and low productivity deepened the dependence from Western capitals. Moreover, the Ottoman Empire had to confront interior and exterior partition forces, which were already planning its end. Revolutions, wars and internal agitations had a very high cost for the state treasury, which was constantly borrowing money with the hope of a future recovery.

2.4 Political changes; nations, constitutions and the dawn of new politics

The French revolution had a major impact all over the world in several ways. The Ottoman Empire, which was ruled by the absolute power of the sultan for many centuries, also received this wind of changes[48]. The decay of the empire caused the decrease of the

47 **Özcan (2003)** dedicates, in describing the history of the guilds, several pages to iron manufacturing and to building materials. He makes clear that despite some medium sized enterpises – such as Samokov – there were not big export companies such as *Jaliffier and Jay* for instance a famous French company specialized in all kind of metal constructions from motorcycles to bridges.

48 The French Revolution may seem, at a first analysis an old event, belonging to a rather broad context. According to **Yerasimos** in **Dumont & Georgeon (1992:17 - 32)** the French Revolution, as this great architect emphasizes, triggered an entire chain of events and ideals which influenced the social stratification. Yerasimos also analyzes how the introduction of Western innovation was often used by the state as a way of forging the new modern Empire.

sultans' absolute hegemony creating a number of centrifugal powers. The central power was severely punishing riots but it had also unavoidably to trust the administration of its vast territories to local authorities with special powers creating therefore a vicious circle of rebellions and repressions[49].

Slowly with Selim III and more decisively with Mahmud II, several steps were made for the enforcement of the central government. In 1826, Mahmud II annihilated, with a bloody movement, the counter power of the *Janissaries;* he stopped with his armed forces the rebellion of Ali Pasha in Epirus but failed to prevent the creation of an indepented Greek state in the Balkan south. On the field of constitutions, Mahmud was the first to introduce constitutional changes. Just a little after his death, the first *tanzimat fermani*[50] was signed by his successor Abdulmecid II, according to clauses elaborated during Mahmud's II lifetime. These reforms on the one hand tried to push the Ottoman society to what was perceived by the ruling strata as progress and on the other, they attempted to interpret the trends of the Ottoman vanguards and to adapt the rules on their demands.

Furthermore, the tanzimat reforms aimed to the adoption of something already rising in many parts of the world; national identity. The Ottoman Empire had already experienced the secession of Greece and the Serbian revolution and more ethnic rebellions were ready to explode. Through equality, justice and safety promised to all citizens of all ethnic backgrounds and religions, the Ottoman rulers tried to offer an Ottoman national identity, the idea of belonging to a great empire as counter offer to the rising national – ethnic identity[51]. However, the tanzimat reforms were a matter of external pressure. The Western European countries were pressing for reforms, in their way, in order to ensure the promotion of their interests in the area. Therefore, the tanzimat reforms were also dictated by the Western European countries and not merely an intrisic process of the Ottoman Empire. Nevertheless, in this research it is more the internal pressure for changes which plays an important role, without neglecting amny frequent and, often, strong interventions from beyond the Ottoman borders.

Reforms introduced during the tanzimat period were almost always of western inspiration and most often based on the French law system. This French influence was the mainstream for many decades, almost a century, leaving a strong impact on both the Ottoman Empire and its successor: the Turkish Republic. French laws and trends were not simply an inspiration for reforms but also a source of symbolic capital. The reforms aimed

49 Detailed histories for each country and analyses for the revolution wave of the 19th century in **Poulton (1993)**.
50 Regulations decree
51 For an analytical approach on the aims of the tanzimat reforms concerning the national Ottoman citizenship see **(Berkes & Ahmad, 1998: 137 - 152).**

to the creation of western inspired sets of rules in several sectors of activity such as commerce, justice, education and many others[52]. These reforms however could not have provisions for all kind of activities of social and economic life.

The first innovation were the guarantees of justice and equality for all citizens indiferently to their ethnicity and religion. This basic rule, along with the will for Europeanizing the state, led to a series of collateral regulations on different fields of activities. Some of these concerned property; the state ensured the right of private property without the intervention of any intermediates. The common Ottoman practice, of trusting the administration of properties and the collection of taxes to local rulers or groups (practice leading to deficient application of the law) was gradually abolished. The state would control the circulation of the newly introduced banknotes creating therefore a stable economic context for national capitalism. The Ottoman state received its first loan ever from the UK in 1855 opening a circle of transactions with the global bank system.

The army was another important sector of reforms. All Ottomans should, after 1843, serve a four-year long military service in the Ottoman forces, whether Muslims or not. A national anthem and a flag were adopted one year later to lead the Ottoman troops to the battle fields. These troops accepted small rank officers from non Muslim minorities in 1847. Within the next two decades, with the assistance of invited Western specialists, the Ottoman armed forces were transformed into a totally western styled army[53].

Changes had also been radical in education. The preexistent higher institutions transformed their programs of studies according to the French and Italian university system. During the 1840s the Ottoman universities of Istanbul had a 'European' structure avoiding the interference of Islam. Fifteen years later, the reforms reached the secondary education with the creation of vocational schools which served as preparatory levels for the entrance of their students into industry. Since the 1860s, public servants were trained in special academies and so were women teaching in elementary schools. In 1870 the first Ottoman scholarship for studying in the West was given in a pursuit to limit the number of Western specialists in the empire through the formation of local professionals. In the field of commerce, the adoption of new, well defined trade regulations in 1840 and of commercial courts of law in 1851 gave rights to new groups and individuals which earlier had to find their way to economic prosperity through the guilds system.

These changes, especially the latter, were promoted within and thanks to a major change of the legislative system, which transferred jurisdiction appositeness from local

52 See **Birând (1955)** an analysis of the *Tanzimat* spirit and its deeper inspirations.

53 Many members of non-Muslim ethnic groups were exempted from military service and bought it off with the payment of a special tax. This measure helped non-Muslim ethnic groups to prosper.

kadis[54] to a centralized system of courts. Penal and Civil code, promulgated in two versions in the 1840s and the 1850s, was a copy of the French one and theoretically ensured the vigour of all these reforms. Reforms and laws were not any more the decision of the omnipotent sultan and his appointed viziers but also of a parliament, which though dependent from the *padishah*[55] constituted the first step towards a popular representation[56].

The last, really powerful sultan of the Ottoman Empire was the contradictory Abdulhamid II. During his long period of reign, the Ottoman Empire lived many dramatic moments. Equally oscillating, between the innovation and the tradition, the 'conservatism' and the 'progress', the last powerful monarch of Istanbul applied a strict and often severe repression aiming to ensure order and unity in the vast state. Although there was a kind of return to some traditional values, the flow towards westernization, both by the authorities and the people, was irreversible. The Ottomans were heaving, trying to reach the levels of European standards because, inter alia, they wanted to stop the increasing penetration of the great powers in their internal affairs. This penetration very often favored separatism, just like in the case of the Russian military intervention for the autonomy of Bulgaria in 1878[57].

Among groups enforcing modernization were also Turks who aspired to a national multicultural state which would succeed the dying empire. Actions of such groups led to the creation of the Young Turks who came into power in 1908. Once in power they further enforced the adoption of western inspired measures and rules[58]. At the same time, Macedonia was the theatre of violent clashes between Greek and Bulgarian armed groups and the Ottoman army. The former were fighting for the annexation of this area to their respective national countries. This violence often reached the cities. The peak of this struggle between these two parts and the Ottoman authorities, which involved many other armed bands, was a series of bombings in Salonika, one of which destroyed the building of the Ottoman Bank[59]. See on figures 2.6 and 2.7 instances of this fervent period. On figure 6, the *Circle des Intimes,* the organization supporting the revolution of the New Turks and on

54 Local judges

55 The Sultan

56 An important book about the tanzimat with special focus on economic and other regulations with direct references to precise articles and legislation has been written by **İnalcik & Seyitdanlıoğlu (2006)**. The book refers also to reactions to the imposed legislation and, in certain cases, to the ways the new rules were practically applied,

57 See for instance **(Crampton, 1997: 75 – 84).**

58 See: (**Selahattin, 1990)**

59 This was a major event for the Ottoman Empire and its last period. The symbolization of the building and its functions belong to the practices of the modern era. The building was among the first of that kind in the Eastern Mediterranean. **Μέγας (1994)** gives full details about the events and their context.

figure 7, the results of the bombing of the Ottoman Bank in Thessaloniki by Bulgarian anarchists.

The general aspect of the late nineteenth century's political scene is a constant Westernization that was creating a particular Ottoman amalgam of activities and identities. This process towards Westernization resulted in numerous transformations and it was accompanied by instability, violence but also from hope for the new to come in a fluid but always interesting environment.

As a conclusion, I should remark that a very important impact of the tanzimat reforms on society is connected to the end of the *millet* system. The millets were social groups consisting in people of the same religious doctrine; this division was the most crucial for the Ottoman authorities during the greater part of its existence. The reforms contributed to the dissolution of the millets, establishing an Ottoman citizen identity. These actions opened the way for the national identities and fragmentation with the results described above.

2.5 Technological changes; the constant pursuit of a place in the vanguard

The economic recession, which was already more than obvious during the late 18th century, was also caused by the slow rhythm of new technologies' adaption in the Ottoman production system. The Ottoman Empire, though in stagnation, could have eventually grasped the opportunity and create a technology - favourable environment. However this did not happen. A main cause for the scarce technological advancement was the unfavourable ambient towards novelty. It is rather strange, but in a period of such fervent changes, technology was not among the fields of special enquiry. Most producers, scientists and artisans were probably considering more convenient to introduce inventions and techniques from the West rather than to develop their own.

Many Ottomans often opted to adopt patterns and methods used in the "successful" and leading West rather than to test new local methods. Ottoman thinkers and scientists did not find the same Maecenas as Westerners did, on the one hand because the economic situation did not permit this kind of sponsorships and on the other hand because social and political agitation transferred the focus of possible sponsoring towards other directions[60].

60 See the introduction **(Önsoy, 2005)** for the adoption of foreign scientific and technological methods in the Ottoman Empire.

Experiments and applications of inventions were very often affronting the suspicion of the public, which was often affected by the instructions of the *Ulemas*[61]. Although this interference to cease this kind of researches was not possible in the late nineteenth century, it however obstructed the work of researches and inventors[62].

Therefore, the Ottoman Empire followed the West as an importer of technology, a practice which cost tremendously both in economic resources and dependence from abroad. Many Ottomans, whichever their activity was, massively introduced new techniques in the empire replacing old ones, very often disusing efficient techniques of the past just because they could not adapt them and make them collaborate with the imported. One of the important novelties, which also had a relation with the economic changes, was the establishment of big factories. Most of the first factories of the Ottoman Empire served the needs of the public sector such as the army and the court. In these factories massive production was applied, very often replacing the respective guilds of the sector[63]. The establishment of a factory meant a series of changes in every sector. New factories needed provisions in raw and elaborated material, logistic management and other services for the production process, on a bigger scale than ever experienced in the Ottoman Empire. Thus, every factory gave the opportunity to various individuals and groups to take advantage of the circumstances and to create medium and large scale installations with a rather stable clientele. These businesses, in their turn, further pushed things towards a capitalist direction[64].

Guilds were unable to react significantly to this great invasion of mass production methods. State owned and state - serving factories were not anymore the main steam engine of production during the second half of the nineteenth century. Private factories and companies of various sizes (depending on each sector of activity) appeared in all sectors of activity. This provoked various reactions from the guilds and had different impacts on their way to extinction. Guilds were often regulated by unwritten norms and were protected by certain state directives, which defined the number of their members and the prices of the raw material and the final product they produced. Furthermore, they had a strict internal hierarchy, which remained untouched for centuries. In the nineteenth century, it was indisputable that all this mechanism was not anymore livable. Guilds were either split in their consisting parts, that is, in separate smaller or bigger workshops, or adopted, according to the new commercial laws, the form of cooperatives. In both cases, with no clientele, membership and prices guaranteed, they had to enter into a strong

61 Muslim religious leaders
62 See **(Göktaş et al., 2009)**
63 A sector by sector reference of the guild's transformations: **(Ortayılı, 2005).**
64 **(Önsoy, 2005) p: 7 – 10,**

competition with emerging factories and increasing imports and therefore to adopt more or less new technologies and methods. These new methods were not necessarily qualitatively better, but in many cases quantitatively more productive or more efficient for the production of objects, the demand for which had risen due to the new trends[65].

Patents in the late Ottoman Empire were rather scarce not because of lack of inspiration but because of lack of means and funds. The few inventions achieved during the late Ottoman period were minimally systematic, very rarely commercialized or broadly adopted. They were more often used as a secret of success by certain companies and workshops[66].

In the field of architectural elements' fabrication, there was not a homogenous industrialization in every subsector. Some of the ornaments, ceramics for instance, were more industrialized. Big companies, such as Allatini in Thessaloniki, were established in various areas of the empire and produced thousands of items and often they even exported both to the East and the West. In other sectors, as for instance in the production of marble elements, there was no industrialization. Artisans, former guilds' members, were working in their private - owned workshops. The Ottoman Empire was one of the biggest producers of marble, exploiting numerous quarries in the Aegean and the Middle East areas. There was a very long tradition, since far antiquity, which bequeathed to the Ottoman artisans important techniques. Yet, due to the nature of the material and the general circumstances, marble production did not follow the same path ceramics did. There were not big industries not even big workshops, not bigger than to serve a small area[67]. (fig. 6 The Allatini Factory)

In the field of iron elements for architecture (railings, doors or iron columns) there was a development of medium sized foundries. Some foundries developed series of matrixes for mass production, a beginning of industrial design[68]. Either copying or converting western designs or creating new models, these small enterprises covered domestic demands with series of products. Nevertheless, since the creation of the final product, that is the door or the balcony railing, was in the hands of the artisans – assemblers, the foundries usually did not develop into big companies of architectural

65 Inventions and technological spirit were not something strange for the Ottoman Empire. However, it was the spirit and the contexts of the late Ottoman era which disfavored the propagation and the exploitation of these advancements. Furthermore, when a country is in high transition and recession, there might be a problem between the different sectors of economy. These and other conclusions about technology during the Ottoman period are presented in **(Dölen; Kaçar, 2003).**

66 **(Önsoy, 2005)**

67 Details about various sectors, the technical education for each of them and the influence of them are examined in **(Önsoy, 1984)**

68 **(Önsoy, 2005) p: 9 – 16.**

elements, but fabricated structural parts along with other iron objects and machinery spare parts according to the demands.

A big and very important exception in this general tendency was the creation, at the time of the tanzimat, of large scale state companies. This was the case of the ***Dökümcüler Şirketi*** (Foundries Company) and of the ***Demirciler Şirketi*** (Smithery Company). These two big companies were founded, in 1868, with an initial aim to serve the state demands and then developed into more independent enterprises. Both are considered as examples of know-how and western technology introduction. I suspect, without being able to prove it, that many cast iron artefacts found in the Balkans were produced in these companies[69].

During the late Ottoman period and its aftermath, artefacts technology in the Balkans was following the West. Only in the 1960s and 1970s some steps were taken towards a development of patents and novelties. In the 1980s there were still some old workshops producing old fashion iron parts, as I have witnessed, but they have been transformed in the 1990s and the 2000s in modern units, though very often by the import of western technology.

2.6 Influence of the socio-economic factors on the objects

There is a chain of actions and reactions, impacts and counter impacts that traverse the whole scale from the most general to the minute and vice versa. The socioeconomic context of the era influenced the ironwork of that period through a number of factors:

Social factors. The transposition of the aspired future to a western direction facilitated the massive introduction of western trends in the Ottoman Empire. This adoption of trends provoked the massive introduction of iron items installed on buildings similarly influenced by the West. Therefore, the opening to the West and the western culture opened a flow of design concepts from the West (often filtered by orientalism).

Furthermore, social changes brought new social strata to more privileged positions. These new strata had different aesthetic demands concerning their material environment, the architectural ironwork comprised. They further enforced pro-Western tendencies; they increased the number of consumers of new ironwork items and changed the geography of the elements' distribution in the cities.

69 The website of the **TÜDÖKSAD** (Turkish Foundrymen's Association) gives a general historical outline of the foundries activity in the Ottoman Empire (http://tudoksad.org.tr/osmanli-donemi/). In a liberal perspective **Çakmak** researches novelty ın Ottoman industry and the role of imported western ideas. The two companies mentioned above are such a case. See further **(Kapucu et al., 2009).**

Economic factors significantly affect the materiality and consequently, architecture and its elements. It is the economic conditions that permit or forbid the reifications of preferences and plans. Possibly, western trends would have been spread into lower strata, if these strata could afford them or contrary, if the oriental workshops could afford to produce and distribute their designs and trends in the interior or abroad in case they possessed bigger capitals, eastern trends would have influenced the West.

Moreover, transformations in production with the introduction of new machinery and the constantly decreasing price of metals due to intense mining, made ironwork accessible to a broader public. The iron elements, which were rather scarce in constructions, became more common during the late nineteenth century. There are interesting examples indicating it. In the city of Plovdiv, ironwork elements were rather scarce and mostly used on prestigious residences and public buildings. Since the end of the nineteenth century while iron architectural components became rather cheaper, many designers of prestigious buildings gradually neglected iron preferring more expensive materials. At that time the use of ironwork was widespread in middle and upper middle budget constructions. Changes on the price of metal and its products changed several times the social groups using them.

Political factors, though apparently irrelevant, had many impacts on the constructions and consequently on the ironwork. When, with the tanzimat reforms, equality was given to all citizens whichever their religion or ethnicity was, the way individuals and communities planned and constructed their buildings changed. Even if governmental directives are not effective enough to change old practices within brief periods of time, they do certainly facilitate things towards certain directions. A result of this change in politics was that, according to the reforms, all citizens had equal rights in constructions. So, in Jewish, Slav or Greek neighborhoods' residences could be larger, up to the standards legislated for Muslims. Consequently, within a very short time, numerous members of the non-Muslim communities who could afford it, upgraded to bigger and more expensive constructions. Bigger houses meant bigger facades and therefore more surface available for adornments and thus ironwork[70].

Modernization of the urban tissue was another decision that changed the cities and their history of architecture down to the detail. The demand of a 'modern' Hippodamean image, with rectangular shapes and diagonal subsidiary avenues, dramatically changed the aspect of the cities. New cities should not be, as Ottoman authorities and later national states' governments continuously propagandized, the unhealthy labyrinths of the past but they ought to be well maintainable urban environments providing all the necessary

70 For a very interesting analysis of architecture in large and small scale see **Kos (1995).**

facilities. They should be easily inspected by police forces and give access to fire brigades, something extremely hard by that time, in such a way that the frequent disasters and the riots of the past would be avoided. See for instance on figures 2.8 and 2.9 the new plans for Stara Zagora (Bulgaria) in 1878, just after the area's autonomy from the Ottoman Empire. The new plans were made under a twofold influence: on the one hand for modernization and on the other hand for the eradication of the Ottoman past.

This new plan led to the widening of many streets, very often in a quite peremptory manner. New wider streets gave space to bigger and better visible façades, more worthy to be ornamented with all kind of trendy elements. Fires were often seen not merely as disasters but also as opportunities to pass definitively to a 'modern' plan of the city in which new trended facades were not a rule but surely a generalized aesthetic and symbolic demand[71].

Political factors influenced the architectural elements and artefacts in an indirect but significant way. The whole spirit of the tanzimat reforms, which were regularizations of political decisions, pushed the Ottoman society to its course towards westernization. The tanzimat reforms, inspired by the West and indicating constantly to it, led various movements towards the West, making at the same time other fashions obsolete[72].

Technological factors also had impacts on the artefacts and the ironwork. First of all, new methods of iron production caused the decrease of the price of iron, making it accessible to more people. Moreover, the fabrication of the material itself became cheaper and more productive. New medium sized foundries could produce more standard items and new smith workshops could assemble easier those parts. Especially with the use of steam power and later of electricity, the assembly of railings, doors and other parts changed. Lathes, mills, sews and especially the invention of oxygen and electric welding, changed production in the last decade of the nineteenth century. Without considering it an absolute criterion, one could date iron elements by these or other similar details[73].

Architectural technology also plays an important role influencing the ironwork. In the 1880's, especially after fires, stone houses proliferated in all the cities of the Ottoman Empire and especially in the central or more prestigious districts. These *kagirs*[74] were very

71 An excellent book on Ottoman urban planning is **Γερολύμπου (1997)**. Especially **pages 59 – 78**, the context of the new concepts which led to the re-planning of the districts and the widening of the streets are thoroughly described. **Γερολύμπου** in chapter 4 goes further deep into the new decrees and laws which led to the re-planning of the city creating therefore a broad context in order to explain how the immaterial influences the material, in **chapter 4**.

72 **Denel (1982)** gives an account of the most important reforms introduced through new legislation by each sultan **(pp: 21 – 42).**

73 **(Önsoy, 2005) pp: 113 – 114.**

74 Stone houses

seldom combined with wooden ornaments and elements, in contrast to the *ahsaps*[75] of Istanbul or the adobe and wooden houses of Bitola or Thessaloniki on which wooden parts were rather frequent. Increasing numbers of kagirs led to a rise in metallic elements. Railings, shutters, fences and other parts were gradually substituted in such extend that at the beginning of the twentieth century, there were extremely limited numbers of wooden elements installed in most of the central districts.

During the initial years of the twentieth century (1910 for instance in Thessaloniki) reinforced concrete was gradually introduced in construction. This novelty had impacts on the use of various ornamental elements. For example, balconies did not need to be sustained by any architectural element since the new material could sustain itself. Iron or marble brackets used to support the balconies were not anymore necessary. This means that brackets on concrete buildings served only ornamental purposes. This limitation of their role, limited gradually their number, until their almost total disappearance after the Second World War[76].

75 Wooden houses
76 **Γερολύμπου (1997)**

Chapter three: Ironwork in the Balkans

In this third chapter, I will present the four cities researched, and details of their main iron typologies. The order of presentation is: Bitola, Istanbul, Thessaloniki and Plovdiv. This order was intentional. Bitola is the smallest of the four cities; most of its ironwork elements belong to mainstream typologies and it is therefore an excellent case to begin with since the elements can be more easily classified and analyzed before passing to more complicated cases. Furthermore, the small size of the city permits an easier access to the urban distribution of the elements. Istanbul will be the second city considered. Although it is by far the largest of the four, it has more compact, preserved areas of Ottoman architecture and therefore allows for greater analysis of both the ironwork elements and their urban environment. Thessaloniki is the third area to be considered for, although sharing similarities with both Bitola and Istanbul and between them in size, Thessaloniki is a quite 'unknown' city. The great fire of 1917 and the massive reconstruction of its historical core have left little evidence about architecture and even less evidence of its ironwork and other architectural elements. It will, therefore, be presented after the analyses of the ironwork in Bitola and Istanbul and in the light of the results obtained them. Plovdiv will be the last to be considered and, for reasons indicated in the first chapter, will be presented in an appendix. Further, Plovdiv is located in Bulgaria, the independence of which in the 1880s, created a distance and isolation between the new Bulgarian state and the Ottoman Empire, an empire in which the three other cities belonged for three more decades. Thus, Plovdiv will be used as an example of how state boundaries might have impacted on architecture and the iron ornaments.

The presentation of each city will take the following pattern:

- The city
  - i) A brief and general presentation of some pertinent historic and geographic information of the city will be given.
  - ii) Details of the urban plan will give a description of the layout of the city, its districts, the type of constructions in them and their population. It is an essential part because it gives the framework on which the buildings and the elements are located.
  - iii) In the discussion on the architecture of the city, there will be given a detailed report of the main architectural styles and trends in the city during the late Ottoman era. The architecture is the vehicle with which the

ironwork and the other architectural elements have a strong dialectic relation. In this section I will concentrate on ornaments and their combinations.

- The ironwork

  i) Ironwork – quantity; the ironwork elements are not equally distributed in the city, districts and areas often have important differences and these differences are discussed in this part.

  ii) Ironwork – quality; the distribution of ironwork elements varies not only in density of items but also in quality. Quality is a quite difficult concept to define and I will do so after having concluded this structural description.

  iii) Ironwork - forms; this is the main core of the presentation of ironwork. The items are presented as objects > categories > classes > typologies. An explanation of this classification will be given after the outline of the structure.

  The order of ironwork classes will follow this order: balcony railings, brackets, window railings and miscellaneous.

Cases:

Several buildings will be analyzed with a special focus on their ornaments and especially on ironwork. The purpose of this is to present examples of how the architectural elements were used on buildings of various types and areas, and to show combinations and trends.

- Conclusions:

  Observations from the above parts will be analyzed and combined and their results will be presented in this final part. The conclusions from the four cities, along with other examples, will be used in this chapter in which the use of iron in the Balkans and the architectural ornamentation in the social sphere will be discussed.

The above structure outline has two points which need further discussion: the first relates to *quality* and the second to the *classification* of the objects.

Quality

Quality is not easily defined, and in my discussion, I will limit my definition of it to that which has to do with the ironwork and the ornamental architectural elements.

Abundance of material, which is an easily measurable and obvious feature, cannot be always an absolute criterion. Although one may bring many examples which indicate that there is a relation between the quantity of material per surface unit of a building and the 'quality' of the object, there are a good number of cases which contradict this rule. For instance, many important buildings of extremely high budget and prestige, such as the famous Dolmabahçe Palace and the Galatasaray Lyceum, have massive, highly ornamented iron fences, which are combined with the high quality of the buildings' facades and other elements. Thus in these cases an abundance of material is connected to quality, while in many other places, such as Cihangir in Istanbul and the Malta Ceddid Market in Thessaloniki, quality ironwork was often connected with scarcity of material. Further, given the shifts of trends, certain fashions demanded more flexible forms, like laces and spirals, and in such cases an abundance of material was not necessarily connected to quality.

The quality of the material, which has to do with the quality of the alloy, plays some role in the 'quality' of the ornament. Better material allows higher plasticity of the forms and therefore better final results. However, very often it is not easy to determine the quality of the alloy under the layers of the paint and after the ornamentation process.

Complexity of forms is another issue which is connected to what often is considered quality. More complicated forms require a greater investment in time and effort to produce, an 'investment' which raises the price of the object and consequently shifts it to a higher category. However, this is only the case with certain trends, baroque for instance. Other trends such as some modern trends of the late 1920s, demanded simplicity in forms, and therefore complexity is not a strong criterion.

Detailed finishing is another criterion which may indicate quality. This presupposes an 'ideal' perfect form which is materialized, well or badly, through the details of the iron artifact. This is a critical and important criterion, yet it depends on an entity, the 'idealized form', which lies beyond the material.

It seems therefore, that quality is a variable combination of all the aforementioned in fluid proportions of each to the other: quality depends on the context which creates the artefacts. Depending on the properties each era's trends demand from the artefacts,

quality definitions slightly change. Nevertheless, one can somehow recognize in past trends, which belong to former contexts, several 'quality' items because, although fluid, the criteria of quality have certain common lines.

In this third chapter I will hold a moderate line defining quality. I will neither consider quality criteria absolutely relative, nor stable and inflexible. I consider them as much as possible in the context of the era concerned, though viewed through our contemporary perspective.

Classification

The question of classification is very important to resolve in order to proceed to the subchapters. The ironwork elements are presented in groups, the criteria for the definition of which can vary significantly according to the perspective and the purpose; accordingly classification can be based on material, era, style, function and on many more parameters and criteria. In this research I will follow the following classification: objects > classes > categories > typologies.

'Objects', in this classification, are the parts which perform a certain function for example, balcony railings are one object, brackets another one.

'Classes', as used in this research, are sets of objects in their different material forms, so brackets can be made of iron, wood, marble or plaster. In this essay the main focus is on iron elements. Other classes may serve to sustain certain arguments, but they will be only lateral elements in the analysis of the buildings' ornamentation.

'Categories' are broad sets which share several general characteristics. Thus, curved bars railings, given their large numbers in the cities and their variations, form a broad set of similar but distinguishable forms.

Finally, 'typology' is a certain form, with its possible slight variations, which once defined can be recognized and named without great doubts.

3.1 BITOLA

Bitola is situated on the foothill of the Pelister Mountains, on the Pelagonia Plateau. This area, which lies almost 700m over the sea level, is now divided between Greece and the Republic of Macedonia. During the long years of the great empires, the Roman the Byzantine and the Ottoman, Bitola played an important role as a transportation nexus and a commercial center[77], see Map 3.1.1.

In the nineteenth century Bitola flourished, its strategic location and its good connection to the main port of the Macedonia–Thrace region on the Mediterranean, Thessaloniki, enforced its importance. Commercial growth brought economic development and with it a flourishing in various sectors of services, crafts and arts, including architecture[78].

The Ottoman Empire's national and religious urban mosaic was well represented in Bitola; Slavs, Turks, Greeks, Jews, Vlachs, Albanians and Gypsies, along with other minor communities and individuals, forming a small panorama of the Ottoman communities of the Balkans. However, the path towards development and growth was hindered by the two Balkan Wars, and Bitola, whose progress was promoted by the unity of the Macedonian hinterland, lost a great part of its importance because of its surrounding area's fragmentation[79].

The next shock for the city was the First World War. During the battles between the Entente troops camped in the Thessaloniki area, and the Central Powers' troops, half of Bitola's buildings were destroyed; a great percentage for any city. Many members of the ethnic minorities fled, especially those who could find a home in their respective national state, and during the years which followed the annexation to Serbia, Bitola declined to the status of a peripheral city of local importance[80].

3.1.1 Notes on Bitola's urban plan

Bitola, seen on Map 3.1.2, to which all the numbers in the section below in **bold** refer, is situated on the banks of the Dragor River. Most of the city's districts are

77 **Димовски – Цолев et al. (1985)**

78 **Димовски – Цолев and Грамосли (1984)** present in their article detailed catalogues of the communities in the region of Bitola during the nineteenth century. The most numerous communities were the ones mentioned on the main text. However, there were many other communities, smaller in numbers, like Slovenes, Cirkassians and others. There were slight differences between the populations of the villages surrounding the city and the city itself but most of the communities were represented in the city of Bitola.

79 **Димовски – Цолев et al. (1985)**

80 Ibid

situated on the plateau with just some of the outermost districts lay on the lower hills of the mountain, number **1** on the map. The map also shows the center of the actual city, an area which coincides with the old parts of the city, and the parts where most of the houses under examination are located.

Number **2** on the map indicates the position of Dragor River on whose banks important Ottoman public buildings were built; two important mosques, Yeni Camiya and Isak Camiya, and a *Bedesten*[81] were the major constructions on both sides of the river. Area number **3** indicates the main square of the city, which is situated on the south bank and where many prestigious buildings are located.

From that point and towards the south, the main street of the city divides the center into two parts; this is Marshal Tito Street or more colloquially, the *Shirok Sokak*, number **4**. Its width is on average 14 meters, and it was for decades, the main commercial area of the city. Shirok Sokak leads to the south to the National Museum, number **5,** formally in Ottoman times, an army officers' Military School. As Bitola was gaining importance, this main street, whose continuation leads to Thessaloniki, was the area of the most prestigious shops and offices. The importance of Bitola's strategic position during the last years of the Ottoman era, the Balkan Wars and the First World War, brought thousands of soldiers and officers in the city and promoted services and trade associated with their presence. At the same time, the presence of so many foreigners reinforced the Western influence on social activities and trends, in arts and design[82].

Prestigious houses were built on the roads situated on both sides of Shirok Sokak and especially on the western part, number **6**. These houses belong to various styles and have both local and imported influences. The main traditional market is located on the north bank of the river within a very short distance from the main square. This market comprises many one storey small constructions in a labyrinth of narrow streets, these buildings having a direct relation to the styles found in the other districts of the city, though being more modest in terms of construction budgets and therefore in the materials used, number **7**.

Pervi Mai Avenue follows Dragor River on both its banks. Important commercial and private buildings are built on this avenue . Commercial buildings and shops are found mostly in the area between numbers **2** and **7**, i.e. in the part where the open market neighbors the river and on the opposite side. Other commercial buildings are built on the south bank, at the part of the avenue shown between numbers **3** and **7,** while the more prestigious private houses and buildings of Pervi Mai are situated on both sides

81 Market of precious goods

82 See for instance in (**Грчев, 2003), p: 60 – 64** for the importance of the activity of foreign architects called both by

of the avenue for a distance of 500 hundred metres. Further away, these houses are scarcer, and more modest constructions become more frequent on the westernmost and, particularly, on the easternmost part of the avenue.

The center of the city is not very extended; Pervi Mai Street being about 750 metres with old houses all along its length. However, this street is a kind of a central perpendicular axis, and furthermore, districts with higher or lower densities of old houses do not extend more than 500 meters on both sides of the Shirok Sokkak. There is no trace of any Hippodamean plan in the center of the city; it is a network of irregularly shaped narrow streets with a few wide roads and few, and small, open public spaces. In many aspects Bitola has maintained the same plan it had during the Ottoman period; buildings of the late nineteenth and early twentieth century followed the Ottoman plan, since architects could not, on their own, exceed property boundaries, boundaries which defined the streets and, in turn, were defined by them. The highest densities of prestigious constructions are therefore situated on Shirok Sokak and Pervi Mai streets, and in the districts on both sides of Shirok Sokak. With some important exceptions, it can be argued that the most important buildings were situated in the core of the urban tissue environment and going further afield, construction budgets become lower. The same happens on Pervi Mai Street; more ornamented and prestigious buildings are situated in the middle of the avenue, whereas as one goes to the outskirts, buildings become lower in cost and poorer in ornamentation. However there are some minor centres of expensive constructions in peripheral areas, for instance at the northwest part of Pervi Mai street and in a luxurious, for its time, neighborhood at the northeast of the park, that to the right of number **5**.

3.1.2 Architecture in Bitola during the late Ottoman era

Architecture in Bitola is, without many important exceptions, akin to the architecture of other Balkan cities and contains only a few buildings more prestigious than the average level of the mid–size Ottoman cities' style of the era. Bitola is, therefore, an excellent case for the study of the mainstream Ottoman architecture and an easier field, compared to other, larger cities, for the research of ironwork and its relations with the ornamentation, morphology of the buildings and architectural trends[83].

Ottoman authorities and local entrepreneurs.

83 **Грчев (2002)** and **(2003)** argues that there is a *hybrid style,* a broad Macedonian eclecticism inspired by the West but materialized in the Balkans, which can be seen as an homogenous subdivision of the European architecture. He also thinks **(2003) p: 39,** that Thessaloniki should be considered as the epicenter of this style, which is then manifested in variants in the Balkans and especially Bitola. **Грчев** discusses morphology and facades, but he does not enter in the research of particular elements on them. This research shows that he was right in his

Most of the buildings in Bitola belong to the mainstream styles which were widespread in the Balkans during the late Ottoman era. Like many other cities, though, nevertheless, with some interesting exceptions, Bitola is a patchwork of styles, both imported and local, the latter including neo-classical, *Bitolian, and* eclectic, all spread throughout the city, and representing periods from the mid nineteenth century to date, and different uses, both commercial and public[84].

I shall proceed to a brief description of the architecture in Bitola, its main styles and how these styles are distributed in the urban landscape. Although architecture cannot be easily categorized, and urban space does not usually contain only one style of building, I will attempt an analysis that, though it cannot set absolute norms, will provide general guidelines for reading the urban environment and its constructions.

Bitolian architecture was subject to strong influences from Western styles, which affected both the morphology of the buildings and their ornaments, at the same time as other Ottoman cities of a similar size; though later than in Istanbul, Bitola witnessed the introduction of Western influences at the same time as Plovdiv or Kavala,, Most Ottoman houses were demolished during the late Ottoman era and as a result, only small islets and isolated Ottoman buildings still survive[85]. In the late 1880s and especially in the 1890s, a Bitolian style could be already recognized; a style which occupies a significant area at both sides of the central Shirok Sokkak

I have defined a Bitolian style because of its proliferation in the city and its frequent repetitions throughout more than two decades, especially in the middle and upper middle class areas[86]. These buildings are eclectic, in a general perspective, because they combine a variety of neo-classical, neo-renaissance, Viennese and other elements. However, their repetition, which led to a proliferation of the style, was not an eclectic practice. In other words, the style was eclectic as an initial concept that emerged through the different influences on the local architecture, but the repetition of the style is not similarly eclectic because the architect does not select from different styles but rather imitates an existing, mainstream trend.

The building on Osmano Street 20, shown in Figure. 3.1.i, is a very typical construction for Bitola, a construction which is very frequently repeated in all the area of *Bitolian* houses indicated by number 1, in the light blue area on Map 3.1.4. It is a residence

classification, for the elements in Bitola and Thessaloniki are common enough to sustain this supposition.

84 **Грчев (2003)** therefore considers that this hybrid Macedonian style (or style of Thessaloniki) was forged through the local renegotiations **(p: 47)** of broader Western European trends **(p: 61).**

85 **(Грчев, 2003) pp: 61 – 63.**

86 **(Грчев, 2005)** thoroughly describes this typology of buildings **(pp: 12 – 14)** along with all the evolution of the morphology leading to them. **Грчев** does not name this style Bitolian because, as I consider, he has to deal with buildings of many adjacent cities (such as Ohrid or Prilep)

of medium – high budget, which bears full sets of the most common elements. There are three levels; a basement, a ground floor which is raised by the basement by one meter, and a second floor with two balconies. Ground floor windows usually have railings, though in this case it does not, and often mouldings, frequently displaying neo-classical or neo-renaissance influence. At both sides of the main entrance there are pilaster strips repeated as cantons, these pilaster strips ending with Corinthian style capitals, a very common element in Bitola. The entire surface of the walls, the pilasters included, is stripped by plaster platblands. With slight variations relating to the depth and the width of the platblands and to the proportion of the covered surface, this common practice, a Viennese influence, was often repeated on Bitolian houses

The ironwork belongs to the common typologies. In contrast to other styles of building, Bitolian middle class houses usually had balconies, and consequently balcony railings and almost always brackets. However, because of the technical restrictions of the era, the balconies of the houses were not bigger than these shown on the picture; they could not be easily supported.

Figure 3.1.ii is another example of the same style, through another building of relatively lower budget compared to the one above. It is located closer to Shirok Sokak, near the National Theater. The general concept is the same though the size of this building is less than the building on Osmano Street. There are, however, noticeable differences in ornamentation, not so much in the morphological combination of the elements but rather in the typologies of the elements involved. There are again plaster cantons, though with simplified capitals, also window moldings, platblands and one balcony instead of two, one having been transformed. Additionally, both the balusters and the brackets belong to mainstream typologies, like those on the building of Osmano Street. It can be seen then, that moving lower in budget there is a substitution of some typologies of objects, such as pilaster capitals, window moldings etc, while at the same time there are typologies of the same level for other objects such as balusters, brackets etc. Therefore, there is a morphological similarity between the buildings but served by different typologies.

Going further down in budget and to even smaller buildings, one can see the main Bitolian concept but with some modifications to the smaller size. That is the case of the building on Borka Levata Street 5 in Figure.3.1.iii. This building is built on a very limited area and, when seen from the street, has only one visible façade. There are no balconies and consequently no balusters. The first floor is extended, creating a type of projection which is supported by mainstream brackets, and the windows have moldings and modest neo-baroque plaster ornaments. The building follows the main Bitolian concept, adapted to the prerequisites of the space and the budget available. In contrast to

the two previous buildings, there are window railings of the commonest type. Window railings are installed on the three quarters of the Bitolian houses.

The Bitolian houses have a relative higher concentration in the 'light blue' areas, 1 and 1a shown on Map 3.1.4. The colors on the map do not represent absolute dominations of a particular style but the relatively higher concentration of a particular style in a zone.

The dark red area on the map, Shirok and Dragor, is where the most important buildings of Bitola were built and where most of the innovative ideas were introduced. In contrast to the Bitolian urban style, which is found mostly in residential areas, styles in this area and especially on Shirok Sokkak, served both commercial and residential purposes.

The building in Figure 3.1.iv is built on Shirok Sokkak, at the crossroad with Partizanski Street. This kind of buildings is an adaptation of the Bitolian style to the commercial character of the area and to the higher prestige of this central street. The façade is ornamented with cantons and plaster strips as in the previous cases and at their upper part, the pilaster strips end to Corinthian style capitals that, in this case, are starkly accentuated by the use of the golden color. The window moldings are the highest quality discussed so far; plaster reliefs having the shape of colonettes and elaborated details. There is only one balcony despite of the fact that the size of the house could easily permit two; this reduction of balconies frequently occuring on commercial buildings or on buildings of mixed use, a practice leading to a decrease of ironwork elements. The iron parts of this building, a set of brackets and the balustrade, belong to some of the commonest types. It can be, thus, seen that, in this case, the higher quality of the building is manifested rather through the plaster elements than through the iron ones.

The building is a commercial one and therefore the ground floor contains shops that have shop windows instead of ordinary windows, hence there are no window railings on this façade and indeed, very few window railings on all the length of Shirok Sokkak. Consequently, it is the use of the area is put that excludes an object, and all its typologies, from the majority of its buildings.

However, not all the buildings on Shirok Sokak follow this general 'Bitolian' morphology in its enhanced or commercial version. It is actually on this street and on the banks of Dragor River where most of the exceptional buildings were erected, for instance the building of Figure 3.1.v., a more direct implementation of the Austrian style, particularly its roof and windows. The building shares morphological features with some buildings in Plovdiv but with a significantly lower number of constructions in Istanbul and Thessaloniki. (The influence of Austrian architecture was stronger in Bitola and Plovdiv,

and generally in the north of the Balkans, than in Istanbul and Thessaloniki, where the Italian and the French influence were more visible. If buildings of this, or similar styles, had proliferated, the total number of ironwork elements would be significantly less.)

Shirok Sokak was not the only area of high prestige in Bitola. The Pervi Mai Street, on both banks of the Dragor River, was also an area of important residences and public buildings and there are two important buildings that show the foreign influences on the Bitolian architecture and the importance of the area.

The first building is Marshall Tito Gymnasium, initially built in 1892 as the private residence of Sali Pasha, the local army commander. It was later converted to a high school for the Public Administration and then to a Gymnasium after the end of the Ottoman period in Bitola in 1912. The building has many neo – renaissance elements on the main façade, as shown in Figure 3.1.vi, and a stronger neo-classical influence on the northern façade. On this building also contains another interesting combination of styles and typologies. The ceramic balusters of the facades' first floor, seen in Figure 3.1.vii, belong to the main typology that is widespread throughout the city and the entire area of the Ottoman Balkans. In this case, there is a further coincidence of typologies: the extremely rare pilasters of the Gymnasium are combined with a typology which is quite frequent in the most prestigious areas of Bitola, that of the ceramic baluster. This ceramic typology is far commoner in Thessaloniki, where it reaches even the low status areas, whereas it is extremely rare in Istanbul. Therefore, the ceramic baluster, used in this case on one of the most important buildings of Bitola, was less frequently used in the most prestigious areas of Thessaloniki[87].

The residence of the Sultan stands on the same bank of the Dragor River not very far from the Tito Gymnasium. It was built in 1911 as a provisional residence of the Sultan Reshad V. After the annexation of the area to Yugoslavia, it was converted to the building of the Public Archives and later, in 1979, to the Senate House of the local university. The building, particularly in terms of its morphology, is a hybrid version between the main Bitolian style and the neo-classical style of Bitola.

The residence bears common typologies of ceramic balusters and railings, and rare pilasters, decorated by plaster cover with channeling. The plaster ornaments of the second floor give a late renaissance touch to the façade and are unique in Bitola. This house is an interesting example of the symbolic expression of the power and was appropriate for a provisional residence of the sultan in Bitola. The residences of the sultan in Istanbul are incomparably bigger, higher in budget and unique in ornamentation and

87 For a detailed morphological analysis see **(Грчев, 2003) p: 67 – 71.**

wealth. The palaces of Istanbul are not merely residences; they are not simply an appropriate dwelling for a wealthy person but also a symbol of the sultan, his power and constitutional role. It is the brief duration of his Bitolian stay and the low importance of this Macedonian city within the Ottoman Empire that permitted it to be a sultan's residence. The Sultanate, with all its power and symbolism, was still resident in Istanbul even when the sultan's physical person was in the house on Pervi Mai Street.

There is a morphological resemblance between this house and a set of neo-classical houses in the center of Bitola. In the area at the east of Shirok Sokkak, there is a small set of houses in a high class area, built with high budgets. These buildings are built closer to a neo-classical style, yet, with many important simplifications compared to the stereotypical neo-classical forms, see for instance the building on Ohridski Street built in the initial years of the 1900s shown in Figure 3.1.x and located on area number **3** shown in dark blue on Map.3.1.4. The pediment of the second floor and the similar moldings of the windows, show a direct neo-classical influence, as does the balustrade of the main entrance with its pillars. However, these pillars are highly simplified: there are no capitals but only the abacus; there is no channeling and the whole stands on a very simple plinth. The same is the case with the minimal dentils of the cornice. Iron elements are not used on the building. The Bitola's neo-classical style did not favor ironwork, favoring instead ceramic and plaster elements. Marble elements are extremely rare in Bitola and consequently rare also on its neo-classical buildings and unlike in bigger cities and in their prestigious districts, where marble elements are more frequent, the result in Bitola was an imitation of the neo-classical style using cheaper materials, More buildings of this general type are built ion this vicinity and on the other side of the Shirok Sokak[88].

The heart of the city and the areas presented previously are surrounded by a zone of medium – low budget residences, number 7 shown in light red, on Map 3.1.4, some of which are simplifications of the Bitolian mainstream styles; others being even simpler and bearing minimal or no ornaments.

The building in Figure 3.1.xi located at the east of the Shirok Sokak near the Pervi Mai Street and the Dragor River,is an example of these simplified versions on low budget buildings. Evidence on the building indicates that it was possibly built in the 1910s. There are plaster strips, two cantons and a central one, of a rather minimalist style, and the friezes on the first floor and dentils are very simple, belonging to a typology that is quite widespread in many areas and in different styles of houses in Bitola. There are no balconies and the only iron elements are the window railings, which belong to the

88 **(Грчев, 2003) p: 85 – 86.**

commonest type.

There is a set of eclectic houses, which have some differences from the mainstream Bitolian urban style and they could be characterized as 'more eclectic'. An area with a higher concentration of such buildings is that at the east of Shirok Sokak located at number **5,** yellow color, on Map3.1.4. On the façade of the Episcopate's building, an interesting combination of various styles' elements creates a highly eclectic result. A French roof, a baroque crown, neo-–renaissance elements on the windows, the already known common balusters and more, are proofs of this mixed and rare, for Bitola, style. The only iron elements are the fence and the gate, Figure 3.1.xii. The example of this building along, with other examples such as the neo-classical house discussed previously, reinforces the idea that higher budget constructions have less ironwork elements, which are also of lower quality[89].

Not far from this area, there is a zone of by Bitolian standards, high budget building. Some of these buildings are highly eclectic and there are two adjacent areas, areas number **5** and **9 on Map 3.1.4**, of higher eclecticism in close vicinity. These buildings are mostly found on the Pervi Mai Street opposite to the old market, area **9**, shown in light green. A very prominent building of this area is that shown in Figure 3.1.xiii, note in particular the various kinds of crowns on the windows, two different styles on two different floors, and also the onion – like endings on the window moldings and the ceramic balusters. These ceramic balusters are not the same as those discussed before but similar to them though with slightly different decoration as is seen in Figure 3.1.xiv.

In the case of these buildings, there are balconies with full sets of iron elements; brackets and balusters of the common typologies. A feature that is quite widespread in this area of commercial buildings, though not the case for these two is the prevalence of the sheet-iron doors. Either as a matter of safety initially or as an aesthetic choice, iron doors became a mainstream for commercial buildings, though not for residences. On these buildings one can still see the old shop windows with their curved wooden frames and their iron shutters, the kind of shutters that can be seen on Shirok Sokkak's old photos. However, renovations during the twentieth century have left no material trace of them.

At the other side, the north bank, of the Dragor River, there is the Old Bazaar with its small warehouses and shops, the buildings of which are very modest in terms of ornamentation and of materials used, as shown in Figure 3.1.xv showing a central point of

89 The building was built in 1902 **(Грчев, 2003) p: 72 – 73,** by **Kuzman** who came from Sofia especially to build it. It was a quite common practice among Slavs to share architectural ideas through hiring the same foreign or local architects in order to promote specific styles. However, the name of the architect does not appear in the relative literature, such as, for instance in **Ганчев, Доичинов, Стоянова (2002)** where a detailed list of architects and their works in Bulgaria is contained. It seems that either **Kuzman** was a minor architect for whose role was exaggerated in the Macedonian literature or that he was erroneously not comprised in the book.

the Old Bazaar. The railings of the shop on the left are a 'modest' version' of a mainstream typology, as is the case for the plasterwork and the other elements. In the Old Bazaar there are not any 'local' typologies, that is, typologies unique to this area. Thus the Old Bazaar is an example of how typologies may be diversified according to the budget available; in this case there was a reduction in the budget for the ornamental material, which followed the reductions on the sums spent on the entire construction. In contrast to other cases in which reduction of money spent on the construction brings a shift to other typologies of ornaments or to a rejection of many façade's elements, in the old Bazaar there is the phenomenon of change 'within the typology', that is, in its quality.

There still exists a small area of several older Ottoman houses, built in the Macedonian style of the early nineteenth century. This is the area **4,** shown in purple, which is close to the area of the prestigious buildings. There is one more islet of Ottoman houses to the north, close to the river and several isolated buildings, especially on the western and the northern part of the city, although most of them are in ruins.

The house on Leninova 57, seen in Figure 3.1.xvi, is a typical residential building of the Macedonian hinterland of the period before the tanzimat. The characteristic feature of the building is the projections of the first floor which create four angular and symmetrical oriels. These projections are supported by wooden – plaster brackets, which pertain to a very common Macedonian typology, a typology which became extinct later with the use of iron. Some structural parts, the cantons for instance, play both a static and decorative role. Besides these elements, ornamentation is based on the exploitation of structural parts as ornamental elements. There are no iron parts on this house, an absence which was a not uncommon practice for this style of buildings and which illustrates why the use of ironwork made a big difference when it became mainstream in the late nineteenth century. This does not mean that there were not iron elements on these houses, but rather that their ironwork elements belonged to the 'simpler' and commoner typologies, or to older typologies which had survived until the mid nineteenth century as 'fossils'[90].

At this point, I must once again emphasize that the classification of the neighborhoods and the connection of the styles to the colours is not as strict as it may appear on the map; for example the buildings surrounding the one I have already discussed is surrounded by newer constructions. The colors on the map represent higher concentrations of certain styles and not absolute boundaries; there are exceptions, osmoses and new constructions throughout the areas of the map.

90 The organization, the morphology and some construction details of this kind of buildings is given by **Николоска (2003).** Most of these buildings, as Николоска argues, can be classified into main categories depending on the area or – after a more detailed inspection – to the artisan who was responsible for its construction given that still in the late nineteenth century many houses were not made by architects.

I shall conclude this short presentation of the late Ottoman architecture in Bitola with two public buildings, both of which are landmarks for the city and both located on the southernmost point of the Shirok Sokkak, where this main street neighbors the municipal park.

The first building is the National Museum, formerly the Military Academy shown in Figure 3.1 xvii. The Academy was built in the early 1880s and it is a mixture of oriental and occidental features. In contrast to the House of the Army, the Military Academy bears oriental elements and details because it preserved a past trend, see Figure 3.1.xviii. In other words, while on the House of the Army oriental details and ornaments are the outcome of an 'oriental–revival' process, ornaments and details on the Military Academy are remnants of past as shown by the case of the trefoil windows arches. Other parts, such as the crown of the façade, are an amalgam of oriental trends and baroque influences of the early and middle nineteenth century. This influence is commoner in Bulgaria and the *Vazhradenski* style[91] and in public constructions of Istanbul as seen in many of the fountains all over the city.

The second building in question, the House of the Army, was built in 1911 with the purpose of hosting the officers of the Ottoman Army, Figure 3.1.xx[92]. The building is a mixture of western styles with respect to the morphology and the composition of volumes, and orientalist ones with respect to the ornaments; in particular the plaster reliefs seen in Figures3.1.xxi and 3.1.xxii. This building is unique in Bitola though there are similar buildings in other cities and especially in Istanbul, for instance in Eminönü and in Kadıköy, the National Conservatoire. It seems that this impressive building did not influence the city of Bitola and the circulation of ornaments; not only is the building unique within the city, but its elements also are unique and did not trigger any imitation.

91 The architectural style of the Bulgarian Resurrection of the nineteenth century's second half.
92 **(Грчев, 2003) p: 90 – 95.**

3.1.3 Ironwork in Bitola

Ironwork areas; quantity

Late Ottoman architecture is well preserved in several, rather untouched, areas of Bitola and although many buildings are missing, it is still possible to gain a good idea of the area's architectural styles. Using the pattern of the distribution of the iron elements throughout the city, it is easily observable that the main bulk of iron elements are installed on buildings of the late Ottoman period, and, as can be seen in old pictures and through the few remnants of this period, earlier buildings, mostly those built before the 1860s, scarcely bear any metal elements. In certain limited areas such as Leninova and Kliment Ohridski Street where more than single, isolated, buildings have survived, the architectural and ironwork aspect are poor in iron elements.

Figure 3.1.a

The difference between the older and the newer styles can be seen by comparing the difference between the house in foreground of the image above and the mainstream Bitolian urban houses as analyzed in the previous chapters. This house is of a 'purer'

Ottoman style with very few western influences. It does not have any balconies, although balconies of several forms were not unknown in the Ottoman architecture as seen in Figures 3.1.1 and 3.1.2, and it does not, therefore, have railings and brackets. Very often in this kind of house, fences also are built of stone. The only iron element on this house is the famous Ottoman knotted railing (lokma parmaklik), which was very common throughout the Ottoman Empire[93].

The result is that areas with more houses of this kind have lower concentration of iron elements, though the mainstream Bitolian house of the late Ottoman era usually did have at least one balcony, railings on the first floor windows and, very often, brackets.

The majority of the buildings in the old districts, though with some areas of exception as already discussed, follow this general type; the areas in question being the first part of Leninova close to Shirok Sokkak, some more buildings a few meters further along in Kiril I Metodi Street, and a few further buildings an equal distance on the east in Rusveltova Street, as seen in Figure 3.1.3. In this latter area with highly prestigious Greek and Slavic houses, the slight predominance of certain neoclassical characteristics, such as pillars, limited the use of iron elements as in Figure 3.1.4. Given that the total volume of these buildings and the quality of the materials used is quite high by the average Bitolian standard, it could be argued that in the case of the city centre, prestige was often associated with an eclecticism oriented neoclassical approach, which disfavored iron elements. These buildings were constructed in the1890s and 1900s, which means that there were contemporary with the typical Bitolian house[94]. This leads to the conclusion that in the above mentioned small areas, a different type of ornamentation, associated with the elite, was promoted as a parallel alternative to the mainstream. This is an indication that in Bitola, just as in several

93 **Uluengin Fatin, Uluengin Bülent and Uluengin Mehmet (2001)** give details about architectural elements in the classic Ottoman architecture. The knotted railings are among the main elements **(pp: 110 – 113).**
94 **Грчев (2003)** notices this area of high prestige influenced by a late neoclassicalism in **p: 101 – 106.**

districts of Istanbul, upgrading properties to a more prestigious style was accompanied by a relative reduction on the use of ironwork. A less stark reduction in the use of iron elements also occurs at the northern part of Shirok Sokkak, which was, and still remains, the most prestigious part of this central street. In this case, there is a decrease of ironwork associated with a less ornamented style of the building produced by means of a substitution of certain iron elements, mainly brackets, with their plaster and ceramic competitors; shown in Figures 3.1.5 and 3.1.6. In the south part of the same street, there are some buildings of a different in architectural style which lack iron elements, and therefore one could claim that this absence is style driven. The first one, Figure 3.1.7, is the Austrian - style building already mentioned, containing shops and dwellings; a small scale equivalent of an important similar building on the main street of Plodiv, Glavnata Ulitsa. They both share similar analogies, those of the dome and the flanks, and they have a kinship in ornamentation. The typology of this building is unique in the city, an imported design without significant local renegotiations. This is the case with one further building at 128 on the Shirok Sokak The building was built in 1903, in the last years of the Ottoman period, as can be seen from the plate embedded on the façade, visible in Figures 3.1.8 and 3.1.9. It is a bourgeois building of built in a late Ottoman architectural style which later proliferated in several districts of Istanbul such as Harbiye, but remained rare in other Ottoman cities, Bitola included.

It is very important to bear in mind that these kind of exceptions should be subject to a twofold analysis. On the one hand, being ornamented by other materials, they cause a decrease in the amount of ironwork used in the city, while on the other, they should be exempted from a second reading of the city because, as directly imported designs, they do not add much in the 'material dialogue', unless they start to proliferate. In other words, if these buildings remain isolated examples of an imported trend, they add minimally to the material trends and to the renegotiations of the ironwork. However, this decrease in the use of ironwork when moving to high prestigious areas and to larger construction budgets is not an absolute rule in Bitola; in the western part of the Pervi Mai Street, which follows the banks of Dragor River, there are many houses which, though prestigious, usually bear full sets of ironwork elements. Accordingly, when considering the concentration of iron elements, one should only speak about relative highs and lows[95].

95 **Грчев (2004)** thoroughly analyses the cases of several buildings in Bitola and their ornaments. Nevertheless, from his perspective as an architect, he is interested in the buildings as a composition that can be divided in its component elements and not in the elements that compose the building. He has a good knowledge of several

Ironwork areas; quality

As in the other cities, there are differences in quality between different areas of Bitola; differences mostly related to the social class or the function of the buildings rather than to ethnicity or religion. Despite there being, as in other Ottoman cities, certain ethnic districts in Bitola, no significant difference can be noticed between the different communities in terms of the quality of building. Muslims in Bitola, as in Istanbul and Thessaloniki, used to be more conservative in maintaining 'traditional' Ottoman forms despite slight innovations over time. However, not all Muslims followed this practice, mostly those of the middle and lower classes.

It is not a big surprise that unique and high quality elements, both in terms of the metal used and the method of manufacture, are gathered in certain prestigious commercial or residential areas. However, with the exception of possibly less than ten isolated elements, the ironwork varieties used in the city are a repetition of certain basic, medium quality, forms. Unique pieces of art are not broadly used as they are in Istiklal – Istanbul, neither are impressive iron gates like those in Thessaloniki, nor sophisticated art nouveau items as in Plovdiv or Sofia. The city's ironwork image gives the impression of Pera's middle class zone or of certain main streets in Thessaloniki, but without their most important buildings. This implies that the collection of ironwork of the smaller cities is not proportional to the entire ironwork variety of the bigger cities, but rather a disproportional collection of elements, with an emphasis to the most trivial.

Even on the most important buildings, such as the Senate or the National Museum, railings are mass produced items which, though of good in quality, are far from special, and not particularly expensive nor sophisticated.

There is, however, a difference in the opposite direction; in the Old Bazaar area, there are samples of the common, mass produced, items found in other city's districts, which, despite having the same form, are of poorer quality material.

ornamental elements because he notices its repetitions however, handling the issue as an architect, he does not proceed in an analysis through the objects – see particularly **pp: 20 – 21.**

Ironwork and forms

Balconies

The variety of balcony railings in Bitola is quite limited compared to the other three cities. Certain designs, confined to a limited number of categories, are repeated throughout the city's old districts. In the first class, the cast iron class, there is a very limited range of alternative forms. This higher standardization of cast railings was to be expected because of the owing to their production method. Curved railings, the second class, are in fact wrought iron railings that are characterized by their prominent outward curve in relation with the balcony's front perpendicular level. The third class, wrought iron, is represented by several designs and the bigger variety of forms.

Cast iron railings

Figure 3.1.c

Cast iron railings represent the 25% of the iron railings in the city of Bitola. Although the other two categories are more numerous than this one, certain typologies of cast iron elements are among the most common, either mainly because of their high standardization, or alternatively, because of the low versatility of this category due to its production method.

The commonest cast iron balcony railing in Bitola is that in Figure 3.1.c. It represents exactly one third of the cast railings, found mostly in this pattern although there are three different versions of the same main concept found in this city in isolated pockets. The main design of this railing consists of cast parts with a 1:5 proportion of width to height. The pattern on of each part has a double symmetry on both the horizontal

and the perpendicular axis and the whole item has four angular square lobes consisting of 2, 360° , outward facing spirals. The center of the cast part consists of the perpendicular bars, which start from the spirals' lower quadrant and, turning by a little less than 45° and almost perpendicularly, intersect with their symmetrical element to end on the diagonal lobe. The central intersection is surrounded by an almost square rhomb, which in this way creates more rhombs in its inside. This description is of the basic railing; other similar railings are differentiated by certain details. I refer to this typology as a *four-lobed* railing.

This four lobed railing, representing the 33% per cent of the cast railings, represents also 8% of the old city's railings, a very impressive proportion. As such, and given that its distribution is quite homogenous in all the districts, it is an easy noticeable railing, (This exact typology, with its different versions, has also been detected in Istanbul, particularly in certain areas like Tarlabasi and Fener.) Another version of this general typology, though much fewer in number than the former, is that shown in Figure 3.1.10. This second version is also found in very limited numbers in Istanbul and, as in Bitola, mostly seen in more prestigious areas, examples of this typology being found exclusively on houses built in the 1890s and 1900s and no later.

Figure 3.1.d

Another very widespread typology, with no obvious variations, is the one portrayed in Figures 3.1.11 and 3.1.d. It represents 25% of the cast iron railings and it is found in all the areas of the city. These balusters have one perpendicular axis of symmetry, the axis coinciding with the main metallic part, which extends through the whole height from the handrail to the toerail. More than the four-lobed typology, and much more than other typologies, this typology of railing resembles a wrought iron railing,

an examination from afar giving the impression that the baluster consists of several round and spiral wrought parts. Although all cast railings consist of different 'parts' of that kind, the resemblance to a wrought iron assembly is more evident in this typology. This typology can be seen in different kinds of buildings throughout the city; the one in the figure above, located in the inner center of the city on Shirok Sokkak Street, being combined with ionic half columns and arches.

There are five more general types of cast railings and certain isolated elements. These five typologies can be classified into two categories according to a specific production detail i.e. the manner of the balusters' repetition. In the first category, each baluster is a different cast part; examples for this category are the two typologies above described. In these typologies, every repetitive form is a separate part.

Figure 3.1.e

In the second category, each part equals to two balusters. However, these two balusters are not equally distributed into the part as 1+1 but in a ½ +1+½ distribution. The reason of this distribution is probably to better fit of the balusters to the newel posts on both sides of the railing's front. Another advantage of this kind of manufacturing is that having bigger parts, the assembly is both easier and more accurate. Judging in terms of form, this typology's design is not very different from that of the previously mentioned typologies; for instance that seen in Figure 3.1.12, a typology which has a kinship with the four-lobe typology because of its double symmetry, but also belongs to the class of the double balusters because each baluster is not a separate part. In Figure

3.1.13 one can see a typology that shares many concepts with that of Figure3.1.12. The central circular part, the symmetrical 'spades', being among the details which are similar to both typologies, and which illustrate a kind of osmosis between the typologies and the patterns.

Other typologies represented by several items throughout the city, warrant further, brief, discussion. The typology shown in Figure 3.1.14 has a design which contrasts with those so far seen. The main subject is not void, like it happens with the four-lobe and the circle-center typologies, neither like the double circular typology of figure 3.1.12, whose gravitational center is material but it is not the 'center of attention' on the form. The railing of figure 3.1.15 is another example of the manufacturing style according to which the balusters do not coincide with the cast iron parts. At a first glance, it seems that the basic repetition motif is the vertical bar with its lateral ornaments and its ending rhombs. However the basic cast part consists of three vertical bars and its accompanying ornaments. The railing on figure 3.1.16 follows the same concept of the previous balustrade. However it has a more complex shape with the common, for that period, floral details.

Curved railings

3.1.f

The curved railings class has more numerous examples than the cast iron one. It is equally widespread all over the city but it has higher concentrations in certain areas such as in the northern part of the Shirok Sokkak, in certain parts of the area **1,** (Map 3.1.4) and in the commercial area. If considered in light of their production method, it is evident that curved railings are a subdivision of wrought iron railings, but nevertheless, this curved shape is such a prominent characteristic that when it becomes as frequent in as it does in a city, it justifies the creation

of a separate category. By far the most widespread subdivision is what I shall refer to as the S-typology, shown above. The S feature is a twin - double volute S-shaped pair of wrought iron scrolls which follow the shape of the surface created by the vertical bars. Because of the high number of its repetitions in Bitola, I will subdivide this typology into two sub-typologies. In the first sub-typology, S1, I will classify various railings with different forms of S-shaped volutes, whose upper parts end at the handrail. In the second sub-typology, which is slightly smaller than the first one, belong the curved railings whose "S" elements do not end at the handrail but on the ½ + 1/10 of the height of the balusters, see Figure 3.1.18. The prominent characteristic whose repetition creates the present sub-typology, is the twisted diagonal bar which begins at the middle bond near the small volute, and ends at the opposite corner created by the next vertical bar. This form has a high concentration in certain main streets and this further enforces its classification as a separate subcategory. Unlike the first, the general s-category, which comprises many different variations of the same design concept, the second subcategory, S2, is uniform from a design perspective apart from slight differences of minor importance. So, although the S1 category is more numerous than the S2, the former containing 20 items throughout the city, the latter less than 12 items, the latter is more compact in the sense that all these items are almost identical in form.

A very important characteristic, uncommon among the items of the S1 typology but common for all the items of the S2, is the position and the exact shape of the curve. In the S1, the curve has both circular and oval shapes centered on the middle or the low part of the railing's height. In the S2 category, the curve has always the same shape and center for all the items. Though of note that the S2 category is relatively concentrated in a particular area, that is, mostly in the Pervi Mai, in the north part of Shirok Sokkak and on Tesla street, it is, however, impossible so many years after the manufacturing of these ironwork elements, to be sure about the reasons of this high concentration.

There is a third group of curved railings that could be considered a distinct typology. This resembles the S2 category in its general form with an important difference: the S. This category instead of S shaped volutes, bears double volute c-scrolls as seen in Figure 3.1.19. This is a quite limited group characterized by a very distinctive design feature, and can be found all over the city.

In concluding with curved railings, reference should be made to some more items that form rather small typologies with limited design coherence between their members. In the first group of this subcategory, I have classified curved railings that also have a

curved front line surface. Four, among the only six items of this class, are in fact variations of the S typology, the other two being unique samples. The last category of the broad curved railings typology is the strip–iron category. This group, which was quite widespread in Thessaloniki, has only two examples in Bitola, both of them installed on buildings of quite unique form for the city. Accordingly one could argue that the strip – iron category is an extremely marginal case.

Wrought iron railings

Samples with volutes

A great part of Bitola's wrought railings belong to a typology that is related to the curved S–typology but is differentiated in not being curved; indeed some elements of the curved S – typology and some of this wrought typology could have been considered more akin if classification was not done by having the curved frontal surface as a first filter.

A typical railing of this category is the one on figure 3.1.g. The volute parts are again S – shaped and they are the most prominent elements of the artefact. The S – shape is disproportionate; one part of the S has

two revolutions, one wider and one smaller, the latter identical to the whirl of the other end. These parts are assembled in double symmetry on two axes; the first coincides with the vertical bars and the other is perpendicular to the first, passing from the center of the balustrade. The result of this assembly is the creation of 'heart' shapes. In some cases the straight line of the 'S' scrolls is twisted.

There are two main ways of assembling the parts and therefore the hearts. The first is by placing the hearts with their lobes touching each other, as in Figure 3.1.20 and the other is by placing the hearts with their ends touching. These two categories are found in exactly equal numbers and while there is a relative concentration of the one category in the east and the other category in the west part of the city, it is rather risky to sustain a particular argument and obtain conclusions from this fact. Both these groups of the 'heart' category are usually made of 'poor' material, which in practical terms means that their bars are thinner than the common wrought bars of other railing typologies. The possibility is that this category was frequently used as a cheap alternative to more expensive solutions.

There are only three samples of railings with a single 'heart' that do not significantly differ from the above categories. There are two or three samples of what I call Bitola's 'French' style, that is, railings with differently wrought scrolls, which cover through various directions the whole of the balustrade's surface (figure 3.1.h).

Figure 3.1.h

Two smaller groups and several isolated samples belong to the category of wrought railings with volutes. The first consists of five items spread all over the city which also give the general idea of two mirrored hearts. Although the general pattern has a kinship with the

'heart' categories the way of achieving it is slightly different (3.1.22).

The first part of this typology of railing is an open W-shaped wrought iron with volute ends. The middle bend of this W is associated with the middle bar and the two other to the bend of the adjacent one. This same central knot holds a double volute horseshoe part which occupies the middle of the balustrade. The visual result is the creation of symmetrical hearts, or a clepsydra, whose vertical axis of symmetry passes through its middle, whereas in the S – category the hearts are situated between the vertical bars. The other minor category, which also has a few items, is a variation of the previous one; in this case the W part is quite 'atrophic', that is, it has shorter and smaller flanks. The combination of two mirrored such pieces on each bar's both parts create a 'rhomb' within which two c-scrolls are inscribed as shown in Figure 3.1.h.

There is a quite distinct category with a concentration in the south part of the

Figure 3.1.h

Shirok Sokkak and in the adjacent streets. This quite isolated typology stands somehow between the wrought iron items and the cast iron ones. The small S – shaped volute parts are made of a round bar. The central part is a double bent volute ending bar, which is associated with a similar one, symmetrical to the first and with a vertical axis of symmetry passing from the middle of the vertical bars. These two symmetrical parts coincide at two

points. In order to bind these two bars, material has been abstracted from both of them in such a way that their total thickness remains unchanged. The method of its manufacture is definitely that of a wrought iron element; however, the visual result, possibly because of the use of the round profile bar, is akin to the cast elements. The railings of this typology are found in a particular part of the center and on buildings of medium and high budget. There are two impressive buildings with this kind of railings; the first one is a building to which I have also made reference; the old Military Academy. As already discussed, this is a very large construction compared to the city's other buildings, yet not a high cost one. It is though, significant to see that such an important building bears this typology. The other prominent building is at 105 Shirok Sokkak. It was built in 1877, so it is among the first

Figure 3.1.i

buildings in Bitola with a western influence, though obviously combined with Oriental elements. The balcony is supported by curved bars that were almost extinct in the 1890s. The last building bearing it dates in 1922 and there are also samples at quite regular intervals in the years between. Given that the rest of the buildings with the same bars are also quite prestigious, one can deduce that this element was considered to denote

relatively high quality. This indicates that this typology was a high prestigious element not so widespread, topologically limited and not very common.

There are some more wrought iron railings with volutes that cannot be easily classified since while they may be akin to certain typologies, they also have significant differences. However, these are quite isolated and low in numbers and therefore do not significantly change the ironwork image of the city.

Examples with round parts

This is a small category with either twisted or straight iron parts, the bars having a circular form. It consists of only 12 items in total, installed in medium and low budget buildings all over the city, though not on those in main streets. The circular part is situated on the middle of the bars accompanied either by the, already known from the S –categories, S –shaped volutes, or by simple C-scrolls. Some items have the circular parts between the handrail and a lower secondary rail. These samples are made out of the same parts, S-scrolls, horseshoes etc. They are, therefore, renegotiations of the same readily available and mass produced iron parts but in different ways of assembly; see for example Figure 3.1.24.

Samples with straight lines

In this category there are several isolated items whose predominant element is the use of vertical bars, see for instance the examples in Figures 3.1.25 and 3.1.26. The first one consists of only vertical bars; a trend which became popular in Greece during the 1950s and 1960s. The second one has some volute parts, however, the main concept is formed by the straight bars. Most of these twenty samples are situated on main streets and on buildings of the last Ottoman period and its aftermath. The observation that these samples are installed on medium budget buildings on the main streets, and the knowledge that this style became widespread in the next decades, indicates that these railings were precursors of trends to come. One of these examples is that of Figure 3.1.27. This was placed on a building of the early 20s, that is, less than ten years after the end of the Ottoman rule in Bitola. This kind of railing, with the wide iron fascias and the very characteristic lobes on the newel posts, is unique in Bitola. The same form, with its

variations, proliferated in the same period in Thessaloniki, appearing in the last years of the Ottoman era and becoming main stream in 1920s and the 1930s.

Isolated samples

There are several items, like the one on Figure 3.1.j, that are not repeated elsewhere in the city and which cannot be easily classified in any of the previous

Figure 3.1.j

typologies. I will mention three of them which seem to be the most interesting. The first is situated on a quite peculiar building in the middle of Shirok Sokkak.

It is a building put up in the Ottoman Empire's immediate aftermath and its style is unique both in terms of morphology and ornamentation. Similarly unique are the forms of the railings of the first floor

balconies. These consist of many different parts, most of them unseen in other railings. It has a unique vertical axis of symmetry in the middle of the whole front. Rectangles, stars, floral volutes, straight parts and circles are combined in a unique piece of questionable aesthetic value.

Although these samples possibly create interesting landmarks in a city because of their uniqueness and, sometimes, peculiarity, nevertheless, they do not constitute a major contribution to the ironwork image of the city which is largely formed by the main categories. Whereas this sample is a unique, and quite peculiar, example that would be possibly a strange item in any city, there are other iron artefacts that combine more common parts in a more conformist way. They may have proliferated in one city and been less popular in another or they may have had little success in all of them.

It is obvious that if the above railing with the stars had numerous repetitions it would not be peculiar at all. This characterization is context created and this context is created by the totality of the railings in the city. The other railings, which may seem commoner, they do so because of their relative form kinship with the dominant categories. I shall examine some last examples. The first one, Figure 3.1.28, although made out of quite common elements, gives a result which does not fit in any of Bitola typologies but has some relation to examples in the other cities, samples which create a small intercity taxonomy of related elements. The second example, Figure 3.1.29, is a variation of the 'French' style, a style whose variations became quite widespread in Istanbul and Thessaloniki in the 1920s and the 1930s. The third, Figure 3.1.30, is a unique and interesting piece, situated on an equally interesting building of the early 1920s. The great majority of these isolated and unique pieces are located on one of the two major streets of Bitola; Pervi Mai, and Shirok Sokkak. It can be seen through the materials used and the types of railings found that the prestigious and the main commercial areas were the locations of innovation and aesthetic experimentation, especially after the 1900s.

Brackets

Iron brackets, supporting balconies or oriels, became a massive trend in the Ottoman Empire between the 1880s and the 1920s. At the end of this period there was a significant decrease in their use and they were either replaced by alternative materials, marble and plaster brackets, or, because of the changes in construction methods, done away with.

Before the late Ottoman period, balconies were rather scarce and the commonest elements supported by brackets, both in Bitola and in other Balkan cities, were the *sahnisi*; the Ottoman oriels. While architecture was becoming more westernized, oriels were replaced by small balconies and old Ottoman wooden and plaster supports by iron brackets. These changes were not absolute; there were oriels with brackets, balconies without them, and a number of other combinations.

Cast iron brackets

The G-Key typology

During the late Ottoman period, iron brackets dominated the entire center of the city, though in the first twenty years of the westernization of Bitola, the 1880s and the 1890s, they were rivaled by constructions erected without any brackets. By far the most widespread typology is the G-key typology, called here because of its form as seen in Figure 3.1.31. There are in total 53 G-key bracket bearing buildings all over the city center; the largest number of repetitions among any typology of any iron element. This typology of bracket is also very common in various districts of Thessaloniki; it is also widespread in Istanbul, especially in the Christian or the mixed districts, but almost absent from Plovdiv where ironwork trends followed a different path, three surviving sets being found exclusively in the 'untouched' hills of the city. This artifact was combined with all forms of balcony railings and oriels and found in most kinds of architectural styles, and is spread all over the city, from Shirok Sokkak to other particular peripheral, modest, constructions. The examples found in Bitola seem to be produced by two different moulds as illustrated in Figures 3.1.32 and 3.1.33. Though there are several minor differences between the two forms, the overall impression is the same; one can say that they are two different interpretations of the same form rather than two different, though similar, patterns.

Other cast iron brackets typologies

There are a significant number of 'griffin' brackets throughout the city. This bracket consists of a main lower branch on which the griffin stands, the back part of the griffin's body consisting of various intersecting circular parts, Figure 3.1.34. There are 12 identical sets of griffin brackets in the city and while this may be less than the numbers of

the G-key brackets, it is still an important typology. Examples of this form are found in all the major streets in the heart of the city, appearing mostly in houses built before the 1900s. There is not a special concentration of this typology in any particular area and it is used in various architectural styles, combined with all kinds of other ironwork and architectural elements.

A category which is very popular not only in Bitola but also in other cities is that of the 'bud-ended' bracket, shown in Figure 3.1.35. The significant characteristic of this category is the vertical bud–like ending of the artefact. It is slightly bigger than the griffin category and it appears that all the examples were made using the same, or identical, moulds. As with the griffin bracket, the bud–ended bracket is found on all the main streets of the city, and found combined with all kinds of other ironwork and architectural elements.

The bracket in Figure 3.1.36 has five examples in the city and is found on both main and secondary streets. Its form follows the general form of the G-key typology, but is a lighter version with less spirals and more floral ornaments. Of note is the fact that four out of the five sets of brackets which belong to this category support oriels. This bracket is used predominantly in medium and low budget constructions.

Another light bracket, a light version of the G-key form is the one shown in Figure 3.1.37. There are only two buildings bearing them and in both cases they are parts of medium – low budget buildings and both support oriels.

During the research, three unique brackets, worthy of note, were also found. All of them are found on Shirok Sokkak, where, as I have shown, unique balcony railings were also observed. The discovery of such unique elements, the main design concept of which remains floral ornamentation, was expected. Their presence shows that innovation was entering most often through this main street of the city; the street serving as a kind of exposition of new trends. These three items, two in the middle part of Shirok Sokkak, Figures 3.1.38 and 3.1.39, and the other on the Military Academy, Figure 3.1.40, reinforce this argument, all of them being installed on distinguished buildings. The first one is on a neoclassical building built in the early 1900s in the more prestigious part of Shirok Sokkak. The balcony railing of this building, one of the common types of cast railings, has been already seen in Figure 3.2.xix and the austere form of the building bears many neoclassical details; Ionic and Corinthian pillars, pediments, etc. There are other equally impressive ironwork items on this building, the window railing for instance seen in Figures 3.1.41 and 3.1.42. It is important to underline once more the way architects were

using ironwork and other elements. They were very often 'crossing' styles by using identical items in different architectural styles or by using different styles of elements on the same style of buildings. (This kind of railing would not have been used in Athens, the Greek capital of Neoclassicalism, but has have been used in Thessaloniki, for the former Greek consulate, though it was not in the first line of choices, Thessaloniki being the homeland of more austere and linear railings, whose use was favoured for building in neoclassical style.) The iron bracket in question is supporting the balcony of the south side, that is, the lateral one which faces a secondary street. The balcony of the main façade is supported by marble brackets, which type gradually replaced iron brackets until the extinction of the latter in the 1920s.

The second bracket is used on a building of the early 1920s, seen in Figure 3.1.43. It is a rather simple, undefined style of construction, the balcony that is supported by these brackets bearing a common typology of railing, and it is an example from the last period during which iron brackets were used. This can reaffirm the argument that when a trend recedes, the recession starts from high end constructions while it remains longer on modest buildings.

Figure 3.1.k

Bar typologies

The last iron bracket typology in Bitola is that of brackets constructed of iron bars. It consists of only six brackets. One of them is a typology of its own being a simple S – shaped bracket with volutes on both ends made of a thin iron strip. The building that bears it is located at the outskirts of the historical center and it is a low budget, simple building with minimal ornamentation; its date of construction unknown. However, I believe that this building, and the one on its right, is older than the buildings on the opposite side of the road, which were constructed in the

1880s and 1890s. I base this claim on the fact that the door of this building is on a lower level indicating that when the road was paved on the level of the new buildings, these two were already built, Figure 3.1.44. The bracket obviously does not provided significant support to anything, the strip is too thin to bear the weight of the balcony, and its use is mainly for decorative purposes. The form resembles the general outline of the G-key category.

The other five bars each follow the same concept. A rectangular profile bar, 4 or 5 cm wide, is lightly bent twice, forming a very open S, see Figure 3.1.45. One end of this bracket holds the balcony at about 10 centimeters from its outermost line whereas the other end abuts on the wall 1 – 1.2 meters under the level of the balcony. The bracket is installed on buildings of various qualities so it cannot be associated with any particular one of them. What can be said is that, in Bitola, this element did not survive in the twentieth century. It is an element that in other cities can be seen in very old pictures, even in those of the 1860s, and many of these buildings were replaced at the end of the nineteenth century. There is one further detail of note; all except one support the same balcony railing.

3.2 Case studies

Case 1 – The 'Common' building.

In this subchapter I shall discuss a number of cases which may reveal some aspects of how ironwork and ornaments were used in Bitola and how they contributed on the morphology and the style of the buildings. These cases cannot cover all the wide variety of buildings and elements in the city but they can give an idea about aspects of it and the flows of trends.

Below is a mainstream building of the 1890s[96] of a type discussed in the first part

Figure 3.1.o Osmano 13

of this chapter. I shall now analyze its morphology in relation w\ith ironwork and ornaments.

96 This type, as aforementioned, is referred by Грчев as "Thessalonikean" or an "Urban Balkan".

The building is constructed on a square plan, developed in two different levels with an elevated basement. Ironwork is used for the balcony railings, for the balcony brackets, the over-door and the basement windows and in this sense, bears a complete set of elements. However, the total amount of iron used on it is quite low compared to the the amount of plaster elements and the buildings size. The balusters and the brackets are very common; four – lobes balusters and sphinx brackets on the balconies. The basement windows belong to the most common typology in Bitola, that of the straight bars and the c-scrolls. Plaster elements are also very common, for example the well known common baluster, which has been already seen in bigger constructions. Plaster colonettes, both as window moldings and cantons, belong to mainstream categories, the simplified Corinthian capital of the colonettes being widespread throughout the entire city.

Figure 3.1.p

One could use this image to show a common type, an 'average' Bitolian house, though the case could be even more 'average' if the brackets belonged to the G-key category. Is there an average house? There is not, yet the house above bears an ornamentation consisting of elements which have high concentrations all over Bitola and which were very typical of the 1890s. The building is not at all innovative. Its ornamentation contributes to the proliferation of the 'mainstream' style by the increase it provokes to mainstream ornamental typologies. However from another perspective, the typologies became

'mainstreams' because buildings as this one, individually repeated existing styles of ornamentation[97].

Case 2 – The 'Poorer' building.

Below is another house at Western part of Pervi Mai Street, locate slightly out from both the middle class city core and the old villas by the river, towards the outskirts of the old center. It is at the corner of Majoro and Panofski Streets, and was built in 1930. What, I think, draws the attention in this case is the adherence to mainstream typologies, though in a simplistic way. In other words, the building follows mainstream ornamental trends, though with a lower quality of element.

Figure Details, Osmano 13

97 Грчев makes a thorough analysis of the morphology and the facades of this kind of buildings in most of his books.

Figure 3.1.q Majoro and Panofski streets

This is a two-level building, small in size and low in terms of construction budget. The ornamentation is quite poor and I contend that two factors contributed to this outcome. The first is that during the 1920s there was a drastic decrease of ornamentation in most architectural styles. The second is that low budget leads to cheap solutions and to use of mainstream typologies. The balusters are straight bars with heart shaped volutes – a typology already seen earlier. The iron artefacts, both the balusters and the window railings, are made of less material than the average. So, although they are exact copies of common typologies, they are poorer in material, in analogy to the budget for the building. The plaster cantons are simplified patterns of the general class of older forms, into which the cantons of the case-study 1 belong. This house is an interesting example of how a common typology of the past, the balusters, may survive in remote areas or on a certain style of buildings.

Case 3 – The 'Luxurious' building.

In the heart of the City there is, as mentioned previously, what is for Bitola a very luxurious area with a slightly different set of architectural styles.

Figure 3.1.r Kiril I Metodi 14

Here, there is an accentuation of neoclassical elements. Their increase in usage cannot be associated with a particular ethnic community; however, they can be associated with higher social class. Although elements of neoclassical influence are installed on many buildings, see case-study 1, the Tito College, in the previous subchapter and others, these elements are more sporadic and slightly altered

Figure 3.1.s

Figure 3.1.t

compared to the original neoclassical forms. The building in this case, like many other buildings of the area and belonging to this social stratum, is almost lacking in iron elements; the ironwork items being limited to the fence and its gate, and to a part of the main wooden entrance. The building follows a generic neoclassical typology, yet with many important simplifications. The pillars are made of bricks, a cheap imitation of the original columns, and their capital does not belong to any particular style, being simplistic imitations of the standard Tuscan form. The pediment is an interesting version of a neoclassical typology and the same design is used over the windows. The balcony of the first floor bears the well known 'common baluster' which intersects so many styles in Bitola and elsewhere. Another set of elements which links this house to buildings of others styles is the particles of the fence. Most buildings in the center of Bitola do not have fences because of lack of space. Big and important buildings of the center and modest buildings of the outskirts often have common parts.

Case 4 – The 'Innovative' building.

On Shirok Sokkak 128, there is a house which I consider to be 'innovative'. This is because the building, although built in 1901, bears many features which became more common in later decades, although it is obvious that if trends had not moved in the direction they did, this building would not be innovative but only a 'particular' construction of an 'isolated' style. The construction contains minimal iron elements having only three small railings on the upper

Figure 3.1.u Shirok Sokkak 128

part of the oriel's windows and an iron door, the latter lacking any special ornamentation. In research into ironwork, the lack of ironwork can be as interesting as its presence, and this building is among the first in Bitola which, after several decades of proliferation of ironwork, shows a tendency towards a trend for the use of less iron.

Several comments can be made for the use of ornamentation on this building, its composition and the syntax of architectural elements. The exclusion of ironwork is not a unique case, although it is quite rare for buildings of this budget and of mixed residential – commercial use, but the adjacent buildings, some parts of which can be seen, bear full sets of iron parts. The architect follows the mainstream in using the common 'Corinthian' cantons similar to those of the house at the left. This mainstream typology is combined with a unique, in Bitola, capital on the oriel's colonettes; the cul-de-lampe which supports the oriel is also unique and rather minimalistic. The moldings are also quite straight – line forms, similar to these which later proliferated in every part of Bitola. The small ironwork items are quite common, belonging to the heart – shaped, wrought iron, typology.

Figure 3.1.v

One can see that various typologies which were more commonly used in later years coincide on the building. Some of them, like the railings or the Corinthian capitals, are common typologies for Bitola, others, like the window moldings and the cul-de-lampe, in this case as a category and not as a typology, proliferated in the years after 1901, so this building was one the first, if not the first one, to bear them. Other elements such as the oriel's colonettes remained isolated and did not create an ornamental trend.

Case 5 – The 'Commercial' building.

On 288 Pervi Mai Street there is a large commercial building which contained, and still contains, shops and workshops. The need for wide spaces on the ground floor limited, as already seen, the number of ornamental elements used and the most impressive element is the iron door which is made of heavy iron sheets and has upon it a repeated

ornamental device. The necessity for safety and endurance promoted the use of heavy iron doors in the whole commercial area, making them a local aesthetic feature. The same concept had no success in residential buildings, `however safer and resistant it might have been. On the first floor, there are repetitions of the well known Corinthian colonette in its version with channelings.

On the figure 3.1v one can see the colonettes and their capitals. The plaster balusters belong to two categories; the first one is the widespread 'common' Balkan baluster (down and right). The other is a different typology with extremely rare samples in Bitola. Despite similarities, differences are evident both on the belly of the balusters and on their beads. In this building they were used as alternative objects without any kind of symmetry. It is a case of use of two different typologies as 'one object'. The ironwork of this building belongs to mainstream typologies; G-key brackets and Bitolian curved railings. One can see that the ornamentation is very similar on both this typical commercial building and on mainstream middle class residences and served by the same typologies. What may often be different is the combination of the ornaments on a slightly

Figure 3.1.u Pervi Mai Street

morphologically different, building. Therefore, it is rather rare to see this entire broad balustrade on a residence since residences usually tends to have more balconies.

Figure 3.1.w

Case 6 – The 'Public' building.

Figure 3.1.x

The Military Academy of Bitola was built in the 1880s and is situated at the southernmost point of the Shirok Sokkak Street, where the street meets the big park. The building has two generic characteristics of the wider Ottoman baroque: the pediment and the trefoil windows, ornamental concepts not generally encountered in Bitola, such baroque influence being much weaker than in Plovdiv and Istanbul. The contrary happens with the iron balustrade. I have already shown this typology, which is quite widespread, especially during the late nineteenth century. The brackets are made of fine heavy iron and their ornamentation is of a high quality and finish. Although they have a general

kinship to other brackets of the era, they do not belong to any category I have encountered in Bitola; it is further a unique typology in my data base from the four cities and in the bibliography. It is hard to say where this iron artifact came from, it is found nowhere else and accordingly its origins cannot be traced. It has been probably specifically selected for this important case of a prestigious public building. A question consequently rising is whether these common railings were considered equally prestigious for such a composition. I think they were because at the time of construction these railings were not so commonly used in Bitola,. This means that when they were first installed, they were an innovative proposition, one which later became a wider current.

Conclusions for Bitola

- Numbers of ironwork elements in Bitola increased significantly during the last two decades of the nineteenth century. Evidence on surviving earlier buildings and the limited photographic evidence shows the scarcity of ironwork before the this period. In Bitola, a significant proliferation of ironwork is a phenomenon of the late nineteenth and the early twentieth century.
- The main bulk of the iron elements in Bitola can be easily classified into few main typologies. Balcony railings belong to the three main categories, cast, curved and wrought, in great percentages. Uniformity in brackets is even high; the great majority of the brackets are cast iron items, their percentage exceeds 80% , with the main typology reaching almost 50% overall. Window railings are a similar case; when there are railings on windows, more than 70% belong to a particular typology.
- Very prestigious residences, even these built during the 'core years' of the proliferation of ironwork, have very limited iron elements or even none. I have shown several cases of such houses on which rival elements such as plaster or marble are substituted iron parts. This observation becomes so evident in certain areas of the city that permits the connection of the iron elements with certain architectural practices and social strata.
- No evidence has been found connecting particular elements to particular ethnic communities. Despite the intense efforts to find the boundaries between communities and determine the differences there might exist in the

distribution of buildings of worship or even in architectural styles, I have not found any particular concentration of elements in any community's area. I cannot, therefore, connect any element to a specific ethnic or national community.

- There are two levels of eclecticism in the city; one is the result of an architectural style combining different elements from different styles because of their aesthetic value, the other is the result of combine different elements because of scarcity of alternatives. In Bitola I have recorded both of them. The former may combine unique elements in original architectural creations, both in terms of morphology and ornamentation; the latter mixes common ornamental elements in rather common morphological constructions, a second level eclecticism created by the availability of means. The architects or the owners were decorating the facades of the houses with what was available in the local market i.e. balustrades, plasterwork etc. In this manner styles were combined not because of a great architectural vision for eclecticism – which would demand great sums of money – but because of the trends in the available ornaments.
- Advancing a conclusion which will be obvious after comparing Bitola to other cities, one notices that Bitola has more in common with the adjacent city of Florina, my brief research on which is beyond the limits of this thesis, than with Thessaloniki and Istanbul. Geographic proximity seems to have played some role in the kinship of architectural elements, a topic. I shall discuss further when comparing Bitola to the other cities.
- According to the existing bibliography, given in this subchapter, the main architectural influences for the westernization of Bitola were primarily from Austria, and secondarily from Italy. However, even a brief inspection of both Austrian and Italian ornaments of the era shows that there was not blind copying of them taking place in Bitola. Ironwork in the city, although generally influenced by these western European countries, does not simply imitate European ironwork.
- Different architectural styles are often served by the same typologies of ornamental elements, ironwork elements comprise. In many cases, morphological differences between architectural trends are bridged through ornaments.

- Iron columns, roofs, warehouses and other elements and constructions of the kind are extremely rare in Bitola. The great variety of Western Europe was not transferred in the city. These constructions were probably very expensive for the budgets of that era in that area.

3. 2 Istanbul

Istanbul is one of the most prominent cities of the world. Through its long history, initially as Byzantium and later as Constantinople, it was an important center at the meeting point of two continents; Europe and Asia. Its geographical position is unique; it is built on both coasts of the Bosporus straits, a narrow strip of sea which connects the Mediterranean Sea and the Sea of Marmara to the Black Sea. The initial nucleus of the city was built on the southernmost part of the European coast on a peninsula created by the Sea of Marmara, the Bosporus and the *Haliç,* the Golden Horn, a long, very narrow gulf, which in prehistoric times was an ancient valley covered by the sea,. The roman emperor Constantine transferred the capital of the Roman Empire from Rome to Byzantium. The new capital, Constantinople was surrounded by high walls which protected the city from invasions and attacks. Other than a short period of Western European occupation by the crusaders, the city was the capital of the *Eastern Roman Empire,* also known as Byzantine Empire, for almost one thousand years until 1453, when it was occupied by the Ottoman army of sultan Mehmed[98].

The Ottomans preserved most of the city's excellent infrastructure and proceeded with its embellishment by building many new constructions: mosques, palaces, fountains, religious schools etc.. The Ottoman Empire was a thriving state based on a strict external policy and on a compact mix of Islamic and secular legislation which ensured stability in the interior[99]. By the time the Ottoman Empire reached its major expansion by 1683, Istanbul had become one of the most prosperous cities of the world by exploiting the wealth of a vast state and the safety of the *Pax Ottomana*[100]*.* During the early eighteenth century, the first signs of decay were already visible in the Ottoman Empire but despite the recession of that period, the city kept its dominant position and expanded. Attempts to recover from stagnation led to an extended westernization of the Ottoman Empire in many sectors of social and economic life. One of the main gateways of this westernization was Istanbul and mainly the European district of Galata – Pera. This district was already built during the late Byzantine times as a small settlement and during the Ottoman period, it was surrounded by defensive walls like the *Historic Peninsula*[101]*.* Since the first decades of the Ottoman rule, Galata was a particular district where Christians and later, Europeans

98 See various chapters in **(Vasiliyev, 1952)**
99 See extensive references to the facts in the interior and the exterior in the classic book of **Cevdet Pasha (1967)** and especially the fifth volume.
100 **(Ortaylı, 2003)** is a comprehensive analysis of this term.
101 **Akın (2002), p: 88 – 91**

too, were less controlled by the Ottoman power. So, it was there where 'westernization' and 'modernization' found fertile ground within the core of the Ottoman Empire[102]. After many turbulent and agitated years, the city was occupied by the allied forces of Entente in 1919. The foreign armies left the country in 1922, when the Turkish Republic was founded bringing an end to the Ottoman Empire, the Sultanate, the Caliphate and to a sociopolitical system that lasted for five centuries[103].

3.2.1 On the urban plan of Istanbul

The Historic Peninsula was - until the middle nineteenth century when the expansion started – the main part of urban Istanbul, other parts of the city including the district of Galata and the district of Üsküdar on the Asian coast of the Bosporus opposite to Galata and to the east. Social and political changes provoked a big expansion of the city, an expansion which created the district of Pera (the extension of Galata out of the walls, to the hills), the district of Tatavla (to the west of Pera) and the district of Kadıköy (to the south of Üsküdar). Further expansions during the late nineteenth and the early twentieth century converted adjacent villages (firstly on the coast and later in the hinterland) into city districts[104].

The expansion was not the only transformation occurred during the late Ottoman era. Old districts, within the walls, were rapidly changing. Hazards – earthquakes and fires – destroyed big parts of the urban tissue[105], while the houses in Istanbul, mainly made of wood, could not resist fire and the inefficient fire brigades could do nothing to stop them burning. During the same period – the late Ottoman era – renovation and modernization of the city was associated with demolition of old houses and warehouses and with the creation of new streets and open spaces[106].

I have already said, in the second chapter, that the agenda of modernization involved the radical change of the urban planning, the vast labyrinth of narrow and dead-end streets being considered an obstacle for the new urban plans. A Hippodamean system had to be applied all over the city and this involved massive changes in the distribution of streets and open spaces. From this perspective, disaster could provide a solution. The

102 **(Akin, 2002) pp: 2 – 17.**
103 See **(Zürcher, 1993) pp: 93 – 133.**
104 One could compare the various city plans of Istanbul or the successive maps. The ***Cadastre de la Ville de Constantinople*** of 1876, the **Cevati Brothers** plans of 1882, the **Goad** plans of 1904 and the **Pervitich** plans of the 1920s do not give only information about the kind of the constructions but also about the city's expansion. All literature, the city plans and the maps coincide in the description of the city's change and sprawl.
105 **Banoğlu (2008)** gives a detailed history of the big fires of Istanbul, which were the biggest destructions, much more frequent than earthquakes. The frequency of fires shows both how the necessity of a new urban system was born and how much extended were the destructions and therefore the city's reconstruction.
106 **Γερολύμπου (1997) pp: 49 – 71.**

great fire of Tatavla, for example, was exploited to reconstruct the city according to a 'European' system of horizontal and perpendicular streets[107]. In this way, police and fire brigades could easier control the city; a practice which was already applied in Paris in the famous case of Haussman. At the same time, new regulations, aiming to prevent future fires, dictated the introduction of stone and brick in all new constructions. This practice created a stark difference between older and newer parts of the urban tissue.

Disasters were not the only reason leading to reconstruction; owing to the need for new houses, several central districts were reconstructed and were created according to the current architectural styles. The surroundings of Şirkeci station, Istiklal Caddesi, the main avenue of Pera, and many other areas did not suffer any major disasters and it was the pressure for new buildings and the great profits made by their construction that changed some areas, such as the the surroundings of the *Galata Tower*[108]. The Historic Peninsula had been connected to Karaköy, the port of Galata, in the 1830s and a second bridge was installed some decades later. These bridges let people move more easily through the city but also let ideas move throughout the urban area. Western ideas, having as an epicenter Pera, spread throughout the districts reaching even the most remote[109].

The relief of Istanbul did not help the urban reconstruction. The lower parts of Plovdiv were a far easier case. Whereas these parts of Plovdiv were built on a flat terrain, Istanbul is built on rather steep hills and this made the attempt at a Hippodeamean plan all the more difficult. Furthermore, in Istanbul the status of properties remained more complex than in other cities where land was often redistributed, for example, Thessaloniki after the fire. This fact, combined with the peculiar geographical relief, created a very complicated urban plan, which in some areas is Hippodamean whereas in other areas is the same maze it used to be during the Ottoman era.

Massive reconstruction was a common practice for decades and especially after Second World War. This practice dramatically changed the aspect of the city and significantly reduced the number of the preserved Ottoman buildings[110]. The greater part of the interior of the Historic Peninsula has very few Ottoman buildings left, those remaining being often isolated and hidden in small streets. The only important preserved area of the interior is located at the surrounding of the Süleymaniye Mosque and the Zeyrek, where there is a relatively compact district of ahsaps; many of which the

107 ibid

108 **Akın (2002) p: 103 – 108.**

109 **Cezar (1981)** gives details and historic evidence on how the construction of the bridges of Galata influenced on the social activities of the city.

110 This is several times explicitly and implicitly stated in **Cogito (2003),** the well known journal of the **Yapi Kredi** editions. Although there are several sources from which one can get clues and opinions about the sprawl of Istanbul, this is one of the most vivid collection of articles about the built environment of Istanbul.

Municipality of Istanbul is trying to restore. The other preserved areas are mostly found close to the coasts of the Historic Peninsula or close to the city walls and are urban areas developed in the 1880s – 1900s at the place of former ahsap districts. In these areas, one can still find very old ahsaps, even of the late nineteenth century, but these are quite isolated buildings, which rarely neighbor another similar ahsaps. Beginning 30 years ago, in the 1980s, the government and the local authorities launched a big scale program to rescue and restore old parts of the city, an attempt often obstructed by lack of funds, property problems, or by the government itself and its urban plan agenda. Accordingly,, it was not unusual for a small part of a district to be preserved while another, greater part, was demolished for an avenue to be opened.

The result of these activities on the urban structure was recorded by the local authorities and it can be seen that a relatively small proportion of the old city remains untouched[111]. However, the enormous size of Istanbul compared to the other Ottoman cities, and especially to the Balkan cities, makes the remaining old parts Istanbul bigger than any other urban nucleus in the Balkans. Thus, the nucleus of Bitola, which was better preserved than Istanbul, roughly equals to the *Fener – Balat district,* which is just one of the small areas still surviving in Istanbul.

The 'old' districts of the Historic Peninsula preserve the Ottoman, maze-like, urban plan of narrow streets, the same occuring in the lower parts of Galata and in other districts. However, there are several parts of the city built according to the new regulations and to the Hippodamean system, the parts of Pera and the streets around İstiklal Caddesi, big areas of Tatavla, many areas in Kadıköy and Moda. When the Hippodamean system was applied in the Historic Peninsula, most of the old buildings were already demolished. Furthermore, it was the application of the system itself that rarely spared these old constructions. As a result, when there is, in the Historic Peninsula, an area of horizontal and perpendicular streets, there are rarely any old civil buildings left untouched, unless, by chance or exception, they conformed, to the new plans. Mosques and public buildings were an important exception from this rule; in these cases it was the plan to be conformed to the buildings[112].

111 In **KUDEB (Koruma Uygulama ve Denetim Müdürlüğü),** I was given a very important still unpublished archive of buildings of the Historic Peninsula. The data contained in it, photos and texts, were of a great help; however, since this is a work to be published, reproduction of its material was not allowed. The CD containing the archive was a great source of evidence for the actual situation of the surviving Ottoman buildings in the old districts of Istanbul. The website for further information is: http://www.istanbulheritagecommittee.com/kurumlar/kudeb.html.

112 A detailed description of the legislation concerning the buildings and their requisite features is given by **Denel (1982).** Heights and other construction details were defined by laws depending on the area of the city and the Ottoman Empire.

I will now proceed to a district by district inspection of the architecture in Istanbul, I shall discuss some details of the urban planning along with a discussion of the architectural styles in each area.

3.2.2 Architecture in Istanbul during the late Ottoman era

The main urban centre of Istanbul during the Ottoman era occupied the historic Peninsula within the walls, the district of Galata and certain areas on the Asian coast. During the last decades of the Ottoman period, Istanbul expanded to new areas outside the walls and on the coasts; this being the period researched in this thesis.

The walls of the Historic Peninsula were demolished in the initial years of the tanzimat[113]. The sea front was opened to the districts, as occurred some years later in Thessaloniki. The only parts of the wall to remain nowadays are the ones surrounding the Top Kapı palace at the cape (Area **a** on map 3.2.4) and the ones dividing the peninsula from the rest of the land, clearly seen on the western part . Area **a** is the location of the Top Kapı Palace which housed the Sultan, the administration and the *harem,* until they were transferred to the Dolmabahçe Palace in the 1860s. Most of the buildings of the Top Kapı Palace were built during the first centuries of the Ottoman rule but there are some newer annexes – mainly pavilions and kiosques[114]. Following counter clockwise along the coast to the interior of the Halic, one gets to Area **b.** This is the area of the Şirkeci Station, the European side railway station built in the 1890s as an amalgam of western and oriental trends. The area to the west of the station (located between the signs **a** and **b** on the coast) and especially the area on the hills (exactly where the letter b indicates) is a commercial district with a great variety of important public and private buildings.

Foreign architects, D'Aronco, Vallaury, Stampa, Tedeschi,, locals, Vedad Bey, Kyriakides, Yenidünya, and others, tried various styles and combinations of architecture. The area of Sirkeci (**b**) and other areas of the Historic Peninsula are the center of the Ottoman revivalism, which started by foreigner architects inspired by orientalism and then continued by Ottomans as a response to imported trends and western influence[115].

The Vakıf Han, built in 1911, is such an example of Ottoman revivalism (fig. 3.2.i). The arches, the domes, and the *hilals*[116], of the facades show the ornamentation proposed

113 **(Akar, 2004) pp: 85 - 90.**
114 **(Necipoğlu, 1991).**
115 A comprehensive list of the most important buildings was published by the Chamber of Architects of Istanbul **(Batur, 2005)** comprising many important buildings. However, data about the buildings are rather limited and the book does not include mainstream buildings.
116 Muslim half moons

by the revivalist trend. On figure 3.2.ii one can see the mosque-like domes and the ornamentation of the windows, direct adaptations of older oriental forms[117].

Not far from Vakıf Han, is the Anadolu Han another building of the 1900s.. This is one more case of oriental revival in the Old Peninsula and especially in *Eminönü.* Orientalist influence is noticeable both in morphology e.g. the projection of the roof, and decoration (fig 3.1.iii). The Armenian architect, Tachdjan, chose an oriental design for the window and its molding (fig, 3.5.iv). Certain elements, the pilaster strips of the entrance seen on figure 3.2.v, are a direct application of the Ottoman artisanship and the *Geçis Elemanlari* (transition elements)[118]. However, this building has also many western European features combined, it is therefore an architectural hybrid as many other buildings in the area. There are more important buildings in Eminönü, like the building of the Company of Telecommunications and the Değirmen Han, both built at the turn of the century and both with prominent oriental elements. Art Nouveau buildings, which are far commoner in Pera, have an important representative here; the Vlora Han.

However, most of the buildings in this area are common and mainstream constructions, being built to shelter commercial and administrative activities. In contrast to the 'famous' buildings, which are mostly found on the main streets and were opened at the time of the tanzimat reforms, 'common' buildings are usually located on the narrower streets, in the old maze of Istanbul, replacing older kagirs and ahsaps, e.g., the building on image 3.2.vi, a medium high budget building. Architectural elements, plasterwork and ironwork, are commoner and belong to high quality typologies (fig. 3.2.vii).

Ironwork is very scarce in the Eminönü area, although these common styles were combined, in other cases, with iron elements. There are, however, still many iron doors. I have detected the same thing in the commercial areas of Bitola, where iron doors were dominant on many commercial buildings. It was possibly a question of security, which later evolved to a trend. Iron balusters and brackets, although rare in this area of Istanbul, are not rare in commercial areas in Bitola.

Further to the west on the same coast of the Haliç one meets the district of Unkapanı. The architectural environment in this area changes significantly. The lower part, which is closer to the sea, consists of small shops, hotels and warehouses. In contrast to Sirkeci, Unkapanı - the area indicated by the letter **c** on Map 4 - has very 'modest'

117 Orientalism is a big issue for the history of art in the Balkans and the Middle East. The oriental forms contributed to the creation of a broad art current which influenced both the western and the eastern European countries and other areas of the Ottoman Empire. The orientalism is neither a totally oriental nor occidental trend but rather an osmosis of the two, a romantic utopia of the Westerners and a Westernized interpreted revival for the Orientals. Among the many books which form the relevant literature I distinguish two: that of **Saner (1998)** and of **Germaner and İnankur (2002).** The former is an excellent analysis of the impact of Orientalism on the built environment and the latter focuses on the impact on Western art.

118 See **Uluengin (2001) pp: 50 – 62.**

buildings, built on low budgets and bearing common ornaments. Whereas the littoral of Unkapanı is full of kagirs, the areas on the hills are built with ahsaps, most of which are now in ruins. These ahsaps reach the vicinities of the Süleimaniye Mosque (which can easily be seen in the middle between signs **i** and **b** on Map 4.

The building in figure 3.2.viii is an example of a middle–low mainstream commercial building. It has a high ground floor with shop windows and a projection of the upper floors sustained by plaster brackets. Ornaments are common, of low quality, and belong to mainstream typologies. The brackets and the moldings are not unique on this building like in many buildings in Şirkeci,. Ornamentation is served by mass produced elements. Ironwork elements are extremely scarce in the area both on kagirs and ahsaps. On pictures 3.2.ix to 3.2.xii, one can see some typical cases of such buildings. Although there is, sometimes minimal, plaster ornamentation on the kagirs, ironwork ornamentation is absent. The building on figure 3.2.xii is an ahsap of the late period; a combination of kagir (ground floor) and an ahsap (upper floors). Ornamentation on both parts is minimal.

Following the littoral to the west, one meets the second bridge of Haliç. The avenue passing from the bridge divides the peninsula into two parts; the eastern part is Eminönü and the western is *Fatih, b*oth areas being administrative units within the Municipality of Istanbul. The northern littoral of Fatih, on the same coast of Halic with Unkapanı and to the west, is Fener, one of the most famous districts of the city. It used to be a multicultural district before Ottoman, non-Muslim communities in Istanbul significantly shrank. The district remained almost untouched by new urban projects, with the exception of the sea front, which was widened by the building of an avenue surrounding the entire peninsula at the line of the natural coast[119]. The hills in Fener are very steep and this contributed to the better preservation of pockets of ahsaps and old kagirs.

Maps by *Goad* and *Pervitich* (fig. 3.1.xiii Pervitich, sheet 22) show that the littoral was built densely with kagirs, whereas the interior was covered with ahsaps. Large areas in Goad's 1904 maps show empty spaces in the interior of the peninsula, older districts that were probably devastated by big fires. Letter **d** on Map 4 indicates the center of Fener. The big building below **d** is the Fethiye Mosque, the bigger mosque in the area. Fener is often considered as a unique area with Balat, to the West, and Ayvansaray ,the area which neighbors the walls. Many important temples are found in Fener. In contrast to Eminönu, in the area of Fener – Balat all communities were represented both by their temples and by community buildings.

119 **(Arpad, 2007).**

There are important public buildings in the area, whose budgets and quality, unlike those of private buildings and residences, have very high standards. Though churches are not generally included in this thesis, one in particular in this area warrants discussion. This is the Bulgarian Church of Sveti Stefan, situated on the first line of Fener's littoral (3.2.xiv). Sveti Stefan was built by an Armenian architect, Hovzep Aznavur, in the 1890s, and is made entirely of iron. This is one of the few examples of such a large metal building in the Balkans and though such big constructions were not at all rare in western Europe, they were very seldom found in the Ottoman Empire. The prefabricateed parts came from the Waagner company in Vienne after an international competition[120]. The Waagner Company is still an internationally active big manufacturer of metal buildings and bridges, see also 3.2.xv and 3.2.xvi.

A sublime building of Fener, seen from very far away, is the *Fener Rum Erkek Lisesi* ,the boys Greek Lyceum of Fener, built in 1883 by the Greek architect Dimadis. The building is a renegotiation of neo – byzantine styles as are many of its ornaments. The characteristic red brick is part of this style, fig. 3.2. xvii; Greeks architects very often emphasized classic ornaments or opted for neoclassic architecture, as in the case of Marasleion Lyceum located close to the Greek Orthodox Patriarchate. It is a very typical neoclassic building of the late nineteenth century. However, the main entrance follows local trends, which have faint relationship with the neoclassic ornamental trends (3.2.xviii).

The main focus of this research, however, is not on the exceptional buildings but on the mainstream and the common. Fener is a place where old, common buildings – ahsaps and kagirs – still survive in such numbers to form compact neighborhoods. The most important street in Fener – Balat is Vodina, or Vodinya, Street, the main street of the area before the construction of the coastal road, and the residential and commercial buildings on Vodinya Street comprise some of the most prestigious in the area.

Such a case is the building on the corner of Vodinya and Kundakcı Streets (fig. 3.2.xix). It is a three storey residence-commercial construction, whose two upper floors are projected and sustained by plaster brackets, the roof being extended and sustained by wooden brackets. The windows have, on both sides, pilaster strips ending to Ionian style capitals while both the upper floors have balconies, seen on the left side as seen on the image, which bear curved bars railings. All these ornaments belong to, more or less, common typologies. The roof brackets are a version of similar elements seen on ahsaps; especially of those in the coastal districts and the *Prince Islands*. The iron elements are widespread all over the city from the modest buildings of *Samatya* to the prestigious

120 See for instance in **(Özbilge, 2005)** especially in **p: 131 -135.**

apartments of Galata. The pilasters strips are even broader typologies. Pilasters of this kind can be seen in many places in the Balkans, but rarely in low-strata areas, unlike the curved iron balusters. The plaster brackets, which sustain the projection of the two upper levels, were used in many middle budget residences of Galata and *Cihangir* but they were less used in Fener –Balat. In this sense, this building has a kinship with the Galata area in terms of plaster ornamentation.

The building mentioned above is not among the commonest cases for Fener. Many of the buildings built during the late Ottoman period follow stereotype patterns with limited ornamentation, whose typologies are among the commonest. The main design concept is repeated throughout the northwestern coast of the peninsula. The residences are three storey buildings with a part of the first floor projected as an oriel which is often sustained by iron or plaster brackets: a practice less often the case in Fener but a much more frequent in Pera. The door is at the one side of the building leaving space for two windows on the same level. These windows are very often protected by iron railings, especially curved ones. The oriel, which is in the middle, has one window with two more windows symmetrically on either side. The upper part of the oriel is usually used as a balcony and in the case illustrated, has railings (fig. 3.2.xx).

There are, of course, various deviations and variants from this basic pattern. In figure 3.2.xxi for instance, the balcony is placed above the main entrance. In both cases, the house on the right on figure 3.2.xx and the house on figure 3.2.xxi, the same balusters are used.

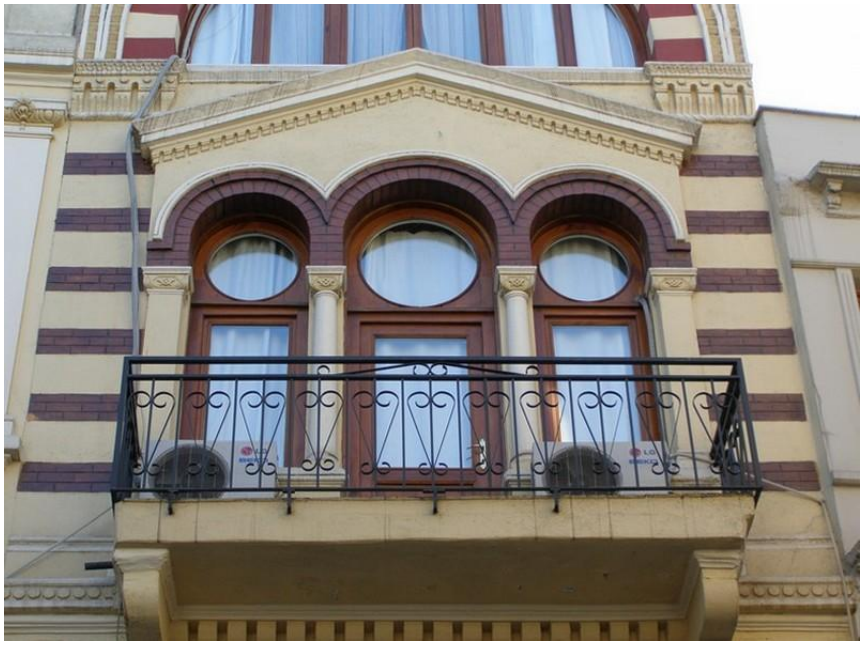


fig. 3.2.xxiv

The designs of the buildings set some limits, in this case only one pair of brackets and a balustrade can be used, but these limitations do not define the form of the objects to be installed. There could be a great variety of different railings in the place of the curved ones - which are so often repeated in Fener. It is fashion and budget which push the choices towards a very narrow range of alternatives compared to all possible forms.

Space fragmentation according to architecture, prestige or social stratification, is not only a difference between broader districts but also within the same district even in a distance of a hundred meters. Some crossroads in Fener create open spaces, some of which spaces were apparently preferred by the higher social strata in the district's stratification. On these crossroads, especially near the Orthodox Patriarchate,, buildings upgrade to more prestigious standards distancing from the mainstream Fener typologies and getting closer either to more inter–district standards or to unique forms.

The building on picture 3.2.xxii belongs to this kind of 'upgrades'. The way to achieve this comes both through the morphology of the building and the ornaments. Whereas not uncommon throughout the city , the ornamental elements of this building, plasterwork and ironwork, are a 'minority' for the Fener area and this residence, which would be commonplace in a small street in Pera, is located at one of the most prestigious spots of Fener. It should be remarked that considering its morphology, this building would be one out of the main typologies in Pera also, however, most of its ornaments are trivial and common in Pera in big contrast with Fener. Nevertheless, it is not just Pera or other similar high strata areas that contain unique or rare ornaments. While it is more likely to find them in Pera, where budgets permit greater flexibility and choice, less probable to find them in Fener, where choice is suppressed by economic delimitation and even less likely to find them in the Unkapanı district, where ornamentation becomes minimal despite that it was in the main trend at that time, this composition (fig. 3.2.xiv on the previous page) made by the Greek architect Mavromatis, shows that rare and even unique pieces can be found everywhere.

A part of the Ottoman city still survives in the area near the walls and towards the interior of the peninsula. The area close to the walls and on both parts of the sign **e,** (map 4) has more modest constructions of lower social strata.

The house on figure 3.2.xxv is a case of a low budget building in a low budget area. It is a three storey construction but morphologically, does not conform to the common Fener style. Ornamentation becomes minimal; it is almost inexistent. The railings however, belong to a mainstream typology widespread in all Istanbul but nonexistent in Bitola and Thessaloniki. These curved window railings are ornamented with decorative iron laces, a 'reflection' of the art nouveau trends that entered the city through its central districts[121]. An iron element, which is very common in the area, is the single bar bracket. In

121 **Barillari and Godoli (1997)** dedicate the second part of their book to the introduction of art nouveau in Istanbul. As it results from their arguments, the Art – Nouveau trend entered from above, that is, from the higher social strata and the most prestigious buildings. This position coincides with mine. I have pointed out that the flow of the trends on ornaments has exactly the same direction.

this case it is not the old building which bears it, but the newer one at its left. This is, therefore, a case of a minor 'revivalism' of a typology; an element that fades out in all the other places continues to live or revives in a limited area combined with the successive architectural styles, a kind of a minor trend and revival that is rarely registered by the 'big' architectural theory. The lack of ornamentation at that time was not so much a result of fashion, as soon as budgets were getting higher, ornamentation was getting denser; however this is not an absolute rule.

Poverty delimits ornamentation. However, despite strong limitations imposed by economic possibilities, ornamentation may decrease or be expressed through alternative forms, see for instance the extremely poor house on figure 3.2.xxvi. The owner tried to decorate the windows with cheap construction bars, bent by hand. Whereas in mainstream constructions bars serve for protection, I consider that these railings cannot really protect anything. The purpose is ornamental. The window frames and the railings are improvised out of remaining parts and as a result resemble each other while being however different. The method of construction shares a great similarity with the other edge of the social scale; in very prestigious areas and on very high budget buildings, often very luxurious elements are also made by hand[122].

At the vicinities of Kariye Mosque (almost at the under the **e**) there is a small well preserved, and recently restored, area of ahsaps (fig. 3.2.xxvii). Most of them have simple standardized ornamentation. Ironwork elements are very scarce consisting mostly of mainstream window railings. There are lower budget ahsaps and kagirs on all the way to the main walls' gate of Top Kapı. This gate is situated at the point where the more notherly of the two avenues going west, Vatan Bulvarı, meets the walls. Here, often the typologies of ornaments – ironwork included – are very modest and mainstream. This is a high probability but not an absolute rule, see for example the upper part of the house on picture 3.2.xxiii. This is currently in very bad condition and has no ornaments, the windows having c-scroll railings which are mainstream in Bitola but rather less frequent in Istanbul. The overdoor is a rarity for the area, a design mostly encountered in some areas of Pera and rarely in Kadiköy. However, this particular object has significantly less material, being an adaptation of a concept to the local standards. This practice is applied on several buildings of this area and it is found especially on window railings. It was often, the case that design concepts of more prestigious areas were adopted in lower strata areas of the city and objectified by less abundant material under lower quality fabrication methods.

122 At that time of lower industrialization – compared to nowadays – many ornaments were made anyway by hand. Therefore, "by hand," in this case, means unique items compared to the mass production of the era.

Old buildings are very scarce in most of the peninsula's interior, there are only a few houses left and these do not form compact neighborhoods but remain isolated or in small groups. However, the few houses in the case of Istanbul may equal to a whole set of houses left in a city in Macedonia or Thrace. There may be 100 Ottoman buildings in all the western interior of the peninsula (from **h** the walls) and while this would be a high percentage of preservation for *Florina, Kavala* or Edirne, for Istanbul this is not very significant and does not change the possible results of the research, given that most of the buildings left are similar to those of the adjacent areas.

Samatya and Yedikule are the coastal areas neighboring the walls at the point they meet the Sea of Marmara (**f** on map 3.2.4). Like Fener, and in conttrast to the interior of Fatih, Samatya was a multicultural district with significant Muslim, Greek and Armenian communities. In Samatya and Yedikule highly prestigious buildings are rare and the preserved buildings in Samatya do not form compact preserved areas in the same way they do in Fener. For example,on image 3.2.xxix; there are six buildings on a row, three of of which are Ottoman, the other three, newer. The green ahsap, second in the row, has very few ornaments. The window railings belong to common typologies (3.2.xxx) and as already discussed, common typologies are often manufactured with cheaper material and with simpler processes in modest constructions. So, whereas in some cases there is a change of typologies when moving to different social strata, in other cases there is the persistence of the same typologies but with an proportional reduction of their cost. A common typology in a 'reduced-cost' form is used on the red brick house, fourth in the row fig. 3.2.xxii, in this case, these common elements are combined with quite original brick ornaments. Ahsaps are commoner in Samatya – Yedikule and some of them are of medium-high quality. For example the ahsap on figure 3.2.xxxii with its rather simple lateral façade leading to a very impressive coin that functions as the main façade of the building. Western influence is noticeable on it (fig. 3.2.xxxiii) as can be seen on the window moldings and the window heads. The roof and the brackets belong to older typologies, probably with some baroque influence.

The mainstream typology of Fener residence is less frequent in Samatya but always common. On figure 3.2.xxxiv one can see a triple three storey residence on a main street. At the end of the nineteenth century the construction of blocks of residences, a practice common in many European cities, became popular in Istanbul also.. This particular residence is organized on three levels and like the residences in Fener, the house has the main entrance on one side with two windows on the other. The projected floor creates a balcony, which in this case bears a quite simple straight bars railing with c-scrolls. The minimal plaster ornamentation has a delicate baroque touch (fig. 3.2.xxxv).

Old houses are much scarcer in the area between **f** and **g** MAP???and the interior of the peninsula and in this area as well as elsewherel over the peninsula, there are ruins of older constructions. This is the case of the wall on figure 3.2.xxxvii. The style of its construction and other evidence shows that it must be a building of the period between the 1820s and the 1850s. The railings belong to a mainstream typology and similar ruins in many parts of the peninsula prove that this typology was widespread since the early nineteenth century. The fact that this typology was so rare on mosques and public buildings leads to the conclusion that probably it was used mostly in civil architecture.

Despite the massive reconstruction of the center, a compact area of ahsaps remained untouched in the interior of the peninsula. This is the area surrounding the Süleimaniye Mosque (the big building between **i** and **b** Map 4 and the University of Ankara. Ahsaps in the Süleimaniye area belong to various styles and are built on different budgets. In the case of the ahsap in figure 3.2.xxxviii, this is an impressive three storey construction made by the combinations of several cubic volumes. Ornamentation is discrete but 'sophisticated', elements' typologies of the façade have different 'biographies' and relations while the brackets, which are quite common on ahsaps, did not continue to be used on or 'pass on' to the kagirs but they have strong resemblances with many plaster and iron typologies as shown in fig.3.2.xxxix. The decorative stars are also a mainstream in ahsaps and passed on to kagirs as plaster elements, however, mostly on middle–low budget buildings (fig. 3.2.xl). The window lattices, which were very popular in the entire Ottoman Empire, did not pass on to the kagirs and faded out with the end of the ahsap period (fig.3.2.xli). In the Suleymaniye area, there are also some middle–high budget buildings, influenced by imported western trends on the ornamentation of their facades. See, for instance, the building on image 3.2.xlii, built in the 1880s and now hosting the Municipal center for the restoration of ahsaps. Its pediments and pilaster strips show a neoclassic influence that passed to the ahsaps during their later period, these 'novelties' being acompanied with typical ahsap ornaments; stars for instance.

Many ahsaps are in ruins but lately the municipality has launched a big scale project for the restoration of old buildings. There are some more, small, areas, which have preserved Ottoman kagirs such as the Çiftegelinler Street in Kumkapı, the area from **g** and to the east on Map 4, in the vicinity of the Church of Aghia Kyriaki. On this row, one can see a mainstream Istanbul building, a simple one, a neoclassic and an eclectic at the end. This eclectic style is achieved both by the morphology and the ornamentation (fig. 3.2.xliv). The building is opposite to the Church of Aghia Kyriaki, one of the last Greek Orthodox Churches built on the peninsula, a building of the Greek community, which sheltered the functions of the parish. Both this building and the one on Tiyatro Street at the other side of

the church are quite original for the area and create and architectural and ornamental islet, and there are, all over Istanbul, several cases of such islets close to churches. In this case, the islet favors certain ornamental elements such as the ionic pilasters. The relation between ornaments and identity is unidirectional. This is, for instance, the case with the use of meanders. There are on both these houses meander friezes which occur often on Greek owned buildings. However, this relation does not 'function' the other way round; buildings bearing meanders are not necessarily Greek.

The area 2 on map 3.3.2 indicates the Pera - Galata area, on the other bank of Haliç. The main core of the district, which was surrounded by walls, can be roughly defined by a triangle whose corners are: the second bridge of Halic near **b1**, the tower of Galata (the open space near **a**) and the letter **b2** (a plan of Istanbul in the 1850s on 3.2.xlii, a contemporary view of Galata: fig. 3.2.xlviii). The area of Galata was, during the entire Ottoman period, an 'exhibition' of foreign trends and a European counterpart of the city. The skyline of Galata was quite different from that of the Historic Peninsula. There were neither big mosques nor great Ottoman Palaces, these being built after the mid nineteenth century, mostly on the coast of the Bosporus.

Galata was, since the first years of the Ottoman era, a place with a majority of non Muslims. These non Muslim communities were formed either by Ottoman Christians, Greeks, Armenians and Bulgarians, or westerners, Venetians, French and others and since the years of Suleyman the Magnificent, many foreign embassies were installed in this part of the city[123]. When the tanzimat reforms dictated changes to building regulations and urban planning, Galata was among the first places where they were applied for the first time[124]. On figure 3.2.xlvii one can see the expansion of the city during the 1850s, the approximate start of the late Ottoman era. Whereas the urban centre of the Historic Peninsula was still contained within the city walls, it significantly sprawled out of the walls in the part of Galata (sign a) and thus created the district of Pera (sign d) (actual image of Galata: fig. 3.2.xlviii). Researchers of the History of Pera consider the construction of foreign embassies and schools to be very important. These buildings were most often designed by foreign architects called in purpose[125] as was the case of the British Embassy, currently the British Consulate, fig. 3.2.xlix. It was built for the British diplomatic mission

123 The importance of the construction of the embassies in Pera and their contribution to the local architectural trends is a common place in literature. Among many references to the issue we will see at this point two: **Duhani (1982) p: 20 – 25** and **Cezar (1991) p: 31 – 54.** They both consider that the embassies functioned as a living example of the western architecture and as a strong proposition for further westernization.

124 See **(Batur, 1985).**

125 This is another commonplace; the many foreign architects who entered the Ottoman Empire created many buildings at prominent places within Ottoman cities. These people definitively influenced Ottoman architecture until the arrival of the first academically recognized Ottoman architects, many of whom had studied in western countries. See for instance: **Barillari and Godoli (1997) p:14 – 41** and **Özer (2005) p: 155 – 161.**

in 1854 by British architects and artisansand the building belongs to a common style for that period and for the purposes it was built for. It is moderately ornamented with mainstream typologies. Although mainstream for the British and the Western architecture, both the form and the ornaments were a novelty for Istanbul. The Russian Consulate, built in 1838 – 1847 by the Swiss architect Fossati, the Dutch Consulate, Fossati, 1858, the French, the American, the Swedish and other public buildings of foreign diplomatic missions in the Ottoman Empire, created, in the period of the tanzimat, the landmarks of the city's renovation and modernization.

As already discussed, foreign experts, including engineers and architects, came to the Ottoman Empire in an attempt by the Ottoman authorities to create a western-inspired impulse to technology and the economy. This wave from the west brought many ambitious architects to Istanbul and the city's renovation and the emerging of new social strata gave an excellent opportunity for the creation of new buildings. Among the first to build systematically in a Western fashion were the members of an Armenian family, the Balyan, who, although Ottomans, had studied in France and in other European capitals. Gaspare Fossati did not leave the country after the completion of the Russian consulate but, with the aid of his brother Giuseppe, who joined him, proceeded with the creation of more than ten big public buildings in the years between 1840 and 1850,. The city attracted many architects who considered Istanbul to be an excellent place for exercising their innovative ideas, similar to the recent trends in Barcelona and Berlin. Ercole Stampa, Giacomo Leoni, Giovanni Battista Barborini and Guglielmo Semprini were some of those forming the Italian wave of architects[126].

The construction of the *Tunel,* the second underground of the world, by the Frenchman, Henri Gavand, in 1875, coupled with the creation of sidewalks, the demolition of the city walls in various phases from 1863, and many other works in the public space created the canvas for the development of a western oriented architecture. The non Muslim communities, which were a minority in Galata and Pera, had their own reasons to favor western inspired trends while the impulse for class distinction pushed upper class Muslims settled in the area to opt for the western trends. This class distinction was accompanied by a massive introduction of French trends and culture and this new French – oriented tendency brought many French architects in Istanbul, among whom were Antoine Bourgeois, Leon Parvilee, Adolphe Maillard and Alaxandre Vallaury whom I have already 'mentioned in the Historic Peninsula[127].

126 A detailed reference to works of Italians in Istanbul by **Burçak (2008).**
127 **Cezar (1991) p: 156 – 162.**

German companies active in the infrastructure works, throughout the Ottoman Empire, particularly on railways, brought many engineers and architects to Ottoman cities, in particular to Istanbul, and some of them were involved in the construction of public and private buildings. A. Jasmund designed and supervised the Şirkeci Station, which I have already presented in Eminönü on the Historic Peninsula, and Max Spitta and Otto Ritte prolonged later the presence of German architects in Istanbul.

British architects did not play a very important role in the architectural activity of Istanbul as Reshid Pasha, the man who worked out the tanzimat, had hoped. The British architects were mostly involved in works of British interest such as the British Embassy which we have already seen, the English Hospital and others[128].

The coast of Galata on Bosporus became an area of great construction activity

Fig. 3.2.l Ortakoy Mosque (and part of the Bosporus Bridge)

during the second half of the nineteenth century (area from b2 to the east and especially the area near the stadium; the area from the stadium to the bridge of Bosporus on map 3.3.5). The Dolmabahçe Palace, a unique *turco-baroque* and *oriental-rococo* masterpiece, was built in the years between 1843 and 1856 to host the sultanate and the high administration, when they permanently left the Top Kapı Palace. It was designed by Garabet Balyan, of the famous family, and supervised by him, Nigoğayos Balyan and Evanis

128 See: **(Baykara, 1985)** for foreign architects active in İstanbul.

Kalfa. Nigoğayos Balyan built two famous mosques: the Dolmabahçe Mosque, close to the homonymous palace, and the Ortaköy Mosque, close to the actual position of the Bridge of Bosporus. The form is a neo – renaissance adaptation of Islamic art, whereas the second is a baroque construction with some orientalist elements. Later, between 1863 and 1867, he built the Cırağan Palace, which was recently restored to function as a luxury hotel. On the hills overlooking these buildings there is a complex of kiosks and pavilions, the Yıldız Palace, which consists of different buildings with different construction dates. This was redesigned as a whole by the famous Italian architect D'Aronco who built many public and private buildings all over Istanbul. All these palaces were not, and are still not within the central urban fabric, in spite of many years of intense urbanization. Then out of the city, and now surrounded by their gardens and big public spaces, these palaces and mosques were not a part of the dense urban landscape but constituted prominent landmarks and architectonic examples which indicated the tendencies and the trends of western architectural styles.

To what extent might the landmarks have influenced the civil architecture of Pera and Istanbul? I consider that their main influence was not through any of the elements they bore but through the path they were indicating; a path towards certain architectural styles, at a first stage, and towards the West, at a second stage.

Many private and commercial buildings were built in all the areas of Pera and Galata and especially on İstiklal Caddesi, ,Street, the main commercial street of the area. The space of this research does not permit an extensive analysis of the architecture in Istanbul, this city and its history are too large to be contained in a few pages. Accordingly,, I shall limit the discussion to some representative cases which indicate the tendencies and the ambitions of the era.

The Narmanlı Han, on the south part of İstiklal Street, was one of the first buildings built according to a western inspired fashion. It was built in the 1830s or 1840s as a complex of shops workshops and offices, fig. 3.2.li. It is an austere building both in form and ornamentation. The brackets have a simple triangle shape, the railings are simple bars and the pillars belong to the Tuscan order in its more basic form. Two hundred meters to the north and on the same row of İstiklal Street, the Cite de Pera was built in 1876. The general plan of the Cite de Pera has a resemblance with the Narmanlı Han, especially on the circular tower at the corner, fig.3.2.lii, nevertheless, ornamentation is starkly different. The Cite de Pera is fully ornamented with various elements. It has an eclectic façade with a neo – renaissance touch. The plaster elements are tailor made for the building, as far I could determine, but the iron elements are not. The railings of the balcony belong to a rare typology, which exists only in Pera and in no other district of Instanbul nor in any other

city of those I inspected, fig. 3.2.liii. They are found on medium high and high budget buildings of various architectural styles. The railings of the terrace are far more common; they are found in relatively big numbers in the Galata and Pera area and throughout all Istanbul. They are found also in Bitola, but in lower numbers. The buildings that bear them also belong to various architectural styles but, in contrast to the balcony railings, they are mostly found on medium budget buildings. So, in this case there is a crossing of two

Fig. 3.2.lv Istiklal Caddesi at the day of the proclamation of constitution (1908)

typologies, which have a different distribution and implication in the urban space. Yet, there is a 'hierarchic' composition in this case too. The 'higher-prestige' elements are placed on a more central position of the composition, whereas the 'lower-prestige' elements are 'hidden' on the terrace. These mass produced elements are combined with a unique door; a masterpiece element.

There are many buildings on Istiklal Street that have been influenced by all the architectural styles in fashion during the late nineteenth century. There are also many buildings which are influenced from the orientalist fashion either through revived elements and ornaments or through new 'oriental' elements.

Whereas Istiklal Caddesi is a mixture of high prestige along with several middle – high budgets constructions, Meşrutiyet Street, close to Istiklal and on the verge of the hill of Pera, is a place of absolute prestige. All styles of facades were incorporated into Meşrutiyet buildings built during the decades at the turn of the century. In whichever style the facades were composed, they are all highly eclectic; the architects most often did not hesitate to mix styles and to combine typologies which would be quite irrelevant in their 'original' styles. A famous example of high eclecticism is the Grand Hotel de Pera, built in 1891 by the Greeks Apergis and Adamopoulos, whose balcony is illustrated in figure

3.2.lvi. Its most prominent elements are the caryatids combined with elements of various styles and trends.

One of the first concrete buildings to be built in Istanbul was the complex of St. Antoine's Church and its apartments. Built in 1906, the church was designed on an Italian neo-gothic style, Fig. 3.2.lvii, the apartments are strongly reminiscent of palaces in Verona and Venice, Fig.3.2.lviii. Giulio Mongeri, the architect, has left his trace in several spots of the city on public and private buildings.

Within thirty years, many parts of Pera were completely transformed. Prestigious buildings, several of which are important landmarks of the city, were constructed during the late Ottoman era: the neo-Ottoman Elhamra Han in1861, the Municipality of Pera – a neoclassic building of the 1880s - various buildings serving the Tünel subway and many private apartments of the late nineteenth century; the Frej, the Venulahi and the Helbig[129].

Many architects started, in the late nineteenth century, a practice of 'signing' their creations. More frequently in Pera and Galata and less often in Fener, Eminönü or Kadiköy, commemorative plates bore the names of the architects, Fig. 3.2.lix. In this manner, there is an immediate introduction of a kind of 'brand' on certain constructions, though many foreign and Ottoman architects did not limit their activities only to prestigious public and private-commercial 'branded' buildings, but worked also on the creation of high or medium-high class residences.

However, most residences in Galata and Pera are common ones, built by unknown architects It is, nevertheless, to these buildings that great importance is attached. It is on these buildings that mass produced ironwork elements are mostly used and on which broad and common trends are circulated.

The Kamondo Apartments, built in the late 1870s, were among the first residences in the transition to the western style of apartments (fig. 3.2.lx). The morphology and the ornamentation of the apartments are 'transitory'; the building is old enough to be in the late neoclassic period combined with the fading out Ottoman trends, or possibly to be considered in the very early period of the Ottoman revivalism. The most prominent morphological feature is the system of oriels, which in this case are not sustained by any brackets. Both the plasterwork and the woodwork have a strong neoclassic influence, and thus, there is a rare combination of neoclassic elements on wooden oriels, which enforce the idea of a transitory character of the building (fig. 3.2.lxi – lxii).

However, during the 1880s and even more in the 1890s, many other styles were used in all the area of Pera and Galata. A detailed analysis of mainstream architecture cannot be, unfortunately, comprehensive within the limits of this research and while this

129 **Belge, 1993 p: 224 – 226.**

is especially difficult for Pera and Galata, the center of the capital, nevertheless, I will focus on a number of cases which may represent general mainstream typologies of civil architecture.

One of the older apartment blocks in Galata (fig. 3.2.lxiv) stands very close to the *Galata Tower*[130] on Buyuk Hendek[131] Street 51. The location of the Galata Tower is indicated by the letter **a** on map 3.2.5. Evidence shows that it is a building of the 1870s. If this is correct, this is the case of a façade which is an ornamental precursor of later elements. Ornamentation is very simple, for instance the balcony brackets (fig 3.2.lxv and lxvii). Window moldings are very austere too (fig 3.2.lxvi). The ironwork belongs to typologies that became very common in the 1880s and the 1890s, while on the balustrade, decorative laces were used. These laces are extremely rare in Thessaloniki and Bitola but present in Plovdiv on later constructions occurring after the big wave of the art nouveau influence in the 1890s; these same wave that had reached Istanbul a little earlier and transformed these laces, changing them in a more art nouveau manner.

Fig. 3.2.lxix Yeni Carsi 21

At the same time, hundreds of medium budget mainstream kagirs were built in the whole area. On image 3.2.lxviii one can see the building that stands on Yeni Çarşı Street 21. Yeni Çarşı Street intersects Istiklal Caddesi at the point indicated by the letter **d MAP???.** The main concept of the building resembles some common typologies seen in Fener. This is a four storey building, which has the typical first floor projection forming an oriel. The oriel creates on its top a balcony sustained by the mainstream g-key iron brackets.

In contrast to its balcony railings, simple bars, and the iron brackets, the ironwork of the main entrance and the windows are uncommon and possibly tailor made for this building. Such elements' combinations of mass produced and tailor made elements are

130 Ibid

131 *Buyuk Hendek* means *Great Ditch.* This important road of Galata was made on the position of the city's walls ditch after their first partial demolition in 1863.

found mostly on higher budget buildings but they are also met, less frequently, in all the range of budgets.

Though ornamentation of the facades significantly decreased in the 1920s and the 1930s under the trend of modernism, this does not mean that there were not minimally ornamented buildings before that period. Close to the German hospital in Pera, in a rather small street, one meets the Kavala apartments. The building was built in the 1900s and its decoration does not involve many ornaments (fig. 3.2.lxx – lxxi).

I conclude this brief presentation of the architecture and the architectural elements in Istanbul with a few more words about some other districts of the city, some of which were not included in this research: Üsküdar, Arnavutköy, Tatavla and the Prince Islands. Others were included: Kadıköy. I will present them briefly: Arnavutköy (number 5 on map 3.2.2) is an area of impressive *yalılar*[132]. The yalılar were coastal residences, very often luxurious, belonging usually to people of the higher social class. They were dense in Arnavutköy and less dense in other littoral areas of the Bosporus which were further from Istanbul. Üsküdar (number 4 on map 3.2.2) had some yalılar, some of which still survive. However, Üsküdar was, architecturally, a mixed district in the sense that there were both yalılar (on the littoral) and typical three storey houses similar to those of Fener and Galata.

This pattern was similar in Kadıköy also (number 3 on map 3.2.2). Some important public buildings, The Army Medical School,on the borders with Üsküdar, and the National Conservatoire, were built on the littoral and some other, less voluminous, on the hills, which are much less steep here. Such a case is the Opera of Kadıköy built in 1928[133]. The building has a peculiar mixed style and an element that is very rare in Istanbul, a marquee, an element, found almost everywhere in the commercial districts of Thessaloniki (see fig.3.2.lxxii and lxxiii). With respect to private buildings and residences, there is a strong resemblance between Kadıköy and others districts of Istanbul. There are many kagirs, which pertain to mainstream styles already detected in Galata and Fener, yet with some local adaptations and touches, as in the example of the row of buildings on figure 3.2.lxxiv, which follow the general style I have already discussed in Fener and elsewhere. These are again three storey residences with a projected first floor sustained by oriels, the first floor windows being protected by railings that are also common in many districts of Istanbul. However, there are some ornamental choices, which, although not limited to the Kadiköy area, are far more frequent here. See for instance, the bricks on the corners and the

132 **Balcı (1975)** offers, with an essence of nostalgia, many architectural details on the coastal villas – the Yalılar.

133 Nostalgic books about the old Kadıköy were more intensively written since the 1980's. These books – which are a fashion for many other Balkan cities too – are not scientific analyses but rather remembrances of 'good old times'. However, their descriptions are so comprehensive and dense that evidence and data can be retrieved. In this case see **Ekdal (1996) p: 67 – 71.**

balcony railings on the top of the oriel. The former are found rarely in Galata, more frequently being found in Fener and more on commercial buildings than residences. In Kadıköy they are a commonplace on mainstream residences. The latter, the railings, are found almost exclusively in Kadıköy and not in other districts. Nevertheless, rare varients are found in other Balkan cities. Thus, although similar, mainstream architecture in Kadıköy differs in ornamentation elements and very often in the proportions and the combinations of those elements on the façade.

Large parts of Kadıköy were built on Hippodamean system, according to the urban plans made after the tanzimat reforms and especially during the late nineteenth century. Buildings of all kinds were built on this raster, some last ahsaps, many mainstream kagirs and some big apartment buildings. Many of these buildings introduced important innovations in the built environment. See for instance the Kehribadji Apartments built in 1909, a quite innovative construction both in terms of morphology and ornamentation (fig.3.2.lxxv). The building bears no plaster elements, being thus a precursor of a trend to come. Nevertheless, it bears full sets of iron elements: balcony railings and brackets and window railings (see fig.3.2.lxxvi and lxxvii). The ironwork is a prominent sample of Istanbul's art nouveau, which was very widespread in the Yalılar of Kadıköy, but rather limited in medium strata areas. In these areas, it is mostly found on prominent and innovative constructions such as this one[134].

Few ahsaps survive in Kadıköy, surrounded by kagirs and newer constructions of every kind. I shall not discuss the mainstream ahsaps found in the middle strata's areas since there are not many particular things about them and they bear in general many limited ironwork elements. Nevertheless, many Yalılar were ahsaps, which often were very innovative.

Such a case is the building on image 3.3.2.lxxviii: it is a high class large residence with full original ornaments. The railings are unique, thought they have a strong kinship with other typologies of Kadiköy and Pera. A detail enforcing this particular kinship is the system of laces on the balustrade; part of the general Istanbul art nouveau. Other large and important residences were built all over the area of the peninsula of Kadıköy. Some of them have maintained the ahsap tradition many years after the trend had faded out in more central districts. That is the case of the building on figure 3.2.lxxix. It is a voluminous construction built in the 1890s to shelter the daughters of a prominent Muslim official. Just as in the cases of other ahsaps iron elements are very few, in this case, limited to the widow railings.

134 **Ekdal (1996) p: 276 – 218** for the architecture and the society through the local's narrative and not in an architectural or sociological perspective.

Müfid Ekdal has written a detailed book about the Kadikoy Yalilar. Out of the 200 buildings mentioned in the book only some ten still survive. Unfortunately archival images are very limited and consecuently, evidence about the Kadıköy Yalilar is very scarce[135]. However, even through this scarce evidence one can see the kinship in architecture and ornamnets between the southern parts of Kadikoy and the Prince Islands. The Prince Islands, at the southeast of Istanbul, were, until the middle nineteenth century, a place of exile, but were then gradually converted to a resort and a luxurious distant district of the capital. Consequently, in the second half of the nineteenth century and in the early twentieth, many villas were built on the four of them and especially on the bigger one: Prinkipos. Some of these buildings are really impressive. That is the case of the building on figure 3.2.lxxx, which was built in the early 1900s. It should be remarked that ahsaps and elements that disappeared in the central districts and still remain in some parts of Kadıköy, have survived for much longer in the Prince islands. Again, as one moves down in the scale of budgets, one meets commoner elements, see for instance on figure 3.2lxxxi. However, due to the prolongation of the life of certain typologies in the Prince Islands area, there were some minor renegotiations of the common typologies and of some local ones.

135 The diligent scholar of Kadıköy, doctor **Ekdal**, expanded the second part of his previous book in a door to door tour of Kadıköy **(2005).**

3.2.3 Ironwork in Istanbul

Ironwork areas; quantity

The widespread use of ironwork was introduced in the Ottoman architecture in the nineteenth century, in particular in the second half. Use of iron on the facades increased along with the import of western architectural models and the consequent Europeanization of the Ottoman Empire. There is little evidence of its use on private buildings during the eighteenth century or in first period of the nineteenth century, especially before the beginning of the photographic era. Remnants of the old city parts, mostly public buildings and ahsaps, contain certain typologies of ironwork, though rather limited in variety.

Ironwork has a higher concentration in the Europeanized district of Pera and Galata, though in the peripheral areas rather than the central area. There are several areas according to the quantity and the frequency of ironwork on constructions (see such a case on Figure 3.2.1 and 3.2.2).

In the historic peninsula, the central districts were mostly occupied by ahsaps. This can be seen in several engravings of the middle nineteenth century and in pictures some years later. These ahsaps were devoured by great fires and thus, appear as desert or ruined spaces on the maps of Goad and to some extent, on the maps of Pervitich, produced when the city was already in the process of reconstruction. Consequently, great parts of the historic peninsula passed directly from the scarce ironwork fashions of the 1850s, or earlier, to the similarly poor in iron elements, trends of the 1920s and 1930s. Therefore, the ironwork phenomenon on the historic peninsula is limited to the littoral districts which were more open to foreign trends because of their higher multicultural populations. There are several more evident areas of differentiation in the historic peninsula; in the commercial district of Şirkeci, ironwork becomes scarcer, as is also the case at the opposite coast of Karaköy and the main streets of Pera. It is important to note that there is not a homogeneous distribution of ironwork, but rather a high concentration in domestic littoral districts, as in the case of the old peninsula, though with some important exceptions, for example the modest ironwork artefacts in Figure 3.2.3. In Galata and Pera the situation is slightly different; the entire district was heavily influenced by Western trends and ironwork is a widespread fashion everywhere. Nevertheless, some geographical differentiation can be found here also.

The districts of Pera and Galata and the adjacent Kaşım Paşa and Tatavla districts, also suffered great fires, events which contributed to the immediate transition of certain

areas from the ahsaps to the interwar fashions. Thus, they do not belong to the late Ottoman trends researched in this thesis. In the districts outside the city walls, trends are mixed; near the north littoral of the European side, for instance, there are a lot of ahsaps built during the late nineteenth and the early twentieth century, despite ahsaps in the center being limited and even forbidden in many places at the same time. Consequently, different circumstances and requirements led to different uses of ironwork.

In Galata and especially on the Karaköy square and the Banklar Caddesi, (Banks' Street), where many important commercial buildings were built during the late Ottoman era, ironwork is rather limited as in Şirkeci, while in other districts, such as Kadıköy, the general trends follow those of the center. In Istiklal Caddesi, balcony railings are heavier and metal quality higher on some buildings, while many others do not have railings at all. In the same street and in a large area, Cihangir, there are numerous iron balcony railings but not so many iron brackets; marble and plaster brackets are very common and small iron brackets often sustaining oriels. In other areas, like in some transition areas between ahsaps and kagirs, there are a large big quantity of window railings; Figures 3.2.4 – 3.2.10 show the common typologies of standard quality, already encountered in Bitola.

As a conclusion, I should remark that although in fashion during the late Ottoman era, ironwork bearing houses do not cover a very big part of the city's area; the ironwork phenomenon is rather limited, though not rare. In some areas, as in Galata or the main streets of Fener, ironwork is used on the majority of the buildings and these are the districts on which, more attention should be given for the analysis of their designs; map 3.2.7 gives an approximate density of the ironwork artefacts.

Ironwork and forms

Istanbul has an enormous variety of architectural elements, greater than any other city in the Balkans. That is not unexpected. Istanbul was the capital of the Ottoman Empire for almost five centuries, by far the biggest city of the area and also one of the main gateways for the entry of Western trends. In this research, I have chosen certain representative districts and I will present for the most part the most common typologies with their variations, and only few rarer samples.

Due to the large size of Istanbul, I shall treat each district separately for each category of ironwork element, and the end I will draw some conclusions based on observations on these categories.

Balconies

Galata

Cast railings

Cast iron railings are highly standardized because of their methods of production. They belong to certain typologies with fewer variations than the curved or wrought iron railings. The most common cast railing typology in Istanbul is the 'four-lobed' typology, already seen in Bitola. Though it is the most common type in Bitola, it is less common in Thessaloniki, where there are other dominant typologies or , in some areas, there are no cast railings at all. There are several variations of the same concept. The typology of Figure 3.2.11 dominates the lower part of the district whereas the one of the Figure 3.2.12 is much more frequent in the upper part towards Pera, especially above Büyük Hendek Street. The former typology is also very frequent in Tarlabaşi. Districts where the former typology is more frequent are less prestigious, which suggests that this category was more trivial and associated with lower budget constructions.

Another typology, which has been also seen in Bitola, is the one of the Figure 3.2.13. This is a quite rare design in both the cities and is mostly found in middle class buildings. It consists of large panels with several repetitions of the same motif. Given that it was a difficult size to fit, smiths used to cut off a part of it according to the balcony's measures.

The railing of Figure 3.2.14 has a slightly different concept. There is only one repetition per assembly part. However, in contrast to the 'four-lobed' category, the sides of each part fit on a different shape which is formed by the assembly, as can be seen in Figure 3.1.14 of Bitola ironwork. It is obvious that these two samples are two close variations of the same concept which has a medium frequency both in Bitola and Istanbul. This typology, occurs on slightly more/less?? prestigious buildings in Bitola than in Istanbul where it is a common typology among many others.

As in Bitola, there are several small typologies which have the austere vertical bars as a predominant element; these typologies being in small minorities both in Bitola, where they are more frequently installed on buildings of the last years of the Ottoman Empire and Istanbul. There are a small number of samples of other typologies also seen in Bitola. While the two towns share most of Istanbul's cheaper and commoner elements. more luxurious, heavy and unique pieces are found exclusivity of Istanbul, as is the case of

the railing in Figure 3.1.16. This sample is characterized by its fine parts, which are in fact a combination of wrought and cast iron parts, the cast iron forming a frame in which several other cast parts are assembled. All of the samples that belong to this category are made of fine metal as can be easily proved looking at the spirals and the junctions.

FFigure a Buyuk Hendek 25

The typology is found in the area which is beyond the Büyük Hendek Street and towards the heart of Pera.

Curved railings

As in the case of Bitola, curved railings in Istanbul could be considered as a subcategory of wrought railings but it is their high number and their important role in the architecture of Istanbul that makes them a different category. Their importance for Galata is large there is not a place in the district with higher concentrations of this typology than here, and they consist of more than the 1/3 of the area's railings, equally distributed all over it. In contrast to Bitola, where between vertical bars, several other equally curved elements are used, in Istanbul there is usually nothing similar to be found. What is very common in Galata and Istanbul, but very uncommon in Thessaloniki and Bitola, is the addition of curved 'iron strips' on the surface of the balustrade. Although standardization is very low, compared for instance to the cast iron category, there are some general concepts which are common for many curved railings. An example of this 'iron lace' is that

shown in Figure 3.2.17. In this case there is a curved balustrade with no further elements between the bars, and there are several horizontal bars parallel to the hand rail and no toe bar. The prominent characteristic is the pair of floral curved elements which start from the lower corner of the balustrade and stretch over several vertical bars. Not all of these railings are symmetrical; the railing of Figure 3.2.18, for example, bears only one threefold ornamental strip, which in this case starts from the middle of the balustrade's end. The bar has some circular parts added on several points, ornamental parts very easy to fabricate in any workshop. Nevertheless, in other cases parts added are highly standardized and mass produced, see, for instance, the railing on Figure 3.2.19. Here there is a set of iron strips passing all over the balustrade. An iron flower is added on every junction, 'flowers' which are standardized and obviously produced using a mould. It can be assumed, but not proven since the catalogues from this era are not saved in any library, that these elements were sold as separated parts. There is another important difference between the railings on Figures 3.2.18 and 3.2.19. The profile of the curve of the former balustrade has a lower center than the one of the latter while the curve of the railing on latter, Figure 3.2.19, is symmetrical to the horizontal axis which passes from the middle of the balustrade. These are the two most important categories of curve profiles though there are a lot of intermediate variations. In Bitola, low curve is almost universal, whereas in Istanbul, profiles are rather divided between these two categories with a prevalence of the low profile type.

Although the commonest design is that of the vertical bars balustrade, there are some exceptions, some of which are highly interesting. The balustrade on Figure 3.2.20, for instance, alternates one complete and one short vertical bar. The short vertical bar follows most of the curve and ends 15 cm before meeting the toe rail, the bar getting narrower and ending to a point. A c-scroll is attached to both the complete bars with its ends turning towards the end of the short bar creating a threefold bunch of endings. This element is installed on two buildings, both in Galata and I have not encountered it in any other city or in any other district of Istanbul.

A common typology in Istanbul is that of Figure 3.2.21. Its main concept consists of one or more, centrally assembled circular parts with one or more strips are tangental to the upper part of the circles and spread over the balustrade. There are also several strips passing from the middle of the circles. That is not though, a constant practice, but occurs in several cases.

A last, but quite important, detail of the curved railings in Istanbul is that their balusters are made of rectangular section bars. This is a big difference to from the curved railings in Thessaloniki, which are made mostly of iron laminates.

Wrought iron railings

Wrought iron railings are less standardized compared to the cast iron and the curved categories. Although they are the majority, slightly outnumbering the curved railings, wrought iron railings in Galata cannot be easily classified into distinct subcategories. Some of these subcategories are just versions of other categories, for instance the railing in Figure 3.2.22, the central motif of which, made only of common bended scrolls, resembles the high quality 'four-lobed' typology seen on Figure 3.2.12 or its even higher version on Figure 3.2.8. The fact that this element is found more rarely in much newer buildings than the cast iron typologies, leads to the thought that it was probably inspired by the 'four-lobed' typology. Similar 'design transfers' from cast iron to wrought iron railings have also been detected in Bitola.

One category, which is quite common in Galata but rather scarce in other districts of Istanbul, is the zigzag category. This category consists of vertical bars, which follow a particular zigzag line. The bars are cross-assembled and due to their lack of vertical symmetry, create pairs of a particular form. The railings may consist only of these bars or they may also have some upper or lower decorative bands, like those of Figure 3.2.23, where a typical railing of this category may be seen.

In Figure 3.2.24 there is another 'transfer' of design from one category to the other. The transfer anyway is only retrospective. This means that the designer did not necessarily think that he was using a curved railing concept. One can make this kind of classification because this concept is very common for curved railings but rare for other categories.

Some typologies, though very common in Bitola, are present in small numbers in Istanbul. This is the case of the 'hearts' typology. In the case of Figure 3.2.25, it is installed on the balcony created at the top of an oriel. Although this railing is found in central areas, like the above, installed in front of the Galata Tower, this typology is not very common. The most common straight bars, wrought iron, typologies are those consisting of plain vertical bars with minimal ornamentation. This trend could be considered as a precursor of the later trends of the 1930s and 1940s. A rather simple railing with minimal ornaments of this kind is on Figure 3.2.26; the balustrade consists of cylindrical bars with particular, massively produced rings on each bar and the upper and the lower space between the bars are filled by symmetrically placed, simple c-scroll elements. There are more variations of this typology all over Galata; for example the railing in Figure 3.2.27, a

very simple design with straight vertical bars and minimal ornamentation. This kind of design is more common in Cihangir.

Other railings of this category can hardly make a definite typology; there are some which are renegotiations of the common typologies, and others with unique forms.

Cihangir

Cast railings

Cast iron railings are quite rare in Cihangir. There are only a few pieces, less than ten in the entire district, which belong to the most common types. In some parts of Defterdar and Hayvar Street this was quite expected. As in most Balkan cities, and elsewhere in the world, the course towards modernism was accompanied by a drastic simplification of the railings' design. In these streets and in many others in Cihangir, a lot of buildings were constructed in the 1920s and the 1930s and this means that these railings were made during the last years of the Ottoman Empire. Only a few ahsaps, which once dominated the same area, remain and these buildings have minimal or no iron elements, certainly less than on ahsaps in Unkapani or Suleimaniye, which bear some standardized metal elements. The explanation for this phenomenon can be found, I think, in the social position of this district in the city and the evolution of trends in the Balkans. Cihangir was an important part of Pera, with a great view to the Bosporus and very close to important buildings, such as consulates and foreign schools. Once the district was rebuilt, starting gradually at the beginning of the twentieth century, it became a high class area for many decades. It became also one of the areas from which new trends were entering in the Ottoman Empire and as detected in Bitola and Thessaloniki, the general trend disfavored cast iron railings. Already in the 1930s there were almost no cast iron railings used on balconies, those few installed in that period being mostly re-uses of older elements in new buildings.

Curved railings

This category is well represented in Cihangir, especially on older buildings though it diminishes on newer buildings, substituted by wrought iron elements, especially by the above mentioned categories of the simple straight bars. The curved railings are almost 1/3 of the samples collected and they are, therefore, an important contribution to the image of Cihangir. The railing on Figure 3.2.28 is used on a building which dates judging from some

technical details, such as the use of concrete for balconies etc., from the early 1920s. The railing belongs to the curved category with the decorative iron strips. As previously described, this category has circular and curved strip parts added on the balustrade. This sample is one of the most typical cases with two circles, one inside the other, tangential to their upper part. There is a metal strip, symmetrical to the central vertical axis, in the shape of a moustache, tangental to the same point. The edges of the strips have volutes of 1 ½*circumference, and on the joints there are flower parts. This is a very typical design constantly repeated allover Cihangir and Istanbul. On Figure 3.2.29, there is another version of the same broader typology but without ornamental parts on the joints, similar designs appear in Figures 3.2.30 and 3.2.31. High quality metal is used and joints are made with strong and dense pegs. This building's door follows the same general concept. However, this is not a very common practice; doors of this kind are very rare and thus one could conclude that the door was tailored for this building, see Figure 3.2.32. The railing on the upper balcony of the same building is a lighter version of the lower one. It has the same balustrade and the elements missing are the iron. A thing that these two railings have in common, and which is also very common in all Cihangir curved railings, is the addition of small metal spheres on the edges of the bars. While this trend of curved railings was fading out, it adopted the simplest forms, preserving at the end only the curved profile. The building in Figure 3.2.33 is in a small street in Cihangir, the concrete floor of the balcony is decorated by minimalistic concrete brackets, which do not significantly sustain anything.

Wrought iron railings

Moving down the hill from Istiklal Caddesi towards the Bosporus, one gets to the area that was massively rebuilt after the beginning of the twentieth century. A great number of ahsaps were replaced by new buildings, the majority of the railings on these buildings belonging to the wrought iron category. The widespread style of eclecticism was abandoned very early in certain districts of Istanbul and Cihangir compared to any other place on the Balkans and the Ottoman Empire, see for instance the building in Figure 3.2.34. This is the Kavala apartments, built in the initial years of the twentieth century. The architecture follows a minimalistic concept both in general outfit and ornamentation and the balconies and their railings are not an exception. They have no brackets and the iron elements consist of vertical, straight and square section bars. Several horizontal bars, in sandwiched pairs, sustain the vertical ones. This general concept of the straight, plain, bars not only become more frequent after in the 1930s, but totally dominated the railings

trends of several Balkan cities, Istanbul, Thessaloniki and Bitola included, see Figure. 3.2.35. The example of the Kavala apartments and of certain other buildings of the same style shows how this style of architecture was a precursor of the trends to come. (This evaluation is done retrospectively because only now one can know which style later became a mainstream one; the same could happen with any other style, with wrought or curved railings. There were, anyway, several limited revivals of various styles, of curved railings included.)

Other railings of the same broad category comprise various designs, which cannot be easily classified in very concrete and definable typologies. A design concept , reconstructed during the same period and occurring several times both in Cihangir and in other districts, is that of Figure 3.2.36 with its variations. The balustrade consists of plain bars with several minimal ornamental elements. These elements are quite simple; small volutes, rings and circles, all of them plain and mass produced. On Figure 3.2.37 one can see the same concept on a building of the 1920s. In this case, the circular parts are missing. The general tendency was towards the extinction of all these small accessories.

Other concepts also involved renegotiations and simplifications of preexisting design patterns, see for instance the railing on Figure 3.2.38 which resembles the railings of the Figures 3.2.30, 3.2.29, 3.2.28 and 3.2.21, though in a rather simplified version.

A new wave of French trends entered the architecture of Istanbul at the end of the Ottoman period. One current, influenced by the French trends, is comprised of several designs with a central 'floral' motif, or its simplified varients, in the center, with various elements filling the frame, the railings in Figure 3.2.39 belonging to this trend. The building that bears it is adjacent to the Kavala apartments seen in Figure 3.2.34, it is more decorated but the overall impression is quite minimalistic. The iron parts that accompany the main motif are more angular compared to the older railings.

There are various railings on which angular iron elements are greater in number and size. The railing shown in Figure 3.2.40 is installed on a building of the 1910s just behind the Galatasaray Lyceum, on Istiklal Caddesi. The construction is moderately ornamented with some emphasis on the windows on which there are various plaster ornaments in neo-baroque style. In this case one can see an incompatibility between the ornamental elements of the buildings, Figure. 3.2.41. Though this phenomenon is very frequent in Balkan eclecticism, this is a slightly different case. This is not merely an indication of how in eclecticism elements were chosen from different trends and tendencies, but it also shows that eclecticism was working in a diachronic manner. In other words, though the plaster ornaments surrounding the windows were eclectic elements of what had been a major tendency in the years between 1870 and 1900, the iron

elements are part of the tendencies belonging to the period between 1900 and 1930. Trends have cycles of life which overlap: they do not start or end by decree and therefore they can be combined in any manner.

Another 'French trend' inspired trend, akin to those of Thessaloniki, which proliferated in Cihangir, is the one of the 'sparse volutes'. The main concept of this typology consists of combining several volute scrolls in various shapes and directions, covering the whole balustrade. This composition usually has one vertical, or a vertical and a horizontal, axis of symmetry, passing through the center of the balustrade. Very often the composition is contained within a frame which is an internal offset of the whole construction. This typology was first observed in some high budget buildings in central Pera and then spread to some extend into many central areas of the city, Figure .3.2.42.

Central Pera and Istiklal Caddesi

Istiklal Caddesi was the gateway for Western trends during the late Ottoman era, particularly after the tanzimat reforms, when Istiklal became a real exhibition centre of Western fashions.

Cast iron railings

Many cast iron railings in Istiklal Caddesi belong to the mainstream categories. This is the case of the railing of Figure 3.2.43. This is a common typology in Bitola, Thessaloniki and Istanbul but not on Istiklal. Several other cast iron categories are also present in this main street, however, none of these mainstream categories are very frequent. As soon as one turns into any secondary street, common typologies become much more frequent. On Figures 3.2.1 and 3.2.6 I have indicated the special typology which combines cast and wrought elements. This category appears in the upper part of Galata as a prestigious typology on buildings of rather higher budget. In Istiklal Caddesi the same typology is used as supplementary in low and medium budget buildings, though low and medium budget buildings in Istiklal Caddesi are often more expensive and luxurious than any building in many of the other districts in the city. The same building on the upper floor has a cast iron element of also high quality and abundant material. The entire building has high quality materials and fine elaboration of all its parts. Its lower part has an essence of orientalism but this is evident more on the plaster elements than on the metal ones, a characteristic of eclecticism wherein elements are chosen from different systems. I have discussed briefly the case of diachronic use of elements. This building is a case of inter-quality use of elements. The railings of the first floor are medium-high quality iron parts, as used in several places in the upper Galata and in Pera. The second and the third floor have only windows, and these bear small common medium quality railings. The balustrade of the fourth floor and the door are much rarer and their quality much higher, Figure. 3.2.44 and 3.2.45 This door is a unique piece, finely elaborated but not really a very 'expensive' one. The upper part of the main leafs seems somehow influenced by the balustrade of the first floor, the overdoor, in its turn, has a vague kinship with the railings of the fourth floor. The window, as seen in Figure 3.2.45a; it is a very elegant and finally elaborated piece, unique in the whole district. The same balusters of the first floor are used in the famous Cicek Pasaji, which is a quite different kind of building both in style and usage, see Figure 3.2.46.

Figure b Istiklal 203

Several cast iron samples, which are repeated in Istiklal, are absent or almost absent from all other districts and streets of Istanbul. These are usually high quality elements, for example the railing in Figure 3.2.47. This is a heavy, material abundant, cast iron railing of medium-high quality, found almost exclusively in this area, the same railings

being used on the building on Istiklal 231a (see Figure 3.2.48). These two buildings are quite different in style. The first one is a medium budget and quite simple building; a rather low profile construction for Istiklal Caddesi. The latter, Istikal 231a, is an impressive, large building with neoclassic inspired ornamentation bearing a different cast typology on the lateral façade with a rather greater` neoclassic influence (see Figure 3.2.49). Comparing these two buildings gives an indication as to how systems of typologies may function. There is a rather small typology, that shown in Figure 3.2.47, the 'rectangular-meander' as I will call it., a typology, local to Istiklal, having a slight neoclassic influence, especially expressed with the meanders. Such a railing for a building like the one in Figure 3.2.49 on Istiklal 93, would possibly have been considered superfluous in any other district of the city The 'rectangular – meander' typology is more frequent on high prestigious buildings combined with more neoclassic elements. Comparing therefore these two typologies it can be seen that they are two intersecting sets (3.2.50).

One set, that in Figure 3.2.1, has geographical spread from Büyük Hendek in Galata up to Istiklal Caddesi, whereas the 'rectangular–meander' typology is found mainly in Istiklal and the perpendicular streets. In Istiklal, the latter typology has greater concentration than the former. These two typologies intersect geographically, though having different concentration cores.

They also intersect in another sense. The first is used in low-medium and medium budget construction whereas the second starts from medium to high budget constructions. This cannot be a strict classification given that there are examples for the contrary,, for example, the case of Cicek Pasajı, but in each typology there is a 'core' of their distribution and some 'extremes'.

Certain typologies are exclusive to Istiklal Caddesi. These elements were either tailor-made or imported; yet, none of the two can be definitely proved since no archives have been saved indicating either the former or the latter, see, for example the iron of Figure 3.2.51, a unique element, at least as far as I can determine . The building on which the railings are installed is a medium budget building by the standards of Istiklal and Pera. It is not uncommon that these medium budget buildings, which would be considered high budget for the rest of Istanbul, bear unique pieces made or imported only for them. In places like Pera, the percentage of this kind of artifacts rises significantly (Figure3.2.52).

In places where buildings' budgets rise, there is a decrease in the percentage of standard common typologies. A rise in the scale of buildings 'quality', and often volume, leads to an increase in the number of unique pieces, particularly in the case of cast iron railings. These elements, either imported or local, were more expensive and it was, thus far easier for the constructors of the more expensive buildings to use railings of their

choice from a much wider range of possible designs, without having to limit their choices to a small range. Within an area of high budgets ,but not top end ones, there are some limitations with cast ironwork because of its production methods, accordingly, architects or owners chose from a much wider gamut of elements though still from quite standardized range. However, going towards the top of the scale, financial possibilities are higher thus giving the possibility for the fabrication of unique, high cast iron, elements..

Among examples of extremely rare or unique pieces are that shown in Figure 3.2.53, the balcony of the Freemasons' building in Nur I Ziya Street, a very important secondary street, perpendicular to Istiklal. The Freemasons' building is situated close to the French Consulate, one of the most prestigious buildings in the city. The balcony consists of heavy, finely elaborated, lace frames. Each frame is an 80x80 cm frame of fine metal (Figure3.2.54), the quality of which can be seen on the curves of the artefact. The balcony is sustained by high quality brackets, a version of the G-key typology. Adjacent to that building, there is another also belonging the Freemasons which has an original cast iron railing. Various rectangular parts of various sizes have been assembled in a bigger rectangular frame with several similar frames combined in pairs to create bigger frames. That gives to the designer certain flexibility; usually more frequent in the other categories of ironwork such as the curved or the wrought railings.

Curved railings

Curved railings are quite scarce in Istiklal Caddesi and in the adjacent areas, and leaving Istiklal Street, one enters areas with significantly higher percentages of curved railings. Curved railings are a 3% - 4% of the railings in Istiklal, significantly lower than the medium of 20% -35% of other districts. The few samples of curved railings in Istiklal belong to the most common typologıes of the broader Galata and Pera area. For instance, the building shown in Figure 3.2.55 is a typical medium budget construction. The elements, mostly plaster ornaments, are very common and typical and so too are the iron railings. These railings are installed on the doors over the main entrance (Figure 3.2.55a) and are a side element of the façade, contributing very little to the main impression given by the building.

One more case of curved railings is that of the Church of St Antoine, which I have discussed in the analysis of architecture (Figures 3.2.56 and 3.2.57).

Wrought iron railings

In Cihangir, the general tendency favored the use of wrought iron elements. The same happens in Istiklal, though with some small differences. This unique and high status district contains unique and high class iron elements which although few, are in an obvious contrast with most other elements in the city: see for example the building on 235 Istiklal Street, shown in Figure 3.2.58, an excellent example of fine Art Nouveau built in 1901 by D'Aronco. All the ornaments on this building are absolutely unique in Istanbul, probably unique anywhere. They are possibly purpose made for the building and are excellent examples of the manufacture of high quality artefacts. The balustrade is an elegant composition of parallel horizontal bars woven in equal intervals in floral forms, th iron bars nicely curved and adorned with additional flower parts. Also of note is the purely ornamental flower part on the wall of the first floor, a unique and highly elaborate, artefact (Figure 3.2.59). The iron compositions of the first floor are an original example of late 1890s art nouveau, and the plaster frame decorating the same floor is also typical for that period and style. All elements on this building are unique, including the entrance, (Figure 3.2.60) the iron door with its high plasticity of iron bars and the plaster ornaments, all high quality material artefacts.

On Istiklal Street 213, there is another very interesting railing installed. It is, like the previous one, made with high plasticity and finesse of form and elaboration (Figure 3.2.61). Some dozens metres further, there is another building influenced by art nouveau trends. This is an apartment building with all its ornamental elements, plaster, iron and marble ones, built in the art nouveau fashion, as in Figure3.2.62. The list of such elements could be much longer. However, though frequent in Istiklal and other limited areas in Pera, these original rare, if not unique, elements are a minority. Most architects and constructors had, mainly due to economic and technical reasons, to choose from readymade and mass produced elements. As a result,there are many mainstream wrought iron railings in Istiklal and the adjacent areas. These common, mainstream elements are very often installed on relatively prestigious buildings whose other decorative elements are of a higher quality, see for instance the first floor door composition in Figure 3.2.63. The plaster ornaments of the moldings and the crown on this door are especially elaborate and prominent. However, they are combined with a rather simple type of railing made with the simpler mass produced parts.

Karaköy

Cast railings

Cast railings in Karaköy are scarce and more than half of the buildings have no iron railings or balconies at all. Where such elements are present, they are often secondary elements of minor importance, having less importance than in other districts. The majority of these cast elements belong to the most common typologies, see for instance the railings on Figures 3.2.64 and 3.2.65. They are installed on medium – low budget commercial buildings close to the littoral, areas that were always place of commerce and workshops. The latter railing is situated in the area where the smiths and iron artisans had their workshops.

At this juncture there are two points to bear in mind, which will become apparent after examining the rest typologies. The first is that although the area where more smiths' workshops were situated is the Arap Cami part of Karaköy, ironwork elements and railings are rather poor there. The second is that whereas retail commerce buildings favored ironwork elements, buildings sheltering workshops and services activities did not. The area of Arap Cami, that is the part of Karaköy to the Halic, is still a place where machinery and tools are sold.

Curved railings

I did not find any curved railings in the littoral area of Karaköy, that is, the few parallel streets from the sea up to the start point of the steep hills of Galata. It is very interesting that in a city where curved railings are such a big group of typologies, these elements are absent from an entire district. Judging by the fact that curved iron railings are quite scarce in

other commercial areas of the city too, one might conclude that the curved form of the railings was not considered suitable for the 'professional' image of a commercial building.

Figure 3.2.c

Wrought iron railings

Wrought iron railings are more common than the two other categories in Karaköy. Most of the main buildings in this area, those with a significant volume and a medium or high budget, do not have balconies at all and when they do, they have a balustrade made of materials such as marble or plaster. For example,, neither the building in the center of Figure 3.2.66 nor the adjacent ones have any balcony or therefore any railing[129]. Similarly, the *Vitalis Han,* in Banklar Caddesi (Figure 3.2.67 and 3.2.c) which like many other hans, contained offices and workshops. This is a high quality construction with obvious neoclassic elements and balconies on these buildings are very small parts of the facades. There is also limited oriental influence on these buildings, built as they were, between 1895 and 1900. Their use gives an explanation about the choice of forms and architectural elements in a period during which in Istiklal and Pera, austere neoclassicism was abandoned and art nouveau gained an important percentage of the ornaments.

Figure 3.2.68 shows a part of Galata Mumhane Street, a street that follows the costal line of the Bosporus and runs parallel to the fence of the passenger port, on which there are several buildings built in different years of the early to the late twentieth century. In that sense, there is not a high time homogeneity in Karaköy, contrary to what often happens in Galata. On many of these buildings there are no iron elements at all. See also the Maliye Street on figure 3.2.69. The building in the center and the adjacent buildings are low-medium budget constructions of the late nineteenth century, the one in the center being built in 1897. They have a rather typical simple neoclassic ornamentation for example , the pediment-like crowns of the windows and their moldings and the plaster-striped walls. These buildings are reminiscent of several buildings in Bitola with the same, rather simple and typical ornamentation. However, in Bitola, whether in a commercial or a residential area, buildings usually have more iron elements. They have more balcony railings, because they have more balconies , and hence more iron brackets supporting them; an element that in commercial areas of Pera, Galata and elsewhere in Istanbul was substituted by marble or omitted. In Figure 3.2.70 one can see the balcony of the first floor. The plaster ornaments surrounding it and supporting it are far more curved

129 See **Edhem (2000)** a door by door analysis of the Banklar Street.

and ‘dense’ compared to the railings and the railings consist of only a hand and a toe rail and the vertical bars they hold. It would be very risky to speculate that these kinds of elements were precursors of a trend that would be extremely widespread in all the Balkans of the 1960s and the 1970s. The existence of such ironwork during that era is associated with functionality. This railing has a form which fulfils functionality, with the lowest use of materials possible and one of the simpler forms necessary to achieve that. It is, thus, functionality through simple forms and minimal use of material that was required in the case of both this building and those of the 60s and which creates a kinship between them.

Tarlabaşı

Tarlabaşi has lately become a special case for the Balkans. The district, which defines the areas around the homonymous avenue, has as strong architectural kinship with Galata and central Pera. Anyway, the distance between Istiklal Street and Tarlabaşi Avenue is in some points less than 150 meters. Tarlabaşi is a special case because more than other areas in Istanbul, because the property status of the buildings belonging to Greeks and Armenians who left the area during the 1950s and the 1960s following intercommunal violence, is disputed and members of these minorities cannot sell, or even modify, their property. Their buildings were occupied during the 1990s and the 2000s by immigrants from eastern Anatolia, mainly Gypsies and Kurds. The living conditions in the area are bad, buildings poorly maintained and overcrowded. It is common to see small herds of sheep in the streets and there are abandoned workshops close to illegal brothels and poor dwellings. Given the semi legality of many of the people living in the area, they consider outsiders with suspicion making it extremely difficult to take pictures of the area. Having been threatened when I attempted to do so I have had to rely on photographs taken by the Istanbul Municipality and their new plans for Tarlabaşi..

Given the kinship between Pera, Galata and Tarlabaşi and the lack of a sufficient photographic evidence of my own,, I have not included this district in the research. Nevertheless, there is an interesting observation to be made, based on an exhibition for the restoration of Tarlabaşi in 2007. According to these images, all the iron elements will be replaced with simple vertical bars elements. In another street of the same district the plan calls for the replacement of existing iron railings to standardize them for all the neighboring buildings. The railing chosen is the, already known, four-lobed taxonomy which is very common in Galata, Pera and Fener and a major taxonomy in Bitola. It is, therefore, a revival of an ironwork past, through a restoration process. When asked about

the criteria for choosing this typology the architects at the exhibition answered that they considered it an interesting local form, however, is seems they did know its importance in other cities of the Balkans (Figure 3.2.71 – 73).

The Historic Peninsula

Şirkeci

I shall examine all the categories together for Şirkeci in only one division because of the scarcity of balcony railings in this area.

Most buildings in the lower part and many more in the upper part of Şirkeci have few iron elements or none at all. The case of Şirkeci, added to the district of Karaköy, strengthens the arguement that medium-high status commercial areas discouraged the use of iron elements. The building of Figure 3.2.74, built during the late years of the Ottoman era, is a typical example of a public building. It has one small central balcony and two more balustrades on the sides, the only iron elements being those of the central door. This is not uncommon in Şirkeci, and examining the adjacent buildings and others on the same street, one can easily see the scarcity of iron elements. Ottoman buildings, built in 1900, are those on the center of the picture (Figure 3.2.75), surrounded by newer constructions with even less ornaments. Many more commercial buildings in Şirkeci built during the Ottoman era

Figure 3.2.d

have no balconies nor iron railings, no iron brackets nor window railings. The only iron element, which has a continuous presence in the district, is the iron door.

Balcony railings generally belong to two main catagories; the first consists of unique pieces, in line with the medium and high budgets of those particular buildings. The second trend consists of mainstream items, very often of a lower quality compared the general standards of the buildings. The *Agopian Han* on Figure 3.2.d, is an example of the first trend. Built in 1920, two years before the collapse of the empire (Figure 3.2.76), it is a unique form, with some typical characteristics of the 1920s, one of which is the star on the center of the balustrade, encountered also in Plovdiv. The other one is the transformation of the curved line, to a double angled bended form. An example of the second trend, the mainstream railings, is that of Figure 3.2.77. It is very common for Şirkeci and other commercial areas of Istanbul to contain a relative proliferation of common typologies. This observation, which is valid for non commercial areas also, may on the face of it be quite trivial However, when comparing residential and non residential areas, or highly and less urbanized areas, the difference is that some of the techniques and materials which may provide cheap and low budgets solutions for the budgets of Şirkeci may be prestigious solutions for certain perıpheral districts of the old city.

Unkapanı

Unkapanı is the district on the coast of the Halic (Golden Horn) situated between the sea and the Süleimaniye Cami at the top of the hills. The lower part, close to the sea, is a commercial district, yet quite different from Şirkeci, in that it is full of small shops and workshops. The upper part is a mixture of kagirs and ahsaps, now in bad condition. Most of the buildings of the Ottoman era are missing in the lower part, whereas those in the upper part are better preserved. The general observation about Unkapanı and the balcony railings is that they are almost totally absent. In commercial areas, as I have already indicated, balconies are rather scarce. In Unkapanı, they are even scarcer; they are almost nonexistent., see Figure 3.2.78. The main street is much narrower compared to that of the neighboring Şirkeci. Buildings are much more modest and smaller than Şirkeci or Karaköy, and iron elements are almost inexistent. This does not mean that buildings are necessarily less ornamented. For example, the building at the left of the wooden one in Figure 3.2.78 was built in 189 and has a double molding of decorative tiles and plaster decorative pillars. The fourth building on the row is also ornamented with some of the most typical plaster elements. There are no balconies and scarce iron elements though there is a set of window railings and metallic shutters – a common element in Unkapanı.

Fener – Balat

Ataturk Bulvari, the main avenue of the old peninsula created during the initial years of the republic, roughly divides the old city into its two main administrative areas; Eminönü, the part of the cape, and Fatih the part of the walls. The coastal part of Fatih on the Golden Horn, adjacent to Unkapanı consists of the districts of Fener, Balat and Ayvansaray. In the section on the analysis of the architecture in Istanbul I have already discussed in that these districts were among the more mixed communities in the city. The Orthodox Patriarchate and many important Greek Lyceums were here while in Balat, there was a strong Jewish community and numerous and important synagogues. There were also many Armenians, although less than in Kumkapı, their center in the Historic Peninsula. In Fener, very close to the Patriarchate, there is the Bulgarian Lyceum and, a very interesting building, previously discussed, the iron church of Sveti Stefan; see Figure 3.2.79.

Cast railings

In contrast to what I had been expecting, cast railings are very scarce in Fener and Balat; my initial thinking was that Fener would have a greater similarity in that respect, to Pera. Cast balcony railings are 5% per cent, more or less, of the samples gathered, a very low percentage compared both to Bitola, Pera and Galata, and the greater part of these few cast railings belong to the most common typologies already seen and described for Bitola and Pera. The most common typology of cast railings in Fener, like in many other places so far in this research, is the four-lobed typology with its versients. In Figure 3.2.80 one can see a case of its use, while in Figure 3.2.81, there is a typology, which though less common is yet present in many different cities, Bitola and Thessaloniki included, and in other districts of Istanbul.

The low number of cast railings in Fener makes conclusions risky. It can be said that most of these cast railings are situated at the important crossroads of Vodinya and Keremit Street and their vicinities, the area with the most prestigious private apartments in the district, close to the Patriarchate and the littoral. This is also the area of iron

innovation for the Fener – Balat districts. I could suppose then, making a quite risky deduction, that cast railings were an element of the more prestigious buildings in Fener than in Galata. There are not, as far as I could determine, any very rare or unique cast railings in Fener.

Curved railings

Curved railings dominate some of the central parts of Fener – Balat, for example the neighboring railings hown in Figure 3.2.82. There are also many buildings without any balustrades at all, a great number of which are much newer buildings than the Ottoman ones. Many other areas of Fener – Balat are dominated by the simple-vertical-bars wrought railings.

The more common characteristic of these curved railings are the rectangular cross – section bars used, the greater percentage of these railings being made of these bars, the cross-sections of which varies between 0,8 x 0,8 cm. and 1,2 x 1.2 cm. Most of the railings, in contrast to their relatives in Galata and Cihangir, do not have the 'floral', art – nouveau inspired elements on the surface of their balustrade (see on Figures 3.2.83 and 3.2.84 and compare with Figures 3.2.18, 3.2.19, 3.2.57 and 3.2.29). In Fener, there is a greater variety in outlines of balustrade curves than in other areas. Some are symmetrical to the horizontal axis of symmetry with a more or less accentuated curve; that is, a greater or a smaller arc of a circle. Others have the greater part of the curve below the axis and there are several variations of shapes in this case too as seen in Figure 3.2.85 and 3.2.85a. A characteristic, which is slightly more frequent in Fener than in Galata and Pera, is the vertical blade on the outermost line of the balustrade. In absolute numbers, central – blade balustrades may be greater in Pera – Galata. However in Fener – Balat there are still a lot of ahsaps; all these constructions having different balustrades – mainly wooden ones – which significantly changes the percentage of use for each typology. In Fener, there are also a lot of buildings especially in commercial areas that have no balconies and therefore no railings,

Wrought iron railings

There are many wrought iron railings, particularly these belonging to the simple – vertical – bars typology. Figures 3.2.86 and 3.2.87 show very simple vertical – bar typologies installed mostly on modest low middle class buildings. Both the buildings of images 3.2.87 and 3.2.88, built during the late Ottoman years, are situated on streets which are perpendicular to the main Street of Balat – Fener, Vodinya Street. There are few

variations of this simple typology, some standard iron parts are occasionally added to the main form and infrequently there are certain buildings which combine sets of curved and straight bar railings. There are also some, very rare, cases of typologies seen in Bitola and scarcely, in Pera, for instance the railing on Figure 3.2.89. This railing is used on the terrace of a building of the late 1890s, a use that was quite rare at that time but became more frequent later, though to a greater extent in Thessaloniki than in Istanbul.

Whereas the simplest railings are installed on secondary streets, there are certain sophisticated railings, particularly in the vicinities of the above mentioned area between the Patriarchate and the Marasleion Lyceum, seen in Figure 3.2.90 which shows the original form of the building. That is an area inhabited by rich Greeks belonging to 'old and famous' families. Many of the buildings were built also by Greeks and in this, rather limited area, there are examples of vanguard architecture in several buildings built between 1900 and 1920. The railings are not particularly impressive compared to the railings of Pera but they are quite original compared to the railings of the main bulk of the Fener – Balat area. The railing shown in Figure 3.2.91 is installed on the building next to the one of the Figure 3.2.90. Built by the Greek architect Mavromatis, in the 1900s, it is a more typical construction than the previous one , but its railing, though simple, is an original.

Ayvansaray

Ayvansaray is the last district within the walls of Istanbul with a front to Halic. The neighbour has a strong kinship with Fener and Balat, and the typologies and distribution are almost the same.

As one moves from the coast to the hills and to the walls, buildings get poorer and the constructions much more modest. Accordingly, whereas the lower part has no significant differences from the neighboring areas of Balat, the upper part does. In the hills of Fener there are typical kagirs built, many of them conforming more or less to the general types already seen in the analysis of architecture and the example of Samatya. On the hills of Balat, especially near the city walls, there is a significantly lower quality in both the kagirs and the ahsaps, which are still common througout the district. Many of the railings have very simple forms, though there are cases of interesting ornamentation using limited means, for example the railing on picture 3.2.92; a poor ahşap with a stone base, which bears a straight bars form (Figure 3.2.93). The poor quality can be detected in the basic elaboration and the basic quantity of material. Furthermore, Ottoman houses are rather rare in this area. Fires during the late nineteenth century and massive reconstruction after the Second World War led to the radical modification of the urban

landscape. See for instance the neighboring buildings; they are all built much later, many of them in the sixties or the seventies and do not have much in common with the older house. Given this, the research material about the iron elements typologies of these buildings is rather limited.

Central Fatih

Evidence for the central area of Fatih is very limited. It can be seen on Figure 3.2.94, an extract of the plans by Pervitich, that ahsaps (yellow colour) in Ayvansaray reach the coast, whereas in Balat there are compact squares of kagirs. One can also see from these plans, and the ones for the respective areas, that as one moves to the center of the Historic Peninsula, not only kagirs become very scarce, but also free spaces and ruins become more extensive. Although I collected various samples, I considered that these insufficient o form a compact corpus from which conclusions can be drawn. The general aspect of the area close to the city walls has certain kinship with the general aspect of Ayvansaray.

Samatya – Yedikule

Yedikule is the district situated at the corner created by the city walls and the coast of Marmara, and had a mixed population of Turks, Greeks and Armenians. Following the coastline to the cape of Top Kapı, one reaches the district of Samatya, an area in which Christian populations, Armenian and especially the Greek, were even greater than in Yedikule. Samatya is the only part of the Historic Peninsula that still has some Greek population.

There is a difference between Samatya – Yedikule and Fener – Balat. In the latter, balconies and therefore their railings are much rarer. On Figures 3.2.94a and 3.2.95 one can see two typical aspects of houses in the district, one on the on a main street and the other on a secondary one.

Cast railings

Cast railings are extremely scarce in the whole area and limited to the most common typologies. The district does not have a prestigious area like Fener has in the

vicinities of the Patriarchate though it does have a main commercial street, the Kuleli – Samatya Street, analogous to the Vodinya Street of Fener – Balat. Whereas in Fener, the main concentration of cast railings was in the prestigious area of the Patriarchate, in Samatya, with almost no cast railings, I did not detect any concentration of them nor any area of relative prestige, facts that I believe are not mere coincidences.

Curved railings

Few railings of this category are used in the district. That does not happen because their percentage is lower here, but because few iron railings are used in the area. The few samples found belong to one of the simpler and most typical categories. They consist of rectangular, cross – section bars with a low curve. There are minimal adornments and end points end knots as shown in Figure 3.2.96.

Wrought railings

Similar to the curved railings, wrought railings in Samatya have a kinship with the similar category of Fener – Balat, though high quality and the original pieces are generally scarce. In Samatya, there are several railings that generally coincide in form with those of the lower parts of Fener – Balat, the main concept being that of simple vertical bars, sometimes quite thin ones, with occasional added ornaments, like c-scrolls as in Figure 3.2.97.

Kumkapı – Yenikapı

Yenikapı is the costal district next to Samatya and Cerrahpasa, around the point where the principal Ataturk Avenue meets the Sea of Marmara. As in other districts of Istanbul, surviving old buildings here are too limited to create an efficient body of data.

In Kumkapı, there are several islets of surviving Ottoman buildings. As I pointed out in the section on the architecture of Istanbul, there is an interesting phenomenon in several districts, which is especially noticeable in Kumkapı. Close to Orthodox churches of which there are many small ones in Yenikapı and a big one, Agia Kyriaki, in Kumkapı, there is an emphasis on neoclassic elements. This is connected to the existence of many buildings of the Armenian and, most often, the Greek community, close to the churches. Often, private buildings also were parts of the same neoclassic islets. The three Ottoman buildings shown, two on Figure 3.2.98 and one more on Figure 3.2.99, have plaster

ornaments which give them the slight neoclassic aspect. Iron elements, balcony railings in this case, pertain to the most common typologies and, judged by quality, to the medium range. There is, in this case, an interesting example of the differential function of various architectural elements typologies and categories, Figure 3.2.100 and 3.2.101. The plaster elements are used to give all the neoclassic impression; the meanders, the ionic pillars and more. The iron elements do not follow this plan although such railings with strong neoclassic connotations, though scarce in Istanbul, were fabricated at that time.

One can observe, on the same pictures, how Ottoman houses are now surrounded by newer constructions, and interestingly, in Figure 3.2.99, the use of an iron bracket on a newer construction; probably a remnant of an older building standing at that same place.

Central Eminonu

Central Eminönü, i.e. the area of Eminönü administrative division which is not close to the sea, is also very mixed judging by its buildings and the dates of their construction. There is an important islet of ahsaps near the walls of the Top Kapı Palace which are, however, strongly modified due to recent restorations. I decided, therefore not to include them in my analysis. The area around the Covered Market (Kapalı Çarşı) and further along, towards Divan Yolu and towards Aksaray is heavily changed due to massive reconstructions during the initial years of the Turkish Republic. I shall, therefore, make my observations on a limited number of buildings, mainly public buildings and big hans.

There is an important area of ahsaps at the vicinities of the Süleimaniye Cami. Since these ahsaps do not have even a single iron railing, I shall revisit them when examining other iron elements.

Cast iron railings

Few cast iron railings are installed in central Eminönü and these few belong to rather high quality typologies. Figure 3.2.102 shows a building of the 1920s has already many characteristics of significant neoclassic simplification. The ornaments maintain the neoclassic outfits without any decorative details apart from their outfit. This style is combined, in this case, with a very rare cast railing, which consists in quadruple-baluster assembly parts (Figure 3.2.103).

Curved railings

There are a limited number of curved railings on the Ottoman buildings of the area. As was discussed in relation to Bitola, it also occured in some areas of Istanbul that both cast and curved railings were diminishing as years were passing, especially after the 1920s but there are certain cases of curved railings in Central Eminönü, mostly in secondary streets and rarely on the main ones. Samples on the main streets belong to the typology with the double circles and the strips, already seen on Figure 3.2.28 as a common typology of Cihangir and Galata. An example of such curved railings on a main street is that of Figure 3.2.104, a hotel build on the central Fevzi Pasha Avenue in the late 1920s just after the Ottoman period. This is a quite original architectural composition which combines various mainstream elements in a relatively uncommon construction. One of these elements is the curved railing of the façade on the secondary street, Figure 3.2.105. The same building has wrought iron railings on the terrace and a built balustrade on the façade of the avenue.

In secondary and narrower streets simpler typologies, like the ones common in Samatya and Balat, are the main bulk of the curved iron railings, for instance the form of the railings on Figures 3.2.106 and 3.2.107.

Wrought iron railings

There is a wealth of interesting wrought iron railings in both quantity and quality. I have discussed for Bitola and for some places of Istanbul – Cihangir and Karaköy for instance – a tendency to abandon curved railings and to adopt straighter lines, simpler bars, or free shaped balustrades. The same happens in Central Eminönü; many buildings constructed at the dawn of the twentieth century and later, pertain to this tendency.

This is illustrated by the railing on Figure 3.2.108, a rather simple, however quite unique, railing. It consists of circular and straight elements, organized in two parallel parts, one for the straight and another for the circular parts. The building is rather 'progressive' with its formal simplicity judged by its construction year, 1904, Figure 3.2.109.. It was a han, a building of offices, shops and workshops and consequently among the first buildings of such dimensions, for which simplicity in form was rather an advantage.

Most of the ironwork consists in rather simpler versions of straight – bar elements with certain circular or arched particles. Their main concept is the set of the vertical bars with some ornamental additions, see Figures 3.2.110 – 3.2.114. Exceptions are rather

scarce but one of these is the railing in Figure 3.2.115. The balustrade of this railing is organized around on central vertical bar and two diagonal ones., Wrought iron elements are added ion the spaces created completing the whole balustrade.

Kadıköy

In Kadikoy, despite intense reconstruction, there are still very well preserved areas with Ottoman houses and residences and particularly in certain streets near the port or in the old market, there are entire rows of surviving houses. These surviving houses do not belong to the same chronological layer; there are some ahsaps of the 1870s next to impressive apartments of the 1910s.

Cast railings

Surprisingly, because, in my judgment, Kadıköy has a lot of things in common with Galata; composition of the population, commercial areas, prestigious neighborhoods etc., there are not so many cast railings in Kadıköy. The difference can be explained because Galata and Pera had a prominent position as a vanguard district of the center and of the whole Ottoman Empire, whereas Kadıköy had a local function of that kind. It seems from evidence gathered in various areas, that cast railings are more frequent in more central prestigious areas and Kadıköy though having a prestigious character, does not have the central one. However, I do not imply that this is an absolute explanation.

Main cast typologies are missing. There are a few samples of medium frequency typologies, as in Figure 3.2.116, and there are also some very scarce cases of original cast railings.

Curved railings

There is a very large variety of curved railings in Kadikoy. Given that one of the main categories, cast railings, is almost totally missing, the whole district gives an impressionof being one of curved and wrought railings The curved railings belong to the most common typologies with some interesting exceptions, for instance the railing on Figure 3.2.117. b This is on an eclectic residence of the 1910s and has the curved shape and the added strips, a type which are also very common in Cihangir.

The simple rectangular cross – section railings are also common in Kadıköy, see figure 3.2.118, and they make up more than the half of the curved railings. It is considered that designs with added iron laces, like the one on Figure 3.2.117, are results of the art nouveau and its influence on architecture. In Kadıköy, this influence is rather limited to prestigious residences and, therefore, does not affect so intensely houses and constructions in general.

During the last period of the Ottoman rule, there were some renegotiations of the curved elements forms. A light alteration is that on a building of the 1910, shown in Figure 3.2.119, which belongs to the trend for simplification which started at the beginning of the twentieth century. The curved railings coincided as a typology with that of the simplified buildings with the rectilinear ornamentation. Curved railings were fading out whereas rectilinear ornamentation was expanding and in the interval between the birth of the latter and the death of the former the two typologies coexisted in various combinations.

The ironwork of the building in Figure 3.2.119 belongs to this case of light renegotiations. The railing in Figure 3.2.120 is a mixture of various elements with an original curve of balustrades. If the original form was only one, it would probably be an original idea of the designer. However there are various 'deviations' of this kind and these deviations are very often installed more on 'new trend' houses rather than on 'traditional' ones. Accordingly, there is a peak of the distribution of 'original' forms on houses of simplified and rectilinear ornamentation; an example being the railing on Figure 3.2.121. on a building of the 1910s, constructed with a simplified ornamentation – observe the brackets- and with a renegotiated form of curved railings.

Wrought iron railings

They are the predominant category in Kadıköy. However though in certain areas, or roads like Namlizade Street, curved railings are dominant, yet, both in absolute numbers and in areas of distribution, wrought railings are a larger category.

There is a typology which is frequent in Kadıköy and unique in the whole city, the one in Figure 3.2.123. This is installed on the medium – low budget building of Figure 3.2.122 which is rather modest in ornamentation. The main concept of this form is very simple; a metal blade, of 2 to 3 cm width, is bent into an oval shape. Its two parallel parts are then joined and weld in the middle so a 'clepsydra' shape is created and that is the baluster of the railing. Several balusters are joined by a simple toe and a handrail into a balustrade without any more ornaments.

There are several simple–bar railings and many others, which consist of simple bars and common additional parts. More than half of these simple–bar railings are on ahsaps: ahsaps, as I have already discussed in different cases, seldom bear iron balcony railings and when they do, these railings belong to the commonest forms as in Figure 3.2.124.

A factor that facilitated the proliferation of the rectilinear wrought railings in Kadıköy was the trend towards block of residences.. Such constructions were built in various districts of Istanbul, such as Cihangir, Üsküdar or the Prince Islands, and especially in Kadıköy and the adjacent Moda. With this practice, certain typologies of ornaments and railings were copied many times. At that time, of their construction simple-bars railings were a cheap and trendy solution of that kind and used very often for these residences as in Figure 3.2.125.

Other railings belong to some of the common categories found in other cities and to some extent, in Istanbul. In Figure 3.2.126, one can see the example of a railing that is frequent in Plovdiv. This is an important point of coincidence between the two cities. It is important because Plovdiv shares very few common iron elements with the other three cities, which between them coincide in bigger or smaller section sets.

The railing in Figure 3.2.127 is a typology common to Istanbul, Bitola and, up to some point Thessaloniki, but not Plovdiv. This is a quite simple concept and therefore common in many cities around the world, but it has a higher frequency in Bitola and a relative importance in Istanbul for what it concerns the Balkans.

Kadıköy was, in some degree and in some of its areas, a prestigious district ; there are various, more or less, luxurious residences and apartments here, some of which are still considered to be so. The Kiehribadji Apartments, built in 1909, are an important building for Kadıköy. Its only ornamentation consists in its unique iron elements: balcony and windows railings, brackets and door, all of them original designs, shown in Figure 3.2.128. Its brackets are impressive; a highly elaborated piece made out of mainstream materials as in Figures 3.2.129 and 3.2.130.

Brackets

Although there are thousands of iron brackets in all the districts of Istanbul, a simple inspection is enough to show that their variety is more limited compared to that of the iron balcony railings. This happens because buildings often have iron railings combined with marble or plaster brackets, or even they do not have any brackets at all, whereas the contrary is very scarce. There are two main uses of the brackets in Istanbul;

sustaining balconies and sustaining oriels. In the first case, it is very usual for brackets to really sustain the balcony, whereas in the second their role is almost always ornamental.

As already discussed, architectural technology, particularly the introduction of reinforced concrete, permitted the optional use of brackets because new ways of sustaining balconies and oriels were applied. Brackets could sustain light balconies, or if many brackets combined, heavier balconies with dense baluster cast railings. The same brackets could not sustain oriels unless they were very light – wooden for instance – and in combination with other sustaining elements.

General architectural trends dictate the selection of materials and as balconies were getting bigger and their balustrades heavier, iron brackets were getting replaced. Changing structural requirements were not the only reason,iron brackets were being phased out ,very often balconies which could equally have iron and plaster brackets, had the latter. This was a matter of style because there was not an absolute material reason for choosing the one rather than the other.

The combination of oriels and iron brackets is also connected to a fashion promoted by architectural trends. In Bitola, these kinds of oriels are very scarce and therefore iron brackets sustaining them are even scarcer. In certain streets of Galata, as in Figure 3.3.131, this practice is predominant.

In Galata, in contrast to Bitola, plaster and ceramic brackets are preferred to iron ones. Iron brackets supporting almost the 20% of the total number of balconies. This number is especially low compared to Bitola, but not to that of the northern part of Shirok Sokkak, which is an area of high prestige for the local standards and with rather newer constructions.

Galata

In certain parts of Galata, especially below Buyuk Hendek Street, brackets are a frequent element. On Büyük Hendek Street, for instance, they are extremely rare even on buildings of the 1880s and 1890s, like the ones of the pictured in Figure 3.2.132. Bracket typologies were thoroughly examined in the discussion on Bitola. In the lower parts of Galata, down almost to Karaköy, I found all the well known typologies of Bitola, the G-key, the edge–bud and more of them, although the G-key, although the most common typology of Galata and of all Istanbul, does not reach the high percentages found in Bitola. Figure 3.2.133 is an example of the main G-key typology sustaining an iron oriel. On this same picture one can see another very interesting iron element of the buildings of Galata; the perforated iron floor of the balcony. The perforations have a hexagonal star shape, on a

3mm thick metal sheet. This element, most probably produced in standardized sheets and then cut on measures, is encountered in Galata and very seldom in other districts, if met at all. In Galata, this element is used from medium budget constructions andabove, even in unique, high quality compositions as in see Figure 3.2.10.

Some elements which are very scarce in Bitola, are more common in Istanbul; for example the quite small bracket in Figure 3.2.134., a type of bracket not very much used in Bitola. It is quite smaller than the other common typologies, the G-key. As oriels were becoming less projecting, smaller brackets were more convenient to fit.

Another widespread element in Galata and other districts of Istanbul can be seen in Figure 3.2.135, these two, above mentioned, typologies have been seen on Figures 3.1.37 and 3.1.38. There are only several examples of them in Bitola, whereas in Istanbul they are quite important and widespread, especially in certain streets, where they are a major trend.

At the vicinities of the lower part of Istiklal Caddesi near the *Tunel*, but not usually on main streets like Mersutiyet, there are several interesting and unique pieces. The heavy railings in Figure 3.2.136 are supported by two pairs of unique, formed, brackets. It was impossible to find the date of construction of this building, which has no other ornamental elements, it is too simple in its outfit and it is therefore a quite particular case.

Shown in figure 3.2.137 is a big building with a set of oriels, each one of which is sustained by a pair of brackets illustrated in Figure 3.2.138. The form of these brackets has a general kinship with the G-key typology, but also some important differences; it has only one spiral, it does not have any parts with 'knots' etc. This typology is installed on a building of the 1850s, a quite old building compared to other kagirs that still survive. This typology is a very old one, which either did not proliferated or buildings bearing it did not survive. Another unique form can be seen in Figure 3.2.139; a rather rare version of a one-bar bracket.

There are also some rare elements made of wrought iron using standardized bars cut on measures as is the case of the element in fFgure 3.2.140. There are more elements like that in various districts with high apartment buildings, like in Kadıköy and while it is a small typology in numbers, it is broad in geographic distribution.

In many areas of high prestige, like Meşrutiyet Caddesi, there are no iron brackets but only marble and plaster ones, especially the former.

Cihangir

Iron brackets in Cihangir become very scarce, especially once one moves from Istiklal Caddesi to the coast of Bosporus. Although many buildings, especially in the upper part of the hills, belong to the same era of those in Galata, that is, the end of the nineteenth century and the initial years of the 20th, buildings in Cihangir have significantly less iron brackets and in certain areas, in the vicinities of Cihangir Caddesi for example, there are entire streets without any iron brackets at all. Most of the brackets belong to the main typologies.

Istiklal and Central Pera

On the entire length of Istiklal Street, there are only two iron brackets. Both of them are parts of prominent art nouveau buildings with unique and very interesting elements. The railings of these buildings were already seen in Figures 3.2.58 and 3.2.61. The first railing, in Figure 3.2.58, is combined with the bracket seen in Figure 3.2.141. This original bracket was easy to has an easy manufacture consisting of only three simple parts. The first is a volute 5 mm blade of 1 ½ turns. The second part is a thinner 1 mm iron sheet cut by a punch on a multi-curved outfit and the two elements are joined in the vertical plane. The junction is reinforced with an unequal L – section element. The fabrication method differs significantly from the balustrade of the balcony, which consists of circular and rectangular – section bars.

The second bracket accompanies the railing in Figure 3.2.142. The concept of both the balustrade and the brackets is slightly different in this case. Both of them, and especially the balustrade, have a 'mechanical' look; they both look as parts of machinery because of their finishing, their shapes and the aspect of their junctions.

At the vicinities of Istiklal there are some iron elements, which belong to the main typologies previously analysed for Bitola and Galata. There are a few ,interesting, exceptions to these typologies. These are the case of the G-key type variation seen in Figure 3.2.143. It is combined with the heavy cast iron, high quality, balustrade already seen in Figure 3.2.54. Although it looks a standardized element produced by a mass production mould, this exact form has not been met in any other place either in Istanbul or in the other cities.

Karaköy

I have pointed out that in Istiklal or Cihangir, where iron balustrades are plentiful,, iron brackets are few. In Cihangir, balconies are scarcer and when they do exist, they seldom have iron balustrades and even less often, iron brackets. In the entire area of Karaköy that faces Bosporus, i.e. the part of the commercial area and the passenger' port, there are only two sets of iron brackets, both belonging to the mainstream typologies. One of these two sets is used as a decorative sustainer of an oriel and is an example of how the change of the oriels size led to the proliferation of the 'short G-key category'. The common G-key type, in this case, is exceeding the length of the oriel by almost 8 cm, although the rear part of the element has been placed deeply in the wall. The result is a

Figure 3.2.e

slightly 'peculiar' and generally not widely preferred.

Iron brackets are also extremely scarce in the part of Halic, the Karaköy Square and the Banklar Street. Half of these buildings do not have balconies at all and when they do, these balconies generally have plaster or marble balusters and brackets.

Tarlabaşı

The geography of iron elements in Tarlabaşı is almost the same with Galata. As I have previously said, my material from this district is quite poor due to technical reasons, so I will not add anything more about brackets.

The Historic Peninsula

Şirkeci

Although there are several categories of iron balconies in Eminonu there are almost no iron brackets in the area.

Unkapanı

In the entire district of Unkapani there are only two metal brackets. They are side by side on one of the districts' main streets in the part that becomes less central. Both the brackets consist of doubled bend simple bars seen in Figures 3.2.44 – 3.2.45.

Fener – Balat

In Fener – Balat, there is a rise in the iron brackets used. They are installed in 10 – 15 % of the balconies depending on the area and the street. These iron brackets belong to the main categories already seen.

Figures 3.2.146 to 3.2.150 show some of these elements whose forms have been already seen in various districts. Exceptions of unique brackets, in contrast to exceptions of railings, are extremely scarce. One such exception can be seen in Figure 3.2.151, a unique form on a building that is itself unique in most of its elements.

Ayvansaray

Iron elements are rare in Ayvansaray. Some belong to the 'small' G- key typology and many of them to the curved bar typology similar to the one seen in Unkapanı.

Central Fatih

Old houses are very scarce in this part of the city. Brackets belong to the main typologies with an emphasis on the single curved bar brackets, Figure 3.2.152, the double-lobe typology,Figure 3.2.153 and the short G-key typology Figure 3.2.154 and they are used mainly to support or to decorate oriels. The simple bar brackets are used, in Fatih, mainly in less ornamented and older houses, and by the end of the nineteenth century, they were not used in middle class houses and gradually disappeared. Cast iron brackets were used in moderation because oriels, which in central Fatih were significantly more numerous than balconies, did not really need to be supported and therefore no material need dictated their use.

Yedikule – Samatya

As already discussed, railings in Samatya and Yedikule are mostly simple curved and wrought iron elements. Iron brackets are extremely scarce, oriels are usually not supported by them neither do they decorate balconies. There are some interesting cases of unique elements, as in Figures 3.2.155 and 3.2.156, which do not though have the high quality of the unique pieces in Pera and Cihangir.

Kumkapı – Yenikapı

Yenikapı has a very limited number of old houses mainly some old mosques and churches, but these do not belong to the late Ottoman era. In Kumkapı, there are many more old houses preserved and as one moves down from the top of the hills and the central part of Eminönü to Kumkapı, cast iron brackets proliferate. The architectural type of brackets – oriel – balcony (see figure 3.2.157), with optional brackets is very frequent in Kumkapı and Yedikule and, as I will show, in Kadıköy. In Galata and Pera, this type is rather frequent, usually because many oriels do not have a balcony on their upper part. These brackets belong to the main types, G-key, double-lobed, as in Figure 3.2.158, and others. A very rare bracket can be seen in Figure 3.2.159, with various volutes organized in

a more triangular form with a terminal 'bud'. This 'bud' has a longer form compared to similar terminals of other brackets.

Central Eminönü

Iron brackets are extremely scarce in the area, if any are to be found at all, my database does not comprise any ironwork elements of the kind, though some in smaller side streets may have been missed, nor very often, are there iron balcony balusters. However, this area is a further case of the different usage of categories and typologies depending on the character of the district and the budget for the buildings. For instance the building in Figure 3.2.160, as with the extreme majority of the buildings of the area, has plaster brackets. It also bears one of the commonest typologies of curved railings in Istanbul.

Kadıköy

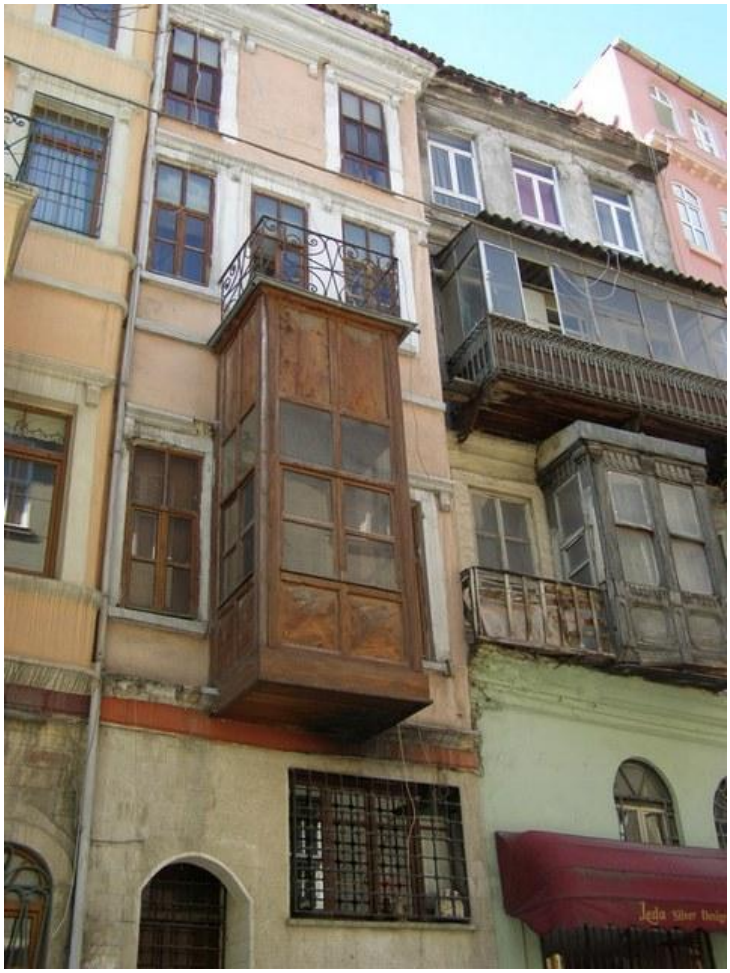
Brackets in Kadıköy are a 'narrow' collection of the variety of items available in the area at that period. The undisputable dominant typology of the area is the G-key, found on approximately 50% of the houses that have iron brackets. The rest of these houses bear few common typologies of brackets, such as the small G-key, the bud-ended and the griffin brackets, typologies that have previously been illustrated in detail.

One thing that must be pointed out for Kadıköy is that, in contrast to other areas of Istanbul (e.g. Pera) or to other cities (Bitola), almost the 50% of the residences have no brackets at all; even buildings of the 1880s and the 1890s, when brackets were frequent in thes kind of medium budget constructions. I have already discussed the decrease of iron elements in commercial areas and in areas of high prestige. Although in Kadıköy this absence of brackets in not so high as the total absence of them in Istiklal for instance, it is much higher than in other districts and cities with similar buildings and functions. This slight deviation from the 'norm' could be possibly explained by local trends, local history of architecture and artisanship.

Case 1 – the common

Istanbul is too big a city to be described by a common type. I have discussed some cases of buildings and their ornamentation, so now I will limit discussion to three similar buildings situated on the architecturally interesting Yeni Carşı Street, at a short distance from the famous Istiklal Caddesi.

This morphological style of architecture was extremely widespread in all Istanbul, especially between the 1880s and the 1910s when the kagirs definitively dominated in the city. There are seen similar types in middle class architecture in the historic peninsula. These three constructions, though similar enough to adhere to the same typology of buildings, have slight ornamental differences. All three buildings have oriels; two are wooden and one made of brick and all different in style. Two of the oriels are sustained by cast iron brackets: the wooden one by a G-key bracket and the other by a small G-key bracket, iron elements are common in Istanbul. The oriels create, on their top, a balcony; a very typical architectural solution in Istanbul. The first balcony, peculiarly enough, exceeds the width of the oriel, the overlapping parts being supported by G-key brackets similarly to the oriel. The balusters belong to a known typology, mostly found in Pera and less frequently in other areas of Istanbul; the zigzag typology seen in Bitola. In both cities it is a noticeable typology, however, none of them has especially high densities of it in any of their districts. The two other balconies, the middle and the right, bear a quite simple and rare typology of railing. I have discussed similar typologies in Istanbul but nothing of the kind in Bitola. A very interesting element is the railing of the lower window. It is a lokma parmaklık, the very old Ottoman typology seen in Bitola, which was extremely common for centuries in the entire Ottoman Empire but faded out while ironwork use was increasing. In contrast to other houses in Istanbul, these houses have extremely minimal plasterwork elements. Also on these houses are interesting combinations and intersections of elements; common types, the small and the ordinary G-key bracket, combined with rare types, the wrought iron railings, and 'relics', the knotted window railing.



Case 2 – the poor

In many areas of the historic peninsula, especially near the walls, poverty is immense. Near Edirne Kapı, the gate of the city walls, there are many very old houses threatened by new urban plans. The construction date of this building is unknown and possibly, impossible to define though it was probably built before the turn of the 19th century, when, according to the records, no more ahsaps were built in the area. The house bears minimal iron elements, installed as I determined by inspection, much after the construction of the house. The window railings belong to a mainstream typology, however, both the material and the standard of building are of a very low quality. The

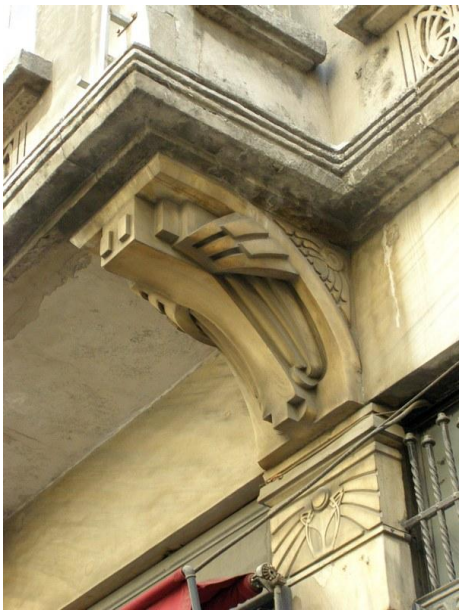
overdoor is very simple, closed by a simple-bars railing and the building uses wooden brackets to support the projection of the first floor and the roof. It is obvious that necessity for ornamentation and function might be the same; however, economic parameters significantly influence choices (in this case limiting them). Nevertheless, though direct western influences are not the case in these disadvantaged areas, general tendencies have here through a process of local renegotiations..

Case 3 – the luxurious

Istiklal Caddesi is the most important street in Pera and Istanbul. Many important buildings representing different periods and architectural styles are situated on all its length,. Numbers 201 and 203 on Istiklal Caddesi are two prestigious buildings constructed during the late 19th century. They both use many unique elements without, however, there being similarities between them. The Başak apartments' building, on the 203 of Istiklal Caddesi, has certain neo-oriental elements e.g. the overdoors, some neo-renaissance elements, the colonettes and local elements of Pera, the railings. These railings were discussed elsewhere in the section on Pera; the only place in the entire city and in the other three cities, where this element can be found. In the case of this building, although the parts that form it are

repeated – not often – elsewhere in Pera, their assembly is very fine and the whole artefact is very well elaborated.

The high class ironwork elements are combined with small marble brackets. In the most prestigious areas, iron brackets were rarely used, mostly substituted by plaster or marble brackets, the latter in very high quality buildings. The typologies to which this building's elements belong are small local trends with limited dispersion in the city and rather short life-cycles. The broader neo-renaissance collonette typology for instance, is not necessarily short living; the contrary happens in the case of this precise colonette. It is this version that is short living and limited as a typology.



The building at 201 is built in a very different style; it is a very interesting example of art nouveau architecture as exempliofied by the highly innovative and unique of the bracket and the relief on the pier which supports it. Both elements are directly inspired from art nouveau but, as far as I could verify, their final forms are not direct copies. There is another issue that I consider important. In this building, as in 203 Istiklal, the architects opted for marble. Their preference, therefore, coincided in the choice of the brackets' material although the brackets were so different in style. While the common choice of material cannot sustain the idea of a common perspective of the architects, it can

however, lead to the result that certain choices and concepts were more common in certain areas and connected, in various ways, to functions, people, social strata etc. of those areas.

The design of the iron door carries the main concept of the marble parts, especially

the upper part with the 'bees'. It is a unique door, illustrations of which are very often included in collections of architectural catalogues of Istanbul. The case of these two

buildings reinforce an observation made several times so far; on moving to high prestigious areas, the proportion of unique pieces and tailored artefacts increases.

As already discussed, the Prince Islands are a special case. Once isolated and a place of exile, they became a luxurious resort during the second half of the nineteenth century, particularly during its last decade. Whereas in the 'main' city, ahsaps were already an obsolete style before the turn of the nineteenth century, buildings of the kind were still frequently constructed here.

The style of the building, built in 1907 as a hotel, has some faint influences of the art – nouveau style buildings in Istanbul which were especially widespread both in the Prince Islands and Kadikoy, the nearer district of Istanbul at that time. The persistence of ahsaps in the Prince Islands shows that, in this case, legislation regulated the building activity delimiting wooden houses and consequently, a whole series of ornamental elements. The shape of the domes shows an orientalist influence on the construction.

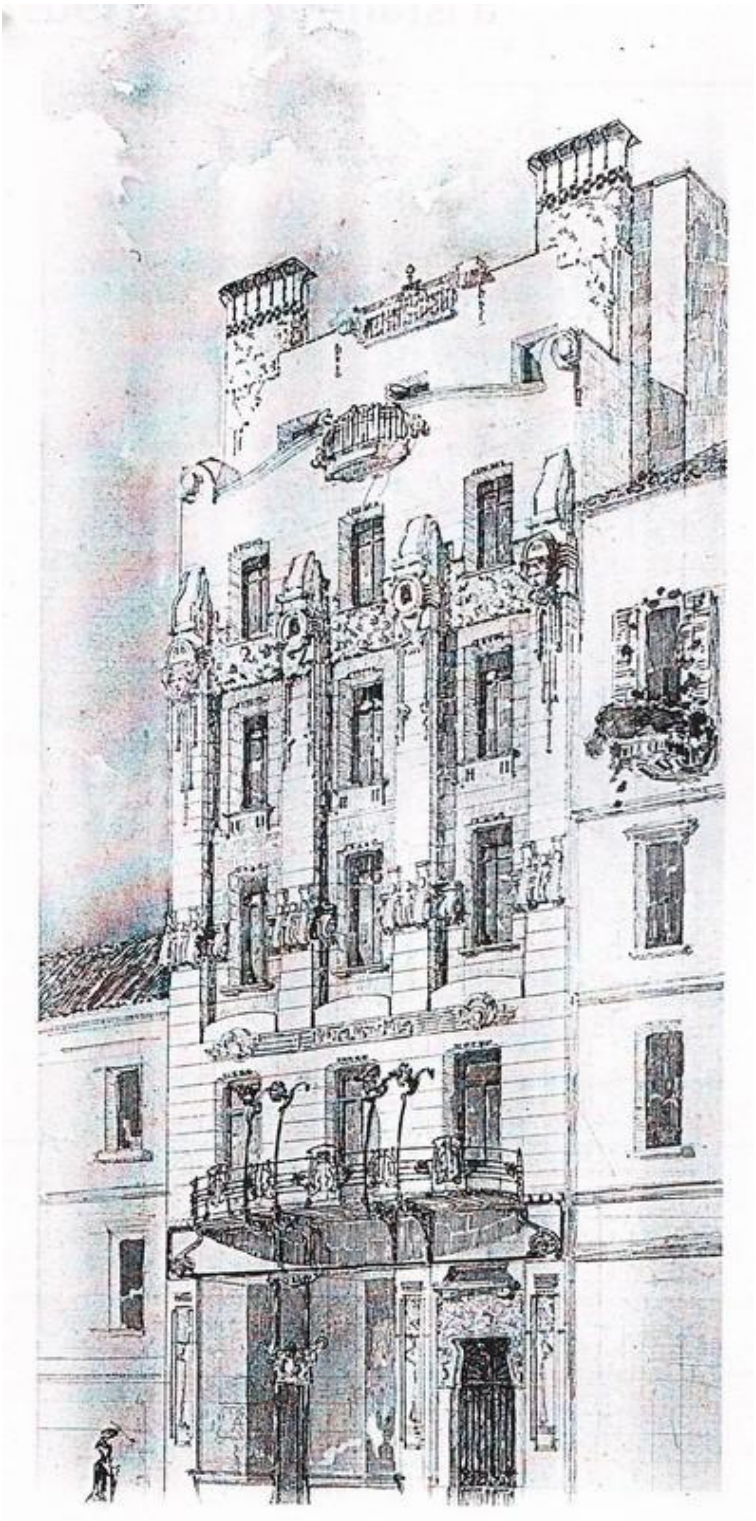
The pilaster strip is rather simple and relatively common in the resort areas of Istanbul and the zones containing konaks, such as Moda or Arnautkoy. The railings, the friezes and the brackets are all wooden, very simple, yet unique in both the Prince Islands and the entire city. The building thus follows the general tendency that connects higher budget buildings to a higher percentage of unique elements. The hotel has one more element that is very frequent on high class buildings in Istanbul but very rare in the others; a marquee.

The marquee, an element which is very rare in Istanbul and almost absent from most of the buildings in Bitola, is much for frequent in Thessaloniki, being present even on buildings of medium budget. The use of this element and the creation of associated typologies and currents is much more common in the case of Thessaloniki than in the other two cities where there is a rather limited set of isolated elements.

Case 4 – the innovative

There are many innovative buildings in Istanbul; many architects were aspiring to build in the city and many were seeking to bring the Western trends and ideas into both public and private constructions. One of the most prominent architects of the turn of 19th century was D'Aronco. He built various buildings in several areas of the city among which

was the *Casa Botter* in 1901. The building is a very interesting version of D'Aronco's personal view of an oriental art nouveau and a proposition for architecture and ornamentation. In contrast to other buidlings on which mass or semi mass produced ornaments were used, Casa Botter bears unique elements designed by the D'aronco for this particular building.



The design on the left is the original made by D'Aronco. The design was followed and the real building with all its elements can be identified by through this drawing.

The elements it bears were, and remained, unique; they were never repeated. They were, however, not indifferent for the city. Although never directly copied as elements, they created the environment which later influenced the main stream for art nouveau in the city., though the level and the degree to which they created this environment can never be definitively proved. However, the creation of such buildings triggered secondary and tertiary waves of design movements. In the vicinities of Istiklal Caddesi there is an installation of 'second – wave' typologies, that is, typologies which are closer to the imported patterns. Additionally,, in lower Galata, Fener or Kadıköy, there is a tertiary wave of more 'distant' patterns. Though

not a fixed rule, many second-wave typologies are smaller in numbers than third-wave typologies. It is a common case for the design patterns to start from an epicenter and to expand in space, in an increasing attenuation of 'fidelity' to the original pattern.

See, for instance, the railings above; they conform to the main concept of art nouveau ideas of floral forms and strips but have a kind of special character which could be attributed to the architect and the city. Istanbul's art nouveau secondary and tertiary waves have – through their typologies, higher kinship to these ornaments rather to the 'original' from Western Europe.

Accordingly, I consider that this example, along with many more throughout the city, shows the role that 'innovative' buildings often play in the cities. Sometimes they are the first buildings to bring certain typologies of elements that later proliferate unchanged, but at other times, innovative buildings make a 'proposition' for a typology that, while the typology itself never proliferates in the city, is yet followed by variations and adaptations – its subsequent typologies - which are triggered by this first proposition.

This balustrade is installed on a building at a few hundred metres distance from Istiklal Caddesi and Casa Botter, towards the Bosporus. It is in a lower budget building, made some years after the Casa Botter, and the influence of art nouveau can be seen on the baluster in the thin – petal flowers and the cylindrical bar strips. This concept is very often repeated in Istanbul, yet this precise pattern is not a wide typology. Comparison with other cities shows that the concept was spread only in Istanbul, although some more distant typologies can be found in Bulgaria as limited groups or isolated cases.

Near the Tower of Galata, a whole square between four streets is occupied by the *Frej Apartmanı* built in 1906 by a Greek; Kostantinos Kyriakidis. Barillari and Godoli (1997) consider that the morphology and the ornamentation of the building are a kind of a personal eclecticism of the architect. They argue that he served the ideals of the upper commercial strata in their raising to the power and the prosperity; this being manifested through certain elements that he repeats several times for buildings of similar purpose.

The brackets shown are one of these elements that Barillari and Godoli consider 'aggressive' and conform to the character to the rising commercial strata. The building has no ironwork at all on the balconies but rather unique and simple iron doors and windows railings. In this case this composition perpetuates a trend that is widespread in Istanbul and elsewhere, with limited use of ironwork, except of the doors and the ground floor windows. Other

than the brackets, it is, morphologically, quite innovative in some combinations of elements it bears.

Case 5 – the commercial

On number 28 Nöbethane Street, Eminönü, there is a common style, medium budget and size commercial building; Kayseri Han. It was built in 1895 in an area which was before, and at that time, a place of intensive commercial activity. The building follows the trend for commercial buildings, it has no ironwork elements except of the main entrance. The style of the ornamentation is mainstream eclectic; it conforms closely to the Ottoman books of architecture of the era, the main propositions of which it generally adopts.

The door of the main entrance is mainstream, but in another sense. In higher budget buildings more original door designs are often chosen although doors are very often 'tailored' and therefore more easily original. On this building, in contrast to the other, mainly plaster, western inspired mainstream patterned elements of the façade, the style of the door is in the local mainstream for the area and for commercial streets. The façade of the building is, therefore, a point of coincidence for two kinds of mainstream flows, one more widespread and another more local.

3.3 Thessaloniki

Thessaloniki was founded in the third century B.C. on the site of an existing settlement. It is located at innermost point of the Thermaikos Gulf, a lake-like narrow gulf that because of it's geographical position is a very good natural port, see Maps 3.3.1 and 3.3.2; number **1**, the Thermaikos Gulf, number **2**, the position of the city's center, number **3**, the Hortiatis Mountain. Thessaloniki, also known as Salonika, is built at the point where the lower hills of the adjacent Mt. Hortiatis meet the gulf; the position of the ancient city coinciding with both its position in the Ottoman era and with the contemporary city centre. The city has, and used to have, an extended front on the littoral, its lower districts touching the sea front. Inner districts are built first on a flat area, smoothly sloped towards the sea and then extending on the steep hills. High walls, approximately 2km on the littoral and built in the late four century, protected the city[137]. At the corners of the littoral wall there were two defensive towers, which still stand, numbers **4** and **4b** on Map 3.3.3. The walls turned inland at point of the towers and joined on reaching the hills, where the castle of Yedi Kule was later built; seen on the upper right part of the same map.

The city witnessed many rulers: the Romans, the Byzantines and the Francs among them. In 1430, it was occupied by the Ottomans, during which rule the city lived successive periods of prosperity and decay. It remained under Ottoman rule until 1912 when the city was occupied by Greek and Bulgarian troops; subsequently being annexed by the Greek state.

Thessaloniki was a true mosaic of Ottoman and West European nationalities: Greeks, from the Byzantine times and immigrants from other places, Turks who came after the Ottoman occupation of the city, Jews expelled from Spain by the Catholic Kings, Slavs from the Macedonian hinterland and elsewhere, Vlachs, Albanians, Gypsies, Cherkez, Tatars, and many Western Europeans mainly Italians, French and Germans.

Even in circumstances of decay, because of its geographical location, Thessaloniki maintained a prominent position in the Ottoman Empire and in particular in the Balkans. being an important port and a transportation nexus serving the great Macedonian hinterland. Later, during the 1890s, the railways gave a new importance to Thessaloniki and further reinforced its position[138].

After a period of relative decay in the first third of the nineteenth century, Thessaloniki benefited greatly from the *tanzimat* reforms. The *Gayrimusluman*, non

137 See **(Βακαλόπουλος, 1997: 74 -76)**
138 A thorough analysis by **Γούναρης** in **(Χασιώτης, 1997: 117 -133).**

Muslims, of the region found a perfect opportunity to enhance their social and economic position while Muslims too, and especially the Turks, created a new cultural movement in the city[139].

Winds of modernization blew in the city beginning in the 1850s and 1860s. Despite that its aspect was, and remained, 'Oriental' until the great fire of 1917, western influence was more and more evident as the nineteenth century was closing. In the 1870s and 1880s new strong upper social strata were formed, comprising people from every community and in particular Jews, Greeks, Turks and Slavs[140].

In the 1890s, Thessaloniki was already one of the Ottoman Empire's most important cities. Various factors contributed to it; good communications with the west, strong western communities, strong political debate and important social activity. The last two decades of Thessaloniki's Ottoman period were very turbulent and agitated; nationalist struggle for the city, and for the whole of Macedonia, involving the fervent action of Greek and Bulgarian partisans, and of the Ottoman army. In 1903 Bulgarian activists bombed the building of the Ottoman Bank[141]; in 1908 the Young Turks, who in time dethroned the Sultan, started their movement here and, in 1909, the last real powerful sultan, Abdul Hamid the Second, was imprisoned in Villa Allatini in the Hamidiye district of Thessaloniki[142].

While these are some important events show the rising importance of Thessaloniki within the Ottoman Empire, were more, trivial and quotidian events that were changing the life in the city and were contributing to its rising role. As mentioned, the city was occupied by the Greeks in 1912, and in 1915, it became the provisional capital of the *North Greece State,* which in contrast to the government of Athens fought at the side of the Entente forces in the First World War. The Entente sent approximately 200,000 soldiers to the Macedonian front, most of who were stationed in the wider Thessaloniki area. Thousands of photographs were taken by the Entente soldiers and numerous postcards were printed for the troops' personnel and their postal communication with Western Europe[143].

This was also a major event and a very broad path of communication, in both directions, was opened; Thessaloniki came in more immediate contact with the West and Westerners had a flow of information from the Balkan city and the 'Orient'. The multicultural mosaic of Thessaloniki did not last much longer. The war between Turkey

139 See the comprehensive work: **(Χεκίμογλου, 2004: 164 – 171)**
140 **(Βακαλόπουλος, 1997: 321 -346)**
141 See **(Μέγας, 1994), (Павловски, 2005)** and **(Битоски, 2003).**
142 **(Δρογίδης, 1996: 88 -167)** and **(Βακαλόπουλος, 1997: 363 – 379)**
143 See the article of **Πετρίδης** in **Χασιώτης, 1997: 137 - 149).**

and Greece of 1919–1922 resulted in 1,500,000 Greek Orthodox Christians and 500,000 Muslims becoming the subject of a tragic population exchange and, as a result, all Muslims had to abandon the city. In 1943 the majority of the Jewish population of Thessaloniki was forced by the Nazis into concentration camps; the two thousand Jews currently living in Thessaloniki are a very small remnant of the community's great past[144].

Two big fires destroyed the city during the late Ottoman period and its aftermath; the first burned the centre in 1890 and the second, in 1917, destroyed the 40% of the city, changing dramatically, and forever, its Oriental aspect[145].

3.3.1 On Thessaloniki's urban plan

The Ottomans maintained, especially during the first centuries of their rule, the Byzantine urban plan of the city. The built area remained within the space defined by the city walls; the main roads were those connecting the port, the main buildings and the walls' gates. Thessaloniki had, like all Ottoman cities, a maze-like urban layout, however, due to its littoral front which defined its south side, the morphology of the terrain and the position of the main gates, Thessaloniki had a basic raster of main streets that followed, more or less, a rectangular system. Main streets were parallel to the littoral front and other important streets were, more or less, perpendicular to them connecting the hills to the sea[146], see Map 3.3.3.

From the 1850s, a wind of 'modernization' blew through the city. This 'modernization' was almost always an attempt to 'normalize' the streets, that is, to make the city raster as Hippodamean as possible; the main boulevards being widened and straightened several times. A major urban planning event was the demolition of the seafront walls in 1870[147]; the walls being demolished in all their length between the White Tower and the Top Hane, an action which opened the city to the sea. The impact was enormous; the littoral districts, which were mostly Jewish, were the poorer areas Thessaloniki. They were tormented by diseases and neighboured on the notorious port area, small factories and abattoirs, which were made the aspect of the area even worse. During the 1880s and the 1890s the area improved somewhat, abattoirs and small

144 See **(Χεκίμογλου, 2001)**
145 See **(Χεκίμογλου; Danacıoğlu, 1998: 19 – 24)**
146 **(Δημητριάδης, 1983)** throughout the book.
147 See **(Γερολύμπου, 1997: 132 – 145)**

factories were 'expelled' to the periphery of the city and new 'modern' buildings were gradually built on the seafront[148].

Another important factor that contributed to major changes on the urban plan of Thessaloniki was the development of a railway system. In 1890s the Ottoman Empire constructed long railway connections between main cities, as a result of which Thessaloniki was not only connected to the rest of the Empire but it also became a transport hub. This development was associated with the importance of Thessaloniki's port; the port was becoming more important by being served by such a railway network. New buildings were built to serve the railway and its functions leading to the rapid spread of the Cayir district[149], number **6** on Map 3.3.3. The port also needed to be 'modernized' so during the late 1890s and the 1900s, major reconstruction gave to Thessaloniki its first 'modern' wharfs with railway connections, cranes', warehouses etc., see number **7** on map 3.3.3. In the 1900s, the littoral was radically transformed into a prestigious area with buildings in the vanguard of architectural design. The area near the port but away from the sea front was also very interesting, but less prestigious. It was an area of warehouses, workshops and brothels; a part of that area still survives and is included in this research in detail[150], see number **9** on Map 3.3.3.

Thessaloniki has a significantly simpler terrain morphology compared to that of Istanbul. In Istanbul, the steep hills gave fewer options for radical interventions, while in Thessaloniki, the area between the hills and the littoral was rather flat, an attribute that was always an advantage for urban change.

In Thessaloniki, as in most Ottoman cities, ethnic communities lived in different districts, though there were with important exceptions to this brought about by means of osmosis. There were also some mixed or common districts, especially commercial and workshops' areas.

Muslim districts in Thessaloniki were mostly situated beyond Egnatia Street, towards the hills. The Muslims were, before the *tanzimat*, rather favored in the choice of the place to live. This led most of them to the 'higher' areas of the city, which were healthier and far from the unhealthy and foul smelling air of the port and the littoral. However, when the lower districts became more important, the Muslims could not now move to the lower parts. As a consequence, the upper parts of the city were rather 'conservative' in architecture, Muslims tending to keep older Ottoman fashions, and later, when Muslims had to leave the city, this rather conservative character of the upper part

148 See **(Anastassiadou, 1998: 125 – 138)**
149 **(Γερολύμπου, 1997: 232 – 240)**
150 See **(Χεκίμογλου, 1997: 17 – 39)**

was preserved. After the population exchanges, the Greek Orthodox refugees from the Minor Asia who settled there, were mostly of lower social class and thus, had rather limited possibilities to change the aspect of their residences. Neither did the authorities focus on that area since that the main urban focus was on the lower part[151], Map 3.3.4.

The major event for the urban space in the twentieth century was the great fire of 1917 which lasted four days of the early August and destroyed the 40 per cent of the city, mostly of the lower part. Hundreds of buildings of every kind were totally devoured by flames; thousands of people were left homeless and found shelters in provisional residences.

During the 1950s, and especially during the 1960s and 1970s, Thessaloniki experienced a significant reconstruction that caused the destruction of hundreds of old buildings. This reconstruction, and a major earthquake of 1978, removed most of the city's Ottoman architecture until today, less than the 5% of the Ottoman city remains in its original condition.

3.3.2 Architecture in Thessaloniki

The scarce images illustrating the built environment of the nineteenth century's first half indicate minimal Western influence on architecture. The influences of cultures were always existent, but it seems that until the 1850s and 1860s Thessaloniki was still in the predominant Ottoman sphere of architectural fashions. Westernization slowly penetrated Thessaloniki in the 1870s and in the 1880s it was already very noticeable in many parts of the city. In like a manner to other Ottoman cities, changes in Thessaloniki were also associated with the *tanzimat* reforms. The new rules for urban planning and the regulations for social and commercial liberalization facilitated the construction of large buildings by members of different social classes and different communities. As state above, buildings of the lower city were constructed within a context of different and more Western ideals. At the same time, the influence of the West became significant in Thessaloniki, just as it occurred in other cities of the Ottoman Empire, and Thessaloniki, being a very important port, was one of the main gateways to the Western trends. Western and Greek architects who had studied in the West, assumed the task of designing many important buildings all over the city. The most famous and prominent of these architects, Vitaliano Poselli, was employed by the Ottoman authorities to construct many important public buildings for a variety of various purposes and in his, approximately 30 years of

151 **(Δημητριάδης, 1983: 211 – 216)**

activity in Thessaloniki, he built public buildings, churches and residences, applying all the trends of nineteenth century's Western architecture[152].

Xenophon Paionidis was among the local architects who adhered to Western fashions and built many important buildings in all the areas of the city and in neighbouring Macedonian towns. Both architects followed an architectural style with a preference to rather simple solutions whichever the style their buildings were. Paionidis built some buildings for the Greek community; buildings having an accentuation of neoclassic elements, a practice in Istanbul which has been previously discussed.

As with all the cities in this study, architectural trends and vanguard buildings were not equally distributed in all the districts of Thessaloniki; the majority of important constructions were concentrated on the littoral front, on the main streets such as Egnatia or Sabri Paşa, and in both the new built areas outside the walls, Hamidye and Çayir.

There follows an outline of the architectural aspect of Thessaloniki's different areas into which I will analyze the ironwork.

Hamidye

In what may appear strange at first sight, I will start with a district that is outside the walls. Hamidye, the district at the east of the city walls, started to acquire great importance in the 1880s, Map 3.3.5. Built on quite flat terrain, Hamidye quickly became an area of prestigious residences in which many architectural styles, such as eclecticism, Turkish baroque, orientalism and art – nouveau, were used. The littoral front of Hamidye, built between 1880 and 1910, was a real exhibition of styles and trends, carried out by various architects, constructed for people of all the main Thessalonian communities. Most of the houses on the littoral were high budget, prestigious residences, built for prominent and wealthy citizens and occupying the first rows from the sea, that is, the first two or three roads parallel to the littoral: see Map 3.3.6 for the position of the *Vassilissis Olgas Avenue*, the main street of Hamidye, after the construction of the new sea front in the 1960s, a construction which increased the distance between the above mentioned residences and the sea. On the next parallel roads, residences and some public buildings were constructed to medium budget and belonging to persons of the medium-upper class. In Hamidye there were two hospitals, an orphanage, several high schools and Poselli's *Yeni Cami*, the last mosque built in Thessaloniki and many important public buildings occupied the area just outside the walls of the city, see Map 3.3.7, number **1**. Private buildings and

152 See **(Κολώνας, 1991)**

residences were rather scarce in this area because the land there was publicly owned or owned by the communities which had their cemeteries there. Architecture in the Hamidye area includes many interesting examples which, as mentioned, belong to many different styles, many of them direct transfers of Western trends. A great number of buildings were built on an eclectic style; a combination of various existing styles, quite a vague definition, since that neither the styles chosen nor the syntax and analogies on the work are uniform[153].

The house of Şeyfullah Paşa was built in 1905 at the corner of Vassilisis Olgas Avenue, the main road of Hamidye, and of 25th Martiou Street; see Figure. 3.3.i. and map 3.3.7 number **2**. This building is a very a good example of eclecticism, combining art nouveau, neo-renaissance, neoclassic, baroque and oriental elements, for example the crown of the building with its Ottoman inscription, Figure 3.3.ii, the projections on both sides of it and the onion dome at the back, characteristic elements of the orientalist style developed in the Ottoman Empire during the late nineteenth century. Paionidis, the architect, has designed this house for a prominent Turk and within the main design concept of the building were included several elements that implied an oriental affiliation, a practice at the time of the upper social strata. These elements were combined with certain neoclassic characteristics, such as ionic pilasters, neo-baroque elements such as windows moldings, and others.

Previously, in 1890, Paionidis had already built , no more than two hundred metres far from the Şeyfullah Paşa house, a residence for the Greek Hatzifotiou, Figure 3.3.iii, map 3.3.7, number **3**. This building is smaller, built to a lower budget and comprises different series of elements. Many of these elements, balcony balusters, cast iron brackets, fence railings etc belong to common Balkan typologies of mass production, whereas others belong to more limited editions, Figure 3.3.iv. (In the collective volume of the Thessaloniki's modern monuments[154], it is argued that its ironworks belong to the art nouveau style. I disagree with this view. The railings belong to, what in previous chapters I have called, a neo-baroque Paris style. I will further analyze this style later in the section on the ironwork inspection of Thessaloniki, Figure3.3.v.) The house is built a little to the north of the main Vassilissis Olgas Street, a few metres from the prestigious littoral front and mass production typologies are already more frequent on constructions. Although the architect is the same in both these cases, the former building has evident orientalist characteristics that the second lacks. It was, I consider, among the purposes of Paionidis

153 **Μουτσόπουλος (1997)**, especially in the first part.
154 **Καμπουρη ed. (1985: 236)**

both to build an architectural form and to furnish it with elements that would be appropriate for the owner. While prestigious houses were built in all the Hamidye area, the general observation is the same; as one moves from the littoral to the inland, elements become more common and construction budgets become lower, albeit quite higher than in other areas of the city.

It is one of the research questions of this thesis as to whether different communities were using different architectural elements. In Leoforos Stratou Avenue, the third main from the littoral, the *Hanim's* house is built, Figure3.3.vi, map 3.3.7 number **4**. What one can observe on the ornamentation of this building is the abundance of baroque elements, in the form of plaster moldings and endings. The house has curved – blade railings, which were, as I have shown in the case of Istanbul, quite common for districts with higher Muslims concentrations, Figure3.3vii. I have also discussed, in the case of the Şeyfullah Paşa residence, the density of baroque plaster ornaments. These two cases, the Hanim's house and the Seyfullah Pasa residence, along with some more in the area, could show the existence of a certain Muslim style. However, the definition of a Muslim style based on this evidence must be tentative: One can see from the registries that these two houses were Muslim owned and consequently draw some conclusions, however, it would be very risky to work the other way round and recognize a Muslim identity based on this style given that exceptions are not rare.

Old sea front

I have discussed how the demolition of the walls resulted to the rising value of the districts' land and to the shift of the city's urban gravity centre towards the littoral. , within the period from the 1870s to the 1890s, this change caused the construction of many important buildings on the sea front. As previously mentioned, districts were characterized by their communities. On the littoral front, districts around Top Hane, were neutral, districts to the east of the port were Jewish and a small district, near the White Tower, was Greek. Very soon after the commencement of the intense construction activity of important buildings in the late nineteenth century, the sea front lost its community identity and was converted into one of the main commercial cores of the city. Although certain buildings, such as the poultry abattoir and the Saias Factory preserved some features of the previous character of the area, it was a matter of time before these buildings were also demolished and the area converted into a district of architectural vanguard, see Figures3.3.viii and 3.3.ix.

The main architectural concepts at the littoral front were associated with westernization and orientalism. However, there is very little living evidence of this on the seafront, more than half of the buildings were destroyed by the great fire of 1917. Most of the new built constructions - built after the fire - were themselves demolished during the 1950s and the 1960s and, as a result, there are no surviving Ottoman buildings on the seafront. Some Ottoman buildings survive at the area near the port; these are close to the wharfs but not on the main seafront, which remains one of the city's more luxurious areas.

Figure 3.3.xi. The littoral in the 1910s

Image 3.3.xi is an example of the sea front in the 1910s. These are the buildings from the Splendid Hotel, Figure 3.3.xiii, to the White Tower, Map 3.3.8, number **1**. There are several kinds of construction styles. Some of them, like the second one from the left, are quite modest and often older than the rest. The third one, with the narrow penthouse, has a simple, late-Ottoman style that is frequently found in certain suburbs of the old Peninsula of Istanbul. The first from the right, the Pathe Cinema, and the sixth one, the Splendid Hotel, are representative of the new styles coming in the city. Floral plasterworks, oval crowns on the top of the buildings, long windows with fanlights, and onion shaped top ornaments are common in many of these buildings. Despite that the same styles could be found at that time in many other European cities, the mixed use of different styles of ornaments, their proportions and combinations, along with the

persistence in certain aesthetic forms, create the particular Balkan amalgam in its 'Thessalonikian' version.

Istira; the port market

Istira, or Ladadika, as it is nowadays called, is the market and warehouse area close to the port, a relatively large part of which has survived the successive reconstructions, though it is now surrounded by big blocks of the 1960s and the widened old avenues. The actual Ladadika area can be divided into two subareas. The first subarea comprises just a row of buildings to the east of *Katouni Street* and closer to Eleftherias Square. These buildings have a greater kinship with the demolished buildings of the littoral and the Sabri Pasha Street, yet they are lower budget constructions compared to the former, Map 3.3.8, number **4**. A few metres towards the port, there is another building that belongs to this subarea. This building has a large proportion of its surfaces free of any ornamentation at all though the smaller ornamented surfaces have voluminous plaster elements in a stark contrast to the rest. There are also sets of mascarons, a very rare ornament in Thessaloniki though not in Plovdiv, for example, where it is very common and widespread throughout the city, see Figure 3.3xv. The building was constructed in the late 1890s when it seems that there were attempts to use mascarons and other elements of that kind in Thessaloniki as there were in Plovdiv. However, the trend failed to catch on in Thessaloniki, neither it did in most Macedonian cities, and as a result it can be seen now as a 'foreign' rather than a 'prosperous' trend, 3.3.8 number **3**.

Another point of interest about this building concerns its railings. They are curved-blade railings with flower parts on their junctions, Figure 3.3.xvi, a typology widespread in all the western part of Thessaloniki and especially the Çayır area. The same typology has some isolated items in the Christian districts of Istanbul but it is almost absent from Bitola and Plovdiv. The architect combined, in this case, relatively rare plaster elements along with common iron elements of the local trend, on a building in the less favoured area of the sea front's zone.

The second, larger, subarea, comprises buildings of significantly lower budget and then, as one goes to the West closer to Salaminos *Street* Map 3.3.8 number 5, warehouses. See for instance the building on Figure3.3.xiv, built in the late 1890s; its ornaments are quite simple, linear and, up to some degree, abstractive, in the sense that they resemble other older elements though more by their outfit than by their detail. Its ironwork, the

railing and the marquee, are very rare pieces. The budget for this building was medium, though relatively quite high for the actual preserved area and its buildings.

This second subarea of Istira consists of workshops and warehouses. Workshops are less ornamented; their ornamentation has many common elements with Bitola, which is not the case for the first subarea, nor as I will show, with the Malta – Ceddid Market and the littoral. On the other side of Katouni Street, just opposite to these buildings, there is one of the older private buildings in Thessaloniki, the workshop of Cauchi brothers. The inscription of the wall indicates the year 1850 as the establishment date of the company but the building is a later construction, possibly of the 1870s. Its ornamentation is simple and, I think, quite elegant for a workshop, Figure3.3.xii. Two series of plaster dentils adorn the roof, the windows have simple plaster label moldings and the entire first floor is defined at the upper part by a plaster strip with meanders. The crown has two relief anchors representing the activity of the workshop. The oriel creates a balcony at its upper part; the balustrade of the balcony consisting of simple balusters, though rather unusual for the city, Figure3.3.xviii. The oriel is sustained by two common G–key iron brackets.

As one goes the west, construction budget were decreasing. Buildings on Aigyptou Street buildings, like the one on Figure 3.3.xix**,** are smaller and very modest in their ornamentation. The building of Figure 3.3.xix has a series of fillet moldings under the roof tiles but no other plastic elements at all. Doors and windows' ornaments are limited to the negotiation of the functional and iron elements consist of the cast brackets and railings; the brackets belong to the most common Ottoman typology of the Macedonia – Thrace area. The balusters belong to a common yet, not among the more common, typology; photograph on the left.

In the adjacent Morihovou Square there is a mixture of workshops and warehouses. Warehouses in Thessaloniki, just as in Istanbul, rarely have ornamental elements, their

ironwork elements being usually limited to the necessary. One of the most ornamented warehouses is shown in Figure 3.3.xx. Its ornamentation consists in dentils and fillets made of bricks, the main construction material of the building. The railings of the windows, Figure3.3.xxi, belong to a very common typology both for Thessaloniki and other areas, which for Thessaloniki have certain technical particularities; they are located on Map 3.3.8 in the area between 3 and 5.

Malta – Ceddid

Close to Istira (Ladadika), but towards the central part of the city, to the North West, lies the district of Malta-Ceddid Map 3.3.8, number **2**. This area, which no longer has any particular name, is the only area between the central Egnatia Street and the sea front where Ottoman buildings survived both the great fire of the 1917 and the major reconstruction of 1960s and 1970s. It is therefore interesting to focus briefly on it, given that it is the only commercial area with quite untouched buildings and therefore a place from where more certain evidence about ornaments and ironwork can be retrieved.

In contrast to most buildings in Istira, which were workshops and warehouses, buildings in Malta-Ceddid were mainly hanlar. They were middle or high budget constructions with medium or high ornamentation, but also with some interesting exceptions.

The building on Figure3.3.xxii is the Emniyet Han, built in 1896 by an unknown architect. It used to host shops and offices but now only its ground floor is in use. This building is among the most important of the area; its style is an excellent sample of Ottoman, and especially of the Thessalonian, eclecticism. The 'molten' forms of its plaster elements, particularly of those supporting the oriel, are combined with the straight lines of the railings' bars. These railings, as I will show later, are quite common on several buildings of the market areas in Thessaloniki but extremely rare in other areas and cities. There are some mascarons representing young girls sustaining the slight projection of the roof, which is, as I have said, are a rare element for Salonika. There is an interesting relic on this building; the rain and the wind have revealed a Bulgarian inscription and two letters of an Ottoman one under layers of paint , Figure3.3.xxiii and Map 3.3.8 number **6.**

Edessis Street is perpendicular to Victor Hugo Stree*t* on the crossroads of which, the Passage Kyrtsi is built, see Figure3.3.xxiv. Like many offices and shops buildings of the area, it is a rather simpler construction compared to the above mentioned Emniyet Han or to some buildings of the littoral. Its main ornamentation consists of plaster relief straps

and simple consoles. Plaster colonettes frame windows and the same material is used on the first floor for a false balustrade. Iron elements are quite limited: used only on the window shutters and the railings of the second floor. On two of the windows there are meander plaster moldings.

A further very interesting building of this area is that of the Bank of Salonika on the middle of the Malta Ceddid area. Built in 1907 by Vitaliano Poselli[155], the construction has many characteristics of Italian inspiration. Such elements include the broken pediment with the clock, stopped at the time of the big earthquake of 1978, the crown, the dense balusters and the Corinthian pillars. The decoration on this building is well defined and stable, in contrast to the fluid forms on other buildings of the area, for example, Emniyet Han. Its railings belong to a quite rare typology for Thessaloniki; various metal laces with intense curve with a common spring point organized around a symmetrical axis, Figure3.3.xxiv, Map 3.3.8 on the middle between numbers 2 and 6.

There are some more interesting buildings on the area belonging to various styles and with many eclectic elements, some of which will be discussed in examining their railings and the use of ornaments on them. Overall, the general architectural concept of the area is that of the Balkan eclecticism serving commercial, and sometimes, workshop buildings.

The lower city

This term is not generally used. I use it as an opposite to the upper city which is the former Muslim part of the city, with some Christian islets, on the slopes. Given that the limit of the Upper City is Olymbiados Street, I will define 'lower city' as the area within the city walls other than the areas I have already examined. This area was not architecturally homogenous and as is seen on Maps 3.3.5 and 3.3.3, the lower part of the city is that with the 'perpendicular' raster of streets. However, it is a common area for this research because of the scarce evidence for its architecture. More than the half of it was destroyed in the great fire of 1917 and it was also the part which was affected the most by massive reconstructions and the earthquake of 1978.

Unfortunately, historic photographic evidence from this area does not cover all its districts in a similar manner. Main avenues and areas close to important buildings and monuments are much more photographed than small streets; since cameras were very

155 **Κολώνας and Παπαματθαιάκη (1980: pp. 86-90)** give many details about the building. In the same book they comprise all the public and private buildings built by Poselli.

expensive, so only very few people possessed them and thus, photographs represent their interests and their focuses.

The parts of the lower city, close to the littoral, had an architectural kinship with the buildings of the sea front. In Figure 3.3.xxvii one can see that residences have some of the eclectic elements seen on buildings in other areas that still survive. These buildings stood on the first parallel to the littoral Nikis Avenue in the 1900 – 1910s. Photographic evidence is quite dense for Egnatia Street, thi*s* was, and still is, the principle avenue of the city. The area around the Triumphal Arch is the most photographed part of the city after the seafront and, in the 1890s, as it can be seen on Figure 3.3.xxviii, westernization had not yet prevailed here, the house behind the arch being a typical middle class, Ottoman residence. The area was westernized some years later and survived reconstruction as an islet of older style, until early 1970s when it was reconstructed, Map 3.3.8, number **8**.

There is evidence of Ottoman architecture on many parts of Egnatia Street, though the architecture in the middle of it was moderately westernized and built generally to a middle budget, see Figure 3.3.xxix located at Map 3.3.8, number **11**. Characteristic of Ottoman architecture are the buildings at the front and right part of the road; they contain many wooden parts built in the Ottoman fashion. In some parts of the Egnatia area, especially in more commercial parts, Oriental characteristics are less frequent. However, ornamental elements are also scarcer here compared to the lower areas of the city and thus western influence – quite ornamented at that time – was lower. Moving towards the hills one crosses another main street; Agiou Dimitriou. In this area, Oriental trends are prevalent, though with some slight Occidental influence; see for instance the second building on the left row, Figure3.3.xxxi, Map 3.3.8 number **7**. At the sides, towards the city walls, architecture was far more Oriental, very different from the littoral part of the city, Figure 3.3.xxxii. However, there were many public buildings left. The old *konak*[156], Figure 3.3.xxxiii, was much closer to the Oriental trends and was ornamented with Oriental elements. That building was replaced in 1893 by a much more western-styled building built by Vitaliano Poselli[157], seen in Figure3.3.xxxiv.

The upper city

The first zone of the upper city on the hills was quite Oriental and the budget for construction was getting lower. More than 200 Ottoman buildings survive in this area.

156 Administrative headquarters.

157 ΄**Κολώνας, Παπαματθαιάκη (1980).**

And influences, Oriental or Occidental, were most often displayed through the scarce ornamentation and cheap materials, Figure 3.3.xxxv and xxxvi, Map 3.3.8, number **9**. However, in certain cases, which will feature in a later discussion on ironwork, this 'poverty' generated creativity and the fabrication of attractive elements using cheap or little material.

In the uppermost part of the upper city stands the acropolis of Yedi Kule, an area that was scarcely built and most of its buildings were of very low budget and extremely minimal ornamental elements, Figure3.3.xxxvii.

Çayır

The area at the western part of the city, just outside the walls, was called *Çayır* Map 3.3.8, number **10**. It consisted of three general sub-areas; the first, closer to the port and the busy Lagadas Avenue, was occupied by big warehouses and hanlar, MAP??? number **10a**. That was also the main gateway of the city located near the area of the railways, Figure3.3.xxxviii, and of the port's western side. The second sub-area consisted of a limited area of middle class houses just behind the railway station. Though only one of them still survives, these houses had interesting ornamental elements and ironwork, often different from those of middle class buildings in the areas within the walls, Figure 3.3.ixl. The third area consisted of very old Ottoman houses that had many early nineteenth century characteristics, Figure3.3.xl. Five of these buildings, of relatively minor volume, still survive in the area though in a very bad condition see Figure 3.3.xli, Map 3.3.8 number **10b**.

3.3.3 Ironwork in Thessaloniki

Ironwork areas; quantity

The scarcity of evidence from the Ottoman Thessaloniki obstructs a detailed research and hinders obtaining a clear image of the architectural styles and the ornamental elements. In the areas in which old buildings have survived, one can have an idea of the architecture during the late nineteenth century but this is extremely difficult in the extensive areas which have been destroyed by fires and earthquakes or were

3.3.1 The eastern part of the centre, the walls and the extension out of them

reconstructed after the wars. An additional problem rises from the fact that archives in Thessaloniki are rather 'conservative' in the way they permit researchers to access sources. The directors of the archives asked me for large amounts of money to let me copy small parts of various images comprising architectural elements, and therefore, I had to rely on their low quality internet versions, available to all, as a material for this research. However, I did have permission to see and study the originals. Further images have been found in books about Thessaloniki, and fortunately, Greek copyright laws still permit the use of images in PhD theses if the source is acknowledged.

Some preliminary observations about the differences in the use of ironwork can be made through looking at the panoramic photographs of various districts. See for instance image in Figureure 3.3.1 above: balconies are present in an average of 50% of the buildings on the front part of the picture, the buildings which is also closer to the sea, this

is the case, for instance, in the two buildings on the left, and on their façades there are brackets and railings. Other buildings, like the one at the right hand side of the photograph, are built in a westernized style but without iron elements. These areas were medium class Greek districts where reconstruction was moderate at the time the photograph was taken in the 1910s. A closer image of a part of the same area can be seen in Figure 3.3.2. As in Figure 3.3.1, iron elements, mostly brackets and railings, are used on half of the houses with a relatively greater use on the larger ones. Central parts of the lower city, especially closer to the littoral, seem to have higher concentrations of ironwork elements. On Figure 3.3.3, one can see a part of a central street close to the littoral. Details of the post card and the buildings indicate that it must be taken during the late 1890s or early 1900s. Therefore, it was taken after the reconstruction of the area and after it gained value because of the demolition of the city walls. The use of railings is regular, both in brackets and railings. Various elements of the morphology and the ornamentation, such as plaster strips, ceramic endings and moldings, show a similarity with middle–high areas of Bitola. At this point I should remark that such buildings are now extremely scarce in Thessaloniki, successive reconstructions of the twentieth century having spared more high and low status areas' buildings than mainstream ones.

As I have mentioned, together with the almost entirely residential area of Hamidiye, the most prestigious area after the demolition of the walls was the littoral. Just after the demolition it was a rather neglected area, and as seen in the image in Figure 3.3.4, in the 1880s the littoral had few important public or private buildings. Parts of it were occupied by factories and workshops, e.g. the Saias Textiles seen on the left of the same image. Not much later, the littoral was converted into the main artery of the city. On Figureure 3.3.5 one can see the mixture of buildings and styles of this very busy part of the city. It is also obvious that iron elements were increasingly used in most of the constructions.

At the west part of the city, one of the most important places was created at the end of the nineteenth century: Eleftherias Square, the area between numbers **1** and **4** on Map 3.3.8. Along with the White Tower, this rather small square was one of the points where gatherings and demonstrations occurred; it was also a place in the architectural vanguard. On Figure 3.3.6 one can see the image of the square during the 1910s. The buildings, of various western-inspired styles, bear full sets of ironwork elements - as it can also be seen on numerous other images of one of the most photographed places. Successive layers of prestigious buildings have been built in the same area since the 1880s until today, compare for instance with Figure 3.3.7.

I have examined the Istira area and its architecture and I have shown that there was a decreasing use of iron when moving to the areas of warehouses and workshops. Salaminos Street, located between numbers **1** and **5** on Map 3.3.8, was the main road leading to the port and to the new Customs Building, the first concrete building in Thessaloniki, built in 1910 by the Jewish architecture Modiano. This street was a place of prestigious commercial buildings. From the image in Figure 3.3.8, it is evident that the building on the right bore full sets of ornamental and iron elements and the same is the case with the buildings of the left row, which can be seen on other images of that era. In a like manner to the Sirkeci Station and the reconstruction of its adjacent area, the Customs Building of Thessaloniki had caused a reconstruction of Salaminos Street and a major change of architectural styles.

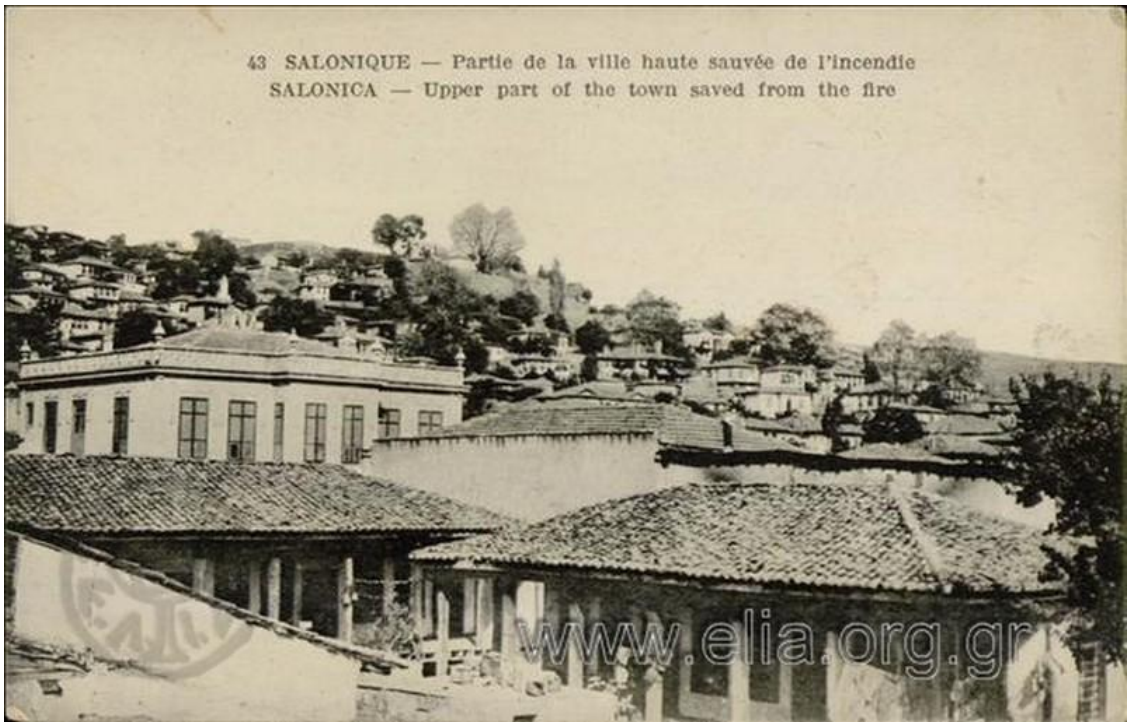
The central parts of the lower city were reconstructed, in mixed Europeanized and Orientalist styles, after fires and because of modernization. Evidence from certain central streets is abundant, whereas that from secondary and lateral streets is extremely scarce. St Sophia is one of the major religious buildings in Thessaloniki, initially built as a church it was converted to a mosque during the Ottoman era. Although the principal object of the image in Figure 3.3.9 is the church, the general arrangement of eight to ten houses can be seen. Out of these houses, only one or two are two – storey buildings, the rest seeming to be rather simple constructions, Figure. 3.3.9. The same place was later embellished, especially after the fire of 1890. Thorough observation of the picture, which unfortunately can be seen only on the original, shows that a floor was added on the building on the left and that a further two-storey building was built next to it. More photographs of the area, some 20 different images having been reprinted in a hundred different post card versions, show the increase of the buildings' heights, the penetrating western influence on the morphology and the augmentation of the use of iron elements. Unfortunately, only two or three of these elements can be identified in all the area around the church, these elements belonging to mainstream typologies also seen in Bitola.

Another much photographed monument of Thessaloniki is the Triumphal Arch of the Roman Emperor Galerius. As a result, there is abundant photographic evidence of its surroundings in successive periods of the later Ottoman era and its aftermath; see for instance Figures 3.3.11 and 3.3.12 and the changes of the built environment. Comparison of many similar photographs gives many interesting details of this specific area, it being one of the last areas to be demolished before the 1980s when a generalized plan for conservation and restoration was launched.

The street that passes from the Triumphal Arch is the Egnatia Street, the main road that divides the lower city into two parts. Architectural styles on Egnatia Street are mixed,

as in other areas of Thessaloniki, but buildings here are, generally, built to a lower budgets e.g. Figure. 3.3.15. The use of iron is moderate, being lower than in the littoral and higher than in the upper city, as I will demonstrate later in more detailed images. Limited space of the thesis does not permit a complete presentation of all the landmarks and of their surroundings. However, this does not really change the remarks as regards architecture, ornamentation and ironwork. As one moves to upper part of the lower city, which is on the lower part of the slopes, one realizes that architecture remained more influenced by the Oriental trends and continued to be so even in the 1920s, i.e. after the Ottoman era.

Figures 3.3.16 to 19 show the surroundings of Yilan Mermer, the Pillar of Snakes; a pillar of unknown origin or date of construction. Through these and other photographs, it can be seen that the tendency of building higher buildings in Western fashion, and with more ironwork elements, was the case in all this area also. In Figure 3.3.19 one can see the current form of the houses and the streets with no remnants from the past.



3.3.20 view of the upper city

In the upper city, Ottoman architectural trends remained dominant for longer. This persistence of Oriental architecture after the Ottoman era was caused less by the construction of new buildings in the Oriental fashion, than by the preservation of the old Ottoman buildings and the low rates of reconstruction and currently, most of the Ottoman buildings surviving are located in this area.

Some of these buildings do not have any brackets at all, as is the case of the house in Figure 3.3.20. This house is similar to certain buildings in Bitola and, to a lesser degree,

Istanbul. Other buildings have partial or full sets of iron elements as shown in the case of the building in Figure 3.3.21; the building having a set of brackets that belong to a mainstream category already discussed in Chapter 3.3.1. The window railings are a variation of a mainstream, which though, unknown in Bitola, is however, found in Istanbul. Consequently, on this building and on many more in the area, ornaments are 'combinations' of the elements seen in Bitola and Istanbul in different variations and concentrations. Such cases of intermediate combinations, which coincide with a geographical medium, enforce the idea of the *design continuum,* which I will discuss in detail in the fourth chapter.

Neighborhoods on the higher part of the upper city, Figure 3.3.22, and outside of its walls, Figure 3.3.23, were very low status, low budget buildings, which bore minimal ornamentation and, usually, no iron elements.

The last two districts to be considered are both outside the walls. The first of them, the Cayir district, was developed near the port and the railway station. Out of the hundreds of buildings in the Ottoman Cayir, only eight still survive and only one will be protected from demolition. Given that the area had both commercial and residential buildings and warehouses, facades vary. In the Cayir area, iron brackets were more scarce but railings quite frequent; a very dominant typology being a variation of the curved railings class. This typology is common in all the western part of the city up to the area of Istira and the port, though in the latter it is not predominant. This railing can be seen on the building in Figure 3.3.24 and it still survives on a low budget building, seen in Figure 3.3.25. Thus, in this area, ironwork is frequent, but not a predominant, ornament; see Map 3.3.9 for a distribution of the appearances of the items of this typology which can be definitely identified.

The other area outside the walls was the prestigious district of Hamidiye, an area which was area of high architectural excellence. People residing in the coastal part of Hamidiye were among the wealthiest of Thessaloniki and came from all its communities; Figures 3.3.26 – 29 show their various iron elements. As one leaves the coast, one gets to lower building budgets and to middle and middle–high social strata areas. Ironwork elements are abundant in both areas; the coastal area with unique forms and the other area with mainstream ones.

Ironwork areas; quality

Not surprisingly, the coastal part of Hamidiye is an area of high quality, unique elements, see for instance the railings of "Villa Bianca" on Figure 3.3.30 with their high

quality, and unique, for Thessaloniki, iron elements. They are among the extremely rare balcony railings that have an art-nouveau influence. Surprisingly though, there are many iron gates and fence railings which have the same influence; an indication that ornamental elements do not have the same origin, neither do they necessarily belong to the same architectural styles.

Another area of high quality elements was the littoral, though they were not present to the degree one could possibly expect given the high quality and high budgets of the buildings. See for instance the balcony on Figure 3.3.31, installed on one of the most prestigious buildings of the littoral, and built in the early 1900s. Following similar trends in other Balkan cities, iron elements on this building are replaced by alternative materials, in this case plasterwork.

However, in a similar manner to Bitola, though in contrast to Istanbul, mainstream typologies reach the deep core of the city; as seen in Figure 3.3.32. Similar picture, from all the parts of the lower city, show a dominance of mainstream typologies; the same typologies which are dominant in Bitola. In contrast to Bitola, mainstream medium quality typologies dominated in a quite broad area of Thessaloniki; not a strange fact given the difference of size between the two cities.

At this point, I would like to make a first remark about a distortion caused by the lack of evidence from Thessaloniki. In the whole area of the lower city, with the exception of Malta Ceddid and Istira, which are compact areas of old buildings, there are no more than five surviving private buildings from the Ottoman era. These buildings have common Ottoman typologies like the ones I have already discussed in Bitola and Istanbul and while these common typologies can be seen in Istira, which was an area of shops and warehouses, they are not seen in Malta Ceddid. A first conclusion which one could reach is that common typologies were limited in areas like Istira or on isolated buildings of the upper city, a conclusion reinforced given also that the higher budget buildings of Malta Ceddid do not have any of these elements. However, this conclusion would be wrong. Even through the poor photographic evidence, some thousands of photographs with only a 5% giving details for ornaments, one can see that common typologies were dominant in all the center of the lower city, reaching some high budget buildings of the upper City. Having recorded these typologies in Bitola and Istanbul, it is possible to determine, firstly that ironwork elements on the surviving buildings of the lower city are not at all rare and unique and secondly that some of the most frequent typologies used in the bigger part of Thessaloniki were mainstream Ottoman typologies.

Ironwork and forms

Balconies

There is a larger variety of balcony railings in Thessaloniki than in Bitola, but a lesser variety than in Istanbul. In this sense, the size of the city has an effect on the number of different typologies in the city.

Cast iron railings

In Istira, where many cast brackets can still be found, there is only one balcony with cast railings and this belongs to a mainstream typology already seen in Bitola and in the architectural analysis of Thessaloniki. Other, all mainstream, cast railings are used as window railings; a quite uncommon practice for Bitola and Istanbul, for example Figure 3.3.33. There are no cast railings on the surviving residences of Hamidiye nor on the commercial buildings of Malta Ceddid. Consequently, in the initial stage of this research, I was trying to find out why cast iron balcony railings were not used in Thessaloniki. Later, when I gathered the material from the archives, I realized that cast iron balcony railings *were* used in Thessaloniki and they were of the same types and possibly, equally as often used as in the other Ottoman cities. These particular elements are missing from all previous attempts to register the iron elements of the city.

Moreover, all these elements were in the archives and in the photographs and go to prove the architectural and ornamental kinship of Thessaloniki and the other cities. That is the case of the railing in Figure 3.3.35, which has a strong kinship, though it is not identical, with a railing of Bitola seen in Figure. 3.3.36. Similarly one can see on close observation, the railing of the first building on the left. It is akin to the railing shown in Figure 3.3.33 and to those of Figures 3.1.15 and 3.1.41 from Bitola; Figures 3.3.37 and 3.3.38.

In the 1950s and the 1960s, Varvoglis photographed many buildings in Thessaloniki. Unlike most photographers who were concentrated on 'important' and

'prestigious' buildings, Varvoglis[152], and a few others, photographed every aspect of the quotidian and the trivial. Consequently, he gives important information about various buildings in the city; see for instance, on Figure 3.3.40 and its resemblance with the railing on image 3.1.14. Unfortunately very few of the medium–low and low budget buildings he photographed still survive. Varvoglis's photographs show cast iron railings existing on a similar percentage of buildings as the analysis of old images and post cards.

Most cast railings belong to the typologies I have already found in the other cities. However, the commonest cast typology of both Bitola and Istanbul, the four - lobed typology, was only once detected in Thessaloniki; however, this does not convince me that they were not broadly used.

There are some cast iron typologies encountered in Thessaloniki but unrecorded in any other of the three cities. Lack of evidence does not permit to conclude about whether these elements, unique to Thessaloniki, were locally produced or imported. Close inspection of the original version of Figure 3.3.41 shows that this was a cast iron railing unseen elsewhere in Thessaloniki or in any of the other cities of this research and while some buildings in Thessaloniki had imported railings, it is unknown if that happened in this case. The building shown in this image is the Ottoman Bank as it was before 1903, when it was bombed and subsequently radically renovated in a very different form. The fence railings seem to be the same they were before the bombing, though in a new assembly, Figure 3.3.42. These railings were fabricated in three different phases and all three sets have brand marks; a very rare practice for ironwork. The first railings, Figure 3.3.43, were fabricated in Shropshire, England, in the place where the first iron bridge in the world was constructed. Later, at an unknown date, E. Fedi, a local Jewish company, copied the original balusters and a third copy and reconstruction was made even later by the workshops of Misailidis. On the evidence, this is an example of a cast railing, a fence railing in this case, that was surely imported and through these and other cases, we know that some imports existed. Consequently, cast railings that were unique in Thessaloniki, might therefore be local or imported, though lack of evidence does not permit them to be identified either way with certainty.

Another example of a unique element is shown in Figure 3.3.44. None can be sure about this element; there is scarce evidence for the building anyway.

At the end of Egnatia Street to the east, there where the Hamidiye Fountain was installed and the wide Hamidiye Avenue was opened at the point of the demolished walls, I have detected the only appearance in Thessaloniki of the, elsewhere, widespread four-lobe cast railings The buildings of this area were built on an innovative plan with a view to

152 **Βάρβογλης (1983)**

modernization. (While I am unaware whether or not more railings of this typology were installed in the maze of the streets of Thessaloniki, I was unable to locate any others, the possibility exists that enquiry of archives to which I had no access might reveal more. It is, anyway, a difficult task because photographers did not usually take photographs in the labyrinth of smaller streets.)

In the upper part of the lower city, cast iron elements are significantly scarcer. As already discussed, the upper areas of Thessaloniki preserved the Ottoman architectural styles for much longer, either in compact tissues or in islets. Seen through time, the area of 'western' and the 'modern' styles was constantly expanding from the central and lower parts of the city to the hills and to the edges. There is some evidence that there was a recirculation of Ottoman trends in the upper part of the lower city. In Figure 3.3.47 one can see a common street in the upper part of the lower city as photographed in 1916. As in all eras, the streets are a mixture of different periods' constructions. On the right hand side, buildings are built according the 'Macedonian' style with their low floor projections and the wooden rod brackets. The window seen on the same side seems to be a remnant of an older construction embedded in later ones, this ancient window still bearing the well known knotted window railing, which gradually vanished from constructions during the nineteenth century. On the left hand side, buildings are built in a later style, though again Ottoman. The oriels are higher and their floor plan is trapezoid; a very common practice during the late 1890s. On the top of the oriel there is a balcony which reminds one of buildings in Kadikoy-Istanbul. Surprisingly enough, the balusters of the balcony also resemble the '8' shaped railings seen in Kadiköy. This and other similar images, indicate that in a middle stage between 'pure' oriental styles and 'total' westernization, there have been various renegotiations of the Ottoman styles. Furthermore, in some of these buildings, late Ottoman iron elements found a relatively favorable field of proliferation.

However, this persistence of Ottoman architecture, either through the maintenance of the former or the latter styles, was much less favorable the

use of iron elements in the upper part of the lower city. The upper city was even more conservative and reconstruction came much later, the first stage after the 1924 and the exchange of populations with Turkey and the second stage in the early 1990s. As already mentioned, railings of any kind were very scarce in the upper city

No any cast iron balusters were located throughout the whole area; though some of them probably were installed, their percentage must have been very low and that might explain why there is no evidence nor remnants of them now.

In the Çayir area, the westernmost district out of the walls, cast iron railings must also have been very scarce; none being detected.

Cast iron balusters are very rare in Hamidiye also, but in this case, different typologies delimit the use of cast typologies and in the area of Hamidiye, and, as I will later show, what I have called 'French style' balusters were indisputably the mainstream. The few cast balusters found in Hamidiye were, as it usually occurs in this high class area, particularly in the parts close to the littoral, unique, high quality elements installed on prestigious buildings. That is the case of the "Melissa Orphanage", Figure. 3.3.49. It was built as a private residence of the Turkish merchant Osman Ali Bey in 1897 and the building's style is an eclectic mixture of neo-renaissance and neoclassic elements. Not only the ironwork, but also the plasterwork and the woodwork of the facades are of high quality. While some of the plasterwork elements belong to very common typologies, the brackets for instance, other elements, such as pilaster capitals on both sides of the balcony door, are original and unique, at least in the area. The balustrade consists of five orthogonal, vertically symmetrical cast iron pieces. Newel posts are quite common. The whole construction is completed by a fine wooden handrail. In contrast to the originality of the balcony baluster seen in Figure 3.3.50, the stairway balusters are rare copies of a mainstream concept of the 1880s and 1890s in Thessaloniki; see for instance on Figures 3.3.51 and 3.3.52, the first being a close up image of the stairway and the second a stairway in a Malta *han.* In both cases the concept consists in passing 'ring' parts to vertical bars which hold, without any intermediate element, a wooden handrail. These rings were mass produced and used either for fence or stairways balusters. The façade of the building is further evidence of mixture of tendencies, styles and ornament typologies.

Curved railings

In Thessaloniki, as in Bitola and Istanbul, the curved railings class was a wide one, though unlike in Bitola, and to a much lesser degree in Istanbul, curved balcony railings were concentrated, both relatively and in terms of total numbers, in certain zones.

The main concept of the west Thessaloniki railing consists in curved laminate bars with their endings bend in volutes to the outward; a typology which was widespread in the western part of Thessaloniki, both within and out of the walls, and was especially used in Çayir, though less often seen in Istira and the port, and in different variations, seen throughout all the lower city. It becomes scarce in the upper city, where anyway all iron baluster railings are scarce, and it is repeated occasionally in the less prestigious areas of Hamidiye. On Figure 3.3.53, the curved railings are used on a two storey commercial building of the port. In this typology, apart from the hand and the toe rail, the bars are held by horizontal laminate bars. Although there is no identical pattern for all these laminate – bar railings, they could be considered as a unique typology because many features are shared between railings of particular areas of Thessaloniki, while they are not shared with other curved elements of any other Balkan city of this research. The railing shown in Figure 3.3.54 is installed on a much lower budget construction of Çayir. The construction date is unknown; its general design concept is akin to the previous ones, however, there are slight differences. A similarity that seems to be shared especially among railings of the westernmost parts of the Ottoman Thessaloniki is the set of internal volutes and endings. For example in Figures 3.3.55 and 3.3.56, the balusters, similarly to those of 3.3.54, have intermediate endings and volutes on the middle or ¾ way up their height. The proliferation of this broad typology reached even middle-high budget buildings of the area in various forms; see for instance the building in Figure 3.3.57, a mixed commercial - residential construction built in a central European style that is reminiscent of similar buildings in Plovdiv. The railings follow the laminate-bars typology with medium height volutes, and in the case of this building, the balustrade has a circular form; a very common practice in Shirok Sokkak (Bitola) and in Plovdiv.

This type of baluster has not been detected in Malta Ceddid, an area which lacks many of the iron elements found elsewhere. In the both the lower and the upper part of the lower city, many curved bars railings can be detected through photographs e.g. the image in Figure 3.xxvii, though as one moves from the west to the east, laminate bars railings become scarcer. Important buildings, like the Old Post, had variants of laminate-bars curved railings, Figure. 3.3.58.

I have not detected any curved railings in the upper city either in archives, books or through my photography. In Hamidye curved railings become more frequent in the streets which away from the coast, where buildings' budgets are lower. Apart from being scarcer, curved railings in Hamidiye do not adhere to the laminate–bars typology and are quite different in design concept. They are more akin to railings of Pera and, to some

degree, to railings of Bitola; see for instance the railings in Figures 3.3.59 and 3.3.60, located on middle and middle to high budget buildings.

Wrought iron railings

Wrought iron balusters were the most widespread class of iron elements in Thessaloniki. They were used in all the districts of the city, even in these in which iron elements were minimally used such as in the upper city, and as in Bitola and Istanbul, they are the class with the largest variation of typologies.

In Malta Ceddid, a district which seems not to share very much with the other districts judging by cast iron and curved - bars railings, there are many cases of what I call French style. (In naming this design concept 'French Style' I do not intend to say that this style is produced only in France or that its presence in a place shows an explicit French influence. The reason which led me to coin this term is the relatively high frequency of this concept in France and especially in Paris.) Figures 3.3.61 and 62 illustrate one more example of this general style which comprises many typologies. They are balustrades with two axes of symmetry, horizontal and perpendicular, which consist of volute scrolls and floral parts. These scrolls are developed in all directions, covering the whole surface of the balustrade, or the balustrade unit. More variations of this style can be seen throughout all the Malta Ceddid area, see Figure 3.3.63, but they are rather scarce in the other parts of the districts within the walls. In Hamidiye, they become again a mainstream. This presence of the typology in higher budget areas, commercial as in Malta Ceddid and residential as in Hamidye, links the broad typology, the 'French Style' to higher prestige buildings.

The high versatility of the style, which is in fact a puzzle game of massively produced parts, creates very broad typologies of railings which are similar in concept but different in final form. On Edessis Street 5, just opposite to the building in Figure 3.3.63 an import from France with a brand name has been detected. On Kyrtsi Han, one of the two buildings with the same name in the Malta Ceddid area, window shutters were produced by the Jay & Jalliffier Company of Grenoble, Figure 3.3.64; a company which was producing iron parts and machinery since the 1880s, its products being installed in many French cities. The railings are unique in Thessaloniki, Figure 3.3.65. Although I cannot know whether the balcony railings were also imported from France, I could see a general kinship with certain Parisian railings, Figure. 3.3.66. (The relationship is quite vague; the main kinship is the free edge of the volutes in the forms of 'thorns' between the other parts. This kinship would not be very important if the form was very common among different styles

of railings. However, given the relatively low usage of this design detail, various railings bearing it can be considered related and I will call it 'Parisian' style in this research.)

In the area of Malta Ceddid and Istira, one more typology is repeated on various facades. Although the balustrades in question are not identical, it is quite obvious that there is a strong relation between them, all of them sharing some common characteristics. The railing in Figure 3.3.67 is installed on Emniyet Han, a commercial building built in 1896, possibly for a Muslim owner; I have discussed this building in the first part of this subchapter and it is shown in Figures 3.3.xxii and 3.3.xxiii. The prominent feature that gives a distinctive form to the object is the Π part, whose corners form semicircles. Three short bars come down from the hand rail; in the form of a 'fork' they intersect the Π part. The middle bar of the fork bears a decorative 'ring'. The two lower perpendicular bars of the railing sustain circular elements between them, at the center and the edges. Map 3.3.10 gives locations where railings of this typology can be confirmed.

Another railing of the same typology is installed on the building of the former Ottoman Customs House, Figure 3.3.68. Built in the late 1890s, the building has a kinship with Emniyet Han, being influenced by the neo-baroque style, particularly in its plasterwork. The balusters may seem similar at a first glance but there are differences both in proportions and in the finishing of certain parts.

Another baluster that deviates from the form of the two mentioned above but

Figure 3.3.71. Axiou and Averof Streets, Port Area

which preserves a strong design relationship with them is the one shown in Figure 3.3.69. However, the style of this building is slightly different from the two above. The decoration of the facades has a lower density and the plasterwork does not have the high plasticity that the other buildings of the same area have. The baluster in this case is significantly different in detail but retains the same main concept. This typology is repeated only in Malta Ceddid and Istira, i.e. in a very limited commercial area of the port. Though small in number of members, the port - straight bars typology is so prevalent in this area that it becomes easily noticeable and gets associated with it.

The railing above, in Figure 3.3.71, installed on a building of the 1920s, preserves some of the general characteristics of those mentioned immediately above, but in my opinion, it could not be considered as related, rather only as generally influenced.

Many buildings of the 1920s, which replaced older buildings destroyed by the fire of 1917, bear a broad typology of railings which is found in all the lower part of the lower city; Figure 3.3.72 is of such a building. The prominent form that characterizes this typology is its newel posts. Instead of massive cast iron bars, whose use was very common, these railings have an iron frame consisting in almost the same parts of the main balustrade and a projecting, usually circular, ear. Although this concept has not been detected in buildings of the Ottoman period in Malta Ceddid where it was very common on buildings of the 1920s and 1930s, it was definitely used in other areas of the city. In the eastern part of Hamidye, where the building concentration was less dense, a building, quite unusual for Thessaloniki, was erected. This building, Figure 3.3.73, reminds one of constructions of the central Balkans and of some early Greek railway stations, often built by foreign architects. The general concept of its railings is the same but the two railings, Figures 3.3.72 and 3.3.74, are very different in many other aspects. Accordingly, the two railings belong to a division that is wider than a typology and narrower than a class.

The French style dominates the coastal part of Hamidiye. The great variety of elements contained in this style cannot easily be classified. There are two reasons that produced such variety: firstly, the high versatility of the French style as already discussed, and secondly, the uniqueness of elements in high social class districts, a pattern which occurs in Bitola and particularly in Istanbul.

The introduction of European trends in the area and the influence, both in morphology and ornamentation, started to impact on the architecture of the city from the mid nineteenth century. The building in Figure 3.3.75 is the former Italian Consulate. Built in 1878 on the eastern coast of the city in the Hamidiye district as a residence for a Jewish merchant, the house was a neighbor to another Jewish and Greek residence: Communities in Hamidiye were absolutely mixed; the only qualification for settlement was economic

status. The consulate is an eclectic building with neoclassic and early baroque renegotiations e.g. the pediments and the pillars for the former, combined with the stairs and the marble balusters for the latter. The balcony railings of the first floor, Figure. 3.3.76, are a variation of a style widespread in all the coastal strip of Hamidiye. The railings are combined with marble brackets; the rare and highest quality rivals of cast iron brackets as we will later see again.

Brackets

The scarcity of evidence in Thessaloniki, which made so difficult the research of balcony railings, makes the gathering of data for the brackets particularly difficult. Beginning with the surviving buildings in districts within the walls, several areas can be examined with respect to balcony brackets. In Malta Ceddid, the most compact area of the lower city with surviving Ottoman architecture, there are almost no iron brackets. This lack of brackets in such a compact area of surviving buildings led me to my first impression that iron brackets were much less used in Thessaloniki than in other Balkan cities. One of the few exceptions in Malta Ceddid is the building in Figure 3.3.77, seen again in Figure 3.3.65. This building, constructed for commercial use at the beginning of the twentieth century, is one of the few in Thessaloniki to combine various neoclassic elements, mainly plaster ones, the window frames, colonettes and pediment. Further, the 'Parisian' balusters, described previously, are combined with the mainstream G-key brackets: in all, more evidence of the crossing of styles and the combination of typologies. Neoclassicism with its various elements was scarcely used in Thessaloniki. 'Parisian' and 'French' style railings were rarely used out of the heart of the city, whereas G-Key brackets were used in most types of building, in almost all the districts, and combined with most of the architectural styles.

The rest of the Malta Ceddid area has balconies with no brackets or, as in Figures 3.3.67 and 3.3.68, ones supported by plaster brackets. An example of lack of brackets is given on Figure 3.3.78. In this, the neo-baroque first floor is combined with the simplistic outline of the ground floor and the second floor, which has no ornamentation added. This is, thus, a case of a layered, floor by floor stratification of styles, combined with the, already mentioned, crossing of the typologies on the facades of the buildings. The proliferation of the use of concrete, which started in the port of Thessaloniki, along with the change of the trends towards simpler forms, reduced the numbers of the iron brackets in the twentieth century, particularly after the 1910s. On Figures 3.3.69 and 3.3.70, I have shown examples for balconies in Istira and Malta Ceddid, which are supported by plaster

brackets. These balconies are parts of the most prestigious buildings in these areas. A significant percentage of the lower budget buildings in Istira, though not in Malta Ceddid, contain brackets. This is not contrary to the observations I have made so far: Higher budget buildings, like higher budget areas, disfavor iron elements, preferring the use of their rivals.

The iron brackets used on the buildings of Istira belong to the most common typologies used in all the cities of Macedonia and Thrace; see for instance the brackets on Figures 3.3.79 and 3.3.80, already seen in many cases both in Istanbul and Bitola. The very low budget buildings coincide in one aspect with the very high budget ones: iron brackets become very scarce. The former seldom have iron brackets because this would raise the cost, the latter, because other materials and styles were considered more appropriate for them.

I have already pointed out the importance of the littoral avenue in the architectural character of the city. As one could expect from knowing the practices in Bitola and Istanbul, there is a decrease in the use of iron brackets in the littoral avenue and on Eleftherias Square. This lower use of iron elements does not result in the total lack of such elements, as in Istiklal, Istanbul, yet, it is of note and further reinforces the idea of the different 'value' of the architectural elements in the public urban space.

When iron brackets were used in the littoral area, they belonged to the common typologies; the ones already seen in Bitola and Istanbul. This was the case of the brackets on the balcony in Figure 3.3.32, which, as I have demonstrated for the railings of this building, belong to the common typology. In the case of plaster brackets, along with having no brackets at all one the main alternatives to cast iron brackets, there was higher versatility of style even though plaster elements were also produced by moulds. See for instance Figure 3.3.81, showing a quite prestigious building of one of the main commercial streets. There are no iron parts of any kind on its façade, plaster elements have prevailed even where usually iron elements were used e.g. the balcony balusters. (Although not part of this research, I should point out that the plaster elements of this façade, especially the brackets, were rare in Thessaloniki.) The crossing of the categories on this façade is made on various levels: categories, classes and typologies.

In the rest areas of the lower city, there are less than ten surviving private buildings of the late Ottoman era, and a few more public. The cast iron elements used on them also belong to the commonest styles, especially those seen in Bitola. On two cases from surviving buildings of the center of the lower city, on Figures 3.3.82 and 3.3.83, one can see the same typology of brackets used in Bitola, Figures 3.1.34 and 3.1.35, and, more rarely, in Istanbul.

The use of the areas in the center influences the use of the typologies and the tendencies of elements chosen. Figure 3.3.84 is a case of a photograph that gives incidental information about elements. On the bottom right corner, one can see the 'rose-bud' typology bracket, supporting a balcony with straight bars, and probably horse-shoe scrolls, balusters. Unfortunately, no other details about

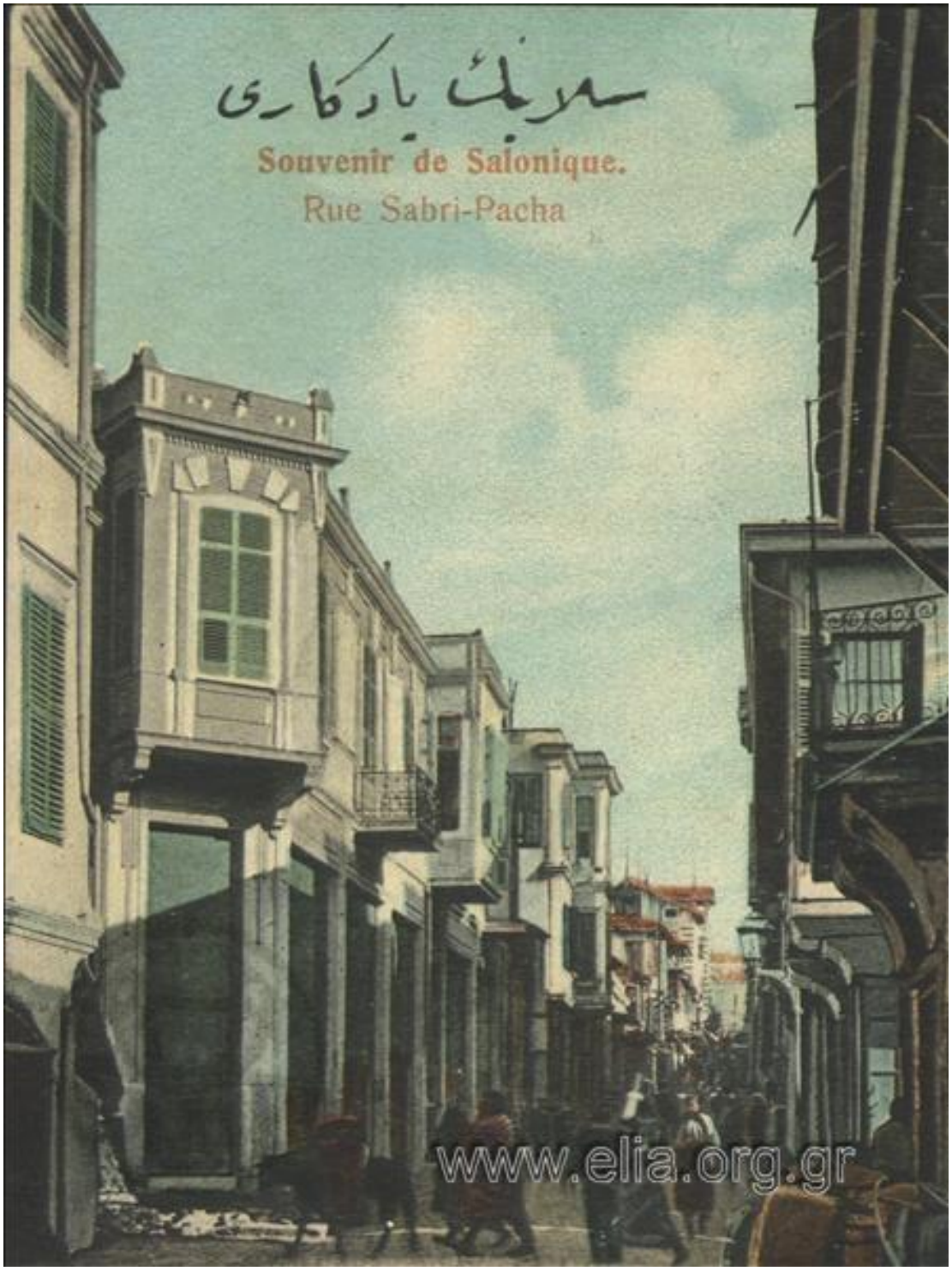


Figure. 3.3.85 Venizelou Street (ex Sabri Pasha)

this building can be retrieved because of the angle and the lighting of the image. In such market areas, the commonest typologies proliferate.

At this point, I think it is important to point out an interesting thing: Whereas 'European style' plaster brackets were used, there were also significant numbers of local plaster typologies that had a certain kinship to more Ottoman typologies, the latter typologies becoming more frequent on moving towards the upper parts of the city. The first building on the left in Figure 3.3.85 is a case of a European style plaster bracket. The buildings on the right have local renegotiations, that is, brackets with more triangular forms and with the longer side of the triangle touching the wall. The more original Ottoman form of the typologies can be seen on Figure 3.3.86, In this case, the wavy curves are indicative of one main characteristic of these typologies. European and the Ottoman plaster brackets have some slight manufacturing differences, but this is beyond the limits of this research.

There is therefore a coincidence between high prestige and 'traditional' Ottoman areas: they both favor a greater use of plaster brackets, however, in a quite different way and through different typologies.

The further one went up the hill of the upper city, the scarcer iron brackets became. Although some were used in the most prestigious buildings of the area, as in Figure 3.3.21, and used especially to support oriels, most of the buildings no brackets at all. Cases of unique brackets, either iron or plaster are extremely rare. Such a rare case is that of Figure 3.3.87 and 3.3.88, a prestigious building on the verge between the lower and the upper city. It has, exceptionally for this area, but not for the whole of the city, a neoclassic influence. This is manifested by the colonettes and the Corinthian pillars; such Corinthian pillars being very common in Bitola but much less so in Istanbul.

Exceptional and unique forms were quite uncommon in middle and low budgets buildings; lower budget buildings having quite limited ornaments anyway. In the littoral area, exceptional and unique forms they were far more common, particularly on the most prestigious buildings. For example, on the buildings in Figure 3.3.89, the first on the row, the Splendid Hotel, has a quite big balcony; large for the standards of the era and the city. It is supported by two 'Atlases' at both part of the big shop window. Though often found in Western Europe, but always a minority as a bracket typology, these kinds of elements were extremely scarce in Thessaloniki and found only in the most prestigious areas on buildings of high budget.

I have already discussed the prevalence of plaster, and sometimes marble, brackets in the district of Hamidye. This can be seen on Figures 3.3.i, 3.3.vii, 3.3.26-30, 3.3.49 and 3.3.60 compared to 3.3.v. This area is one more good example of the decrease

of these architectural elements when budget raise and when the area in question is more prestigious. In the same area, other iron elements, such as roof ornaments, are used, though rare and found almost exclusively on the most prestigious buildings, Figure 3.3.90.

On page 200, I have discussed the case of the local, curved-laminate balusters typology. This typology was almost always used without brackets. One of the few cases with brackets is that in Figure 3.3.xvi, which contrasts with the cases seen in Figures 3.3.24, 3.3.54-56 and 3.3.xli and in many others, where no brackets are used. Although is not easy to investigate whether this combination was due to the decrease of iron artifacts in these areas, or to a local preference, it is evident that the curved laminate-bars typology was, in general, a typology excluding brackets. Given that it dominated great parts of the Cayir area, and particularly the medium and the lower budget districts, it resulted iron brackets being quite rare both in the easternmost area within the walls, and in most of the western areas outside the walls.

Case studies

Case 1 - The Common

I have chosen as an example of a 'common, building of Thessaloniki, a 'typical' residence of the lower city or of Hamidye, that is, of one of the areas of the later Ottoman era's massive, western inspired, renovation.

Figure 3.3.a. The ex Greek Consulate

Such a case is the building of the ex Greek consulate, built in the late 1890s in the yard of the Greek Orthodox Cathedral as a subsidiary space for the functions of the episcopate. It was later converted to a consulate and, after the annexation of Thessaloniki to Greece, to a museum of the struggle for Macedonia. The building has many mainstream elements, with an extra neoclassic touch, a rare thing for Thessaloniki, which could be related to its Greek ownership, a relationship already discussed. Ornamentation is quite 'discrete', though the building does not lack ornaments. Simple plaster moldings frame the windows, symmetrically installed pilaster strips define its openings, and Ionian capitals give the most prominent neoclassic touch. The terrace bears the well known ceramic balusters, a convenient and easy solution for all styles of buildings in Thessaloniki too. The ironwork

elements are mainstream ones, a point that would have been unobservable had the research been confined to Thessaloniki since

Figure 3.3.b. Detail of the ex Greek Consulate

both the balusters and the brackets were recorded in Bitola and then in Istanbul. In this case ironwork typologies, which are shared between these three cities, are combined with plasterwork elements which are uncommon in the two other. These plaster elements, occasionally met in Thessaloniki, become more frequent as one moves to the southern parts of the Balkan Peninsula and into the Hellenic area. From this perspective, there is an overlap of two different design areas, that of plasterwork and that of ironwork, which coincides in several buildings in Thessaloniki.

Some residences on the limits of the upper and the lower city had a strong western influence, yet, there persisted certain oriental ornamental and morphological elements. Such a case is the house on Olymbiados Street, figure below, at the corner with Filimonos Dragoumi Street. It was built by an unknown architect, probably in the 1890s, at a prominent point of the street which divides the upper and the lower City. It is a high, four storey construction with a prominent oriel and dormer windows, the plaster pilaster strips dividing the surface to accommodate the openings, windows and doors, as in the case of the ex – consulate. These pilaster strips are very akin to those of Bitola, but whereas in Bitola appear in most areas and on a variety of buildings, in Thessaloniki they seem to be limited to certain areas and buildings; they do not appear in Istira, Cayir or

Hamidiye but they can be seen in photographs of parts of the destroyed Lower City. A circular ceramic part is repeated in each frame under the windows; a mass produced piece, which, seen only rarely in Thessaloniki, is unseen in the other cities.

The morphology and the ornamentation of this building classify it as belonging to the broader, Macedonian - late Ottoman trend, with many touches from the West. It is a quite mainstream case in Thessaloniki as it would be the same for most Macedonian towns and for Bitola though it would be in a minority in Istanbul and a rare exception in Plovdiv.

There are not many ironwork elements on the building, the only ones being the oriel's brackets and some small parts of the door.

Figure 3.3.d. Detail of the building in Figure 3.3.c.

In the case of this building, the oriel is a slight projection of the first floor. The type of the construction shows that, unlike earlier, the brackets did not support the main part of the oriel's weight. This is, along with many others, an interesting example of an 'architectural inertia', that is, of a persistence of elements whose importance was gradually fading out.

The balusters belong to a quite rare typology: they have been seen in Bitola and in Pera – Istanbul but in very special cases.

Case 2 - The Poor

Figure 3.3.e. Building on Santarosa Street

In Çayir, apart from certain streets with medium size budget buildings, most areas were built with low budget residences and shops and inhabited by a mixed population. Unfortunately, the archives for this area are very poor and shed light on the architecture. The house on the left was built, probably, in the 1900s, the architect is unknown. There were not registries for this kind of building though they appeared occasionally

on various lists such as the tax revenue catalogues. It is a simple two storey construction with minimal decoration. There is only one plaster strip under the roof, imitating a series of dentils. The first floor has a projected part which is not supported by any external element, the two symmetrical balconies being also unsupported by any bracket or other element.

Figure 3.3.f. Detail of the same building

The balusters of the balconies belong to the already mentioned typology of west Thessaloniki with one of its many versions of curved laminated bars. The residence lacks any other common element of ornamentation on its main façade. Simple railings on the gate door and the door, most probably added later, complete the ornamentation on all its external surfaces.

One can see once more in this case, that low budgets limit choices to the most essential, though while some elements such as the railings resist more this 'diminution to the minimum' more, others, such as the plasterwork, resist less. The 'resistance' of the classes and the typologies is not constant but varies according to local traditions and personal choices.

Case 3 - The Luxurious

Figure 3.3.f The old Italian Consulate

In Vassilissis Olgas 20, i.e. on the main street of the prestigious Hamidiye area, a luxurious residence was built in 1878 by an unknown architect , for the Jewish merchant Jemborga.

The residence is a brilliant exposition of unique elements. Its main stairway, with the original marble balusters, the balusters of the first floor, the marble pillars and the window pediments are unique pieces in Thessaloniki, and are combined in an eclectic manner which brings together neoclassicism and late neo – renaissance. The railings of the balconies belong to what I have called 'French Style', a style which was far more frequent in the coastal part of Hamidiye and on some high budget construction of the commercial zone of Malta – Ceddid. The balcony is supported by marble brackets; one more indication of a common substitution in the more prestigious districts. The floors are defined at all their levels by high quality plaster strips. Although none of the elements of the main building is repeated in any other of the buildings in Hamidye or in Thessaloniki, there are elements on other constructions that have a conceptual kinship. Such is the case of Figure 3.3.i which illustrates the residence of Seyfullah Paşa. The pillars of both this building, which is known as the Italian Consulate after its later function, and those of the Jemborga residence, although not identical,l follow a related general idea. Accordingly, if one could broaden the typology of the pillars, and comprise the common features, rectangular shape, intermediate floral strip etc., one could

Figure 3.3.g. The windows of the Consulate

Figure 3.3.h. The fence of the Consulate

have a looser group objects shared on many buildings. This example, along with many others, shows the subjective limits of the definitions of typologies and genres in architecture and its ornaments.

Although the fence of the Consulate is also unique, it constitutes a different case. This happens because, in contrast to the main building ornaments which are unique elements consisting in original details, the fence is a unique object consisting of common elements; though elements which are common in Hamidiye only. So, whereas in the case of the pillars one could recognize a general kinship with other similar pillars, in the case of the fence one can recognize mass produced parts assembled in a unique way, a case of having two different ways of achieving uniqueness: Compare similar parts in Figure 3.3.29.

Case 4 -The Innovative

The new, at that time, Thessaloniki Customs Building was built in 1910

Figure 3.3.i. Thessaloniki Customs House

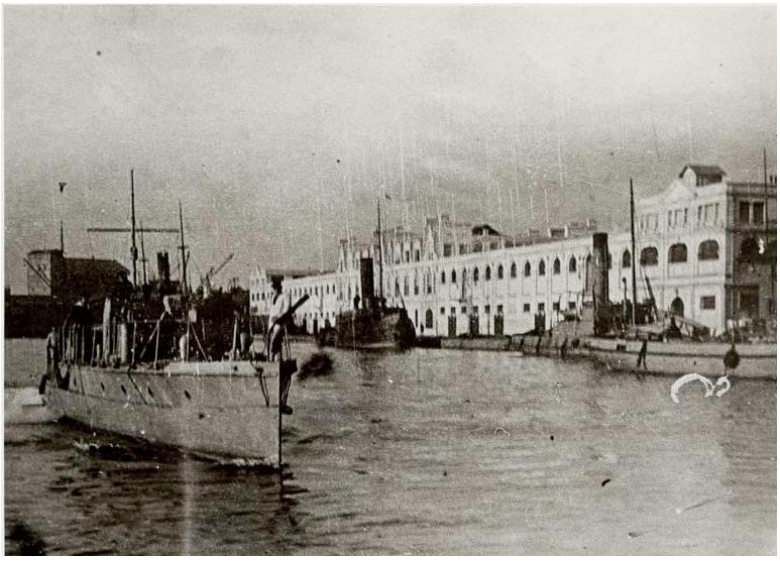


Figure 3.3.j.

by the Jewish – Italian architect Eli Modiano. The building was erected on terrain reclaimed from the sea; a very difficult task at the time for buildings of this size built 'on the sea'. Modiano, who studied in Paris, opted for French characteristics both in morphology and ornamentation. The roofs are excellent examples of what a 'French roof' is while the plaster strips all over the façade of the ground floor and the moldings of the dormer windows complete this 'French' style. In terms of ironwork,

the choice was very simplistic. Only the windows of the ground floor have simple bar railings; the least that could be installed to prevent access. This building was innovative for Thessaloniki for a more important reason than its style: it was the first building constructed of concrete and steel. (According to urban legend, the technology of that time required that egg yolks should be added in the concrete mix. As a result, thousands of eggs were bought from all over Macedonia triggering the curiosity of the city's population.)

Case 5 - The Commercial

Figure 3.3.k. The Saoul Arcade; the façade on Vassileos Irakleiou Street

On Fragkon Street at the point it meets the Venizelou Street, formerly Sabri Pasha Street, one of the first to be opened after the first wave of modernization in 1867, stands the Saoul Arcade. It was built in 1867 by Carolo Modiano, possibly with the collaboration of the famous Vitaliano Poselli. Two major restorations were carried out in 1881 and in 1929, and led to the change of the building's morphology. The façade on the figure above is the one which retains all the original elements and features. As in the case of Istanbul and to a much lesser degree of Bitola, the ironwork elements are generally replaced by their alternatives; plasterwork elements in this case. The balconies have a dense balustrade consisting of the typology of balusters which can be sporadically seen in some of the older

buildings of Hamidiye; balusters that are, simultaneously, common for their era, common for high prestigious buildings, rare for commercial buildings, most constructions in Hamidiye were residences, and extremely rare for Thessaloniki overall. This building is, therefore, an example of the multiple roles and implications a typology can have in the city.

Figure 3.3.l.

Just as in other cities of the Balkans, massive iron doors were used in commercial buildings. In the case of the Saoul Arcade, the gates enclose a cross shaped internal area of corridors. A lot of iron is used, the parts are quite trivial, c-scrolls and simple volutes, and the final result is a mainstream assembly.

At this point I should remark on a matter that has to do with the chronological layers of the city, the urban fragmentation and the function of the typologies. Sometimes, buildings like the Saoul Arcade were built as high class constructions outside of mainstream prestigious elements of an era. Later, as time passed, the typologies become extinct and many of the buildings were demolished. Consequently, the resulting fragmentation of these aspects of the city means there is,at a given moment, a scarcity of certain typologies that formerly were widespread and common.

Case 6 - The public

The building of the Ministry of Macedonia, formerly the Supreme Administration

Figure 3.3.m. The Ministry of Macedonia

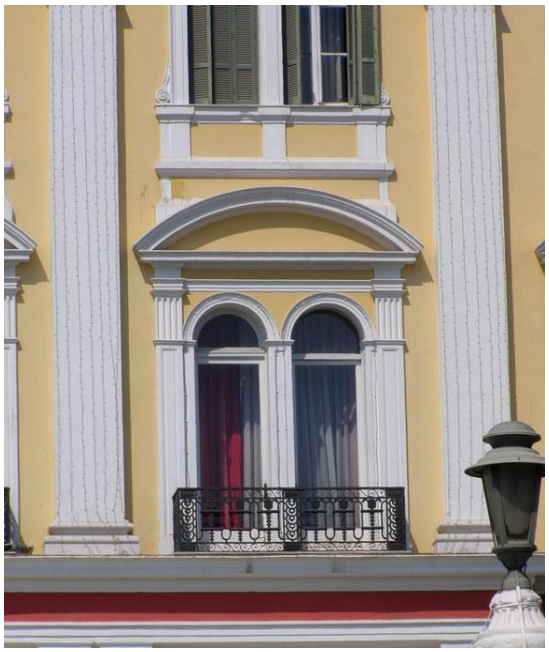


Figure 3.3.n

of Macedonia, designed by the famous Italian architect Vitaliano Poselli, was built in 1891 close to the location of the old building of the administration (*konak*) demolished in the same year. It has been since then, other than for a few, exceptional, years, an administrative center; initially of the Ottoman Empire and later of the northern part of the Greek State.

The building is located in a prominent location in the middle of the lower City on Aghiou Dimitriou Street, one of the major avenues of Thessaloniki. On Figures 3.3.xxxiii and 3.3.xxxiv I have given an aspect the old konak and the first form of the

building, before the last floor was annexed. The façade has a vague neoclassic influence, the central pediments, the pilaster strips etc., along with Byzantine–Ottoman influenced details, doors and moldings of the ground floor etc.; see on the image below. The balcony railings' broad typology are a very interesting case: although rare in the era the building was erected and for almost two more decades, they became more popular in the 1920s but never reached the levels of a major trend. In this sense these railings were precursors of a trend that survived for a long time, though remaining always a minority fashion used on

Figure 3.3.o. The gate

few of buildings of the heart of the city.

Chapter four: Ironwork and architectural elements in the social sphere

In this chapter, I theorize on ironwork, the architectural elements and the objects. In chapter one I did not limit my research to the registration of the Balkan ironwork but analysed its use and its possible social implications. Therefore, here I will explore the implications of ironwork in the social sphere and investigate the limits and the catalysts, both material and immaterial, that may influence ironwork's use.

4.1 Properties of the architectural elements

The general view of the cities' streets might not reveal the complexity nor the kinships and the contrasts of the facades' architectural elements. This was also my first impression from the field; although I could recognize the relevance of the architectural elements to certain tendencies and trends, although I was unsure about their spatial and chronological distribution or about their classes and resemblances. Since the first close inspection I found some clues, which indicated that foreign and local influence, distribution of the elements in the city and the links between the architectural elements and the spatiotemporal coordinates are neither totally arbitrary nor random.

Architectural elements of the late Ottoman era - just as objects or other uses, eras and places - are products of their time[153]; they reflect the social, economic, technological and political circumstances of their present, past and future[154]. This is not a vague philosophical declaration. Certain influences, such as the technological ones, can be easier

153 A big discussion exists concerning the relation of the artefacts and the urban space with the forces which produce them. From Marx and his *Überbau* to Luckacs and Lefebvre, theorists of space and the city are trying to investigate the causes of the creation of the urban environment. Similarly, in the design discipline, the object (which is a consistent part of the city) is created within a context and therefore is defined by it - see for instance: **(Attfield, 2005).** However, both in the case of the space and the objects, there is always a problem of *infinitesimal analysis.* As I have already discussed in the second chapter of this thesis, there can never be an absolute criterion of the forces which impact on the objects or on the creation of space. Since processes of production are connected in a network of mutual reactions one could go infinitely far in order to find the entire set of factors that impact on a certain thing or phenomenon. **Lefebvre (1974),** in his very important book about the urban space and the city, gives a thorough analysis based on Marxist fundaments. One of the main concepts is that the means of production significantly impact on the image of the city. Although in many cases I accept this perspective, I have certain objections in that I think that conceptual factors (future plans, social status, utopias, etc) influence the creation of the city and also, the means of productions.

154 This archeology of the "recent past", the enquiry of the social practices through the examination and the analysis of the material entities is central in the material culture studies. A very strong framework of the enquiry of the circumstances which lead to the creation of objects and material entities is given by **Buchli (2001).** Buchli emphasizes on the conditions which lead to the creation of materiality, which if read later in the opposite direction give clues about the missing parts of the past **pp: 14 - 16.**

seen on the objects; former technologies were, most often, less sophisticated than the latter ones, which were usually more advanced.

Furthermore, technological circumstances (in relation to economic ones but to a lesser degree), have measurable results. A railing or a door can be more efficient than other railings and doors. They can also be more expensive or cheaper. So, in a quantitative perspective they can be judged and compared[155]. Nevertheless, when one comes to the social and the political circumstances the features of the objects are rarely measurable, so every judgment becomes relative and subjective. The architectural elements are used in the public sphere and appreciated without any universal and constant standard[156]. A door may be more efficient in isolating the interior from the sound and the dust of the street than another door in absolute measurable terms. It cannot, though, be more beautiful or more luxurious than another in absolute and measurable terms but only according to subjective judgments, always associated to their broader context.

Apart from the economic and the technological contexts, which impose measurable features and limits on the object, function also delimits the objects and constitutes a relatively objective parameter of judging them[157]. The architectural ornamental elements can be classified by two main categories as regards their functionality: the first comprises objects that play a functional role and also have ornamental qualities and the second comprises mainly as ornamental. In the first category for instance, the balcony railings that have an obvious functional role are included and in the second one, various elements such as the plaster strips on the external walls, which do

155 Intentionality as a major factor on critique and judgment was highly elaborated by **Husserl** (see the comprehensive collection Husserliana, especially in the XL volume [2009]). Husserl starts on a mathematical basis and proceeds to the implication of intentionality in all aspects of human activity. In this thesis I will not adopt more than this basic position, that is, of the important role of intentionality in the comprehension and the judgment of the material world.

156 Although quite trivial, a reference to **Kant** is necessary at this point. Kant is considered the culmination of the subjectivity of aesthetics in the new era. Although he advocates, in the **Kritik der Urteilskraft**, a sublime sphere of high beauty, he also opens the field for the personal judgment. In this sense, Kant echoes a very old debate in the philosophy of the aesthetics which dates back in the classic times. **Plato,** in his famous example with the bed and the carpenter **(Republic, 597a)** scrutinizes the essence of the beauty of the objects. A permanent believer of the supremacy of the "idea" (ιδέα), Plato often argues that the object is a copy of the copy of an immaterial supreme entity which represents the absolute 'truth' of the object. This idea haunts the western philosophy until now, in several approaches which try to find the proportion (often using psychology or mathematics) of the beautiful. **Aristotle** slightly loosening this general idea, he introduced the famous concept of "mimesis" which by its own word root advocates an idea of imitation.

157 The classification problem in architecture is an old one when forms, functions or other features must be quantized. **James & Li (1996)** in their attempt to create taxonomies of masted structures, think a whole range of morphological and functional parameters. In their attempt they make a comprehensive retrospection of the problem of classification in architecture. James & Li are facing the same problem I do: they hesitate to draw a line between groups of elements and they do so after creating intentional priorities of both morphological and functional features. They do also refer to a "generative grammar" of the masted constructions, an often used metaphor. **Rossi, Ghirardo & Eisenman (1984)** keep a distance from pure material readings of the built objects and their elements. Criticizing more than half a century of high functionalism, the three architects emphasize the social role on the reading of the object (**pp: 48 – 50).**

not have any practical function at all. The functional demands impose certain material limits that should be respected for an object to fulfill its purposes. Although exceptions always exist, they are rather limited and these 'extremes' do not usually survive for very long[158].

I come back to the example of the balcony railings; their main purpose is to prevent falling and to create the sense of security. If railings were lower than 70 – 75 cm most people would feel rather unsafe. In cases where they were higher than 90 – 95 cm, most people would feel imprisoned behind bars. The extreme majority of balcony railings in the four Balkan cities of this research and in most parts of the world follow this functional demand. Their heights are almost always between 75 and 90 cm.

In other cases functions are combined or ranked. The windows, for instance, are the entrances for light and air, so they should be as open as possible. When safety issues arise, the installation of window railings occurs, which although delimits the openness demand, it combines the safety demand. [See examples for functionality and other relevant cases in pp. 95, 106, 110, 139 142 and more]

It could be argued that the demands for a function or the creation of the economic environment are based on the fluid and obscure domains of the human social life, its networks and constitutions. This is a strong argument in my opinion. Yet, once formed, demands create precise boundaries of materiality within which, the properties of the object should be restricted. The demand for safety is, thus, a social construction. Once created, the object should follow this demand within a delimited range of material properties; the window should permit no access so its design should fulfill certain standards[159].

When one enters into the examination of the political context, things become far fuzzier. Some political decisions and choices have a direct impact on the objects whereas others may only indirectly influence them. Quite often laws impose the limits for the objects; buildings should not exceed certain sizes, streets should have precise widths, fence construction is controlled by stricter or more flexible regulations. These are political parameters directly influencing the architectural elements and there are similar

158 **Skibo&Schiffer (2008),** in a behavioral approach of design and objects, scrutinize the material limitations imposed by functionality on the design activity. Their approach is a critique to other analyses based on pure aesthetic criteria (some of them are comprised in this research) which neglect or underestimate the importance of materiality.

159 **Leach**, echoing **Eco**, considers that two function levels should be distinguished for architecture: the primary, which involves the architectural objects as function and the secondary which involves it as symbol **(p. 173)**. He offers many examples for the secondary level mostly to reverse writings which saw minimal or no symbolic function of the architectural object. At this point and further on in this chapter I will accept the basic frame of this twofold function which I will further discuss.

regulations for a great variety of objects. [See page 48] See on figure 4.1 an indicative plan of the limits on forms.

Apart from these direct political interventions on the object, there are also other, more general interventions, which affect them through a chain of actions and reactions. A new tax on iron would, almost certainly, influence its price and possibly reduce its demand and therefore the number of iron architectural elements. The political context can be broader. The change of the foreign policy towards a country, as for example the Ottoman foreign policy for France, influences their mutual commodities' exchanges and leads to consequent changes in the availability of certain materials[160]. I will use an example from the iron industry; the great opening to the West, after the tanzimat reforms, permitted greater imports of Western goods to the Ottoman Empire, especially from France and Austria – Hungary. Iron, a vanguard construction material for most of the Western countries at that time, was produced in great quantities with new techniques and in incomparably lower prices compared to the early 19th century. A new, relatively cheap construction material was abundantly available in the Ottoman Empire. It is not, therefore, strange that iron elements proliferated all over the Balkans and the Middle East during that period. This is an example of how general political decisions may affect objects on a minor scale, even not directly targeting them[161].

Political contexts are less clear than economic or technological ones. In the economic domain, the measurable and tangible judgments about the objects and the context are mutually justified. So, the demand for safety leads to certain railings heights. Contrary seen, certain railing heights offer better safety, had that safety been intentional or not. Thus, these two entities, safety and windows' form have direct relationships, which links them in both directions. In the political domain, the opening to the West was the main concept that led to a chain of reactions resulting in the proliferation of the iron elements. The contrary cannot be proven or even seen through the element. One may go as far as to see an augmentation of iron imports but not the opening to the West, merely through the ironwork, unless other sources and data are combined.

These relations are also extremely unclear in the social sphere. In contrast to laws and regulations that are explicitly recorded, social laws, networks and relations do not constitute such stable and well defined propositions[162]. The social implications of the

160 Detailed tables of imports and exports can be found in the **Bulletin Mensuel de la Chambre de Commerce Francaise de Constantinople**, the most famous financial journal of the era.

161 The comprehensive book of edited by **Inalcik** and **Quatert** thoroughly describes this chain of actions and reactions in the Ottoman economy **(1994)**.

162 At this stage I risk this allegation. Although in the analysis of the architectural elements, I adopt some general terms and methods of a slightly structural analysis I do not do the same for the sociological part of it. In the social

object reside in the fluid subjectivity of the constantly changing and implicit social contexts. We know from our experience that, depending on the circumstances, certain objects bear aesthetic and social evaluations, being characterized, for example, as luxury, trendy or passé objects. These values were never agreed or precisely defined. They have been attached to the objects or to the categories of objects through their use and their involvement for certain purposes, in certain areas, by certain people and due to many reasons and causes[163].

Being fuzzy, the social values and features of the objects do not indicate clearly or do not indicate at all the generative causes which led to their formation. So, an object by itself does indicate parameters of its technological and economical contexts but it does not reveal much about its social context. The way to explore the social implications of the object is to understand the social environment and then to investigate many objects of a kind (e.g. doors or railings) and their appearances and uses in the city and how these categories of objects interact with the social environment, other objects or uses of areas[164].

4.1.1 Architectural ornaments

part of the architectural phenomenon I consider very useful the theoretical framework of Foucault and his *infinitesimal mechanisms* **(Foucault, 1966).** What I think is a crucial point that differentiates the mechanisms of architectural from the social phenomena is that the former are born from the latter. In the systems of architectures, the elements of the sets (houses, architectural elements, etc) once created retain their relations however the social context, which interprets them, might change. Contrary, the sets which mainly form social sets-groups consist of *acting agents* who constantly destabilize the stochastic system which comprises them.

163 From **Karl Marx** and **The Capital** to the **Parallax View** of **Slavoj Zizek (2006)** and the **Theory of value** by **David Grebber,** there is a strong consideration of the attribution of value to the inanimate entities and the reflection of the human aspirations on them. The "fetishism of the commodity", the famous term used in the first part of Marx's capital recognizes a quite metaphysical quality on the commodity and the object. Marx, who would not most probably, adopt a metaphysical explanation, does not go deep to the analysis of this term. However, this concept triggered a very long discussion that is still very vivid. Slavoj Zizek considers the objects as reflectors of the human actions. Every artificial object made intentionally bears the qualities and the aspirations of the agents and the circumstances which made it. Therefore, even under distortion it 'reflects' human actions and aspirations to other humans. Grebber puts the objects on the fluid social network and shows the vanity of searching for stable values. Values are 'agreed' in the social sphere, in the human networks.

164 An inspired analysis of an archaeology of the recent past is given by **Buchli (1999).** Buchli focuses his introductory analysis on the ongoing debates on the independence of the agent and the fuzziness of meaning. The first debate, which is very important for this archaeological research, has to do with the level of contribution each individual has in the creation of the material status of a circumstance. Between strict structuralism and relativistic postmodernism, opinions of different perspectives, he attempts to give explanations for the dynamic characteristics of materiality such as trend and transition. The second debate, about meaning, is also fervent and concerns the possible meanings objects may bear or not. In this thesis, I have already argued and I will persist on the argument, that objects bear meaning. Differently to highly meaningful objects, (signs, uniforms etc), architectural ornaments bear 'low loads' of fuzzy meanings. So, concentrations and aggregations of objects add their fuzzy meanings giving a more 'stable' and clearer general meaning.

As already discussed in the introduction, architectural elements of the façade and ornaments are a very interesting category of objects. It has been seen in many cases in this research that ornaments and façade elements depended significantly on the area in which the buildings were built, their use and their date of construction[165]. Although that is the case with all kind of architectural elements, a special emphasis was always attributed to the façade elements mainly because they are visible. Other elements of the building fulfill more functional than ornamental needs. Quite often, there is a difference between the main façade - which is mainly seen - and the lateral ones. Back sides of the buildings are very often neglected and that did not happen only during the later Ottoman era neither was the case only in the Balkans. The importance of the ornaments as visible elements and as parts of a 'social scenic' becomes evident when focusing on medium budget buildings and middle class areas[166]. Limited budgets do not permit a balanced ornamentation of the whole building and therefore, there is a higher intensity of ornamental elements on the main façades both in quantity and quality. Façades visible from main or busier streets, in these categories of buildings, are usually more impressive and almost theatrical whereas other façades, especially those towards 'blind' areas or narrower streets just complete with certain dignity the aesthetic proposition of the main façade.

High budget buildings do not ordinarily follow the same rule. Because of the high financial sources available, top end buildings are built on a higher or a perfect ornamental balance. The architect can complete the scenic on every façade of the building. Very often these high end buildings are built on more spacious terrains and this means that façades and their ornaments are easier visible from various sides and angles. At the other end of the financial spectrum, low budget houses do somehow follow an unbalanced style that favours the main facade. However, very often low budget means low range of choices and in that case, ornamentation is very scarce on all façades the main one included. Even in these cases though, the main façade has more functional elements (for instance, the main entrance, the only balcony of the house), which make it de facto more ornamented. [See the cases of Istiklal and Vassilissis Sofias compared to Ayvansaray and Cayir]

165 The 'syntactic' relationships of the ornaments led many architects and others to consider a 'grammar'. Already since the late 19th and early 20th century, the relations on the façade's ornaments were the object of various treatises in an attempt to find rules and possible 'universals' that could shed light to the 'architectural scenic'. **Jones Owen** with his **Grammar of Ornament (1910)** tries to find sets of rules which explain the facades' phenomenon. Later on, under the strong influence of structuralism that also involved forms and designs (see **Levi Strauss (1976)**) these efforts were enforced.

166 One of the often quoted books, among many others, which see the city as a scenic is **Raban's Soft city (1974). Harvey (1990)** considers this work as one of the essentials describing the postmodern perception of the urban space. The city as a compound of "*signals, styles, systems of highly conventionalized communication*", **(p. 6)** resembles the idea of flows of subsystems which has been and will be further analyzed in this research.

Even though one may usually perceive as ornamentation a number of elements superfluous to the main function of the object or its components (in this case the house), ornaments are not just the parts that are mainly defined as such. Even the texture of an element that has a clearly functional value, even the use of the material in its simplest form (for example, simple vertical bars railings) is an aesthetic proposition and an ornamental option[167]. Therefore, saying in the previous chapters that moving deep in the twentieth century buildings were getting less ornamented, I describe the diminishing of complexity of ornamental forms and not the diminishing of ornamentation[168].

The reasons which lead people to adorn their constructions remain obscure and difficult to investigate[169]. There are two main categories of reasons that lead to ornamentation and these are usually mutually interacting; personal delight and social appreciation. The purpose of this research is not to investigate the origin of these needs but to research their interaction with the ironwork and the architectural elements.

Personal taste is manifested several times in the four cities considering the architectural elements and the ironwork. Multiple examples for houses with an isolated ornamental taste exist in all the cities of the world, the four cities of this research included. The 'deviating' personal taste of the architect or the owner is the one which, if escapes the norm in whichever way, will possibly lead to the change of the trend and the formation of a new fashion current[170]. Even in cases of imported patterns, personal taste has played its

167 This passage is an argument against the mainstream bibliography on ornaments. A great part of the books relating to ornamentation is interested in the elements which are 'superfluous' on the construction. Superfluous, in this sense, is whichever element does not add something to the functionality of the building. As one can suppose from the text above, I do not agree with this mainstream idea. I do not agree for instance with the nuclear idea of **(Moughtin, Oc, Tiesdall, 1995)** and their theory and philosophy of ornamentation which is based on the solid classic pillar of unity – proportion – scale – symmetry. I think that this base is so fluid that can hardly function. Furthermore, examples of texture – ornamentation, such as paint or material, are totally missing neglecting in that manner part of the potential architectural elements. **Петрова (2001)** leans closer to my arguments in considering that the gradual decrease of the *intentional ornaments* has promoted the structural elements to ornaments.

168 Le Corbusier in his ***city of tomorrow*** rejects ornamentation and launches a wave of trend to the whole world. This trend reaches the Balkans quite attenuated; much of its guidelines were too expensive to be followed whereas a relatively strong persistence of local traditions or past trends' remembrance was still vivid. Yet, in one or the other way ornaments, in their mainstream definition, decrease. The range of possible forms for many architectural elements narrows around the functional forms. Later, after the WWII, when in the Balkan countries centralized states, communist or national capitalist, were established the modernist agenda found a significant field of application.

169 There have been various attempts to investigate this rather obscure aspect of human action. **Leyton (2009)** makes an attempt of a systematic analysis of architecture and the ornaments by getting back to the fundaments of geometry. By analyzing the symmetries and the asymmetries of the form as inter-actors of human perception and the memory, he makes an effort to reconstruct a theory of the architectural shape.

170 **Bourdieu (1977)** and **Giddens (1979)** tried to resolve the problem of the collective, the individual and the creation of the currents and the trends. Both, with the concepts of *habitus* and *structuration principle,* attempted to find the aggregation forces which lead actions and choices within certain favorite streams. Both these concepts were criticized as highly structural and therefore leaving limited space to individual actions. However, as I have discussed and I will further discuss, there seems to be a kind of *habitus* in the choices of the architectural elements. Either enforced by social factors or material constraints, a kind of *habitus* is obvious on the ornaments and ironwork trends of the four cities examined on this research.

role. It has been seen in the four Balkan cities of this research that Western fashions were generally followed but not in a blind–copy way. Whether it has to do with imports of foreign trends or local renegotiations, a main impulse towards the new trends was driven by personal taste and choice, sometimes against the mainstream. This does not mean that personal choice is totally irrelevant to the social context and its interferences. Tastes are and were created within contexts and forged through the material condition of each circumstance. This is why there are neither big gaps or rapid transitions between fashions but rather smooth emergences and transformations. The materials, ironwork materials for instance, are almost the same during the last 150 years. All forms of railings could be technically and economically achieved since that time. Nevertheless, it took decades to pass from one form to the other even if the latter forms were simpler than the former. Personal taste was always very important; it either opted for an innovative design or enforced an existing one making it proliferate[171]. However, there were conceptual limits to it. These limits set obstacles to many personal choices or made them conceptually intangible. [See some cases of personal taste in pp. 81, 94, 109, 122]

The main pressure on personal taste and the consequent delimitation of the range of possible pattern choices was mainly caused by social factors. The 'collective taste' of each era – a vague stochastic idea – was imposing the main guidelines within whose limits the mainstream was moving and from which the transcendences were springing. So, whereas always achievable and conceptually tangible, certain forms have been extremely scarcely or never materialized being far out of the collective streams of a certain era. See for example the railing on figure 4.1; a very simple form. Though always very easy to be materialized, I have never spotted it in any of the four cities of my research. There has been no restrictive law or a normative forbidding such a pattern. It was just out of the 'collective' trends and tastes; it has been beyond the design concepts and efforts of various eras and contexts. This means that no designer before the 1920s, when this railing appeared, had attempted the installation of such an object, despite its extremely simple

171 Critical mass – a term coined for the theory of nuclear physics – is the necessary quantity to trigger a phenomenon or a chain of reactions. In social theory, there have been various approaches attempting to explain how social actions and collective human choices (such as riots, trends etc) are provoked when a number of people adheres to it. **Marwell & Oliver (1993)** make a full enquiry of this social phenomenon and include many interesting examples many of which have to do with fashion. **Rogers (1995)** does the same in a perspective of communication and diffusion. Both approaches deal with a great problem that cannot give a satisfactory explanation, the same way this thesis cannot too. Differently to physics, in which the deeper mechanisms of the critical mass chain are explained (at least down to the atomic level), in social phenomena, critical mass is associated human choice. Since the analogous of the atomic level of physics (the physics of the mind) remain obscure and puzzling, all approaches and explanations remain descriptive and stochastic.

form. The 'collective' taste and the contexts gradually shifted towards the general trend that permitted the emergence of the new pattern through the action of the designer[172].

4.1.2 Ironwork elements

Iron elements constitute a category of architectural elements that participate in the system of trends, personal tastes, collective appreciations and social implications. Two genres of these elements exist in building constructions. I deal only with elements of the façades and of the public space since the others are either invisible or interior elements and thus form a different case.

In the previous chapters, I have discussed the predominant types of ironwork in the four Balkan cities in the form of balcony railings, brackets and occasionally of other elements. It is clear through the research of the four cities that, patterns and typologies of ironwork elements are neither equally distributed in the cities nor absolutely randomly selected.

Iron elements function as a subsystem of the broad system of ornamental objects. If one defines as a system the whole category of the façade elements and objects, ironwork elements are a subset of this bigger system. All the ornamental elements form a set of objects that I will call a system, that is, a set which also comprises its interactions with other sets of objects such as clothes, machinery, inner decoration items, transportation vehicles and more. So, the system is a set in interaction and in constant transformation. Similarly, the system of ornamental elements consists of certain subsystems one of which is iron elements, when using the material as a classification criterion.

4.1.3 Syntax of the architectural elements

Ironwork artefacts and architectural elements form various subsystems according either to their material or to their architectural style. These subsystems intersect in

172 At this point I would like to add some words on the evolutionary theories in aesthetics and arts as developed through the idea of the *memes* and discussed in many works, as for instance in **The Selfish gene** by **Dawkins**. Although I can recognize some strong points in its arguments, I think that it is metaphysical in advocating an inexistent imaginary entity: the meme. So, whereas in natural sciences the evolutionist theory succeeds in expelling immaterial entities from the creation of things the memes theory does exactly the opposite. Furthermore, the theory is retrospectively deterministic in the sense that is always justified. Whichever the outcome of a process might be it is always justified by the use of an intermediate 'favorable' environment. Several architects also reject the application of evolutionary theories on architectural systems. **Colquhoun (1996)** similarly considers them as determinist theoretic frameworks that delimit to the minimum the "conscious interference of the designer".

various ways combining styles, materials and forms[173]. [See just a few of these cases in pp. 88,139,144,181 for materials and 106, 132 and 181 for styles, despite that the entire chapter 3 is full of this kind of examples]

Balkan eclecticism, an Ottoman version of the late 19th century's widespread international eclecticism, further enforced the combined use of various elements which belonged to different fashion currents.

Both the mixture of materials and the styles were always common practices in architecture and among the main parameters leading to the transformation of styles and the changes of fashions. The mixture of materials is the most essential and visible mixture. Façades made of a single material are an important part of several districts in Istanbul (*ahsaps* in the central districts of the historic peninsula and elsewhere) but quite uncommon in Bitola, Thessaloniki and the rest of Istanbul. In Thessaloniki and Bitola, for instance, even in the middle of the Ottoman period, most houses combined plaster, ceramic and often iron elements. [See some interesting cases of such combinations on pp. 62, 84, 106, 187, 199 and 204]

This first inter–material syntagmatic[174] construction is an essential one, often dictated by the physical properties of the materials and their availability. So, the combination of plaster daub was motivated by a series of parameters in many areas of the Balkans; the abundance of the material and its easy application were among them. As long as this material was further used, more reasons enforced its utilization; more artisans were able to handle it and more forms of application were available. That is also the case of marble and stone. Areas with big marble or stone quarries provided constructions with abundant quantities of this material and led therefore to a flourishing artisanry and a wide variety of ornaments and objects.

Iron elements were not such a case. Although many pits of iron were exploited throughout the Ottoman Empire, most of the elaborated iron was either imported from the

173 At this point my analysis resembles the analysis of **Barthes** in **Systéme de la mode (1967)**, especially the second part, where he introduces the syntactic relations of different garments. Yet, I do not fully share with him the attribution of parts of the sentence to each of the elements or of their properties. As I will later argue, I think that there are some vague analogies between language and architecture that can be applied on the architectural elements. Objects bear meaning and have structural relations between them. However, these relations do not reach the level of a language but remain on a level of relative intermediate "meaning charge" and loose structure. I will therefore, only partially claim some kinship with the analysis of Barthes as a general concept.

174 I should, at this point, mention the basic concepts of syntagmatic and paradigmatic axes as expressed by **Jakobson (1966)** and others. According to their concept, the paradigmatic axis is the conjunct of the alternative elements that create part of a proposition whereas the syntagmatic is the axis of the elements combined to make a proposition. In Logic is the basic OR – AND relationship. In this analysis I will deviate from the strict structural use of the axes. I have to deviate because neither the ORs nor the ANDs are as strict as they are in language systems. Furthermore, the final proposition, in using the linguistic term, which is the house, is so more fluid than a linguistic proposition that neither of the axes can function in perfect theoretical manner.

West or distributed through the central Ottoman iron industry in Istanbul[175]. The detailed catalogues of the French Chamber of Commerce indicate the significant increase of iron imports during the last two decades of the 19th century. The same happened with the production of the state owned iron industries. This means that, as far it concerns iron and iron artefacts, availability was not so much influenced by local factors but rather influenced by the whole commercial circulation of commodities in the Ottoman Empire. This feature of iron elements and the material in general creates particularities in its use too. Iron could not 'compete' so easily with other materials in the paradigmatic axis. That also led to the scarcity of iron elements in many places, especially the most remote and poor[176]. [For some cases of rivalry between different typologies or categories see pp. 106, 130, 138, 195 and 204]

The mutual substitution of material subsystems on the paradigmatic axis has also practical origins as the examples above indicate. When a material better serves local prerequisites or conditions, it creates a chain of preferences and traditions that further favour its proliferation. An example of this process can be drawn from another material; marble. Foreigners travelling to several parts of the Aegean Sea in the nineteenth century were impressed by the amount, the variety and the splendour of marble elements on public buildings and even on modest residences[177]. These travellers ignored, when they first viewed these artefacts, the abundance of marble in the entire Southeast Mediterranean basin and the subsequent development of advanced techniques of its elaboration. Another example of this relative predominance of a material has to do with ceramics. In the area of the Cyclades Islands and elsewhere in Greece and the coasts of Minor Asia there is a tradition of pottery since the remote 2nd millennium BC. Many ceramic artefacts can perfectly substitute iron elements such as brackets or balustrades. The big difference in physical properties between the two objects is on resistance to strikes and weights. Iron elements were finally preferred, after long years of completion with their rivals and for a well defined period. A big percentage of the substitutions (iron

175 More details in **Küçükerman (2000).**

176 At this point, I should make a brief reference to **Baudrillard (1968)** who broadly used the term *system* in his analyses of trends, many of which involved interior architecture and domestic objects. Baudrillard, in my opinion, in order to form a critique against the strict structures (of Barthes for instance) considers often the material ambient in a complex of metaphors. For example, he often finds relations between the body and the residence, which I do not see in my research. An important difference between his researches and the present one is that the economic and social environment is not the same. Baudrillard, for instance, often uses the concepts of commoditization and commercial promotion in order to explain the mechanisms of the fashions. He considers, for example, very important that objects are made to not last long; this was not the case during the time researched when objects were made to last as long as possible.

177 (**Σιμόπουλος, 1975)**

for something else) were rather difficultly done during the late nineteenth century under the influence of a non material parameter; trend.

All these examples show that the use of materials is not equally favoured in every context. Ornaments and elements' subsystems, according to their material, are not on the same level of preference but in each case and each context they gain or lose popularity creating prevalence for the contexts to come. Ironwork massively entered such a context, the Balkans of the 1850s-1860s, on a relatively low level of 'prevalence'. It was an unknown and less used element in the architecture of the area. There were other reasons and factors that enforced and propelled the use of iron in constructions. These reasons were associated with the trends and the prestige of certain iron elements in specific uses such as balustrades, brackets and more, in specific areas of the cities.

These immaterial properties and values of the object overwhelmed the material 'levels' of prevalence and changed the syntax of the facades. The subsystems of ornaments do not consist only of those elements that are more convenient in a material perspective but also of those that have higher aesthetic value. That is one of the darkest aspects of the research. Aesthetic value comprises both the subjective evaluations about beauty, collective evaluations and immaterial values through social networks[178].

The result of the elements' syntax on the façades is the creation of a vast variety of façades ensembles through a relatively much smaller variety of elements available in each circumstance. Artisans of a certain circumstance – for example, Bitola in 1890 – create or import series of artefacts; according to this research: some 20 designs of balusters, about 30 designs of plaster moldings, 5-6 cast iron brackets and many other ornaments. Only these first three categories could make up to 360 combinations, a really great number compared to any category or typology of elements separately.

I should, though, point out that not all these combinations are existent or frequent. On the one hand tastes delimit the number of possible combinations (wooden brackets are never combined with an iron balustrade). On the other, immaterial values, such as the prestige of the objects, further restrict the number of alternative syntaxes (e.g. a wrought iron bracket is rarely combined with marble balusters, because the former is seldom found in high class areas whereas the latter are found almost exclusively in them).

178 I should once more emphasize that prevalence was also created by the diffusion of western patterns. I have mentioned general cases of promotion of western trends in the second chapter, associated with most sectors of social life and activity. However, there were also direct influences on the architectural elements, not only through the imported patterns but also through the schools of architecture and the books on ornamentation. **Talat (1909),** in his book on architecture, gives multiple examples of ornamentation with many details on forms and proportions. It is important to notice that the ornaments proposed do not significantly coincide with the patterns used in the Balkans. This fact enforces the idea that, what was promoted was the general concept on ornamentation and not the patterns themselves. This observation will be useful for the reading of various parts of this chapter.

These subsystems of elements – categorized either by their material or their trend – are very fluid. This creates a system – the façade– out of several subsystems, the ornamental elements, which are moving in different design directions on different pace[179]. These relative movements create a series of interesting heterochronisms. I have discussed, for instance, that cast iron brackets became widespread in Thessaloniki during the 1880s and then gradually disappeared in the 1910s. The 'classic' ceramic balusters were less widespread as a typology but they kept their proportion in the city from the 1870s to the 1930s and sporadically until the 1940s. In the meanwhile, iron brackets were almost extinct or replaced by plaster ones. In the period from the 1880s to the 1940s, ceramic balusters were occasionally combined with all these taxonomies of brackets. This created differences in syntax in which elements taxonomies had overlapped each other in various ways through time, depending on the 'history' of each one of them. [See on pp. 62, 83, 93, 113, 126, 132, 140, 151, and 197 for some of the cases of typologies' life-times combinations and overlaps][180]

Another factor which, along with "time-slide systems" and the "taste and prestige" factors, impacts on the syntax is the "informal eclecticism". It is well known that in all eras there is, more or less, a tendency to combine various styles on a building[181]. This tendency became a strong trend and an art current during the late 19th century. At the same period it entered the Balkans as a major architectural and ornamental fashion, especially in Thessaloniki and Istanbul. I call this 'formal eclecticism', in the sense that it is a recognized trend with well known representatives and samples. What I call 'informal' eclecticism is the mixture of styles that occurred because of the limited alternatives in ornaments or the local evaluation on how the style of an element could be eventually combined. So, there

179 A great debate is made precisely at this point, that is, whether and in which degree there can be systems and flows at all. **Foucault, (1983)** for instance, proposes to prefer flows over unities and mobile arrangements over systems along with disjunction and juxtaposition. I do not deviate much from the general concept of this proposition, yet, I use terminology in a slightly different manner. Disjunction and juxtaposition are parts of what I will later call 'attractors' borrowing from the chaos theory. According to this use, the flow of a system is not defined only because of its own development and life – cycle in the city but also because of the differential movement of the other systems. I could have used the term 'mobile arrangements'. Yet, I think that various factors relatively stabilize these 'arrangements' in such a way that they can be seen for a brief time of observation as systems.

180 One can go further down to the typologies and their different life-cycles and combinations on investigating the life-cycles and the overlaps of the scrolls and the parts used for the creation of the balcony railings or the doors. Although, I have researched and registered such case, I did not included them in this thesis, because on the one hand, they lead to similar results, and on the other, because this would had limited the analysis of balcony railings and brackets.

181 **Kolonas,** a Greek historian of architecture who has repeatedly researched Thessaloniki with an emphasis on the area of Hamidye does believe so. In his books and his presentations, he speaks about the use of architectural style according to the community identity of the owner. When we met in a conference, he was quite critical about the use of ornaments in this process of denoting identity. I think that this hesitation is a common mistake of many architects. Many architects do not proceed to a detailed analysis of the ornaments considering them as lateral 'servants' of the main architectural style. In this manner, many architects fail to see that the connotations of the objects that are less direct and rather based on their statistical peaks and concentrations.

are, in Bitola, neighbouring buildings that although pertain to different styles they share common balusters. This element – the balusters - creates a kinship between two buildings of different styles, in this case, a neoclassic and a neo - renaissance. This point of junction on this neo-renaissance building (the baluster) is not shared with any other neo-renaissance building in any of the other cities, such as Istanbul or Thessaloniki. [Some more cases of eclecticism on pp. 181, 188 and 236] See on figure 4.3 a representation of the differential movement of the subsystems and the cross section through typologies.

4.1.4 Urban geography and ironwork

Architectural elements, ironwork objects included, are not homogenously distributed in the city, be it Istanbul, Thessaloniki, Plovdiv or Bitola. A first impression from any of these cities is enough to show that there are differences, often very sharp ones, in the urban tissue and the buildings that form it. The reasons of this urban mosaic are various and connected both to material and immaterial perquisites and demands. On the side of the material prerequisites, I could name several of them: the uses of the area and of the constructions, regulations, history of the area, general incomes and more. On the side of the immaterial I could name history of trends, social networks, distinction, collective and socially formed taste and other[182]. [pp. 83, 107, 122]

The material side - the material sets of factors - creates several limitations that settle boundaries within which choices are restricted, just as it has been already argued for separate elements and their subsystems. A city of the Ottoman Empire and not only, should have a market, a port (if coastal) or a main gateway, an abattoir, workshops of various kinds, residences and so on. Bigger cities have more of these installations, most often different in size, trend and construction date. Just as functional needs and requirements delimit the object, areas' requirements and functions enclose buildings and constructions within a range of possible forms[183]. So, as discussed, in many cases - like in the old bazaar of the Dragor River, the Egnatia Street of Thessaloniki, the Glavnata Ulitsa

182 **Neil Smith (1984),** in a neo-Marxist inspired approach, tries to connect the flow of the capitals in the capitalist market with the creation of the "uneven development". In this attempt, a central role is given in the circulation of capitals and the aspiration for surplus value. This kind of approaches may give some explanations in my case. When big capitals are invested on the built environment, certain typologies are preferred and other are excluded, as I have seen in many cases. Yet, a mechanistic explanation, like the one advocated by many in a neo- Marxist perspective, gives, in my opinion, an asymmetrically major role on the capitalist aspiration. These approaches are a good explanatory context for the fragmentation of the city. Nonetheless, I think that the issues of social and symbolic status are often underestimated. Very often in this research, the capitals were following immaterial entities, as the above mentioned ones.

183 **Gadelsonas (1968)** is one of many architects who attempt to find the relations and the boundaries between functionality and form. On trying to define this mutual relationship, he considers that even 'flowing' functionality puts certain limits on the architecture and its possibilities.

of Plovdiv and the Yuksek Kaldirim in Istanbul - market areas' prerequisites settled several functional requirements on the form of buildings; in these cases the functions of shops and of a retail market. These requirements led to the creation of high and wide windows and thus significantly diversified the elements of the ground floor compared to those of the residential areas. Another example of use that influences forms is connected, for instance, to the existence of warehouses and workshops. In certain areas of the city, such as Çayir in Thessaloniki and Balat in Istanbul, there is a bigger density of industrial buildings and workshops. These types of constructions were usually less ornamented than residences. The difference, compared to nowadays, is that medium sized workshops and warehouses at that time were often found in the urban tissue, among residential and commercial areas, whereas nowadays they are mostly situated in well defined areas beyond the limits of the residential districts.

Different functions required different kinds of buildings. They also required different size of buildings. A central station, such as the Şirkeci Station in Istanbul, was an example of a big size 'modern' building near the Top Kapı Palace. This kind of building did not influence the urban geography purely by its presence neither did it impact on the architectural artifacts' geography merely by the elements it bore. The construction of such a building influenced the whole area. Not much later it was built, it caused the district to change; new hanlar, retail shops and facilities with their correspondent constructions were built in the station's vicinities[184]. The whole area radically changed several times since the building of the Şirkeci Station although no major hazard occurred there, as it happened in other areas. The station was promoting the construction of new buildings with certain functions. This reconstruction activity happened several times within the past 120 years, leading to a multilayered urban environment in terms of architectural trends and their elements[185].

Other factors creating architectural differentiation in the urban tissue have a relation with the social stratification and the differences in economic standards. Urban physical geography, along with the urban functions, creates favoured and disfavoured zones within the city. An excellent example of the creation of zones and their

184 See for extensive details in the comprehensive book of the **Istanbul Municipality (2003)** in which detailed analyses of the areas and their uses and populations are comprised. This book is an important book with important data which were missing from other works. Through various charts and indexes a huge amount about the Historic Peninsula is given. It would be a real help for researchers if the Municipality could proceed to similar works for the other areas of Istanbul.

185 The Sirkeci Station is one of the most important cases for **Saner (1998)** in his enquiry on the Ottoman Orientalism. Further information for this and more orientalistic buildings are given along with some data about the areas. Saner, pays great attention to minor details and gives many descriptions of ornaments, although he does not enter in a systematic analysis of their typologies.

transformation caused by changes in functions has been already discussed for Thessaloniki. The city, like many other ancient cities of the world, was surrounded by defensive walls. In an attempt for modernization, parts of the walls, especially those blocking the sea front, were demolished and the spaces opened were converted into avenues[186]. Before the demolition of the coastal walls, the lower parts of the city, which neighbour the coast, were unhealthy and stinky areas because the fresh sea breeze could not affect their microclimate. The area was avoided by the Muslims who had more opportunities to choose where to live, opting to settle higher towards the Yedi Kule fortress. The inhabitants of these districts were mostly Jewish and some Greeks who had to conform to the bad conditions because of their economic status. The opening of the sea front created a unique open urban space near the sea front. Very old rare pictures of the 1870s and the 1880s indicate that the sea front was not an area of prestigious architecture when walls were first demolished. There were ordinary residences at the eastern part, several warehouses and the poultry abattoir. Most of the important architecture was developed along the Egnatia Street, one of the city's most important streets, connecting to the major wall gates from the west to the east. In the 1880s and more in the 1890s and the 1900s, the importance of Thessaloniki in the Ottoman Empire was further reinforced. New activities began in the city including commerce, intense politic debate and artistic creation. These activities needed spaces to be hosted; the most prominent and glamorous were created on the littoral avenue and the adjacent streets. The littoral became an area of fervent reconstruction and massive application of all the latest trends. Not later than the late 1890s the general image of the sea front had almost nothing to do with its immediate past. This reconstruction of the littoral was accompanied by a massive introduction of new architectural elements as a part of the new architectural styles. [pp. 177,178]

The change of Thessaloniki's role in the Ottoman Empire and the transformations in the legal, social and economic fields caused the Muslim privileges to fade out. In the 1880s, it was not the Muslims but the rich who could choose their area of residence. Rich Jews were unexpectedly lucky; they had important estates in a former unprivileged area. At the same time the once flourishing Muslim neighbourhoods of the middle city were entering in a period of stagnation. Not only there was not any architectural activity, but the rather old buildings were decaying due to shortage of maintenance funds.

The above example gives strong evidence about how the geography of the city can drastically change, if triggered by certain events; in this case the demolition of the coastal walls and the changes in economy and politics. The areas of architectural innovation

186 See (**Γερολύμπου, 1997)**

shifted from the centre of the city to the littoral front, leaving Upper City's Muslims districts in remoteness. The geography of the architectural elements followed this general tendency; innovation zones follow the shifts of the social activities. This is not strange at all; people acquiring power could easier choose their preferred places in the city. As higher evaluated places were changing, powerful people – who most often were also rich – could follow these movements and promote their tastes. Moreover, these people could afford innovation, excellence and originality whereas the others conformed to the ordinary, the trivial or to nothing more than just maintaining what they had inherited. Districts in the centre of the city suffered later massive reconstruction because their buildings, and all their accessories and facilities were regarded as obsolete and inadequate. Small islets which survived until the 1990s, had their identity changed again; being monuments of the historical past, many of these buildings, became the residences of wealthy people who wanted to avoid the crowded and noisy centre.

Iron artefacts closely followed these shifts and changes. In the 1880s, the demolition of the walls revealed just a few buildings whose iron elements could be considered of a medium quality. Most iron elements were concentrated on the Egnatia Street area and near the *Konak* and a few more along the Sabri Pasha Street and the vicinities of Aghia Sofia. These elements had strong similarities with the Ottoman vanguard of that era, in other Ottoman cities. Excessively sophisticated and expensive items were almost inexistent. The ironwork wealth of the four cities was much inferior to that of certain Western European cities, since wood, plaster and ceramics were dominating in the whole Macedonia – Thrace area. The shift of the nucleus of activities and prestige in the late 1880s and the 1890s coincided with the massive introduction of Western patterns in Thessaloniki. Since these areas were inhabited mostly by Jews and Greeks and given the will of these ethnic groups to move their perspective to a western direction, a massive import of western patterns occurred on the prestigious littoral. Ironwork in that part of the city was different from this of the old nucleus, being local renegotiations of western inspired designs[187].

There are similar stories of urban fragmentation and differentiation in all the four cities[188]. I have discussed many reasons for the creation of this mosaic. I will not analyse the case of hazards, such as earthquakes and fires, which caused a rapid reconstruction of

187 In: (**Μουτσόπουλος, 1997)** one can see some examples for this local renegotiation for the high strata of Hamidiye in Thessaloniki.

188 For example, see for Bitola and West Macedonia: **Јанев (2001)** especially pages **162 – 164** for the sizes and the practices of the smiths' guilds which are similar in many other areas of the Ottoman Empire.

whole areas, provoking the abrupt transition of the architectural style from a precedent period to a successive one[189].

The change in the urban geography was triggered by a major event for the history of the city. Apart from these rare events that influence the urban tissue, there are trivial and everyday minor events which have, when accumulated, equal or even tenser impacts on the material environment of the city.

Local 'spirit' is an important parameter of that kind. Ironwork artisanry in the Balkans was mostly practised in rather small or medium sized workshops. These small enterprises had limited possibilities of exporting their creations to distant lands, either in the Ottoman Empire or beyond its borders. Whereas people with very high incomes could choose any kind of railing and pay for its importation, the rest had to limit their choices to the affordable within their area or the city. Differently to nowadays, where imported commodities and objects from countries far away may be significantly cheaper. During the late nineteenth century and later, local products were in general cheaper due to transportation costs and to high import taxes. That is the reason that explains why local kinships between artefacts in many areas of the Balkan cities were rather enforced. [See cases of local spirit on ironwork and ornaments on pp. 63, 79, 98, 111, 121, 181, 184, 190, 143, 147, 151 and 194]

Such restrictions cannot limit the circulation of design concepts, forms and ideas. Kinships are often very strong within an area and indicate the common origin of the artefacts' forms. There is, however, a noticeable osmosis between areas, broader districts, cities or regions[190]. Artefacts, with the important exception of certain cast iron items, are similar between neighbouring districts but not identical. The same occurs between cities and regions with lower degrees of osmosis in each case. The broad Macedonia–Thrace region was a kind of design environment continuum. Each city had similarities to its neighbouring one and the latter to the next city. It resembles in a way to the piano keys, each one of which has a difference of a semitone from the neighbouring ones. Moving along the line of the keyboard these slight changes are accumulated and create a big and important difference. In the case of ironwork the issue is more complex and more dimensioned both in space and time. Bitola ironwork and ornaments in general have strong similarities with ironwork and artefacts in the neighbouring city of Florina and

189 (**Γερολύμπου, 1985)** all the book and especially **pp: 135 – 166.**

190 **Quartet (1993)**, analyzing the late Ottoman textile industry draws similar conclusions for manufacturing. He, offers further examples and the analyses of practices used by the Ottomans to sustain their position on the inner market, pass to exports and revive local trends

these have in their turn important kinship with ironwork and ornaments in the neighbouring Veroia, Thessaloniki, Kavala, Xanthi, Edirne and Istanbul[191].

At this point I shall borrow a term from linguistics; the term of isoglosses. Isoglosses define by a line the limit, up to which a certain type is used. In like a manner, the *isotope* of the G-key cast bracket comprises broad areas of Macedonia and Thrace being that way a quite big one, whereas the old vertical bars' isotope of Thessaloniki comprises only the deep commercial core of the city, that is, the areas where these typologies are found. (See figure 4.4 for an approximate representation of the isotopes of two different typologies). This linguistic metaphor functions quite well for many objects but there are also some important differences. Whereas language types should pertain to a broader general code – language – and conform to its rules, ornament and ironwork types are not constrained to fit within such a rigid system. This creates several interesting abnormalities in the continuum, which are not, though, so random and inexplicable.

A first particular feature of the architectural elements' urban geography is that, differently somehow to language, they create intercity vicinities and contradictions. More precisely, I have discussed in the paragraph above the existence of a continuum between certain Balkan cities. The smaller towns and the villages inbetween, have certain kinship with some parts of their neighbouring cities, mostly the suburbs, whereas the centres of the cities form a fragmented intercity area in which the continuum is clearly visible. This is not strange; economic possibilities, urban functions and general trends are more alike in the 600km distant port areas of Istanbul and Thessaloniki than in Thessaloniki and the small port of *Michaniona*, just 35km away.

The same fragmentation occurs within one city; the unique-pieces' high concentration phenomenon is linking prestigious coast districts of Istanbul to the high class area of Hamidye in Thessaloniki, making thus a double focused isotope out of them[192]. This isotope is further enforced by the creation of other intercity isotopes, which share features and objects in common, like for instance the old centre of Thessaloniki and the Shirok Sokkak of Bitola in which brackets and railings have strong similarities. [See on pages: 70, 110, 119, 122, 133, 134, 145, 149 and 201, for cases of 'luxurious' elements and their areas]

I will use the isotope to pass to the concept of *topos,* which will be useful in the further analysis of the ironwork and the architectural elements. In mathematics, topos is

191 I compared the ironwork of the four cities of this thesis with other Balkan cities in two ways: the first was through the same method of photographing and registration as I did with the main research and through the poor existing bibliography, for instance: **Πετρόπουλος (1981α), (1981b)** and **Βάρβογλης (1997).**

192 Many good examples for the trends and the architectural kinships are given by **Kolonas (2005)** although that his main focus, in this book, is on Greek architects.

the set of all the points which fulfil certain prerequisites. In the case of ironwork and architectural elements, topos is the area, fragmented or not, which comprises spaces defined by the same properties, as for instance, their contained objects[193]. (See cases of topos on figure 4.5). This concept is important because it will be used in the analysis of taste and trends. Once formed a topos, let us say, the topos of vanguard unique elements, it usually functions as a common space for trends and taste. Influences and osmoses were sometimes higher between the distant prestigious areas of Bitola, Thessaloniki and Istanbul than between two districts of the latter, for instance: Cihangir and Unkapanı[194]. [See cases indicating topos on pp. 72, 109, 118, 126, 133, 134, 184, 188, 190, 191 and 202] [See cases of vanguard design practices on pp. 94, 98, 111, 114, 119, 131 and 180]

4.1.5 Trends and tendencies

Data and evidence from the four Balkan cities of this research and further comparison with other cities indicate the existence of trends and tendencies within the Ottoman Empire. A first inspection of the architectural elements and the ironwork may not reveal the power of these trends but a closer investigation shows that, even not branded, ornaments' trends of that era were raising or fading out; they were either highly appreciated or neglected.

The explanation of *transition* was and still remains among the most difficult questions of philosophy and social sciences. I shall limit myself to an object oriented analysis, which is the main focus of the research.

The material status of any instance and point is closely related to the precedent time instances which led chronologically to it. In the case of ironwork and architectural elements, for instance, there was a massive introduction of new elements influenced by similar vogues and trends in the West. However abrupt and massive that introduction might be the former material status influences the latter. Here are two examples: the first from Plovdiv and the second from Istanbul. In Plovdiv, the centre of the city was demolished in successive stages for a new modern centre to be built. An important

193 **Lagopoulos (1992)** shows how space creates relative perceptions and meanings. His analysis, which approaches the idea of topos, without naming it as such, demonstrates not only how space is perceived as meaningful by individuals and groups but also how actions are then influenced according to these perceptions. These perceptions often enforce the role and the meanings of the conceptual site (real or imaginary) influencing actions concerning them. Consequently they might create 'avalanches' of similar practices that might lead to the creation of local and intercity trends.

194 Newspapers like **Cumhuriet** and **Μακεδονία** were continuously publishing commercial announcements accentuating imports from France and Britain. These announcements show that there was a symbolic value on these imports which can be seen through the high class origin of the products.

exception was the case of the areas on the hills which remained untouched. The architecture of the new centre was materialized in accordance to the modernist projects of the era[195]. In this case transition in the central districts was abrupt and almost total. Nevertheless, it was *almost* total. Because even in the Plovdiv case, the precedent material instance, that is, the market, the workshops, the transportation and more, influenced the subsequent. So, although some Bulgarians may have dreamed a western-like ornamentation style, the material condition that produced the ornaments remained the same. This is why there are faint similarities between Plovdiv and Vienna, the origin of the trends and the place where many foreign architects were coming from. These similarities reach the limits of the achievable in Plovdiv and not of the desired. Austria – Hungary was a richer country than the new born Bulgarian state, with a longer tradition in its own forms of ironwork. Furthermore, it was not achievable to materialize Austrian - Hungarian patterns fully, just because a new city was planned and new ironwork designs were imported through catalogues. The smiths, the machinery, the know-how did not change as dramatically as the main plans did. It is an interesting thing to observe that sometimes major things are easier to transform than minor things. That is an unexpected paradox; although very often minor things change easier and more often than major things, but there are always exceptions. In this case, once decided, it was easier to transform the main plan of the city than to change its minor objects. Streets were made wider and parks were created. However, although local artisans intensely copied western patterns, they still used local adaptations, fabricated by the same machinery with the same methods. They sold these elements to local people who could afford certain prices and maintained many aspects of their former taste, that before the reconstruction[196]. I name this conceptual background *design substratum,* which is the combination of aesthetics appreciations, trends and local prerequisites that act as a 'canvas' for incoming trends.

In Istanbul things were quite different. New trends and ornamental elements emerged in the city while old typologies were still used and alive. This is a commoner case, although cases of sudden transition are not extremely rare and they are highly

195 A thorough analysis of the Bulgarian cities' transformations, with many interesting anecdotes in: **(Кираджиев, 2008). Кираджиев,** gives a thorough analysis of the modernization and Europeanization processes in Bulgaria, especially in pp. **242-262.**

196 For comparison reasons I conducted a one week research both in Vienna and Budapest, places from where the main influence on Balkan architecture (especially on that of Bulgaria and the Republic of Macedonia) has came. Although not so extensive, my brief research revealed that there is not a strong imitation of the Central European patterns. Furthermore, as it results from these comparisons, there are not common typologies between Vienna or Budapest and Bitola or Plovdiv. This reinforces the idea of the dialectic relationship of the local and the global and of the flows of the ornaments as subsystems of the façades. Although trends were coming from Western Europe (from central Europe in the case of the Slavic Balkans), local adaptations were creating all the aforesaid streams of local trends.

interesting. In Istanbul, massive plans or actions to impose an abrupt transition (by demolishing most of the city like in Plovdiv, for instance) were never fully applied. The transition was created by the actions of separated individual or collective forces, through partial laws, with varying aspirations and final aims. Westernization, in contrast to the Bulgarian case, where central directives were introduced, was a main trend, a main general direction, served more or less as a general vague idea[197]. Within this main idea, within this dominant stream, collective and individual initiatives were contributing, enforcing or attenuating it. In the case of Istanbul and the constant emergence, the precedent material status was extremely important for the outcome of the subsequent[198]. The artisans and the smiths creating the 'new trends' were, most often, the same persons creating the precedent ones. The smiths did not abandon their former ways and manners of fabrication and usually merged incoming trends with local ones. The activity of the smiths is not the only parameter affecting trends. The set of iron elements existing in a narrower or broader area seems that influences the subsequent objects of this same place. There are various examples for that; trends disappearing in the main city survived until the 1920s in the Prince islands. In Cayir – Thessaloniki, blade-curved balcony railings dominated the area for decades whereas in other parts of the city, typologies were succeeding one another. The material bequeathment is not only technical. It is also conceptual. This means that the relation between the precedent and the subsequent does not only depend on the material possibilities of a certain area during a certain period but also on what people have conceptually in mind. Certain art nouveau railings were not more expensive than most Ottoman mainstreams iron elements. However in many cases, people did not opt for them. Whereas art nouveau elements were dominating in certain parts of Pera, like for instance in Yeni Carsi Caddesi, their local adaptations were extremely frequent in Kadıköy[199], whereas Balat seems rather untouched by this main

197 It was in a sense, a *zeitgeist.* This term which goes back to **Hegel** - see (**Oetjen, 2003)** and goes on through the entire romantic period and much later. In my opinion, there is nothing transcendental in the spirit of an era and time that leads fashions. In chapter 4.3, I will discuss that the fetishism of the object is the recognition, on the object, of the actions and the spirit of the others. This creates an illusion of a spirit of the object, which is invested by meanings and aspirations. In like a manner, there is not a *Geist* on the social sphere but the recognition of the spirit of the others. It is, therefore, a constant renegotiation of the own aspirations and spirit in regards of the others' aspirations and spirits, in a tug of war for balance between the personal and the social.

198 Here there is have a strange balance. On the one there is a country that receives successive waves of trends and on the other, the local renegotiations and adaptations. Very often, especially for very luxurious houses or important public buildings, architecture was a direct transfer of the Western trends. So, which was the importance of the antecedent form since the consequent was so dependent on the new coming waves of trends? Nevertheless, despite that pattern imports were direct it seems that there was a kind of adaptation even in those very "high" levels of architecture. See for instance in: **(Evren, 2007),** for many cases of adaptation to 'Oriental' patterns during the construction of public buildings by Italian architects. These adaptations were either the result of the owners' desire or the architects' visions, which might have been also influenced by their orientalist perception.

199 **Ekdal (2005)** often accentuates this parameter of the local architecture in Kadıköy. Unfortunately most of the buildings he describes, situated on the coast from Moda to Suadiye, were demolished.

style. Another example comes from Plovdiv. The lower parts of the city, which were massively reconstructed during the 1880s, host big numbers of secessionist elements, often in their Bulgarian variants. During the same period the few houses built on the, architecturally, better preserved hills, tend to bear simpler forms of ironwork, more akin to those of the older houses of the area.

4.2 Architectural elements in the social domain of the Balkans

Through the general theoretical context formed in part 4.1, I shall continue with the analysis of the use of ironwork in the Balkans and its possible implications in the social sphere. In the previous part, I have used examples from the ironwork and the architectural ornaments to form this theoretical context. In this part I will examine whether the ironwork 'subsystem' enforces or attenuates the claims of this context.

4.2.1 Systems and subsystems; the case of ironwork

The ironwork subsystem has not the same characteristics or features with other subsystems even when 'serving' the same architectural trend. Neoclassicism, for instance, was a broad trend, widespread throughout the globe. That main concept of reviving the 'glamorous' ancient era, was materialized through various subsystems. Neoclassicism in Athens, for instance, was materialized by forms closer to the neoclassic idea in the sense that they consisted of explicitly 'ancient' forms such as sphinxes and chimeras[200]. Neoclassic buildings are abundant in Bitola [pp. 64, 91], rare in Thessaloniki and a small proportion in Istanbul. In each of these cases – and in many more all over the globe – the general idea of neoclassicism was 'served' by iron elements which, although akin to some degree, are different enough to belong to different typologies. There are no sphinxes or chimeras in Bitola however neoclassical the buildings might be. There are instead mainstream Ottoman railings and brackets combined with neoclassic plaster window moldings. These moldings have, as a subsystem, far more common elements with the relevant Athenian neoclassic subsystem of moldings.

During the same period a subsystem of ironwork elements, e.g. ironwork of Bitola, may be installed on buildings of different trends and types such as neoclassic, art nouveau

200 See for instance: **Hatzi & Mihalopoulos (1984)** and the extensive collection of balcony ironwork elements (especially for Athens in the former). Even a first reading of the book indicates the stark differences between the railings of Northern and Southern Greece. Southern Greece has been the core of the first independent Greek state in 1830. It has been both under the influence of the general trend of neoclassicism and the ancient style's revival especially in Greece.

and neo-baroque. Subsystems intersect, crossing and combining each other in various ways surpassing typical and strict definition and styling of trends.

The subsystem of ironwork elements is not an indispensable set of accessories for a building. There are many constructions with a very limited number of ironwork objects or no iron parts at all. I have shown that, in certain areas, iron elements are repeated in most of the buildings whereas in other areas they are very limited. The reasons leading to the diminishing of the iron elements on the façades are not identical for all cases and circumstances. In Istanbul for instance, among buildings built during the 1890s and 1900s, the richer in iron elements are those of Pera and Fener and especially those not pertaining neither to the very high nor to the low budget class. This is also the case in Bitola, where the few, really high class residences of the centre are quite poorer in ironwork compared to the middle budget buildings, which constitute the main bulk of the centre's built environment. [For the lack of iron elements see pp. 94, 125, 137, 139, 141, 149, 191, 192, 194, 200, 204 and 207]

Iron elements (railings, door ornaments, fences or brackets) also form subsets based on their designs and patterns; in this research they have been called typologies[201]. Though difficult to classify at a first inspection, it has be seen in the respective chapters that iron and other elements can be classified into taxonomies with stronger or weaker kinships. That was not totally unexpected. The great demand for ironwork during the late nineteenth century transformed the small smith artisanship into a flourishing network of workshops and boosted ironwork production. This growth in the quantities of the iron elements produced, led to the broadening of the variety but, at the same time, to a higher standardization of the forms.

One can observe an undeniable increase in the quantity of ironwork artefacts. At places where islets of middle nineteenth century buildings have been left untouched one observes a considerably lower use of iron elements in Istanbul, Thessaloniki and Bitola. Evidence is very poor from Plovdiv at that time. However, general views of the city give the impression of constructions with a very limited use of iron elements. The use of the elements decreases slowly during the 1920s affecting especially some iron objects, such as balcony brackets, whose use lacked functional purpose. [See pp. 67, 68, 99, 122, 124 and more]

201 Genre is a different way to approach taxonomy and typology, used in different occasions but which has very strong similarities as a concept. In my opinion, it is a matter of creation of dynamic sets, in a manner very akin to mathematics. **Frow (2006)** gives a good account for the formation of the genres' sets **pp: 51 - 68.** The problem, which rises from the critique of the old structural approaches, is that sets are never stable and their relations are always in renegotiation. So, the big challenge of theory is to find an explanative platform that will indicate how these renegotiations, alterations and differences can create a 'corpus' of relevant entities.

Ironwork trends in the Balkans were significantly influenced by the West European trends in architecture. The opening of the borders to the West coincided with great transformations in the city and the general image of the built environment [pp. 48, 49]. That coincidence was not incidental. At the same time, that of the tanzimat reforms, almost all fields of social and economic activity were significantly influenced (more in the cities less in the rural areas) by strong winds of changes according to the Western models and fashions [pp. 33 – 46]. Ironwork artefacts and ornamental elements were just one of the subsystems that followed, on their pace and their particularities, the general flow towards occidentalization. It is well known in the smitheries of the Balkans –as a rumour - that Western European ironwork patters were often copied through imported catalogues. This practice is still widespread in Greece and Turkey where artisans still diligently copy designs of various objects. Unfortunately, there is not much evidence of this copying activity. Certain old catalogues can be found in several workshops but nothing from the 19th century. The only proof of that practice is indirect and based on the strong design kinship of the Western European trends with the Ottoman ones. As soon as a trend rose in the Occident variations of the same trend were appearing in the Orient. I have discussed about this practice with the Parisian style of the 1880s and the 1890s, with Art Nouveau and Jugendstil and their Balkan relatives and later with modernism and its various interpretations through time. The general flow from the West to the East is evident; styles born in Western Europe reached the Middle East and the Balkans with a delay and certain amplification or attenuation. The same happened not only in the Balkans but also in Latin America, Indochina or Zanzibar and generally in all those places in which many people had their eyes turned to the West for trends and innovation[202].

A comparison between designs of railings in the West (mainly Austria, Italy and France) and the Balkans indicates that although akin, iron architectural artefacts in these two big areas are rarely identical[203]. Designs travelled through continents; but it was mainly the concepts which were travelling and not the exact designs. Adaptation by local smiths and artisans to the local standards was a very common practice, although imported

[202]202 The impact of the western architecture on various areas around the globe has been thoroughly analyzed, yet, most often, in separate works and researches. Both **Kishida (1953),** especially **(pp. 115 – 125)** and **Gonzalez (ed, 2002)** have analyzed the 'waves' of foreign trends entering respective areas. They also describe the attempt for a local reply through the renegotiation of the imported styles. Japan and Latin America, in the case of these two books, have acquired much in common. Patterns and forms are shared with the Ottoman Empire despite the lack of direct contact between these areas. In both cases, Japan and Latin America, the imported architecture is named "European". In the case of the Ottoman Empire and the Balkans, both the terms "European" and "Western" have been used for architecture. The former is slightly erroneous because the Balkans are indeed a part of Europe and its architecture. The latter is preferred meaning most often the same thing.

203 There are various catalogues of ironwork and their reprints, which comprise designs from various western European cities. Through them, a basic comparison can be made. I have used various, like, for instance: **Wheeler (2002)** and **Grave (1881) [reprint: Veyrier (1998)].**

designs could equally be used. Despite my research in the Balkan cities the reasons of these adaptations are not yet absolutely proven. The original French and Austrian catalogues of the late nineteenth century may be missing but it is sure that they were not faithfully copied. The modification of the designs was an action that required time and effort. The main reasons were not economical; more than the half of the mainstream Balkan artefacts that have a design relation with certain Western designs do not significantly differ in production cost. Neither was the general architectural style a main impulse for modifying the designs of whole series; buildings very similar in many other ornamental subsystems, in the Balkans and the West, differ significantly in the details of their iron elements.

My argument, which unfortunately cannot be confirmed by the artisans themselves, is that Ottoman artisans and ironwork designers avoided adopting designs without a previous elaboration, without a kind of adaption to the Balkan taste. The creation of that taste was, I believe, a process that happened at the same time that a massive introduction of Western ironwork designs and forms occurred. Previous iron designs (before the 1870s) had often significant differences and contributed to a limited number of later taxonomies (after the 1870s). That is not the case only for previous iron elements such as balcony railings. There was also, all over the Ottoman Empire, a big tradition of similar wooden elements such as balcony balustrades, brackets, doors and more. There are very scarce examples for designs and forms passing to the iron elements of the same use[204]. A reason for this is associated with the different mechanical properties of wood and iron, which permit or forbid certain types of elaboration with a consequent impact on forms. The other reason is, probably, the shift in trends and choices, as wooden constructions, were in general given up in favour of stone constructions, which bore limited or no wooden ornaments.

There is a kind of a circular course as regards the forms of iron elements; simplicity - complexity – simplicity. Iron elements had quite simple forms during the first half of the 19th century. [pp. 130, 132] This was in general the case for many public and religious buildings, the plaster and whose marble elements are not simple in forms at all[205]. This simplicity in forms was less visible during the last decades of the nineteenth century when more complex forms entered the urban space, especially in areas where

204 The weak relations of the facades' ornaments between wooden houses (*ahşaps)* and later constructions can be seen by the comparison of the material gathered for this research and the material from ahşaps. For a good collection and analysis of façade ornaments see: **(Ciner, 1982)**. A chapter of this book dedicated to wooden balustrades shows the radical change in patterns and the scarcity of ironwork on wooden houses.

205 A comprehensive analysis of the Ottoman architecture in **Kuban (2007)** which is written by one of the most prominent architects in Turkey). See especially **pp: 551 - 673.**

economic possibilities permitted such practices. This cycle of forms approximately coincides with a greater course of the trends which passed from the more austere forms, for instance civil residences of Thessaloniki and ahsaps of Istanbul) to the slightly more complex (vazhradenska residence of Plovdiv[206]) to the direct influence of the rather perplex forms of neo-baroque and art nouveau and again to the simpler forms of modernism and art deco. Even neoclassicism, which was revived in most European countries as an austere simplification of the ancient temples, has often adopted in the Balkans a less austere form. This was not achieved through greater imitation of the ancient complex parts and details but through the adornment with the above mentioned 'intersecting' subsystems of ornaments[207].

It is evident both from the aforesaid here and in the separate conclusions for each city that ironwork elements and typologies functioned as subsystems both between them and with other architectural elements. Certain designs and typologies emerged and were combined with other elements and their typologies crossing styles, time and space.

4.2.2 The differential movement of the subsystems

The most important feature of the subsystems is precisely their independent and differential way of evolving and combining. Architecture and urban space cannot only be seen as a procedure that forms objects from the major to the minor but as a combination of differential flows of all its consisting elements' typologies and taxonomies. So, instead of seeing the changing city and its buildings through the architectural styles and their transformations, I propose a combined gaze that takes into account the consisting elements and their flows as interacting factors. The architects and the urban planners, however detailed their work may be, can only partial influence with their work the objects and the architectural elements of the city[208].

206 For more details see : **Арбалиев (1959).**

207 **Μπίρης (2003)** describes the social and political context that created the vigorous Athenian neoclassicism at the same time this style was in its decay in other parts of Europe. He shows the forces that strengthened the style forming it in a particular local trend despite its foreign influences. The book shows also the difference of styles between Thessaloniki and Athens even after the annexation of the former to Greece.

208 **Borden, Rendel, Kerr and Pivaro (2003)** introduce a negotiation of such a relativistic perspective of space and time in a 'dialogue' with Benjamin and Lefebvre. In **pp: 45 – 47,** the writers see the city as system of flows, yet in a different perspective than the one of this thesis. They tend to focus on a rather more macroscopic level considering the buildings and the activities of the city and not the consisting parts of the buildings. Just like I did so far, the four writers see the inability of any individual or group to control the urban phenomenon. Along with the spatial relativity, they argue about the relativity and subjectivity of time. Slightly differently to them, I think that the main factor of relativity of time is not individual subjectivity and practice but materiality itself: construction dates and elements' lifetimes. This does not mean that I do not see any subjectivity in the creation of urban time. The aspirations and the 'nostalgias' create imaginary cityscapes, which are projected on the urban space.

This was the case for the late Ottoman Balkan period too; however modernist the ambitions of the planners and the architects might have been, they had to conform to the material conditions of the subsystems, which due to many factors – often the same ones that influence the major objects – follow their flows, changes, trends and fashions. It is not so rare, therefore, to see on the façades, the streets and the space, vanguard elements and fossils not only as different chronological layers of the city but also as contemporary options on the same constructions. The G-key bracket typology survives in certain areas until the early 1920s when already main doors with 'floral' decorations had already become a wide current. [pp. 140, 148, 197: the g-key bracket as fossil]

This observation is not valid only for iron artefacts; I have registered other cases concerning all the kinds of architectural elements and ornaments. I have already seen the case of the widespread ceramic baluster and its persistence in various kinds of constructions. Evidence from researches concerning other objects (signs, clothes and more) indicate the same function of systems and subsystems and the same differential slide movement[209]. In the second chapter of the essay I have discussed the possible function of the subsystems and their differential sliding movement as it resulted from the bibliographical research. The registration of the ironwork typologies, the comparison of their elements and the analysis of their use have shown that this hypothesis, rising from the relevant literature, is verified. I could have chosen plasterwork instead of ironwork. Simple analysis of the relevance between the plasterwork and the ironwork indicates that their typologies connect as interacting variables. Geographical vicinities, for instance, can be observed on the plasterwork and the same can be detected when one considers social strata. It is highly possible that I would have reached the same conclusion if the whole research had a focus on another system of objects[210].

The possible interaction between the subsystems of the architectural elements can be an interesting field for further research. Although I could deduce some things about this interaction I cannot systematize it, since I have not analytically researched any other category of objects.

209 Architects also consider a kind of flow defining the building as the basic element of research. **Rossi, Ghirardo & Eisenman (1984)** (to whom I already have a reference) started a discussion about the typological generations in the city and the architectural artefacts. In a similar way to this research, these three architects deem that there is a strong line of influence between past, present and future. Although, they occasionally refer to the concept of architectural flows, I think they imply this kind of function in the urban environment.
210 See **Uluengin (1998)** and her results about windows in Ottoman architecture.

4.2.3 The sidereal city as an inter-style section

I have so far seen the city as a compound of systems and their respective subsystems trough their currents and their differential sliding movements. This flow of trends and objects is not the only parameter that creates differentiation and design fragmentation in the city. The vast mosaic of the urban space is also created by the differences in the construction dates of the buildings and of all their elements. The city in this perspective has a *sidereal* quality. Just as the night image of the sky is in fact the view of different instants of the past, equally the city is a mosaic of different temporal fragments whose tesserae are all the urban objects with their respective construction dates.

In some districts, like for instance on the hills of Plovdiv and the Upper City of Thessaloniki, the contrasts in fragmentation are milder, yet noticeable. In other districts, like for instance in Karaköy in Istanbul and the west part of Pervi Mai Street in Bitola, contrasts are very stark. In these districts, buildings of different ages lean close one to the other and very often there are annexes and significant modifications on them.

There have been registered cases of old or fossilized artefacts and ironwork elements with interesting revivals.

4.2.4 Eclecticism as a reinforcement of variety

It is, therefore, a common practice to use architectural elements and ornaments that are available and to follow in this way the trends of the ornaments and their typologies. Although significantly influenced by the general architectural trends, the typologies of the ornaments follow their rhythms of change and their 'itineraries' in the urban space. A trend that significantly promoted the relative independence of the typologies and their separate evolution in the city is eclecticism. This trend was precisely the combination of various elements belonging to different architectural styles and therefore to different typologies of architectural elements.

As it shows, this fashion facilitated all kinds of cross–style selections and composition of the façades, sometimes in a manner that would, with difficulty, be accepted some years before and some years after the eclectic period. It is not rare to see peculiar crossings of styles, especially the use of neoclassic pillars combined with baroque moldings and art nouveau or mainstream ironwork. I have examined this crossing in the case of the sultan's villa in Bitola with the minimalistic Doric pillars and the neo - baroque moldings combined with mainstream ironwork and the well known 'floral' ceramic

baluster. I have also seen, in Thessaloniki, the house of Şeyfullah Paşa and the solutions used by the architect, Paionidis. He combined custom designed elements in a highly eclectic manner in order to build a house that on one hand would fulfil the general prerequisites of the area's high status and on the other, it would give the oriental character desired by the owner. In Istanbul I have seen this tendency in many buildings, the Ortaköy Cami for instance, which as I previously stated, constitutes for the historians of Istanbul one of the most prominent western inspired eclectic buildings of the city.

However, these examples are chosen from the buildings of the higher strata of the city for which larger amounts of funding were available. Special and unique elements could be more easily used on their façades given their higher budgets. Architects and owners of medium strata constructions had to conform to the available elements, yet, with some interesting examples for uniqueness. What was very important with eclecticism was the design mentality that it favoured. Since the combination of various styles was acceptable and 'trendy' for high prestige constructions, 'more extreme' combinations of common typologies' elements were also acceptable in the lower strata buildings. When later, during the 1920s and the 1930s eclecticism was not anymore a major trend the spectrum of possible combinations was again relatively narrowed. [Cases of high budget facades on pp. 91, 118, 138]

I have already, briefly discussed the importance of eclecticism both 'formal' and 'informal' in the augmentation of possible syntaxes of elements in 4.1.3. According to that passage, informal eclecticism was the inter–style mixture because of the lower 'pure' elements for each architectural trend and the proliferation of a local style. So the architect of the Tito High School of Bitola, examined in the respective chapter, had to combine styles and use the same ceramic balusters used in other architectural styles because he had to conform to the low variety available. However, in an environment of formal eclecticism this practice was not so odd and therefore not only was it accepted but, as repetitions of the same practice show, it was also widely imitated.

One can, thus, detect through this and other examples a circle of reproduction of artefacts between formal and informal eclecticism. Such an example is the increased use of art nouveau wooden artefacts combined with orientalist details in the bourgeois houses of Kadıköy. The eclecticism of the district favoured elements that massively entered the Pera district in pure art nouveau constructions and then were adopted in Kadıköy in mixed styled houses. These elements of art nouveau origin had local renegotiations in Kadıköy therefore forming new typologies with increasingly less kinship with the elements of Pera.

4.2.5 The construction of national identities, ironwork and architectural elements

When I first started my research I was wondering whether I would find elements on the façades which indicate national identity or whether certain elements or their taxonomies are associated with certain communities of the Ottoman society. Already while photographing, I realized that the general rule is that it is, in most of the cases, impossible to detect the nationality of the architects, the owners or the dwellers by just examining the architectural elements of the façades. The connection of certain elements to certain nationalities functions only as an affirmation of what one might now gather from other sources rather than from autonomous evidence. I have discussed for instance in chapter 3.2 about how often there is an augmentation of neoclassic elements as one moves closer to churches. I have also argued about the case of the Hamidiye district of Thessaloniki and the choice of certain styles and ornamentation depending on the nationality of the owner of the house. [See for instance: 99, 108, 114 and 181]

Nevertheless, one is able to observe this retrospectively, that is, knowing the identity of an area and a house and then affirming a connection to national identity through the elements. I have already examined, for instance, how meanders were used in Greek constructions and some remarkable cases of this use in Balat and Kumkapı. One cannot, however, say that meander indicates Greek identity. It is a faint prevalence of a certain possibility, a relative preference but not an indication.

The same occurs with Muslims and their persistence in maintaining Ottoman style, more by maintaining old buildings rather than by adopting Ottoman elements and ornaments in new constructions. Many Muslim areas both in Thessaloniki and Istanbul (such as the Upper City and the Süleimaniye area) have a great number of surviving Ottoman houses. This happens in other cities of the Macedonia – Thrace region too, in Xanthi and Komotini for instance. Yet, one cannot form a rule out of this observation and reverse it. Whereas in Veroia there is a well maintained area of Ottoman architecture where Muslims used to live, there is a similar Jewish area. This case rejects the idea of a stable and equal relationship between style and community in this case also[211].

211 Whether eclecticism has been a separate trend, an autonomous architectural current or just a fuzzy mixture of styles during a time of design embarrassment, is still a field of debate. **Buckler (2003)** argues (examining the case of the late nineteenth century Russian period) that opinions were divided since that era. Whereas some architects considered it as a design trend others deemed that eclecticism was a messy (often named "bastard") mixture of styles without coherence. In our case, it is important that, formally accepted or not, eclecticism had significant impacts on the ornamental practice in the late Ottoman Balkans. Anyway, one of the main arguments of this research is that trends can be equally strong and important even when not recognized.

It is necessary at this point to think why in an era of such a rise of struggles for the creation of independent states and national identities, significant objects such as the elements of the façades were not used for national identity purposes. Both in this case and in lateral enquiries I have conducted for dress fashion of that era, I was trying to find why many elements of the public space were not used for these goals. The enquiry of dress fashions helped me to find a possible answer to this question.

Clothes and accessories were objects that could denote community and national identity during the late Ottoman period[212]. It is quite strange that in an era when nationalists were trying to find differentiating characteristics to define national boundaries, such obvious signs as dresses and façades where not exploited for this purpose. A conclusion for the dress fashions, which may explain some things about the architectural ornaments, is the prevalence of class distinction over national distinction. The garments were used in the process of Westernization giving great symbolic capitals to the ones wearing them. It was imported a well constructed model of social distinction from the West that was giving immediate results in social prestige. Since many immaterial characteristics could be used for the creation of national identity, it was very convenient to transfer its creation to other objects and systems. For example, language was a system that had less immediate functions of prestige[213]. Revoking common ancestors, common blood, transferring thus the national patrimony to systems of features and objects which did not interfere immediately with systems of social class prestige, was a similar case. I, therefore, think that architectural ornaments and their respective subsystems and typologies functioned in the same way. The will of capitalizing immaterial value from these objects and their use for social distinction immediately and efficiently exempted architectural ornaments, ironwork included, from the objects and the signs used for the connotation of national adherence. These elements were instead used for purposes of social distinction.

An observation that enforces this explanation is that neither in Bitola, Thessaloniki or Istanbul, and even less in Plovdiv, macroscopic differences in ornamentation based on the population composition and their national affiliation were detected. If that were not true, there would exist important differences between the Upper City of Thessaloniki and its Greek districts or between the former and the South-eastern area of Bitola which was Christian. Furthermore, after a time you would think one would be able to recognize buildings by their external aspect and to guess the nationality of the owners and the architects. Beyond my experience and the data of this research, which in no case could

212 See **Faroqhi (1995).**
213 See **Αρχάκης; Κονδύλη (2002).**

sustain such a claim, two more observations enforce the above argument. [Some cases of 'national' characteristics on architecture on pp. 147, 181 – 183 and 192]

Firstly, in case such differential characteristics existed, the relevant bibliography would include them. However, there are not, in the bibliography, many cases that a researcher guesses the identity of the house without archival research or personal knowledge.

Secondly, in case things were as obvious as they are with dress code, there would not be disputed areas, buildings and architects, which is very often the case in the Balkans. I, therefore conclude, that nobody really can claim that an absolutely national style existed in these areas however different cities, as sums of their objects, might have been. So, a 'pure' national style has never been developed for the reasons I have already mentioned. The only national details or styles I can detect in the cities are just noticeable higher frequencies and repetitions of existing elements by certain groups. Direct denotative symbols do exist; but they are a very small part of the whole number of the urban objects. I should, though, exclude mosques, churches and synagogues, which bear series of symbols and elements due to their function. It seems that the architectural elements of the religious buildings did not significantly contribute to the creation of trends in their vicinities but the contrary; the civil architecture influenced gradually to a certain degree the religious architecture.

4.2.6 The construction of class identity, the ironwork and the architectural elements

According to the discussion above, the social stratification and the symbolic capital played an important role in not significantly using the architectural elements to denote national identity. The architectural elements are associated with social strata, to budgets and to areas, but it has never been proved to be especially associated with certain nationality or religion. The association to a class is often obvious given that in certain areas, very poor or very rich for instance, iron elements become scarce due to the aforesaid variety of reasons. The other categories of elements also change throughout the city and its different areas.

However, the deep changes in the Ottoman society had an important impact on the social structure, the urban geography and consequently on the fragmentation of the urban areas. During a very long period of the Ottoman rule the social stratification was promoting a high class based an Ottoman style of noblesse. Little lower, high members of

the guilds, high positioned *ustas*[214] were gaining enough recognition to permit themselves a good dwelling. Furthermore, merchants and higher state employees were also potential owners of prestigious dwellings. These dwellings, if concentrated in a part of the city, would create areas of prestige. Nevertheless, this was not the case. Community-based divisions in the city during the greater part of the Ottoman era prevented all these people from gathering in one place. Moreover, the tough construction rules, especially for non Muslims did not favor an earlier sprawl of imported trends or a vivid development of the Ottoman styles. [215]

Consequently, before both, all these strict regulations were loosened and the old social hierarchies overwhelmed, no compact areas of high prestige were created in the cities. With some interesting exceptions, one cannot find in the Ottoman cities before the *tanzimat reforms,* so extended and broad areas of higher prestige. High budget *konaks*[216] were very often surrounded by modest dwellings or concentrated in rather small areas of prestige within limited districts.

The aforementioned, massive introduction of Western designs coincided vaguely with the transformation of the urban areas. So, it was quite a frequent phenomenon to have areas of intense innovation both in urban design and architectural details. The main criterion for acquiring property or living in these areas of higher prestige was economic. The old dwellers of the areas, if the areas were not formerly fields, were offered significant amounts compared to their income in order to leave. Given that after tanzimat reforms entrepreneurship opened to all communities, the aforesaid areas became mixed districts in the national perspective. Thus, the newly formed prestige areas were, since their creation as such, sites of low national and strong class profiles. At the same time, although created by various factors, these areas became the common place and the line of convergence of people belonging to different communities but with a new shared characteristic: high socioeconomic status.

I have argued how certain systems of objects were preferably used for class rather than national connotation. The aforesaid in this paragraph shows how the gateways of novelty in the Ottoman cities were de facto delimiting intense national affiliation. Although certain elements of national identity have been used in prestigious areas of Pera and Hamidye, these were made occasionally in a non systematic manner and therefore they cannot be seen as 'national' styles. I have already shown, in Istanbul and Bitola, cases of

214 Ustas are the higher masters in the hierarchy of the guilds.

215 **Todorov (1997)** gives some excellent accounts on the Ottoman cities of the Balkans with a special focus on the socioeconomic structures and transformations. See especially **chapters IV, V, IX, XII** and **XI,** for a deep analysis of the Ottoman urban phenomenon and the transformations of the social relations and the urban space.

216 Prestigious residences

elements (meanders, hilals[217] and onion-domes) used as national identifiers and their vague meaning loads.

Whereas these cases were very limited, the cases of class connotation of architectural elements were numerous and kept increasing during the last decades of the Ottoman period. Dozens of ironwork elements and hundreds of other objects have exclusive or important concentration in high prestige districts. At the same time, these relative concentrations were attributing by their renegotiations or absences to the creation of a big part of middle and low strata's architectural identity. As the Ottoman period was reaching its end, class connotations of the architectural elements were rising.

217 Muslim half moons.

4.3 The object as a knot; immaterial value and fetishism

In 4.1 and 4.2, I reached to some conclusions that will answer my research questions. In this subchapter, I will attempt to generalize some of these results in an attempt to make a small contribution to the theory of objects and design.

Ironwork elements and architectural ornaments are artificial objects and as such, they share properties and features with other sets of objects in the social domain. Objects are material entities that, due to their natural features, have similarities and differences when compared with each others. Objects do not perceive difference. Difference and similarity are human perceptions[218]. Whether two objects are identical, similar or different is defined by the human observer according to fluid and relative criteria. There are not two identical objects in this world. However, depending on human purposes and intentions limits of *tolerance*[219] are defined. Tolerance is defined by purpose. Two brackets, for instance, are alike when they just decorate a balcony even when made of different material. Tolerance, in this case, is very broad for defining the brackets' material. In case the balcony should be sufficiently sustained by the bracket, tolerance becomes narrower and the material resistance becomes important because of the purpose.

When two objects are not identical, within the limits of the discussed *tolerance*, they are not necessarily different. Within the boundaries of equally subjectively and socially defined limits, objects are more or less similar. Resemblance, or otherwise, absence of difference, classifies objects into the same set or into a *class*[220]. A class is therefore a set of objects created by partial absence of differences under an intentional observation. This partial absence of difference is defined by certain propositions. (Fig. 4.6) [See cases of broad and narrow classes and typologies on pp. 73-75, 94, 127, 128, 144, 151, 194 and 200-202]

When, for instance, the proposition is shape, one may have in the case of railings, the 'curved-railings' class. According to the geometry of their curves, railings enter deeper or more superficially the respective class. Another proposition could be "art nouveau

218 **Decartes (1637)** is considered one of the founders of this thought. This reference to him does not constitute any prove of this general opinion but an indication of a general epistemological framework which is based on rationality. From Descartes, thus, I borrow the rational context and I reject any transcendental implication. Therefore, my approach is materialistic and Democritian; whenever an imaginary entity is implied, this is the product of the thinking matter (and not an ontological subject per se), **p. 111**.

219 Tolerance is a term borrowed from mechanical engineering. It is the dimensional deviation from the ideal size that is permitted for an item to be accepted for a certain purpose.

220 A general theory of fuzzy sets in **Dubois, Prade (2000)** with a good reference to the philosophy of fuzzy sets, which has application in cases like the one examined in this thesis and a special focus on main concepts of fuzziness in **pp: 24 – 77**.

railings"; in this case there are certain items that get deep in this set, fulfilling the definition of the style and thus the proposition of this class. Other items, with similar but slightly differing 'laces', curves and floral forms, are in the periphery of the class. In case the numbers of such items start to proliferate, the creation of a new, akin class is more likely to occur.

4.3.2 Set of objects and fuzzy meaning

The objects and their constructed classes enter the social domain. Suppose (just theoretically at this point) that objects and classes are void of meanings and values in the first place. People, who are observers, producers and users of the objects, connect vaguely, after repetitive actions of observation and use, objects and their classes to other objects, to other classes, to people, to times or spaces. They connect classes, which are sets of objects, to other sets of material or immaterial entities[221].

Here are some examples: when a category of objects (for instance, western-fashioned clothes) entered Istanbul, they meant nothing to great parts of the population (that is less the case in our era and with our media, but this does not subvert the general concept as it will be later formed). The clothes were under observation by the inhabitants of Istanbul, whatever their class might have been. Repetitive uses of the specific cloth typologies within certain areas, by certain people under certain circumstances, created connections between the typologies of the objects and other typologies and classes of objects or practices. Western clothes were mostly connected to middle and upper social strata, to the areas of Galata, Pera and Kadıköy, and more to younger than to older people and more in the 1890's than in the 1880's[222].

As somebody could easily observe, these connections were neither absolute nor stable, given that the proliferation of the objects, the changes in the material status and transformations of practices were rendering connections and classes' boundaries very fluid. The connection between a class of objects and other classes, milieus or practices is not an originality of the Ottoman Empire of the late 19th century. That was only a period of

221 **Peirce** had founded an important brand of semiotics in the 19th century. Though his approach is considered rather structural Peirce himself lets margins for shifts and uncertainty in meaning. **Eco** broadens this approach on uncertainty and reaches the possible limits on the pursuit of meaning **(1975)**. My approach gets many analytic tools from semiotics, yet it denies strict structures and it rather prefers flows and streams, as I will later further discuss.

222 At this point, I think that **Deleuze (1968)** gives a firm philosophical background for the function of the proliferation of resembling patterns for the creation of a tendency. Deleuze **(pp: 82 – 83)** gives a special emphasis on the line between past and present, which I also consider important.

interesting examples. Connections are always made between sets, something which is a major ability of the human discourse[223].

These connections are not, though, an ocean of irrelevant, subjective and totally disordered judgments and links. There are several forces that keep connections within more probable areas, making links smoother and more stable than whirling currents of fugitive subjectivity. I shall call these forces, these material and immaterial factors, *attractors[224].* These attractors are both social and material. The material attractors include the brevity of human life, the scarcity of material availability and more, whereas social attractors include trends, *habitus*, prestige, distinction and others. The former, being material, are rather simpler to be proved whereas the latter are conceptual entities and therefore harder to be defined[225].

I will now reverse the connection concept, according to how an object or a class of objects gains meaning through its implications in the social domain. An idea, expressed through a proposition, creates a *conceptual field* [226](See fig. 4.7). This is a metaphoric entity that comes to reverse the idea of the classes' connections. Let us consider the proposition: "Expensive houses' railings" in Istanbul of the 1890's. This proposition creates an immaterial concept, an idea for an imaginary object that never gets materialized. [See also the case of the "Bitolian house" on pages 59, 87 and 88, as a case of a conceptual core, which never gets materialized] Objects of the real world lean closer or more distant from the conceptual core created by the aggregation of subjective judgments and then directed by attractors to dominant positions. So, returning to the previous example, judgments, however subjective they may be, tend to be concentrated and distributed around that conceptual core. Most people at that time would probably say that marble balusters were belonging to the conceptual core of "Expensive houses' railings" whether they could possess such an object or not. This system is dynamic and *differential.* Every object, added or subtracted from the set of objects of a *circumstance,* (that is from a spatial and temporal instance) contributes to the materiality that gives birth to the

223 **Zlatev (2009)** gives a state-of-the-art analysis on the creation of thought and deductive logic on living beings.
224 I borrow the term attractor from the Chaos Theory. In chaos theory, attractors are the factors pushing the outcomes of dynamic systems towards favoured areas.
225 At this point I would like to refer to the famous **Greimas** square (**1966**). According to this idea, the antithesis of the contrary concepts, further strengths their meaning.
226 This is another approach for the isotopes as defined by **Kerbrat-Orecchioni (1983)** and **Eco (1986, pp. 190-199).** Although their approach has a narrative gateway, they leave an open space for other systems, objects included.

conceptual core. Therefore, the conceptual core and the judgment are by definition *shifting* immaterial entities[227]. [Some cases of differential systems on pages 61, 69, 81 and 148]

It would be impossible to find meanings and values on the objects without the attractors. Trends, for example, tend to concentrate most of the forms into certain favourite currents, which have a time of inertia however shifting and flowing they might be. Prestige is another immaterial attractor. Many people try to maintain a decent material status and this leads their choices to certain preferred classes of objects. These objects were recognized by other people as 'decent' objects. This multilateral 'tug-of-war' maintains conventions about 'decent' forms within limited ranges of alternative classes of forms.

4.3.3 Narrations

Most objects and events of the world exist beyond our experience[228]. These gaps of knowledge about the world, its material status and events, are filled by *narration*. Narration is whichever set of *differences* describes other sets of objects or concepts. They are whichever significant sets that may mean something to somebody. These narrations help us to fill the gaps of experience by deduction. We have certain experience about a place or a time and their contents. Narrations, the truth of which we more or less verify, makes us construct the missing parts of what exists beyond our direct experience.

Narrations are major impact factors on the conceptual cores. I come back to the case of the late Ottoman Istanbul; most people ignored the material status of the West. This status was known to Istanbul and its people, either through the few western Europeans visiting the city or through the numerous texts in books and newspapers[229]. Furthermore, the image of this status was enforced through narrations about the West and through the narrations created by other narrations. The narrations about the West were filling the gaps of the experience. The evidence, about the 'progress' and the 'splendour' of the West, was coming through the filter of the narrations which accentuated some aspects and attenuated others. When adopted by high social strata in Istanbul, the narrations had

227 **Eco (1975)** gives a similar definition of the concept of the core, defining it trough the terms of "galaxy" and "nebula", giving in such manner a parameter of uncertainty **(pp. 248-254)**.

228 With this declaration, I do not intend to enter in an epistemological enquiry. I am rather referring to the practical fact that one can have practically limited knowledge of the surrounding environment, due to the physical features to the body. I do not, nevertheless, enter in a discussion on the philosophy of perception and on the long debate on materialism and idealism.

229 See various pages of the second chapter.

already impacted on the materiality, having created major trends in several aspects of social life and having created new standards of prestige[230].

These narrations about the West and its trends, and later, about the people in Istanbul adhering to them, were converting into materiality, objects and practices. All these new objects significantly changed the conceptual cores about many propositions. The proposition "entertainment of the middle class' youth" involved in each moment very different objects, not the former Ottoman but the new European-styled ones. New narrations created by the new conceptual cores, further affect materiality creating therefore a loop of constant feedbacks and shifts. The new conceptual core of 'entertainment' for example, possibly reinforces trends towards it, boosting production to certain direction and thus proliferation of certain objects (in the case of entertainment, football courts, summer resorts and their appurtenances etc). New narrations cause the shifting of the conceptual course because neither the narrations nor the objects produced focus on the same *core,* which are anyway in constant renegotiation and transition.

4.3.4 The dialectic properties of the object

At the beginning of 4.3.2 I made a supposition; that objects enter the social sphere void of meaning and values. That never happens. We all enter the social structure and start to create our conceptual connections at a certain point of the aforementioned *loops* of narrations and *conceptual connections* at certain circumstance. The producers of the new objects, be they artisans, designers, engineers or whoever, are more or less aware both of the conceptual cores and the narrations. Consequently, they do not only take into account the functional prerequisites of the object to be designed but also the meaning it may bear because of its future class adherence, the conceptual core to which it may belong and the narrations that may affect it. Taking these into account, they further modify the form. They adopt and use the differences and the forms of pre-existent classes of objects in order to take profit of meanings and connections accumulated on them and place the object within certain position of the social sphere. The function is metaphorically a 'carnival'. The object gets vested with the mask of already created concepts and values.

The object by itself means nothing. Objects react or do not react with each other in a deterministic manner. Meaning is invested on the object when reference to another set of objects or concepts occurs. I have already described these mechanisms. Attribution of

230 As **Akin (2002)** points out, examining newspapers and literature, especially on the last part of her book.

meaning is based on differences. If differences do not exist, there cannot be variations of meaning. The object has, by nature, differential characteristics and therefore it can bear meaning. Yet, it is not sure that it will do so. Should it enter the appropriate circumstances, implications and observations in order to be loaded with meaning?

Here is an extreme example; rocks in the desert. There are thousands of rocks, similar one to the other in the middle of that vast area, the Saudi Arabian desert, for example. These rocks do not have any meaning at all, except of their vague collective descriptions as 'desert rocks'. When human actions involve some of these rocks in the social sphere, they gain meaning. This is how the black stone of Kaaba entered the domain of human action and narratives and got invested with meanings and narrations.

The discourse is a major factor in the creation of the object's value. Consider an object from Western Europe, an i-pod for instance, brought to the Sentinel Island of the Adamans[231] and an object brought from the Sentinel Island to West Europe, for instance, an object for hunting. Both objects are quite useless to either part because they cannot be used. The value these objects may bear, may possibly be connected to their rare form. Imagine the narrative coming to both parts informing about the objects' origin and their rarity in their new context. This information can significantly increase the value of the objects and invest on them meanings connected with all the past assumptions about their respective origins.

The attribution of meaning on the object is not, therefore, a homogenous and standardized phenomenon. Some of the objects, and to very different degrees, will be loaded with meaning. Here is an example from ironwork; curved-blade railings were a major trend for low and middle strata of the rather poor areas of Çayir. This design was avoided in most of the prestigious areas of Thessaloniki, where other typologies were preferred. Given the relatively higher density of the typology in poorer areas one could assume that this form was connected to the concept of 'modest constructions'. This typology is not an exclusivity of Thessaloniki. I have met it in Venice and Faro. However, in these cities the samples are very scarce and installed on buildings of every kind. Due to their limited number and their faint implications in the social domain, curved-blade railings did not gain any meaning at neither Venice nor Faro and remained isolated cases. They did not enter any cycle of narrations; no one created any narration about them so

231 The Sentinels are the inhabitants of a remote island of the Adaman archipelago of India. Under the protection of the Indian government, the sentinels have never come in close contact with any stranger, attacking everyone who comes close. Their language is unknown and absolutely incomprehensible even to the populations of the neighboring islands.

they did not enter in the domain of the orientalist discourse of other cases and did not gain any added value.

The object, according to the aforesaid, can function as a reflector of human discourses and thoughts. This happens because people can recognize on the objects any actions and discourses of other people. The object functions as an accumulator of social practices, discourses and narrations. This is a feature of the object in the sphere of metaphysics.

Returning to the previous paragraph, one can think of many objects that are made on purpose to reflect peoples' thoughts, practices and aspirations and others, which just periodically reflect actions and discourses. An excellent example of the first category is money.

4.3.5 The fetishism of the object and the trends

Fetishism was, according to its initial definition, the 'spiritual nature' of material objects. A materialist perspective does not allow any room for a spiritual part of the object. The object is matter and nothing beyond this. However, according to the previous paragraphs, there is a spiritual side of the object, the origin of which is beyond its materiality and does not reside in it. It is the recognition of the conceptual constructions and the narrations of people in it. These narrations and meanings invested in the objects may travel beyond the individuals, beyond time and space. Highly symbolic objects, such as the cross or the sickle and the hammer and other less symbolic ones but also meaningful, such as golden rings, transcend times and spaces, aggregating the judgments and the narrations of numerous people and different circumstances. People recognize in the object this 'false' spirituality. They recognize their own spirituality in the manner it was invested in the object. The piece of cloth becomes a flag, a form of a golden ring a sign of marriage and so on.

People always see the material part of the object. They use rings for their fingers and perfumes for their body. They base choices and trends on this material part; but this is just a part of the whole. The other part is based on the fetishist side; objects are chosen and forms are designed because their respective classes, additionally to their meaning, bear the reflection of human actions and judgment; they bear an immaterial character which though created by humans does not belong anymore to anyone of them.

Chanel number 5 or Moleskine notebooks are nothing but objects in a big class of similar rivals. In the first place judgments, narrations – and as I always think, chance – triggered the addition of favourable meanings and values on them. As long as these values and meanings were accumulating on the objects, they started to be used as 'coins' of their added values. These uses further enforced the judgments and the accumulation of meanings on them. This practice further imposed the social uses and the implications of the object and therefore their fetishist – spiritual side.

4.3.5 The immaterial capital

The accumulation of *values* – that is of social and spiritual qualities on the object through its links to conceptual cores and social practices – creates a *capital* on the object. This *immaterial capital* is used in the *carnival,* influencing the whole procedure that starts from the difference and the meaning and goes to the fetishism[232]. The immaterial capital is whichever social and conceptual load gets accumulated on the object and can return to the social sphere as an interacting quantity.

As I have already said for other immaterial features of the object, not all material entities bear or will bear immaterial capital. The important thing is that they can bear it. The degree and the nature of the immaterial capital that can be loaded on the objects depend on the circumstances. The immaterial capital, be it social capital, commercial capital or whichever else, is an accumulation of linking power between sets of meaning and material entities. The expensive paintings or the precious gems do not have any value, if value is not added to them. Function utility is not enough; objects of similar utility, forks or dresses, may have extremely different immaterial accumulations, which are not explained by any of their functional properties.

The immaterial and the discursive accumulation of capital on the objects are well known to the people involved in its production, distribution and consumption. They use this capital during the *carnival process* as previously discussed. By using the immaterial capital, they can broaden the idea both of the social capital and the conceptual cores – narrations mechanisms. The immaterial capital is the fluid aggregation of values on the object or the *typologies of the objects.* The immaterial capital is not, therefore, socially

232 **Marx (1867)** introduced the famous term of the *commodity fetishism* in "Das Kapital" in order to justify the part of the value, and possibly of the price, which does not correspond to the production means invested to it. The fetishism at that time meant the animistic of certain tribes that objects have a soul. Marx uses this term in order to explain the soul the commodity as a projection of the social relations. Later, the term was broadened in order to comprise various kinds of objects, be they commodities or not. See: **Erstes buch, 1.4, 25-36**.

positive or negative, good or bad but any kind of concept the human mind can perceive. Thus, this capital can also be negative and then appropriately used for certain purposes. Just as the bourgeois use Jazz music as a symbolic capital for social prestige[233]; a beggar may use rags and their immaterial capital to enforce pity and ask for money. The immaterial capital becomes an entity, a vague object which in its turn can be used, commoditized and exchanged. The *hieroglyphs* of the trademarks, the *goodwill* of the businesses, become fluid entities which are sold and bought in like manner to corporeal ones.

I have already discussed that the important feature of the object is that it can be discursively and socially loaded with immaterial capital. Not all objects are loaded; neither are all of them equally loaded. Many objects - and the architectural elements are very often among them - are partially and lightly loaded with immaterial capital. Therefore, whereas a simple demonstration of a highly loaded object, such as a uniform, directly and explicitly demonstrates its high conceptual charge, a simple demonstration of an iron artefact may not reveal it. I have pointed out, for example, that one has to investigate and compare many ornaments, from many cities and their districts, in order to draw some conclusions about the difference in immaterial capital between iron and plaster brackets. This means that a conclusion about the social implication of iron artefacts involved the statistical and comparative analysis of many of them in order to detect the rather lower load they bear. I have discussed, for instance, that the widespread 'G-key' brackets were avoided in high class buildings, that as we go to higher classes some iron artefacts disappear (brackets) whereas other proliferate (marble elements) or that there are popular and unpopular syntaxes of artefacts depending on the circumstances. All these actions and choices, driven by trend, economy or taste, involved very low loads of immaterial capital, which were extremely hard to detect even by the agents of the choices themselves.

233 Just as in the two previous subchapters, my reference here has a connection with **Bourdieu**'s *symbolic capital* (**1979**). Bourdieu in his book **"Distinction"** does a detailed investigation on how various objects and activities (such as films, music or holidays) are used in the social domain by different individuals and groups of various classes as marks of distinction. Bourdieu uses the term of the symbolic capital, a term that can be connected to the fetishism of the commodity, for it describes the immaterial value of the object which is attributed to it trough social practices. This brilliant idea opens the path for many analyses and discussions on the social life of things and on the fetishism of the commodities. The object, immaterial entity itself, gains a 'life' or a 'soul' (in the case of fetishism) because is living beings to recognize on it, the intentions and the aspirations of humans. This is the case of one of the most prominent objects with a high capitalized symbolism on it: money. Made of paper or, most often, cheap metal, money gains all its value because people recognize on it their aspirations and intentions. In like manner, all the objects which enter the social sphere are loaded with symbolic capital, or as preferred to say in this thesis as more general term, immaterial capital. So, the gift is loaded with all its social connotations, the uniform with precise tasks and obligations and the garments' trends can be positioned on the spatiotemporal axes.

A low immaterial load does not mean lower importance in the creation of the urban geography and the trends. The aggregation of many objects and their repetition in time and space gives importance even to the most minute of them which combined with meanings and implications of the objects. Consequently, a mere artefact may usually mean something within a very limited range of concepts but combined with other artefacts within a broader context, following or negating a more general idea, it may add to the collective meaning of an entire typology or category of objects. This is why the artefact and possibly, many other objects, however static they might be, are part of a fluid system, of a current. They are part of a context, which is always changing because the objects themselves change the context in which they enter.

4.3.6 The trends

The aggregation of similar objects, organized in typologies, their persistence in the social domain and their intense or weak loads of meanings create the fluid *differential* flows which constitute the concept of trends. The trends are repetitions of objects belonging to one or more similar typologies within a material and a narrative set of contexts. As already discussed, nothing is stable given that each entity added (material object or narration) shifts the typologies, the trends and their meanings. However, the number of the entities that form the trend and the usual rhythm of these phenomena permit their observation and social use.

An example can be taken from architecture; I have already indicated the various combinations of the 'classic' ceramic balusters and their biography through time, contexts and architectural styles. Each 'classic' ceramic baluster added enforced the trend that involved its use and modified the broader architectural trends (e.g. neoclassicism) by replacing rival balusters. However, this 'classic' ceramic baluster was not the only typology of balusters. Other more or less similar balusters, regarding material, dimensions and forms, were combined within the framework of the broader architectural trends. Some of them proliferated whereas others did not. The reasons of relative success or failure are material-conceptual, as I have already analyzed. What I want to stress about trends is that, fashions are born and die on every moment by every object added or subtracted from the social sphere (which means not only the real objects but also those of the aforementioned design *substratum*). In this sense, every object is the beginning of a potential trend, which will be boosted or attenuated by other objects belonging to the

narrow typology or the broader class of relative objects. Therefore, each 'classic' ceramic baluster added was propelling the trend of its own typology on the various architectural trends (and in this case: contexts) which were succeeding one another. At the same time, a relatively higher baluster, a marble baluster or a more 'austere' baluster were propelling the broader class of "balusters", which contained them as typologies. Yet, they were also the possible beginning of the trends to come, of the propositions that could eventually increase greatly in the city, depending on the coincidences of the social and material factors: the existing trends, the narratives and the attractors.

This is not just a theoretical conclusion. Existing trends could condemn an emerging idea as obsolete or too vanguard. Narratives could obstacle the proliferation of a very trivial or a too snobbish artefact. Attractors, such as economic coincidence, could make the object very expensive to acquire or too 'cheap' to be combined with 'better' ones. As all these major parameters flow, they leave preferable ranges and possible paths for some typologies to succeed and to grow into trends.

I come back to the explanation of the meaning of things and their implication in the social sphere. All this fluidity, as I already described it, would make any attempt of searching the meaning and the role of the objects in the human domain a vain task. Nevertheless, the great number of objects that create a typology, the vast number of people involved in trends and narratives and the strong inertia of our habitus, make these 'snapshots' significant, because values, immaterial capitals and meanings do not change that fast. These main attractors (and others such as material conditions, economy, technology, the brevity of our life, the limitations of space and time) add to the flows the amount of viscosity, which makes their speed of changes possible to be observed and used.

Conclusions

The aim of every research is to answer to the initial questions put, either by confirming or rejecting their main presuppositions or even by totally modifying them, according to the data gathered, to their analysis and to the 'conversation' with the existent literature. Therefore, I will now proceed to an attempt to answer the research questions of 1.2, based on the context described in chapter 2, to the data presented in chapter 3 and their analysis in chapter 4.

1. ***Which were the ironwork elements and typologies used in the biggest cities of Macedonia and Thrace during the late Ottoman era?***

The main ironwork typologies of four important Balkan cities were presented in this thesis. As it results from the relevant literature and my research, these ironwork typologies were partially, western inspired and later locally renegotiated. Although the variety might not be impressive, as in some central European countries, the research has detected many typologies of elements, which were classified in the respective categories. The required maximum size of the thesis does not permit the presentation of all categories of elements. Nevertheless, this material was gathered and will be eventually presented in the future.

2. ***How are the ironwork and ornamental elements distributed in the city and how do urban activities impact on them?***

The ironwork and ornamental elements are not equally distributed in the city neither in terms of density nor in terms of typologies. The use of the buildings, the incomes of the inhabitants, the dates of construction and the local tendencies have played a role in this inequality of distribution. Contrary, religious and ethnic affiliations seem to have influenced minimally their distribution in the city in a hardly detectable way.

3. ***Which is the dialectic relation between the buildings' architectural style and the typologies of the ornamental elements of its façade?***

The syntactic analysis of the ironwork, the other architectural elements of the façade and the general morphology and style of the buildings, has shown that there are

various combinations and crossings of typologies and styles. One typology of architectural elements served different styles of buildings, whereas in other cases, one architectural style was served by different typologies of objects depending on personal choices, on the district of each city or on the city where a building was built. The architectural style was imposing a general range of acceptable elements' forms, which was, however, materialized in very different ways depending on various contexts and circumstances.

4. ***How are the different life-cycles of the objects combined and how do they interact as mutually 'sliding' systems?***

This is the reverse question of the previous one. Thorough observation and registration of the elements' typologies and of their usage has shown that their life cycles are very different. Some live brief 'lives' whereas others survive for many decades. Some sprawl throughout entire regions whereas others remain limited in small areas. Some proliferate reaching high peaks whereas others are found only in very small numbers. These and other characteristics of the objects, their typologies and their categories are the consistent parts of the façade, which is both combined through specific instances of their life cycles and a snapshot of these same life cycles. The typologies are 'flowing' in the city as constantly changing streams that coincide on the façade. The architect sections the typologies available at a certain instant of their flow, acting on them by enforcing them and consequently attenuating others.

5. ***In which ways might ironwork and objects of the public space function as immaterial factors in the social network?***

The analysis of many elements in the context of the districts and the cities has shown that objects can be loaded by weaker or stronger immaterial capitals and meanings and therefore be connected to certain judgments and appreciations. The immaterial load on the objects can be so weak that the only way to prove it is by the examination of many items, a whole typology either in an entire city or in a broader intercity area.

6. ***Which are the mechanisms that influence taste and create trends?***

In the fourth chapter, I have shown that taste is influenced by many factors in ways that can be more or less detected depending on the nature of each one. Certain factors, such as political events, may seem very irrelevant but play, through a chain of indirect

processes, a role in the formation of trends. Others, such as the mainstream tendencies and the zeitgeist, have a more direct, yet, somehow 'metaphysical' impact on the formation of the trends. Factors, as the personal taste or the prestige, can be supposed but never definitely proved, since that the agents of the creation of the buildings will never affirm or deny results of architectural analyses. Tastes are born, enforced and decayed every day, in every moment by each choice of any element, be it already existent or innovative.

A study of ironwork in the Balkans during the late Ottoman era

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Doctoral Research Thesis

(Volume 2)

Appendices

Images and figures

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Chapter 1 – images

Fig. 1.1 Villa Allatini – Hamidiye district Thessaloniki (1888, architect Vitaliano Poselli, photo. Auguste Léon 1913)

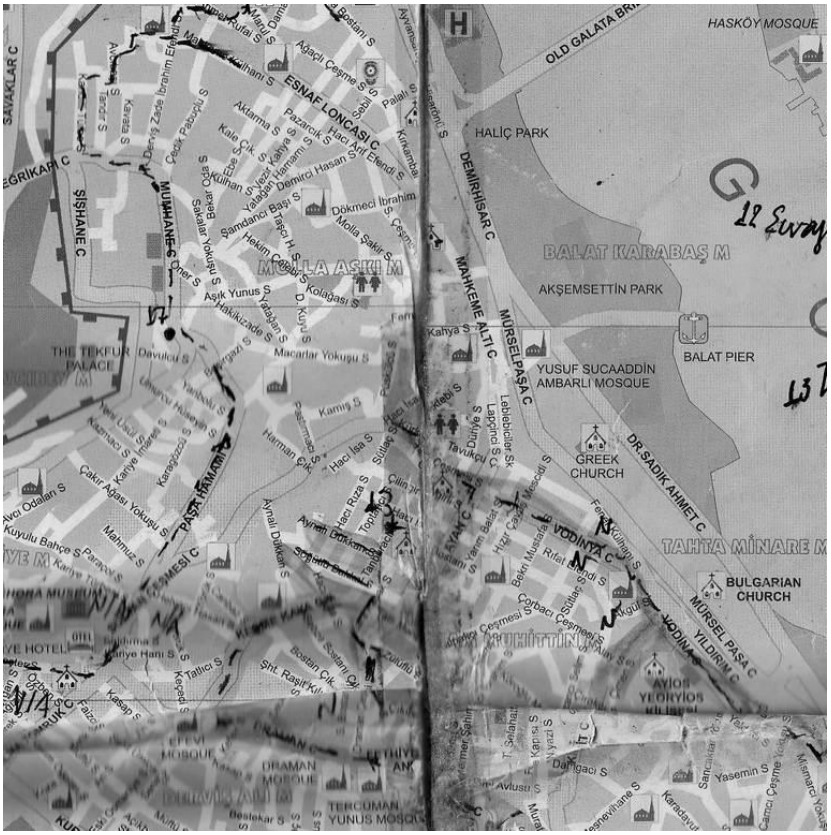


Fig. 1.2 Part of the map showing the itinerary of 29 May 2008 and some notes

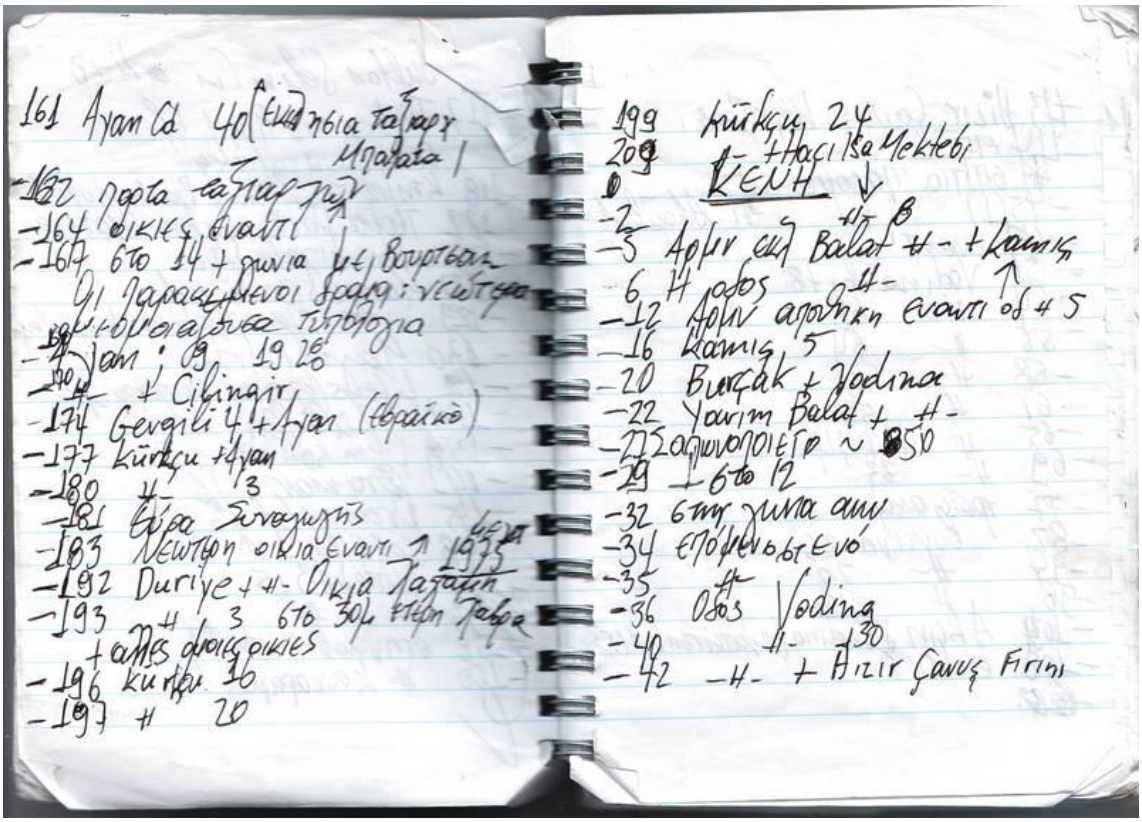


Fig. 1.3 Extract of the notes referring to the same route

Fig 1.4 Some of the data are inserted in the file properties

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Street	Num.	Budget	Style	Floors	Use	Surface	Balcony	Bracket			Door	window	overdoor	Gate	date
2											Mat	Style				
3	Kurkcu	24	ml	simple	2	res	ml	n	g-key			w/i	n/i	n		;>1920
4	haci isa mektebi + kurkcu mh			ahsapian	2	res	h	curve	n			;	n/i	n		;1900
5	haci isa mektebi		l	sim, brick	1	res	l	n	n			w/i	90d.blade	n		;1900
6	armeniki apothiki kamis m			ware, sim	1	ware	mh	n	n			i	n/i	iron plate		;1890
7	kamis 5		l	ist.unkapania	1	res	l	oriel	n			w.i romb	45d.2vol	arch		;
8	burcak + vodina		l	simple	1	res.com	l	oriel	small,g-k			shop	n/i	n		;
9	yarim balat + vodina		mh	simple thrac	2	res.com	m	curve	n				n/i	n		;1900
10	yarim balat 12		l	sim.brick	1	res.com	l	oriel	n			;	1/2bars 2vol	n		
11	yarim balat		mh	sim.	2	res.com	mh	floor	sim.bar.vol			;	vert.bars+hor	n		;1900
12	yarim balat		ml	ahsap-kagir	1	res	l	oriel	n			w	bars,part	n		;
13	yarim balat		m	ahsep-kagir	1		m	n	n			;	cast tek parca	n		;
14	vodina	30	m	simple ist	2	res.com	m	curve	n			w	n/i	bars		
15	vodina+hizir cavus		m,mh	chalkedonian	2	res.com	m	wood	wood,roof			w	n/i	n		;1900
16	vodina 76,78		ml	ist. Class	2	res	l	oriel	n			w/i	curv,lat	w		
17	vodina68		m	ist.class+ahs	3	res	ml	oriel+w,bars	n			w	curv,lat	w		
18	vodina 64			ist.class	2	res	ml	oriel+curv	n			;	n/i	n		;1920concrete
19	vodina58		ml	ist.clas	2	res	l	oriel	plaster			w/i	n/i	;		;1920concrete
20	vodina50		m	ist.clas	2	res	ml	oriel	small g-key			w/i	n/i	;		;1890
21	vodina 46-44		m	ist.simple	3	res	m	oriel	plaster			w/I rombe	bars45d	arch, 1/2circle		;1915 concrete
22	vodina 33		ml	simple	2	res	l	oriel+curve	n			;	n/i	;		;
23	vodina33		m	ist,part	2	res	l	oriel+curve	plaster shell			w	w	w		1901
24	vodina26		l	simple	1	res.com	l	oriel	small g-key			w+rombe	bars, all	bars		;
25	vodina 20		mh	ist,part,ren	3	res	m	oriel+4lobes	plastergkey			iron	bars, blades,p	arch,laces		;
26																
27																

Sheet1 Sheet2 Sheet3

Fig. 1.5 The same building marked on the excel

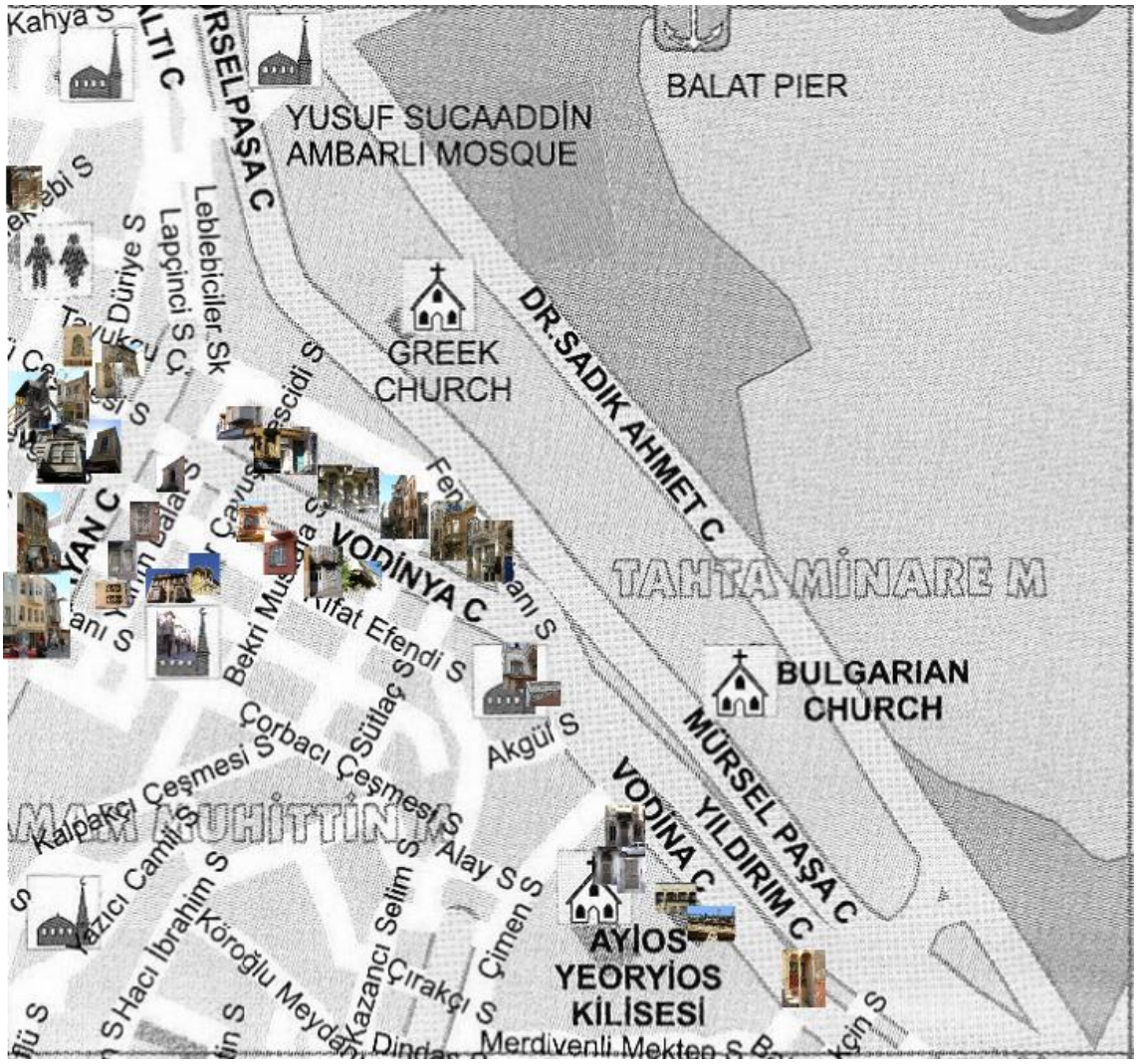


Fig. 1.7 Map of photos

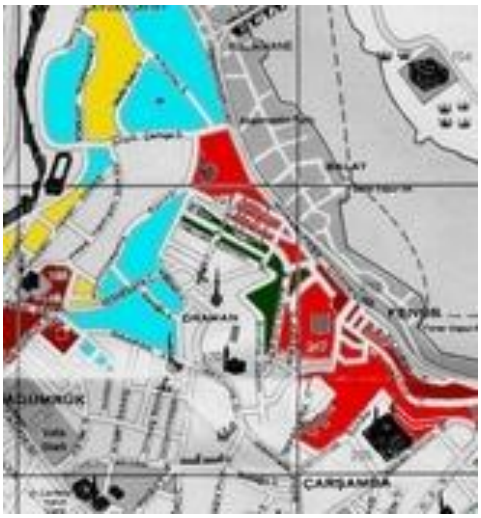


Fig. 1.8 Uses of areas (from the general map of Istanbul)

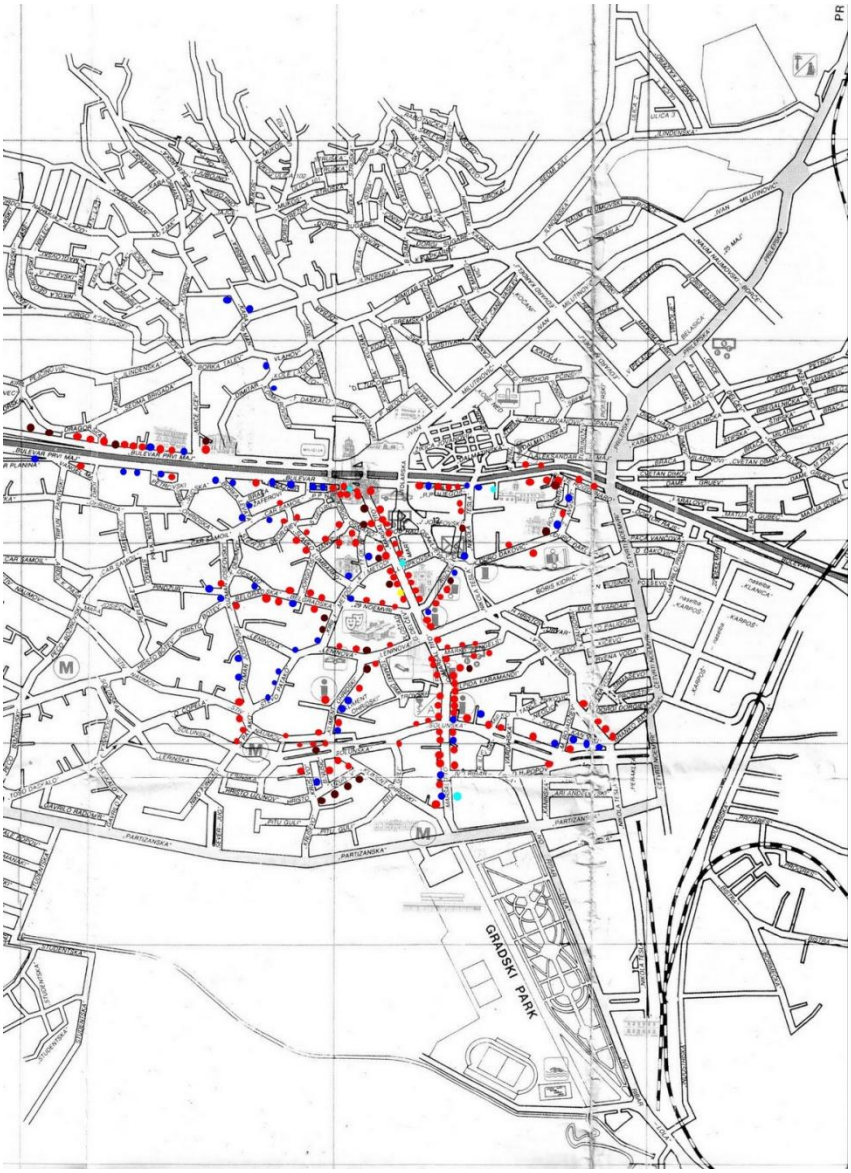


Fig. 1.9 Brackets' materials map for Bitola

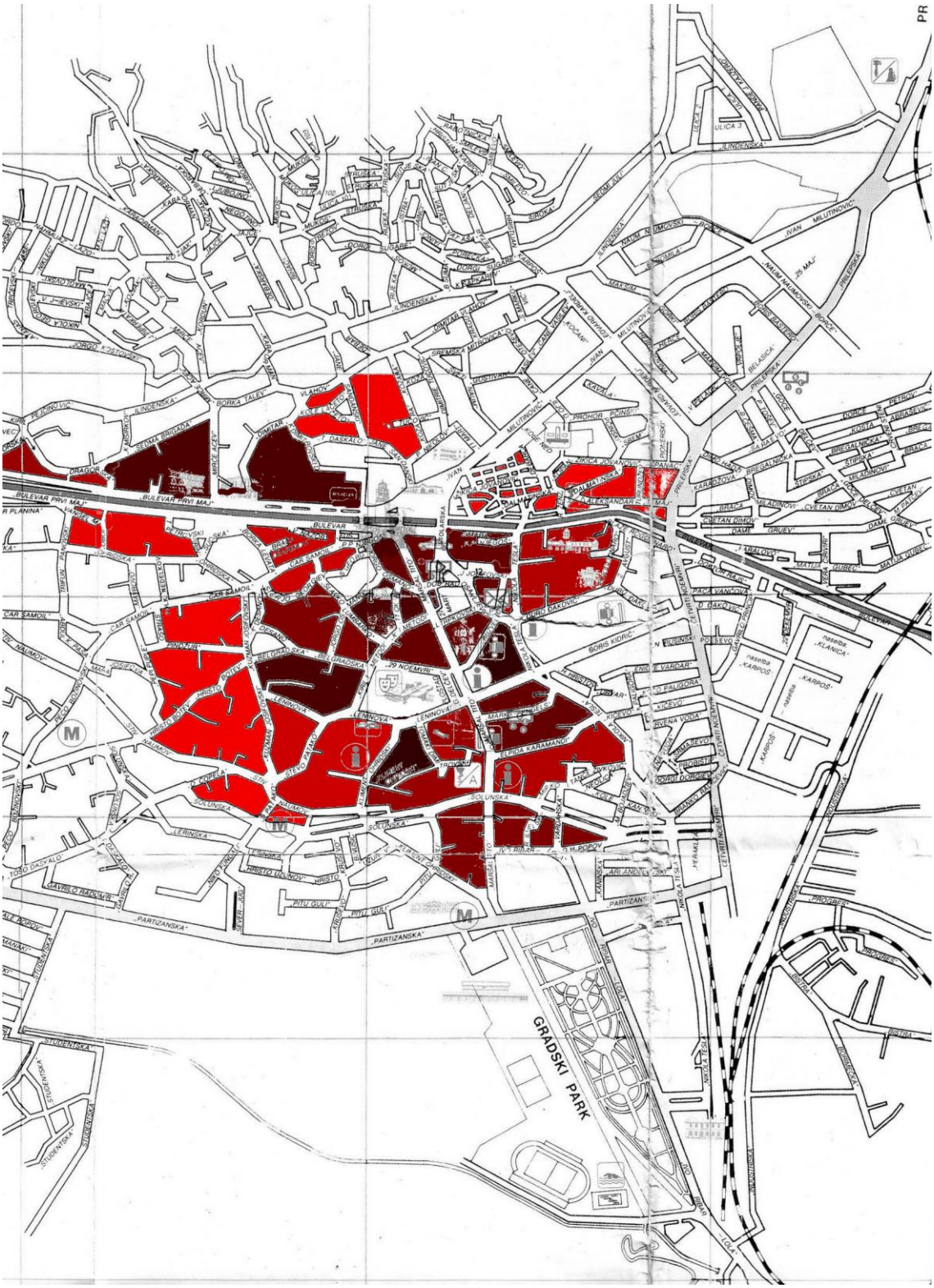


Fig. 1.10 Iron concentrations in Bitola

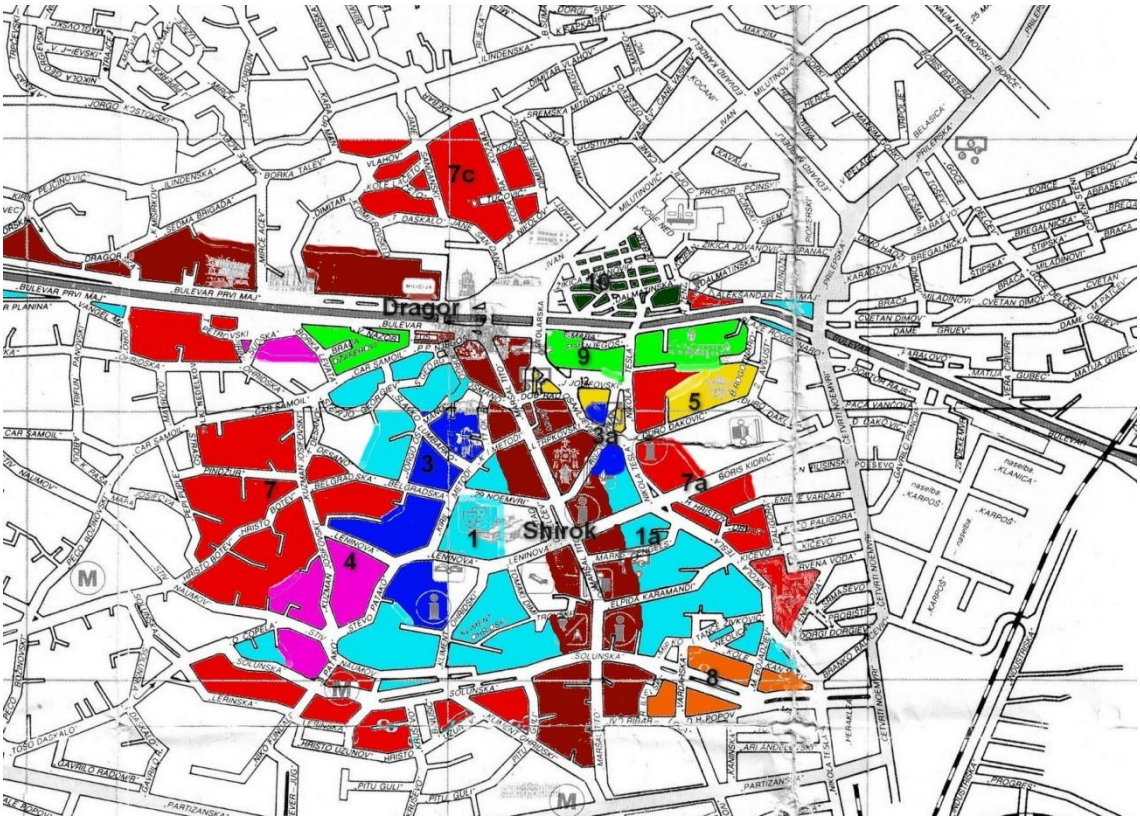


Fig. 1.11 Bitola – Architectural areas

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Street	Num	Budget	Style	Floors	Use	Surface	Balcony	Bracket		Door		Window	Gate	Fence	Overdoor	Basement	
2									Material	Style	Mater	Style						
3																		
4	Osmano	16	Normal	Classic Bitola	2	Residence	Mediu	4l	iron	gk	?	?	horseshoe					
5	Osmano	18	N-high	Neoclassic Bit	1	Residence	Medium	4l	iron	gk	w	w	horseshoe	New	new	w		
6	Osmano	20	N-high	Neoclassic Bit	1	Residence	Medium	Cast-circl	iron	gk	w	w	N/A	New	new	arch,volute		
7	Osmano	13	m-h	Neoclassic	1	Residence	Medium	4l	iron	gr	w	w	N/A	n/a	n/a	arch,volute	h/shoe	
8	Lumparkofski	11	m-h	Neoclassic	1	Residence	Medium	4l	iron	gr	?	?	n/a	n/a	n/a	arch	?	
9	Lumparkofski	8	m-l	simple	1	Residence	m-l	st-vol	iron	gr+gk	w	w	horseshoe	n/a	n/a	arch	n/a	
10	Lumparkofski	12	m	simple-orn	1	Residence	m	st-vol	iron	gk	w	h/s	h/s	n/a	n/a	arch?vol	h/shoe	
11	Lumparkofski	terra	m	simple,orn	1	Residence	m	kor	iron	bud	w	n/a	h/s	Brs.VI.TR	wall	n/a	n/a	
12	Lumparkofski	cor.	m	Neocl.Simple	1,5	Residence	m	Cent.cast	iron	gk		h/s						
13	Lumparkofski	22	m	Neocl.simple	1,5	Residence	m	st-vol	iron	bud			h/s+h/s2	n/a	n/a	arc.vol	n/a	
14	char samoil		m-l	Orien.simple	1	r/c	m-l	n/a	iron	n	w					arc.vol		
15	char samoil	43	neo					palata		monadika								
16	borka levata	8	m-h	neoclassic	1,5	Residence	m-h				w	h/s				arc.hs	h/s	
17	borka levata	5	m-l	Classic Bitola	1,5	Residence	l	Oriel	iron	Sm.Gk	w		h/s	n		w-gl	n	
18	pervi	112	h	Classic Bitola	1	r	h	Oriel	iron	gr	w		h/s	bar.vol,st	vol	rec.vol	n	
19	pervi	104	m-l	simple	1,5	r	m	built	mix	built, 4l	new		N/A	Bar.h/s	h/s	n/a	n	
20	pervi	98	m-h	simple	1	r	m-h	NEW										
21	pervi	94	m-h	simple	1,5	r	m			UNIQUE							KEPEGIA	
22	pervi+Majoro		l	simple	1	r,w	l	st-vol										
23	Shar Planina	3								NO IRON								
24	Ruzveltova	20	m	Orn	1,5	r	m-l	Crvol,stvol,crv		gk	w					vol		
25	Ruzveltova	26	h	Classic Bitola	1	r	m	n	n	n	w	bars	N/A		bars	?	LADDER	
26	ruzveltova	24	m	simple	1,5	r	m-l	or	l	2lobe	w	brs	n	br	br	?		
27	ruzveltova	20	h	neoclassic	1,5	r	m-h	built	l	n	w	1st,hs/2	NEW	NEW		gl		
28	ruzveltova	16	m-l	eccl.classic	1,5	r	m	or,vol	l	UNIQUE	w	vol	n	n	n	rec.vol		1923
29	ruzveltova	10	ml	ecc,simple	1,5	r,c	l	cer.class		n/a	w/l		n	l	l	l		;1920
30	ruzveltova	8		simple	2	r	ml	g-key	l	bar	w	simple	n	n	n	w		;1900
31	ruzveltova	2		urban	3	c	mh	plaster	pl				n	n	n	n		;1930
32	29i Noemvri	2;	m-mh	classic bitola	2	r	m	curved bl	n	n	w	clas	n	l	l	l		;1900
33	29i Noemvri	10	ml	simple, neocl	2	r	l	curved bl	n	n	w		n	n	n	w		;1920
34	29i Noemvri	12	m	classic bitola	2	r	m	circles	l	gr	w		n	n	n	n		;1900
35	29i Noemvri	20	ml	ecl	1	c	l	n	n	n	w		n	n	n	n		;1920
36	Kiril I metodi	14	h	neoclassic	2,5	r	m,mh	cer.class	n	n	w		n	l	l			1903
37	Kiril I metodi	23	h	ecl	2	r	mh	circles,cer	l	gk			n	built	new	n		;
38	Kiril I metodi	16	mh	classic bitola	2	r	m	wr1	1	bars	w		nal					;1900
39	Kiril I metodi	20	m	classic bitola	2,5	r	mh	n	n	n			nal					;1900
40	Kiril I metodi	22	mh	simple bitola	2	r	mh	n	n	n			n	l	built		iron colu	;1900
41	Leninova	38	m	simple bitola	2,5	r	m	circles	l	bud			n	l	l		iron colu	;1900
42	Leninova + Kiril		m	ottoman	2	r	m	n	n	n	w		lokma		built			;1870
43	Leninova	44a	m	ecl	2	r	m	cr - uniqu	pl		l		n					1928
44	leninova	57	m	ottoman	2	r	mh	oriel+bars	pl	pl	w	simple	n	n	n	l	iron colu	;1870
45	leninova	57a	l	ecl,simple	1,5	r	l	n	n	n	w		n	n	n	w		1890
46	Patako	6	l	ottoman	1,5	r	l	oriel	w		w		bars	w	built			;1870

diadromi | budget | style | floors | surface | balcony | bracket | date | alfavitika

Fig. 1.12 Part of the excel file for Bitola

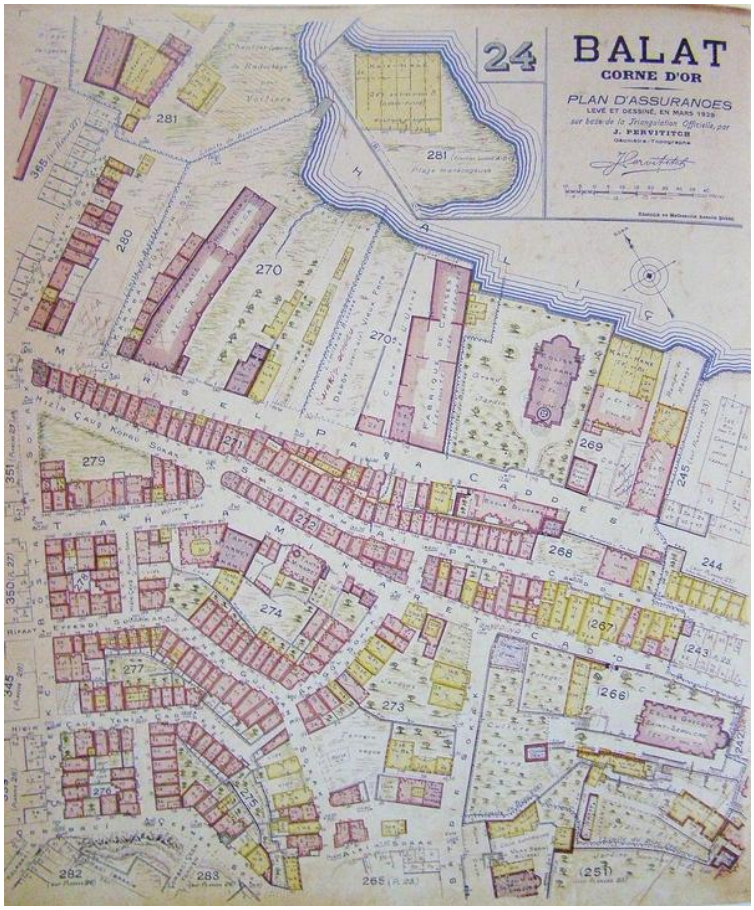


Fig. 1.13 Insurance map by Pervitich

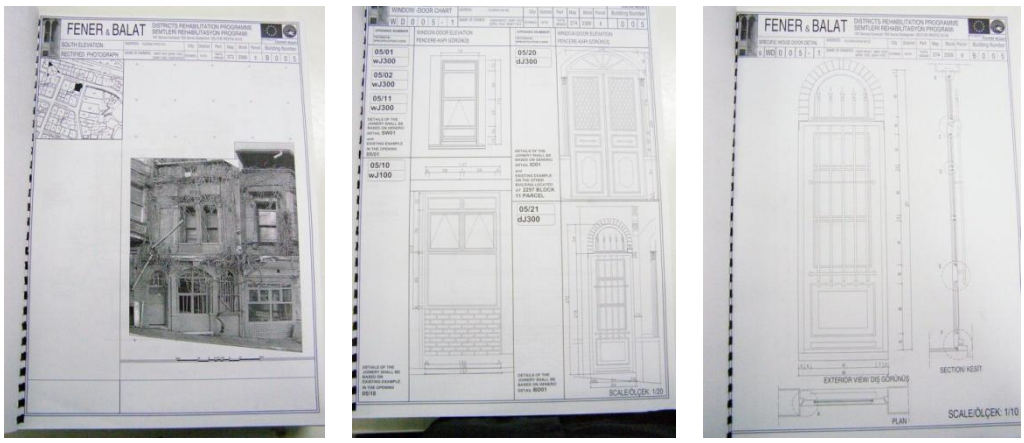
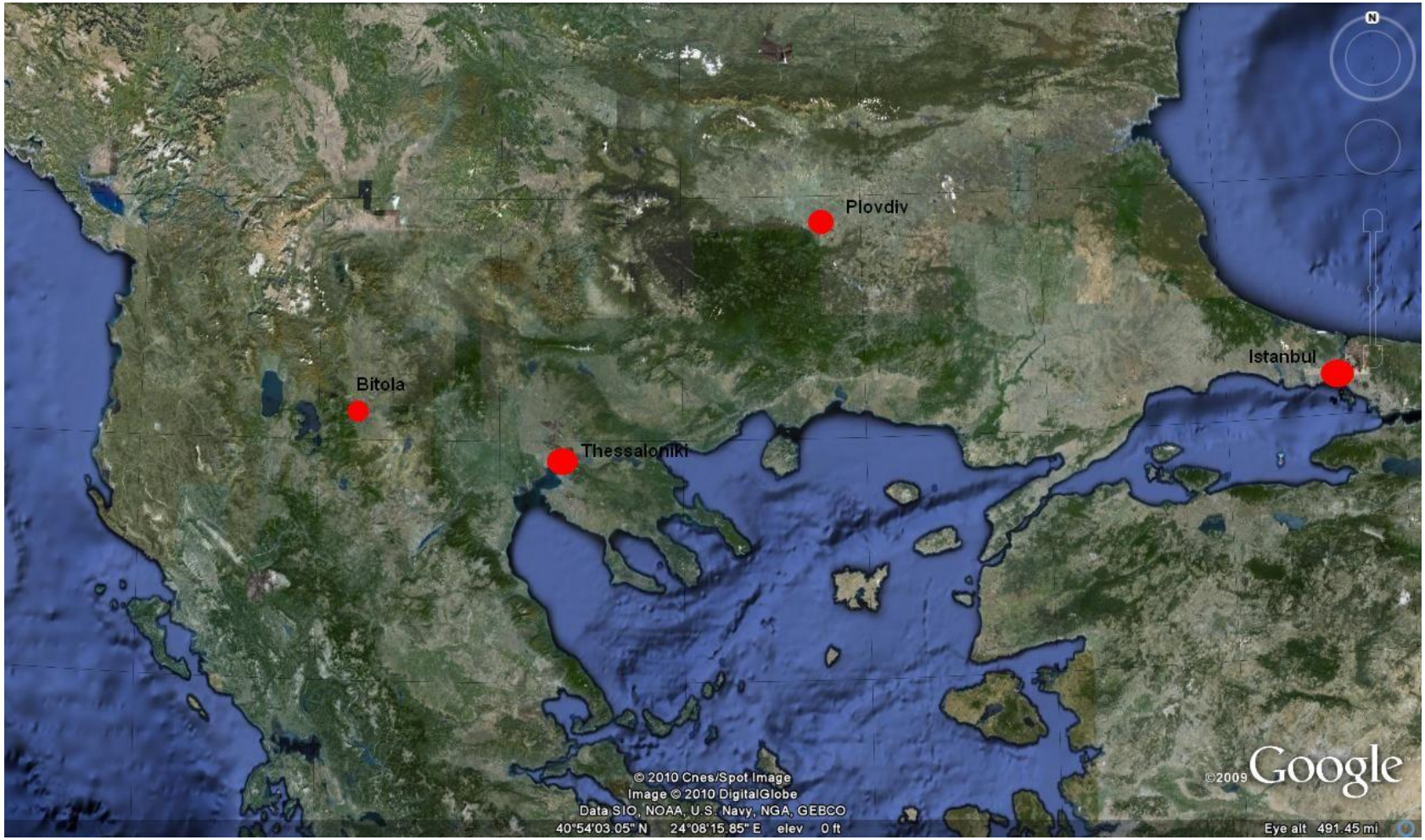


Fig. 1.14 – 16 Sheets of the project for the rehabilitation of Fener – Balat

Map 1.1 The partition of Ottoman Empire's European lands.



Map 1.2 Location of the four cities examined in the thesis

Chapter 2 - Images

Fig. 2.1 Dress code swaps by Sultan Mahmud the Second

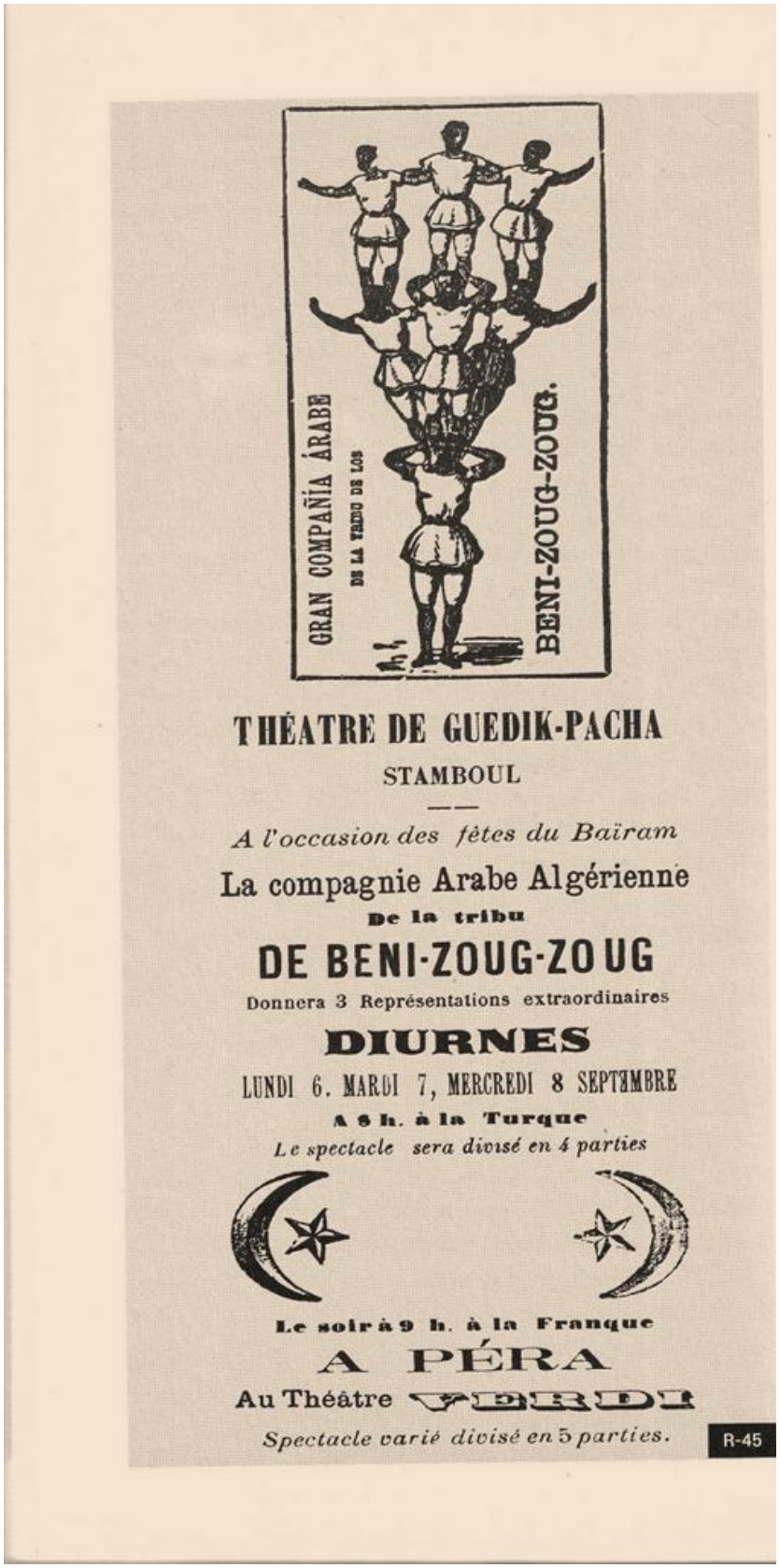


Fig. 2.2 Poster for a spectacle in Pera (late 19th century Istanbul)

Fig. 2.3 The Alvo Brothers ironwork shops in Thessaloniki (early 1920s)

Fig. 2.4 Mixed dress code suits in Thessaloniki of the 1890s

Fig. 2.5 The fez: the last oriental garment to survive. (Istanbul early 1920s)

Fig. 2.6 *Les Intimes,* the pro Young Turk organization in a demonstration in Thessaloniki

Fig. 2.7 The ruins of the Ottoman Bank after the bombings of 1903

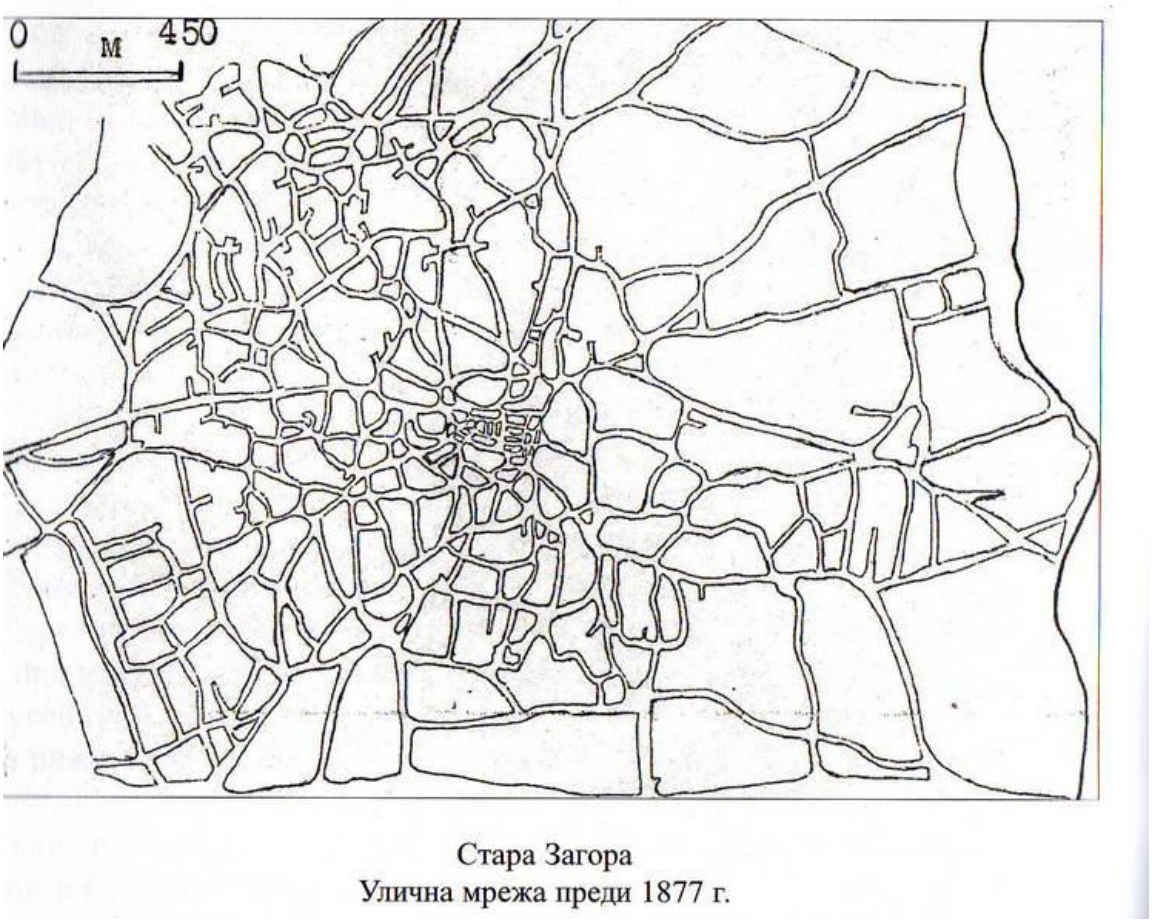


Fig. 2.8 The city plan of Stara Zagora (Bulgaria) during the late Ottoman era until 1877

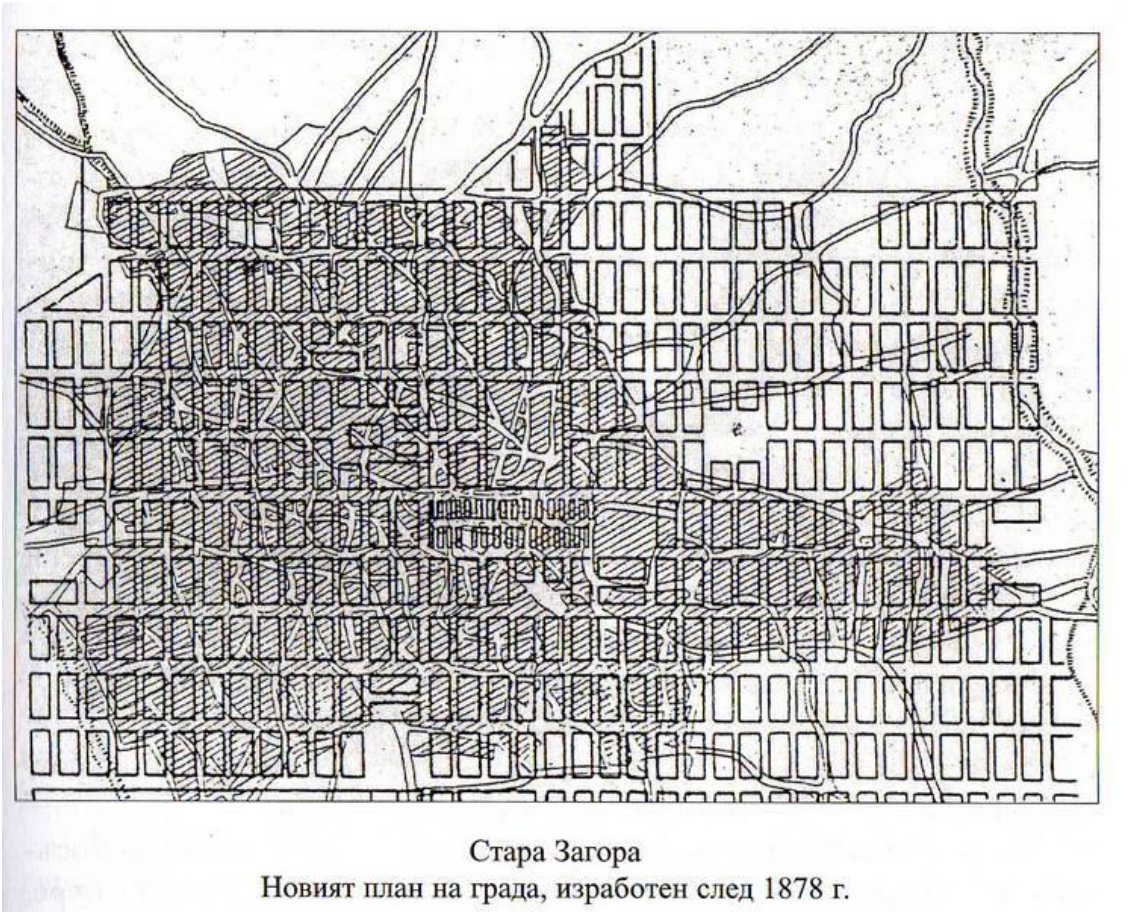
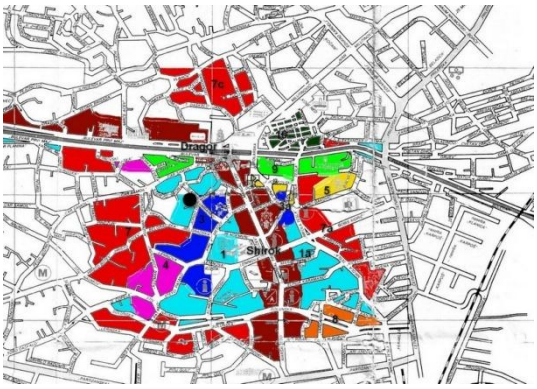


Fig. 2.9 The new urban plan of Stara Zagora made after the independence from the Ottoman Empire (1878); a totally different raster

Bitola – architecture

Fig 3.1.i Osmano 20



(For a bigger version of this map see at the end of this appendix)

Fig. 3.1.ii 29i Noemvri 12

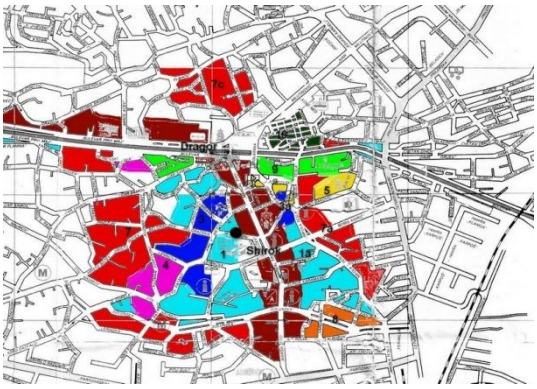


Fig. 3.1.iii Borka Levata 5

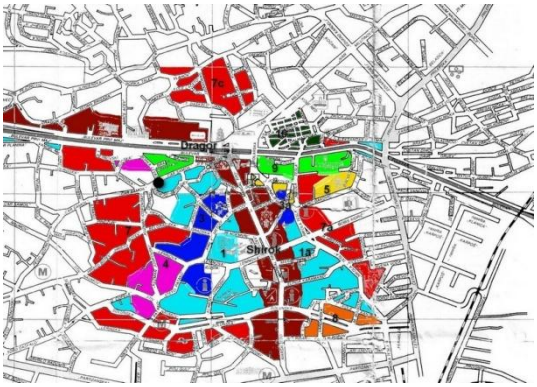
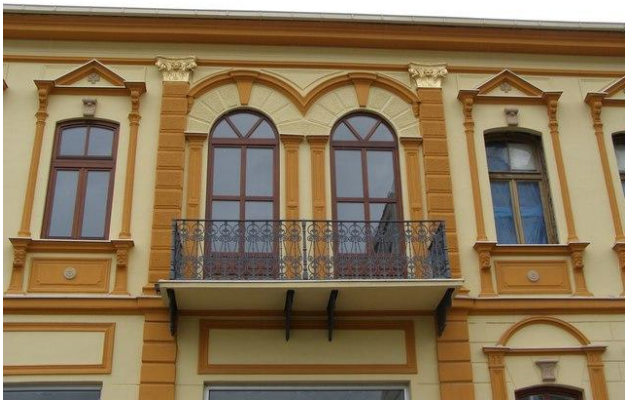


Fig. 3.1.iv Tito and Partizanski Street



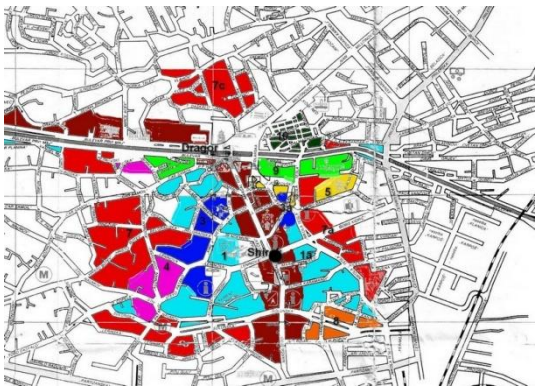


Fig. 3.1.v

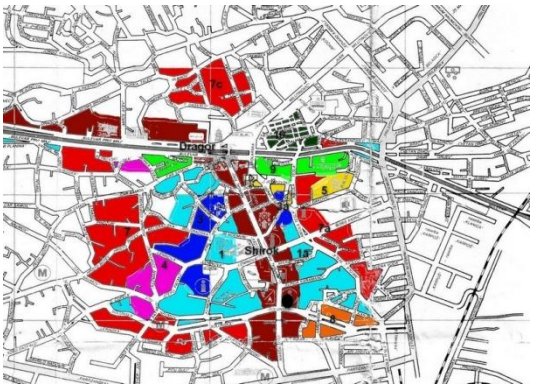


Fig. 3.1.vi The Tito Gymnasium

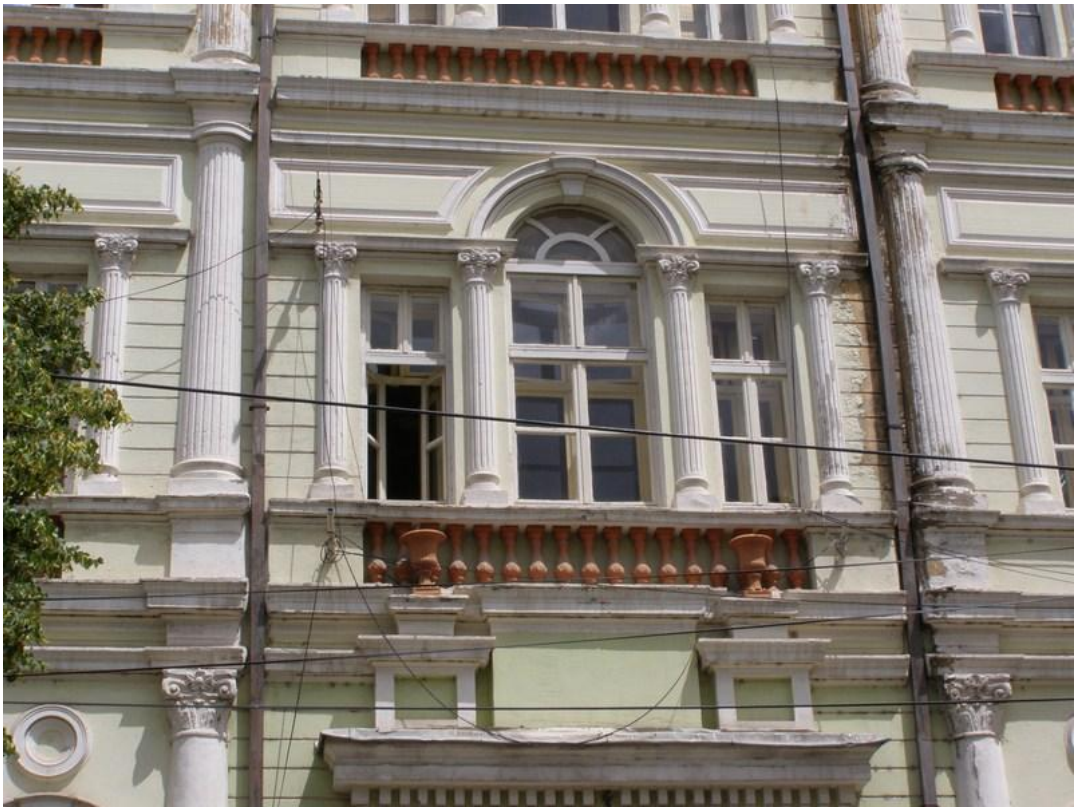


Fig. 3.1.vii the Tito Gymnasium

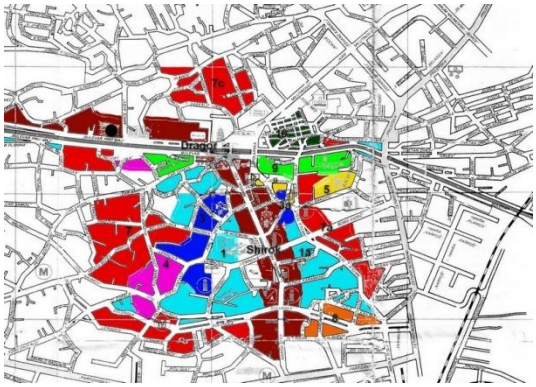
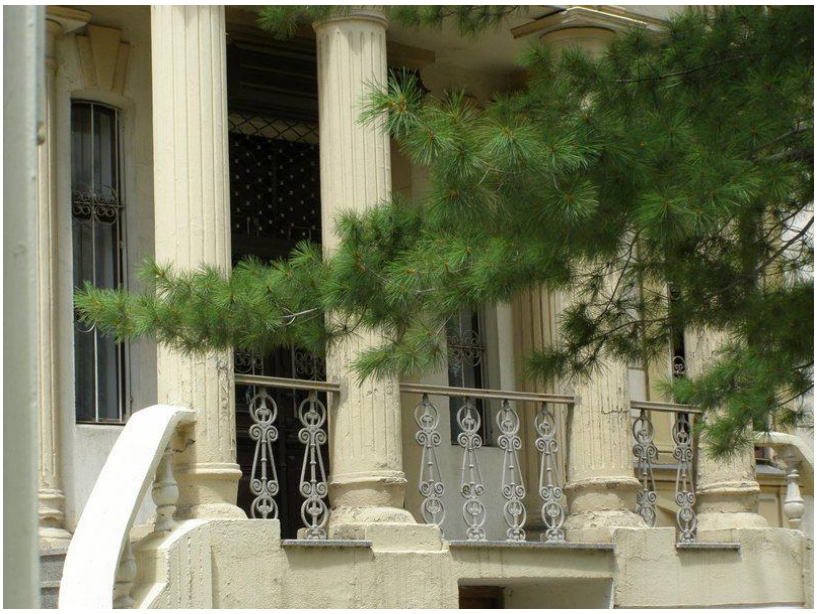


Fig. 3.1.viii and iv The Sultan's residence



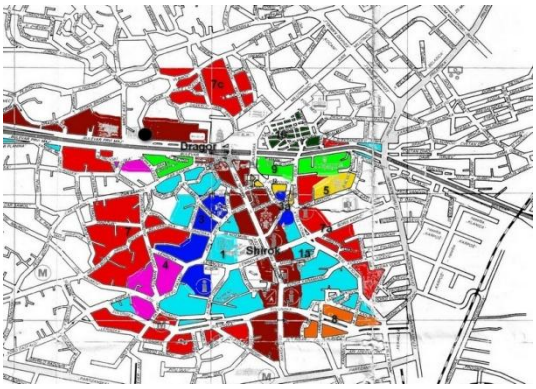

Dragol
Shirol

Fig. 3.1.x Ohridski and Leninova Streets

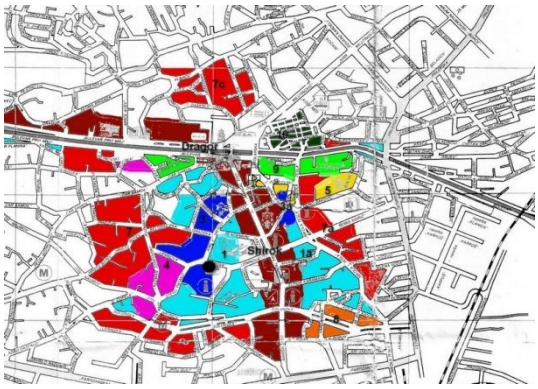


Fig. 3.1.xi 2nd Avgust Street 12

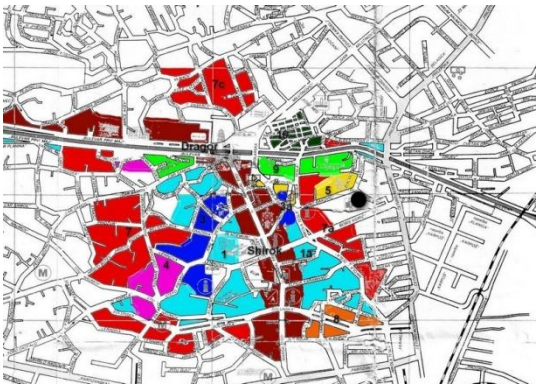


Fig 3.1.xii Dagovic 55; the Episcopate

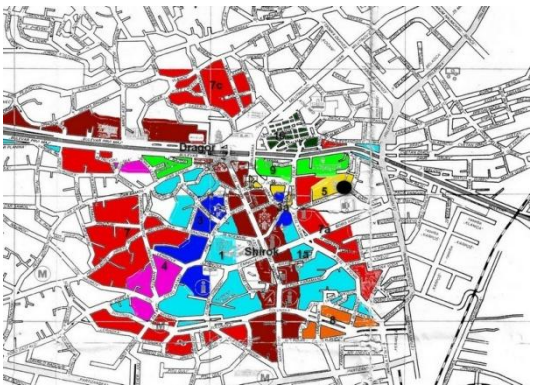


Fig. 3.1.xiii Pervi Mai Street 276 – 278

Fig. 3.1.xiv Pervi Mai 276

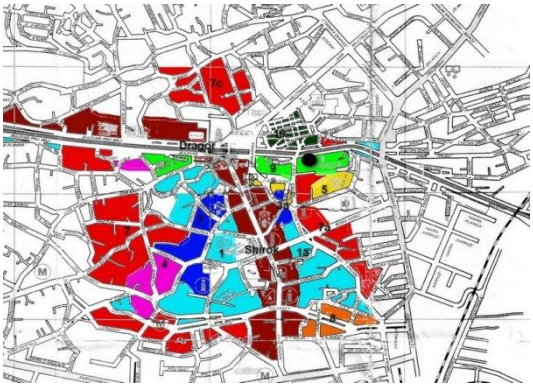


Fig3.1.xv View of the Old Bazaar's central crossroads

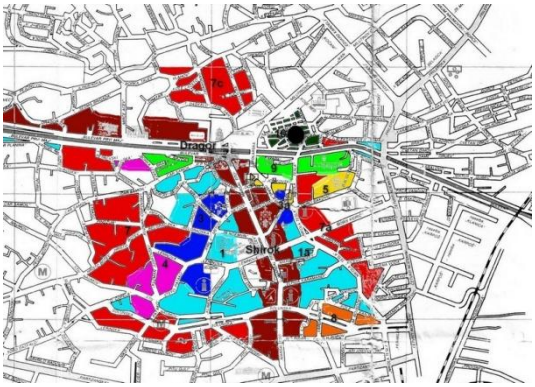


Fig. 3.1.xvi Leninova 57

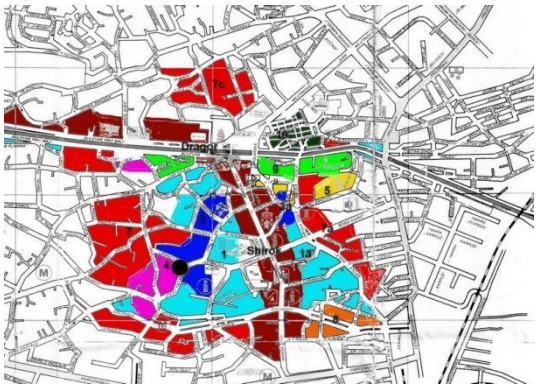


Fig. 3.1.xvii and xviii The National Museum

Fig. 3.1.xix the balcony of the National Museum

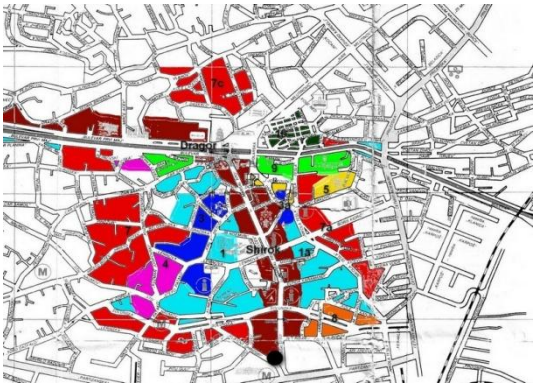
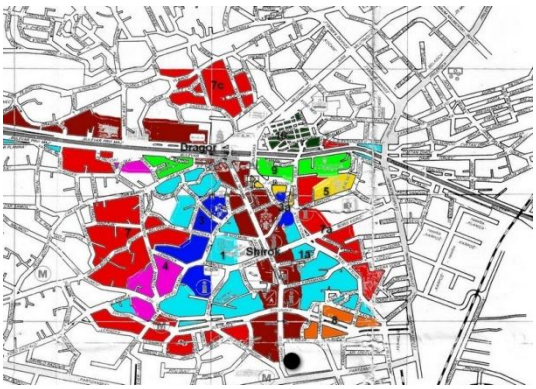


Fig. 3.1.xx the House of the Army (the western façade)

Fig. 3.1.xxi the southern facade

Fig 3.1.xxii Details of the southern façade



Bitola - ironwork

Fig. 3.1.1 Leninova 57

Fig. 3.1.2 Leninova 57

Fig 3.1.3 Rusveltova 26

Fig.3.1.4 Ohridski 98

Fig. 3.1.5 Tito 57

Fig. 3.1.6 Pervi Mai

Fig 3.1.7 Tito and Solunska

Fig 3.1.8 Tito 128

Fig. 3.1.9 Tito 128

Fig. 3.1.10 Rusveltova 8

Fig. 3.1.11 Shirok Sokak and Partizanski

Fig 3.1.12 Shirok Sokak 41

Fig. 3.1.13 Beogradska 5

Fig. 3.1.14 Lumparkofski and Tsar Samoil

Fig. 3.1.15 Beogradska and Iosifivski

Fig. 3.1.16 Shirok Sokak

Fig 3.1.18 Tito 101

Fig. 3.1.19 Tito

Fig. 3.1.20 Beogradska 5

Fig. 3.1.21 Lumparkofski and Tsar Samoil

Fig. 3.1.22 Tesla 124

Fig. 3.1.23 Marx 30

Fig. 3.1.24 Lumparkofski 8

Fig 3.1.25 Solunska 226

Fig. 3.1.26 Tito on the main square

Fig. 3.1.27 Tito 44

Fig. 3.1.28, 29,

30 / Pervi Mai27/ Tito 57/ Tito 84

Fig. 3.1.31 Naumov and Ohridski

Fig 3.1.32 Naumov and Ohridski

Fig. 3.1.33 4i Noemvri

Fig 3.1.34 Pervi Mai 112

Fig. 3.1.35 Leninova 38

Fig. 3.1.36 Rusveltova 24

Fig. 3.1.37 Borka Levata 5

Fig. 3.1.38,39

40

/ Tito 40 / Tito 90/Archeological Museum

Fig. 3.1.41 Tito 40

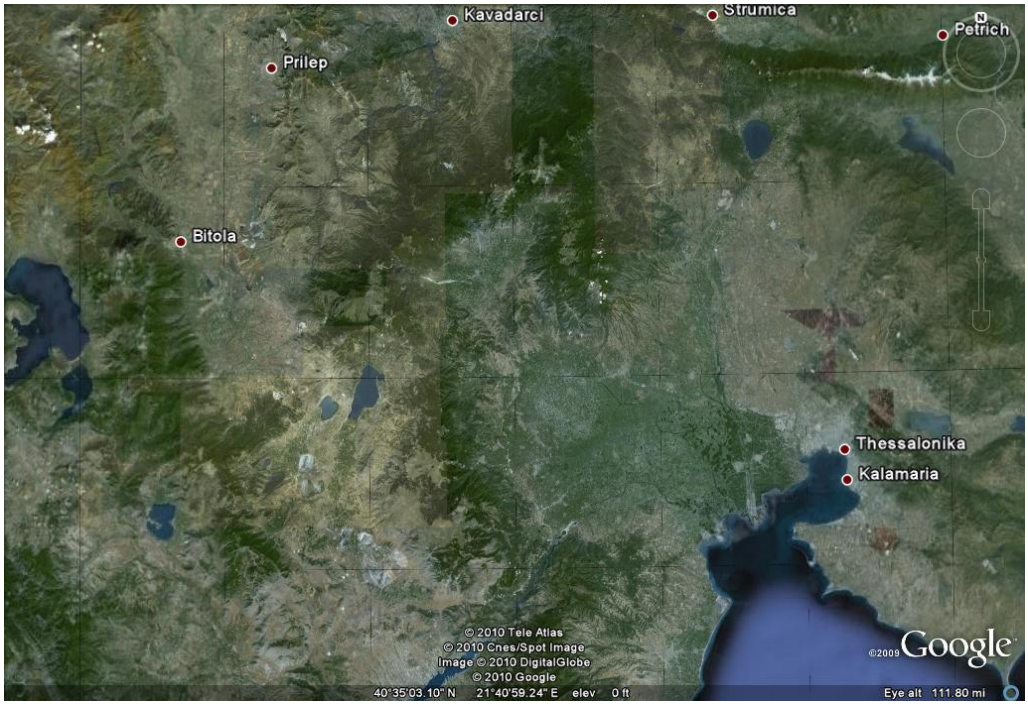
Fig. 3.1.42 Tito 40

Fig. 3.1.43 Tito

Fig 3.1.44 Solunska 203

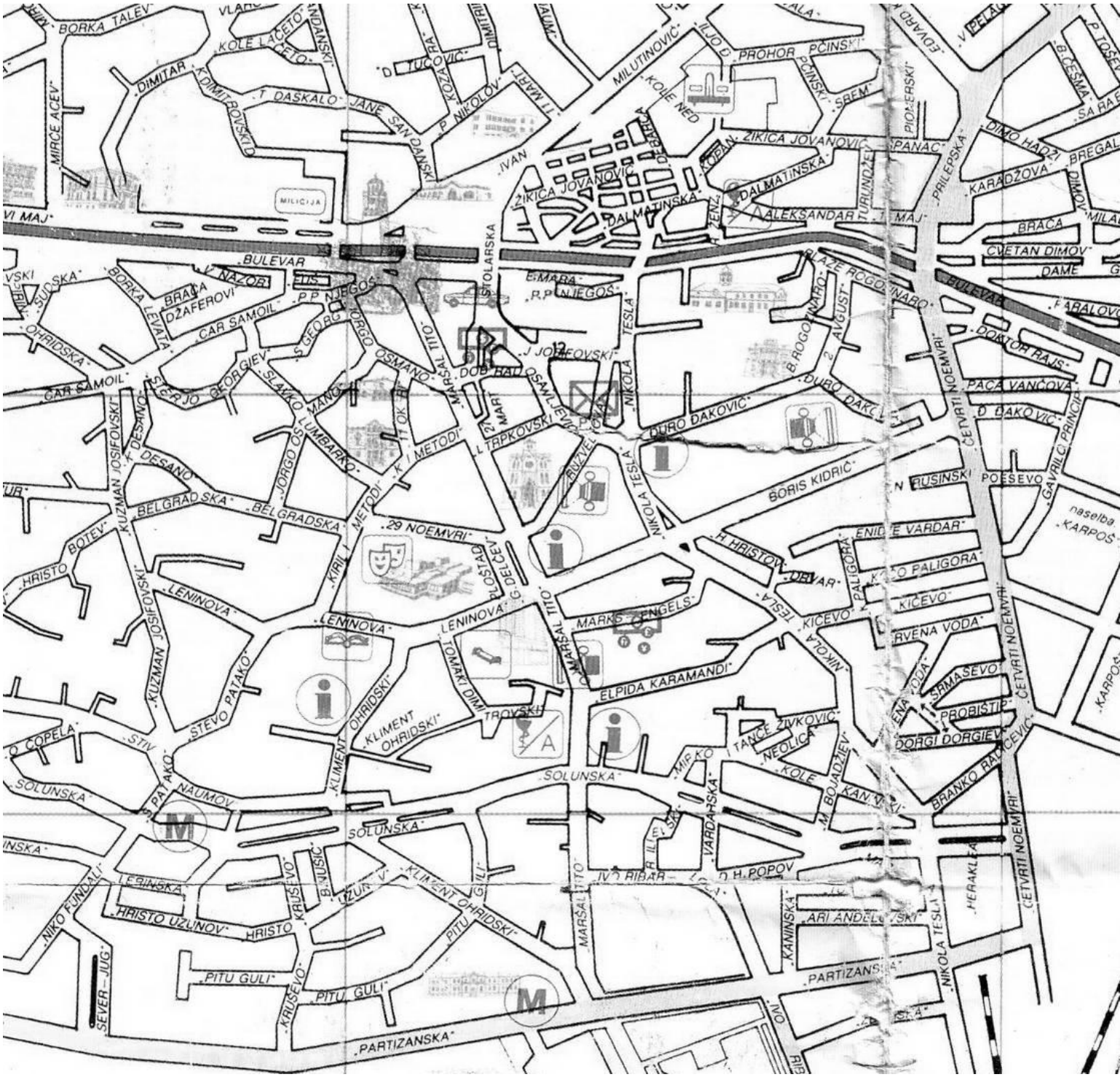
Fig. 3.1.45 Tito 102

Bitola – maps

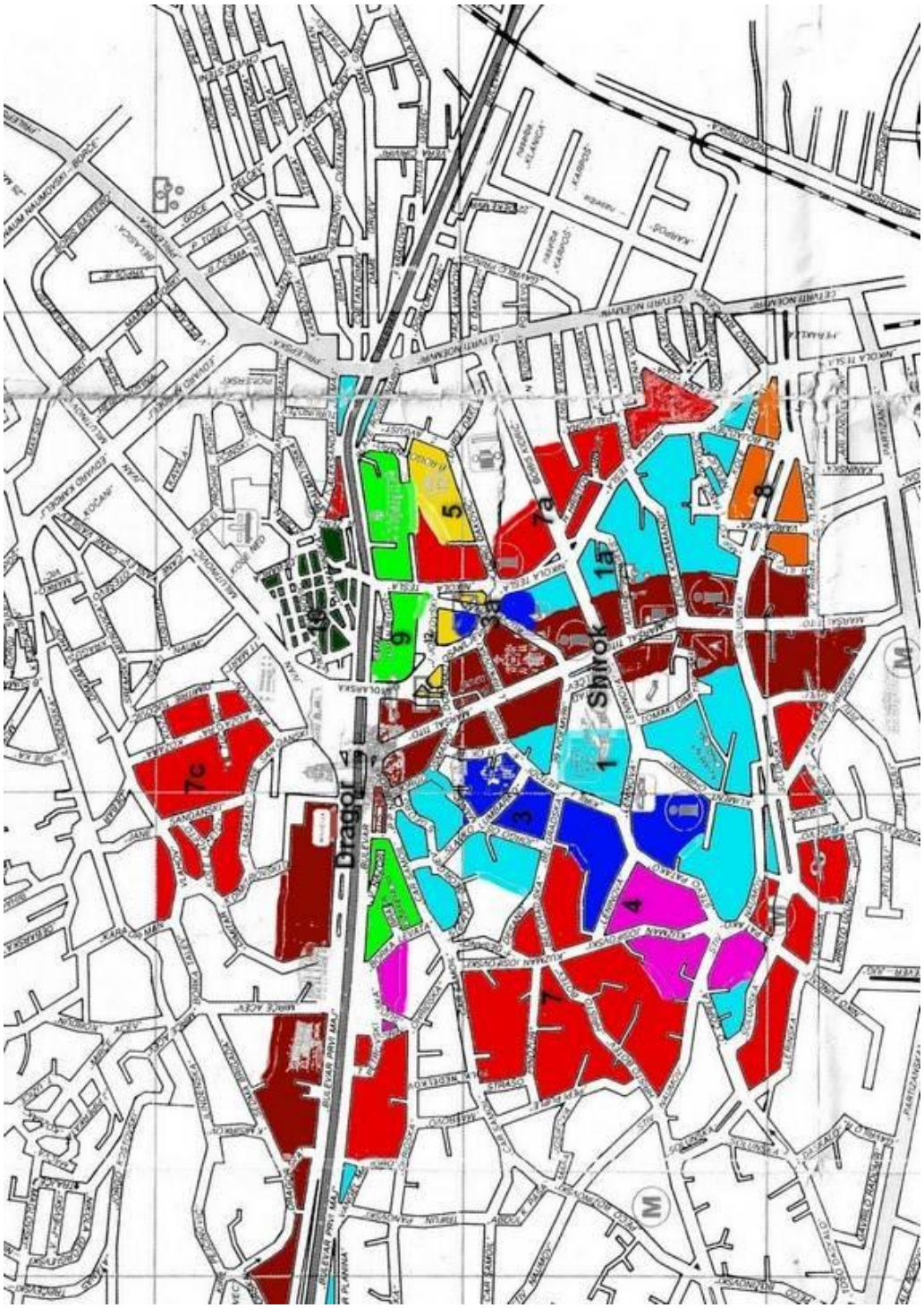


Map 3.1.1 The area of central Macedonia

Map 3.1.2 Bitola; the central part



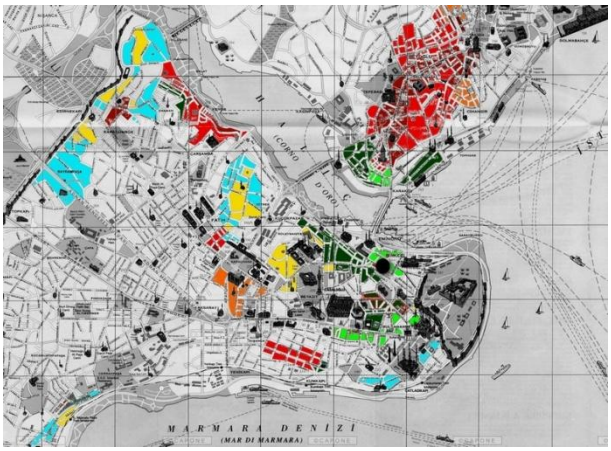
Map 3.1.3 Plan of Bitola



Map 3.1.4 Architectural areas

Istanbul - architecture

Fig. 3.2.i Vakıf Han, Eminönü



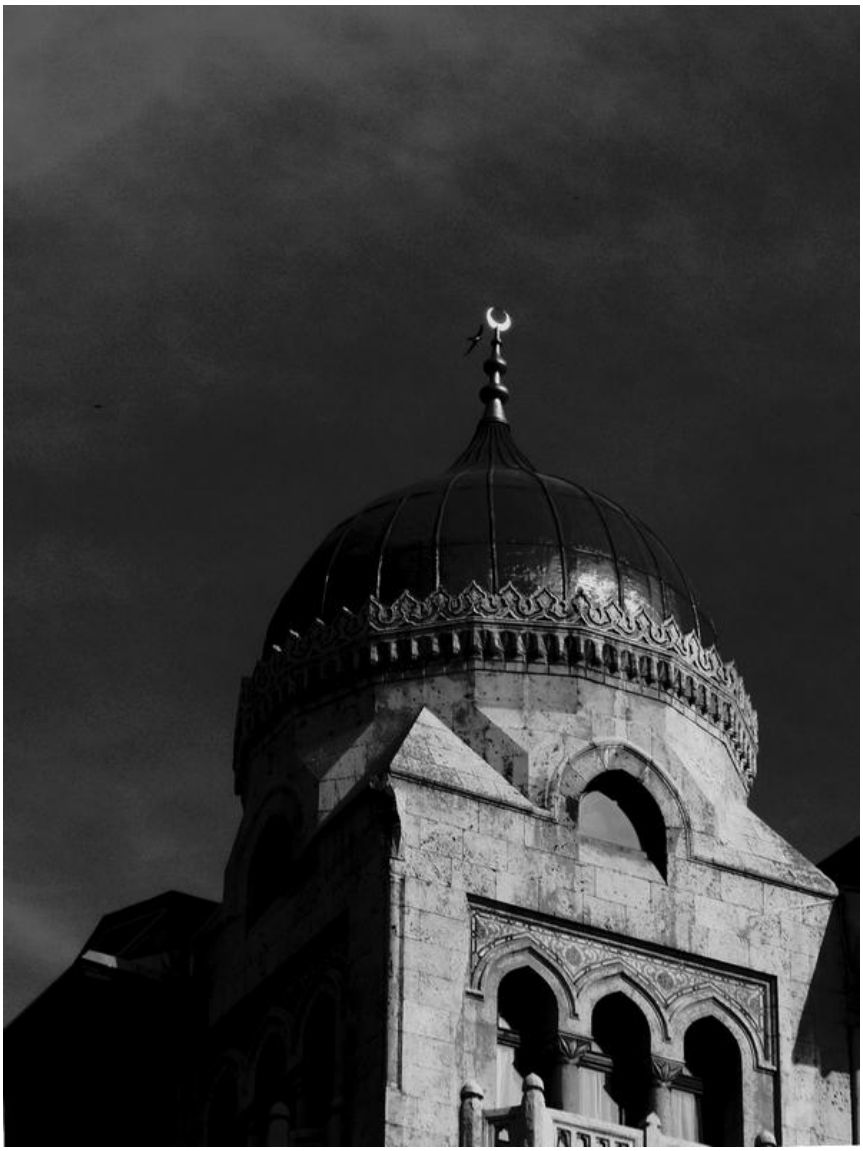


Fig. 3.2.ii A dome of Vakif Han

Fig. 3.2.iii Anadolu Han, Şirkeci

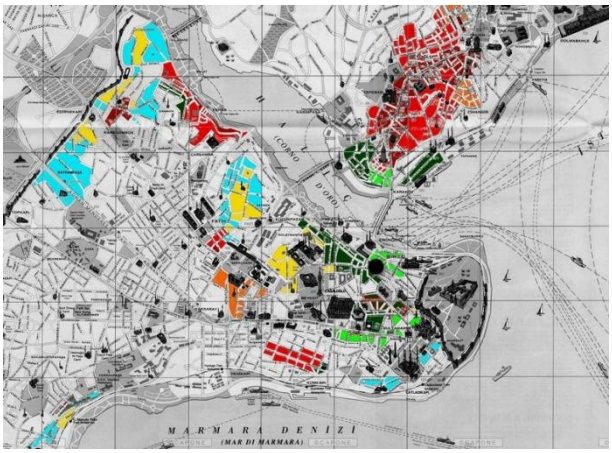


Fig. 3.2.iv Anadolu Han: entrance

Fig. 3.2.v Anadolu Han: detail

Fig. 3.2.vi Buildings in Şirkeci

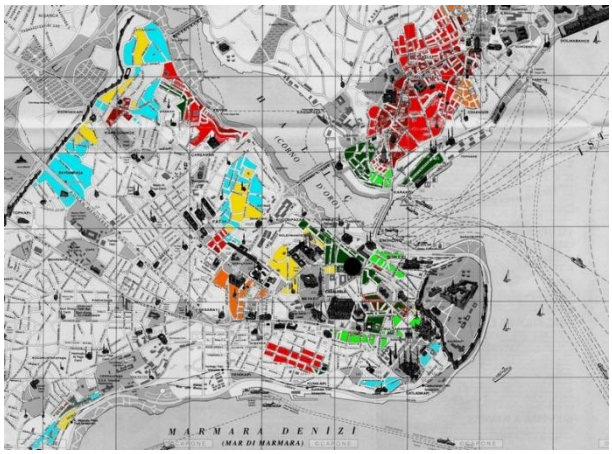


Fig. 3.2.vii The balcony of the building above

Fig. 3.2.viii Hasırcılar Caddesi

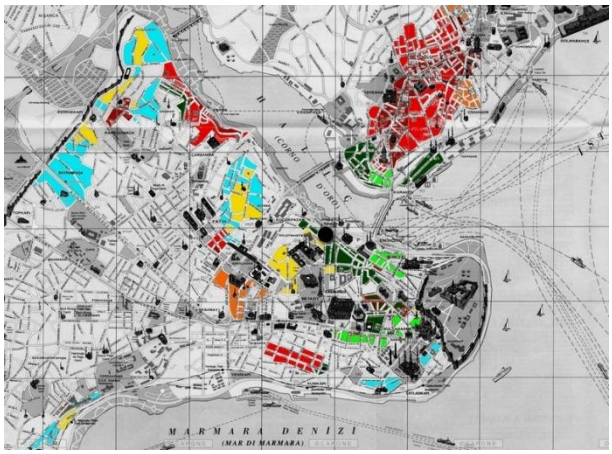


Fig. 3.2.ix, x

Xi, xii kagirs and ahsaps in Unkapanı

Fig. 3.1.xiii the eastern part of Fener in the maps of Pervitich (pink colour kagir, yellow colour ahsaps)

Fig 3.1.xiv The church of Sveti Stefan

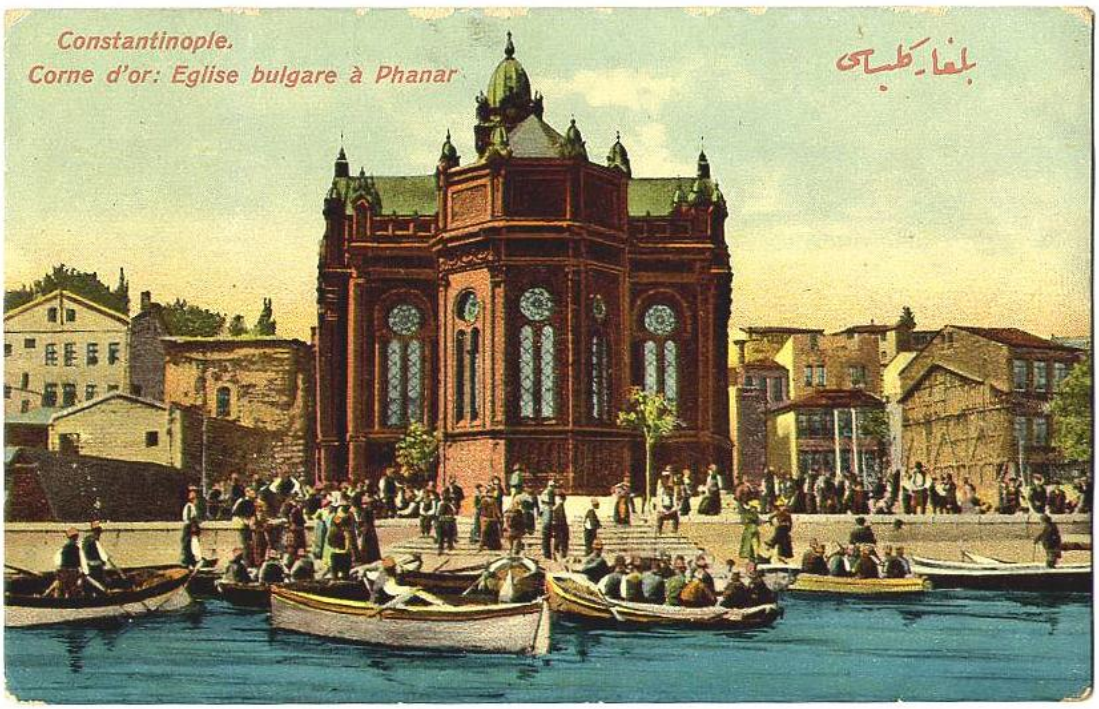


Fig. 3.2.xv Sveti Stefan in the 1900's

Fig 3.2.xvi details on Sveti Stefan's western façade

Fig.3.2. xvii The Greek Lyceum

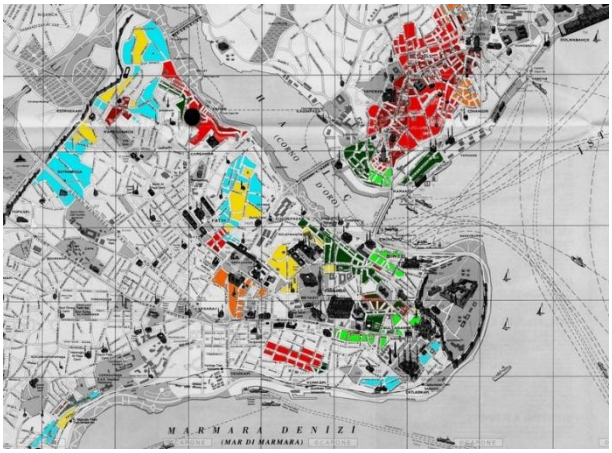


Fig. 3.2.xviii The Marasleion Lyceum

Fig. 3.2.xix

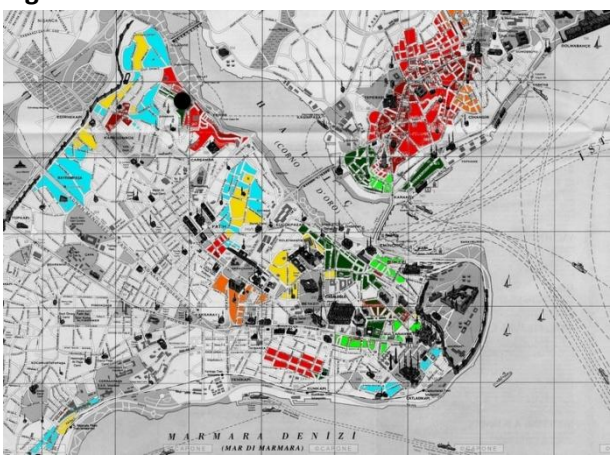


Fig 3.2.xx Vodinya 46 Mainstream houses

Fig. 3.2.xxi Vodinya 60

Fig. 3.2.xxii Akcın Street 4

Fig. 3.2.xxiii Details

Fig. 3.2.xxv Mumhane & Besirgan Streets

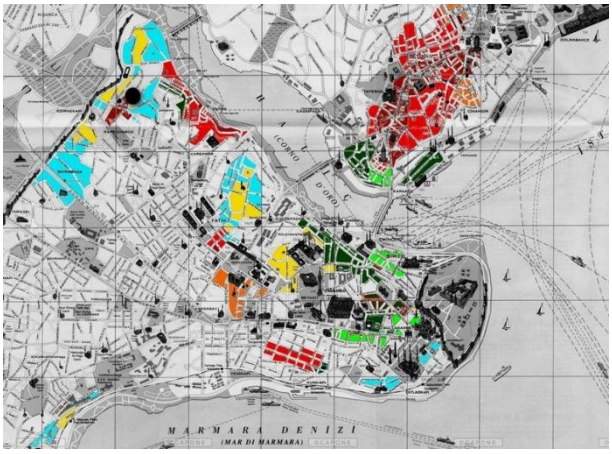


Fig. 3.2.xxvi Mumhane and Besirgan Streets

Fig. 3.2.xxvii

Fig. 3.2.xxviii Top Kapı area

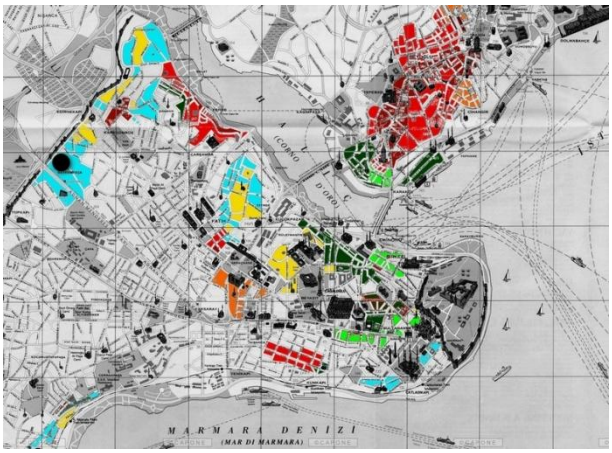


Fig. 3.2.xxix Agios Konstantinos surroundings – Samatya

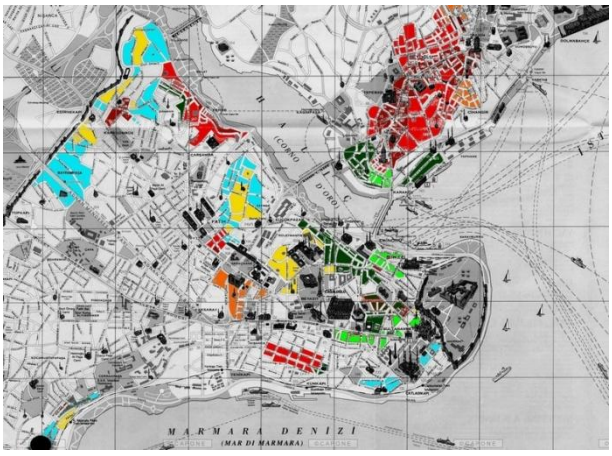
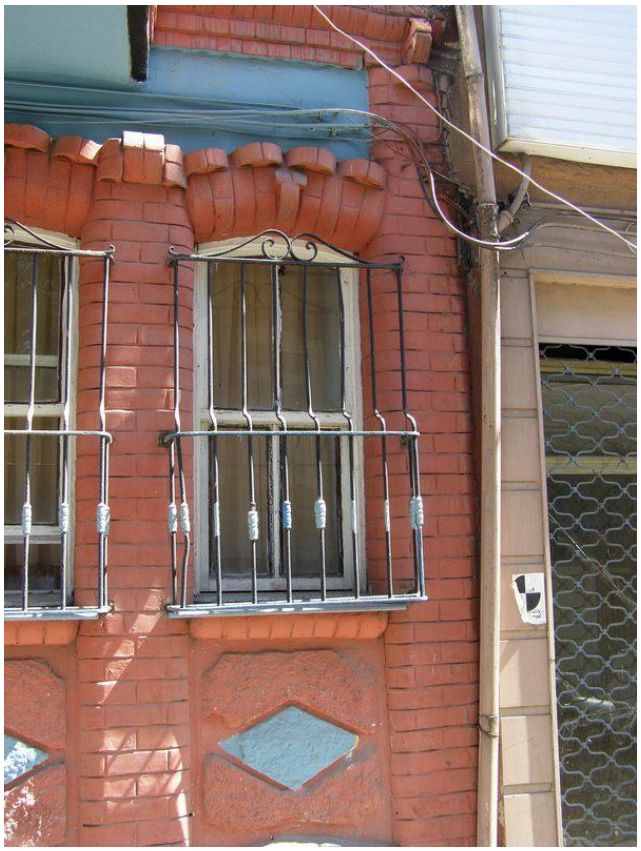


Fig. 3.2.xxx details of the green ahsap



Gig. 3.2.xxxi The red brick house

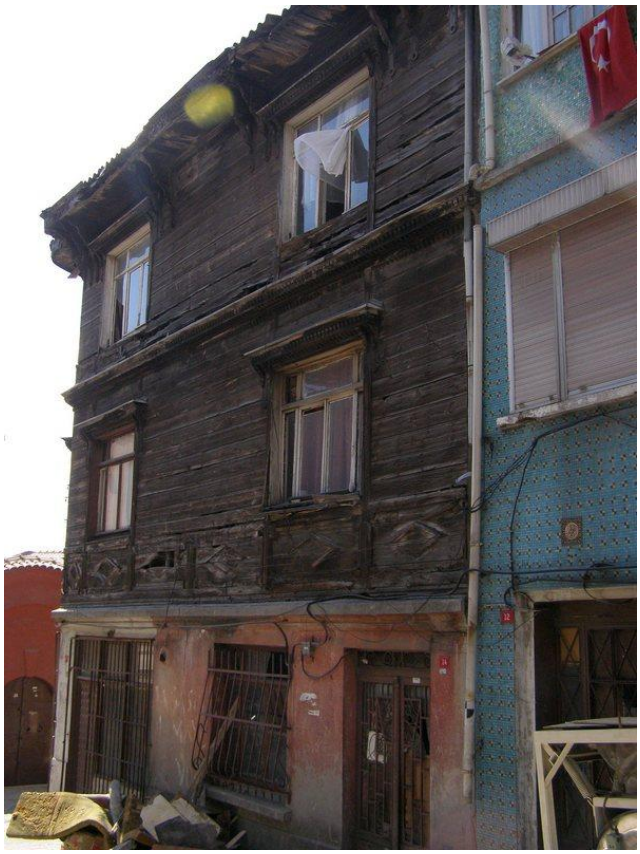


Fig 3.2.xxxii

Fig. 3.2.xxxiii Kuleli Sokak

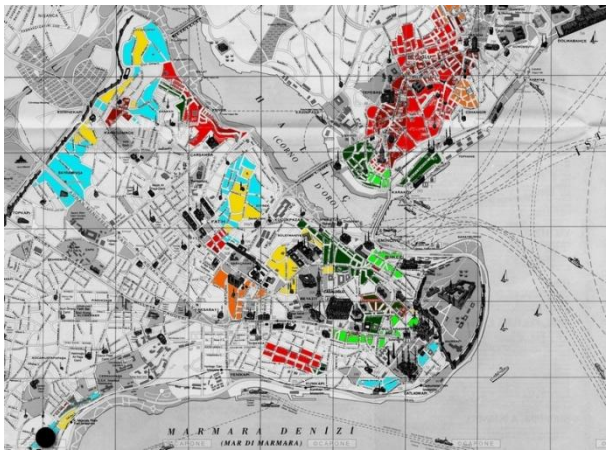


Fig. 3.2.xxxiv İmrahor 12 – 8

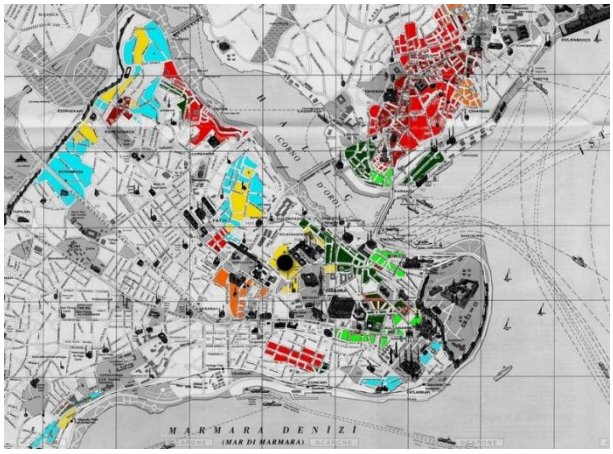
Fig. 3.2.xxxv

xxxvi

Details of İmrahor 12 – 8

Fig. 3.2.xxxvii Old wall in Fatih

Fig. 3.2.xxxviii Yoğurtcuoğlu Street



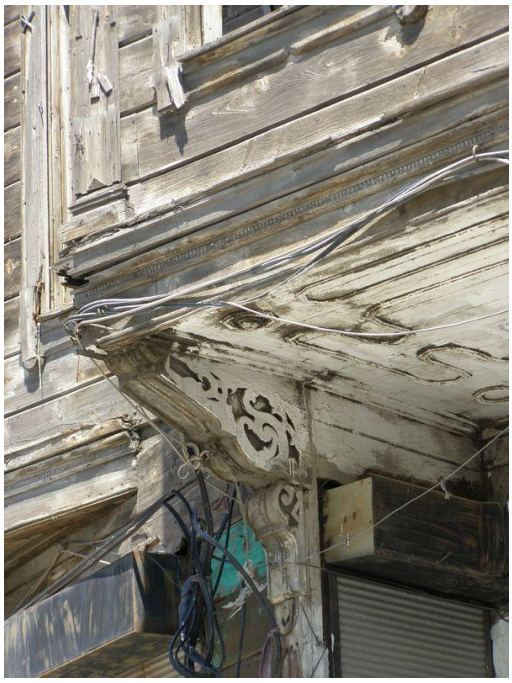


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Fig. xlii The building of the center for restoration (KUDEB)

Fig. 3.2.xliii The Ciftegelinler Street to Aghia Kyriaki

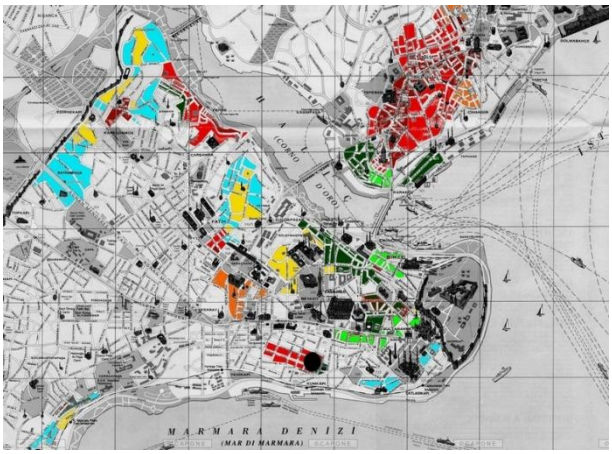

Fig. 3.2.xliv, xlv

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Fig. 3.2.xlvii Istanbul in the 1850's

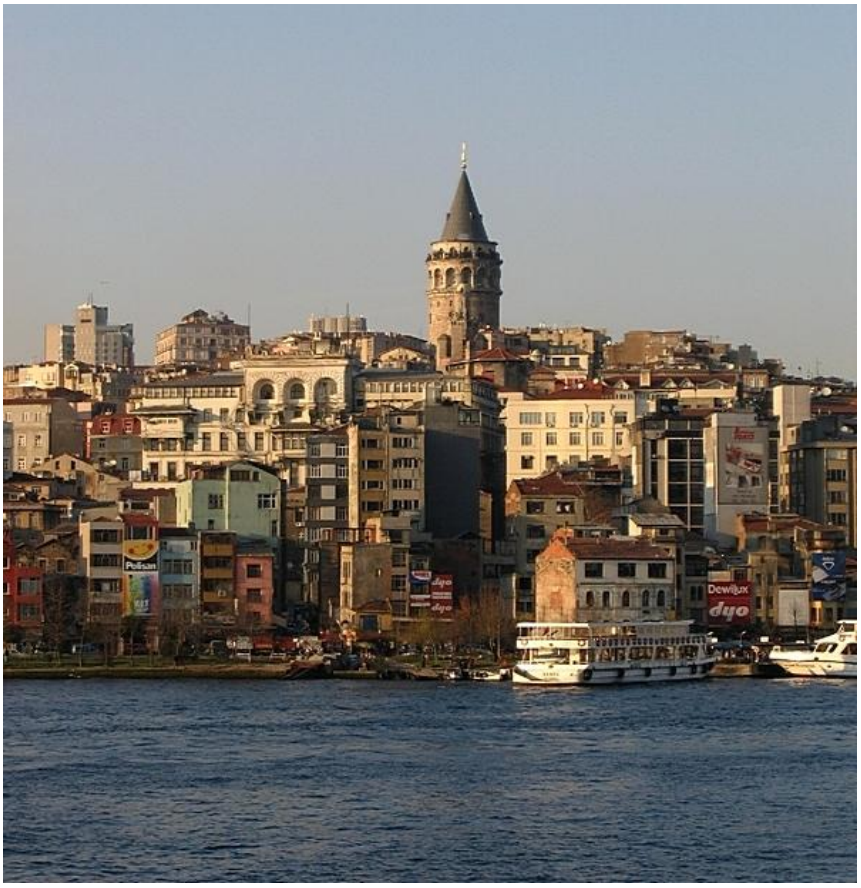


Fig. 3.2.xlviii View of Galata from Unkapanı

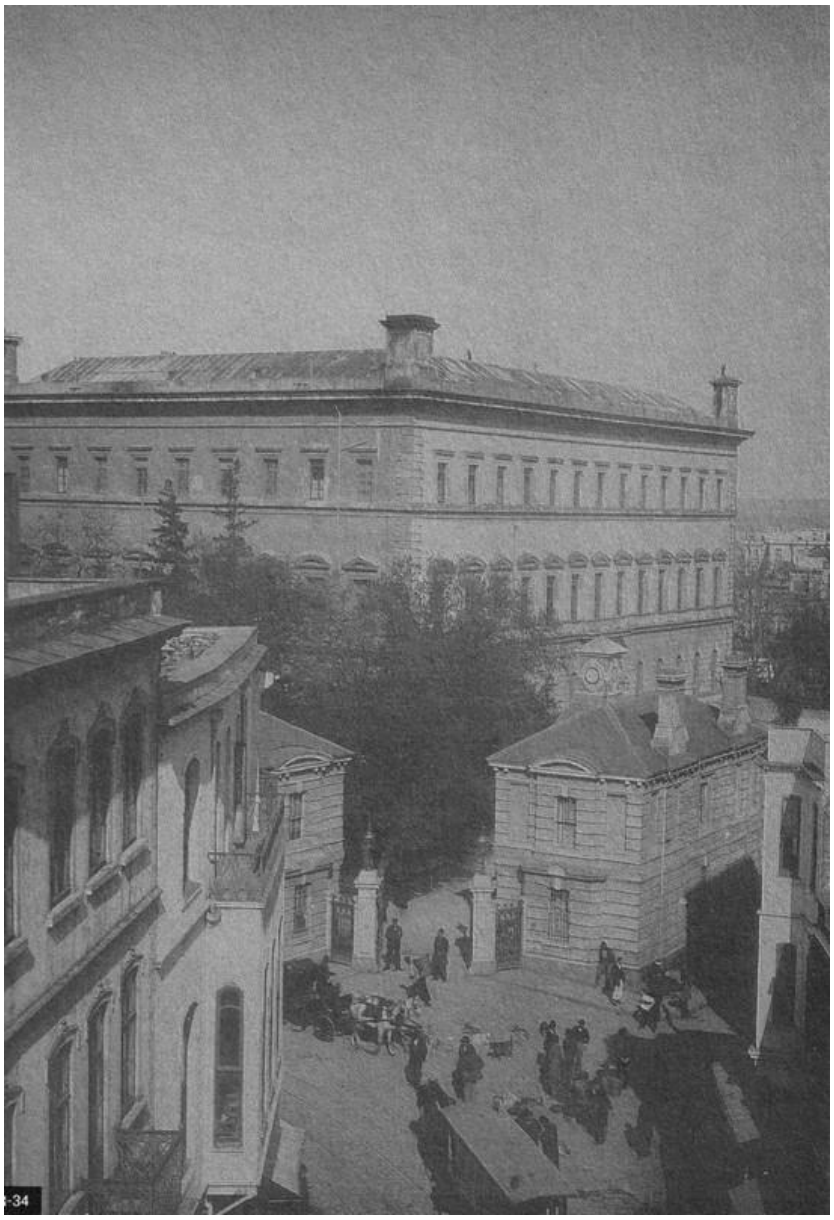
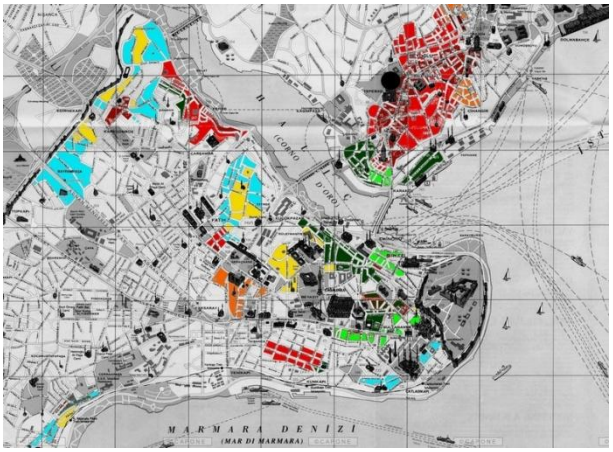


Fig. 3.2.xlix The British consulate at the turn of the 19th century



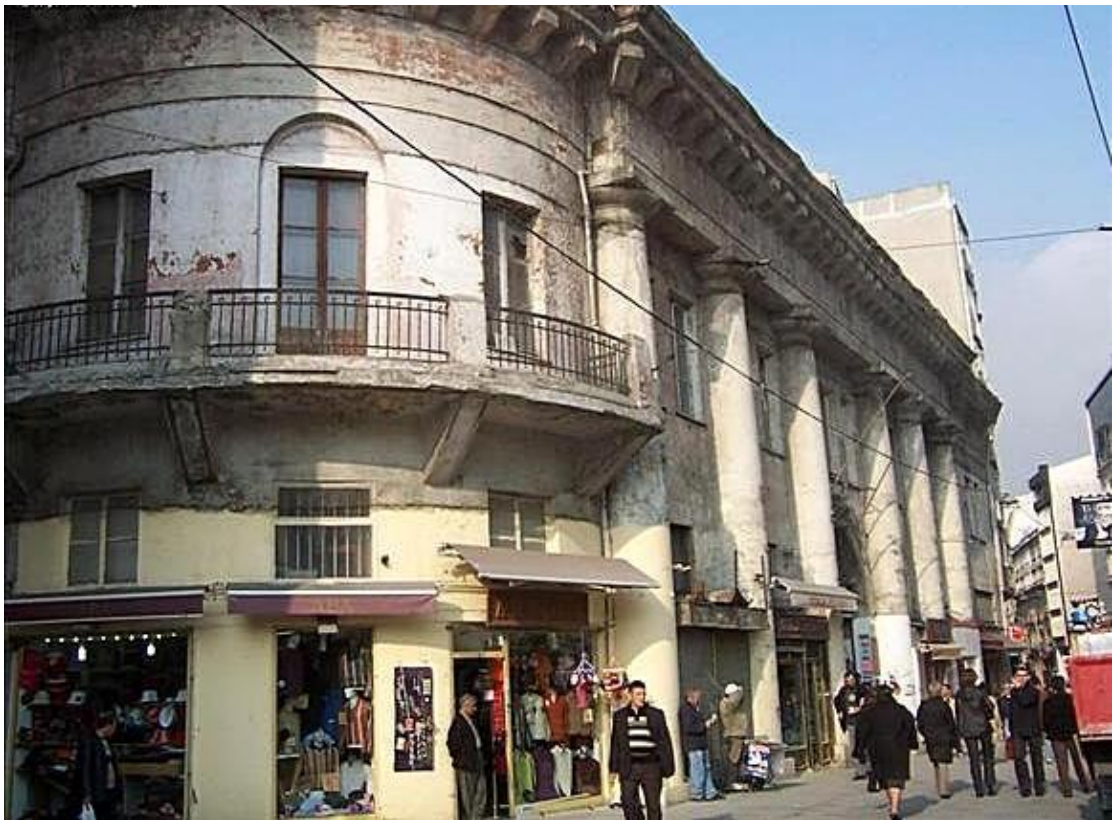


Fig. 3.2.li The Narmali Han

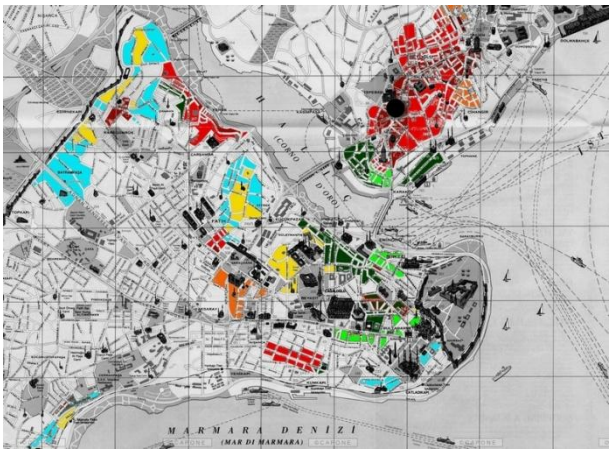


Fig. 3.2.lii The Cite of Pera

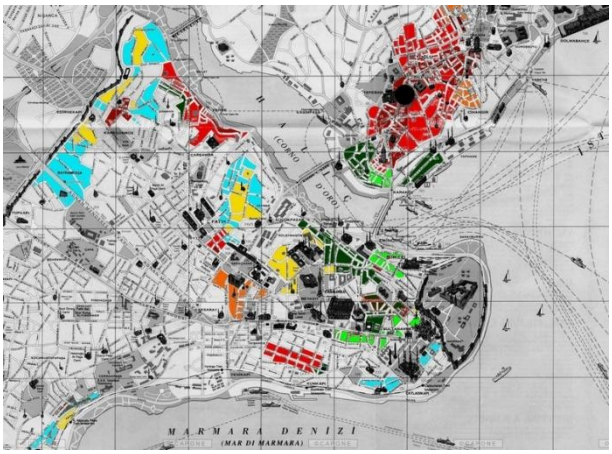


Fig. 3.2.lii,

liv details of Cite de Pera

Fig. 3.2.lvi the balcony of Grand Hotel de Londres

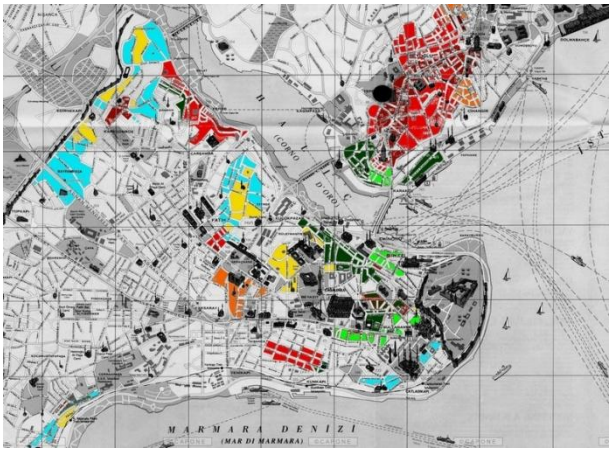


Fig. 3.2.lvii the entrance of St Antoine's complex

Fig 3.2.lviii St Antoine; part of the court

Fig. 3.2.lix Architect's names on inscriptions

Fig. 3.2.lx the Kamondo apartments (second on the right)

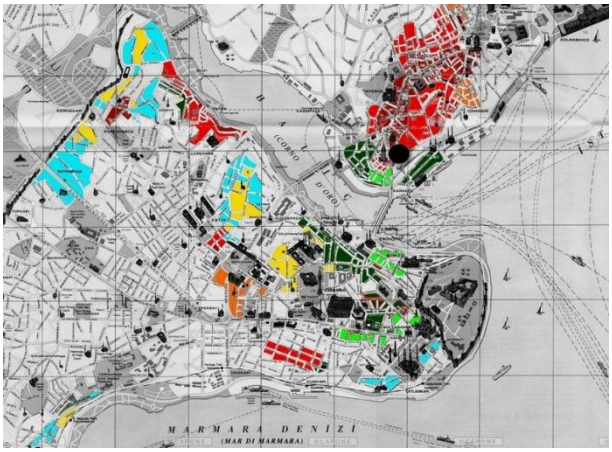


Fig. 3.2.lxi, lxii details on the Kamondo apartments

Fig. 3.2.lxiv Buyuk Hendek 51 (the second on the row, green walls)

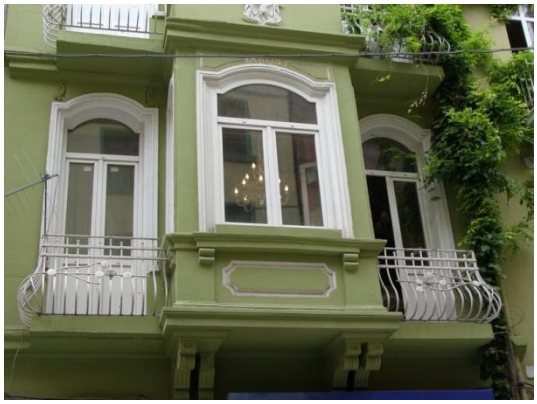


Fig. 3.2.lxv, lxvi, lxvii details of the building on Buyuk Hendek Street 51

Fig. 3.2.lxviii Yeni Carsi 28 (the white building)

Fig. 3.2.lxx Oba Street 1

Fig. 3.2.lxxi Oba Street 1

Fig. 3.2.lxxii and lxxiii
The Opera of Kadikoy
built in 1928

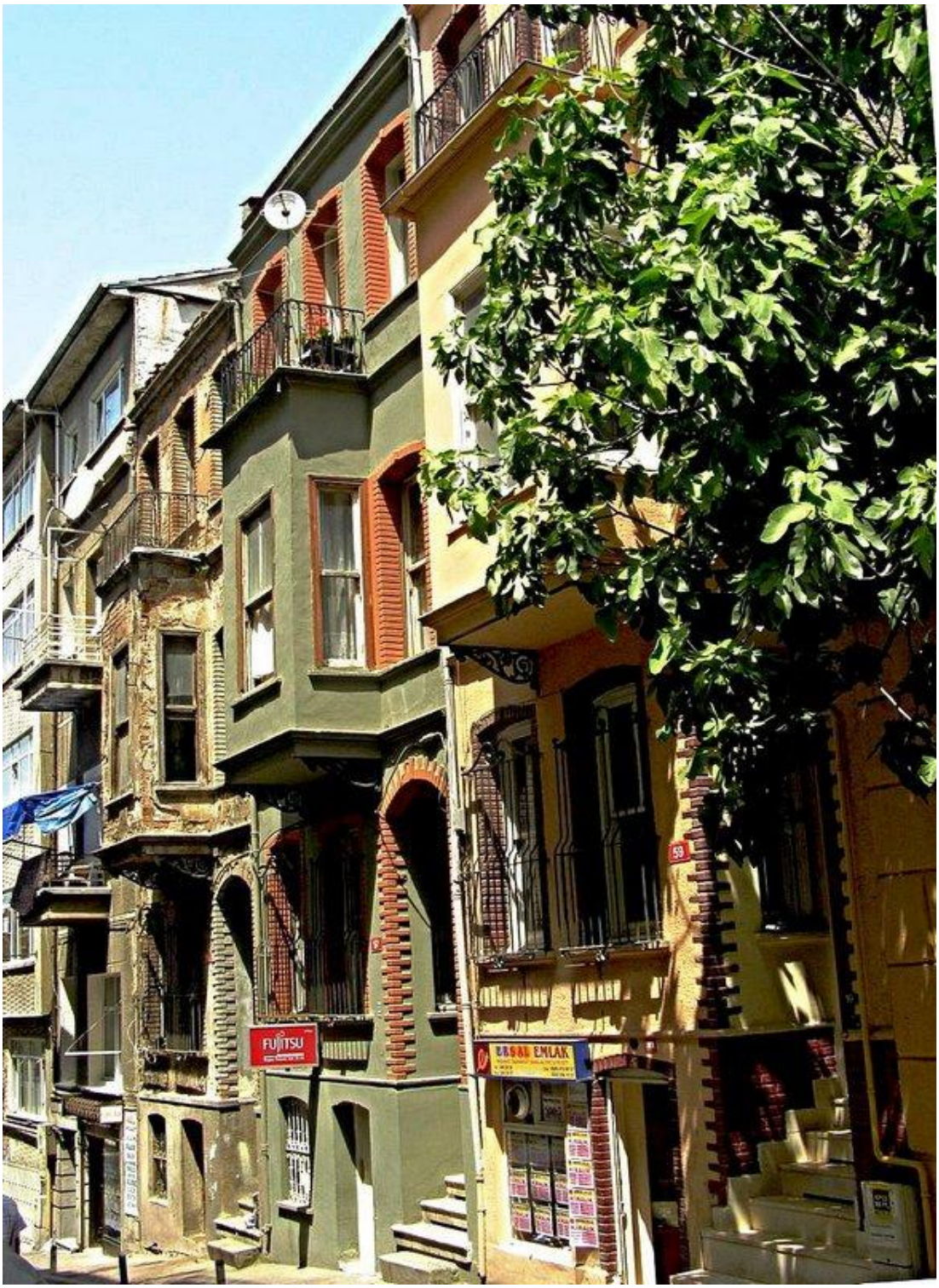


Fig. 3.2.lxxivEsrefoglou Street, 53 – 59

Fig. 3.2.lxxv The Kehribadji Apartments – Yeldegirmeni Street 3

Fig. 3.2.lxxvi and lxxvii Details of the Kehribadji Apartments

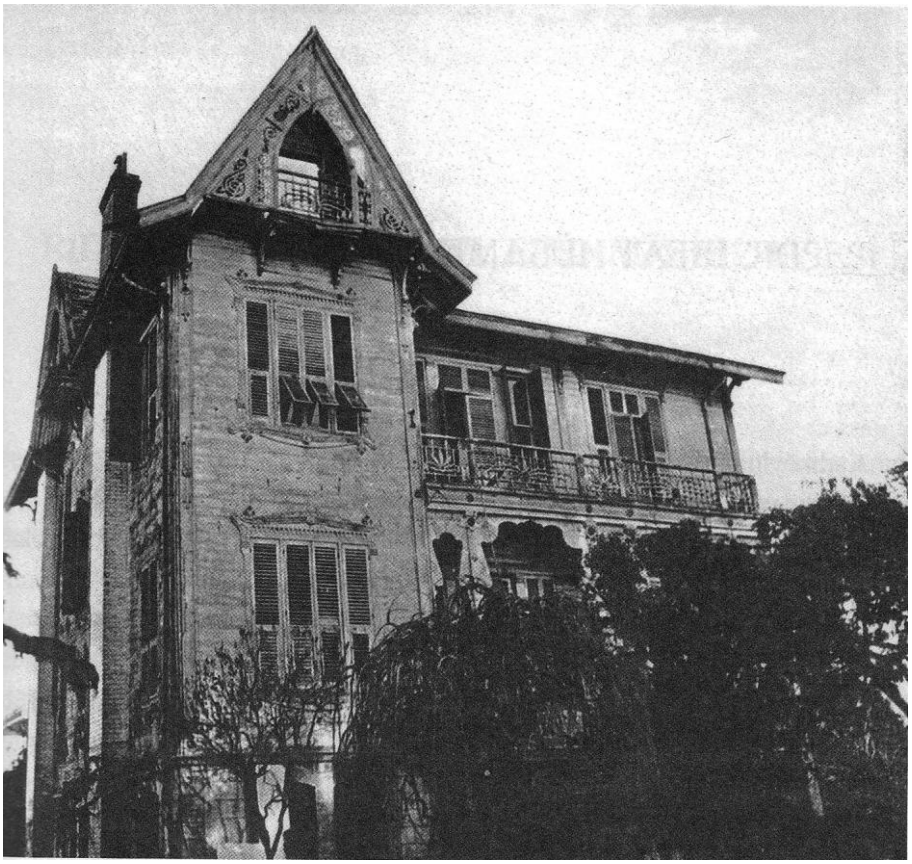


Fig. 3.2.lxxviii Nadir Aga Köskü – Kadıköy

Fig.3.2.lxxix Zuheyrzade Ahmed Konagi – Kadikoy

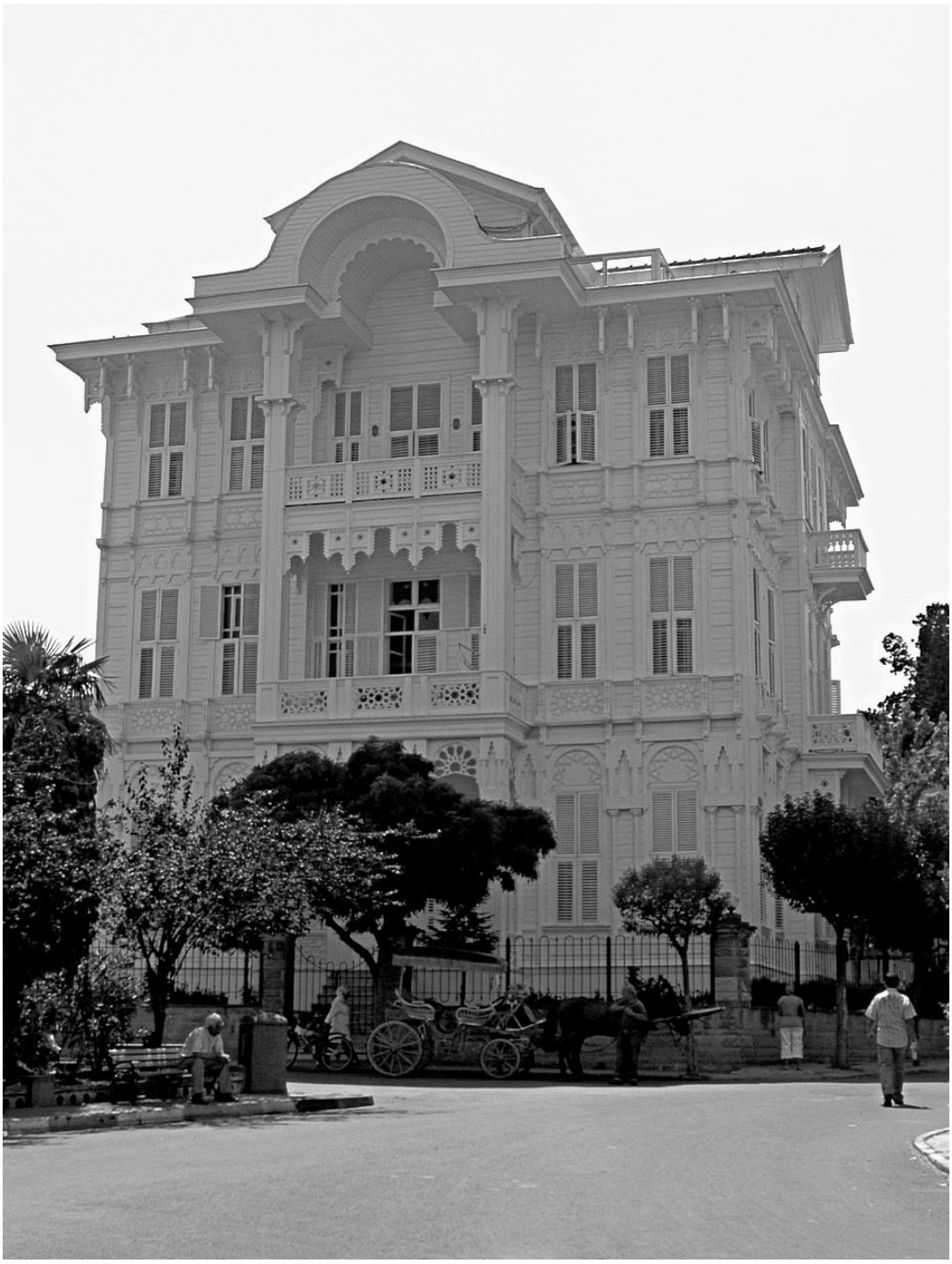


Fig.3.2.lxxx Luxurious ahsap – Prigkipos

3.2.lxxxi Middle budget house – Prigkipos

Istanbul – ironwork

Fig. 3.2.1 Ironwork in Istiklal Caddesi Başak Apartments

Fig.3.2.2 Başak Apartments

Fig. 3.2.3 Window, Edirne Gate, Ayvansaray

Fig. 3.2.4 Balcony in Galata near the tower

Fig. 3.2.5 Balcony in Galata close to Kaşım Pasa

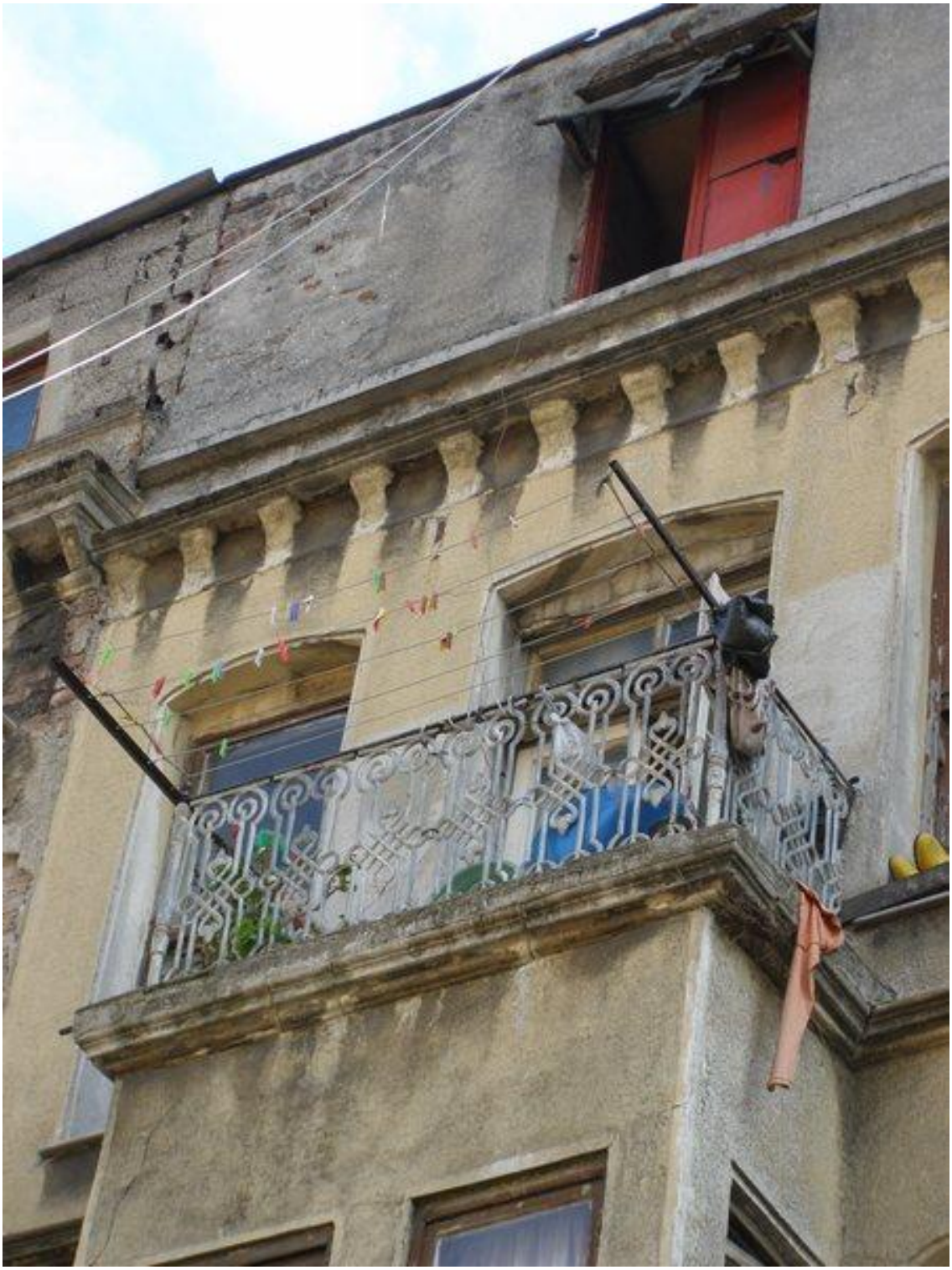


Fig. 3.2.6 Ironwork in Kumkapı, in the south of the historic peninsula

Fig. 3.2.7 Esrefoğlu 59, Kadıköy

Fig. 3.2.8 Railing in Fener

Fig.3.2.9 Bracket in Fener

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fig. 3.2.24 Büyük Hendek 51

fig. 3.2.25 Galata Tower Square

fig. 3.2.26 Büyük Hendek 23

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fig. 3.2.38 Hayvar 6

Fig. 3.2.39 Oba and Soğancı

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Fig. 3.2.45 The door of Başak apartments on Istiklal 203

Fig. 3.2.45a Window of the first floor of the Başak apartments on Istiklal 203

Fig. 3.2.46 The famous Çiçek Pasajı

Fig. 3.2.47 Istiklal 93

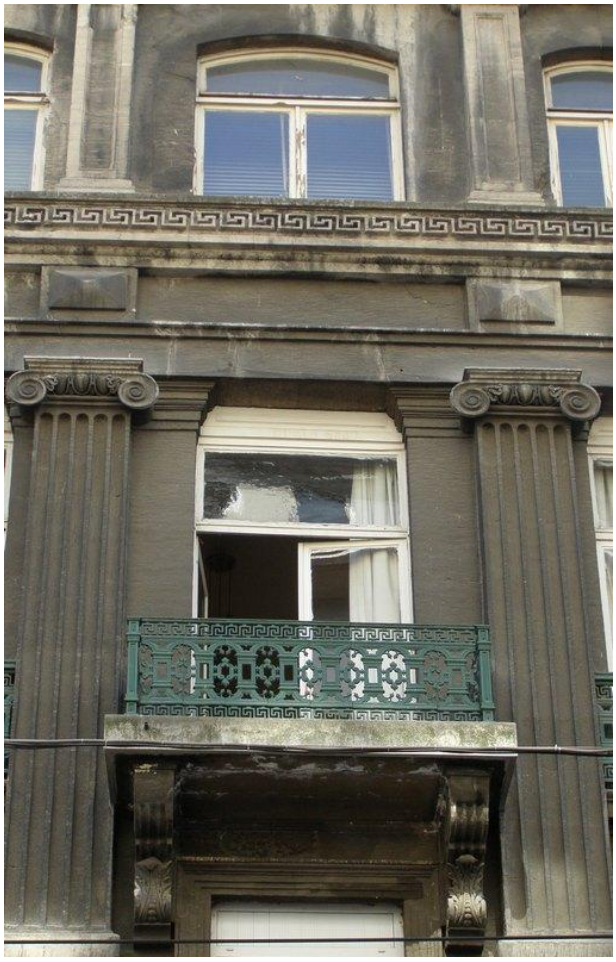

Fig. 3.2.48 Istiklal 231a

Fig. 3.2.49 Istiklal l3

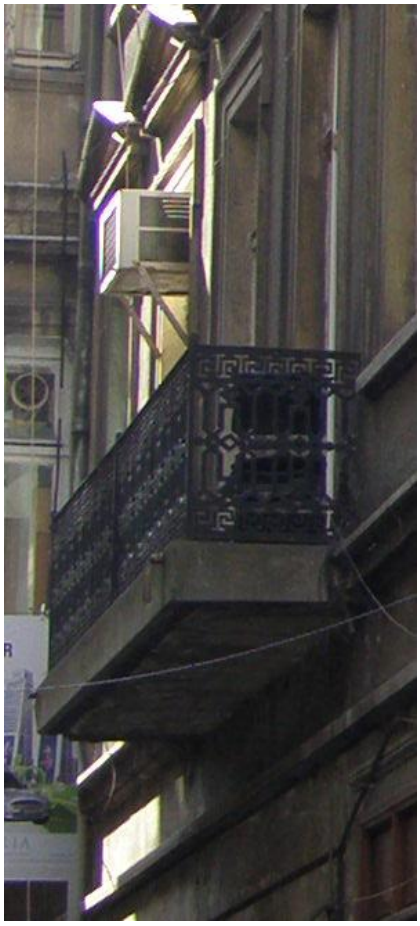

Fig. 3.2.50 Istiklal 231a, side façade

Fig. 3.2.51 Istiklal 132

Fig. 3.2.52 Istiklal 132

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Fig. 3.2.56 Istiklal 233, Church of St Antoine

Fig. 3.2.57 Detail of the building on Istiklal 233.

Fig. 3.2.58 Istiklal 235

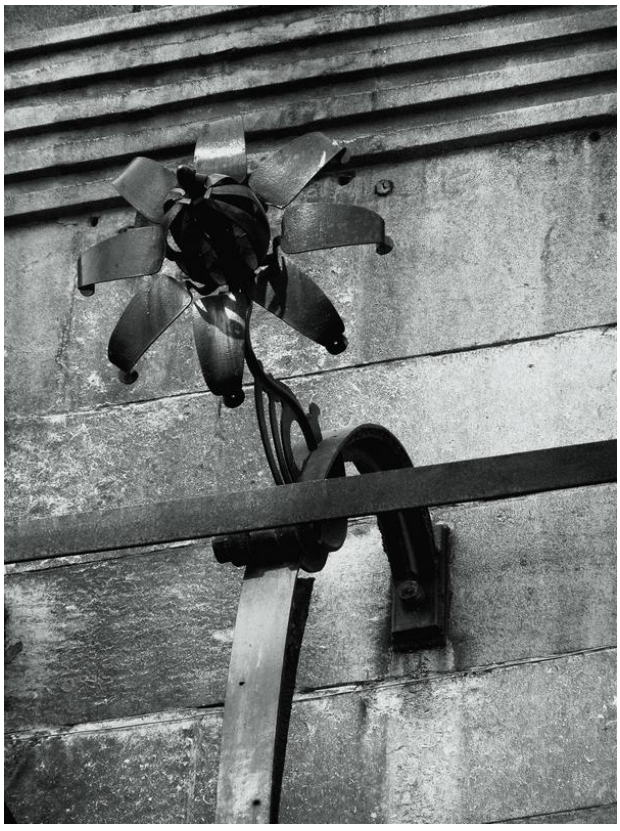

Fig. 3.2.59 Detail from Istiklal 235

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Fig. 3.2.85a

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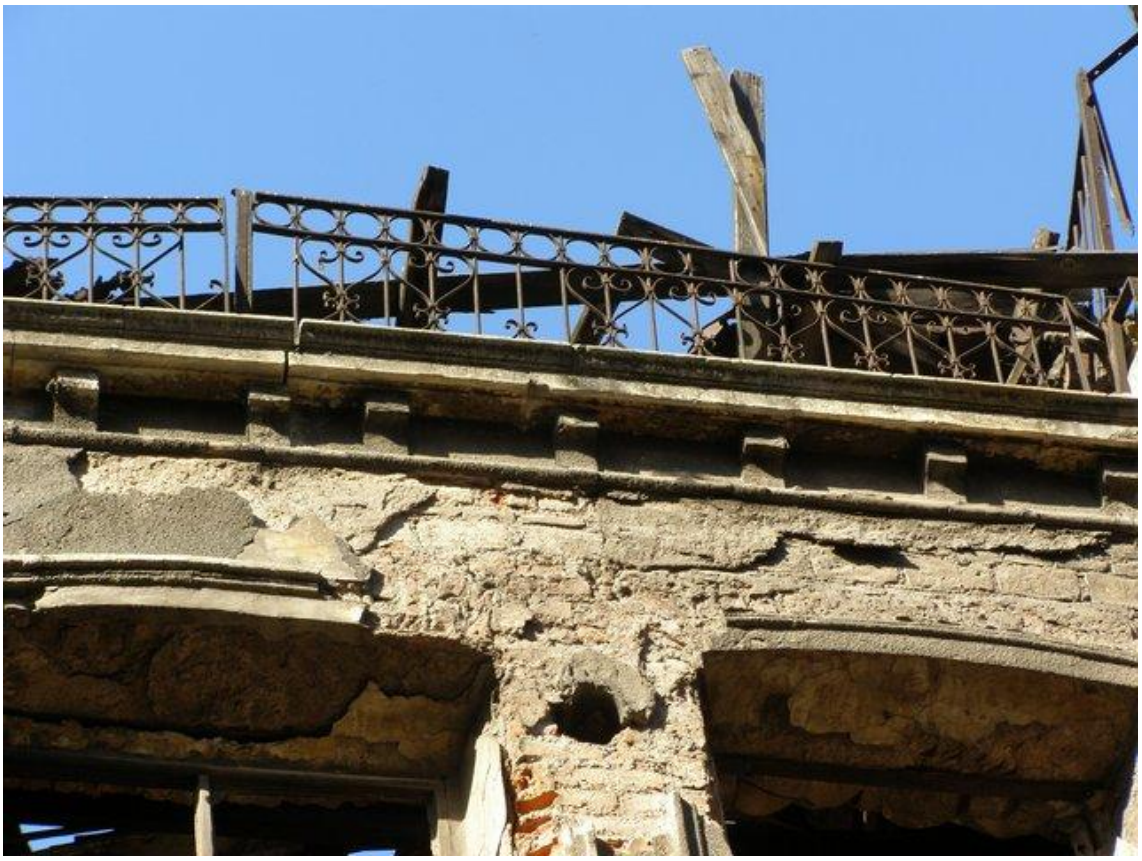

Fig. 3.2.89 Vodinya Street near to the Keremit crossroads

Fig. 3.2.90 At the vicinities of Marasleion, Vodinya Street 9.

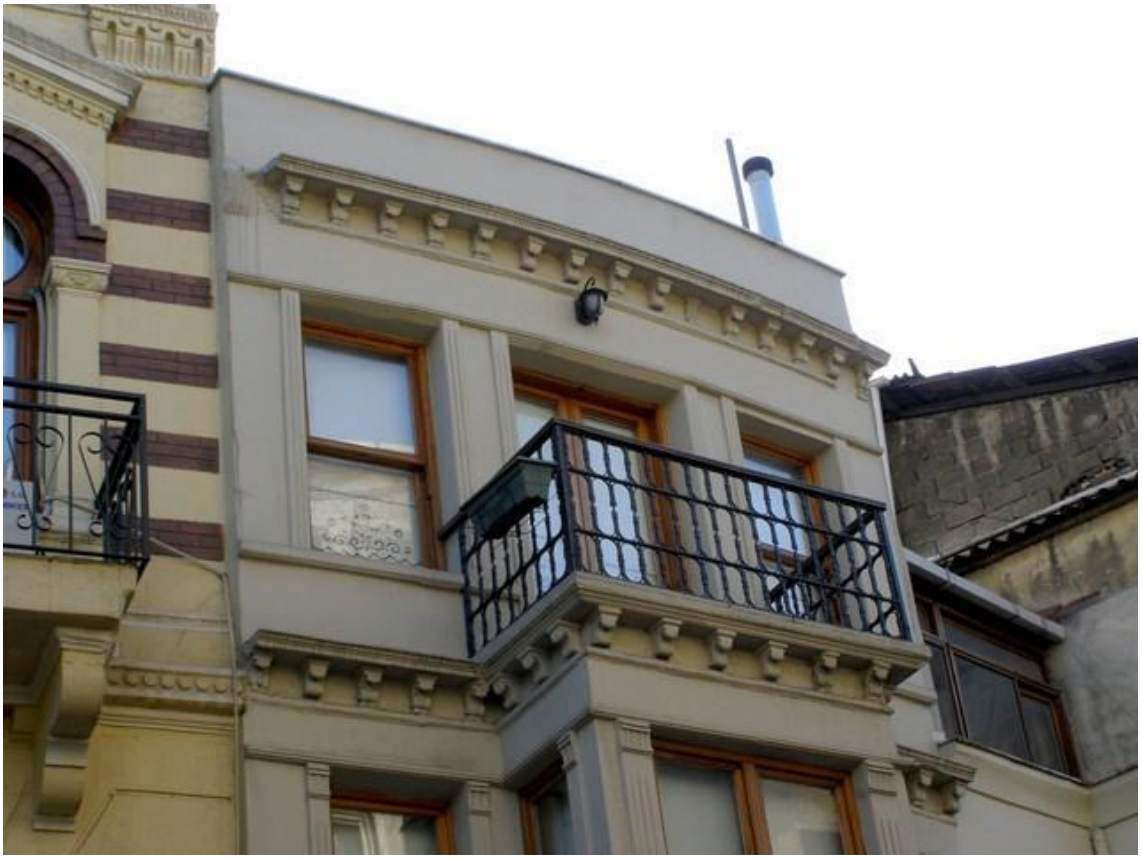

Fig. 3.2.91 Vodinya Street 11

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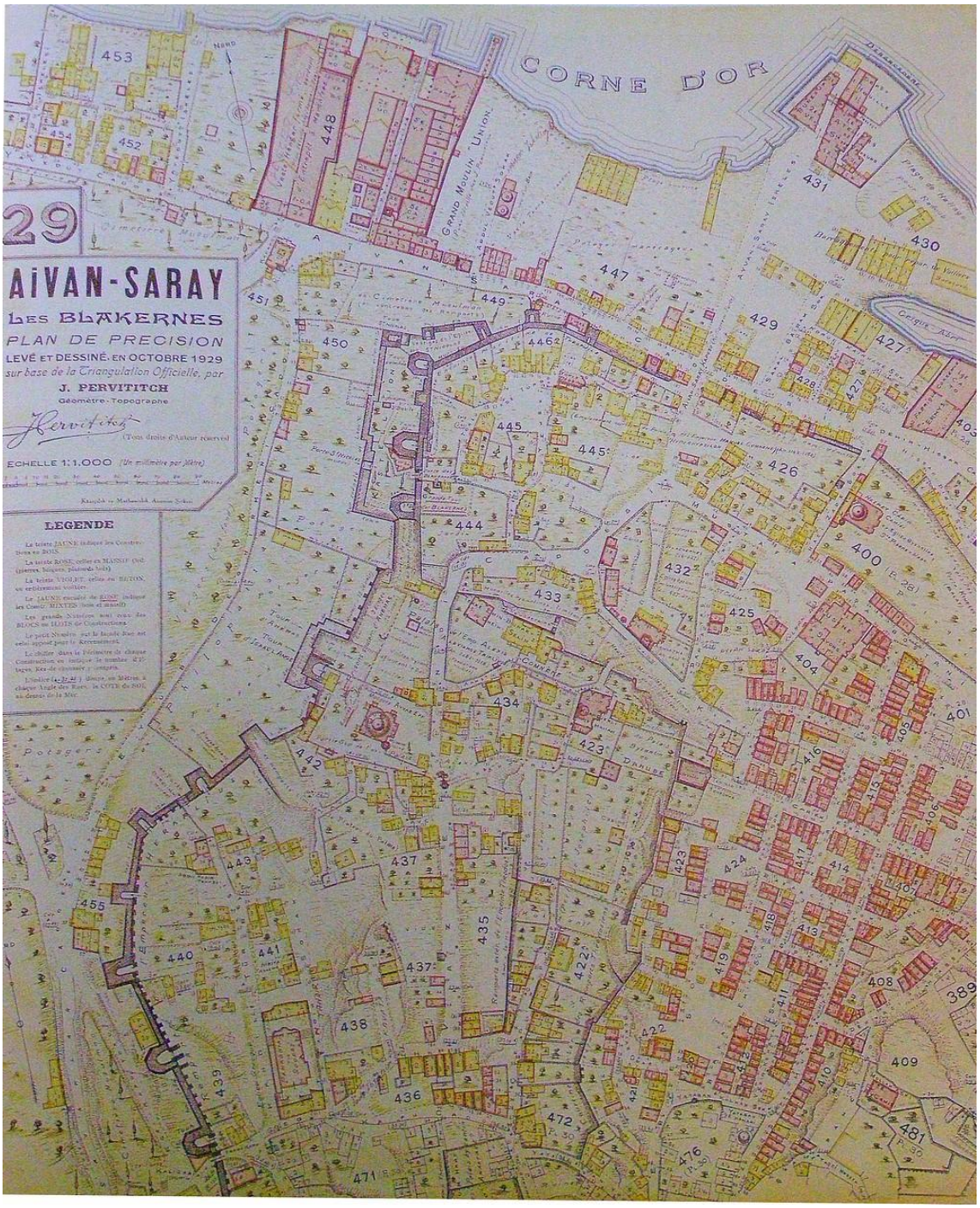

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Fig 3.2.94.a Büyük Kuleli and Haci Kadını

Fig. 3.2.95 Arap Kuyusu Street

Fig. 3.2.96 Tahta Tulumba Street 2.

Fig. 3.2.97 İmrahor 12 – 8

Fig. 3.2.98 Cift Gelinler and Gedik Paşa Streets

Fig. 3.2.99 Gedik Paşa 12

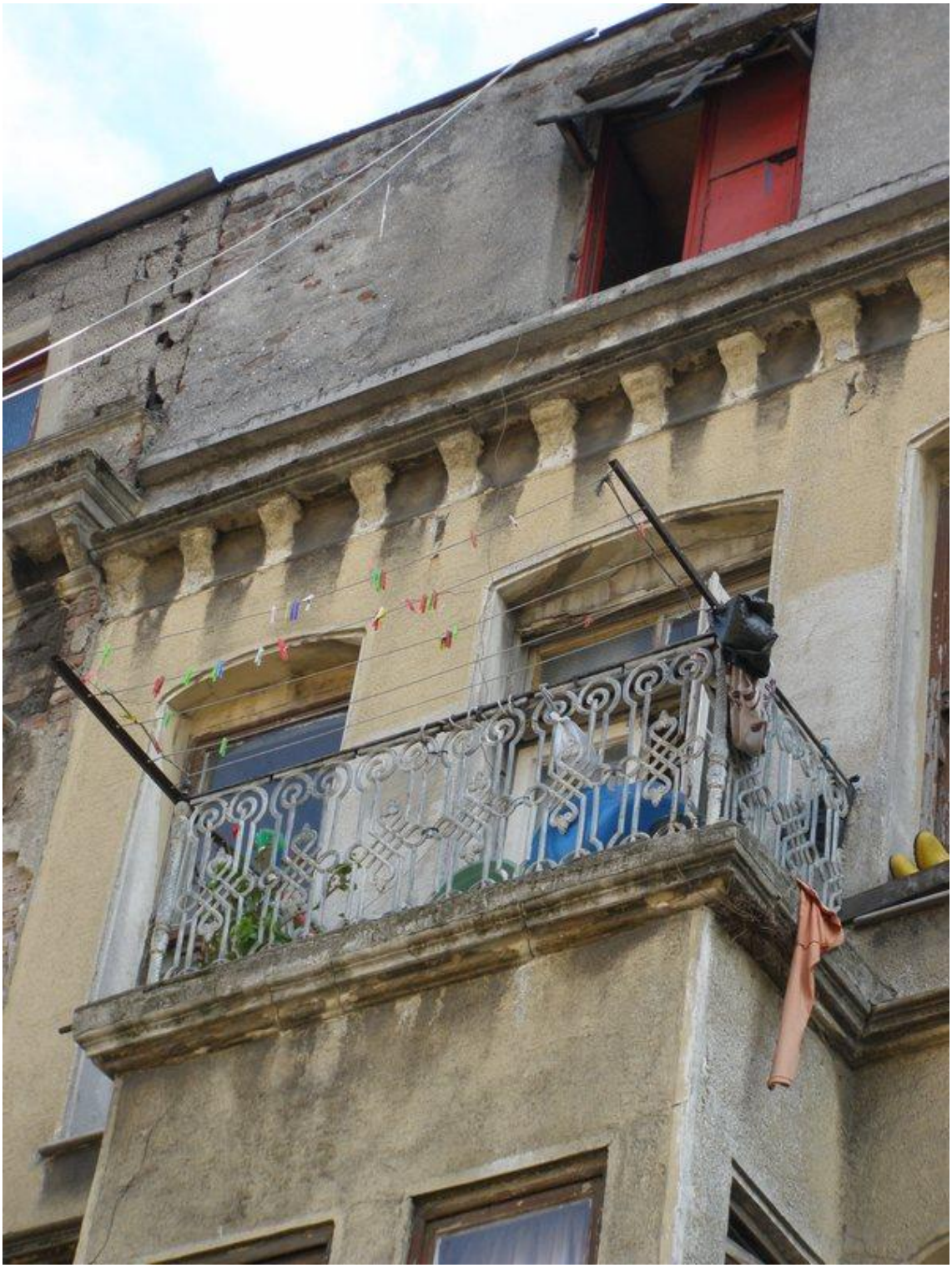

Fig. 3.2.100 Detail of figure 98

Fig. 3.2.101 Detail of Gedik Paşa 12

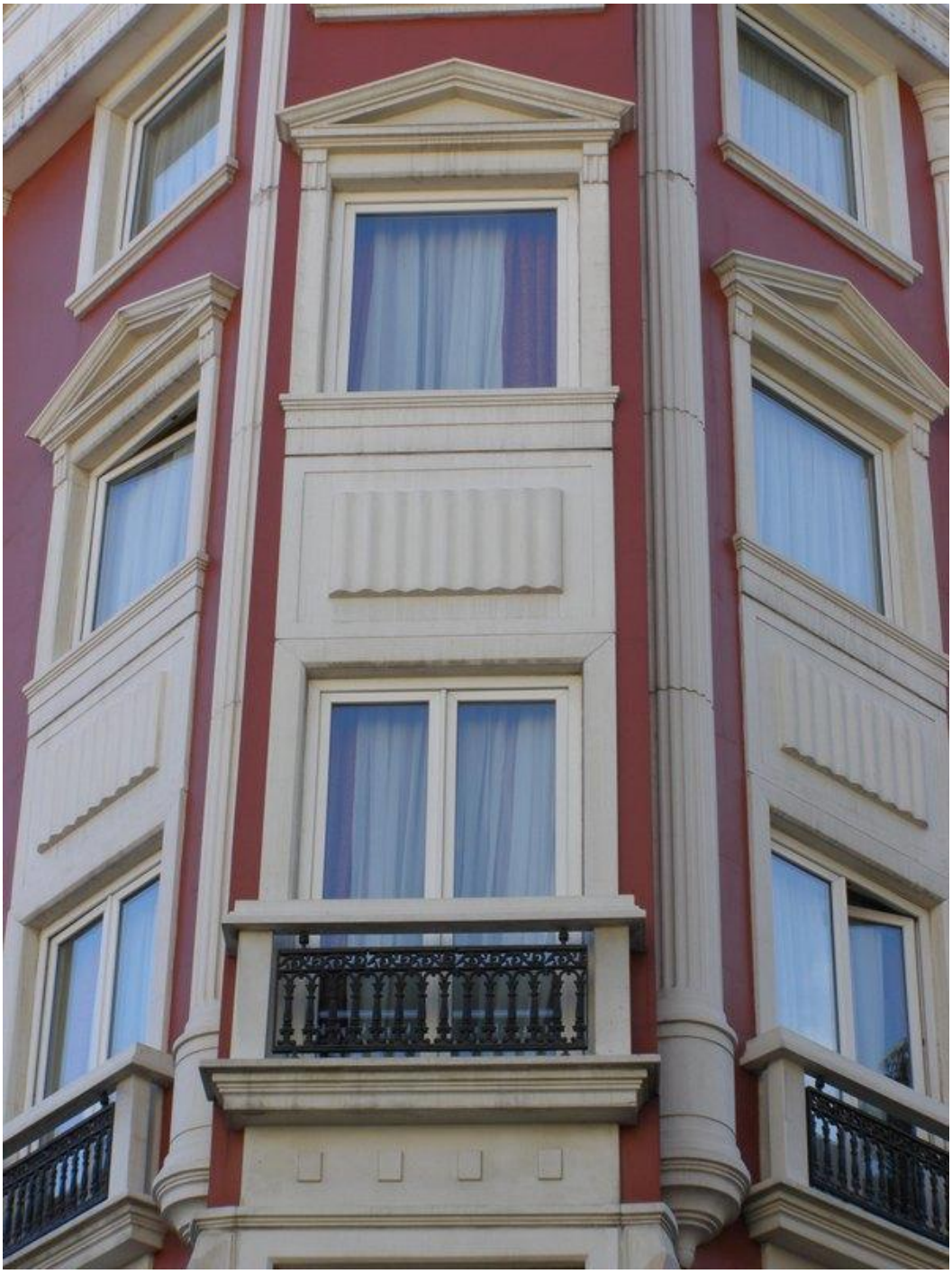

Fig. 3.2.102 Nöbethane 48

Fig. 3.2.103 Detail of Nöbethane 48

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Fig. 3.2.112 Fevzi and Kıstaşı

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Fig. 3.2.115 Sarıgüzel Street

Fig. 3.2.116
Esrefoğlou 23

Fig. 3.2.117 Yeldeğirmeni 21

Fig. 3.2.118 Nemlizade 58

Fig. 3.2.119 Nemlizade 54 - 56

Fig. 3.2.120 Nemlizade 54 – 56, detail

Fig. 3.2.121 Nemlizade 52

Fig. 3.2.122 Yoğurtcu 9

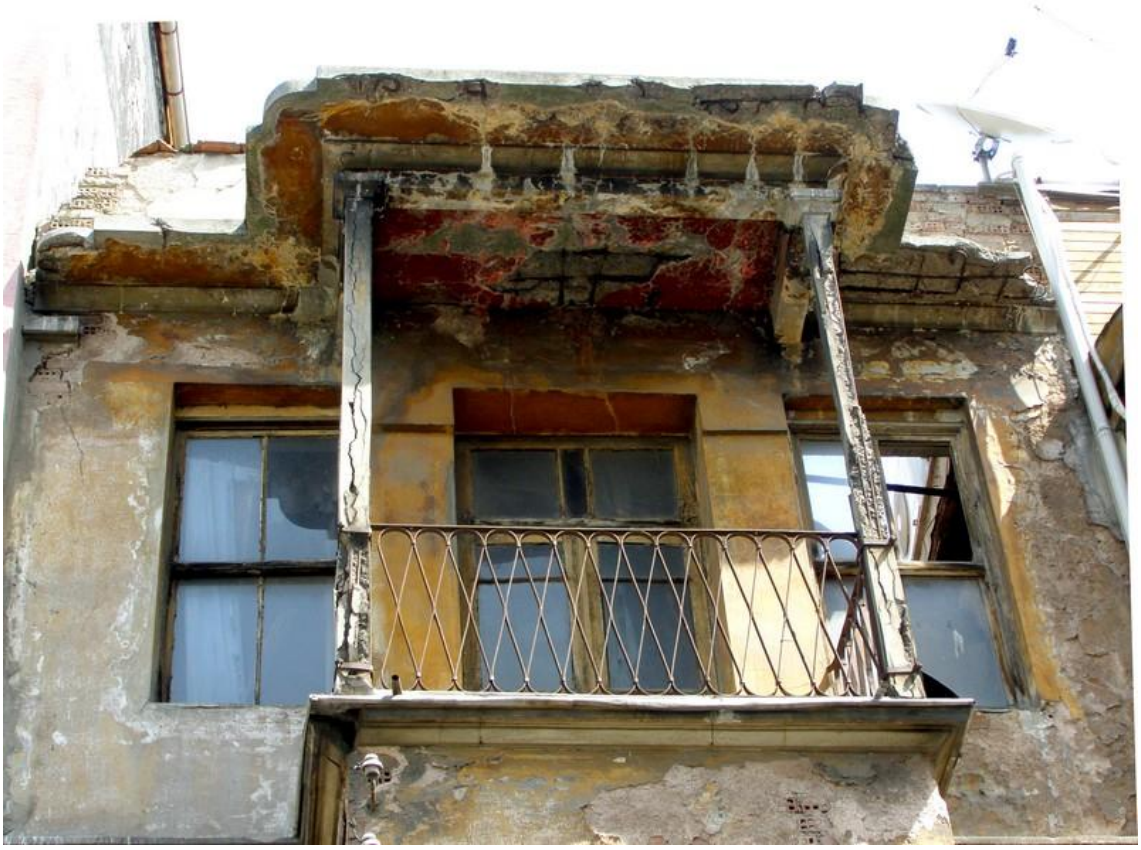


Fig. 3.2.123 Yoğurtlu 9, detail

Fig. 3.2.124 Misaki Milli 25

Fig. 3.2.125 Esrefoğlou 59 - 55

Fig. 3.2.126 Esrefoglou and Başıkcı 7

Fig. 3.2.127 Uzun Hafiz and Karakolane

Fig. 3.2.128 Yeldeğirmeni 3

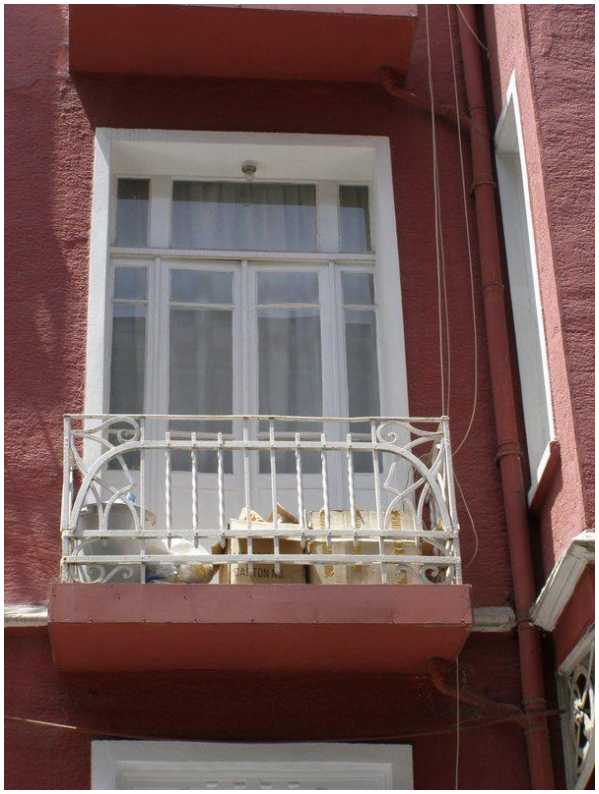
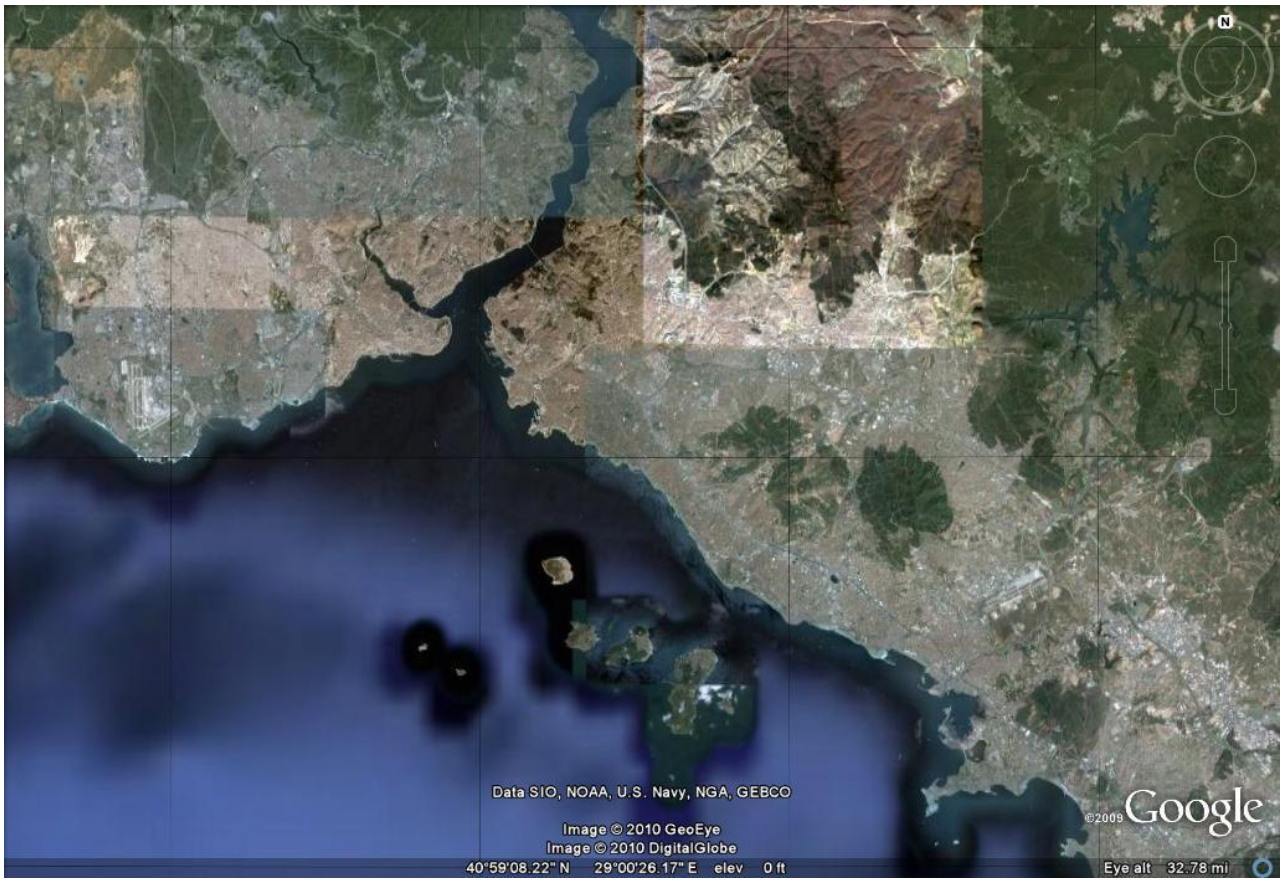


Fig. 3.2.129 Yeldeğirmeni 129

Fig. 3.2.130 Yeldeğirmeni 129, detail

Istanbul – Maps



Map 1 Position of Istanbul

Map 2
Areas of Istanbul

Map 3 Districts of Istanbul

Map 4 Locations in the Historic Peninsula

Map 5 Locations in Pera

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Map 6 Locations in Kadikoy

Thessaloniki – architecture

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Fig. 3.3.ii The Ottoman inscription on the house of Şeyfullah Paşa

Fig. 3.3.iii The Siaga House in Hamidye

Fig. 3.3.iv The balcony of the Siaga House, Hamidye.

Fig. 3.3.v Balcony of the Siaga House

Fig. 3.3.vi The Hanim's house on Leoforou Stratou Avenue

Fig. 3.3.vii Detail of the Hanim's house

Fig. 3.3.viii The middle of the littoral front in early 1880s after the demolition of the sea walls

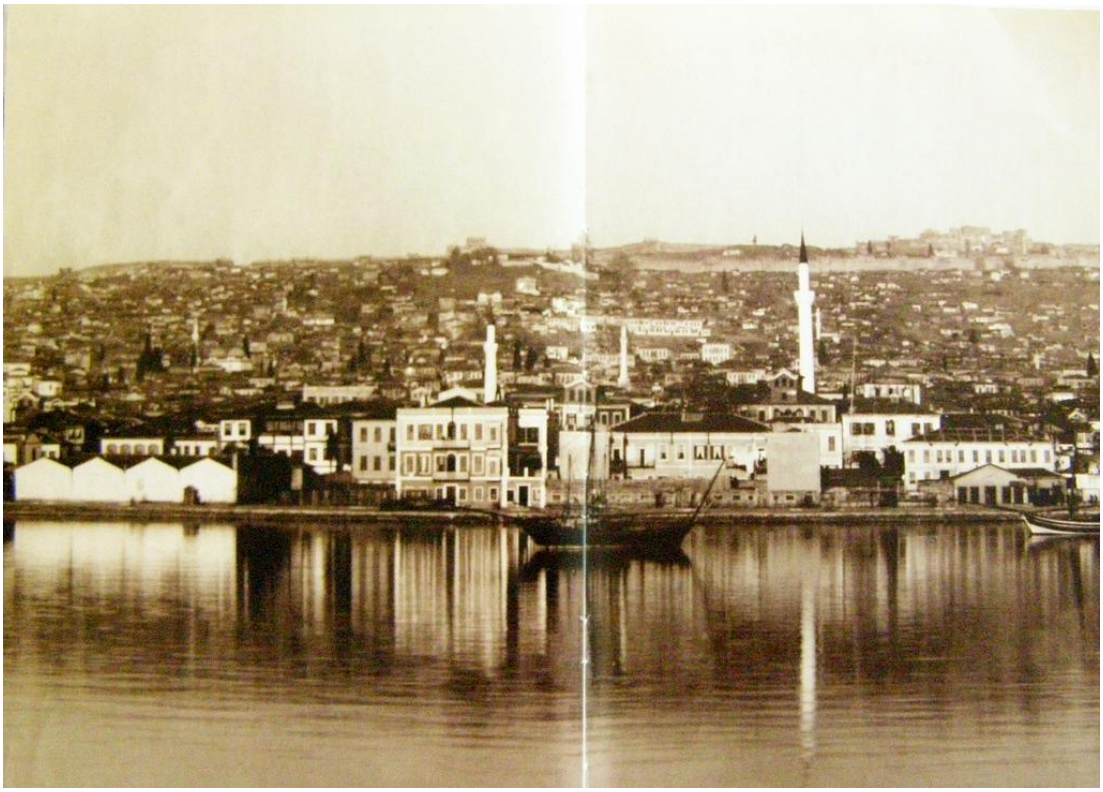


Fig. 3.3.ix The same image with the part to the east close to White Tower

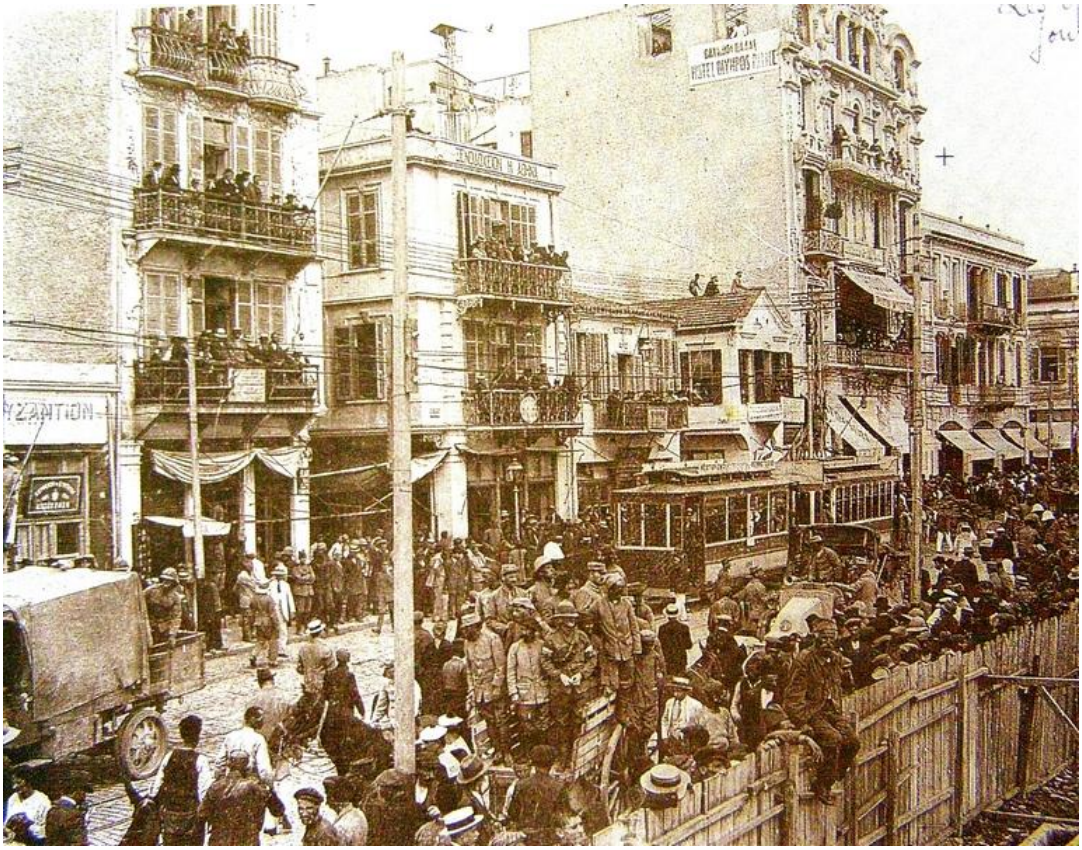


Fig. 3.3.x The central littoral area at the late 1890s

Fig. 3.3.xii Buildings at the central part of the littoral in the 1910s

Fig. 3.3.xiii Hotel splendid on the littoral

Fig. 3.3.xiv The building on Katouni Street 14

Fig. 3.3.xv Katouni Street 6

Fig. 3.3.xvi Detail of the building on Katouni Street 6.

Fig. 3.3.xvii Cauchi Bros building on Katouni Street

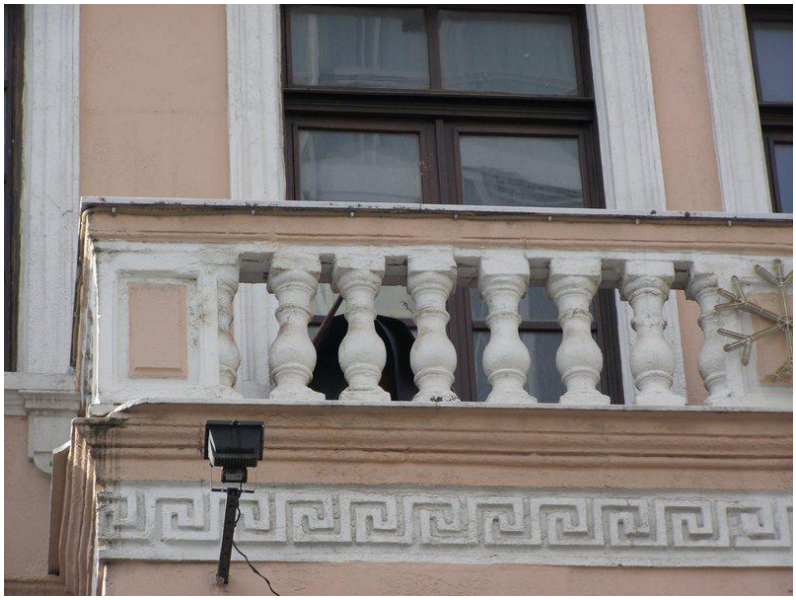


Fig. 3.3.xviii Detail of the building

Fig. 3.3.xix Building on Aigyptou Street

Fig. 3.3.xx Warehouse on Salaminos Street

Fig. 3.3.xxi Window of the warehouse on Salaminos Street

Fig. 3.3.xxii Emniyet Han on Edessis Street

Fig. 3.3.xxiii The signs on Emniyet Han

Fig. 3.3.xxiv Passage Kyrtsi

Fig. 3.3.xxv Bank of Salonika on Syggrou Street

Fig. 3.3.xxvi Railing on the Bank of Salonika

Fig. 3.3.xxvii Proxenou Koromila Street during the late Ottoman era.

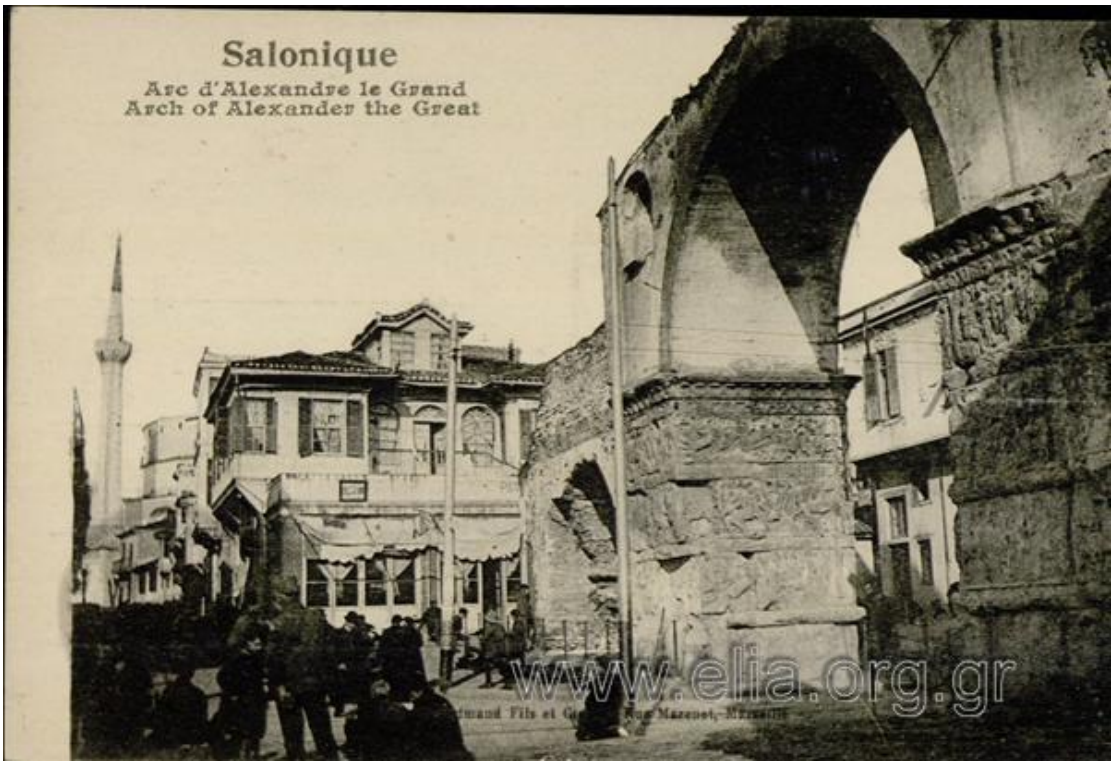


Fig. 3.3.xxviii Triumph arch, late 1890s

Fig. 3.3.xxix Egnatia Street at the core of the city

Fig. 3.3.xxx Part of Egnatia Street

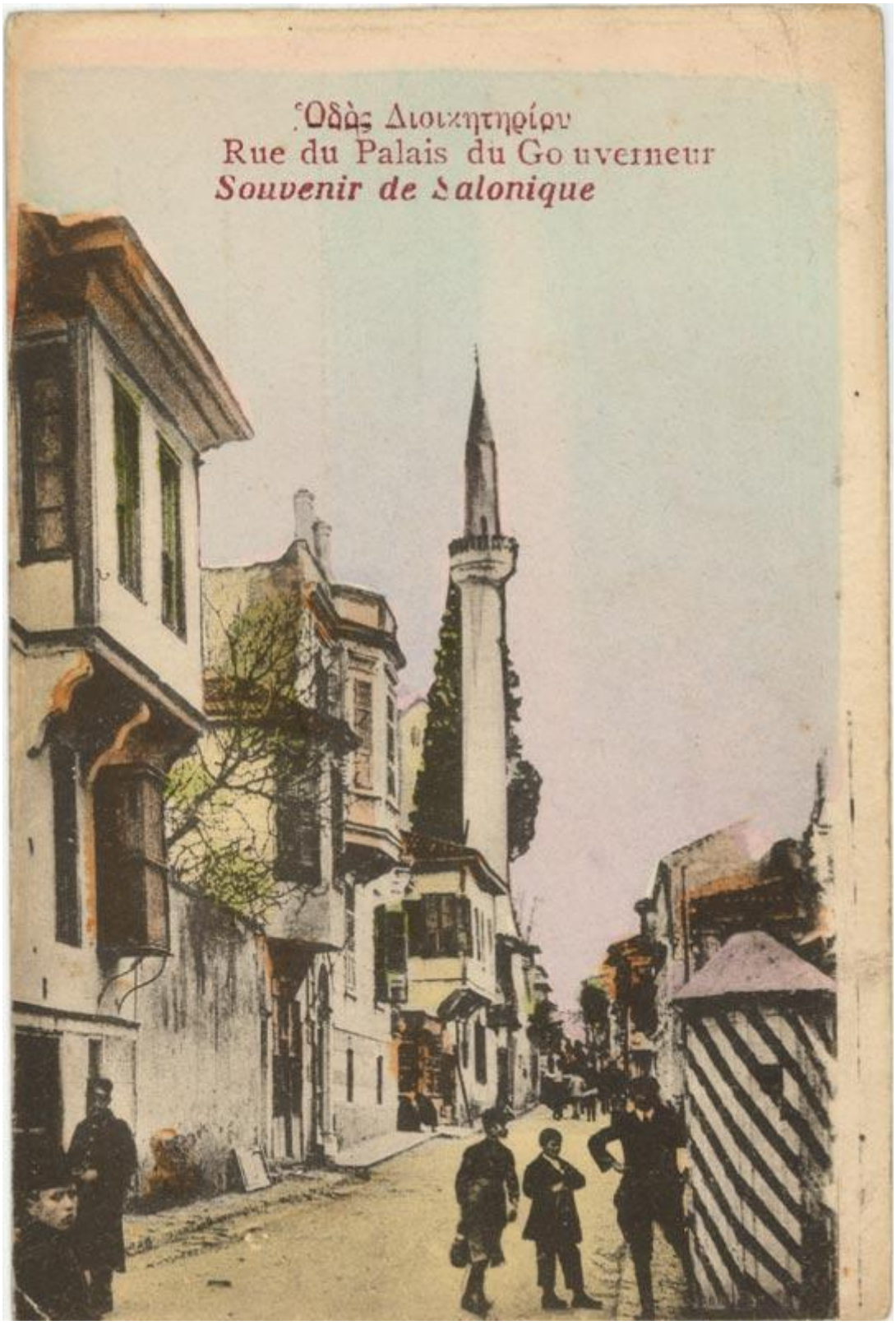


Fig. 3.3.xxxi Agiou Dimitriou Street 1900s

Fig. 3.3.xxxii West part of Aghiou Dimitriou Street

Fig. 3.3.xxxiii The old Konak

Fig. 3.3.xxxiv The New *Belediye* building

Fig. 3.3.xxxv Street in the Upper city

Fig. 3.3.xxxvi Square in the Upper City

Fig. 3.3.xxxvii Houses in the area of the acropolis

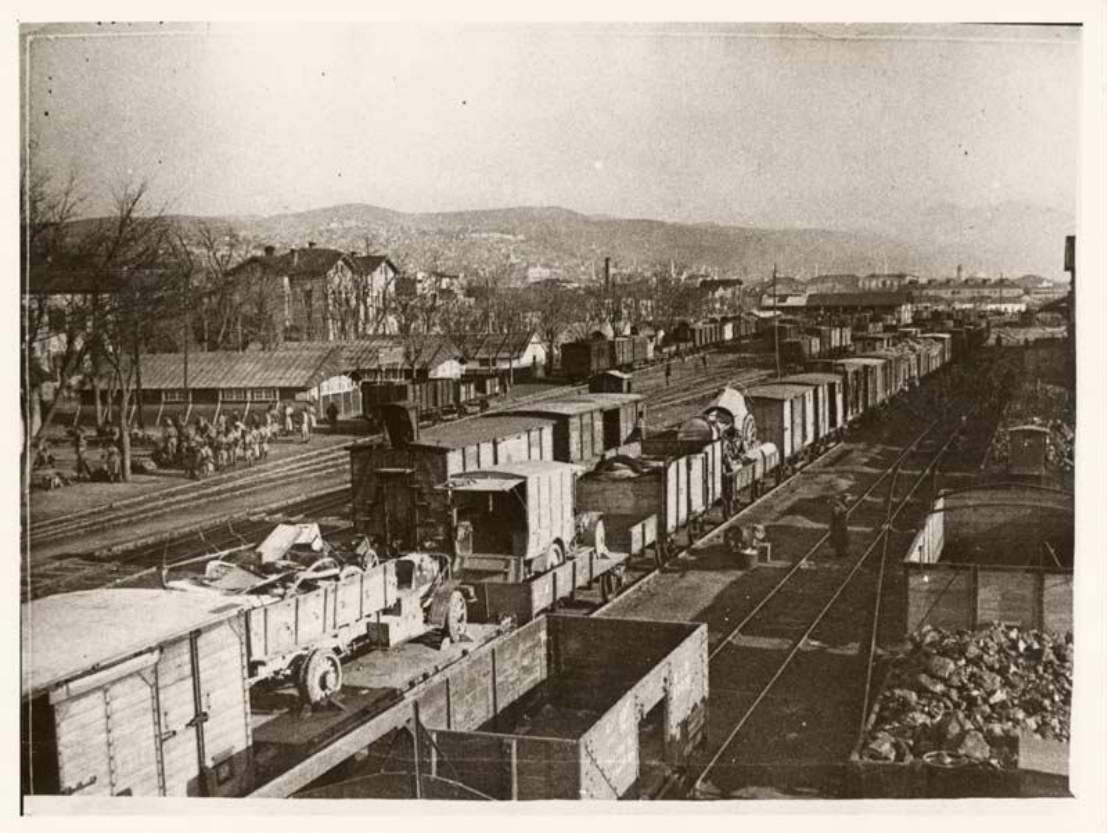


Fig. 3.3.xxxviii Railways infrastructure, late 19th century

Fig 3.3.ixl Houses behind the railway station

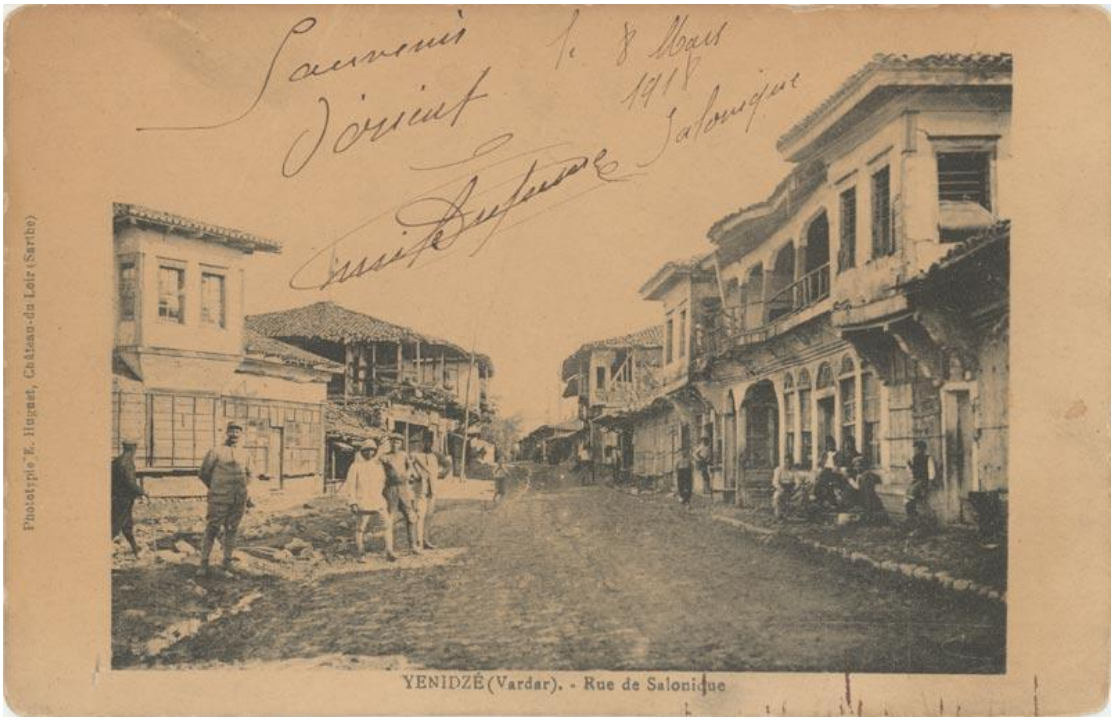


Fig. 3.3.xl Gianitson Street, early 1900s

Fig. 3.3.xli Tantalou Street, Çayır

Thessaloniki – ironwork

Fig. 3.3.2 Ippodromiou Street in the eastern part within the walls

Fig. 3.3.3 View of a street parallel to the sea front

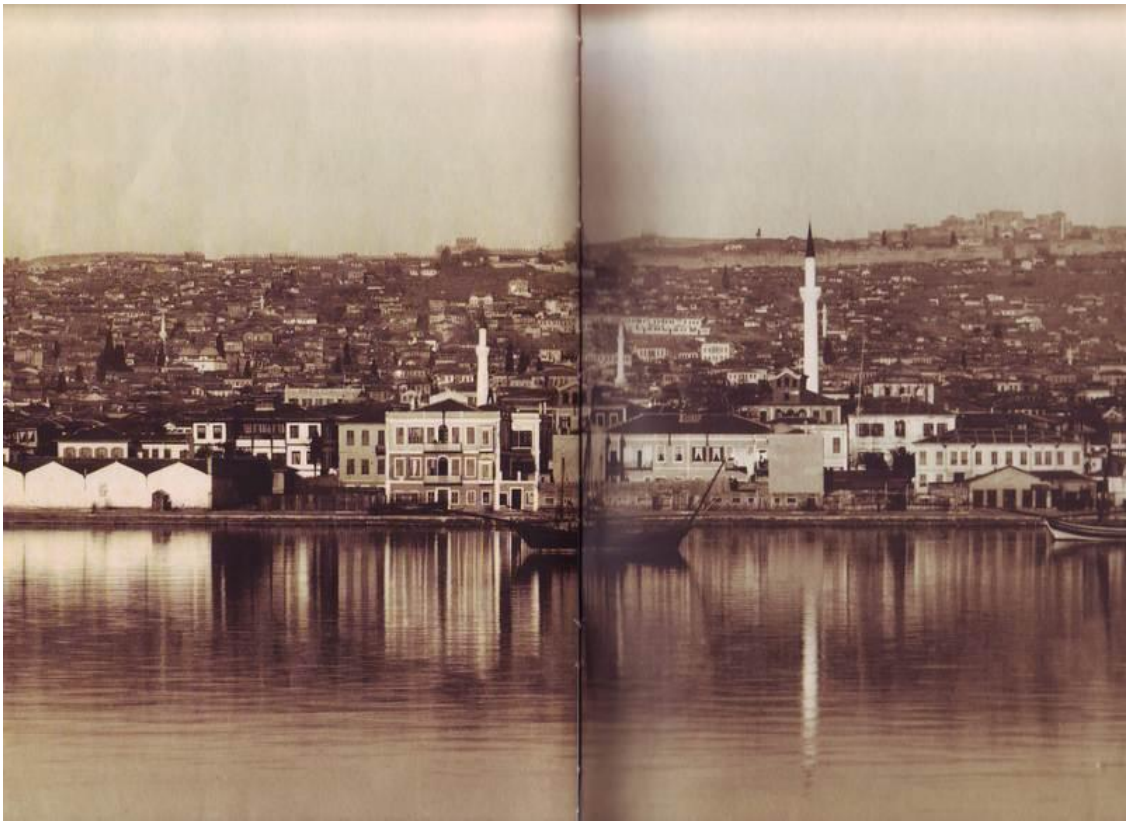


Fig. 3.3.4 View of the littoral in the early 1880s

Fig. 3.3.5 Part of the littoral in the 1900s

Fig. 3.3.6 Eleftherias Square in the 1900s

Fig. 3.3.7 Eleftherias Square in the 1890s

Fig. 3.3.8 Salaminos Street in the 1910s

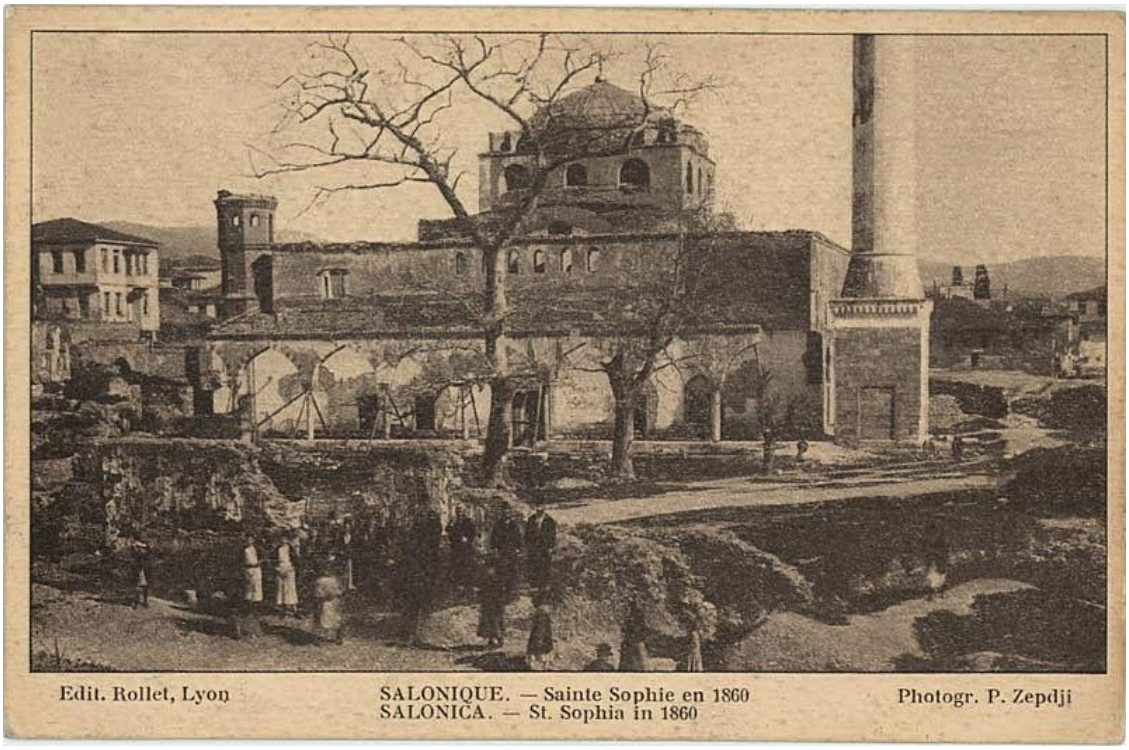


Fig. 3.3.9 St Sophia Church and the surroundings during the 1860s

Fig. 3.3.10 St Sophia Church during the 1900s

Fig. 3.3.11 The Triumph Arch in the 1880s

Fig. 3.3.12 The Triumph Arch in the 1900s

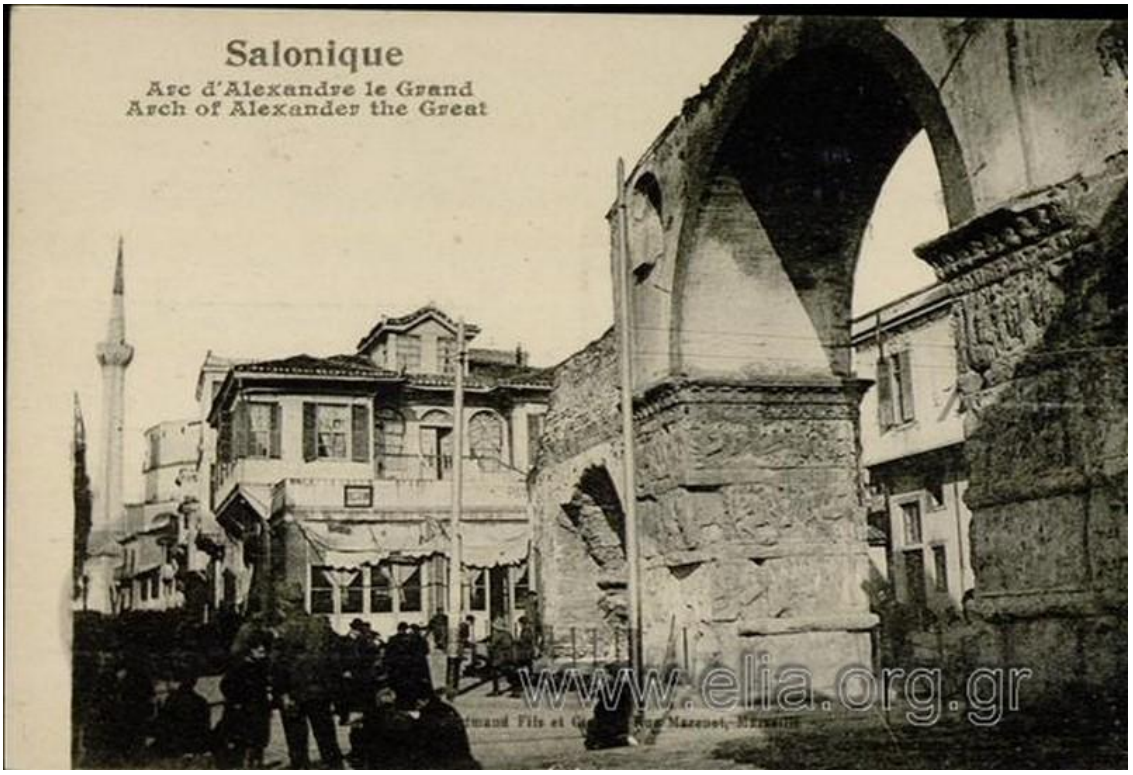


Fig. 3.3.13 The area to the north of the Triumph Arch

Fig. 3.3.14 The same house in the 1970s

Fig. 3.3.15 An indefinable point on Egnatia Street

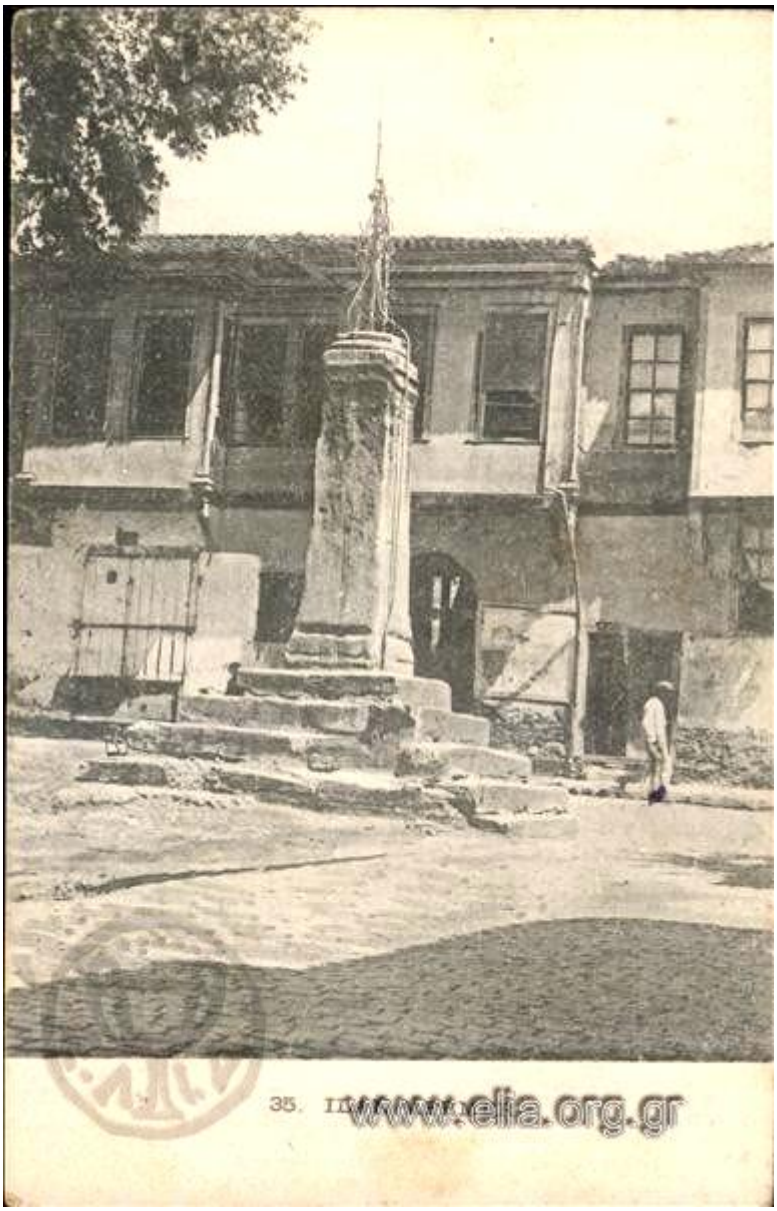


Fig. 3.3.16 Aghiou Dimitriou Street at the Yilan Mermer in the 1900s

Fig. 3.3.17 The same point in the 1890s

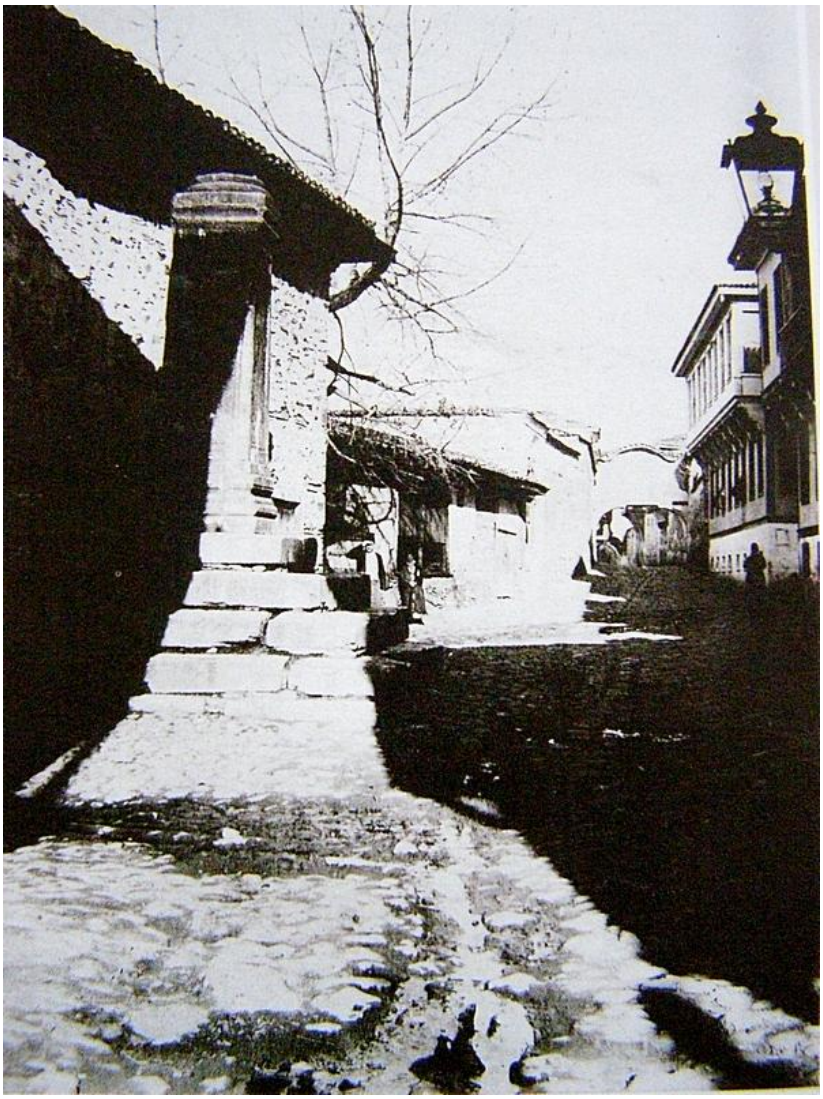


Fig. 3.3.18 The same place during an indefinable period (probably in the early 1890s because there is still the arch over the street and the lantern)

Fig. 3.3.19 The Yilan Mermer and the area in 2008

Fig. 3.3.20 Poliorkitou and Papadopoulou Streets, Upper City

Fig. 3.3.21 Poliorkitou Street, Upper City

Fig. 3.3.21 Details on the same building

Fig 3.3.22 The upper part of the Upper city in 1918

Fig. 3.3.23 Parts of the Upper city out of the walls

Fig. 3.3.24 A road in the Cayir area in the 1890s

Fig. 3.3.25 Fintiou Street 17, Cayir (2010)

Fig. 3.3.26 "Villa Bianca" Vassilisis Olgas and Sofouli Streets (date: 1912 Jewish property)

Fig. 3.3.27 "Villa Kapantzi" Vassilisis Olgas and Mpotsari Streets (date: 1900, Turkish property, Architect: Arrigoni)

Fig 3.3.28 The "Benveniste" House on Delfon and Paraskevopoulou Streets (date 1907, Jewish property)

Fig. 3.3.29 Sofouli Street (date: 1922)

Fig. 3.3.30 Details of the "Villa Bianca" (seen again on image 3.3.26)

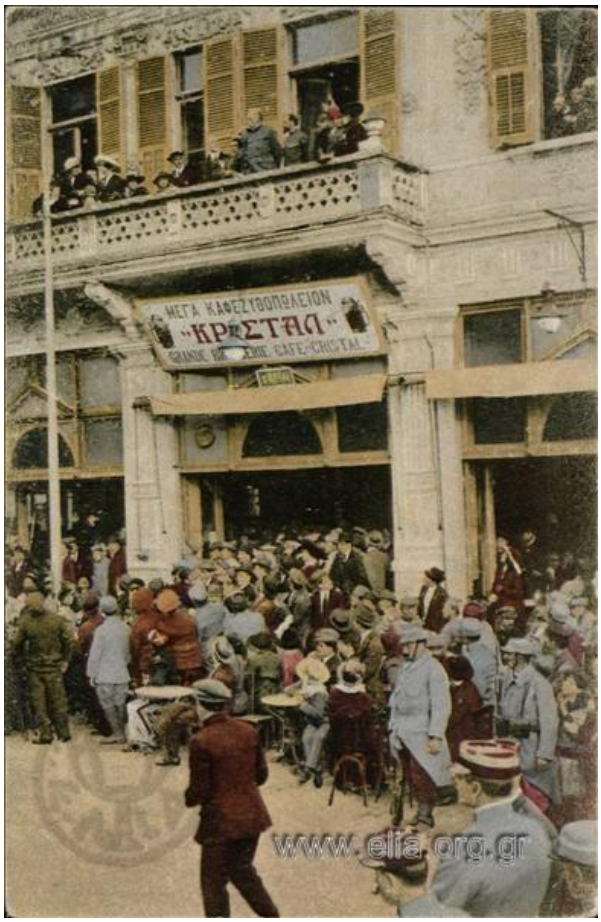


Fig. 3.3.31 The building on the corner of Eleftherias Square and the littoral avenue (1900s)

Fig. 3.3.32 Balcony on the littoral close to the Nikis Square (photograph dated in 1908 during a demonstration of the *Neoturks' Revolution*)

Fig. 3.3.33 Window on a building of Katouni Street in Istira

Fig. 3.3.34 The littoral avenue in the early 1890's

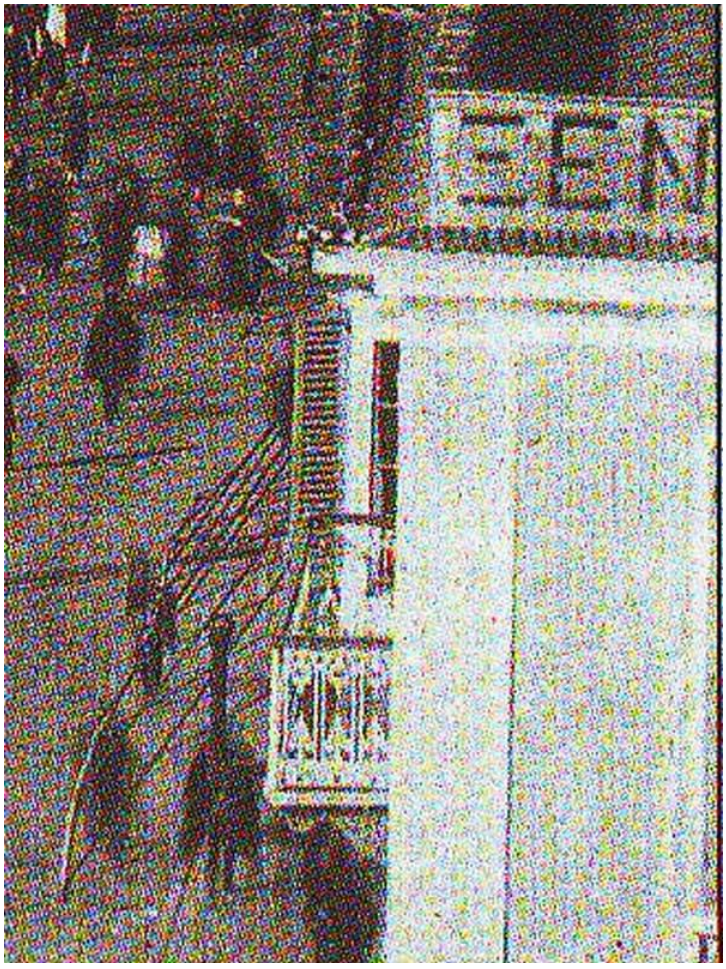


Fig. 3.3.35 Detail of the first building on the row

Fig. 3.3.36 The cast iron of the balcony has a strong kinship with those of 3.1.13 in Bitola

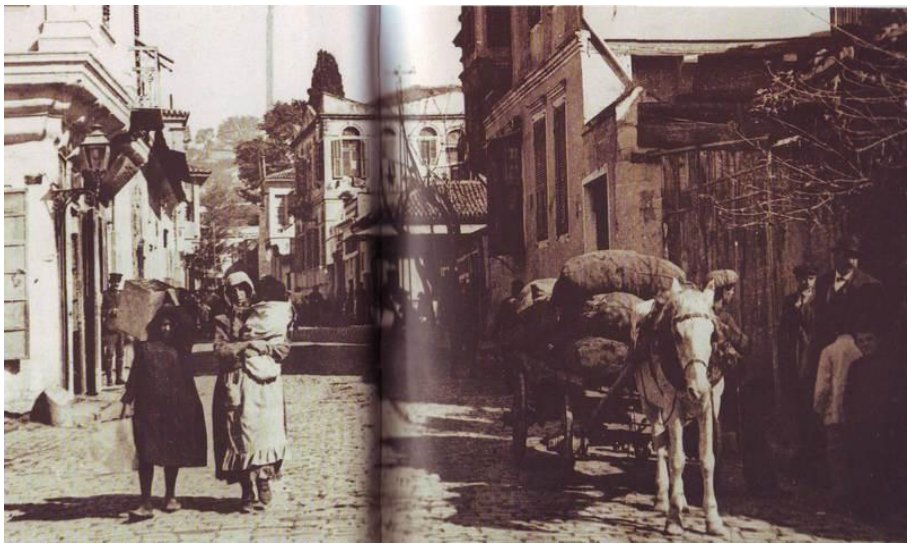


Fig. 3.3.37 St Sophia Street in the 1890's

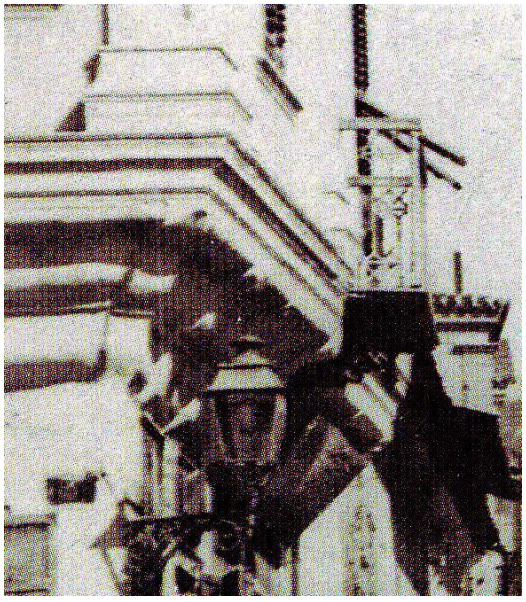


Fig. 3.3.38 Detail of the railing

Fig. 3.3.39 Balcony at the surroundings of the Triumph arch

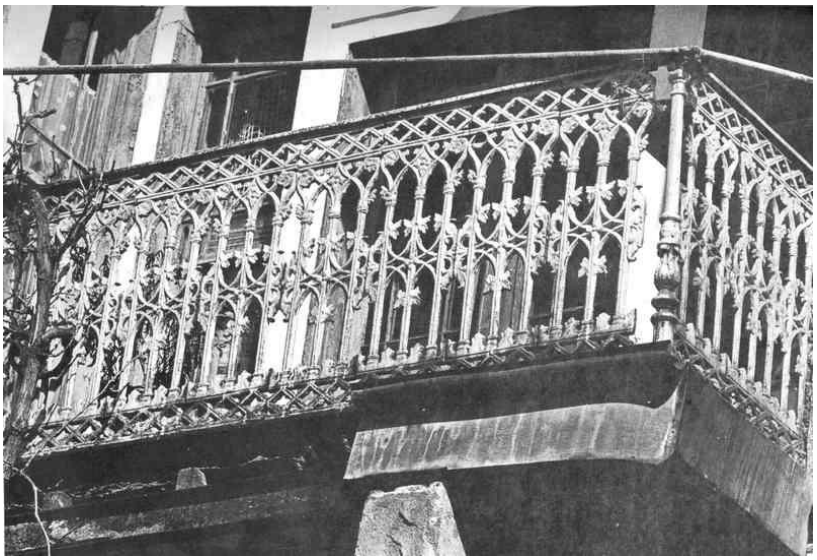


Fig. 3.3.40 A balcony from the book of Varvoglis

Fig. 3.3.41 The old building of the Ottoman Bank (bombed in 1903)

Fig. 3.3.42 The 'new' building of the Ottoman Bank

Fig. 3.3.43 Detail on the gate railings of the Ottoman Bank

Fig. 3.3.44 Unknown building probably in the western part of the lower city

Fig. 3.3.45 Building of the 1890s at the corner of Egnatia and Hamidye Streets

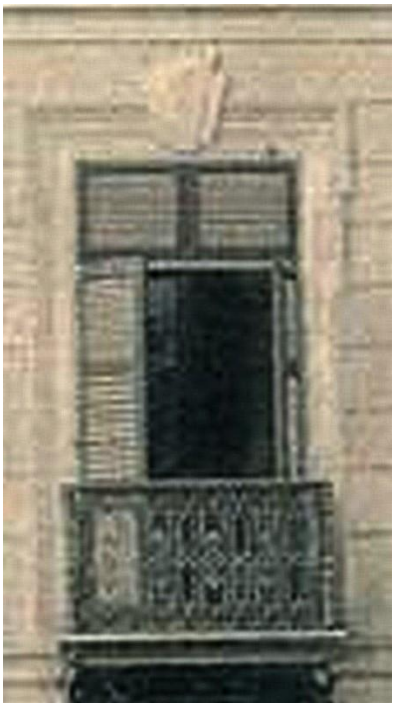


Fig. 3.3.46 The Balcony of the same building

Fig. 3.3.47 An indefinable street in the upper Lower City in 1916

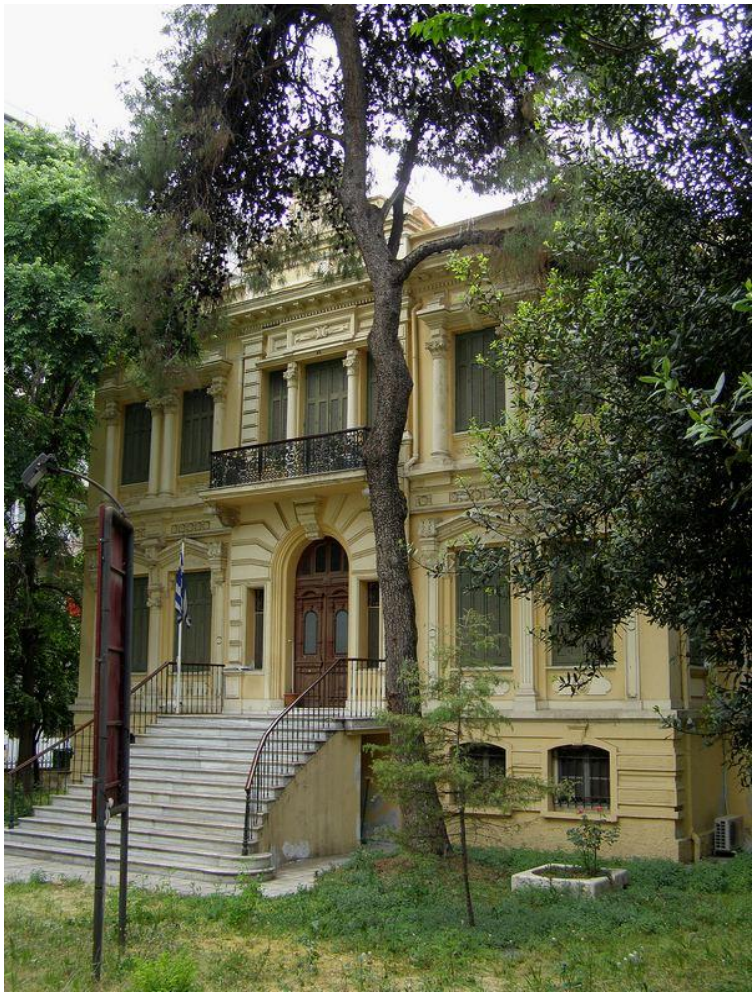


Fig. 3.1.49 The "Melissa" building

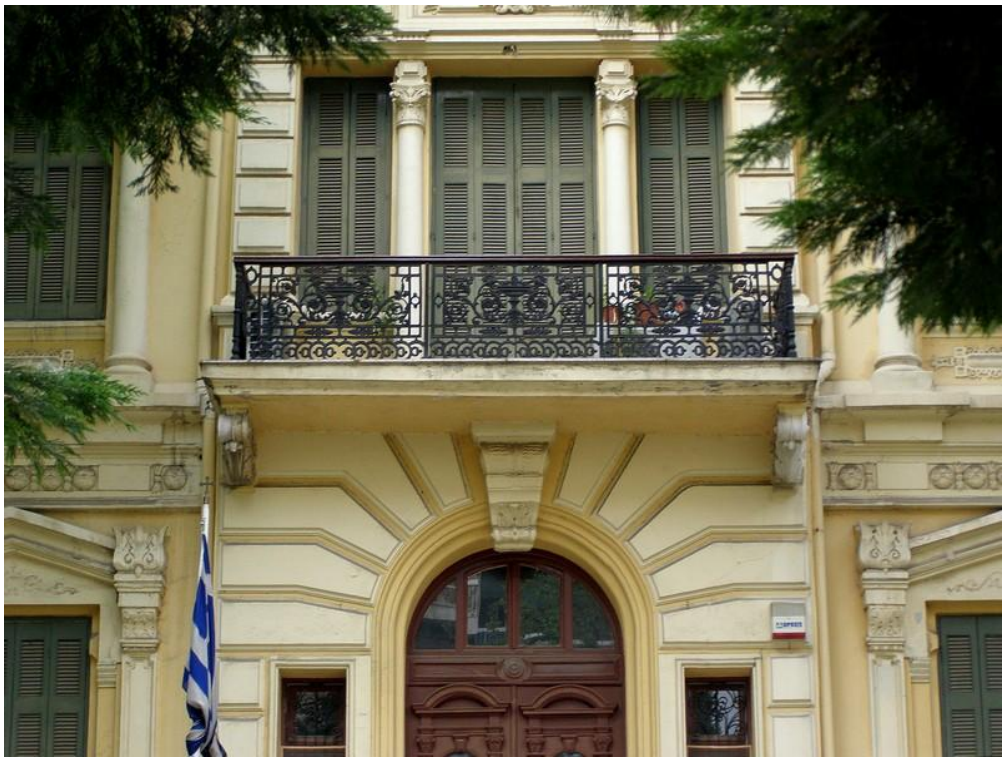


Fig. 3.3.50 The balusters of "Melissa"

Fig. 3.3.51 The balustrade of the stairway

Fig. 3.3.52 The stairway in the Ismail Bey Han on Paikou Street (in Malta Ceddid, built in the early 1880's)

Fig. 3.3.53 Building of the 1900's; lower part of Istira – Port

Fig. 3.3.54 Fintiou 17 – Cayir

Fig. 3.3.55 and 56 Aisopou and Fintiou Streets – Malta Ceddid

Fig. 3.3.57 Monastiriou Street Cayir

Fig. 3.3.58 The old Post Office

Fig. 3.3.59 Delfon and Paraskevopoulou Streets; Benveniste Building Hamidiye, 1907

Fig. 3.3.60 Spartis 11, Hamidiye

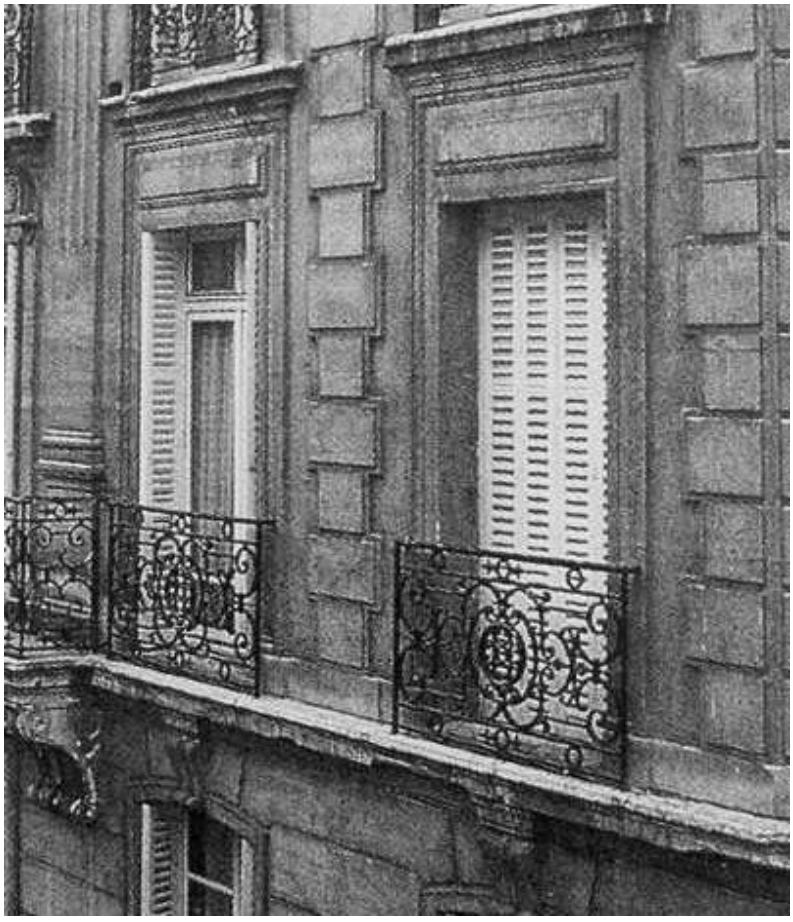


Fig. 3.3.61 Rue Portalis, Paris

Fig. 3.3.62 Ismail Bey Han in Malta Ceddid (the north façade on Valaoritou Street)

Fig. 3.3.63 Edessis Street 6

Fig. 3.3.64 Shutters on Edessis Street 5

Fig. 3.3.65 Edessis 5; the first floor

Fig. 3.3.66 Rues de Constantinople and Napoles – Paris

Fig. 3.3.67 Edessis 3, Emniyet Han – Malta Ceddid

Fig. 3.3.68 Votsi 3, Istira area close to the port

Fig. 3.3.69 Katouni and Polytehneiou Streets, Istira

Fig. 3.3.70 The west façade of the above building

Fig. 3.3.72 Valaoritou and Leontos Sofou Streets

Fig. 3.3.73 Kaliga Street, Hamidiye

Fig. 3.3.74 Detail of the same building

Fig. 3.3.75 The former Italian Consulate

Fig. 3.3.76 Detail of the consulate

Fig. 3.3.77 Edessis Street 5

Fig. 3.3.78 Votsi Street 3

Fig. 3.3.79 Katouni Street and Aigyptou Square

Fig. 3.3.80 Katouni Street

Fig. 3.3.81 The Crystal Coffee Shop on Eleftherias Square

Fig. 3.3.82 Exadaktylou Street

Fig. 3.3.83 The former Greek Consulate on Aghias Sofias Street

Fig. 3.3.84 The market area

Fig. 3.3.86 Aghiou Dimitriou Street (ex Kasimiye Camii)

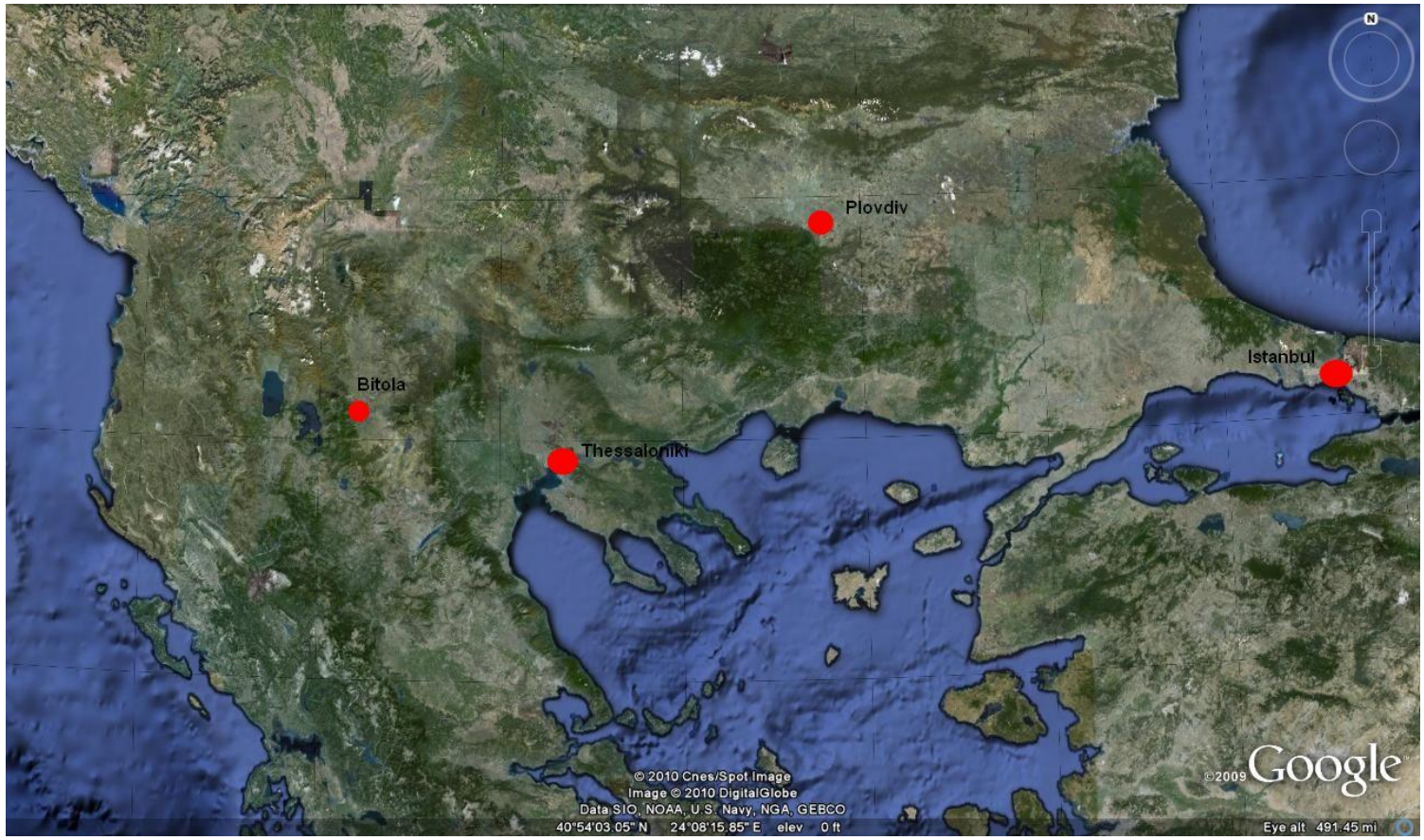
Fig. 3.3.87 Karipeion Megaron on Olymbiados Street

Fig. 3.3.88 The brackets of the above building

Fig. 3.3.89 The Splendid Palace on the littoral

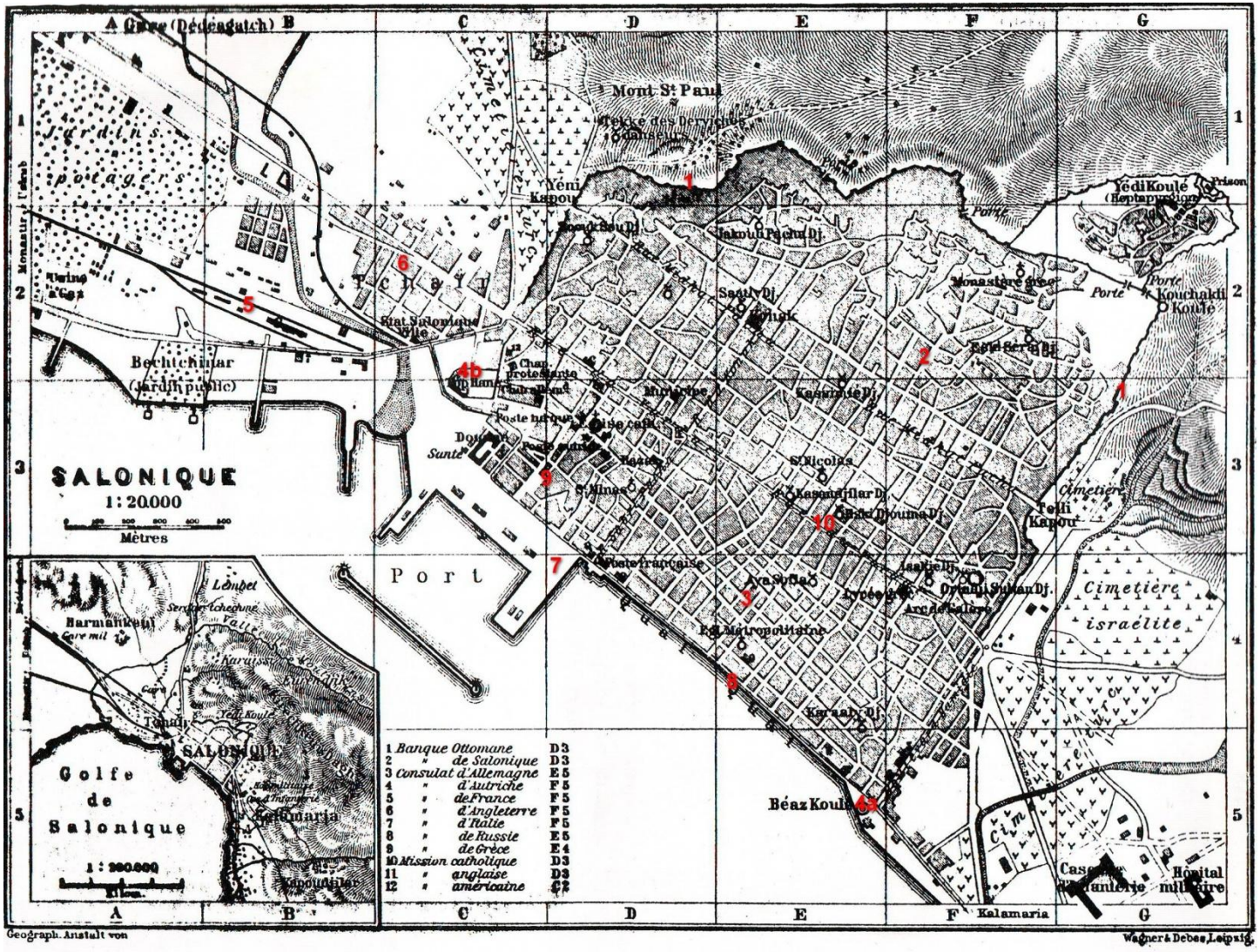
Fig. 3.3.90 The Villa of Ahmet Kapandji on Vassilissis Olgas Street

Thessaloniki – Maps

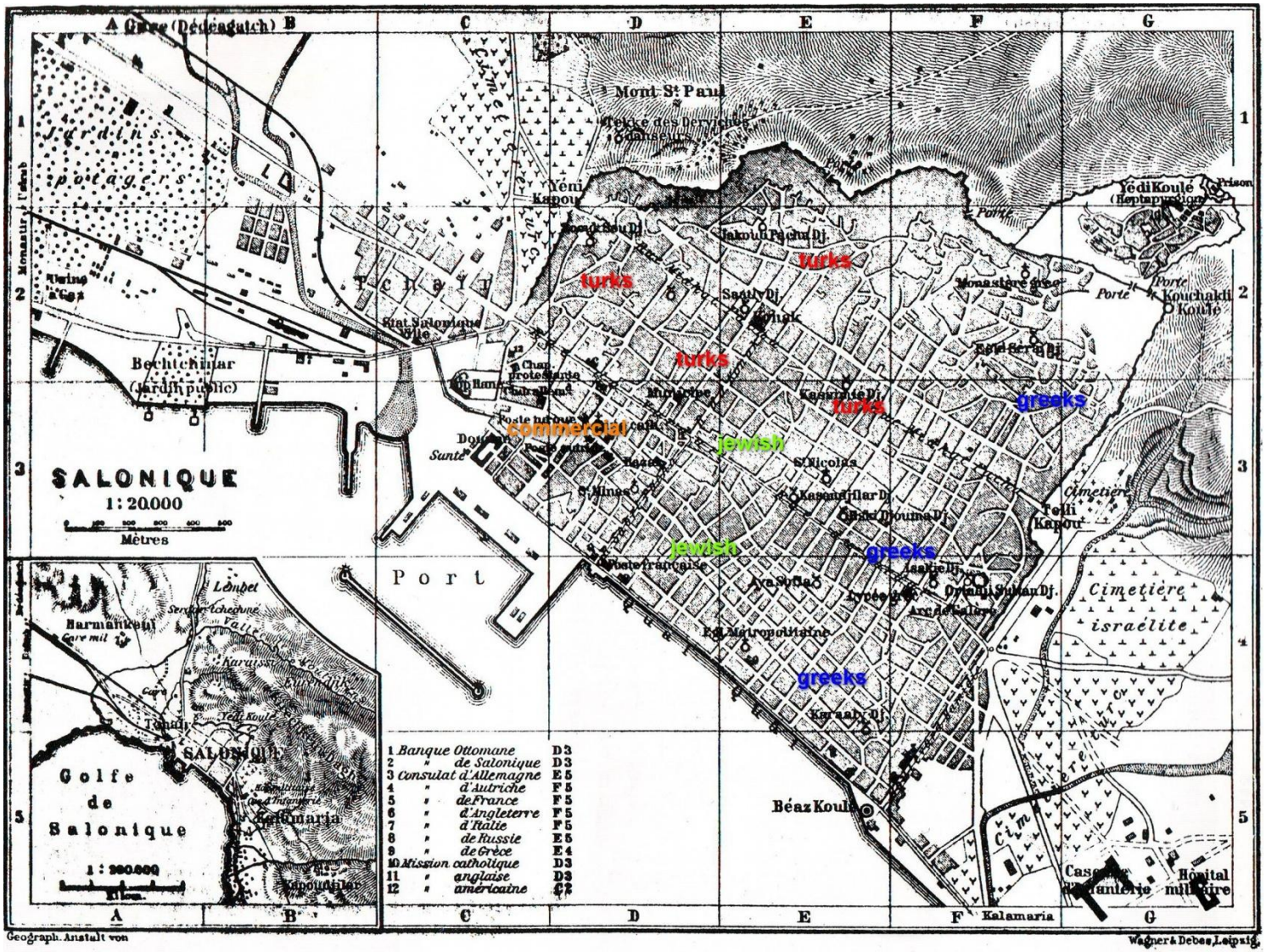


Map 3.3.1 Thessaloniki and the other cities of the research

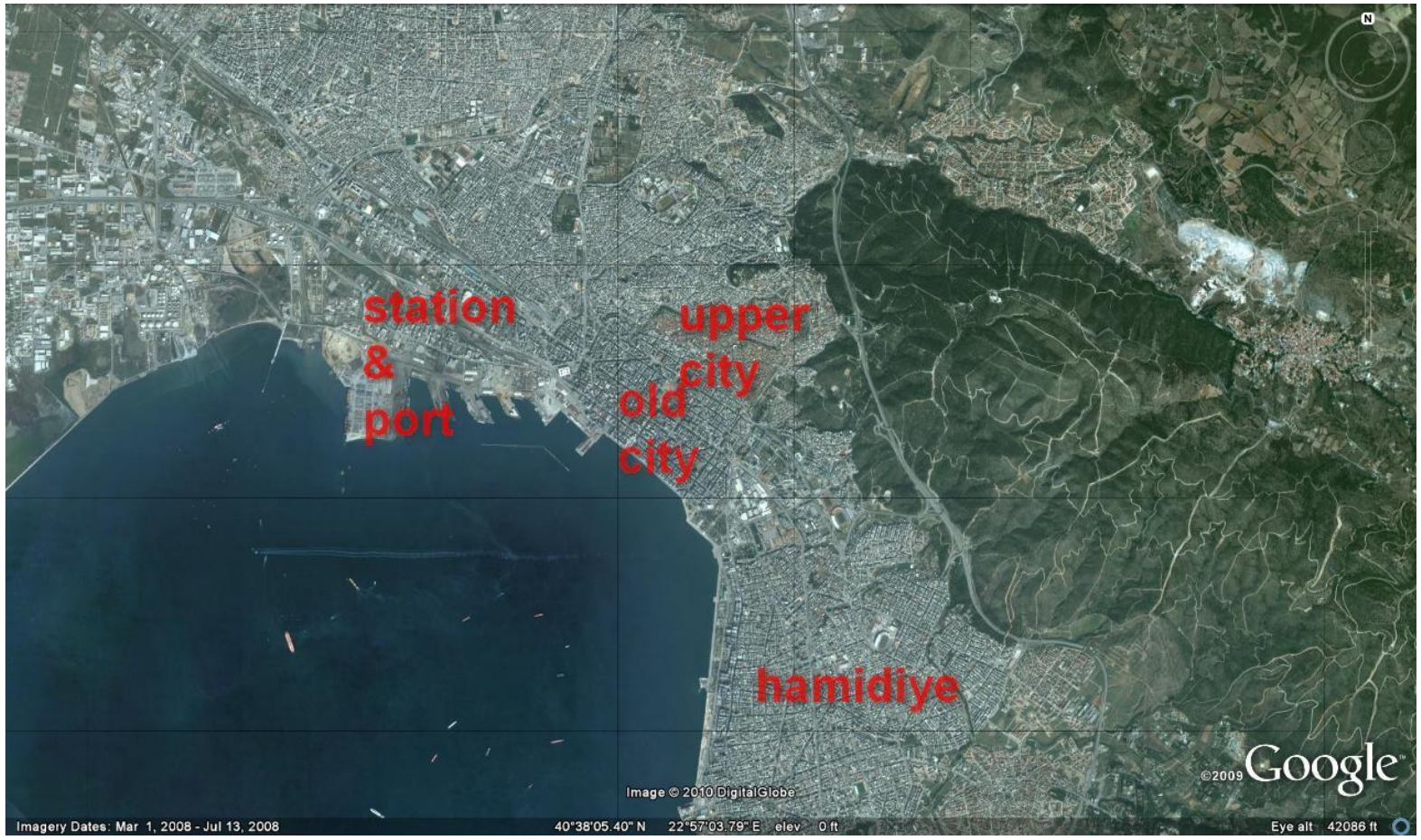
Map 3.3.2 Thessaloniki and its surroundings



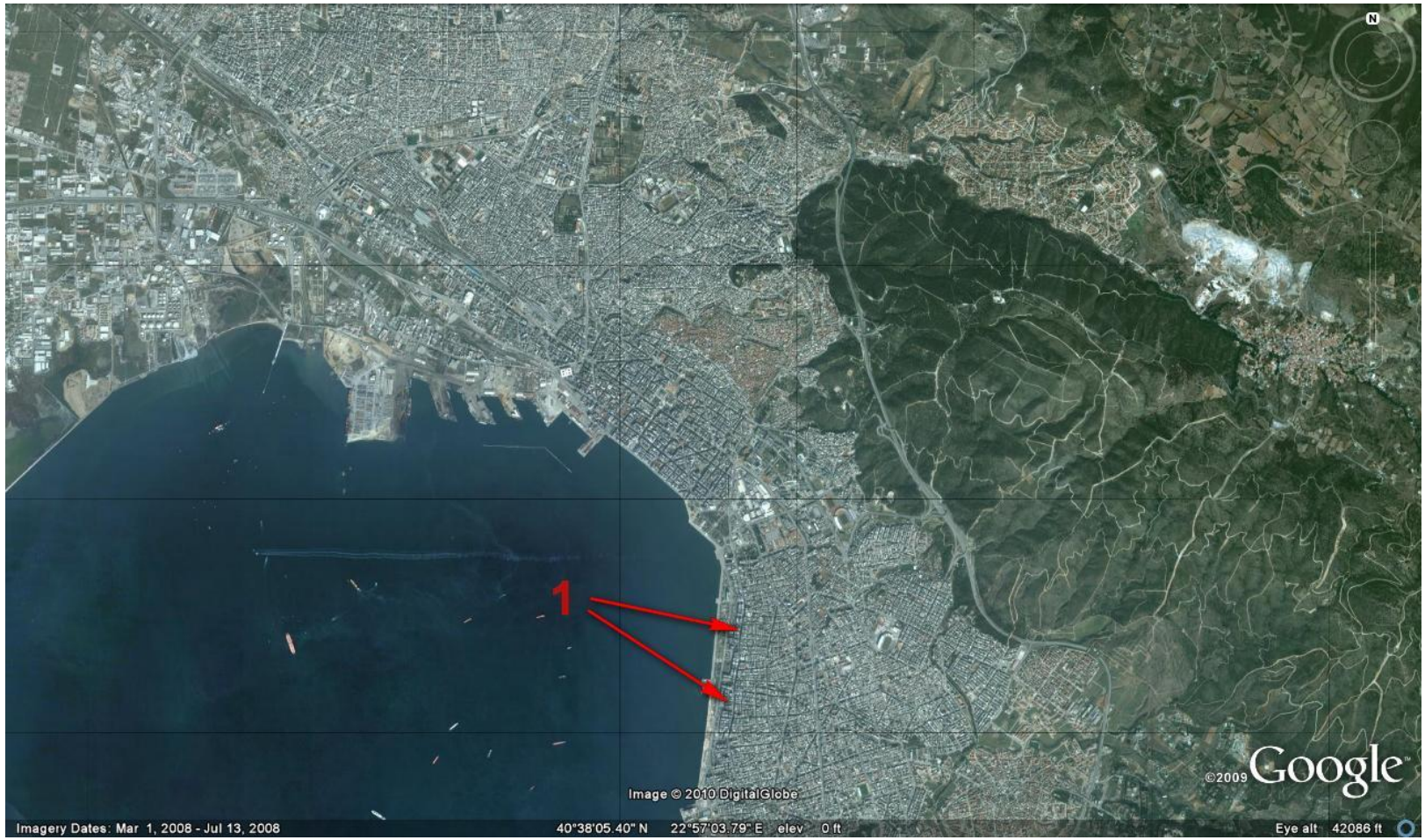
Map 3.3.3 Plan of Thessaloniki in the 1890's



Map 3.3.4 Ethnic communities and districts

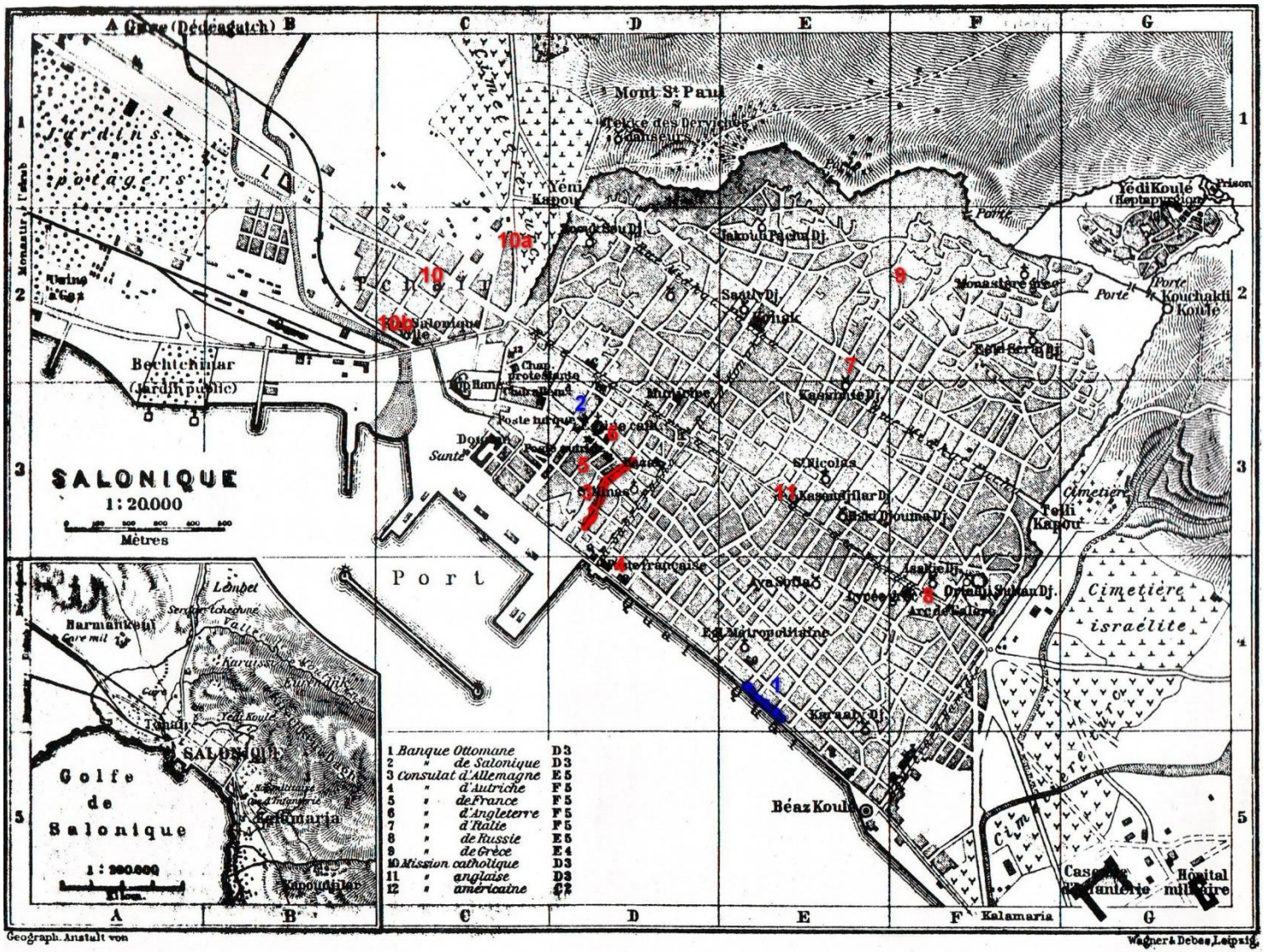


Map 3.3.5 The Hamidye area in relation to the old parts of the city

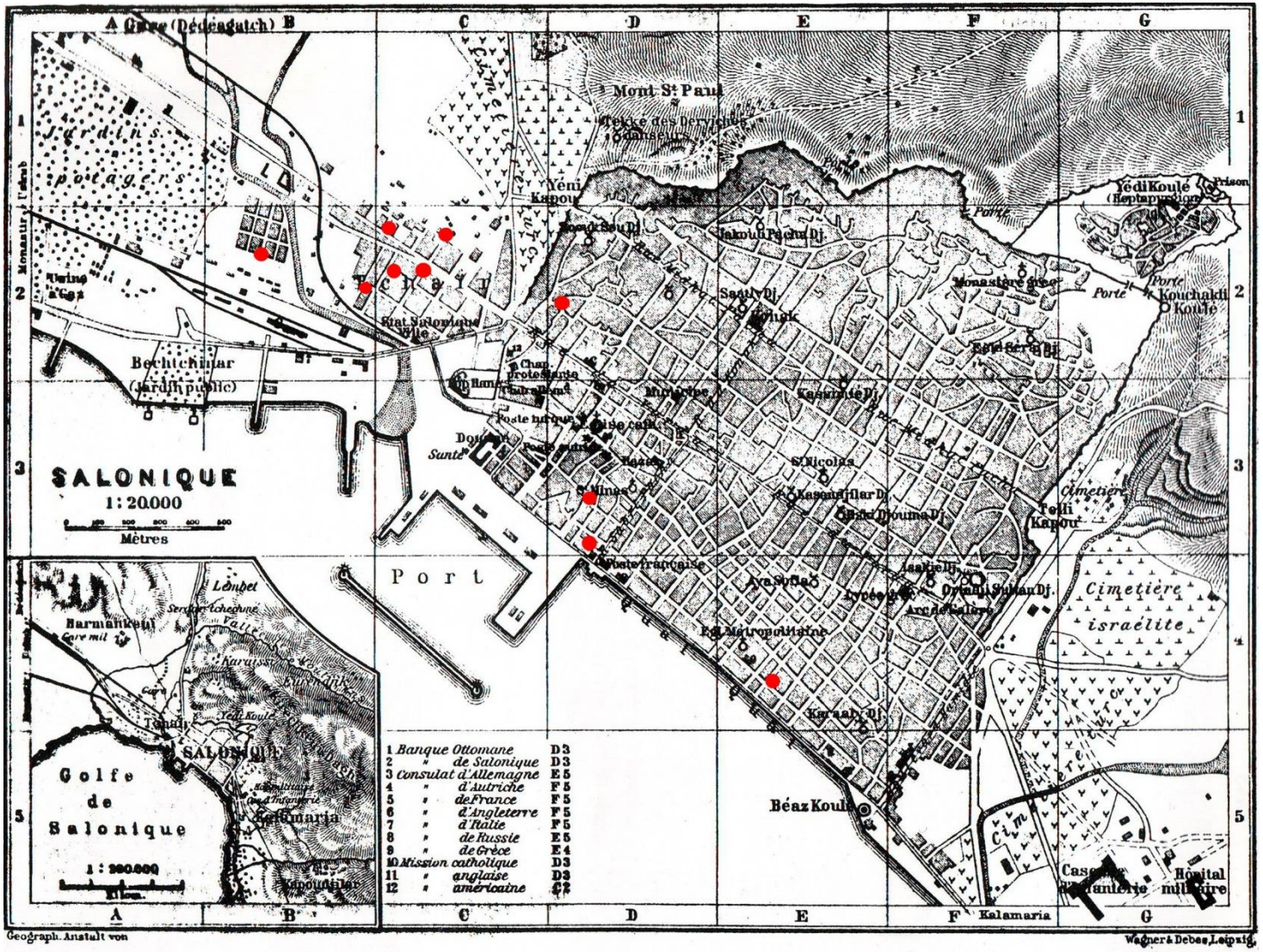


Map 3.3.6 The position of Vassilissis Olgas Avenue in the actual city tissue

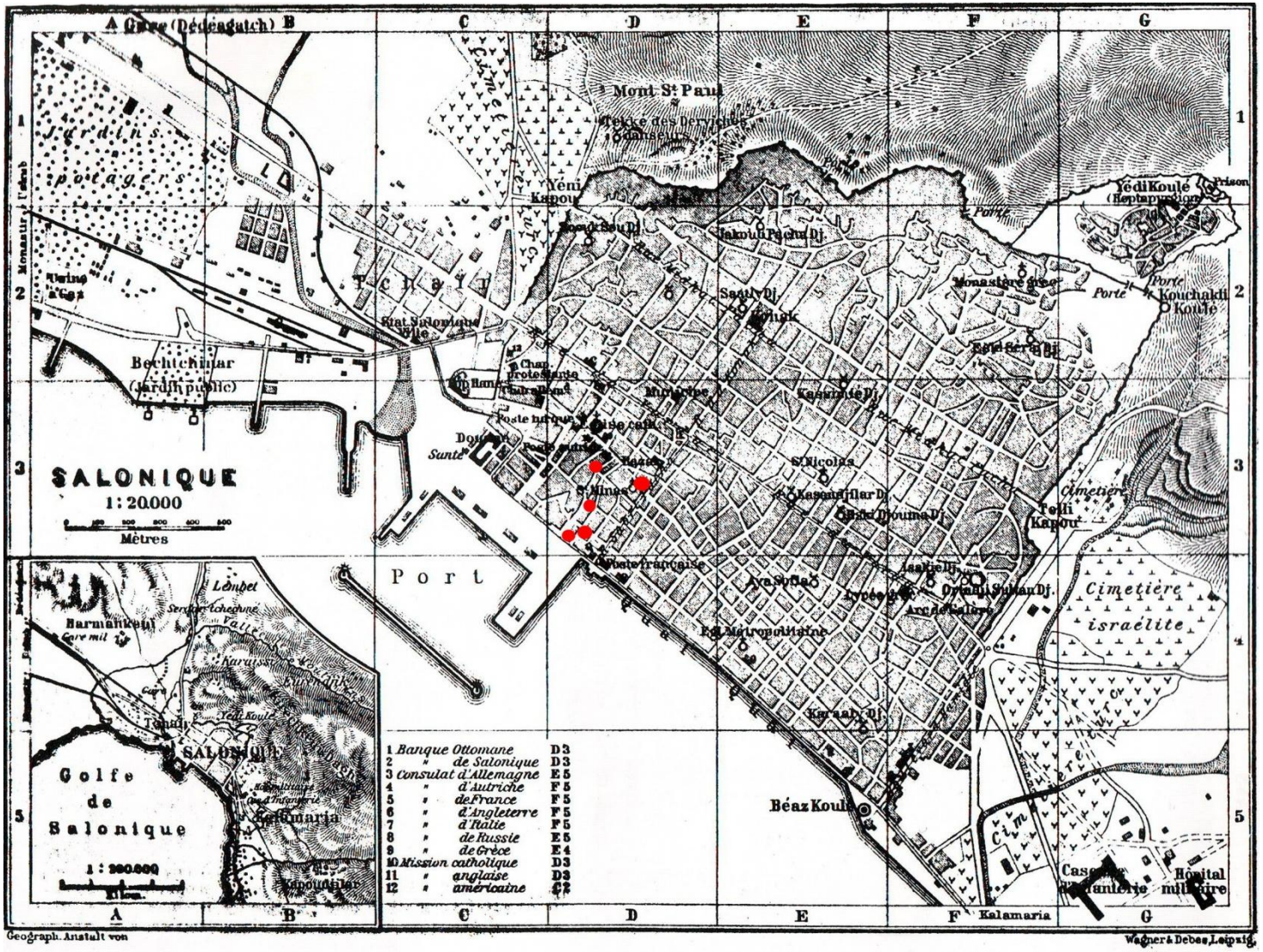
Map 3.3.7 Plan of Hamidye in the 1910's



Map 3.3.8 Several locations used in chapter 3.3.3

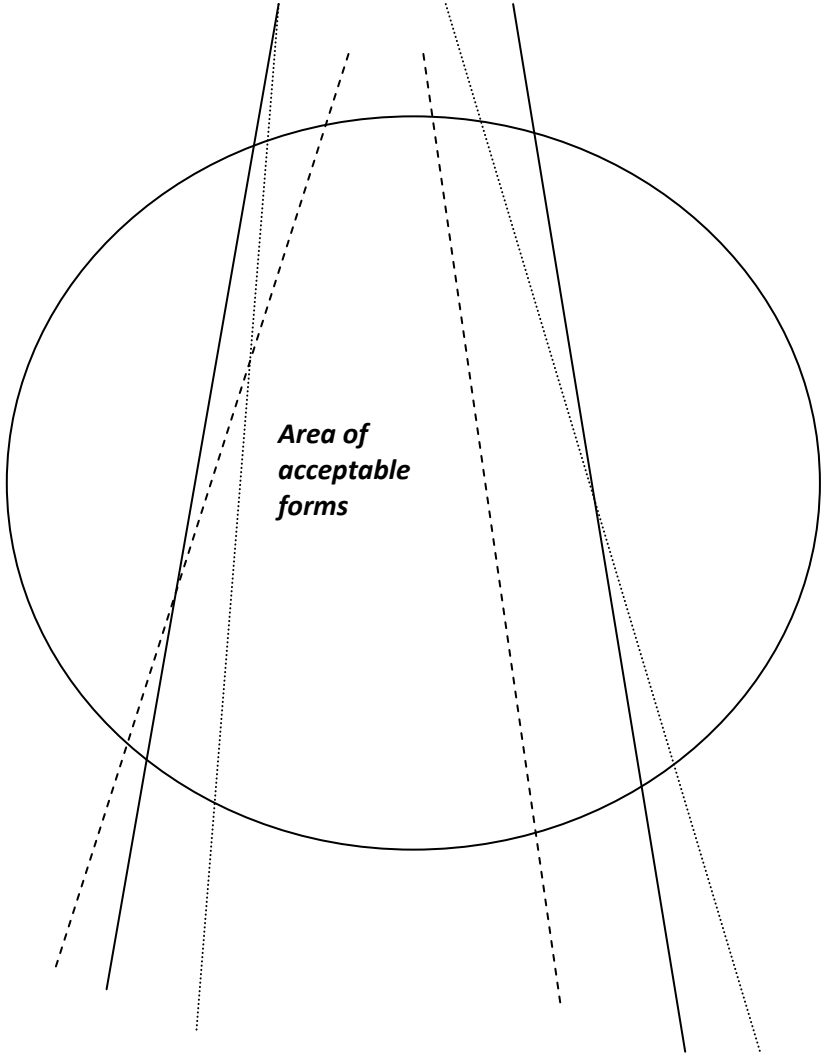


Map. 3.3.9 Main appearences of the curved-blade railing



Map 3.3.10 Main appearences of the Π typology.

Chapter 4 – Figures



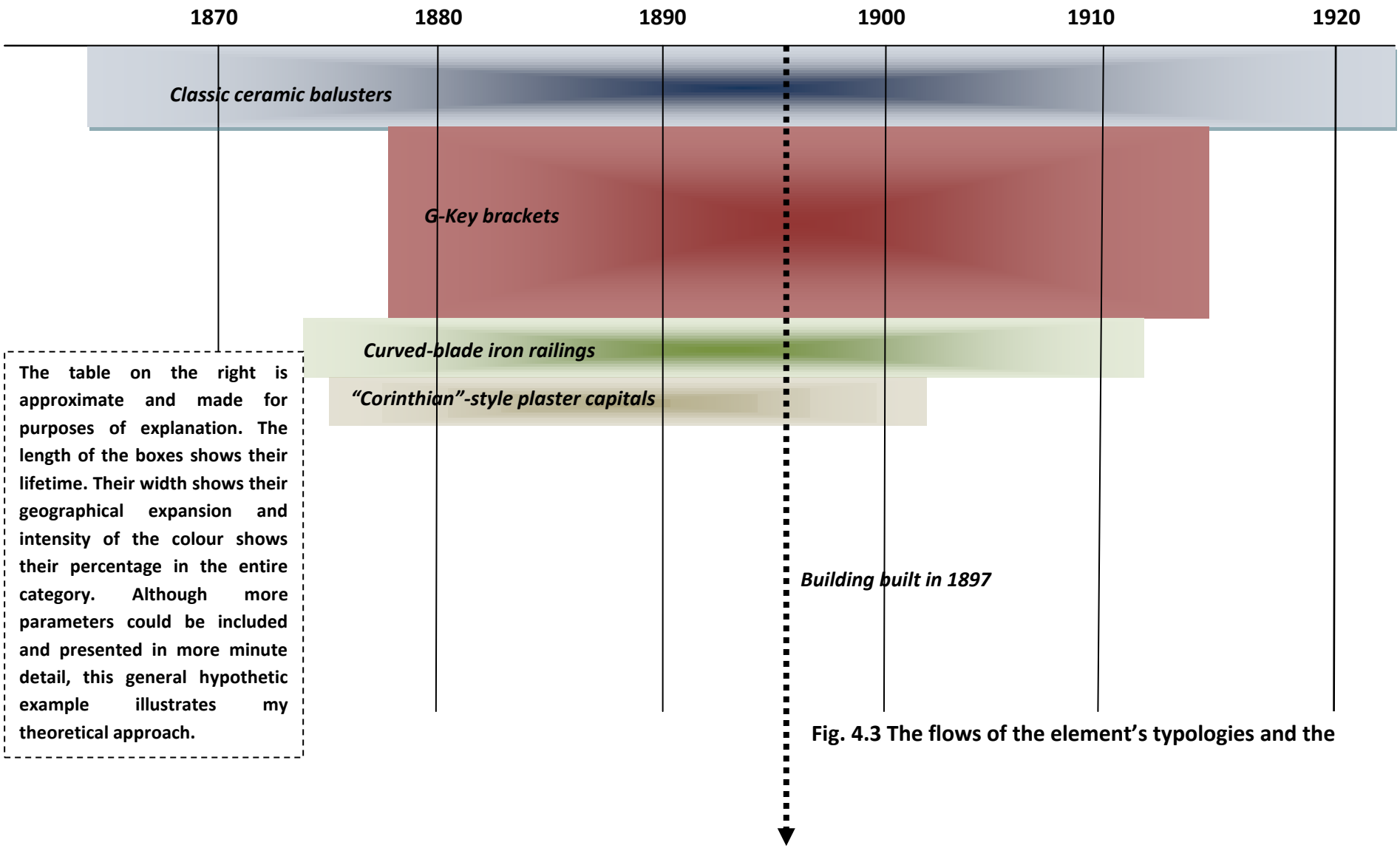
Functional delimitations

Economic delimitations

Aesthetic delimitations

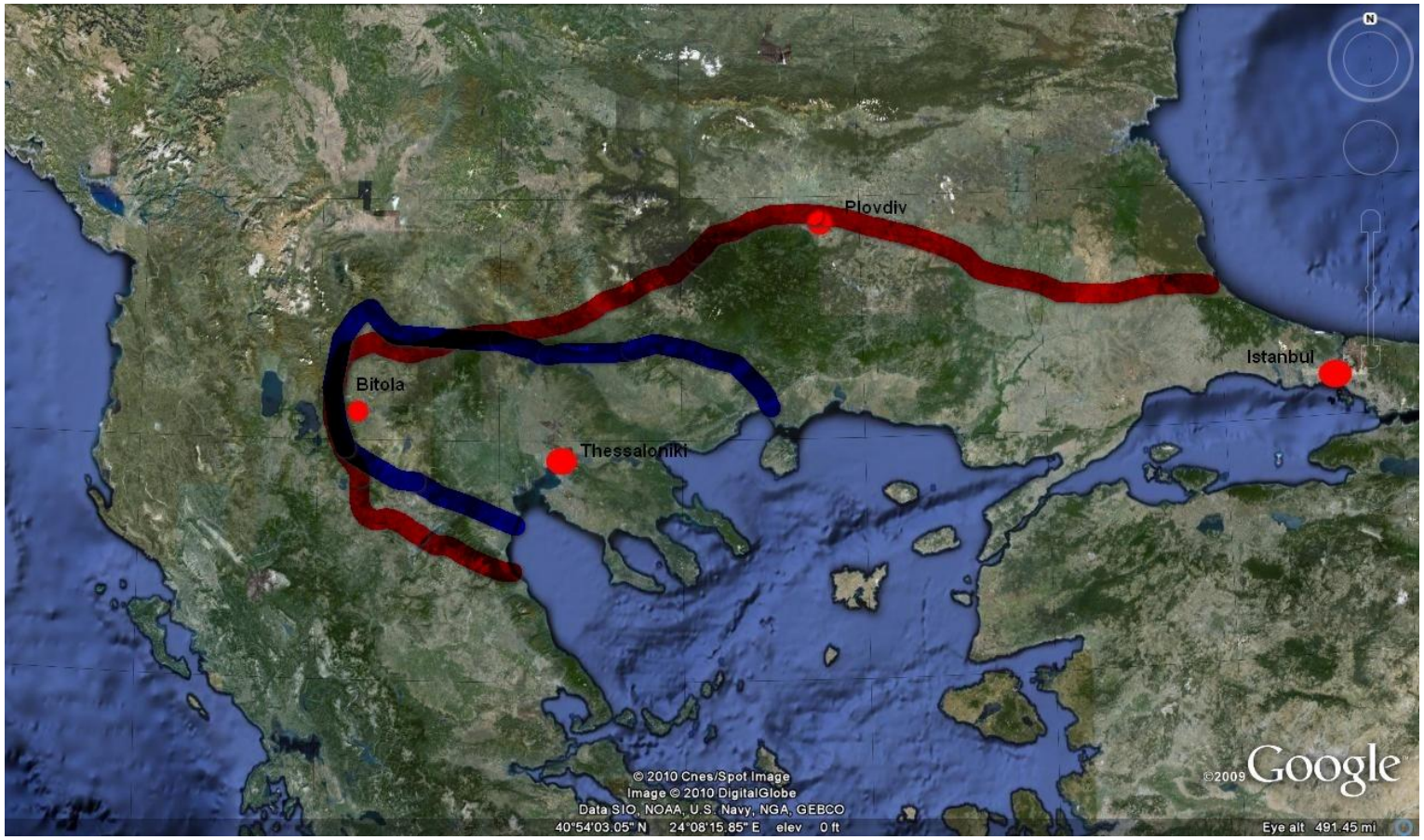
Fig. 4.1 Delimitations of the possible forms

Fig. 4.2 Olympou Street, Thessaloniki



The table on the right is approximate and made for purposes of explanation. The length of the boxes shows their lifetime. Their width shows their geographical expansion and intensity of the colour shows their percentage in the entire category. Although more parameters could be included and presented in more minute detail, this general hypothetic example illustrates my theoretical approach.

Fig. 4.3 The flows of the element's typologies and the



Isotope of the 'classic' ceramic baluster

Isotope of the G-key bracket

Fig. 4.4 The isotopes

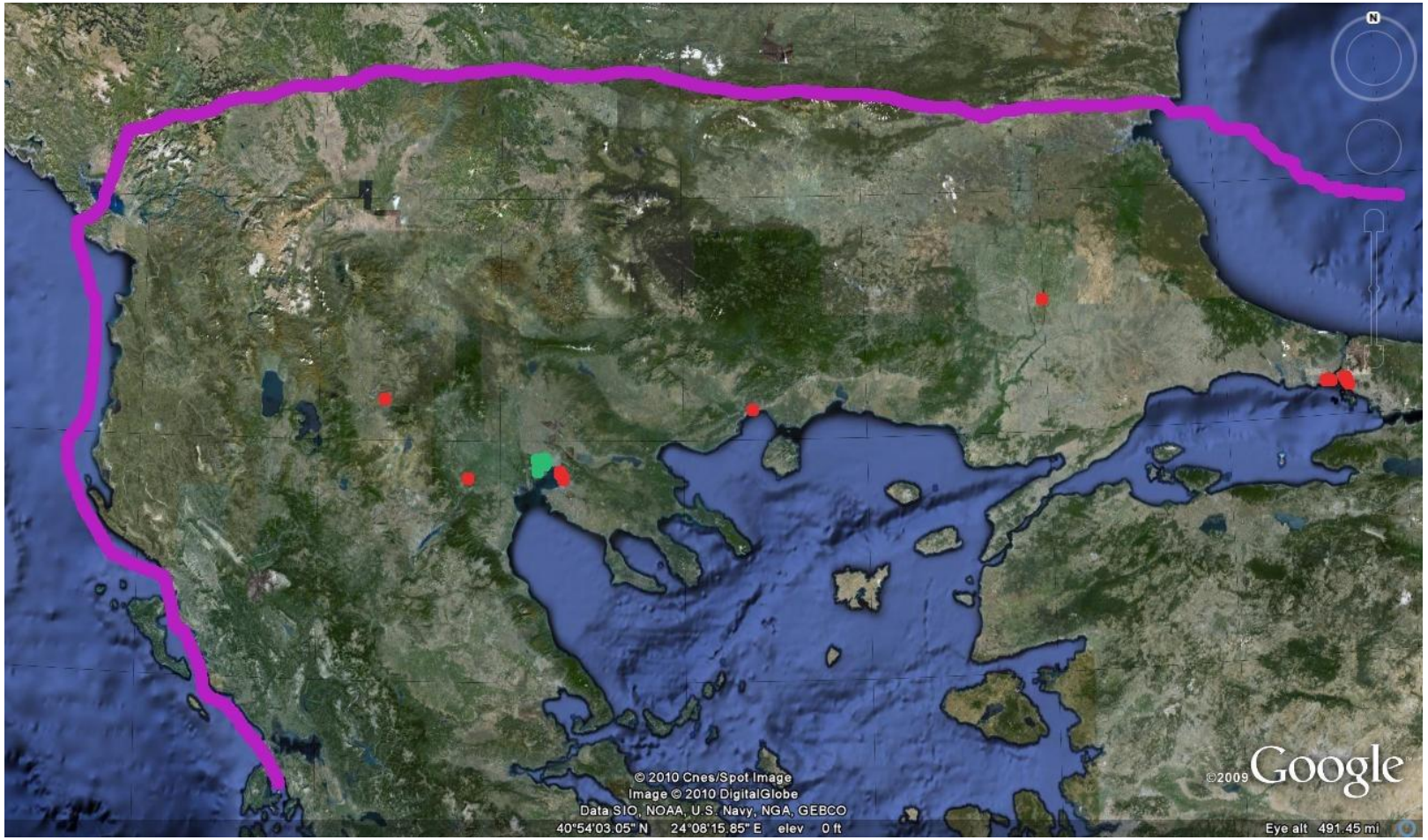


Fig.4.5 The *topoi*

The *purple* line defines the topos of the southeastern European eclecticism. The *red* dots define the topos of prestigious constructions areas. The *green* dot defines the topos of the curved blades balcony railings.

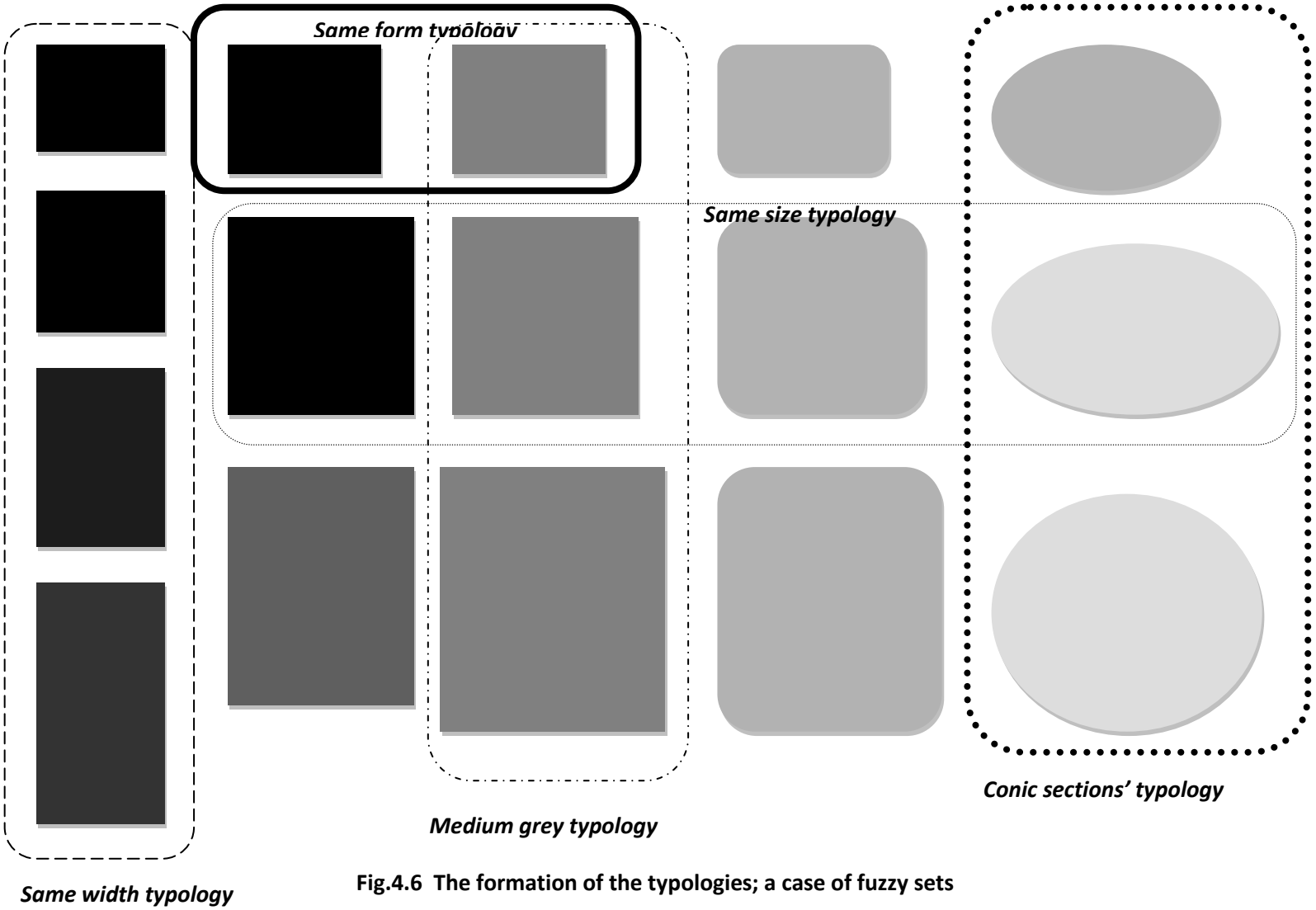


Fig.4.6 The formation of the typologies; a case of fuzzy sets

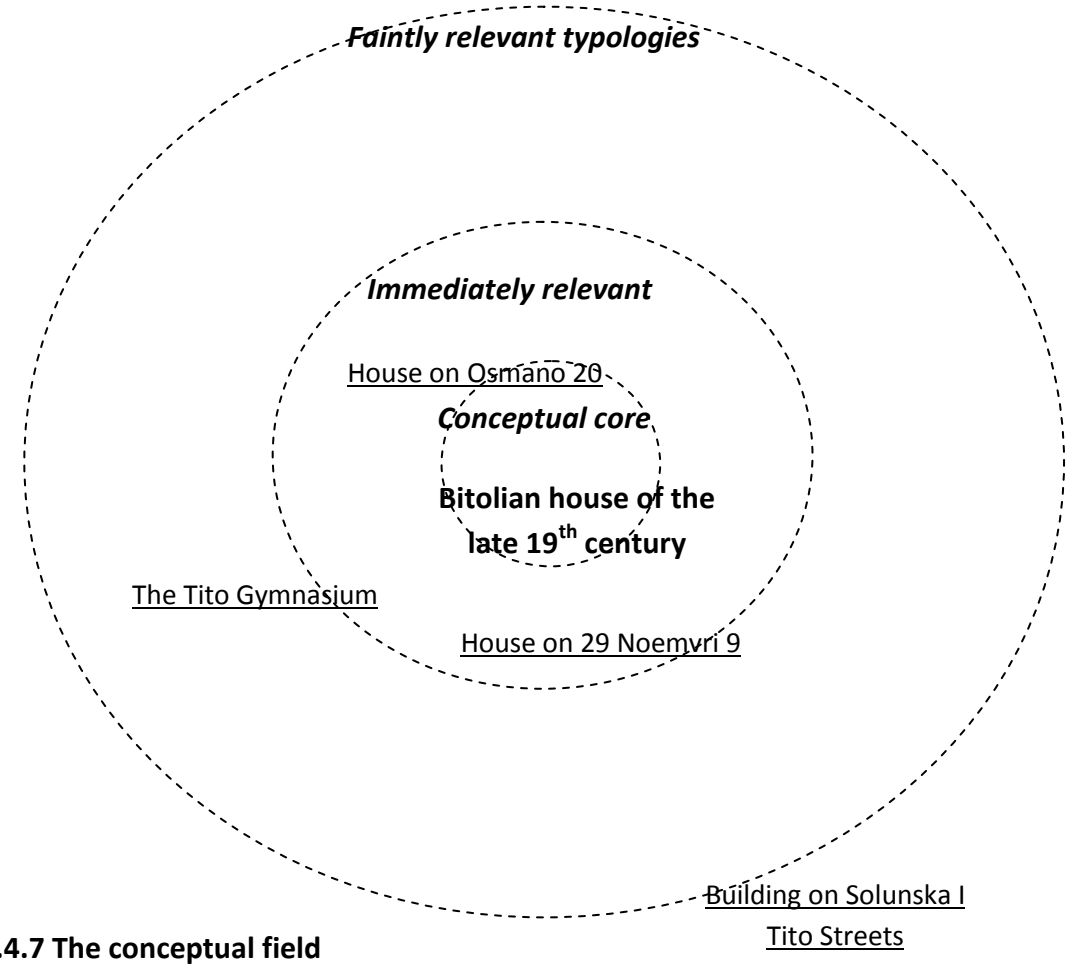


Fig.4.7 The conceptual field

A proposition creates a conceptual core; for instance, "late 19th century bitolian house". The deep core of the concept is void, given that the idea is an amalgam of different typologies, which are not found neither strictly nor in their totality in each one of the Bitolian houses. Unless a manifesto exists, no building can ever bear all the features which create the central concepts (unless it is a very 'narrow' proposition which creates a very 'narrow' concept). The house on Osmano 20 is deeper in the center of the concept because it bears more typologies frequently found in Bitola. The building on Solunska and Tito is far from the core because its consisting parts are seldom found in the area.

The relation of the conceptual core and its materializations is reciprocal. The core is created by the forms and the activities which proliferate in the city and the, defines them in the opposite directions. If buildings, like the one in Solunska now far from the core, proliferated in the city, the definition of a Bitolian house and the main concepts about it would be different.

PLOVDIV

Plovdiv (or Philippoupolis) is situated on the main plain of Romylia, an area that constitutes the central-eastern part of the Bulgarian state. Maritza river crosses the fertile region and meets the seven hills of the city, which form a peculiar relief in that they stand apart of any mountainous zone. The original core of the city was built one the two main hills and on the valley between them.

Like most of the Balkan Ottoman cities, Plovdiv was a mosaic of ethnicities; almost of the same kind of the other three urban centers of the research, but in different proportion[1]. These communities had their respective neighbourhoods, a division that was gradually dissolved during the late Ottoman period. Income and social stratification became, at that time, the main criterion for the distribution of the population in the urban tissue[2].

The changes in production and the opening to the commercial activities, because of the tanzimat reforms, brought new strata to power and introduced new habits. However, it also led to an increase of the frictions between the communities and especially between the Bulgarians and the Greeks[3].

Plovdiv was occupied in 1878 by the Russian army, which guaranteed the independence of the state of *Eastern Romylia*; Plovdiv was the capital. The annexation of Eastern Romylia to Bulgaria deprived Plovdiv of their position as a vanguard, given that Sofia occupied this place. The fact that the Ottoman area came to an end in Romylia 34 years earlier than in Thessaloniki and Bitola, is very interesting for this research, because this period coincided with the time during which the use of iron increased in the Balkans[4].

Due to various reasons, great parts of Plovdiv's population left the city, putting, in the 1920s, a definitive end to the Ottoman multiculturalism. Since the 1860s – 1870s and for many decades, Plovdiv was under a constant process of westernization but, in contrast to Istanbul and Thessaloniki, of mainly Austrian origin[5].

On Plovdiv's urban plan

There are two main areas on which the Plovdiv is built. The first one is the area of the hills and the other is that of the flat terrain between them. Although fragmented, the

1 **Стоянов (2008: pp. 17 – 27)**
2 See: **(Кесякова, 1999: p.68)**
3 Ibid **p:134**
4 **Crampton (1997: pp. 75 – 85)**
5 **Бичев (1954: pp. 6 – 16)**

area of the hills can be considered as a common space in that it is a very steep, limited relief in the core of an urban tissue. The flat area was the space that was radically transformed during the last decades of the nineteenth century. On page 48, I have discussed the case of the total transformation of Stara Zagora. Although not so abrupt, the demolition of the old districts of Plovdiv, and their restitution by new buildings on a Hippodamean raster, was a generalized process of the flat part of the city, carried out in a few decades time[6].

The hills constitute a different case. On the one hand, the steep areas were spaces where massive interventions were more difficult to achieve. On the other, being prestigious areas, inhabited by the richer, they were rather protected by the will of their dwellers to maintain their privileged space. As a result, the hills maintained several layers of the early and mid nineteenth century architecture, whereas on the lower, flat part, only some public buildings survived generalized reconstruction.

The new plan of the city, made by Josef Schnitter, totally changed the image of the center. Schnitter, from Austria – Hungary, was a prominent personality for both Plovdiv and Bulgaria in the sector of architecture and urban planning. He planned various public and private buildings, being in this way, an important example of the Austrian – Hungarian influence on Bulgarian architecture. (See on figure 1 the plan of Schnitter)

Architecture in Plovdiv during the late Ottoman era

The western European influence, and especially the Austrian – Hungarian, on Bulgarian architecture is a common place in Bulgarian architectural bibliography. Starting with the *vazrazhdenski* style[7] of the Bulgarian resurrection (which mainly involved neo-baroque inspired local renegotiations of ornamental forms) and then continuing with more direct applications of western ideas, new forms transformed the aspect of the urban space. Most of the architects active in Plovdiv, if not foreigners, had either studied in Austria and Germany, or under the guidance of architects of that origin.

The city is full of art nouveau buildings (a major trend during the late Ottoman era) in its secessionist version[8]. However, one does not encounter the pure secession of Vienna, but local renegotiations, similar to the few existent in Bitola and faintly relative to those of Istanbul and Thessaloniki.

6 **Кираджиев (2008)** on various pages.
7 **Йокимов (1978: pp. 66 – 76)**
8 **Йокимов (2004)** and the book about the Bulgarian secessionism and its influences.

Architecture in the hills was preserved and there are some examples that demonstrate a relative conservatism in that they maintain certain forms and ornaments, extinct from the center of the city.

Ironwork in Plovdiv

Quantity

Plovdiv has many areas where buildings bear full sets of iron elements, like for instance the important Ivan Vazov Street. However, differently to Bitola and Istanbul, where buildings have balcony railings and brackets (in the former) and only balcony railings (in the latter) in high percentages on their main boulevards, the main boulevard of Plovdiv (Glavnata Ulitsa) has a much higher percentage of buildings without any kind of iron element (excluding doors). In that sense they resemble areas like Karaköy in Istanbul, which has, however, a different function in the city. In this sense, they have a greater kinship with Vienna and Budapest, where iron elements of this kind are equally limited.

Quality

There are some high quality pieces in Plovdiv, a lot of mainstream ones but not the impressive gates or public objects (for instance, statues and fountains) one can find in Central Europe. In this aspect, ironwork quality in Plovdiv is not very different to that one encountered in the other three cities, with the exception of some high end cases in Istanbul (for instance, Dolmabahçe and Galatasaray Lisesi)

Balconies

Cast iron railings

Although there are several cases of cast railings (some of them quite unique) their percentage is quite low; much lower than in the three other cities (fig 2).

Curved railings

They constitute a quite broad group of typologies, especially in prestigious districts surrounding the deep centre. A typology commonly used, has a kinship with the curved railings typologies of Bitola, yet, with some significant differences (fig. 3). Other typologies in Plovdiv are not in used in any other of the three cities.

Wrought iron railings

This is the greater group of typologies, with many of them influenced by art nouveau. I have not detected any typology in Plovdiv that is also used in any other city, I have researched (fig. 4 – 5). Some faint resemblances between typologies of the hills and of the other cities cannot support any particular argument due to the scarcity of samples.

Brackets

Iron brackets are extremely scarce in the flat area of the city. Typologies encountered there are irrelevant to those of the other three cities (fig. 6). The prevalence of plaster brackets is almost absolute. On the hills, iron brackets are also very rare, in this case due to the great numbers of vazrazhdenski houses. It is only on the hills that two common typologies are used (G-key and small g-key; fig. 7) and this occurs on buildings built before the independence of Bulgaria, that is, when Plovdiv still was part of the Ottoman Empire. This observation strongly enforces the hypothesis of a common space within the Ottoman Empire for the circulation of objects and designs, and the consequent differentiation of the design ambient, after the creation of borders between the two states.

Images

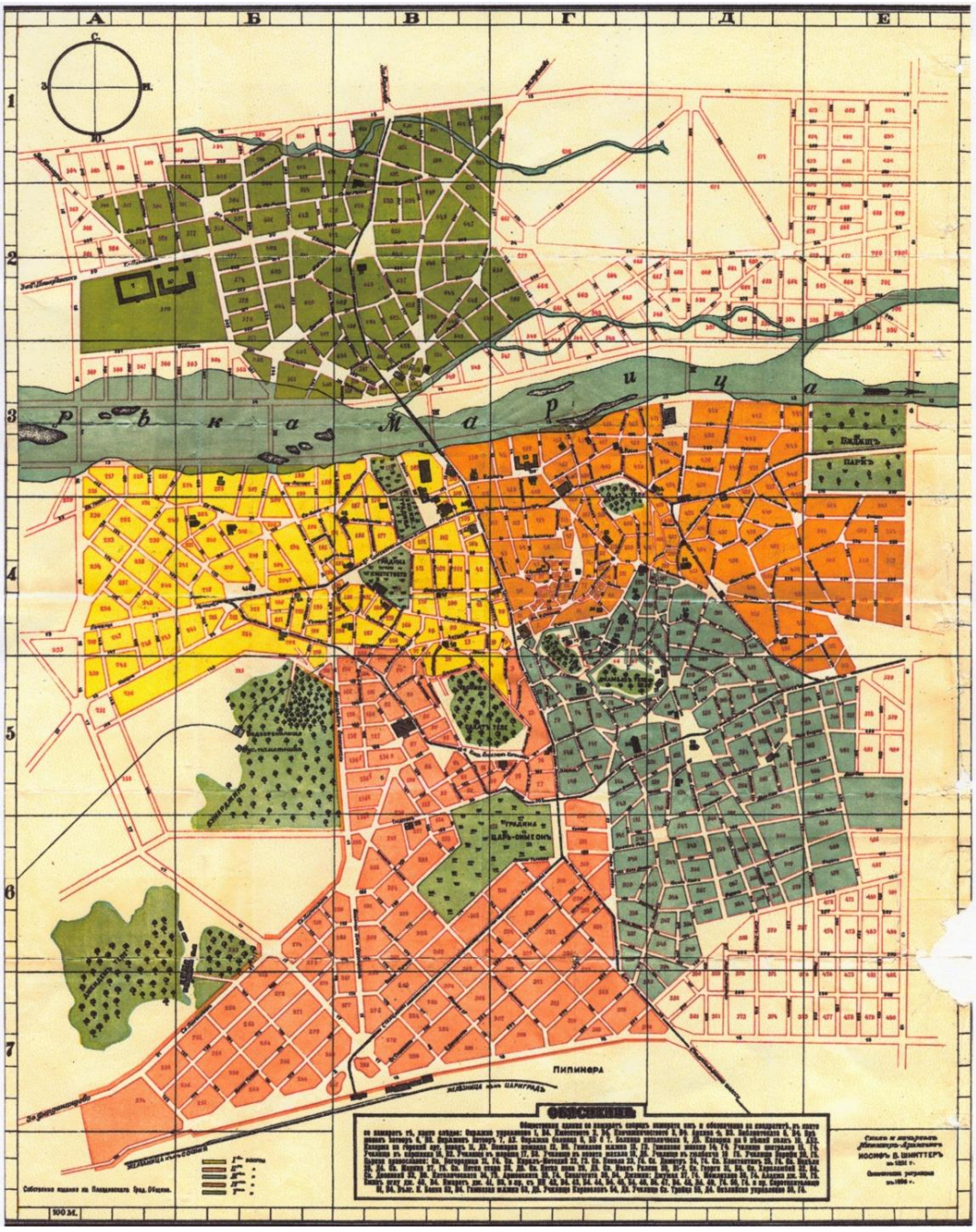


Fig. 1 The plan by Josef Schnitter

Fig. 2 A cast railing in the central area

Fig. 3 A railing at the area of the railway station

Fig. 4 One of the commonest typologies

Fig. 5 A particular typology of the centre

Fig. 6 One of the rare iron brackets in the area of the market

Fig. 7 One of the rare appearances of the G-key bracket on the hills

Fig. 8 One of the main rivals: plaster

List of the main typologies

Type: Cast iron railings

Manufacturing: Separate balusters by the same mould.

Main areas of use: Bitola – Throughout the districts. Istanbul – Galata, Tarlabasi (frequent) Fener, Kadikoy (occasional). Thessaloniki – rare
Main period of use: 1870 – 1910

Type of buildings: Most styles and budgets. Medium, medium-high strata buildings.

Name: Four-lobed

Main areas of use: Bitola – throughout the city. Istanbul – rare. Thessaloniki – Lower city.

Main period of use: 1880 – 1910

Type of buildings: Most styles and budgets. Medium, medium high strata buildings

Name: n/a

Type: Cast iron railings

Manufacturing: By means of mould producing ½+1+ ½ balusters.

Main areas of use: Bitola – central areas. Istanbul – rare. Thessaloniki – Lower city (rare)

Main period of use: 1890 - 1910

Type of buildings: Bitolian, eclectic. Medium high strata.

Name: n/a

Type: Cast iron railings

Manufacturing: Separate balusters by the same mould.

Main areas of use: Bitola – centre. Istanbul – Galata, Pera (occasional). Thessaloniki – Lower City (occasional).

Main period of use: Around 1900.

Type of buildings: Bitolian, eclectic, Istanbul mainstream. Medium high strata.

Name: n/a

Type: Cast iron railings

Manufacturing: By means of mould producing ½+1+ ½ balusters.

Main areas of use: Bitola – deep centre. Istanbul – Pera (rare). Thessaloniki (rare-variants)

Main period of use: Around 1900

Type of buildings: Various – Medium, Medium high strata.

Name: n/a

Type: Cast iron railings

Manufacturing: Several vertical bars and rhombs by the same mould.

Main areas of use: Bitola - periphery. Istanbul – rare. Thessaloniki – rare.

Main period of use: Around 1900.

Type of buildings: Various.

Name: n/a

Type: Cast iron railings

Manufacturing: Several balusters by one mould.

Main areas of use: Bitola – centre and prestigious areas. Istanbul – Pera. Thessaloniki – Lower city.

Main period of use: 1890 – 1910

Type of buildings: Bitolian, eclectic, neoclassic, neo-baroque

Name: n/a

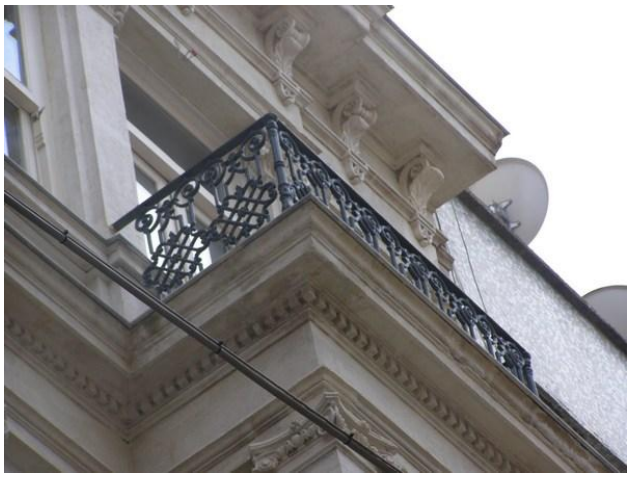
Type: Cast iron railings

Manufacturing: Separate balusters by the same mould.

Main areas of use: Istanbul. Istiklal and high prestigious area of Pera.
Main period of use: Around 1900.

Type of buildings: Highly prestigious, eclectic.

Name: n/a



Type: Cast iron railings

Manufacturing: Separate balusters by the same mould

Main areas of use: Istanbul – Pera

Main period of use: Around 1900

Type of buildings: Eclectic, neoclassical.

Name: n/a

Type: Cast iron railings

Manufacturing: Separate balusters by the same mould

Main areas of use: Istanbul – Pera, Fener (rare).

Main period of use: 1890 - 1900

Type of buildings: Mainstream Istanbul residences

Name: n/a

Type: Cast iron railings

Manufacturing: Multiple balusters by one mould.

Main areas of use: Istanbul – Pera (occasional)

Main period of use: 1900 – 1910

Type of buildings: Various

Name: n/a

Type: Cast iron railins

Manufacturing: Separate balusters made using one mould.

Main areas of use: Istanbul – throughout the city (rare). Thessaloniki (rare).

Main period of use: Indefinable

Type of buildings: Various.

Name: n/a

Type: Cast iron railings

Manufacturing: Separate balusters made using one mould.

Main areas of use: Istanbul – Istiklal and Pera

Main period of use: 1880 -1900

Type of buildings: High class

Name: n/a

Type: Curved baluster railings

Manufacturing: Wrought iron scrolls

Main areas of use: Bitola – throughout the city. Istanbul – rare. Thessaloniki – rare. Plovdiv - occasional

Main period of use: 1880 – 1920

Type of buildings: All kinds

Name: Bitola curved railings.

Type: curved baluster railings

Manufacturing: Wrought iron scrolls.

Main areas of use: Bitola – periphery

Main period of use: 1890 – 1910

Type of buildings: Middle and low strata buildings

Name: n/a

Type: Curved baluster railings

Manufacturing: Wrought bar railings with iron laces.

Main areas of use: Istanbul – Galata, Pera, Cihangir, Fener, Eminönü, Kadıköy

Main period of use: 1890 – 1915

Type of buildings: All styles. Medium, medium high, high class.

Name: n/a

Type: Curved baluster railings

Manufacturing: Wrought bars with laces and circular scrolls.

Main areas of use: Istanbul – Galata, Pera, Cihangir (frequent), Historic Peninsula, Kadıköy (occasional).

Main period of use: 1890 – 1920

Type of buildings: Various. Middle, middle high and high strata.

Name: n/a

Type: Curved baluster railings

Manufacturing: Wrought iron bars in semicircular form.

Main areas of use: Istanbul – throughout the city (occasional)

Main period of use: Indefinable

Type of buildings: Low class, Middle class

Name: n/a

Type: Curved baluster railings.

Manufacturing: Curved blades.

Main areas of use: Thessaloniki – Western areas

Main period of use: 1880 – 1915

Type of buildings: Eclectic, simple. Low, middle class.

Name: Curved-blade

Type: Wrought iron railings

Manufacturing: Wrought iron scrolls.

Main areas of use: Bitola – throughout the city. Istanbul – rare, Thessaloniki, rare.

Main period of use: 1880 – 1920

Type of buildings: Various.

Name: Hearts

Type: Wrought iron railings

Manufacturing: Wrought iron S and C scrolls.

Main areas of use: Bitola – periphery (occasional). Istanbul – rare. Thessaloniki – extremely rare.
Main period of use: 1890 – 1900

Type of buildings: Bitolian, various.

Name: n/a

Type: Wrought iron railings

Manufacturing: Simple iron bars.

Main areas of use: Bitola – throughout the city. Istanbul – throughout the city. Thessaloniki – throughout the city.
Main period of use: 1870 – 2010

Type of buildings: All kinds.

Name: Straight bars railings

Type: Wrought iron railings **Manufacturing:** Bended bars	**Main areas of use:** Istanbul – Kadıköy. Thessaloniki – Lower City. **Main period of use:** 1890 – 1910 **Type of buildings:** Mainstream **Name:** 8 – shaped.

Type: Wrought baluster railings **Manufacturing:** Iron bar bended by machine	**Main areas of use:** Istanbul – Galata and Pera (frequent), other areas (rare). **Main period of use:** 1880 – 1910 **Type of buildings:** Mainstream urban residences, various styles. **Name:** Zig – zag.

Type: Wrought iron railings

Manufacturing: Straight bars with circular and ellipsoid scrolls.

Main areas of use: Istanbul – Galata, Pera, Kadıköy (frequent), Historic Peninsula (occasional)

Main period of use: 1990 - 1920

Type of buildings: All kinds

Name: n/a

Type: Wrought iron railings

Manufacturing: Vertical, and horizontal straight bars, with straight and circular scrolls.

Main areas of use: Thessaloniki – port and Malta Ceddid district.

Main period of use: 1890 – 1910

Type of buildings: Eclectic

Name: Railings with Π elements

Type: Wrought iron railings

Manufacturing: Straight bars, frame newel posts with lobe projections.

Main areas of use: Bitola (rare). Thessaloniki – throughout the city.

Main period of use: 1910 – 1940

Type of buildings: Various

Name: n/a

Type: Wrought iron railings

Manufacturing: S, C and other scrolls in various directions. No Balusters.

Main areas of use: Bitola - rare. Istanbul. Pera, Cihangir, Eminönü (frequent), other areas (occasional). Thessaloniki – Hamidye, the Littoral.

Main period of use: 1870 – 1930

Type of buildings: Eclectic and other styles. Middle high and high strata.

Name: 'French' style

Type: Wrought iron railings

Manufacturing: Bended iron blades

Main areas of use: Thessaloniki – all eastern part

Main period of use: 1880 – 1920

Type of buildings: Low strata, middle strata, eclectic and mainstream.

Name: Curved blades.

Type: Cast iron bracket

Manufacturing: Mould

Main areas of use: Bitola – Throughout the city. Istanbul – throughout the city. Thessaloniki – throughout the city. Plovdiv – The hills.

Main period of use: 1860 – 1920

Type of buildings: All types and budgets; especially middle strata.

Name: G-key

Type: Cast iron bracket

Manufacturing: Mould

Main areas of use: Bitola, throughout the city. Istanbul – Galata, Pera, Fener, Kadıköy. Thessaloniki – throughout the city.

Main period of use: 1880 – 1920

Type of buildings: All mainstream types.

Name: Chimera

Type: Cast iron bracket

Manufacturing: Mould

Main areas of use: Bitola – throughout the city. Istanbul – Throughout the city. Thessaloniki – Lower City.

Main period of use: 1880 – 1910

Type of buildings: All mainstream types.

Name: Bud – end.

Type: Cast iron bracket

Manufacturing: Mould

Main areas of use: Bitola - Throughout the city (especially commercial areas). Istanbul – Pera, Fener and others.

Main period of use: 1880 – 1920

Type of buildings: All kinds, especially mainstream. Middle class.

Name:

Type: Cast iron bracket

Manufacturing: Mould

Main areas of use: Bitola – Side roads of the centre. Istanbul – Pera, Karaköy, Fener, Kumkapı, Kadıköy. Thessaloniki – Lower City – rare.

Main period of use: 1880 – 1910

Type of buildings: Mainstream and middle strata

Name:

Type: Cast iron bracket

Manufacturing: Mould

Main areas of use: Bitola, Istanbul and Thessaloniki – throughout the city (rare).

Main period of use: 1880 – 1900

Type of buildings: Eclectic and others.

Name:

Type: Wrought iron bracket

Manufacturing: Wrought iron scroll

Main areas of use: Bitola – Secondary roads and surviving Ottoman style buildings. Istanbul – Fener, Samatya, Top Kapı. Thessaloniki – Cayir, Upper City.
Main period of use:

Type of buildings:

Name:

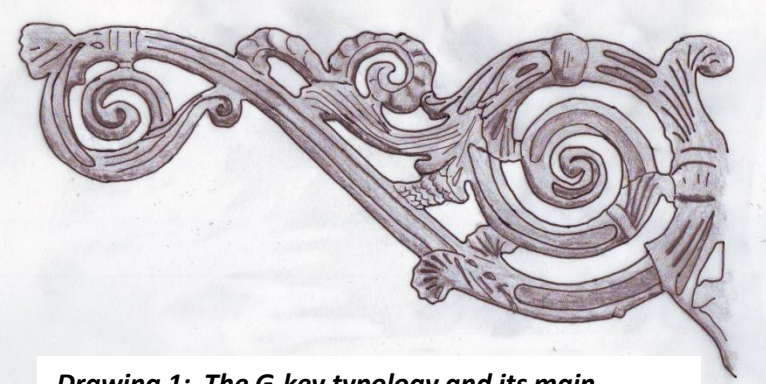
Type: Wrought iron bracket

Manufacturing: Bended iron bar.

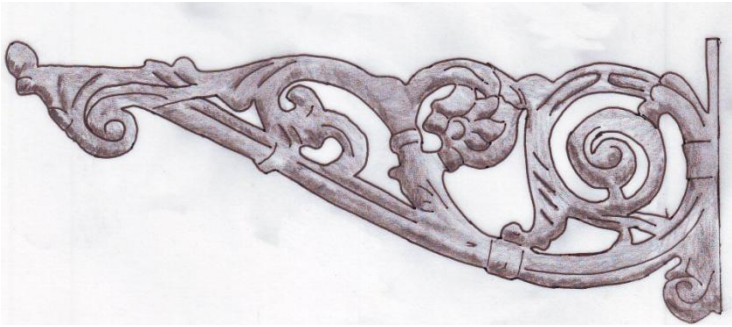
Main areas of use: Bitola – Southern parts of the center. Istanbul – Fener Balat, Ayvasaray (occasional), others (rare). Thessaloniki – Cayir, Upper City.
Main period of use: 1850 (and possibly earlier) – 1900.

Type of buildings: Ottoman revival, Macedonian etc.

Name:

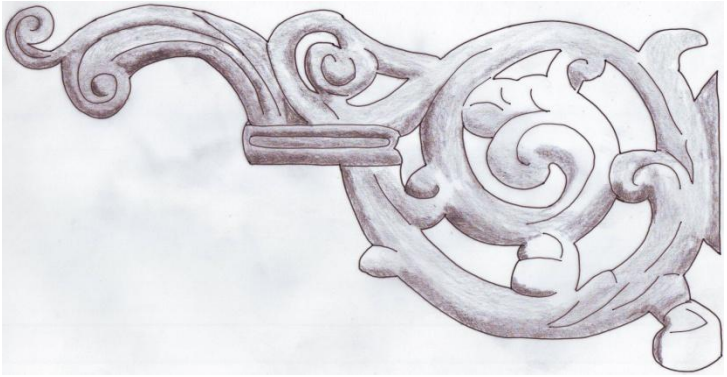


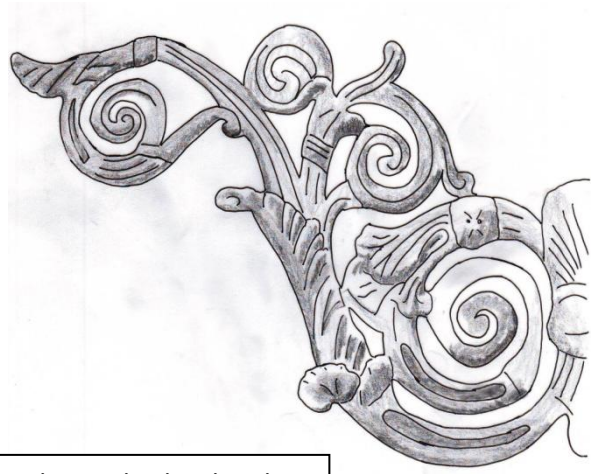
Drawing 1: The G-key typology and its main



Common details: Floral forms, S-shape, branch divisions.

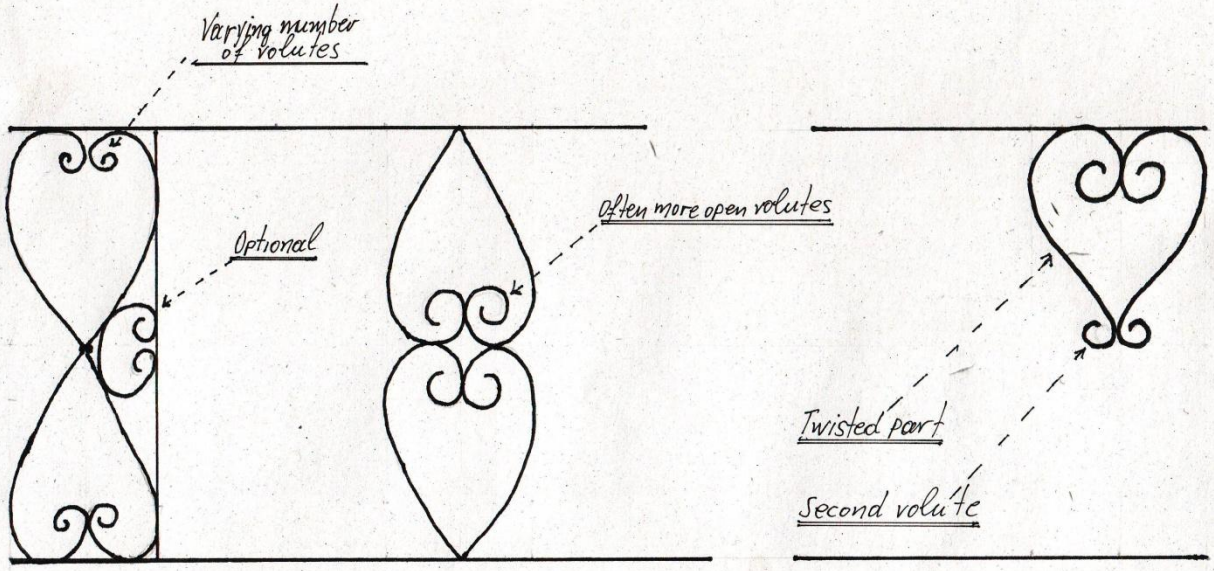
Mostly common details: double spiral volutes

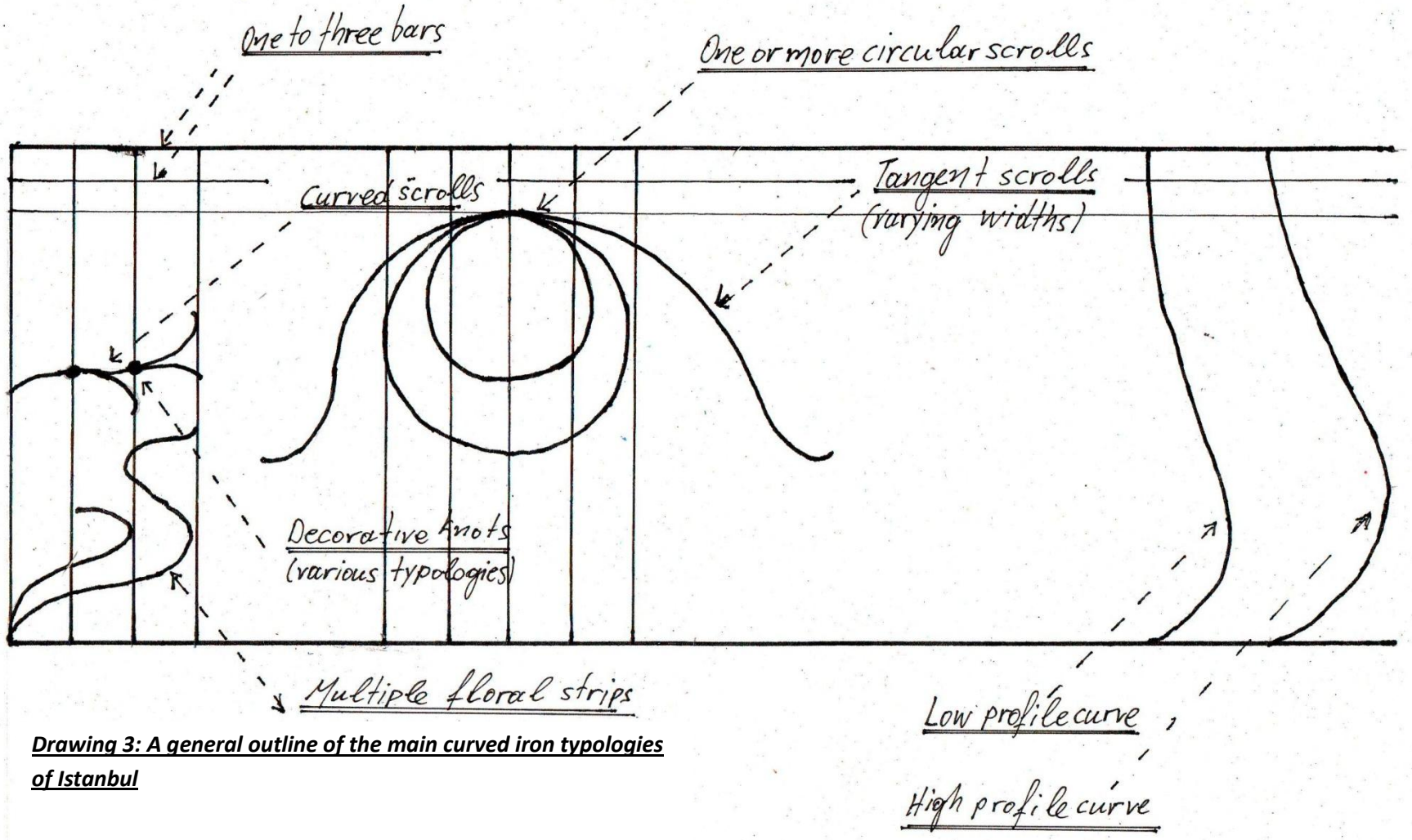




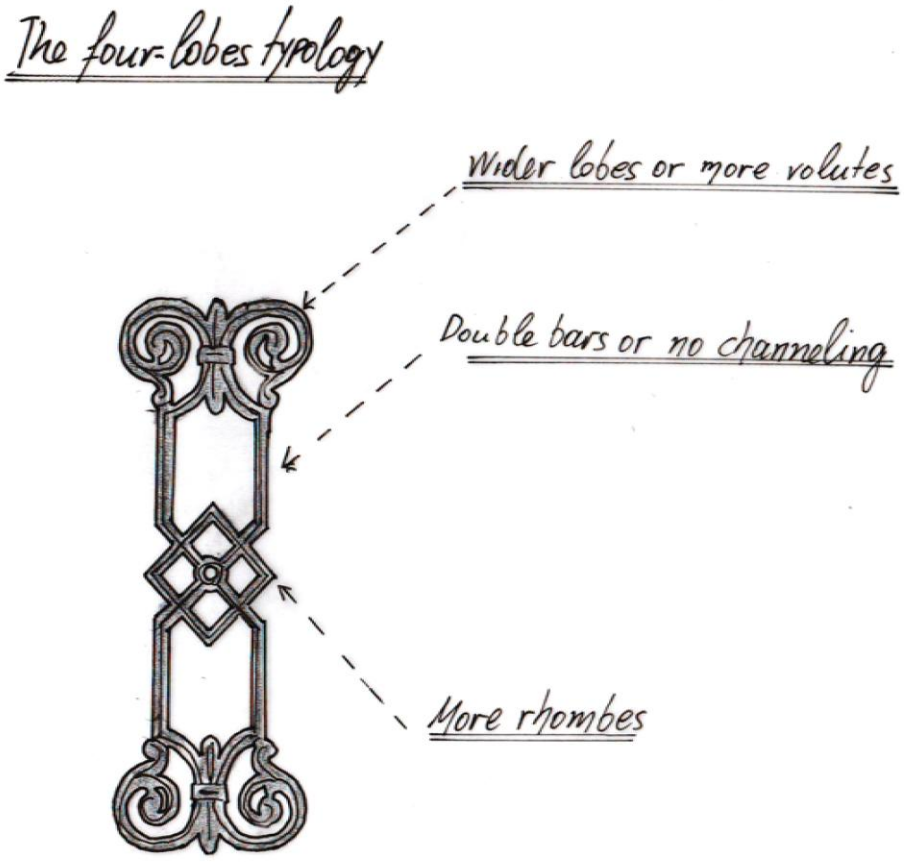
(clockwise from up left corner) i. The classic G-key bracket, ii. the oriel G-key bracket, iii. G-key variant from Pera, iv. G-key variant from Istiklal – Pera

Drawing 2: The "hearts"



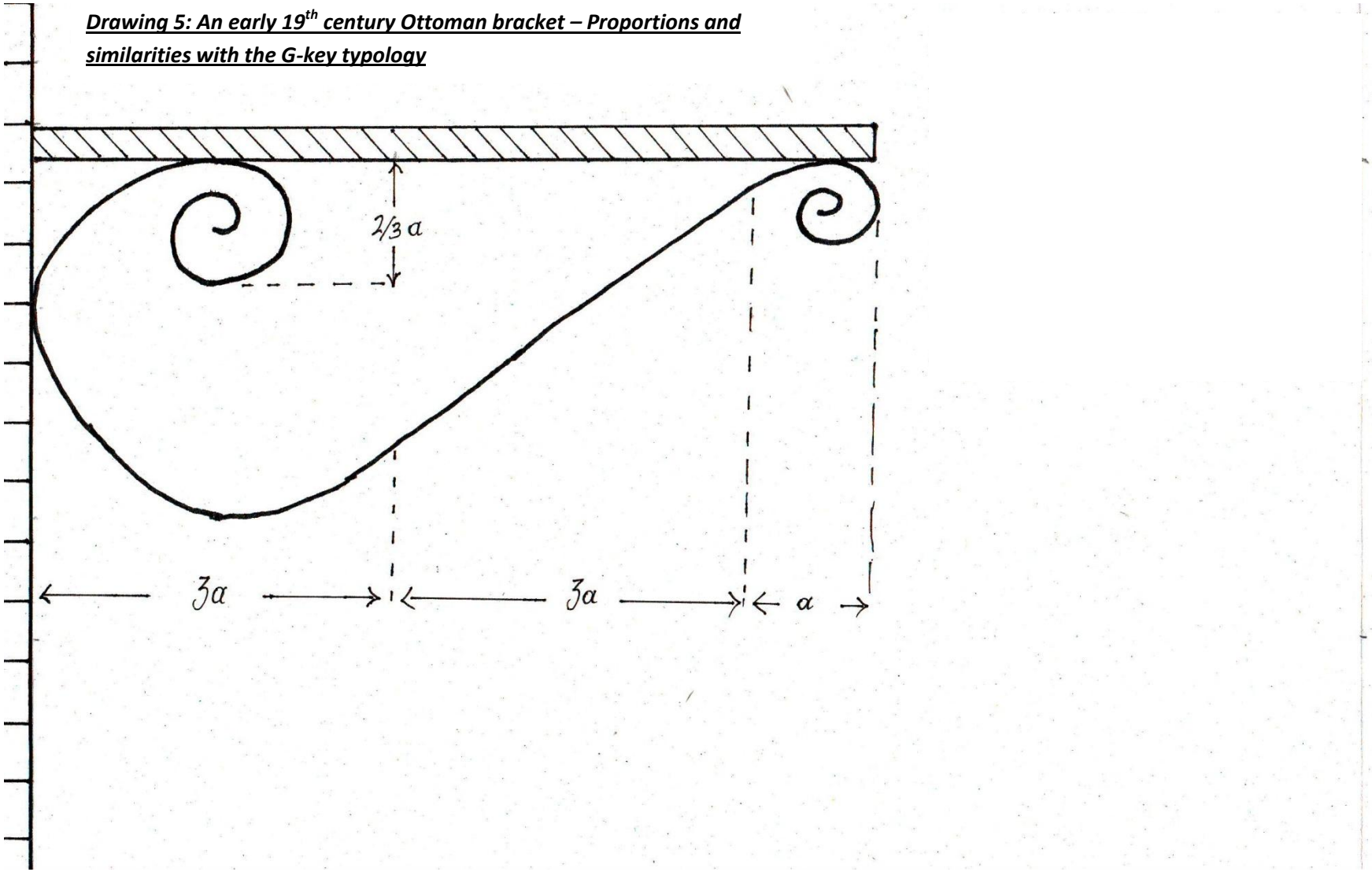


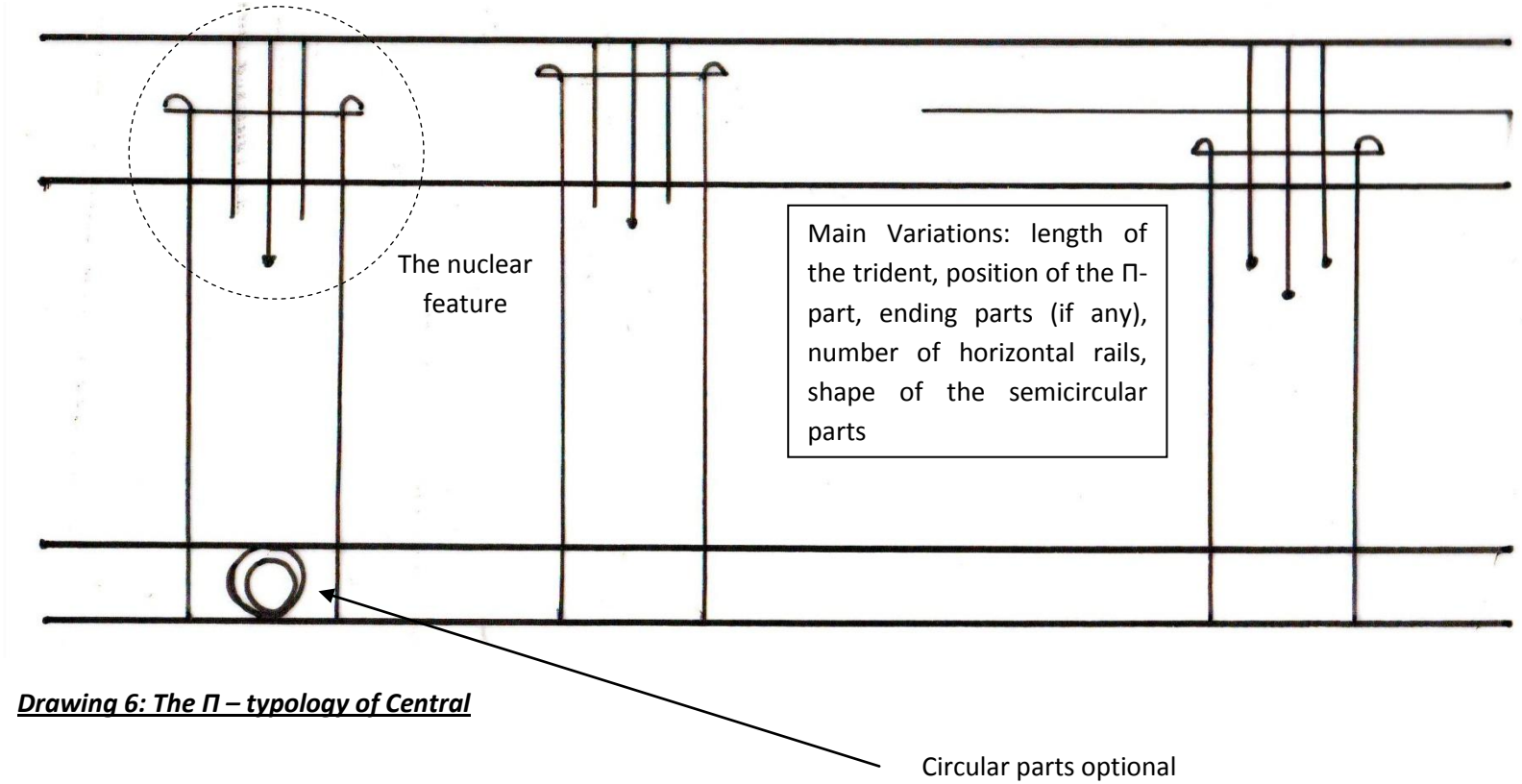
Drawing 3: A general outline of the main curved iron typologies of Istanbul



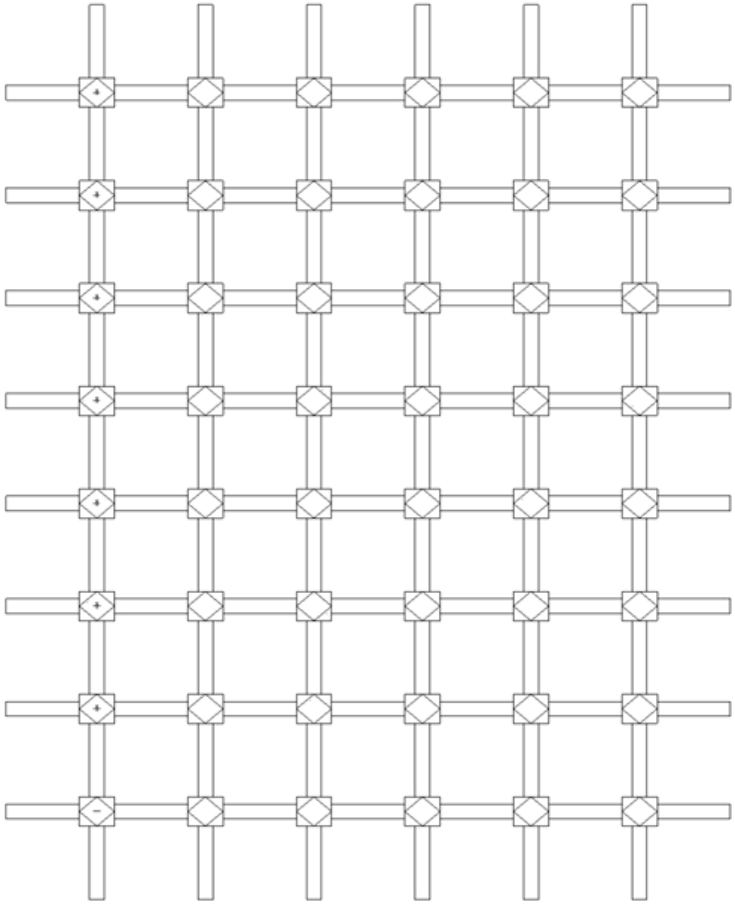
Drawing 4: The main variation of the four-lobes

Drawing 5: An early 19th century Ottoman bracket – Proportions and similarities with the G-key typology

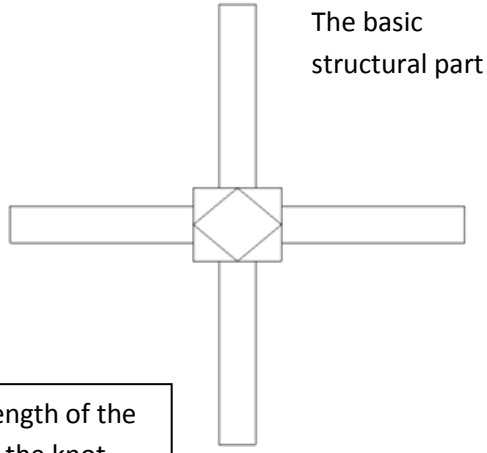




Drawing 6: The Π – typology of Central

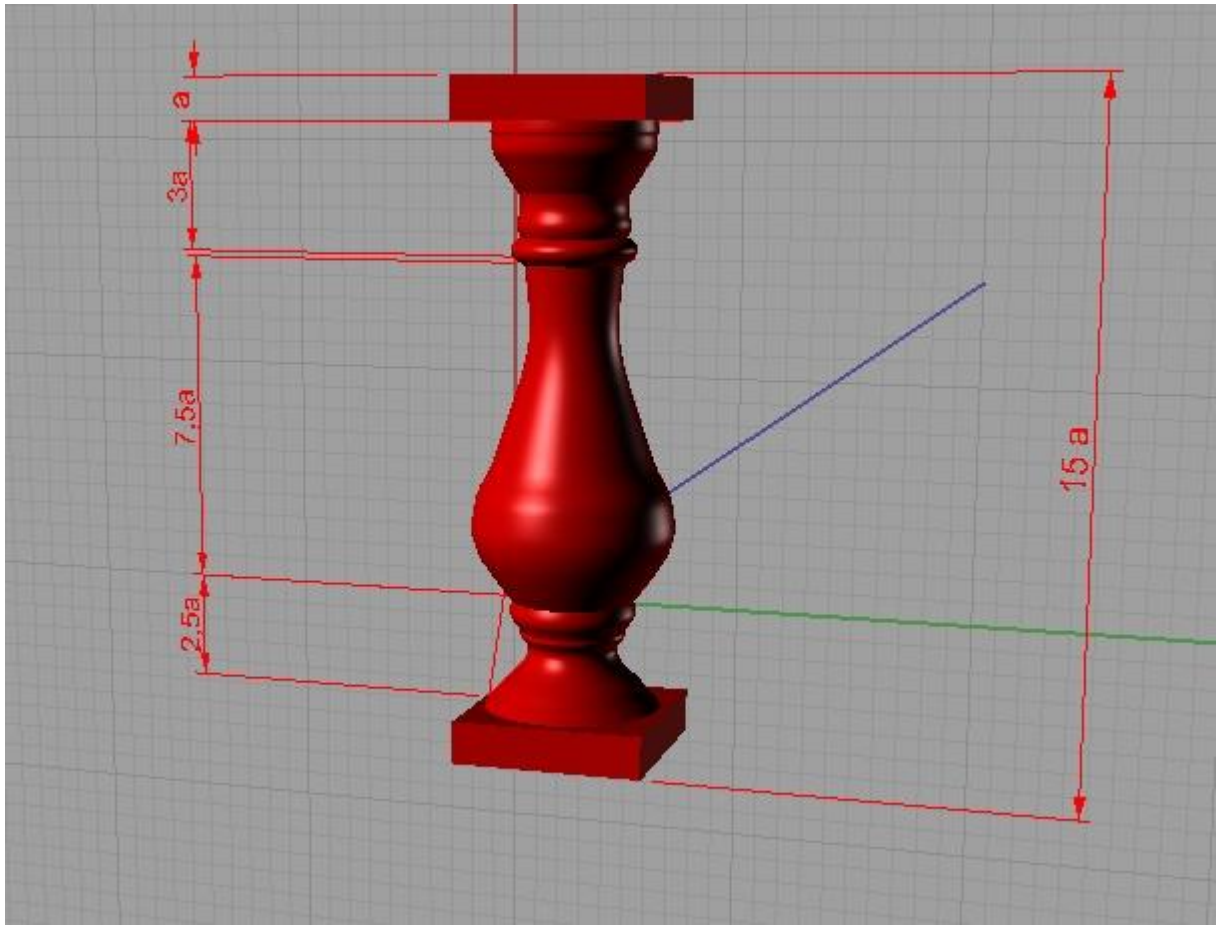


Drawing 7: Lokma parmaklik - Pre-tanzimat period



The basic structural part

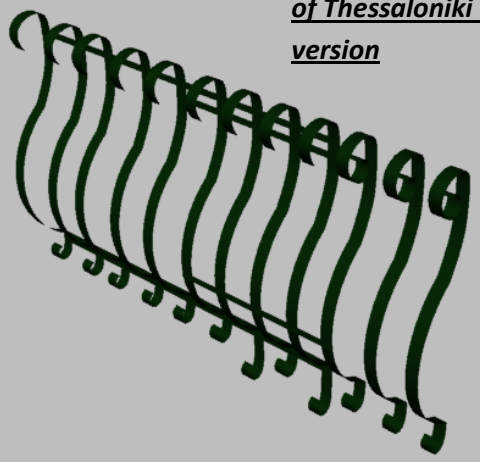
Variations: length of the cross, size of the knot, width of the bars.

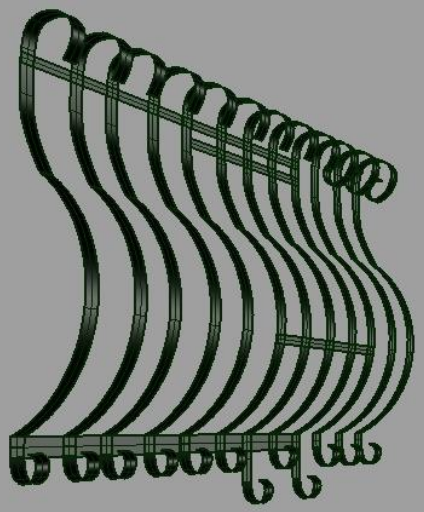


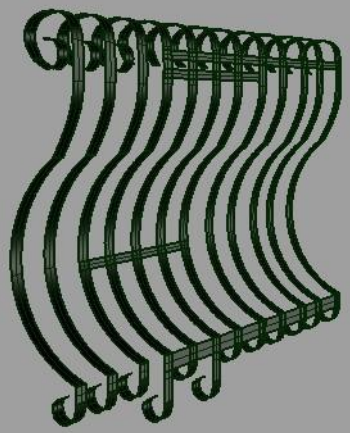
Drawing 8: The Common baluster – proportion

This baluster, with its floral forms which are not shown in this figure, is recognized in an immense variety of similar by its proportions.

Drawing 9 Curved bars railing of Thessaloniki : a hybrid version







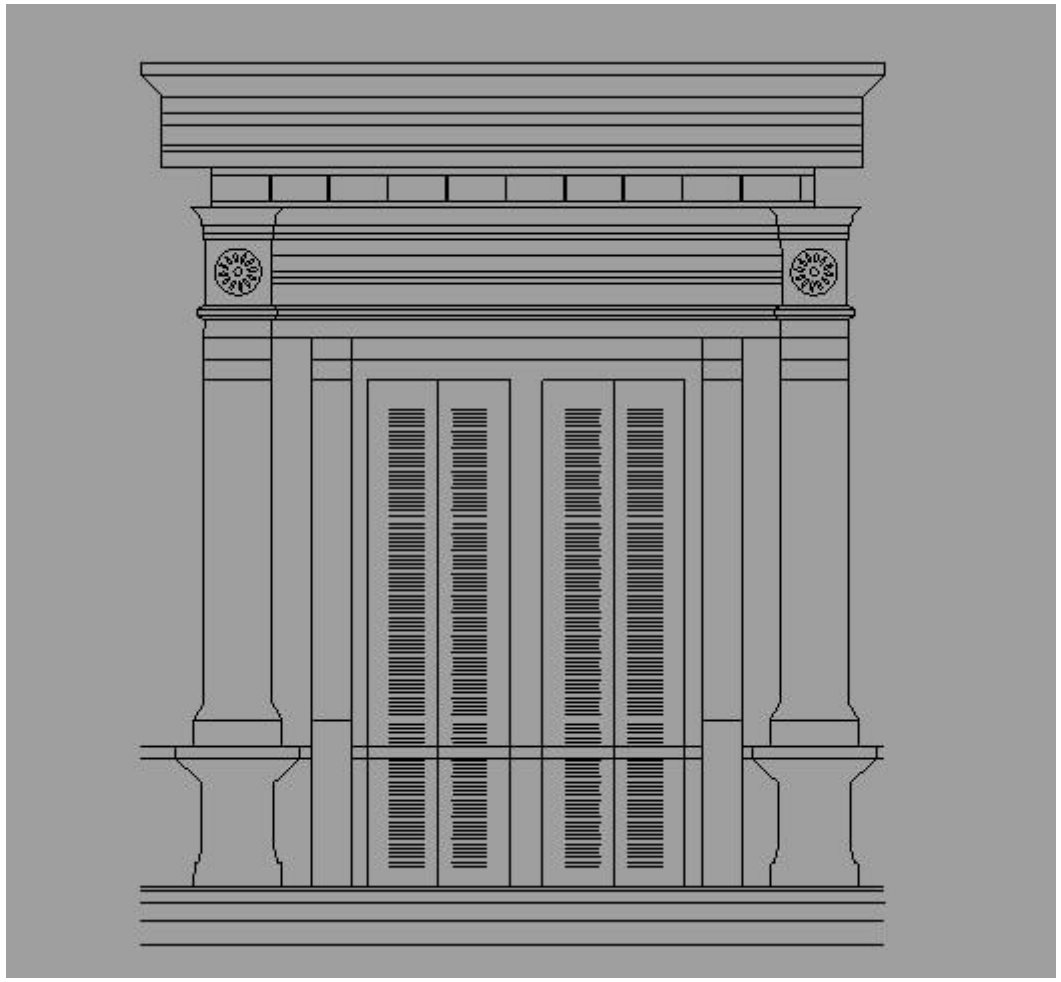
Main similarities: Blade – wrought bars, volute ends, curved shapes.

Partial similarities: Bars with different lengths, intermediate volutes.

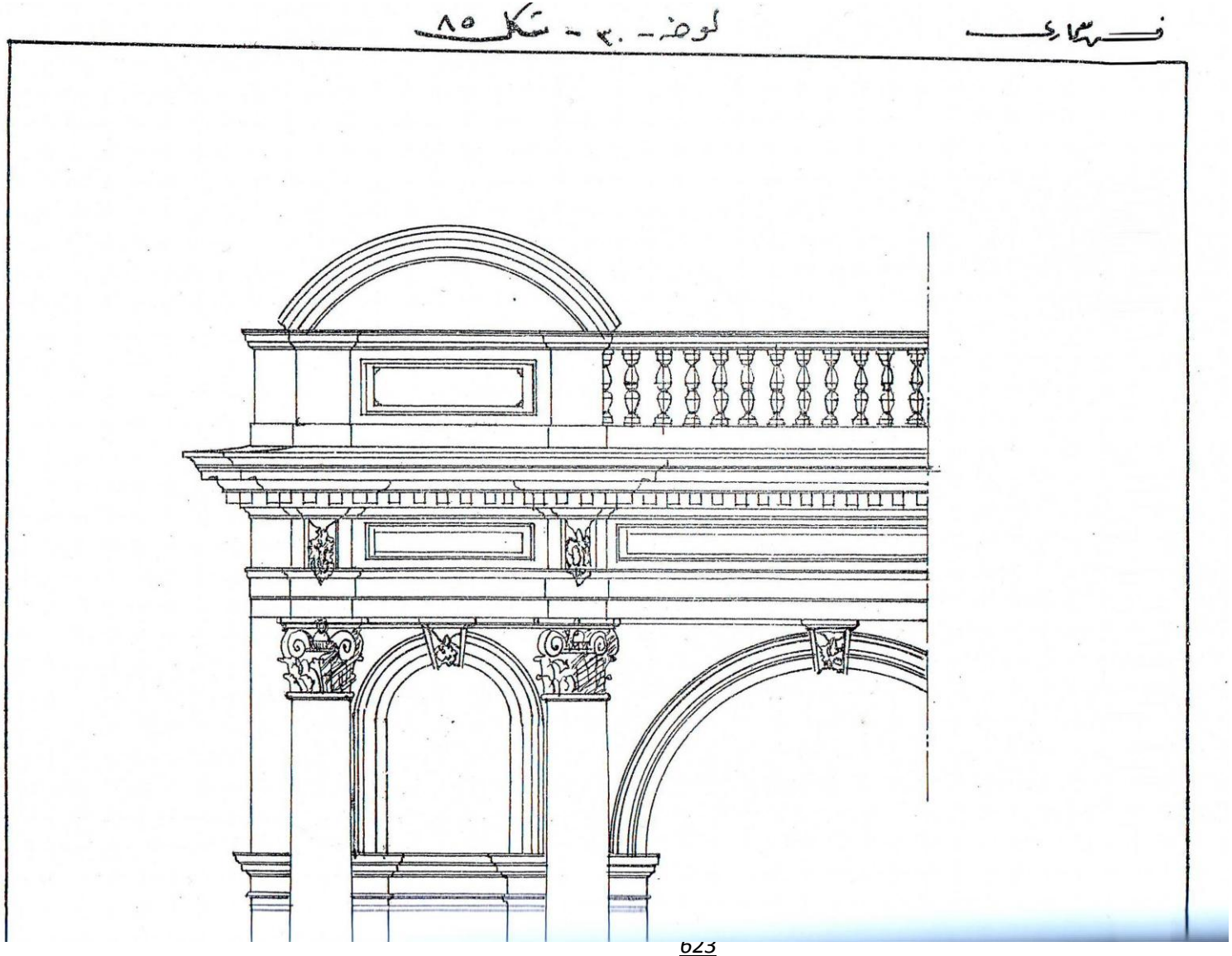
Main variations: Varying number of horizontal bars, number of end – volutes, optional decorative scrolls.

Drawing 10: Three Bitolian facades

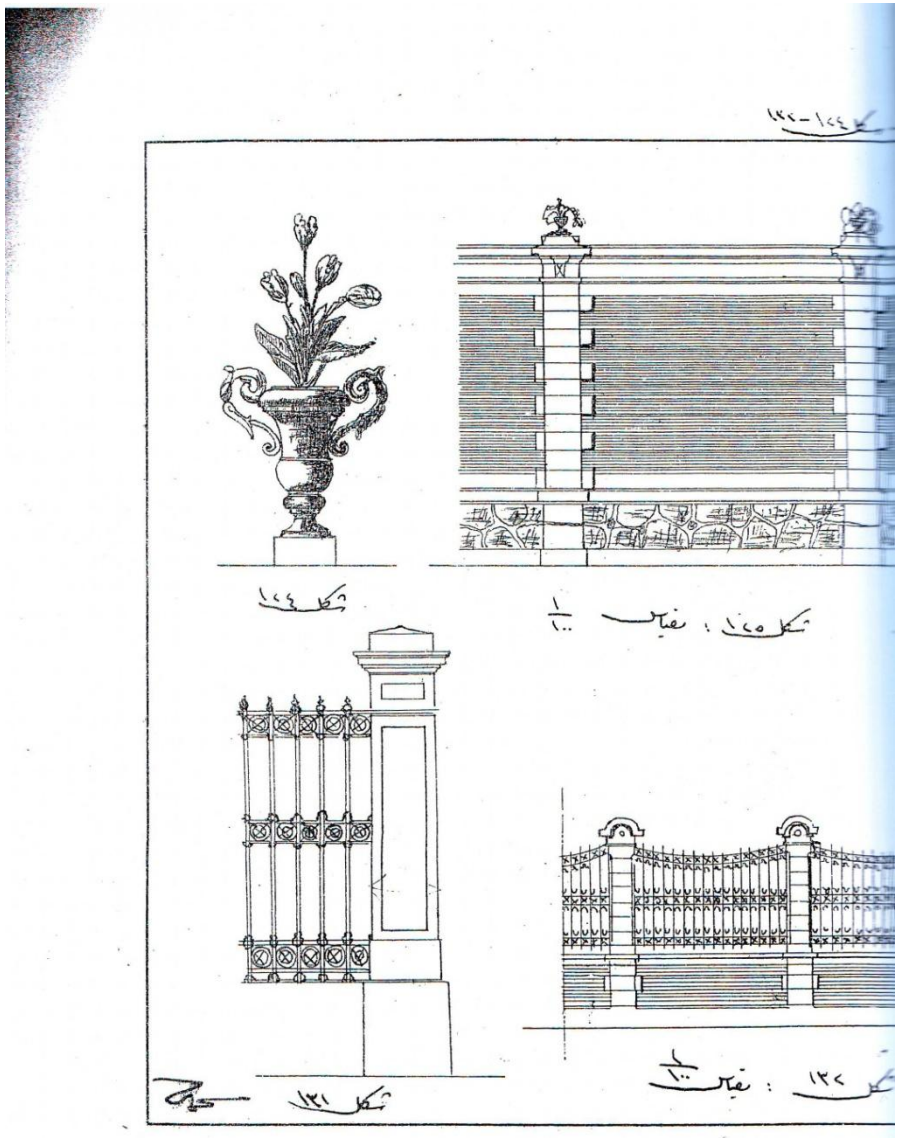
These three Bitolian facades, though different in style, share a common element; the classic baluster presented throughout the thesis.



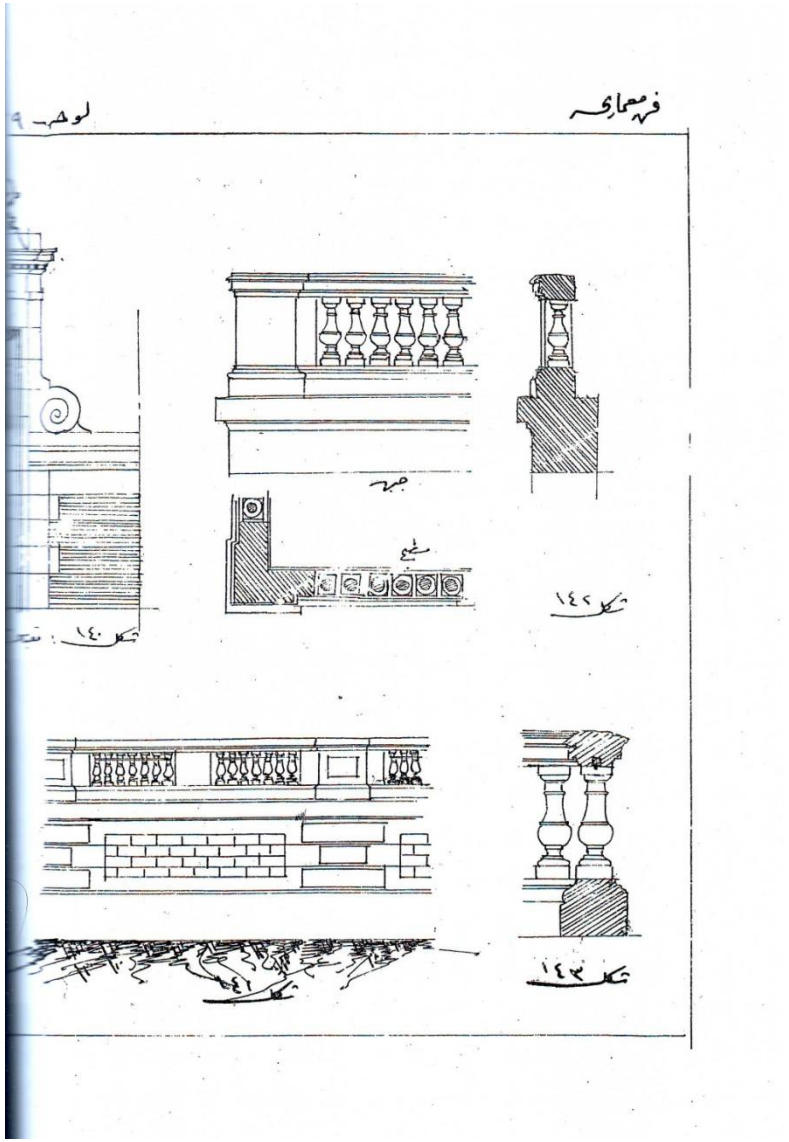
Drawing 11



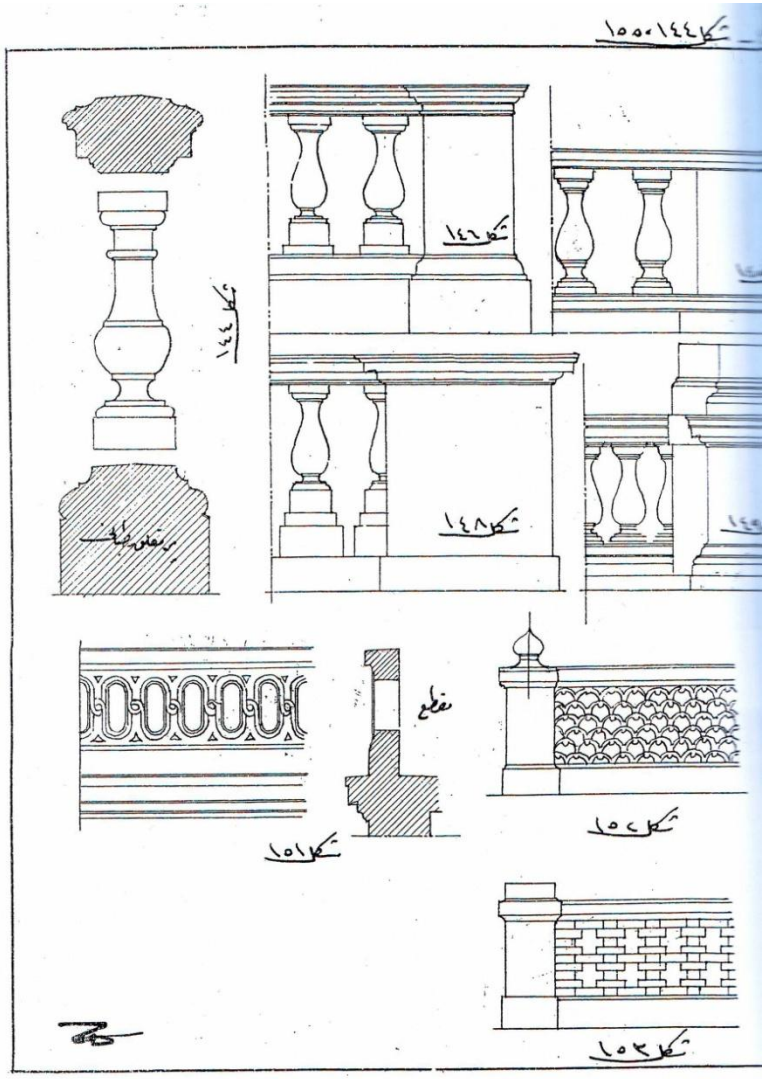
Drawing 11: Detail of a façade from Talat's book (1903). All these details have been seen in various buildings of the four cities.



Drawing 12: Samples for fences and railings by Talat (1903)



Drawing 13: The general typogy of the ceramic baluster presented in various uses



Drawing14: Balcony designs; various balusters of the same general typology

Methodology: further discussion

General issues

In Chapter one, I gave the main, yet sufficient, outline of my research methods. In this appendix I will proceed to a deeper analysis of the methods, and to a discussion about the problems of methodology and the limits of research, trying to speak informally, out of my experience in the field.

A main problem, which all researchers have to face, is the size of the material to be gathered. In this thesis I had to deal with this issue, particularly in Istanbul. Bitola is a small city, therefore, I managed to photograph all the remaining buildings within a quite brief period of time. In Thessaloniki, the surviving buildings were slightly more than those of Bitola, due to the great fire of 1917 and the massive reconstruction of the 1950s and 1960s. Istanbul was a different case. There are some thousands of surviving old buildings in many districts, which occupy an area almost equal to the actual size of Thessaloniki. Therefore, it was necessary to focus on certain districts.

However, the decision to exclude or include data in a research is often quite difficult and requires a good knowledge of the field. In other words, I had to make thorough and long inspections in various streets and districts in order to decide what to include in the data. This means that even when I had already photographed a great part of the old districts of Istanbul, I was changing my plans about the inclusions and the exclusions of data, according to what to my deepening knowledge on the city, its history and its landscapes.

The entire concept, according to which I based the selection of data in Istanbul, can be quite complicated to describe in a few pages; it requires a detailed explanation, which involves analyses based on the knowledge of the city. It can be the topic of a study on Istanbul, given that it was constantly under renegotiation. When, for instance, I was writing some last parts for Istanbul, evidence from archives and bibliography indicated me that there was the need of returning to the field to fill some gaps.

One of the main criteria leading me to my choices was the representation of most, if not of all, the "broad" typologies. This means that very often I was omitting isolated buildings or entire islets of typologies in case that, as I was thinking, they were not significantly changing the data and the possible conclusions from it.

When I started this research, neither the technology available nor my funds or possibilities permitted me to use very sophisticated methods of research in the

meanwhile, GPS technology became widely used and significantly cheaper, but for me it was quite hard to pass to it. Furthermore, the regulations for a thesis demanded certain formats and presentations methods – a print book – and this obliged me to start with these prerequisites. Other kinds of presentation of this work would require further effort, work and money; things which out of my possibilities for this period.

I had, therefore, to comply with the needs and the regulations. This demanded a great number of photographs, which would permit me to have an extensive database, easy to be elaborated even far from the field, which was anyway divided into four different and distant parts. This great collection of photographs also permitted me to use it in other cases, that is, for other lateral researches and for articles.

Starting to photograph

The task of taking all these photographs was not always very easy. My first difficulty was that I had a very modest camera and I had to take the best out of it. The mediocre quality of this device obliged me to use all kind of techniques used for enhancement and processing. The results were satisfactory. Although that when I was starting I had the impression that I would need a very good camera for this task, it was proved that ingenuity and technical skills improvement could lead to good results.

Once the technical part was solved at this stage, I had to deal with the task of taking photographs on the streets. This task was sometimes very easy, like in Plovdiv, where the center is very touristic and one out of two visitors is constantly photographing something. The same is the case in certain central districts of Istanbul, but things were very hard in remote or non touristic areas where photographing was a very uncommon practice, often creating suspicion among the locals. As I discussed in chapter one, I encountered great problems in Istanbul-Tarlabaşı. This happened because of the special character of the district and its population. However, I encountered similar problems in many other districts of Istanbul, yet, not so stark.

I also understood that people could possibly feel rather confused if a person was taking pictures of private houses. Some thought that I might be state employee; others thought that I was a thief or something of the kind. In order to calm their anxieties I had to explain myself, to show part of my work and to be as clear as possible; this also happen in many other cases, when people just wanted to know, without any kind of suspicion.

I imagine that if I could not speak all the four languages, spoken in the four cities, things would be much harder. Although that giving explanations various times a day

slowed down my work, it was also very useful in many cases. Locals, very often have a good knowledge of their area, either because some of them are interested in it or because rumors and urban legends circulate in the area. These legends and local knowledge are not always exact and need to be compared, tested and proved; yet, they are very good indications for further research.

The limited funds, I had, obliged me to find a solution about the time I should dedicate in each city both for photographing and for the research of bibliography. Therefore, I settled my 'headquarters' in Sofia, which was at the center of the entire area. It was the cheaper option and a capital, where access to important libraries was available.

I organized trips to the cities and particularly to Istanbul, where the major part of the data would come from. The brevity of these trips, two weeks each of them in a total of ten trips, required a precise organization of the actions to be done. Therefore, I spent a trip in walking around all the districts and taking notes in order to plan better my photographic trips in Istanbul. In Bitola, I photographed all the Ottoman houses, almost 300 of them and in Thessaloniki, I already had a good archive, which needed some amendments.

The photographic activity had also some technical problems. Streets were often full with objects, packed with heavy traffic and objects covered by trees carpets or other obstacles. The size of the city and the number of the photographs I should take each day obliged me to photograph quickly, without any luxury to use a tripod or to think too much about each frame. At the beginning, this was quite difficult, but later I gained significant experience; this experience permitted me to do the job faster.

Therefore, I was moving between cars, shop stands, people working and going around, trying to find in a few seconds the best angle to shoot, keeping always an eye to people observing me and possibly getting nervous or curious about my actions.

Managing the data

At the end of this photographing activity, I gathered a total of twenty thousand photographs, half of them from Istanbul. This was a voluminous archive for my possibilities, which I should absolutely classify and edit in order to make it useful.

While photographing, I was keeping note of the location of each building and, often, of other details that could be of some help. Later, when back from the field, I used these notes to identify each of the frames. I used the "comments" option of the digital files, introducing the notes from the notebooks in them. In this manner, each photograph

became autonomous in that it could be classified in any manner, by any of its characteristics, in any group, always having attached its details.

However, that was not enough. The data should be handled also in a statistical way. Although an analysis could be done through the photographs available, a further action was necessary in order to find relations between districts and cities, concentrations of elements and syntactic preferences. The way to do that was through the creation of excel files. In these excel files I introduced many characteristics of the buildings, their location, their elements and more. This classification permitted me to access the data in whichever way; if I wanted to examine the concentration of the g-key brackets in Fener, I should merely sort the respective columns. I do not proceed with the benefits of the data base, because these are already well known.

This classification in excel files had also some problems. Although in some cases, cast iron brackets for instance, standardization was very high, in other cases it was very low; for curved railings, for example. In the latter case, the classification was a quite subjective task, which supported by my knowledge of the cities. The typologies were introduced by a codification I invented for this purpose, because no previous classification of this type of elements existed. For reasons of economy of time, I used a codification that was brief and easily readable by me, however, not ready to be presented as an open source to whomever interested.

The database helped me to understand some things about the cities and the distribution of their elements that escaped my first observation. For example, the similarity of architecture between Pera, Fener and Kadıköy led me to the conclusion that the elements used were more or less the same in typologies and numbers. The excel files revealed that this was not the case.

The same network of relationships, trends and concentrations was revealed by the use of maps. The data gathered and the excel files helped me to create maps, some paper and some digital ones. In these maps, some of which are included in this thesis, I was either locating photographs of the elements, signs with their typologies or colors indicating concentrations, uses, styles and more. As I have already discussed, this material is very voluminous. Some hundreds of excel files, and tens of maps and other auxiliary media. Therefore, I comprised in the thesis only some of them, keeping the rest as a tool for explaining the city and investigating the objects of the urban space.

Using the data

While writing the thesis, I used this excel files, the conclusions and the indications born from them. However, I considered that a strictly quantitative analysis of the data would not be enough for my purposes and would not answer my research questions. Therefore, I went back to the photographs and I started a descriptive analysis of the elements and their positions and combinations on the facades. Therefore, the method was both quantitative and qualitative, in a combined way that could better serve my purposes.

Copyrights and limitations

In chapter one, I discussed the necessity of taking many photographs because of copyrights. Laws, about copyrighted material, vary in the four countries of the research and in the UK and during these years, they were becoming stricter. Generally, in the UK and in the Balkan countries, the use of photographs in PhD theses was either tolerated or permitted, if the source were acknowledged. Thus, there was not a major problem if the material were to be used merely in the limits of this thesis. However, I had the intention to proceed to conference presentations and to articles, and in that case rules were significantly stricter. In this perspective, I often need five or six images for an article and this means fifty to one hundred euro for each of article.

Greater future researches would need greater amounts of money; that was a problem solved by the creation of a personal data base. The creation of a data base helped me to know deeply the cities but also provided me with a good source for future publications, without any dependence from permissions by any thirds.

Archival research

In chapter one, I discussed the necessity of an archival research. As I said, many data was missing especially in Thessaloniki, but the same was the case with some parts of Istanbul and Plovdiv. This was sometimes easy, for example in Plovdiv and in Bitola but some other times very hard, for instance in Thessaloniki and Istanbul.

In Thessaloniki, I wanted to access the archives of the Chamber of Commerce. Although I have asked many times to study their archives, their constant answer was that they were amending and reorganizing it and that, in the meanwhile, it was closed to researchers. However, a well known Greek professor, talking about his research in a

conference, was mentioning his visit to these archives during the same period. This was quite disappointing for me, because it revealed me something that I was suspecting.

Another incidence of this kind happened in the Centre for History of Thessaloniki. The administration of the archives did not permit me to photograph the old post cards although I told them that these reproduction would not and could not be published anywhere, because of the quality of such a reproduction does not permit such an action. They later told me that I can have five or ten of them; that was useless, because I needed small parts from many cards than entire cards in a limited number. I sent a letter to the vice-mayor explaining my research and the special needs I had, but although I had a number of protocol, I never received an answer.

This is another case from Istanbul: In the Nadir Eserler archive of the University of Istanbul, photographs in the catalogues, available for the researches, had usually a size of 7*10 cm. This size was very small to let me observe minor details such as architectural elements. When I asked for bigger images, they asked me five euros for each of them; that was totally out of my possibilities.

I also had some problems in finding the dates of construction of the buildings in Thessaloniki and Istanbul. There are some archives that keep details of construction, if still exist any. In Greece, these two archives are open, the first to lawyers and the second to engineers. The former had a very strict policy, not permitting any other kind of research and individuals getting access. The latter, this of urban planning, is a notoriously corrupted authority, which I wanted to avoid. In Istanbul, although I tried to access them, I never had any luck to convince the authorities although I tried hard, probably due to my poor network there. These reasons led me to find other solutions, as I discuss in chapter one.

In other cases I was luckier: as I discussed, in the State Archives of Plovdiv, I found several files that included full details and plans from the activity of certain architects in the city. The access was very easy and they gave me full permission to copy it. The same happened in Bitola, although documentation there was much poorer.

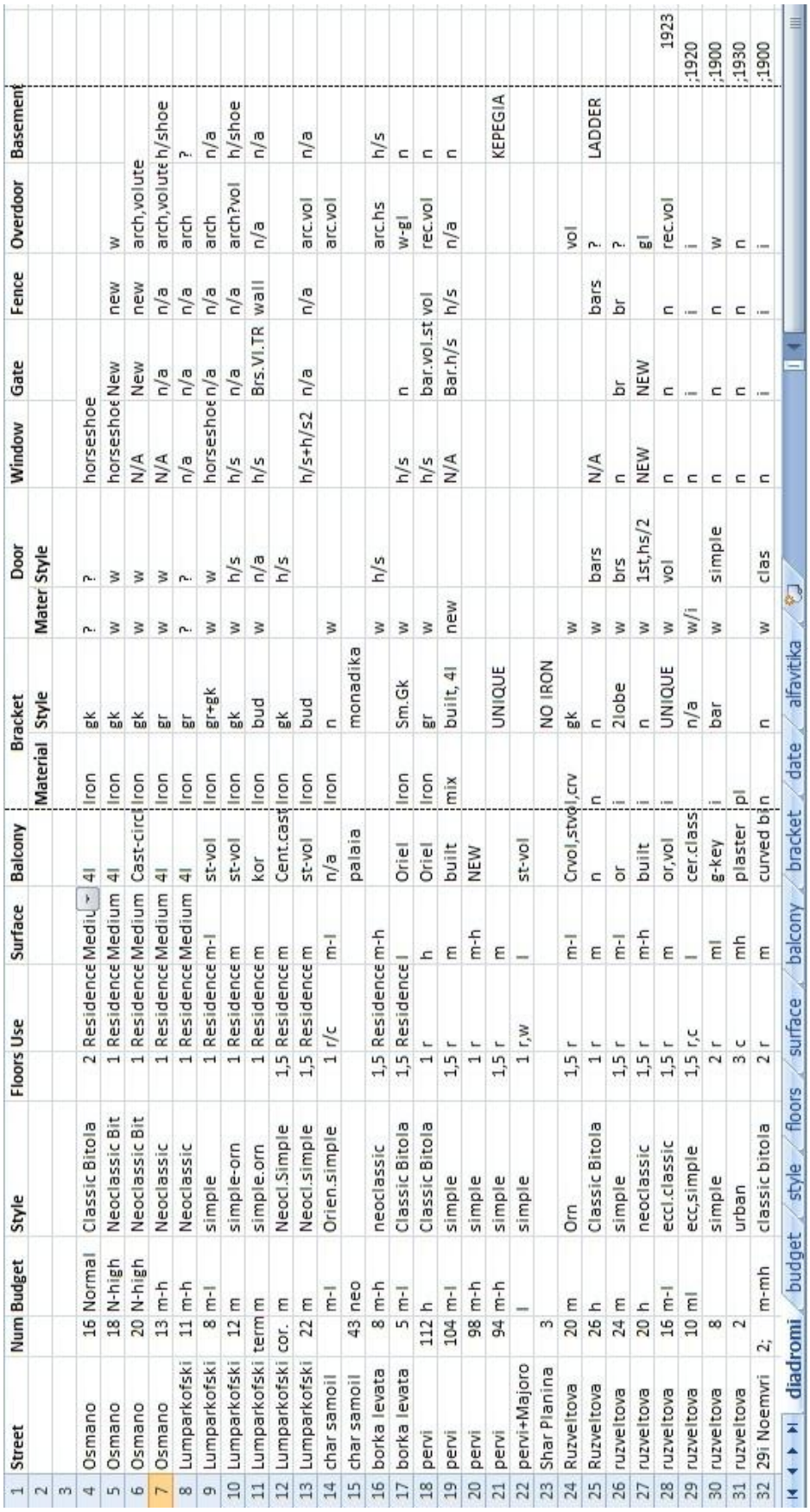
Political issues and oddities

As discussed in chapter one, in the years of the fieldwork the relationships between the four countries, involved in this research, had moments of tensions, which sometimes influenced my research. For example, there has been a tension between the Republic of Macedonia and Greece. A small parenthesis at this point: It would be extremely

bad for me to use the term "Republic of Macedonia" in Greece, if not forbidden, even in an indirect manner. The issue of the name caused major tension between the two countries during the summer of 2008, when some minor attacks against individuals occurred in both sides. I was in Bitola at the time of major tension but I did not experience any attack against me; yet, I often encountered suspicion, which I overcame with discussion, using again the knowledge of the local language.

In Istanbul, problems were quite frequent but not that much because of the occasional tensions between Greece and Turkey. It was mostly the interior political tensions to make things difficult, in certain cases. The open front with the Kurds and the frequent bombings in Istanbul caused a state of high surveillance and this had an impact on the permission to photograph important public buildings. Knowing that authorities were afraid of bombings, I insisted to obtain a permission to photograph in Istanbul and Edirne. The Turkish consulate of Istanbul told me that such permission was available only to photographers of the press and therefore they denied it to me. After insisting and meeting the consul, I was given a kind of permission, or better, a notice which stated that the Turkish authorities were aware of my activity in Turkey. This document, which I renewed twice, helped me in two cases, both in the same day, to skip arrest. It also helped me to gain easier access to certain archives and libraries; a lateral that I did not imagine at the beginning.

Although I could narrate more incidents, like the ones mentioned above, I must say that most frequently people were friendly and polite. Both photographing and archival research was a good experience, during which I met many interesting people.



	Street	Num	Budget	Style	Floors	Use	Surface	Balcony	Bracket		Door		Window	Gate	Fence	Overdoor	Basement	
									Material	Style	Mater	Style						
4	Osmano	16	Normal	Classic Bitola	2	Residence	Mediu	4l	iron	gk	?	?	horseshoe					
5	Osmano	18	N-high	Neoclassic Bit	1	Residence	Medium	4l	iron	gk	w	w	horseshoe	New	new	w		
6	Osmano	20	N-high	Neoclassic Bit	1	Residence	Medium	Cast-circ	iron	gk	w	w	N/A	New	new	arch,volute		
7	Osmano	13	m-h	Neoclassic	1	Residence	Medium	4l	iron	gr	w	w	N/A	n/a	n/a	arch,volute	h/shoe	
8	Lumparkofski	11	m-h	Neoclassic	1	Residence	Medium	4l	iron	gr	?	?	n/a	n/a	n/a	arch	?	
9	Lumparkofski	8	m-l	simple	1	Residence	m-l	st-vol	iron	gr+gk	w	w	horseshoe	n/a	n/a	arch	n/a	
10	Lumparkofski	12	m	simple-orn	1	Residence	m	st-vol	iron	gk	w	h/s	h/s	n/a	n/a	arch?vol	h/shoe	
11	Lumparkofski	term	m	simple.orn	1	Residence	m	kor	iron	bud	w	n/a	h/s	Brs.Vl.TR	wall	n/a	n/a	
12	Lumparkofski	cor.	m	Neocl.Simple	1,5	Residence	m	Cent.cast	iron	gk		h/s						
13	Lumparkofski	22	m	Neocl.simple	1,5	Residence	m	st-vol	iron	bud			h/s+h/s2	n/a	n/a	arc.vol	n/a	
14	char samoil		m-l	Orien.simple	1	r/c	m-l	n/a	iron	n	w					arc.vol		
15	char samoil	43	neo					palaia		monadika								
16	borka levata	8	m-h	neoclassic	1,5	Residence	m-h				w	h/s				arc.hs	h/s	
17	borka levata	5	m-l	Classic Bitola	1,5	Residence	l	Oriel	iron	Sm.Gk	w		h/s	n		w-gl	n	
18	pervi	112	h	Classic Bitola	1	r	h	Oriel	iron	gr	w		h/s	bar.vol.st	vol	rec.vol	n	
19	pervi	104	m-l	simple	1,5	r	m	built	mix	built, 4l	new		N/A	Bar.h/s	h/s	n/a	n	
20	pervi	98	m-h	simple	1	r	m-h	NEW										
21	pervi	94	m-h	simple	1,5	r	m			UNIQUE							KEPEGIA	
22	pervi+Majoro		l	simple	1	r,w	l	st-vol										
23	Shar Planina	3								NO IRON								
24	Ruzveltova	20	m	Orn	1,5	r	m-l	Crvol,stvol	l,crv	gk	w					vol		
25	Ruzveltova	26	h	Classic Bitola	1	r	m	n	n	n	w	bars	N/A		bars	?	LADDER	
26	ruzveltova	24	m	simple	1,5	r	m-l	or	i	2lobe	w	brs	n	br	br	?		
27	ruzveltova	20	h	neoclassic	1,5	r	m-h	built	i	n	w	1st,hs/2	NEW	NEW		gl		
28	ruzveltova	16	m-l	eccl.classic	1,5	r	m	or,vol	i	UNIQUE	w	vol	n	n	n	rec.vol		1923
29	ruzveltova	10	ml	ecc,simple	1,5	r,c	l	cer.class		n/a	w/i		n	i	i	i		1920
30	ruzveltova	8		simple	2	r	ml	g-key	i	bar	w	simple	n	n	n	w		1900
31	ruzveltova	2		urban	3	c	mh	plaster	pl				n	n	n	n		1930
32	29i Noemvri	2;	m-mh	classic bitola	2	r	m	curved bi	n	n	w	clas	n	i	i	i		1900

diadromi / budget / style / floors / surface / balcony / bracket / date / alfavitika

Fig. 1 One of the excel files for Bitola

	Street	Num.	Budget	Style	Floors	Use	Surface	Balcony	Bracket	Door Mat	Door Style	window	overdoor	Gate	date
2															
3	Darussafaka	terma	ML	simple neocl.		1 com	L	N/A	n/a						;1900
4	Darussafaka	terma	ML	warehouse,brick		1 com	L	n/a	n/a						;1890
5	Darussafaka +Manyasizade		L	ahsap		1 res	ML	w	n/a						
6	Manyasizade		L	simple		1 res	L	n/a	n/a		Iron				;1920
7	Zuluflu		L	ahsap		2 res	L	oriel	w			90d. 2vol			;1870
8	cikin sokagi		L	ahsap		1 res	ML	n/a	n/a		;	str.bar,laces	n/a		;1870
9	draman	46	ML	sim. Ist.		2 res	ML	str.bar	n/a		iron				;1900
10	draman	16	M	med.Ist		3 res	M	oriel	n/a		w		n/a		;1890
11	sogutlu	1	m	simple neocl.		3 res	L	plaster	n/a		w/i	90d.spades			;1890
12	sogutlu	10	m	simple		2 ware	M	n/a	n/a		;	bars	n/a		;1900
13	sogutlu	;	m	simple ist		2 res	I	oriel	i	2lobes	;	bars	n/a		;1900
14	sogutlu	;	ml	sim.ist		2 res	I	oriel	plaster	sim.crv	w/i	bars, 2vol	n/a		;1900
15	karapapak	19	ml	very simple ist		2 res.com	I	oriel	n/a						
16	tanburaci	;	ml	sim.ist		2 res	I	oriel	n	bar	;	curv,vol	n		;
17	tanburaci	;	I	sin.ist		2 res	I	oriel	n		;	bars,2vol	n		;
18	tanburaci	;	mh	ist, kadikoy		2 res	mh	oriel	plaster	triangle	;	90d.unique	n		;1890
19	ayan+cilingir		m	ecl		1 com	ml	N/A	n	n	shop	n/i	n		;1880
20	gevgili4+ayan		m	sim.ist		2 res	m	oriel	n		w/i	n/i	n		;1880
21	Kurkcu+ayan		m	unique		1 com	I	N/A	n		shop	n/i	bars		;
22	kurkcu3		I	simple		1 res	I	N/A	n		shop	n/i	arch		
23	kurkcu+durye		mh	sim.thracean		2 res.com	mh	int,cur,star	n						;
24	durye		m	sim.ist		2 res	I	cur.lace,or	n		w/i	cur,vol	n		;
25	Kurkcu	16	m	sim.ist,brick		2 res	I	oriel	n		w/i	cur,spades	n		;1900

Fig. 2 One of the many files for Fener – Istanbul

GLOSSARY

Term	English
ağa	Turkish noble (plur. ağalar)
ahşap	Wooden house
bedesten	Market of precious goods
belediye	Perfecture
cadde	Street (genitive caddesi)
esnaf	Guild
han	Building with shops and offices (plur. hanlar)
historic Peninsula	The peninsula on which Istanbul was initially built, on the European side
janissaries	special forces of the Ottoman army
kâgir	Stone house
konak	Mansion, large and imposing house
lokma parmaklık	Knotted railing
nüfüs mubadelesi (exchange of populations)	Exchange of the turkish populations of Macedonia with the Greek populations of Minor Asia, after their war in the years 1919 - 1922.
pax ottomana	The long-lasted internal order of the Ottoman territories
sahnisi	oriel
tanzimat fermani	The decree of the tanzimat reforms
tanzimat reforms	Major reforms on various sectors of the Ottoman state and society during the second half of the 19th century. From the Ottoman *tanzim: regulation*
ulema	Muslim religous leader
valide hanim	The mother of a sultan
vizier	Position similar to that of a minister
vlah	Populations speaking romance languages, residing in most countries of the Balkans, also known as Aromuni
yalı	Prestigious residence built on the coast (plur. yalılar)
yedi kule	defensive tower and neighborhood, both in Istanbul and Thessaloniki

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