

# Turkish City: A Methodological Research on the Analysis of the Turkish City Pattern and Evaluation under Today's Conditions

NURAN ZEREN GULERSOY

	<p>The long-awaited book titled “A Methodological Research on the Analysis of the Turkish City Pattern and Evaluation under Today's Conditions” of Prof. Kemal Ahmet Aru, master of the urban planning lecturers in Turkey, took place among the Publications of Yapı-Endüstri Merkezi in April 1998.</p> <p>This work of Prof. Aru, who has graduated from Department of Architecture, Academy of Fine Arts, in 1937 and started working as an assistant at Urban Planning Department, Faculty of Architecture, Graduate School of Engineering in 1940 and having completed his 48<sup>th</sup> year in professorship, reflecting the knowledge accumulated over many years is an important source for not only the researchers in architecture and urban planning but also for everybody who is sensitive towards the city and the environment.</p> <p>This work comprising analytical studies and assessments carried out systematically on Turkish cities selected as samples from seven geographical regions of Anatolia is concluded with a method trial for the protection and evaluation of the old Turkish city Pattern under today's conditions.</p>	<p>The book, containing the characteristic pattern analysis, photographs and assessments regarding the researched cities, consists of 288 pages and 3 sections.</p> <p>In the first section of the book, titled “General Research on the old Turkish Cities”, general information and pattern analysis regarding the researched cities and the regions where these cities are located are provided and the objective of the first section is stated in the book as documentation and analysis. The researched cities are considered by seven geographical regions, the cities of Bursa, Edirne from Marmara Region, Trabzon, Tokat from Black Sea Region, Kütahya Muğla from Aegean Region, Antalya, Adana from Mediterranean Region, Sivas, Kayseri and Konya from Central Anatolian Region, Erzurum from East Anatolian Region, Adıyaman, Urfa, Diyarbakır, Mardin from Southeast Anatolian Region are studied and the cities are presented with “Identity cards”. The research is based on topographical, economical and ecological developments rather than historical development; on</p>	<p>boundaries and the characteristics of each texture group are determined.</p> <p>In the first section lower scale pattern analysis on eight cities Bursa, Edirne, Konya, Sivas, Tokat, Antalya, Mardin, Erzurum selected after a systematic analysis carried out on city scale on sixteen cities. In the pattern analysis, samples of old pattern characteristics, old pattern and population increase rates, old pattern and homogeneous regions, region ratios, road, green, building area ratios per regions; characteristic building texture samples are studied. Adıyaman, Adana and Erzurum among the cities studied in the structural building analysis are grouped as concentric cities, Çorum, Tekirdağ, Sivas as radial type cities, Çankırı, Giresun and Kahramanmaraş as saddle type cities, Mardin, Trabzon and İzmit linear type cities, Siirt as bow type city and the cities such as Balıkesir, Bursa, Diyarbakır Manisa, Şanlıurfa that cannot be generalized are grouped</p>
<p><i>Turkish City: A Methodological Research on the Analysis of the Turkish City Pattern and Evaluation under Today's Conditions</i></p> <p>Prof. Kemal Ahmet Aru Yapı –Endüstri Merkezi Publications, April 1998</p> <p>Cities selected from Marmara Region</p>			

Yıl	Kent Nüfusu	20 Yıllık Artış%
1950	30426	
1970	54885	80.39
1990	102345	86.47
<b>Eski Doku m<sup>2</sup></b>	<b>1950</b>	<b>113.39</b>
<b>Nüfus</b>	<b>1990</b>	<b>33.71</b>
<b>Eski Doku</b>	<b>345 ha</b>	<b>%83</b>
<b>Yeni Doku</b>	<b>71 ha</b>	<b>%17</b>
Yıl	Kent Nüfusu	20 Yıllık Artış%
1950	103812	
1970	275917	165.79
1990	834576	202.47
<b>Eski Doku m<sup>2</sup></b>	<b>1950</b>	<b>33.43</b>
<b>Nüfus</b>	<b>1990</b>	<b>4.16</b>
<b>Eski Doku</b>	<b>347 ha</b>	<b>%52</b>
<b>Yeni Doku</b>	<b>320 ha</b>	<b>%48</b>
Yıl	Kent Nüfusu	20 Yıllık Artış%
1950	36005	
1970	85032	136.17
1990	170589	100.62

the "Identity Cards" information about general characteristics, geographical properties, in particular the topographical situation of that city, the history, the historical development of the city, historical artifacts and their periods, the climate, temperature, rainfall, wind, demographical properties, population development, economical structure, first sector agriculture, second sector industry and third sector services, agricultural production resources, industrial production resources are summarized in tables. In the book, the old pattern components of equal characteristics are selected and assessed with specific graphical drawings. After this assessment, these textures are grouped per uniformity criteria at city level, uniformity criteria at environmental level, per uniformity boundaries and the power and the inducing elements of these

as cities of specific type. Furthermore, at the end of the first section, the development of the old pattern of the Turkish cities between 1970 and 1990 is analyzed and as an interesting assessment, old pattern per capita table sorted according to square meter values is developed. In this table, with 33.71 square meters Edirne has the highest old pattern area per capita and with 0.58 square meters Adana has the lowest.

In the second section of the book, titled "Systematic Study on the Samples of Regional Cities" on the other hand the analysis are detailed and a systematic study of lower scale

IDENTITY CARD					
MARMARA REGION EDIRNE	Map	Source	Documents	Land Use	
GEOGRAPHY Geographic Characteristic		Topography		Altitude	
HISTORY Historical Development of the City		Historical artifacts	Period	Historical artifacts	Period
CLIMATE					
Temperature	Degree	Precipitation	Degree	Wind	Direction/Speed



is sought on regional city samples. These analyses are carried out on the cities of Adana, Adiyaman, Antalya, Erzurum, Konya, Sivas, Tokat, Trabzon and Urfa as selected from various geographical regions and the sample pattern selected from within the city is analyzed and assessed at city, district and district surrounding level. Here, the ratio of the piece of pattern to the total city area and to the whole of the old pattern is determined and the position of the piece of pattern with regard to the functional elements of the city, the connection with the sphere of influence is assessed, the relation to the environment in respect to the natural texture is analyzed. In the environmental connection on the other hand the service relations, service center analysis, the hierarchical organization of the services in the historical texture is researched. At district level , the distribution of

the services, the boundaries of the districts, the land use, and the hierarchy in the dimensions of the road textures are analyzed.

In the second section, the patterns formed by many factors are classified and illustrated according to their characteristics. The pattern types, formed by the separate influences of various factors, of eight different types of climate, natural structure and of the city functions are grouped depending on their pattern characteristics as type A Textures (Antalya, Kayseri), Type B Textures (Çorum, Sivas), Type C Textures (Erzurum, Diyarbakır), Type D Textures (Tokat, Kütahya, Maraş, Afyon), Type E Textures (Edirne, Balıkesir, Manisa), Type F Textures (Gaziantep, Adiyaman), Type G Textures (Konya, Adiyaman, Gaziantep) and Type H Textures (Ankara, Bursa).

### Identity Card of Edirne

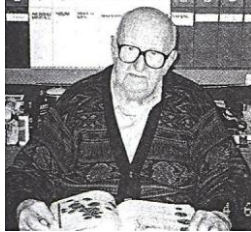
At the end of the second section, rather lower scale and more detailed studies are covered in the analysis and assessments, road systems in old patterns, road and crossroad types, urban spaces in old patterns and characterizations in urban spaces are provided. In all of these studies the city is approached as a system, and analyzed and assessed from the whole to the parts in a hierarchical order.

In the third section of the book titled "Methodological Research on the Protection and Utilization of Old Patterns" on the other hand, guiding proposals on protection and utilization of these patterns are developed, in this section the information gathered, the analysis made and the conclusions drawn in the first and second sections are assessed with the unique scores of the master.

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This book, being the product of a study started in 1960's, With the information it contains is a very special resource for the architecture and urban planning and qualifies with the unique drawings of the master as an artwork to be viewed page by page.

The new and old texture of Edirne

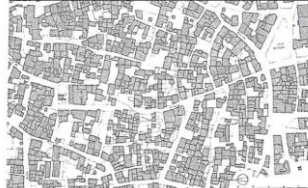
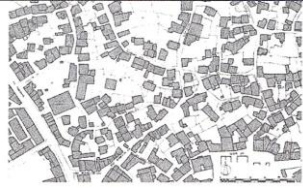




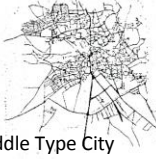


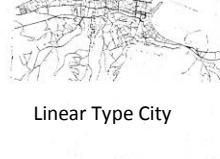
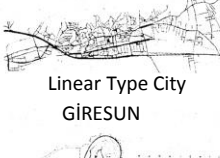
		<b>Interview with Prof. Kemal Ahmet Aru on his book “Turkish City”</b>		
		<p>“I read in <i>Kitap</i> supplement of the newspaper <i>Cumhuriyet</i> that your book titled “Turkish City” was published and next day I immediately went to Yapı-Endüstri merkezi and bought the book. I have read, viewed it with great pleasure remembering my student and assistantship days. When the bulletin <i>Mimarlık</i> has requested from me to prepare an article promoting your book I wanted to add your opinions to this article as well. Which of meaning does this book bear according to you?</p>	<p><b>With this study intended for the analysis of the Turkish city patterns and evaluation under today’s conditions, I wanted to guide the young in their prospective studies. This book, according to me, bears the meaning of “Message from the Turkish City Patterns to The Youth”.</b></p>	<p><b>climate appear as two separate elements affecting each other. Due to different climatic conditions of Turkey, the old city patterns and house types in different geographical regions have different appearances. I have tried to present these differences in a systematic way in a hierarchical order.</b></p>
<p>Prof. Kemal Ahmet Aru</p>		<p><b>I believe that this book which is an analytic study and assessment carried out on the Turkish cities is a document and a resource providing opportunity for prospective development. I guess it wouldn’t be wrong to say that this study is the first systematic research and assessment carried out in this sense on the Turkish cities selected as samples from seven geographical regions of Turkey.</b></p>	<p>How did you come to this idea of such a pattern analysis regarding the Turkish cities?</p> <p><b>As for why Turkish cities, why Turkish city patterns... Yes, I am neither an art historian nor an architecture historian, yet throughout my career I have prepared the plans of nearly thirty cities. I have had the opportunity to study different samples of these patterns. When</b></p>	<p>I know that this study was completed during my studentship. As a matter of fact, I had colored couple of map sections as well. Can you tell us the story of the research since it had started?</p> <p><b>I have started with this study in 1960’s. Until 1960, I couldn’t make time for such a study since the educational</b></p>
<p>Arial view of Edirne <i>Archive of Aykut Karaman</i></p>				



preparing the plans I have walked, breathed in these cities, felt their patterns and later seen how they were vanishing, being destroyed personally by the authorities, by the people living there and wanted at least to document these.

If we look at the history of urban planning, we see two major pattern trends in the formation of the city pattern. One of these is the geometrical pattern, and the other one is non-geometrical organic pattern. We call the first one metric pattern of the city silhouette and the second one rhythmic pattern. Old Turkish cities having a free and organic texture have rhythmic patterns. These fundamental forms of the old cities shouldn't be considered coincidental. The fundamental forms of these cities are nothing but non-geometric forms originating from the inner texture coming to the surface. And the inner texture is derived from the needs of the people living there. We witness, that in the configuration of the houses as well as of the roads and city patterns, human being and the nature, in particular the

and practical works were taking all of my time. In 1960's, when I was living abroad I have had the time to make such a study. When I was working as visiting professor at the urban planning department, faculty of architecture of technical university of Stuttgart in 1961-1962, of Berlin in 1963 and of Vienna in 1967, I prepared conferences about "Turkish Cities". I have had exhibitions in Hannover, Berlin and Stuttgart. These exhibitions and conferences have drawn great attention at that time. After I returned to Turkey, I have thought about improving the studies I had made for these conferences and exhibitions and collect them into a book. I have completed the first version of this study between the years 1972 and 1975 with the support of Araştırma, İnceleme Mütevelli Heyeti (Board of Trustees for Research and Studies) (AİHM) that at those times was an institution supporting the researches at ITU, and with the support of a group of then young now middle-aged

 <p>High ADANA</p>	 <p>low ADANA</p>	 <p>moderate ERZURUM</p>	<p>Samples of characteristic building texture</p>
<p>architect colleagues of mine. The study has been used as an educational material since 20 years at the faculties of architecture in ITU, Yıldız and MSU. And is still being used.</p> <p>It took also quite a long time this study to be published as a book. Can you tell us about this process as well?</p>	<p>In this study, the sample selection was very important. When selecting the samples we have based ourselves on three basic criteria. The first one, the city had to have been established as a Turkish city or even if established earlier to strongly have the characteristics of a Turkish city; the second one, the city had to have substantially preserved old texture</p>	<p>What kind of method did you apply in order to attain this objective?</p> <p>Two parallel methods have been used in order to attain this objective. The first one is the "Analytical Method." The second</p>	
<p>As for the publishing of the research as a book; after the study was completed my colleagues around me were telling that this study so that it could achieve its objective should certainly be published. Many publishers were interested. Such a study had to be published in color. The publishing conditions and costs of those days have discouraged the publishers. Couple of years ago, President of Yapı-Endüstri Merkezi Dear Doğan Hasol has visited me at home, has seen these studies and was very interested. "We can publish this book" he said. I've got very excited, very happy when the publishing of the book came into question after eighteen years since its completion; however I was a little worried as well. The study was completed eighteen years ago. The time elapsed had taken many things away from these special textures. Since December 1992 we have been working on updating these first studies with new maps and documents and new statistical data. We have determined the developments and changes occurred between the years 1970 and 1990. In the first study there were thirty-two cities. In this book we have taken sixteen of these cities. We have analyzed six of these cities in detail.</p>	 <p>ERZURUM Concentric Type City</p>  <p>SIVAS Radial Type City</p>  <p>ÇORUM Radial Type City</p>  <p>K.MARAŞ Saddle Type City</p>  <p>SİİRT Bow Type City</p>	 <p>MARDİN Linear Type City TRANBZON</p>  <p>İZMİT Linear Type City</p>  <p>GİRESUN Saddle Type City</p>	
<p>In this study you state "it has been aimed to select the cities with the capability of representing old Turkish city patterns". How did you make this selection?</p>	<p>and structure; the third one, the cities had to be selected from various geographical regions and had to represent these geographical regions.</p> <p>In this study, the information gathered about the cities in proportion to the means of the earlier studies have been studied and classified and it has been aimed to select the cities and pieces of textures on which the systematic analysis shall be applied from among "the cities with the capability of representing old Turkish city patterns".</p>	<p>one is the "Perceptual Method." In the analytical method, the dates and geographical structures, form topologies, physical pattern characteristics of the settlements and regional climatic characteristics have been analyzed. According to this analysis an assessment and classification has been made. From each type of urban forms, samples are selected according to the historical development, physical pattern characteristics, geographical regions and climatic conditions. In this way, it has been aimed to ensure that the cities and pieces of pattern</p>	<p>Formal building analysis</p>

on which the systematic analysis shall be applied had the capability of representing the Turkish cities. In the second method which we call Perceptual Method, the cities are put through a second election. Perceptual Method has been used to verify and correct the representative palette selected by means analytic criteria and to bring the research to a dynamic level by means of subjective criteria. However, in order to mitigate the subjectivity in the application of the method; the study has been carried out by a board of six architects separately.

Your book is not limited with only the analysis and assessments, in the third section there are guiding proposals for the protection and utilization of these patterns as well. When developing these proposals, with what kind of interpretation did you address these old patterns?

In the third section of the book, the information gathered, the analysis made and the conclusions drawn in the first and second sections are attempted to be analyzed to a certain extent. I say "analyzed to a certain extent" as I think that this study which I believe is the first study carried out in this sense on the Turkish city patterns shall be followed by other researches and this research might constitute a resource for other researches. I hope that this study we had initiated with great hopes and courage shall encourage the younger generations that shall be making PhD and post doctoral researches at our universities.

According to me, it may be possible to utilize the road patterns that despite of all deteriorations still exist in the old Turkish cities. The surveys to be carried out on these road patterns can put the neighbourhoodship that existed in the old times around the city center into a certain order. One of the purposes of contemporary architecture is to plan the city settlements as well ordered, socially organized wholes of a size allowing to be understood in terms of their problems,

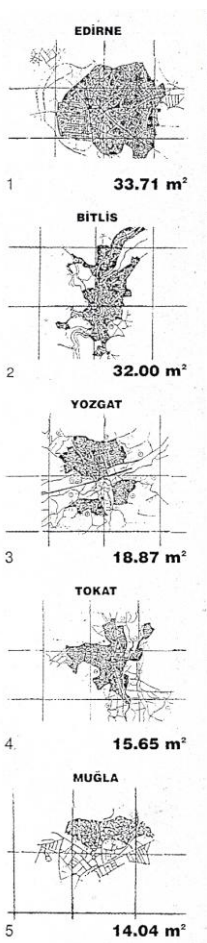
I guess this can also be accomplished in the reorganization of the old Turkish cities. With the proposals for the re-planning of the old pattern, we have aimed to "attempt" this.

Finally, I have to say, in particular to the youth that... I have expressed in this book as well. We should be aware of what our architectural heritage bequeaths to us in terms of city textures. We

should make use of this heritage with principles protecting and utilizing it, like the whole world is doing, should protect and modernize the environment bequeathed to us by the centuries and live in it.

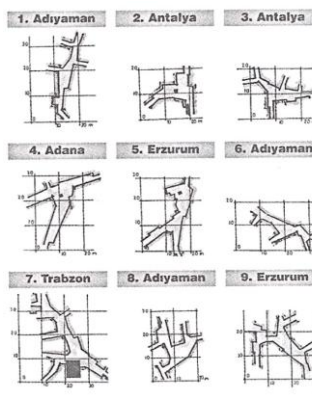
Thank you. On behalf of the youth and those who were once young, yet are still young...

Old texture per capita ordered according to m2 value

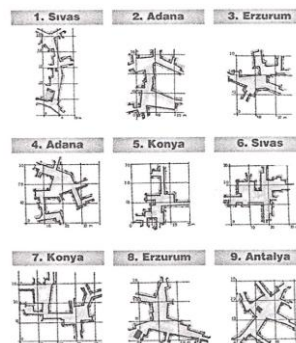


Urban spaces in the old textures

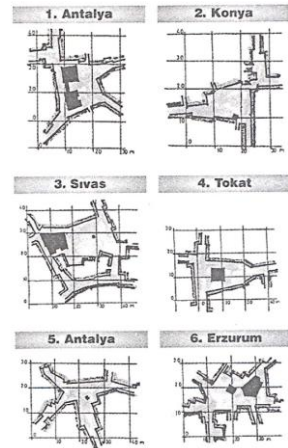
TYPE A URBAN SPACES



TYPE B URBAN SPACES



TYPE C URBAN SPACES



TYPE D URBAN SPACES

