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SPATIAL ORGANIZATION IN FOURTEENTH CENTURY SYRIA : AN EXERCISE IN HISTORIOGRAPHY¹

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ABSTRACT

This article is an analysis of the general pattern of spatial organization in fourteenth century Syria in the light of modern studies of urban and regional organization. First, the article introduces the theoretical framework of the hierarchical scene of human settlements. Then, it defines fourteenth century Syria as a region the economic well-being of which relied heavily on intra-regional specialization and trade, as well as on commerce with the neighboring regions. The realization of these conditions necessitated the existence of an effective transportation network. In the article, the transportation system in the area is discussed along with the efforts of the Mamluk government to make the most out of the available transportation technology. The efforts of the Mamluks were related not only to their concern about commerce, or, rather, about the maximization of tax revenues, but also to the nature of their military-administrative organization. A detailed discussion of the relevant aspects of the Mamluk administrative system follows next in the article. This discussion indicates that there existed a direct relationship between the economic and administrative functions of Syrian towns, as well as between the population of a town and the size of its military garrison. On the basis of the interrelationship among these four factors a model is developed in the concluding section of the article to analyze the spatial organization of human agglomerations in fourteenth century Syria.

INTRODUCTION

Urban analysis in Middle Eastern historical studies has drawn the attention of a number of prominent scholars. One can recall the works of Lapidus, Stern-Hourani,

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Mantran, Cahen, Ziadeh, Frye, and Lassner among many others. Most of these works deal with individual cities or individual aspects of urban socio-political life.² Macro or broader analyses which study the premodern Middle Eastern city as an element of a spatial organization pattern or structure are very few. The historical data at hand hardly avails itself to such analyses. Yet, ways must be found to fill the gaps in our knowledge, for urban history is bound to remain incomplete unless it accounts for the interactions between individual cities and their surrounding areas.

Modern research and theory may be of assistance. Modern urban and regional studies discuss the rationale of the distribution of human beings in a given space at a given time, compare different orders of urban and rural centers, and analyze the relations among them. These studies emphasize the hierarchical distribution of human agglomerations and then discern the more important determinants of the composition of a particular scheme of hierarchy. Their findings can be fruitfully employed in historical research so far as they are relevant to the specific historical case under consideration.

The present article is such an attempt. First, it introduces the theoretical framework of the hierarchical scene of human settlements. Then it compares the sizes and functions of human agglomerations in fourteenth century Syria with a view to analyzing the general pattern of spatial organization in one of the most highly commercialized regions of the times.

This commercialization has been the major reason for concentrating the research on Syria. The reason for delimiting the research to the fourteenth century, or, rather, 1317-1388, on the other hand, has been the relative political stability and economic prosperity prevailing during this period.³ Without some degree of economic exchange implied by commercialization, and without stability and prosperity, which make possible the examination of economic activities in a state of relative "equilibrium,"⁴ the application of the findings of modern research to a premodern situation would have been highly complicated.

An evaluation of these complications is beyond the principle objective of the present article. Here, modern theory and research findings are applied to a particular historical setting in order to develop a broader framework within which to analyze urbanization in that setting, notwithstanding the inadequacy of the data at hand. In the concluding section of the article, such a framework is offered in the form of a model which needs to be verified through further investigation into the primary sources. As it is, the present article relies essentially on secondary and tertiary sources, representing an attempt to organize the available information in a meaningful way, to resolve contradictory evidence, to raise new, analytical questions on the basis of old information, and to program further research. In that sense, this article is not so much a work of history as it is an exercise in historiography.

THEORY

Hierarchical scene of human agglomerations :

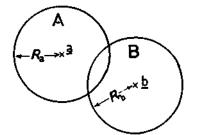
Empirical data indicates that there is a regularity to the areal structure of human settlements. Especially in a large, homogeneous territory, or a meaningful system of

regions, there is a definite and regular ordering of human agglomerations. Such an ordering may range from hamlets (agglomerations of the smallest or first order) through villages, towns and regional cities up to primate cities (agglomerations of the largest or nth order). Each order has associated with it a specific spatial spread of hinterland (tributary area). The hinterland of an agglomeration contains the hinterlands of a finite number of agglomerations of the next lower order (which have smaller size hinterlands). Corresponding to each order there is both a definite number of functions which each agglomeration of that order performs, and a population-size typical for each agglomeration of that order. Functions performed by the lower order agglomerations correspond to more frequent, smaller and relatively cheaper demands, while functions performed by the higher order agglomerations correspond to less frequent and usually more expensive demands.⁵

Most of this information on the economics of spatial organization is derived from research on industrialized societies such as Western Europe and the United States. There are, however, studies which indicate that there would be a rational (functional) hierarchical system of human settlements in any given naturally delimited zone under all modes of production with a certain degree of commercialization.⁶ The natural (ecological) limits of one particular zone would vary according to the available technology of transportation and production. So long as technology remained unchanged, the spatial organization system of a particular region would be shaped according to the efficiency with which the available technology could be utilized.⁷

Let us assume a "featureless plain" with the same productivity at all points.⁴ The peasants or producers of a particular village or hamlet on this plain are producing food beyond their requirements and are willing to exchange the surplus for services or for manufactured articles provided by town-a. Actually, town-a is a focal point village of our featureless plain, because this village has a natural advantage over others to serve as a market for all the villages of the plain.

The peasants would bring their surplus produce to town-a as long as it is economically feasible for them to do so. In other words, if the transportation costs were larger than the total revenue that the market in town-a permitted the producers to earn, then they would seek to sell their produce elsewhere. In that case there would be more than one market-town in our plain, and each market-town would have a more or less circular hinterland of its own, as illustrated in the following diagram.



- A = Hinterland (tributary area) of town - a
- **B** = Hinterland of town -b

Here R is the maximum distance of cultivated areas which would keep sending their surplus produce to town-a. Now let us contemplate upon some factors which influence R. Say :

- $y_x =$ production of a peasant at a distance x from the town.
- k = cost of transporting one unit of the product a unit distance.
- z = consumption of a peasant.
- S = the value of the surplus product a peasant takes to the market-town.
- P = price per unit of product at the market-town.

Then :

$$P(y_x-z) - (y_x-z)kx = S$$

Now, as long as $S_a > S_b > 0$ for a marginal peasant, he will send his surplus produce to town-a. If through time S_b becomes higher than S_a ($S_b > S_a > 0$), then the marginal peasant's surplus pruduct will be marketed in town-b. When $S_a < S_b < 0$, then he will look for another market, that is, another town. As R is the maximum distance of cultivated areas which would keep sending their economic surplus to a particular town, S = 0 when x = R, by definition. If we substitute R for x:

$$P(y_R-z) - (y_R-z) kR=0$$

 $Py_R-P_z-y_RkR+zkR=0$
 $y_R(P-kR) - z(P-kR)=0$
 $(y_R-z)(P-kR)=0$

That is :

$$Y_{R}=z$$
 , and $R=rac{P}{k}$,

 $y_R = z$ means that there would not exist any market-town if the peasant consumed all it produced. It also indiactes that if there were drops in the production level due to bad harvest or destructive wars or epidemics, then the towns would be affected by the calamity. The other equation, $R = \frac{P}{k}$ suggests that as the cost of transportation increases, the area of influence of the town would decrease, while if the prices increase, the area of influence of the town would also increase.

Transportation cost is a function of such inputs as load weight, distance, speed, and freight safety. Prices are determined by the rules of supply and demand. Supply would be determined by the production technology, peasant consumption norms and transportation technology. Demand would be determined by the size (population) of the town and the town consumption norms. in return, the size of the town, in an isolated agricultural setting such as the one assumed here, would depend on supply (or aggregate surplus produce available to the town). If towns **a** and **b** would specialize in different goods and exchange them, however, and if both towns benefitted from this extended trade, then the sizes of both towns would increase. Some peasants who lived close to towns would then move into the towns, and other peasants who lived in the very periphery of the town hinterlands would be absorbed into the economic orbit of the towns. Consequently, interregional trade would influence the size of a town. The point to keep in mind here is that, given the technology of transportation, the greater the intervening distance is, in general, the smaller will be the trade between towns a and b, the higher degree of self-sufficiency at both towns, and the fewer who ply in the production of exchangable goods.

Another point to keep in mind is that the extra-economic measures taken by a political mechanism could influence the relationship between a central place and its hinterland.

For example, the taxes in kind imposed on the peasant would force him to lower levels of consumption and thereby increase the local surplus to be transferred to the town, $(y_R(1-t) = z, where t is the tax rate)$. Dues collected in the market place, on the other hand, could adversely affect the reach of town's influence or hinterland.

$$\left(\mathbf{R}=\frac{\mathbf{P}\left(\mathbf{1}-\mathbf{t}\right)}{\mathbf{k}}\right),$$

Now let us apply the foregoing theoretical discussion to Syria in the fourteenth century. First, It is necessary to define the natural boundaries of the region of Syria.

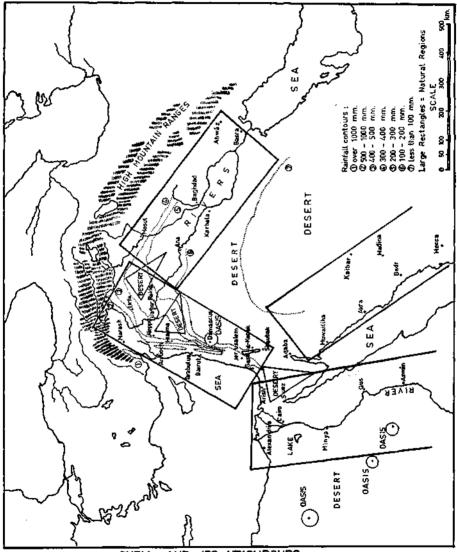
FOURTEENTH CENTURY SYRIA

Syria and its neighborhood :

By 'Syria and its neighborhood' is meant an area encircled by the Taurus and Kurdistan Mountains to the north, Zagros Mountains and the Persian Gulf to the east, the Mediterranean Sea and the Libyan Desert to the west, and the Arabian Desert and the Red Sea to the south. The Red Sea extends in a northwest direction and joins the Sinal Desert to separate one big portion of this area, namely the Nile Valey of Egypt. Between the east coast of the Red Sea and the Arabian Desert is squeezed a second region, the Hijaz. The Arabian Desert mixes into the Syrian Desert at its north and into the Sinai Desert at its northwest. The triangular shape of the Syrian Desert further separates the area into the regions of Syria and Iraq. These two tilted rectangular regions overlap in the very north of the area, on the Desert of Sinjar, which forms a natural border between them.

Due to varying degrees of rainfall, the triangle of the Syrian Desert resolves it self into two principal component parts: the apex of the triangle or the Little Desert (al-shámiya), and the rest of the triangle or the Great Desert (al-samâwa). The Little Desert is the only easily traversible part of the Syrian Desert. Thanks to the winter rainfalls (200-400 mm), in spring patches of the Little Desert are thinly covered with a kind of feathery grass, and all the year round most of it is sparsely covered with camel thorn, and a variety of aromatic plants. Water is near the surface in every depression and natural springs and wells occur frequently. In many places the surface is hard and relatively smooth. Unlike the Great and Arabian deserts, sand-dune formations and patches of soft sand are rare. All these factors explain the more inhabitable and

traversible nature of the Little Desert compared to that of the Great Desert. To put it in other terms, while the Little Desert connects the Mediterranean seaboard with the Mesopotamian valley, the Great Desert separates the two. (See the Map.)





(W.Popper, Egypt and Syria Under the Circassian Sultans, 1382 - 1468, Berkeley, 1955-57, Vol. XV, Map 1; R.Nyrop et al., Area Handbook for Syria, Washington, D.C., 1971, p.14; The Economic Development of Syria, Baltimore, 1955, fac. p. 6; C.P.Grant, The Syrian Dessert, New York, 1938, fac. p. 106 and XVI.

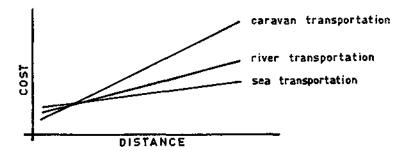
SPATIAL ORGANIZATION FOURTEENTH CENTURY SYRIA:

Given this location of Syria and the transportation technology of the fourteenth century, the roads which connected Egypt and the Hijaz to Iraq and further beyond had to cross Syria, providing it with the benefits of interregional trade. As for Syria's commercial relations with the rest of the Mediterranean world, much of it was conducted through Mamluk Egypt which politically dominated Syria. Still, interregional trade was a significant source of revenue for Syria, as the general semi-aridity of the area rendered agricultural activity rather precarlous. The Syrian coastlands were mountainous in a gentle way, and received sufficient rain to yield the standard Mediterranean crops, fruits, vegetables and olives and grain. In the oases and along the few rivers, too, agriculture fared well. Elsewhere, however, the productivity of the peasant necessarily remained low, while quite an important section of the population had to make a living as pastoralist nomads.

Under these circumstances the economic well-being of the area depended on the prospects of intra-regional specialization and trade, which, in turn, necessitated the existence of an effective transportation network.⁹

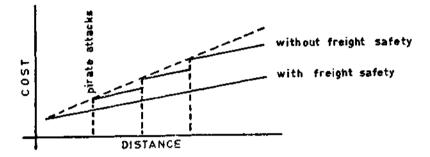
Transportation :

In fourteenth century Syria there were three basic means of transportation: (a) Beasts of burden, (b) river transportation, and (c) sea transportation.¹⁰ The most common and economical beast of burden used was the camel. Its load capacity was higher than those of horse and donkey. The pack camel walked at two and a half or three miles an hour and covered distances of fifteen or twenty miles at a stretch with an average load of three hundred-weights (cwts) or about 350 lbs. in hot weather. In cooler weather or short journeys it could carry heavler loads, as heavy as 1000 lbs. On short journeys, the camel could travel seven to fourteen hours a day, on long journeys only seven hours a day. That means, if one had to use one camel per day to carry a 1000 lb commodity to a fourteen mile distant location, he would have to use more than two camels on the same route but to a destination point twice as far away. Camels traveled in groups (gâfila) known to us as caravans. The smaller the caravan, the faster it could move; the larger the caravan, the slower its progress would be, and the greater the number of inevitable delays, but the more adequate its escorting guard. Consequently, when the roads were safe, commercial caravans would be smaller in size than in the case of unruly times.¹¹



On the other hand, in both sea and river (when navigable) the transportation costs per unit commodity would vary less with the distance covered, compared to camel transportation, and, in general, both sea and river transportation would be cheaper than camel transportation. This situation is illustrated in the diagram above.¹²

It is already mentioned that transportation cost is a function of load weight, distance, speed and freight safety. As the Mamluk state which ruled over Syria could control neither the sea routes nor the ports which were dominated by the merchantpirates of other powers, the absence of freight safety increased the costs of sea transportation as illustrated in the following diagram.¹³



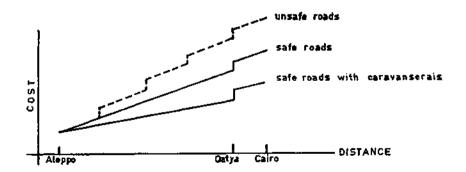
(That is, if 10 ships left Alexandria for Tripoli and if 3 of them were captured by the pirates, the sale of the goods carried by the remaining 7 ships had to make up for the losses).

On the other hand, the Mamluks encouraged land transportation through a number of ways ; They assured freight safety, and built caravanserais and bridges in order to lower the costs of transportation. In Syria the main threat to the caravans came from the beduins. The beduins hit the caravans for booty to make up for their rather meager living. Under normal circumstances, however, they must have never meant to annihilate trade, for regular trade would mean a regular source of income (booty) for them, not to mention that it was the very beduin himself who supplied the merchants with camels.¹⁴ Moreover, quite a few tribal chiefs dwelled in towns, and they probably were merchants themselves. Nevertheless, beduins seized every opportunity, as at times of a weaker central authority, to increase their 'share' (booty) in commerce. A strong central government, such as that of the Mamluks in the fourteenth century, however, would force the beduins to settle for less. The Mamluks, indeed, kept the beduins out of the roads most of the time.¹⁵ This the Mamluks accomplished not only through sheer power but also by paying off the beduins and by alotting fiefs to them in return for the beduins' watch over roads.¹⁶ The latter case means that the Mamluks Internalized a certain portion of the costs of trade by directing state revenue to the beduins. If the state did not pay the beduins, the merchants would. If bargain between the beduins and merchants would not work, then the merchants would be forced to travel with a larger body of guards and with larger caravans both of which would increase costs of transportation.

Another contribution of the Mamluks to transportation services was to build caravanserais and bridges at critical points on important roads. Caravanserais provided the merchants with free and secure lodging. They were **waqf** institutions. In other words, the state once more internalized a portion of the costs of transportation by directing state revenue to the use of caravanserais. Caravanserais had two other functions: first, they reduced the effective costs of transportation as they enabled the pack camel to cover the right amount of distance with the right amount of load.¹⁷ Second, the caravanserais served as markets for merchants travelling from and to different directions, as well as for the neighboring villagers and beduins. Such opportunities helped the merchant make extra profits and thus further decrease his costs of transportation.

The Mamluks' was not the only state to build a caravanserai system. Both the Ayyubids before them and the Ottomans after them built caravanserais.¹⁸ The Ayyubids built seven caravanserais in Syria,¹⁹ while Ottomans built nine of them on the Syrian portion of the pilgrimage road.²⁰ The Mamluks, on the other hand, built twentyseven caravanserais in Syria.²¹ The curious point about the Mamluks is not that they built more caravanserais but smaller and more frequent ones. They built one about every fourteen kilometers or nine miles.²² That the Mamluks built smaller and more frequent caravanserais would indicate that the caravans, too, were smaller in size and, therefore, travel was faster.

One final point to be made about the Mamluk system of communications is that they collected toils only on leaving or entering Syria at Oatya.²³ This toil increased the costs of transportation from the merchants' point of view. Yet, merchants elsewhere in the fourteenth century medieval world would have to pay toils much more frequently in an area of Syria's size. Once more, one has to acknowledge the Mamluks' concern about maintaining an effective transportation system which would foster intra- as well as interregional commerce. The following diagram should illustrate the affect of the Mamluk cost-reduction measures on the transportation-cost function of caravan trade in fourteenth century Syria.



There was a close relationship between the Mamluks' concern about an effective transportation network and their administrative system.

The Military-Administrative System of the Mamluks :

Under the Mamluk administration, Syria or al-bilâd al-shâmiya consisted of seven sub-provinces or mamiakas: (a) Dimashq (b) Halab, (c) Hama, (d) Tarabulus, (e) Safad, (f) Ghazza, and (g) al-Karak.²⁴ The governor-general or the malik al-umerâ resided in Damascus and, in his capacity as the Viceroy of the Sultan (nâyib al-sultan), presided over the governors of sub-provinces, as well as other administrative officals of military backgorund (arbâb al-suyûf), and the provincial civilian officials (arbâb al-aqlâm and al-muta'amminûn). Amirs were divided into ranks which corresponded to a specific number of "mamluks" (specially trained chivalric "slaves") they were entitled to keep in their service regularly and to the number of scidiers they were to command during campaigns. Almost all the amirs were of mamluk background. There were, however, low-ranking amirs who were actually of the local people such as tribal chieftains. These local amirs had to watch over roads and supply labor for public construction or fulfill similar administrative tasks at peace time. Local amirs belonged to ajnâd al-halqa (troops of freemen) as did the ordinary soldiers of the campaign army.²⁵

In the Mamluk administrative system, each person who served the state in a position of command was remunerated through a fief corresponding to his military grade. ²⁶ A fief was a right conceded by the state on the tax revenues of a piece of cultivated land or of other economic activities. Most of the fiefs were rights on agricultural tax revenues.²⁷ Agricultural taxes were levied either in cash or in kind, according to the agricultural product and according to circumstances.²⁸ Taxes on grain, which was the most important crop, where collected in kind as a general rule but not always.²⁹

There were essentially two kinds of fiefs: valuable fiefs assigned to an office for a specific purpose and lesser or minor fiefs assigned to individual persons.³⁰ The latter were titles to the revenues from a single village or to a portion of them. These fiefs were usually issued to local amirs or other officers of the **ajnâd al-halqa**. As already mentioned, the **ajnâd al-halqa** were a militia of free men. In the Ayyubid times and in early Mamluk period they constituted an important part of the Syrio-Egyptian army. Gradually, however, and especially with the fiel redistributions (**rawk**) of 1297, 1313 and 1315, the Mamluks reduced the **ajnâd al-halqa** to an insignificant position in order to increase the power of the central government. Many of the **halqa** fiels were reallotted to royal offices, and the rest were not only further reduced in size but also reassigned in areas remote from the dwelling places of claimants. A fief claimant ended up being the tenant of another claimant in his own village and a lord in someone else's village.³¹ He had to take a trip or send an agent to his fief village, collect the returns on his fief, take these returns to the most profitable market, exchange them for other goods or cash, and return to his own village.

A wide speculation on minor fief chits (mithâl) was the natural outcome of the Mamluk redistribution policy. Throughout the fourteenth century, the chits kept changing hands. The central government did not intervene so long as the chits did not accumulate in the hands of potential rivals of the Sultan such as Mamluk amirs or powerful tribal chieftains. Otherwise, the government was satisfied with collecting a special tax on every noticed exchange.³² According to al-Maqrizi's complaints, ³³ many

flefs eventually ended up in the hands of shopkeepers and peddlers. This could not have been but a normal consequence of transportation and market conditions. Both shopkeepers and peddlers were men with commercial connections that reached beyond their dwelling place. It is interesting to notice that nor were the tribal chieftains much affected by the **rawks**, ³⁴ for, one would think, they, too, were men with connections that extended beyond their immediate surroundings.

The relationship between the minor fiels and market and transportation conditions is quite clear, but it was the concern over the optimization of the revenues on more valuable fiels which really prompted the Mamluk administration to keep up an effective transportation system. Valuable fiels were titles to the tax revenues from a number of villages. These villages were as a rule scattered in various parts of the jurisdiction of the office to which the fiel was assigned.³⁵ The main purpose of this rule seems to have been to level off the fluctuations in fiel income resulting from varying degrees of rainfall from one year to another and from one location to another.³⁶

The mamluks were paid by the amirs or the sultan, under whomever they served. 37 In the case of the amirs, they had to distribute two thirds of their income among the mamluks who served under them. In practice, however, this apportionment was not strictly observed, so that, in 1365, it even became necessary to issue a decree requiring the amir to share his income equally with his troops. 38

This decree indicates that the central government did not intervene in the collection of revenues.³⁹ There were the agents of the central government in all regions of the Sultanate, but they were not involved in the collection of revenues. It was incumbent upon each official to reap the benefits that accrued from the fields which came along with his office. As for the taxes collected in cash, this would have caused little difficulty, but in the case of the taxes in kind, transportation costs would have loomed as a crucial problem. A set of figures preserved in Popper 40 indibetween the net and gross incomes of the fief-holders. The difference was due to "processing costs", that is, mainly transportation expenses. Those officials who held cates that in the case of grain-producing lands there was about 7-10 percent difference large enough fiefs, such as the governors, and other important provincial officials and highranking amirs, would naturally attempt to minimize their expenses by building bridges, caravanserals, khâns (inns), and other commercial constructions, and by seeing to the safety of the freight. The available data indicates the predominating role played by the amirs and other provincial officials in the construction of such odifices in Syria.⁴¹

For the provincial amirs to undertake constructive projects which improved their lot, however, the central government in Egypt must have kept the amirs in their offices for a reasonable duration of time. This seems to have been the case In fourteenth century Syria. Lapidus explains the political stability that prevailed during this period in terms of the length of tenures in office.⁴² Yet, too long terms in provincial offices would tend to weaken the control of the center over the provinces, threatening the entire system with dismemberment and undermining the prospects of intra- as well as interregional trade. Exactly this had happened in thirteenth century

Syria under the Ayyubids and the Latins as well as the early Mamluks, when fiefs were hereditary, and transfer of fief holders was not common practice.⁴³

Under the fourteenth century Mamluks, the more important fiefs were assigned to positions, rather than individual persons.⁴⁴ There was a specific number of mamluks who served in each mamlaka. Amirs were appointed to command these mamluks and to administer the mamlaka. An amir was not entitled to dispose of any namluk who served under him, nor acquire new mamluks except with the approval of the central government. When an amir was transferred from one mamlaka to another, he was almost invariably unable to take his mamluks with him. The same rule was applied to his fiefs or estate as to his mamluks. He lost both when he was transferred to a new position in a new mamlaka.

If the political concern of the center for maintaining control over the provinces was one reason behind this policy, economic considerations were equally important. The size of the mamluk regiment in a particular town-a must have been closely related to the area of economic influence of that town, or to the economic potential of its hinterland **A**. Promotion for an amir must have meant appointment to a new town-b with a richer hinterland **B**, and which, therefore, could support a larger regiment of mamluks. Indeed, as already indicated, the rank of an amir varied according to the value of the fields of his 'amir-ship' and to the number of mamluks he thereby commanded.⁴⁶

This means that there would be a close relationship between the size of a town and the troop equivalents of fields granted in the economic hinterland of the same town. Actually, the connection between the size of the military regiment in a town and the town's population would be a two way relationship. While the central government would assign troops to a town according to its economic strength, the presence of a regiment in a town would contribute to the size of the town.⁴⁷ Whichever way one looks at it, it would be possible to say that in fourteenth century Syria the economic functions of towns coincided with their political functions.⁴⁸

In al-Zahiri's work, there is a list of the troops of the governors and amirs in Syrian mamlakas.⁴⁹ According to this list, the greatest number of mamluk troops were concentrated in the mamlaka of Dimashq (about 3,000), then in Halab (about 2,000), and Tarabulus (1,000). The mamluk contingents of the mamlakas of Safad (300-400), Hama (300-400), and Ghazza (80-100)⁵⁰ were smaller, while the al-Karak regiment was insignificant. On the basis of the hypothesis above (about the relationship between sizes of regiments and populations of towns), al-Zahiri's list can be used to cross-check the scanty information on town populations that is at hand, with a view to describing the hierarchy of Syrian towns in the fourteenth century and to discussing how towns related to one another within that framework.

Hierarchy of towns:

Ziadeh discusses the population of Syrian towns in the fourteenth century on the basis of contemporary accounts. He reaches the following conclusions : Damascus and Aleppo 100,000 each, Tripoli 20,000, Jerusalem, Beirut, Antioch and Ghazza 10,000 each, and twentytwo smaller towns 2,000 each.⁵¹ When checked over against the list of mamluk troops in each **mamlaka** and other information Ziadeh's list calls for revisions. The list of mamluks suggests that Damascus was more populous than Aleppo. Other Information indicates the same. There were 364 **masjids** and about 70 **khans** in Damascus, but 215 **masjids** and about 35 **khans** in Aleppo.⁵² According to the Ottoman census of early sixteenth century, Aleppo and Damascus had equal populations.⁵³ Aleppo seems to have begun to gain parity with Damascus from the end of the fourteenth century, after southeastern Anatolia was brought under Mamluk rule in 1374-5. Before that, Aleppo was cut off from her natural hinterland and lagged behind Damascus.⁵⁴

Still another factor that contributed to Aleppo's prosperity seems to have been the opening up of the Baghdad road towards the end of the fourteenth century.⁵⁵ For whatever reason, during the greater part of the fourteenth century the important trade route which connected Iraq to Egypt and to Anatolia, including Istanbul, in both cases via Aleppo, had remained idle. This situation would not have had but a negative influence on Aleppo's size. Eventually, however, with the revitalization of the Baghdad route Aleppo became a city equally important as Damascus. In other words, Aleppo and Damascus were essentially citles of the same order with similar functions. They were both subregional centers where the special products of their adjoining areas (which included the desert) were exchanged, highly skilled manufacturing activities were concentrated, and exports to other regions than Syria were undertaken. Damascus exported to Egypt, and Aleppo to Baghdad and Anatolia. Aleppo was situated at the junction of more important trade routes, but Damascus was located on a more fertile plain.

An Interesting point that one notices about the more prosperous times of Damascus is that these times coincided with the more prosperous times of Cairo, at least under the Ayyubids, Mamluks and Ottomans. On the other hand, Aleppo merchants maintained good relations with the rulers of Anatolia and Iraq. In fact, while the Aleppans welcomed the Ottoman rule enthusiastically in 1516, the Damascenes rebelled at the first opportunity. Throughout the Ottoman rule Aleppo remained a loyal city and the regional capital of Syria. From the mid-nineteenth century, with the increasing prospects in Egypt, Damascus once more began to catch up with Aleppo in size and importance. At the end of these developments many Damascenes but very few Aleppans participated in Arab nationalist organisations the more important of which had headquarters in Cairo.⁵⁶

In summary, the rivalry between Damascus and Aleppo to become the most prominant city of Syria arose from the fact that these cities were of the same order with similar functions. It would be appropriate to think of Syria as a region that consisted of two subregions; Aleppo controlled the economy of the northern subregion and Damascus that of the southern subregion. The lead of either one of these centers over the other, and therefore over the whole region, was mainly determined by the prospects of interregional trade among Syria, Egypt, Anatolia, the Hijaz and Iraq. This argument, however, should not overshadow that there was some degree of specialization between these two citles. During the fourteenth century, Aleppo's specialities were wood and marble works, figs and pistachios, weapons, livestock and beasts of

burden, and, especially, soap and perfume, while those of Damascus were silk, linen, embroideries, jewelry and other luxory goods and ceramics, glassware, iron and leather works and apricots.⁵⁷ It was precisely this specialization between the two cities that helped Aleppo remain an important city during the fourteenth century in spite of the various limitations enforced on her by political circumstances.

Tripoll was the third largest town of Mamluk Syria. It was the center of a sugar-growing area with a refining industry. Its textile industry was important as well, but unlike Aleppo and Damascus she lacked industries of war materials and luxory goods.⁵⁸

Ziadeh does not include Hama among larger towns. Yet, according to Ibn Battuta, it was "one of the dignified centres and elegant cities of Syrla... it has a suburb called el-Mansuriya, which is larger than the town itself." ⁵⁹ Sourdel tells us that al-Mansuriya was really a quarter of the city on the other bank of the river.⁶⁰ There were about 360 mamluks stationed in the **mamlaka**, but there were 6.000 **halqa** troopers along with them. There were 12,000 **halqa** troopers in Damascus. 6,000 in Aleppo, 4,000 in Tripoli, 1,000 in Safad, and 1,000 In Ghazza.⁶¹ Under all circumstances Hama has to be reckoned as a larger town than Ziadeh affirms. Hama's specialities were silk and other textiles, fruit and some artifacts. Its position on a very fertile plain between the two important centers of Syria further supports the case that Hama was a large city. In the same sense of being a center on the border of the two subregions of Syria, Hama had similar functions to that of Tripoli. That Tripoli was more Important or populous was probably due to its additional advantages as a port city.⁶²

Ghazza and Antioch seem to have been the other important towns in Syria in the fourteenth century. Ghazza was a rich and prosperous town under the Mamluks. It was an important commercial town on the interregional road between Syria and Egypt. Its specialities were grapes, figs, and stock-breeding. Ottoman registers on the early sixteenth century indicate that the city might have had a population of over 10,000 people in more prosperous times of the fourteenth century.⁶³ Antioch was once the most important city in Syria.⁶⁴ At its conquest by the Mamluks in 1297, it stil revealed much of its grandeur. Even in the middle of the fourteenth century, according to Ibn Battuta, it was "a great and eminent city," and "densely populated."⁶⁵ Throughout the Mamluk rule, however, Antioch kept declining especially as Aleppo gained in importance. Nevertheless, Antioch, which was located on a very fertile plain, retained its transhipment function on the Syria-Cilicla road throughout the fourteenth century.⁶⁶

Contrary to Ziadeh's opinion, neither Beirut nor Jerusalem seem to have been among the more populous towns of Syria in the fourteenth century. It is true that iron ore and timber of Beirut were Important resources for the Mamluk military economy,⁶⁷ but it was Sidon (Saida) which served as a port to Damascus rather than Beirut.⁶⁸ Ibn Battuta described Beirut as a "small place," and Sidon, in similar terms, as "a pleasant place".⁶⁹ As for Jerusalem, Ziadeh himself mentions elsewhere in his work that this city had no other claim to existence during the fourteenth century than its senctity. "No main routes passed through it, no vital trades were practiced in it."⁷⁰ Ayalon tells us that Jerusalem was the principal place of banishment for the Mamluk amirs because of the town's isolation and the absence of a strong military garrison there." ⁷¹ Ibn Battuta described Jerusalem in equivalent terms with Nablus and al-Ramla as "large towns", ⁷² It seems that Nablus, Jerusalem and al-Ramla were the secondary towns of an area the economic center of which was Ghazza.

Safad, too, was a center, but of a small area isolated from the rest of Syria by a circle of mountains and the lake Tiberias. Safad, which controlled the entrance to this pocket was a medium size town "neither large nor small." Safad controlled this area and also served as a wholesale market for the products of its various settlements and for the products of Damascus.⁷³

Ziadeh's list does not include Malatya among the larger towns of Syria, but probably it was one of the more important centers of the Aleppo subregion. First of all, it had a special military function as a boarder town. About 600 of the mamluks commissioned in the mamiaka of Halab regularly served in Malatya in addition to 1,000 halga troopers.⁷⁴ Secondly, Malatya was an important station on the Syria-Caucasia road. This road was particularly important to the Mamluk regime because of the continuous need for 'slaves'. Finally, Malatya was located on a rich plain which could support a large population. On the basis of these reasons, Malatya can be considered as a center of the same order with Ghazza, Safad and Antioch, al-Karak also had a similar function of controlling an important interregional trade road, namely the Damascus-Hijaz hajj road, but al-Karak's hinterland was too poor to support a large population and favorable commercial prospects. It would be more appropriate to consider al-Karak as a center with a single function. In that sense, al-Karak compared to Jerusalem which had a single function as a senctified city and to Beirut again with its single function as commanding over scarce timber and iron-ore resources, or Saida as the major port of Damascus.

Smaller size towns such as Ba'labak, Harim, 'Izaz, Sarmin, Ma'arrat, Kafr, Tab, Nu'man and Jinin, among others, served as retail market centers for the surrounding villages and hamlets and/or as stopping and small scale trading places on the caravan roads.⁷⁵ As for the villages and hamlets, little information is available about them. Their primary function was agricultural production. Grain was the most important product.⁷⁶ Beyond the villages and hamlets extended the deserts or stood the mountains where the nomads ranged. In order to attain a full view of human spatial organization in fourteenth century Syria, it is necessary to account for the relevant aspects of the nomadic way of life.

Economic aspects of the nomadic way of life:

Kenneth Walton has noted that:

Nomadic way of life is not isolated from the other forms of land use and societies in the arid lands but, in fact, is complementary to them ... there is a symbiosis between the nomadic pastoralist ... and the cultivator who exploits either dry farming or oasis irrigation techniques. This relationship is in part induced by the need for exchange of products between the two economies and in part the product of the greater mobility

and hence greater fighting power of the nomad who, in the individual tribe at least, has a leader who has been selected for his ability to make decisions on problems of water supply or pastures or for his ability to lead battles for grazing rights or for plunder. The cultivators need milk, meat, hides and wool as well as grain. In areas of winter rainfall such as eastern Syria, Jordan and the northern parts of Arabia, the farmers began to cultivate in the autumn at a time when grasses are beginning to spring up in discontinuous areas of the desert between the cultivated lands. The Beduin moved away from the settlements until the harvest when the nomads began to re-enter the cultivated areas to graze the animals on the stubble so that from July to October nomad and sedentary cultivator were in close proximity. Regular links of this kind may be extended into a more regular economic connection between the desert and the sown in which the same families return, according to the seasonal rainfall pattern, to the lands of palm groves which they themselves cultivate or own.⁷⁷

Thus, for Walton, the nomadic way of life is an ecological adaptation, and the various patterns which it evinces are conditioned by the particular nature of the geographical environment at a given level of development of the productive forces. From this point of view, one can readily acknowledge two major divisions among nomads until the modern times: semi-nomadic peoples and true nomads. The semi-nomadic way of life is found "on the margins of the extreme deserts in areas of seasonal rainfall, or in the pluvial upland areas," ⁷⁸ and is characterized by a mixed economy. True nomads are peoples "whose contact with the oases and the steppe margins is irregular and who depend for their existence on exchange trade." ⁷⁹ Whenever possible, both of these groups would be engaged in carrying-trade by pillaging the caravans or guarding them and in either case by supplying the beasts of burden.⁸⁰

Their greater dependence on the draught-resistant came! permitted the far-ranging habits of the true nomads. Even with their greater mobility true nomads were restricted to known areas of grazing and water supply.⁸¹ Portions of these true nomads became semi-sedentarized under certain circumstances such as a good annual rainfall, favorable market circumstances (increasing food prices), transportation security, and the strength of the central government in enforcing inter-tribal peace and in guarding. the ease and security of settled life. The same circumstances encouraged trade, and nomads benefitted from increased interregional as well as intra-regional commerce. In this way, at least some of the semi-sedentarized nomads accumulated enough property to move into larger villages eventually, and even to towns where life was more prosperous than both the desert and semi-sedentary hamlets and villages. Setbacks to these favorable conditions, however, would reverse the entire process and portions of the village and townsfolk would go back to the desert or mountains. This relative ease with which many elements of the semi-nomadic and true nomadic population could have become sedentarized or vice-versa (the ease with which a number of individuals of even a large group of sedentarized peoples could have switched to a less settled life if so forced by social, political and economic conditions) constituted a basic feature of the human spatial organization in premodern Syria.⁸² The convenient economic prospects of the fourteenth century must have encouraged the sedentarization of the nomads. The tent clusters of the true nomads must have shrunk while hamlets

at the outskirts of a cultivable area that constituted the hinterland of a town or large village must have increased. Some of the semi-nomads must have switched to a full sedentary life and moved to villages and towns with better prospects.

CONCLUSIONS

In the light of the foregoing discussion, the relative ranks, populations and functions of human agglomerations (from the nomadic tent clusters to the subregional centers of Aleppo and Demascus) in fourteenth century Syria can be summarized as in the following table. Although not in Syria, Cairo is included in this table, because it was the economic as well as political primate center of the Mamluk state which included the region of Syria. Cairo was more populous than any other Mamluk city, and the largest number of mamluk troops was based there.⁸³

Rank	Agglomerations	Popul. size order	Economic function
I	Nomadic tent clusters	1	milk, meats, bide, wool + beasts of burden = animal husbandry
II	Villages and hamlets	2	Agricultural production, especially grain
III	Ba'labak and other large villag	es 3	Retail + occasionally very specialized handicrafts
īV	al - Karak	3	
	Saida	4	
	Beirut	4	Wholesale + small scale cotton industry +
	Ramla	5	special function
	Nazareth	5	
	Jerusal e m	5	
v	Safad	6	
	Malatya	6	Transhipment, minor entrepôts + textile industry
	Antioch	7	
	Ghazza	7	
VI	Hama	8	Specialized industry (silk + sugar). Essentially
	Tripoli	9	rank IV centers but with greater opportunities due to position in between sub-regional centers.
VII	Aleppo	10	Subregional control centers + Principal entrepôts
	Damascus	11	of interregional trade + War industry + production of luxory goods.
VIII	Cairo	12	Primate interregional center.

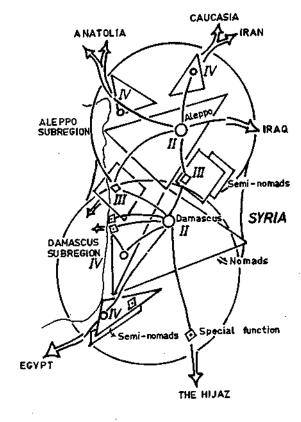
RANK, POPULATION AND ECONOMIC FUNCTIONS OF HUMAN AGGLOMERATIONS IN 14th CENTURY SYRIA

In the table above, the rank of an agglomeration indicates its respective order within the hierarchical framework of spatial organization in fourteenth century Syria. The table suggests that there was a regularity to the population sizes corresponding to each order. In this hierarchical system, the economic function of a lower order agglomeration was contained by all the higher order agglomerations. A higher order agglomeration, on the other hand, had additional functions to fulfill. For example, in Damascus nomads marketed their products, various agricultural crops from grain to apricots were harvested, retail as well as wholesale trade was practiced, and it was a transhipment center with many entrepôts. In addition, there were many industries or handicrafts producing goods from ordinary wearing apparel and household ware to high quality weapons and luxory items.

Functions of different ranks of agglomerations overlapped as a natural consequence of the limited means of transportation. It was too costly to carry bulky products such as grain or perishable items such as fresh fruit or milk and milk products across long distances. Such products had to be produced within an area that the market and transportation conditions allowed. For example, grain was brought into Damascus from as far as the plain of Houran (about 80 miles) but not from beyond that.⁸⁴Ba'labak was the furthest point (46 miles) that supplied Damascus with various preparations of milk.⁸⁵ Under such circumstances, Damascus naturally produced most of the grain it needed within the oasis on which it was located, and it stood as a favorable market for the nomads who frequented the desert borders of the oasis.⁸⁶

In spite of its limitations, transportation played a predominant role in integrating the various human agglomerations in fourteenth century Syria. To the extent the expediences of intra- as well as interregional transportation and commerce allowed it, economic specialization helped the central towns of Syria grow in size (albeit in proportion to the potentialities of their immediate agricultural hinterlands). In turn, the growth of the central towns positively affected the life of lower order agglomerations all the way down to the nomadic tent clusters. In the first three quarters of the fourteenth century, the most central town in Syria was Damascus. From the last quarter of the century, Aleppo became equally important due to the opening up of the Iraq route and the elimination of the political limitations that had curtalled its development. Henceforth, economic activity in Syria revolved around two prime cities each being the center of a subregion as Illustrated in the following diagram.

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AREAL ORGANIZATION OF 14TH CENTURY SYRIA 87

Inter-regional routes
Intra-regional routes

NOTES

1 This article originated in a seminar at the Near Eastern Studies Department of Princeton University in the winter of 1972. I greatly benefitted from the criticism of Professors Avram Udowitch and Roy Mottahadeh, who conducted the seminar. I was first attracted to the topic by Ilhan Tekeli's work on the spatial organization of the Ottoman Empire. (See his "The Evolution of Spatial Organization In the Ottoman Empire and the Turkish Republic," From Medina to Metropolis, ed. by Carl Brown, Princeton: The Darwin Press, 1973, 244-273, and "On Institutionalized External Relations of Cities in the Ottoman Empire — A Settlement Models Approach," Etudes Balkanlques, II, 1972, 49-72). The present article owes to Tekeli's work on more than a few points. I am also indebted to my colleagues Belgin Tekçe and Ahmet Aykaç, who offered valuable criticism, and Günhan Danışman, who encouraged me to turn the original study into an article and who prepared the drawings.

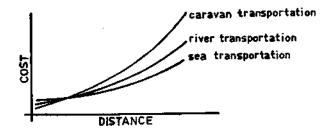
- 2 Claude Cahen, "Mouvements et organisation populaires dans les villes de l'Asie Musulmane au moyen âge : milices et association de Foutouww," Sociéte Jean Bodin, VII, La Ville, 273-288, idem, Mouvements populaires et autonomisme urbain, Leiden, 1961; R. Frye, Bukhara : The Medieval Achievement, Oklahoma, 1965; A. H. Hourani and S. M. Stern, (eds.) The Islamic City, Oxford, 1970; Ira Lapidus, "The Grain Economy of Mamluk Egypt," JESHO, XII (1969), 1-15; idem, "Muslim Cities and Islamic Societies," Middle Eastern Cities, ed. by Lapidus, Berkeley, 1969, 47-79; idem, Muslim Cities in the Later Middle Ages, Cambridge, Mass, 1967; J. Lassner, "Massignon and Baghdad," JESHO, IX (1966), 1-27; idem, "Notes on the Topography of Baghdad," JAOS, 83 (1963), 458-469; idem., The Topography of Baghdad; Robert Mantran, Istanbul dans la seconde mitié du xvir siècle : essal d'histoire institutionnelle économique et sociale, Paris, 1962; idem, La vie quotidienne à Constantinople au temps de Soliman le magnifique et de ses succes seurs [Paris, 1965]; Nicola Ziadeh, Urban Life in Syrla Under the Early Mamluks, Beirut, 1953.
- 3 Lapidus, Muslim Cities, 16 . 25.
- 4 For theoretical discussions on "equilibrium" see Walter Isaard, Location and Space Economy, New York, 1956, 2-4 and passim.
- 5 Walter Isaard et al., Methods of Regional Analysis: An Introduction to Regional Science, New-York, 1960, 222 (22); Isaard, Location, 1 54, 254 287; Josiah C. Russell, Medieval Regions and Their Cities, Newton, 1972, 23 30; Allen K. Philbrick, "Areal Functional Organization in Regional Geography," Papers and Proceedings of the Regional Science Association, III (1957), 87 98; idem "Principles of Areal Functional Organization in Regional Human Geography," Economic Geography, XXXIII (1957), 299 336. On the general theory of spatial organization also see William Alonso, Location and Land Use: Toward a General Theory of Land Rent, Cambridge, Mass., 1964, 36 58; B.J.L. Berry and Allen Pred, Central Place Studies: A Bibliography of Theory and Applications, Philadelphia, 1965; Gerald J. Karaska, "The Partial Equilibrium Approach to Location Theory: Graphic Solutions," Locational Analysis for Manufacturing, ed. by G.J. Karaska and D.F. Bramhall, Cambridge, 1969, 22 41, and Walter Isaard, Ecologie Economic Analysis for Regional Development, New York, 1972, Introduction.
- 6 Russell, Medieval Regions and Paul Word English, City and Village in Iran: Settlement and Economy in the Kirman Basin, Madison, 1966. Also see Berry and Pred, Central Place Studies; Norton Ginsburg, "Urban Geography and "Non-Western Areas," The Study of Urbanization, ed. by P.M. Hauser and R.F. Schnore, New York, 1965, 311ff, and Leila T. Erder, "The Making of Industrial Bursa," unpublished PhD. dissertation, Princeton : Princeton University, 1976.
- 7 See F.M., Peter "Development Policy Making and the Geographer's Regions: Comments by an Economist," Land Economics, XLII (1966), 75 84, where he discusses relationships between technology and natural boundaries. Also see F.W. Morgan, "Hinterlands," Readings in Urban Geography, ed. by H.M. Mayer and C.F. Kohn, Chicago, 1959, 376 387, where he discusses relationships between natural boundaries, transportation technology and political authority. J.C. Stabler, "Exports and Evolution: The Process of Regional Change," Land Economics, XLIV (1968), 11 23, summarizes the basic works that observe structural changes following the introduction of improved technology. Also see Tekeli, Etudes Balkanique, II, 49 72, and Isaard, Location, 55 76.
- 8 For "featureless plain" see Alonso, 17.
- 9 C.P. Grant, The Syrian Desert: Caravans, Travel, and Exploration, New York, 1938, 6-16; The Economic Development of Syria, (Report of a Mission), Baltimore, 1955, 3-10, and Richard Nyrop et al., Area Handbook for Syria, Washington, D.C., 1971, 7-30.
- 10 Carriage transportation was known but not practiced in Syria or Egypt. (Maxime Rodinson, "Araba," Encyclopedia Islamica, New Edition.) Given the ecological conditions in the area, carriage transportation was more expensive than transportation by beasts of burden. This could be due to the higher costs of maintaining horses as beasts of burden (Grant, 15-16), and also to higher costs of constructing and maintaining proper roads for carriage transportation.
- 11 "Camel" and "Caravan" in Encyclopedia Britanica, IV (1967); Pellat, "ibil" and "badw" in Encyclopedia Islamica, New Ed.; Grant, 15-16, and 175, also Chapter IV: "Merchant Caravans',

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esp. pp. 146 - 148; Marshall G. S. Hodgson, The Venture of Islam: Conscience and History in a World Civilization, 3 vols., Chicago, 1974, vol. I: 147 - 150; R.W. Bulliet, "Le Chameau et la Roue au Moyen - Orient," Annales économies, sociétés, civilisations, XXIV (1969), 1092 - 1103, and Carlatan Stevens Coon, Caravan: The Story of the Middle East, New York, 1958, 336 - 337.

12 Compare this diagram to truck-rail-ship transportation cost functions provided by G. J. Karaska, Locational Analysis, Karaska and Bramhall, eds., 23-24.

The diagram above shows the functional relationship to be linear, while a non-linear relationship as illustrated below would be closer to truth.



The last diagram indicates that transportation costs increase at an increasing rate with distance. These diagrams and the formula R = P/k suggest that a city depending on sea transportation (such as Istanbul) or a city depending on river transportation (such as Cairo) would enjoy the surplus of a broader hinterland than a city depending on land transportation (such as Aleppo or Damascus). (On a more detailed theoretical treatment of the relationships between transportation technology and city size see Tekeli, **Etudes Balkaniques**, II). This point may shed some light on why both Istanbul and Cairo have been the seats of mightier empires than those to which either Aleppo or Damascus served as capitals.

- ¹³ Ibn Battuta, The Travels of Ibn Battuta (AD 1325 1354), 3 vols., trans. by H.A.R. Gibb, Cambridge: Hakluyt Society, 1958, vol. I, 70 157, passim., describes the destructed coastal towns. The reason of the Mamluk failure in the seas was that the countries they ruled lacked adequate timber resources necessary for ship building. Moreover, as proud cavalry soldiers the Mamluks despised anything that had to do with seamanship. (David Ayalon, "The Mamluks and Naval Power," Proceedings of the Israel Academy of Sciences and Humanities, I/8, (Jerusalem, 1967), 1 12).
- 14 Pellat, "ibit," EI, new ed., 884. In Ottoman Syria only in Aleppo 3000-4000 light camels were sold annually by the Beduins. At that time these camels were upbrought mainly in the vicinity of Basra. (Grant, 143).
- 15 For example, Ibn Battuta's account gives the clear impression that in the mid-14th century travel in Syria was secure and smooth.
- 16 A.N. Poliak, Feudalism in Egypt, Syria, Palestine and the Lebanon, 1259 -: 1960, London, 1939, 27.
- 17 See above, page 9.
- 18 Not to mention that caravanserai construction goes as back as the Romans and may be even further back. Ilber Ortaylı, "Osmanlı İmparatorluğu'nun nakliyat problemi açısından devenin taşıma maliyeti eğrisi," unpublished paper, Ankara, 1971, p. 4.
- 19 Jean Sauvaget, "Caravanserails syriennes du moyen âge," Ars Islamica, VI (1937), 48-56, and VII (1940), 1-20; here, VI: 48-56.
- 20 Jean Sauvaget, "Les caravanserails syriennes du Hadjaj du Constantinople," Ars Islamica, IV (1937), 98 - 121.

- 21 Sauvaget, Ars Islamica, VII, 1-20.
- 22 Sauvaget, Ars Islamica, VII, 19. Compare with William Popper, Egypt and Syria Under the Circassian Sultans, 1382-1468: Systematic Notes to Ibn Taghri Birdi's Chronicles of Egypt, University of California Publications in Semitic Philosophy, vols. XV and XVI, Berkeley, 1955-1957, XV, 47-50.
- 23 Lapidus, Muslim Cities, 18, an ad-valorum toll of 5-10%. Also see Ibn Battuta, I, 72, and Coon, 340.
- 24 Ziadeh, 13 14.
- 25 On the Mamluk provincial administration and amirs see Ziadeh, 11 24, and 42; David Ayalon, "Studies on the Structure of the Mamluk Army," Bulletin of the School of Oriental and African Studies, XV/2 (1953); 203 228, XV/3 (1953) : 448 476, XVI (1954) : 57 90, here, XVI : 65 66, XV : 459 476; David Ayalon, "The System of Payment in Mamluk Military Society," Journal of Economic and Social History of the Orient, 1/1 (1957) : 37 65, 1/3 (1958) : 258 296, here I : 42 and 61; David Ayalon, "The Muslim City and the Mamluk Military Aristocracy." Proceedings of the Israel Academy of Sciences and Humanities, II (1968), 311 329, here, 328 329; Lapidus, Muslim Cities, 48, and Poliak, Feudelism, 9 14.
- 26 Poliak, Feudalism, 1-18.
- 27 Poliak, Feudalism, 18-19.
- 28 Ziadeh, 27.
- 29 In Egypt, the lower Nile area payed grain taxes in cash while the upper Nile area payed taxes in kind. (Lapidus, JESHO, XII, 3.)
- 30 See Ziadeh, 42, and Popper, XVI, 109.
- 31 Ayalon, BSOAS, XV, 448 459; Poliak, Feudalism, 23 27, and Hassanein Rabie, "The Size and Value of the Iqta' in Egypt, 564 • 741 AH/1169 • 1341 AD," Studies in the Economic History of the Middle East, ed. by M. A. Cook, London, 1971, 129 • 138.
- 32 An interpretation of Ayalon, BSOAS, XV, 448-459, and Poliak, Feudalism, 23-27.
- 33 Mentioned in Ayalon, BSOAS, XV, 453-454.
- 34 Poliak, Feudalism, 30.
- 35 Poliak, Feudalism, 19.
- 36 See Tekeli, Etudes Balkanlques, II, for a discussion on the effects of a similar rule on political stability in Anatolia. Ziadeh (p. 42), on the other hand, believes that the main purpose of this policy was to weaken the amirs. Tekeli's argument seems more plausible.
- ³⁷ My knowledge of Mamluk "feudalism" is derived from the works of Lapidus, Cahen ("L'évolution de l'iqtas." Annales, VIII, 1953, 25-32, among his other works), Poliak ("Le caractère colonial de l'état mamelouk dans ses rapports avec la horde d'or," Revue des études Islamiques, 1953, 231-240; "The Influence of Chingiz Khan's Yasa Upon the General Organization of the Mamluk State," BSOAS, X/4, 1942, 862-876, and "Les révoltes populaires en Egypte à l'epoque des Mamelouks et leurs causes economique," Revue des études Islamique, VIII (1934), 251-273 in addition to his Feudalism), Ziadeh, Ayalon ("Discharges From Service, Banishments and Imprisonments in Mamluk Society," Israel Oriental Studies, II, 1972, 25-50; "The Circassians in the Mamluk Kingdom," Journal of American Oriental Society, 1949, 135-147; L'Esclavage du Mamelouk Jerusalem, 1951; "The Great Yasa of Chingiz Khan: A Reexamination," Studia Islamica, XXXIII, 1971, 97-140; Gunpowder and Firearms in the Mamluk Kingdom: A Challange to a Medieval Society, London, 1956 in addition to his above mentioned articles in Proceedings, BSOAS and JESHO), Popper, Rabie, Ahmad Darrag (L'Egypte sous le règne de Barebay, 1422-1438, Damas, 1961), W.J. Fischel ("Spice Trade in Mamluk Egypt," JESHO, I, 157-174), and E. Strauss,

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"Prix et salaries à l'époque Mamelouke," Revue des études Islamiques, 1949, 52 ff.). In these works there are references to the fiefs of "mamluks", especially "royal mamluks", but, except in Popper, no where is the issue dealt with in detail. Popper's account (XVI, 108-115) makes quite clear that at least some of the royal mamluks had fiefs at one point, but by the mid-14th century almost all royal mamluks were paid by the bureaus of the Sultan, and if some of them still had feudal rights, they were more nominal than actual.

- 38 Ayalon, BSOAS, XV, 460.
- 39 Compare with Poliak, Feudalism, 20-21.
- 40 Popper, XVI, 109.
- 41 Sauvaget, Ars Islamica, VII, 1 · 20, and Lapidus, Muslim Cities, 195 · 210.
- 42 Lapidus, Muslim Cities, 68-69.
- 43 Poliak, Feudalism, 28, and Ziadeh, 39-40.
- 44 Contrast with Poliak, Feudalism, 26-28.
- 45 Ayalon, BSOAS, XV, 459 476, esp., 460 461. Also see Ziadeh, 42.
- 46 Ziadeh, 42, and Popper, XVI, 109.
- 47 For the positive influence of the number of troops on local economy, Lapidus, Muslim Cities, 50.
- 48 It is assumed that "military function" is the same as "political function". This assumption can be justified in terms of the military structure of the political leadership in the Mamluk state.
- 49 In Ayalon, BSOAS, XVI, 72; Ziadeh, 25, and Poliak, Feudalism, 7 n8 and 8.
- 50 According to Poliak, but cf Ayalon, BSOAS, XVI, 72 and Ziadeh, 25.
- 51 Ziadeh, 97.
- 52 Information supplied by Ziadeh himself, pp. 89-90. Aleppo, however, had more public baths. Also see Ibn Battuta's and Qalqashandi's descriptions of Syrian towns. For Qalqashandi's account see Gaudefroy - Demombynes, La Syrie à l'époque des Mamelouks, Paris, 1923.
- 53 About 60.000 each. See Ömer L. Barkan, "Quelques observations sur l'organisation économique et sociale des villes ottomanes des xvi et xvi siècles," Sociète Jean Bodin, VII, La Ville : Institutions économiques et sociales, 291 - 311, here 292.
- 54 Lapidus, Muslim Cities, 20, 25, 29,
- 55 Lapidus, Muslim Cities, 18-19.
- 56 Lapidus, Muslim Cittes, 43; J. Sauvaget, "Halab," EI, new ed.; Elisséeff, "Dimashk," EI, new ed., C. H. Dawn, "The Rise of Arabism in Syria, "The Middle East Journal, XVI (1962), 145-168.
- 57 For more detailed treatment of the products of both cities see Lapidus, Muslim Cities, 17-20, 33, 41, 57, 60, 86, 96.
- 58 For further information see Lapidus, Musilm Cities, 19, 33; Ibn Battuta, I, 88-90; Qalqashandi in Gaudefroy - Demonsbynes, 110 - 112, and Ziadeh, 221 n142, and 222 n143.
- 59 Ibn Battuta, I, 91.
- 60 D. Sourdel, "Hamat," EI, new ed.
- 61 Poliak, Feudalism, 8; Ayalon, BSOAS, XVI, 72, and Ziadeh, 25. The high number of halqa troops may reflect the rather special administrative status of Hama in the first half of the century, when

its amirs were descendents of the Ayyubids and not freed mamluks. The same situation may also indicate the importance of Hama as an important political commercial center for Beduins. (See Gaudefroy - Demombynes, 106 - 109, and D. Sourdel, "Hamat," EI, new ed.)

- 62 For a theoretical discussion on the advantages of being located on borders of subregions see Isaard, Location, 203-219, and 281-287. I have in mind the similarities between Isaard's theoretical region C, and Tripoli and Hama.
- 63 D. Sourdel, "Ghazza," EI, new ed., and Ibn Battuta, I, 73.
- 64 Josiah C. Russell, 197 210.
- 65 Ibn Battuta, I, 103.
- 66 Ziadeh, 65, and 221 n135.
- 67 N. Elisséeff, "Bayrut," EI, new ed., and Gaudefroy Demombynes, 74.
- 68 Gibb's note in Ibn Battuta, I, 84 n64.
- 69 Ibn Battuta, I, 84-85.
- 70 Ziadeh, 68-69.
- 71 Ayalon, IOS, II, 34.
- 72 Ibn Battuta, I, 77, 82.
- 73 Gaudefroy Demombynes, 118 119, in reference to Qalqashandi.
- 74 Poliak, Feudalism, 8.
- 75 Ziadeh, 63 69.
- 76 Zjadeh, 70 · 72.
- 77 Kenneth Walton, The Arid Zones, Chicago, 1969, 137.
- 78 Walton, 138.
- 79 Walton, 138.
- 80 The Mamluk efforts to incorporate the nomads in their overall system of communications have already been mentioned.
- 81 For the specific areas of the 14th century tribes in Syria refer to Ziadeh, 45, and Popper, XVI, 5-7.
- 82 Ibn Khaldun, The Muqaddimah: An Introduction to History, tr. by F. Rosenthal, 2nd. ed., Princeton, 1967, 3 vols., vol. I: 247-310, esp. 252-257; vol. II: 279-283; Popper, XVI, 2-3; Ziadeh, 51-72, esp. 63; Lapidus, Muslim Cities, 84, 86-87, 90-91 and Lapidus in Middle Eastern Cities, ed. by Lapidus, 64-69. Compare with Emanuel Marx, Bedouin of the Negev, Manchester, 1967; Walton; Norman N. Lewis, "The Frontier of Settlement in Syria, 1800-1950," International Affairs, XXXI (1955), 48-60; W. R. Polk, "Rural Syria in 1845," Middle East Journal, XVI (1962), 508-514; Louise Sweet, "Camel Riding of North Arabian Bedouin : A Mechanism of Ecological Adaptation," American Anthropologist, LXVII (1965), 1132-1150; Grant, 16-31; Lady Anne Blunt, Bedouin Tribes of the Euphrates, New York, 1879; J. L. Burckhardt, Notes on the Bedouins and Wahabys, London, 1830; Idem., Travels in Syria and the Holy Land, London, 1822; C. M. Doughty, Travels in Arabia Deserta, Cambridge, 1888; Alois Musil, The Manners and Customs of the Rwala Bedouins, New York, 1928; C. F. Volney, Travels InFough Syria and Egypt in the Years 1783-85, London, 1788. Also see Hodgson, passim, esp. II: 147-151 and I: 81-91.
- 83 Lapidus, Muslim Cities, 79, and Ayalon, BSOAS, XVI, 72.
- 84 Lapidus, Muslim Citles, 17.
- 85 Ibn Battuta, I, 117. Distances from Popper, XV, 50-51.

- 36 Even with the much improved means of transportation of the early 20th century, grain remained to be among the most important crops of the oasis of Damascus. (J. A. Tower, The Oasis of Damascus, Beirut, 1935, 39. Tower's work on the ecological conditions of the oasis of Damascus is an illuminating study. For the ecological conditions of Aleppo and its vicinity see Jean Sauvaget, Alep: essal sur le développement d'une grand ville syrlenne, des origines au millieu du xix siècle, 2 vols., Paris, 1941, I: 1-21.)
- 57 For detailed maps of the routes and locations of towns in 14th century Syria refer to Popper, XV, Maps 13, 14, 17, 18, 20, Popper's maps together with Ziadeh's map on provincial administration (facing p. 12), and Sauvaget's maps on postal routes (La poste aux chevaux dans l'empire des mamelouks, Paris, 1941, 57) and on the junction of roads at Aleppo (Alep, II, Plate LI) have been the principle sources used in the construction of the diagram on the areal organization of 14th century Syria.

14. YÜZYIL SURİYESİNDE NÜFUSUN MEKANDA DAĞILIMI ÜSTÜNE BİR YÖNTEM DENEMESİ

ÖZET

Çağdaş toplumbilimi araştırmaları, belli bir mekânda yaşayan insanların bir araya toplanarak oluşturdukları çeşitli boydaki yerleşme birimleri arasında yapısal bir ilişki bulunduğunu gösteriyor. Bu çalışmaların bulgularından tarihçiler de yararlanabilirler. Çağdaş ve eski toplumlar arasındaki iktisadî ve teknik gelişme farkları göz önüne alınmak kaydıyla, eldeki tarihî veriler yeni bulgular ışığında yeniden ve daha anlamlı olarak değerlendirilebilir ve şehirler çoğu zaman yapıldığı gibi tek tek ele alınmak yerine doğal çevreleri içinde anlatılmak mümkün olur. Elinizdeki yazı, bu düşünceyle girişilmiş bir çalışmanın ürünü, ondördüncü yüzyıl Suriyesinde nüfusun mekânda dağılımını açıklamaya yönelik bir yöntem denemesi.

Önce, insanların mekânda dağılımıyla ilgili bazı çağdaş çalışmaların ondördüncü yüzyıl Suriyesinde de gecerli olabilecek bulguları gözden geciriliyor, Sonra, Suriye bölgesinin ondördüncü yüzyıldaki yaşam şartları ele alınıyor. Yarı kurak bir iklime sahip olan bu bölgede iç ve dış ticaret olanakları değerlendirilmedikçe insanlar ancak sımırlı bir geçim düzeyinde kalabilirlerdi. İç ve dış ticaretin bilinen teknikler çerçevesinde geliştirilmesi işe, büyük ölçüde, etkin bir taşıma düzeninin kurulmasına ve sürdürülmesine bağlıydı. Yazıda, o dönemde Suriye'de hüküm süren Memiuk devletinin bu yöndeki çabaları belirtiliyor. Memlukların çabaları, devletin temel iktisadi dayanağını sağlama almaya, yani üretimden alınan payı en yüksek düzeyde tutmaya yönelik olduğu kadar, devletin askerî ve idarî örgütlenme biçimiyle de yakından ilgiliydi. Bu bakımdan, yazıda Memluk devlet örgütünün ilgili boyutları ayrıntısıyla tartışılıyor. Çeşitli kasaba ve şehirlerin iktisadî ve idari işlevleri arasındaki ilintiyle beraber, belli başlı yerleşme merkezlerinin nüfuslarıyla garnizonlarının büyüklüğü arasındaki düz orantılı ilişkiye değiniliyor. Sonuç bölümünde de, daha önceki tartışmaların ışığında, ondördüncü yüzyılda Suriye'de yaşayan insanların mekânı kullanış biçimlerini aydınlatıcı bir model geliştiriliyor. Model, tarihî gerçeği tamamıyla açıklama savını taşımıyor; salt, bu gerçeğin aranmasında başvurulabilecek bir araç ya da çalışma kılavuzu olarak ileri sürülüyor.