

**THE ARAB-MUSLIM CITY:
Tradition, Continuity and Change
in the Physical Environment**

Saleh Al-Hathloul

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INTRODUCTION

Introduction

With respect to the issue of formulating a theory of tradition, Karl Popper raises two important questions: first, how does tradition arise and persist?; and, secondly, is the function of tradition in social life amenable to analysis?¹ Popper argues that tradition arises because of our need for a certain predictability in social life. In this sense tradition provides order and regularity in our natural and social environment; it provides us with a "means of communication" and a set of "conventional usages and ideas" upon which we operate. Thus, the function of tradition is "explanation and prediction,"²; our need for structure and regularity in social life makes tradition persist.

Popper draws an analogy between the role of tradition in society and the practical function of myths and theories in science. "Scientific theories," he states, "are instruments by which we try to bring some order into the chaos in which we live so as to make it rationally predictable." Similarly, the rise of "traditions, like so much of our legislation, has just the same function of bringing some order and rational predictability into the social world in which we live." The analogy goes further in suggesting that, since the significance of myths and theories in scientific thought lies in the idea that "they (can) become the object of criticism, and ... (can) be changed," so too do "traditions have the important double function of not only creating a certain order or something like a social structure, but also giving us something upon which we can operate; something we can criticize and change."³

But since the term "tradition" contains a strong allusion to imitation, how can it be that tradition changes? And insofar as it does, can we continue to see it as one and the same tradition? In other words, is there what we might term "continuity" in a changing tradition? And if so, which is more important for a society: the preservation of its tradition, or the establishment of a sense of continuity with that tradition?

In dealing with this question, J.G.A. Pocock argues that, consciously or not, societies are organized to ensure their own continuity and thereby serve the function of preserving something from the past. Society's "awareness of the past is in fact society's awareness of its continuity."⁴ Pocock sees the society's own structure as the single most important element of continuity between its past and its present; thus, societies often conceive of their past in a way that insures the continuity of their structure. He shows that a society may have as many pasts and modes of dependence on those pasts as it has past-relationships,⁵ and that it may also have as many pasts and relationships with those pasts as it has elements of continuity. Believing that a sense of continuity with the past arises from the working of social institutions, Pocock calls for using law rather than narrative history as means of studying the past; in this way, one can establish out of the legal record a description of how these social institutions have worked.⁶

In order to help us define and deal with the problem with which we are concerned in this study, let us examine, in the context of the development of the *Shari'ah* (the Islamic legal tradition) during the second and third (eighth and ninth) centuries, both the idea of tradition as something upon which we can operate (that is, a tradition which is constantly modified) and the concept of "continuity within a changing tradition."⁷

The development of the early schools of law at Kufah and Medina (subsequently known as the Hanafi and Maliki schools respectively) began in the early decades of the second century (first half of the eighth century A.D.). The schools developed as a result of the need to re-evaluate the legal practices which had arisen during the Umayyad period; Umayyad judges faced overwhelming problems as a result of the enormously rapid expansion of Muslim territories and they thus tended to be somewhat pragmatic in implementing the spirit of the original laws of Islam as propounded by the Qu'ran. The starting point of the schools was the review of various local practices, legal and popular, in the light of Islam's original aims and objectives. Out of this review, a body of Islamic doctrine gradually developed in the

form of the two schools.⁸ Institutions and activities were individually considered in the light of the principles of conduct enshrined in the Qu'ran. These were then approved or rejected according to whether they measured up to or fell short of these criteria. The process originated in the personal reasoning, or *ra'y*, of individual scholars and developed into a consensus of opinion of a given school's jurists. This subsequently developed into the idea of the *sunnah*. *Sunnah* had originally meant actual customary practice, but in second (eighth) century jurisprudence it came to have a different connotation. *Sunnah*, as Coulson defines it in the terms of the scholars of the time, was "the ideal doctrine established in the school and expounded by its current representatives."⁹ If we are to understand how the consolidation of tradition through the establishment of continuity worked in the development of the Islamic legal system, an awareness of the changing connotation of the work *sunnah* during the development of the *Shari'ah* in the second and third (eighth and ninth) centuries is essential.

In the early 'Abbasid period, legal and political aspirations sought to revive the pristine purity of Islam during its Medina period. This could be achieved only by cutting right through the Umayyad period and representing legal doctrine as having its roots in the earliest days. Thus, jurists attempted to establish a sense of continuity with the time of the "rightly-guided" rulers (al-Khulafa' al-Rashidun). This was achieved in two ways: First in the interest of the consistency and coherence of the doctrine, reasoning was made more systematic, so that *ra'y* gradually gave way to *qiyas*, or analogical deduction. And, secondly, emphasis on the notion of *sunnah*, or the established doctrine of a school, began to grow in such a way as to reflect each school's purported continuity with the original tradition. As Coulson puts it, "in order to consolidate the idea of tradition the doctrine was represented as having roots stretching back into the past, and the authority of previous generations was claimed for its current expression."¹⁰ This process was projected backwards to the early generations of Muslims and ended with the Prophet himself as the authority for the doctrine.

By the middle of the second century (around 770 A.D.), the generally accepted legal methods of the early schools were challenged. The opposition adopted a doctrinaire attitude towards the substance of the law and its basis in jurisprudence. Pursuing the tendency of the early schools to project the *sunnah* backwards into the past, the opposition claimed that it did not go far enough. They saw the precedent of the Prophet himself as the supreme and overriding authority for law, and thus brought into increasing awareness the potential conflict of principle between the authority of the Prophet seen through *hadith* (report, or tradition of a precedent set by the Prophet) and the contemporary consensus of opinion among the local scholars as reflected by the *sunnah* of the school. As a result of this potential conflict, the current doctrine in the early schools was gradually modified, not only in the form of accepting some of the stricter rules advanced by the opposition but also through a growing tendency to claim the authority of the Prophet for the doctrine and to express it in the form of *hadith*. This is perhaps best illustrated through the *al-Muwatta'* of Malik b. Anas (d. 179/796), the first written compendium of law produced in Islam. Malik's method of composing the treatise was to begin his discussion of a legal topic by quoting relevant *hadith* or precedents as they were known, and then to consider, interpret, and accept or reject them in the light both of his own reasoning and of the legal tradition of Medina. His supreme criterion was the local consensus of opinion (that is, the *sunnah* of the school) and, in cases of conflict, nothing could override this authority.¹¹

In effect, then, the main features of legal development in this period was the increasing diversity of doctrine. The opposition's challenge to the establishment in the early schools had now crystallized into a conflict of principles. The issue polarized into whether jurists should maintain the right to reason for themselves as advocated by the establishment (*ahl al-ra'y*), or whether they should accept the exclusive authority of precedents from the Prophet as advocated by the doctrinaire opposition (*ahl al-hadith*). Thus, to use Pocock's terms, "a problem in past-relationships" had arisen and some unifying process was necessary in order to establish "modes of continuity" and to save the law from total disintegration.

This process was undertaken by al-Shafi'i (d. 205/820) whose main purpose was the unification of the law. In order to neutralize the forces of disintegration, he formulated a firm theory concerning sources from which the law must be derived. His theory was innovative not by introducing entirely original concepts but rather by giving existing ideas novel connotations and by connecting these ideas into a systematic scheme. Al-Shafi'i introduced a structure of law based upon the foundations of the essentially ethical standards of conduct formulated by the early schools. The main thesis of his work was the emphasis on the authority of the Prophet as a lawgiver. For him, the Prophet's legal decisions were divinely inspired, while for the scholars of the early schools the Prophet was the person best qualified to interpret the Qu'ran though he was considered, nonetheless, a human interpreter. Thus, al-Shafi'i's theory was based on the recognition of the *hadith* and precedents of the Prophet as a source of the divine will, complementary to the Qu'ran.

To reestablish tradition and to imbue a sense of continuity into the law, al-Shafi'i's theory recognized the *sunnah* as a second source of law after the Qu'ran. But *sunnah* in al-Shafi'i's terms was the divinely inspired behavior of the Prophet while in the early schools it signified the local tradition of the individual school. By replacing this concept of *sunnah* with that of a *sunnah* originating from a single source, that is the actions of the Prophet himself, al-Shafi'i hoped to eliminate a root cause of diversity between the different schools and to instill uniformity into the doctrine. He argued that there could be only one genuine Islamic tradition, and his scheme forms a subtle synthesis by bringing together the apparently contradictory attitudes of the establishment in the early schools and the opposition groups.

Two more sources of the law were recognized by al-Shafi'i's theory: one was *ijma'*, al-Shafi'i's denied that the agreement of scholars in a given locality had any authority, and argued that the only valid consensus was that of the entire Muslim community.¹² As to *qiyas*, al-Shafi'i repudiated the undisciplined forms of reasoning such as *ra'y* or *istihsan* and insisted on the exclusive validity of strictly regulated analogical reasoning. Thus, al-Shafi'i achieved his goals not

by introducing new concepts but, to use Coulson's words, by "giving existing ideas a new orientation, emphasis and balance."¹³ His contribution lies in bringing these ideas together for the first time to form a systematic scheme of what is known as the "roots of law" (*usul al-fiqh*).¹⁴

Al-Shafi'i's position on the *sunnah* as the divinely inspired behavior of the Prophet proved irrefutable and was therefore gradually accepted. From then on, the *hadith* or precedents of the Prophet could no longer be rejected through the objective criticism of their contents. Since the authority of the *hadith* was now considered binding, the only possibility left open for criticism was to deny the authenticity of the original reports. As a result of the Shafi'i thesis, a new science of the Prophet's tradition, *Ilm al-hadith*,¹⁵ developed, and three more schools of law were formed: one which followed al-Shafi'i's own teaching and was named after him, and two others which were both extreme supporters of tradition, the Hanbali and Zahiri schools. The Hanifi and Maliki schools, for their part, adopted a more reserved attitude towards al-Shafi'i's thesis. Since a strict adherence to al-Shafi'i's thesis would have required a complete revision of their existing corpus juris, they accepted the authority of the *sunnah* of the Prophet in a qualified form.¹⁶ However, the process of adjustment was undertaken without too much difficulty since most of the doctrine of the two early schools was already expressed in the form of Prophetic *hadith* and precedents.

The classical theory of Islamic law developed during the third (ninth) century, after the death of al-Shafi'i. Though it comprises the *usul*, or sources, laid down by al-Shafi'i -- the Qu'ran, *sunnah*, *qiyas*, and *ijma'*: its composite structure is fundamentally different. It aims at re-asserting and preserving the Islamic legal tradition as it had developed up to that point. At the time, *ijma'* was accepted as the agreement of the acknowledged jurists in a given generation. Once this consensus was reached, it was considered binding for later generations. *Ijma'* therefore provides for and tolerates those variations adopted by the different schools of law which it had been al-Shafi'i's aim to eliminate. But a more important difference is that *ijma'*, in the classical theory, becomes, in Coulson's words, "the self-asserted

hypothesis of Muslim jurisprudence."¹⁷ It is a material source of law in itself, while for al-Shafi'i it assumes a minor and trivial role since it is almost impossible to have the consensus of the whole Muslim community. In this new sense of the classical theory, *ijma*^c guarantees the authenticity of the Qu'ran and the *sunnah* as records of divine revelation, and also guarantees the validity of *qiyas*. But most of all it guarantees the authority of the whole structure of the legal theory.

Ijma^c as defined and accepted by classical theory has a double function. On one side it is permissive and inclusive in that it completely accepts and validates the status quo as it existed at that time. On the other side, it is prohibitive and exclusive in that it guarantees the preservation of the principles of law from that point onwards. As soon as *ijma*^c, in this sense, was accepted, *ijtihad*, that is, independent judgment, which had been restricted earlier by such principles as the authority of *sunnah* and the strict regulation of methods of *qiyas*, eventually disappeared, and the process of theoretical legal development in Islam finally ended with *ijma*^c. By the end of the third and the beginning of the fourth century (tenth century A.D.), Muslim jurisprudence formally recognized this by declaring "the closing of the door of *ijtihad*." The right of *ijtihad* was replaced by the duty of *taqlid*, or imitation. And by virtue of *ijma*^c, every jurist had to be an imitator, bound to accept and follow the doctrine established by his predecessors.

Throughout the development of the *Shari'ah*, the desire had always been to reaffirm the past's validity as a guide to the present. Thus the *Shari'ah* was advanced, accepted, and took the shape of a tradition. This tradition was then subjected to evaluation, criticism and change throughout the second and third centuries of Islam, until, for reasons too complex and controversial for our consideration here, it came to a halt.¹⁸ What is relevant to our concerns, however, is that when its theoretical development stopped, the *Shari'ah* as a tradition was not challenged. Whatever problems might arise, they were considered manageable and the tradition was accepted as is, without being questioned. Thus, Pocock's questions; why should the present follow the past? and how did the past become the present?¹⁹ never arose since

the tradition was accepted and it was assumed that the present is not different from the past.

This pattern of the dominance of an unchallenged and long-standing tradition is repeated in the context of the Arab-Muslim city's physical environment. Within this environment, a certain tradition of building developed and came to be accepted. This tradition was no doubt evaluated, criticized and probably changed but a sense of continuity persisted. In recent times, however, the tradition has been challenged. A problem in past-relationships has arisen and attempts to re-establish continuity seem to have failed. As a result, a physical environment that is markedly different from the traditional one is being introduced in these cities. Here, the present differs sharply with the past, and Pocock's question of how the present came to be what it is requires an answer. It is only part of this study's concern to attempt an answer to this question. Our main concern is how one can re-interpret the past in a way that is useful and suitable for the present, that is, in a way which will re-establish a sense of continuity and will eliminate the rupture and sense of alienation being voiced as a result of the introduction of such an environment.²⁰ But since this concern implies that the past has a certain value for the present, the question of whether or not the present should follow the past and, if so, why, also needs to be addressed.

Two responses to this question have been advocated in the Arab-Muslim world.²¹ First, the traditionalists simply re-affirm the past's validity as a guide to the present. By doing so they remove themselves from the problematic situation of the present to an earlier position, accepting the authority of the past as the only source for the present. This position by its very nature does not allow for innovation and change, and therefore can only produce traditionalism.²² The other response is that of the liberals. They neither accept the past's authority nor its authenticity as a source for the present. Their position, as Laroui analyses it, is based on the assumption that "tradition is a destiny" and that "progress is necessarily an intervention from outside."²³ This position denies a given society's freedom of choice and implies a lack of authenticity and non-participation on the part of a

traditional culture and population. It also implies that certain cultures are inferior in comparison to others. The result becomes a desire on the part of this position's advocates to wipe off everything and start from scratch or, as Popper puts it, "to clean the canvas"²⁴ and import as many ideas and materials as possible from the presumably superior cultures.²⁵ Both positions, that of the traditionalists and that of the liberals, seek to remove themselves from the present, the former by withdrawing backward in time, and the latter by moving elsewhere in place; neither of them appears to be actually dealing with the problems of the present.

This study takes an interest in the present. It does not blindly accept the authority of the past, though it does recognize its authenticity and therefore its value as a resource for the present. It sees the liberal position, which denies the importance and influence of tradition, as futile. To use Popper's words again: "You may create a new theory, but the new theory is created in order to solve those problems which the old theory did not solve."²⁶ Thus, one cannot discard the old theory as if it never existed. In the same sense, this study rejects the traditionalist position which sanctifies anything that occurred in the past. Tradition *per se* should have no authority, but it does have value. Its value lies in the fact that it forms the most important source of our knowledge, and serves as the base for our thoughts and actions; in other words, tradition consists of a platform upon which one can operate. This tradition should be open to evaluation and criticism. Such an approach implies, to use Stanford Anderson's words, that the "tradition we prize is not a mere accumulation of knowledge, an undifferentiated catalog of past events, but rather a vital body of ideas, values, mores, and so forth that we have as yet found resistant to criticism."²⁷ In this sense, tradition becomes a choice rather than a destiny.

Having thus stated the main concern and the purpose of this study -- its position regarding the role of the past and its value for the present -- let us now try to polarize the questions with which we will be dealing. Our problem, as alluded to earlier, is that of a present physical environment in the Arab-Muslim city which is totally different from

the traditional one. This has resulted in a sense of discontinuity and alienation for the inhabitants. Our purpose is to understand how this came about and how we can re-establish a sense of continuity. In order to do so, we will address ourselves to four main issues: (1) the origin and the process of formation of the traditional physical environment; (2) the disparity between the traditional and contemporary environments; (3) the origins of this disparity; and (4) some possible notions which might be suggested by way of attempting to re-establish a sense of continuity between the past and the present.

In order to study both the past and the present physical environment and to investigate Arab-Muslim society's awareness of its past, we will direct our attention to present activities and institutions which give rise to an awareness of the past and to the modes of awareness these activities and institutions produce. In this regard the law as a highly institutionalized form represents a valuable asset, especially in a Muslim society where the *Shari'ah* regulates all aspects of life and provides behavioral rules of conduct. Legal decisions are forms of convention which represent an important, if not the most important, part of the entire social fabric. Therefore, their role is more powerful and significant than that of any other social institution. Their study is very helpful here since they make a genuine connection between the physical and social fabric. They provide us with the corpus of information necessary to investigate the relationship between the political, socio-cultural, and environmental factors.

Having accepted the law as an institution through which we will deal with our problem, let us now throw some light on the levels of treatment of the materials used, the assumptions implied in this treatment, and the procedures to be used to answer the questions raised. Since we have the *Shari'ah* as developed and synthesized in the third (ninth) century, especially that part of it regulating the physical environment and the way it was applied in an actual context in Medina and in Tunis, and we have the traditional physical environment itself, we should be able to reconstruct a fairly detailed picture of how this environment took its particular forms and why these particular forms came to be what they are, and not otherwise. To give an example of

the levels of treatment here, we may cite briefly various cases at Medina in various years: in 978/1570, when a person asked the court to have the width of the street in front of his house measured before rebuilding the house; or in 1268/1852, when a group of people sued their neighbor on the grounds that he had closed their lane by building across it to the other side, thus turning the lane into cul-de-sac on two sides; or , again, in 981/1573, when an individual sued his neighbor in court for the latter's opening of windows in his upper chambers which the former claimed caused him damage and denied him the right to privacy within his own home. In all these cases, there is a highly institutionalized social context in which alone these cases -- or, rather, the documentation of these cases -- could have been produced and have meaning as a record. Within these records or documents, we have several levels at work: first, there is the level of the actual building forms; second, there is the conflict on the social level; third, there is the regulatory mechanism, or the court, which usually relies on certain accepted conventions; and, fourth, there is an ideal system, in this case Islam, within which these conventions are molded and can even be transformed when the need to do so arises.

Continuing to use the legal system, we will try in the context of the present to reconstruct how the contemporary physical environment came about and how it differs from the past. We will trace those modes which give a sense of continuity with the past and those which encourage discontinuity. To give an example of the level of treatment here, we may cite a preconceived master plan for the city of Riyadh which gives minimum standards for street widths; or enforces setback requirements and allows for openings, regardless of whether these inflict damage on neighboring inhabitants; or forces residents within this context to use corrugated plastic sheets and other means to protect their own privacy from being invaded by neighbors buildings; or results in others suing their neighbors in court in order to have them stopped in spite of the fact that these neighbors were allowed by the regulatory mechanism to do what they did. Here, what we have is, first, a preconceived prescriptive convention of physical form; second, a conflict on the social level which results from this form; and, third, a duality in the regulatory mechanism represented on one side by the

building authority, which implements a certain prescribed rule without being able to respond to the inhabitants' need when conflicts arise, and on the other side by the courts which in most cases, because they rely on accepted social norms and conventions, contradict the building authority and its rules.

The organization of this work stems from the nature of the problem addressed -- that is, having a present which is markedly different from the past -- and from the preconceived assumption of looking at the past as a valuable resource for the present. As we stated above, after dealing with the various processes crucial to the formation of the past and the present, we will attempt both to elicit explanations for the contemporary situation and to engender some possible views on the problem of establishing continuity with the past in the future. The study, therefore, will not be a history of the Arab-Muslim city's physical environment, but rather a selective "reading" of both the past and present. Despite the somewhat uneven tone which results from this approach, the central question will remain constant. Rather than retracing history we will concentrate on what the attitude of an Arab-Muslim concerned with this present and future should be toward his past as a whole. Our emphasis throughout will be on the connections between continuity and discontinuity, and our dominant consideration will be the contemporary Arab-Muslim city's physical environment vis-a-vis the traditional one.

In Part I, concerning the traditional physical environment, we will attempt a selective reconstruction of the past by looking at the process of its formation and change. Our main hypothesis here is that, within the traditional Arab-Muslim city, the social and religious structure informed the physical environment, and that this relationship was neither determinist nor autonomous but rather reciprocal and possibilist. Since traditional physical forms are seen as the result of incremental diachronic processes, an investigation into the continuous and gradual building practice in the city should reveal the origin of these forms and the process of their formation. Some of this process is codified and thus made available to us in Muslim law. Using legal material, we will follow this process on three levels. On the level of

the city, we will show how certain rules or social conventions were established to deal with what we, today, call zoning districts, and we will investigate the themes implied by these conventions and the reasoning behind them. On the street and building level, we will look at the rules governing the right of way; the conceptions of space, privacy, etc.; the ways in which these rules were formed and accepted as social conventions; and the ways the legal system mediated between these conventions and the physical environment in times of crisis to result in accepted conventions of form. At the end of Part I we will look at the nature of the law and the institutions involved and how they were able to handle conflicts and accommodate change.

The legal materials used in Part I are of three types: first, jurists' opinions from the first three centuries of Islam which include hypothetical and actual cases; second, manuals of *hisbah* (to promote good and forbid evil), written between the fifth and eighth (eleventh and fourteenth) centuries, specifying the obligations of the *muhtasib* (the traditional inspector of the market); and, third, actual cases of which some took place in Tunis in the first half of the eighth (fourteenth) century, with others being drawn from the court records of the city of Medina beginning with the second half of the tenth (sixteenth) century and extending to the present. Four clarification need to be pointed out here. The first is that these materials are more social than physical in nature and therefore are rules of conduct rather than prescriptive physical regulations. The second point is that we possess these materials only because the cases were documented, a process reflecting a moment of conflict for the dominant and accepted tradition. Thirdly, jurists' opinions and their hypothetical discussions were not created in a vacuum, but were related to a reality of which the jurists were conscious, especially in early Islamic times -- that is, actual cases from Tunis and Medina show that the concepts held by the jurists were applied in reality and that most of these concepts continued to work beyond the early periods and up to a much later time. And, lastly, the reason so many of these references are to the great second and third (eighth and ninth) century Muslim jurists while the sources themselves are often of a later period can be explained by looking at the process of legal development in Islam during the first three centuries and the

closing of the door of *ijtihad* which took place in the fourth (tenth) century. From that time onwards, jurisprudence was confined to the elaboration and detailed analysis of established rules. This development substantially affected the way Muslim legal sources were composed, since the role of the jurists became that of commentators upon the works of past masters.

In Part II, concerning the contemporary physical environment, we will attempt a reconstruction of the process through which the contemporary physical environment in Saudi Arabian cities was introduced and the way it was sustained and developed, in sharp contrast to the traditional one. The contention here is that the traditional process of reciprocal interaction between the socio-religious structure and the physical environment within the city has been replaced by another process which holds to more prescriptive conventions of form. These conventions are alien to the environment and often work to defy accepted social norms and conventions. We will trace this process in Saudi Arabian cities by looking at the development of orthogonal grid as a street pattern and the villa as a housing type. We will first show how they were introduced into the country and subsequently institutionalized. Second, we will look at the introduction and development of contemporary zoning regulations which insured the continuation of and, in some instances, enforced the development of this new physical environment. And, finally, we will concentrate on the cultural conflicts within the system by showing where and how these new rules and regulations originated and how the context within which they developed differs from the Saudi Arabian context. Within this whole part we will always be concerned to look at the modes of continuity and discontinuity with the past and to show how this is reflected in the physical environment itself.

Choosing Saudi Arabia as a case for this second part stems from two main considerations: the first is simply my greater familiarity with the Saudi Arabian context; and the second is the fact that Saudi society is the most traditional in the Arab-Muslim world, or so it is considered, though at the same time it has a very high potential for change. This

would imply a constant rethinking of its values and its tradition, and a continuous reinterpretation of the past in terms of its present.

The model of Saudi Arabia might be seen as a very extreme example which may not be entirely valid for other Arab countries. However, it is its uniqueness that makes the model valuable. Saudi Arabia represents a laboratory case through which the process was introduced and institutionalized within a time-span of less than twenty-five years while in other Arab countries such as Egypt or Syria this took more than 100 years. Another point where the model of Saudi Arabia may differ from other Arab countries is the way the process has been introduced. These two points, however, do not undermine the assumption upon which the choice of Saudi Arabia as a case study is made -- namely that although the means to introduce the new physical environment and the time-span it took may differ, the process itself and the results are similar throughout the Arab world.

In the conclusion, we will deal with the two remaining issues: first, the reasons behind the development of a physical environment which differs from the traditional one; and secondly the idea of having an authentic present and future by re-establishing a sense of continuity with the past and how this can be achieved. By looking at some of the ideologies implied, the changes in scales of power and technology, and the duality in institutions which worked in favor of the new physical environment, we will suggest some approaches towards re-establishing a sense of continuity with our past that stems from our needs in the present and our aspirations for the future.

Notes

- 1- Karl Popper, "Towards a Rational Theory of Tradition," in his *Conjectures and Refutations: The Growth of Scientific Knowledge*, New York: Harper and Row, 1968, p. 125.
- 2- These are Stanford Anderson's rephrasing of Popper. Stanford Anderson, "Architecture and Tradition that isn't 'Trad, Dad', " in M. Whiffen (ed.) *The*

History, Theory and Criticism of Architecture, Cambridge, Mass.: M.I.T. Press, 1970, pp. 80-81.

- 3- Popper, op.cit., p. 131.
- 4- J.G.A. Pocock, "The Origins of Study of the Past: A Comparative Approach," in *Comparative Studies in Society and History*, 4 (1961-62): 209-246.
- 5- "Past-relationship expresses the specialized dependence of an organized group or activity within society on a past conceived in order to ensure its continuity." Ibid., p. 213.
- 6- Ibid., p. 243
- 7- This is a brief sketch of the development of Islamic legal tradition. Its emphasis is on the *Sunni* school of law. It is not intended to be a comprehensive treatment, since many of the events and circumstances which lead to the rise of these schools are neither introduced nor treated here. It is rather a sketch of the development of the structure of the law with the aim of emphasizing those points of crisis where the need would arise for looking to the past to proclaim the continuity of a present or promoted tradition with that of the past. This account is based mainly on three sources, but I am very much indebted here to Coulson. These are: N.J. Coulson, *A History of Islamic Law*, Edinburgh: Edinburgh Univ. Press, 1964, paperback ed. 1978; S. Mahmassani, *Falsafat al-Tashri' fi al-Islam*, (*The Philosophy of Jurisprudence in Islam*), trans. into English by F.J. Ziadeh, Leiden, 1961; J. Schacht, *An Introduction to Islamic Law*, London: Oxford University Press, 1964.
- 8- The Schools' common ground was the explicit provision of the Qur'an, the precedents of the Prophet and the early Caliphs. Their legal method was basically the same but the systems of law which the two schools created from it differed, though these differences were mostly in the details of the law. See Coulson, op. cit., pp. 47-50.
- 9- Ibid., p. 39.
- 10- Ibid., p. 40.
- 11- Malik b. Anas, *Al-Mawatta'*, Cairo, 1967.
- 12- Al-Shafi'i's concept of *ijma'* here is designed towards the goal of rejecting the authority of the *sunnah* of the school or local consensus, thereby eliminating the diversity of law and enforcing this concept of *sunnah*.

- 13- Coulson, op. cit., p. 61.
- 14- For the matured essence of al-Shafi'i's legal theory see his *al-Risalah*, Cairo, 1895. Translated into English by M. Khaduri, in his *Islamic Jurisprudence*, Baltimore, 1961.
- 15- This had a major impact on scholarly activities during the third (ninth) century where the *sunnah* of the Prophet became the focal point. One of the main features of this period was the growth of a separate science, *ilm al-hadith*, with a literature of its own. Specialist scholars devoted themselves to the process of collecting, documenting and classifying the *hadith* and actions of the Prophet according to certain criteria that were developed for this purpose. As a result, several compilations were produced such as that of al-Bukhari (d. 256/870) and that of Muslim (d. 261/875), and Muslim jurisprudence accepted as authentic the corpus of *hadith* resulting from the activities of specialist scholars during this period. Coulson, op. cit., pp. 62-70.
- 16- Both schools were reluctant to accept the binding nature of a single or isolated *hadith* (*khbar al-wahid*) when it contradicted their established doctrine. And both preserved subsidiary principles of jurisprudence in order to be able to override that of isolated *hadith*. The *Hanafis* maintained the validity of *istihsan* (preference), and the Malikis that of *ijma' ahl al-Madinah* (the consensus of Medina). Coulson, op. cit., p. 72.
- 17- "For although the validity of the principle is formally expressed in a tradition from the Prophet which states: 'my community will never agree upon an error,' it is the *ijma'* itself which guarantees the validity of the Tradition." Coulson, op. cit., p. 77.
- 18- Some writers have suggested the Mongol invasions as a reason for such phenomena. But, as Coulson rightly shows, this phenomenon occurred some three centuries before the invasion. Coulson suggests that it was probably the result not of external pressures but of internal ones. His reasoning is that the material sources of the divine will had been fully exploited by that time, and that an exaggerated respect for the personalities of former jurists induced the belief that the work of interpretation and expansion had been exhaustively accomplished by scholars of peerless ability, and he links this to the spread of *ijma'*. Coulson, op. cit., pp. 80-81. Although this might be valid it still does not explain the internal causes or problems that lead to the closing of the door of *ijtihad*. This internal cause could very well be found in the struggle between the *sunni* (orthodox) schools and other schools, rites or groups such as the *Shi'ah*, *Mu'tazilah*, *Qadariyah*, *Zairiyah*, *Batiniyah*, *Murji'ah*, etc., which appeared and developed during the second (eighth) and third (ninth) centuries.

- 19- Pocock, op. cit., p. 244.
- 20- This sense of alienation has been voiced by many writers in the field of Muslim cities and Islamic Architecture. See H. Fathy, "Planning and Building in the Arab Tradition: The Village Experiment of Gournah" in M. Berger (ed.) *The New Metropolis in the Arab World*, Cairo (1974), pp. 210-229, "Constancy, Transposition and Change in the Arab City," in L. C. Brown (ed.) *From Medina to Metropolis*, Princeton, 1973, pp. 319-333, see also S.G. Shriber, "Planning Needs and Obstacles" in M. Berger (ed.), op. cit., pp. 166-188. Recently, most of the issues related to this process of alienation and change in the Muslim city and Architecture have been raised in the Aga Khan Award for Architecture Seminars, Seminar One, *Towards an Architecture in the Spirit of Islam*, April 1978; Seminar Two, *Conservation as Cultural Survival*, Sept. 1978; Seminar Three, *Housing Process and Physical Form*, March 1979; Seminar Four, *Architecture as a Symbol and Self Identity*, Seminar Five, *Places of Public Gathering in Islam*, May 1980. An evidence of this alienation on the part of the residents can be found in the second part of this study.
- 21- Q. Zurayq, in "Our Position Towards the Past" counts four directions. These are: the Traditionalist, the Nationalist, the Marxist, and what he termed the Scientific approach. This last approach, according to him, exists only in the minds of a very few, and he therefore hopes to see it develop in the Arab world. As to the first three, the traditionalist is encompassed within our own first classification, while the nationalist advocate can be found on both sides of our classification depending on his way of looking at the past. As to the Marxist, many of its advocates can be seen as very similar to those of the liberals' point of view illustrated here. See Q. Zurayq, *Nahn wa al-Tarikh*, Beirut, 1959, ch. 2, pp. 25-45.
- 22- A representative example of the traditionalist way of thinking can be found in M. Bahi, *Al-Fikr al-Islami al-Hadith wa-Silatuh bi-al-Istiqmar al-Gharbi*, 2nd ed., Cairo, 1959.
- 23- A Laroui, *The Crisis of the Arab Intellectual, Traditionalism or Historicism?* Berkeley: Univ. of California Press, 1976, p. 42.
- 24- Popper, op. cit., 1976, p. 131
- 25- A representative example of the liberals way of thinking is to be found in H. Sa'eb, *Tahdith al-Fikr al-'Arabi*, Beirut, 1970.
- 26- Popper, op. cit., p. 132
- 27- Anderson, op. cit., pp. 81-82.

Chapter I

ORIGIN AND DEVELOPMENT OF THE TRADITIONAL PHYSICAL ENVIRONMENT

Part I

THE TRADITIONAL ENVIRONMENT: PROCESS OF FORMATION AND CHANGE

Chapter I

Origin And Development Of The Traditional Physical Environment

A. Background

The Arab-Muslims have founded numerous cities and towns since the time of the Prophet Muhammad's *hijrah* to Medina. These newly founded towns have usually been classified by various authors according to the functions they served at the time of their foundation.¹ The first type is known as the armed camp or *fustat*, a military town-camp, appearing in two types of location: either in the neighborhood of a pre-Islamic town such as the al-Fustat or old Cairo, located near the Roman fortress of Babylon; or on sites in relative isolation from competing settlements, such as Kufah in Iraq, and Qayrawan in present-day Tunisia. The second type of city is known as the fortress, or *ribat*. Such cities were founded as fortresses serving to consolidate the domain of *dar al-Islam* on the frontier as well as in the interior. Originally border garrisons, the forts grew into fortress towns and became the nuclei of very important cities, such as Rabat in Morocco, and Monastir in Tunisia. A third type of Arab-Muslim settlement is the princely town, the outcome of an accumulation of political power, whereby princes wished to give expression to the political power of a dynasty by founding their own capitals. Such was the case with Baghdad, founded by the ^UAbbasids in the second (eighth) century; with Fez, founded by the Idrisis in the third (ninth) century; with Marrakesh, founded by the Almoravids in the fifth (eleventh) century; and with Mansurah, founded by the Merinids in the eighth (fourteenth) century. Other cities which can be included under this category are those which were founded by a sovereign who found it desirable to remove his residence from a traditional capital. Examples of these are Samarra', built by al-Mu^Utasim who moved from Baghdad in the third

(ninth) century, and Raqqaḍah, an Aghlabid residence founded during the third (ninth) century 10 km. from Qayrawan to replace Abbasiyah which had been constructed several years earlier, only 4 km. from Qayrawan. The fourth type of settlement is the sanctuary town, founded around a hermitage or saint's tomb. Such is the case with Karbala' in Iraq or Mashhad in present-day Iran.

In describing the physical pattern and organization of these Muslim towns, Von Grunebaum states that throughout the Islamic world, the towns resemble one another.² He points to the individual walled quarters; to the system of gates which close off these quarters during the night; to the lack of open spaces or squares within the city in general and within the residential quarters in particular; to the very narrow and winding streets and byways; and to the Muslim house which is oriented away from the street and opens onto an inner courtyard. Von Grunebaum ascribes various reasons for such similarities in pattern. He ascribes the organization of the town into quarters to the original settlements of the Muslim armies which were formed of Arab tribes and where each of these tribes had its own quarter. He relates the arrangement of the house to the need of the inhabitants to maximize their privacy. He alludes to the role of Islamic law in accounting for the street pattern and urban forms, and refers, in this regard, to Brunschvig's study on medieval urbanism and Muslim law.³ However, both he and Brunschvig come to the conclusion that the problems treated by the law were "dealt with per se, that is to say, not within a general treatment of the city and its legal difficulties." Nonetheless these authors concede that such problems were dealt with at considerable length and with considerable competence.⁴

Von Grunebaum is most probably right in referring to the original settlements of Muslim armies as the base for the later model of the Arab-Muslim city. One should remember, however, first, that these newly founded towns soon encompassed non-Arab residents as well, and secondly that the Arab-Muslims did not create all of their cities and towns out of whole cloth. Indeed, they inherited numerous Hellenistic and Persian cities and several of these inherited cities which still exist follow Von Grunebaum's description very closely. The fact

that some of these cities, with an ancient, highly-ordered city plan, such as Damascus or Aleppo, have been radically altered into an irregular street pattern and a different character requires a concerted explanation. (Figure 1)

In reference to these orthogonally planned Hellenistic and Roman cities, Von Grunebaum points out that their forms had not been preserved intact down to the Muslim era and that, in fact, the decomposition of their original plans had in some places begun as early as the second century A.D. As an example of such a decomposition, he refers to Sauvaget's studies of Aleppo and Damascus which show the gradual forsaking of their geometric block structure during the Byzantine period.⁵ Both he and Sauvaget, however, confirm that the radical alteration of the plan was consummated during the Arab-Muslim era. Von Grunebaum ascribes this process of the Muslim period to a change of focus where,

the ancient political interest in the community, the classical ideals of city-oneness and of the clarity of the architectural (and administrative) design have been replaced by a dominant religious interest.⁶

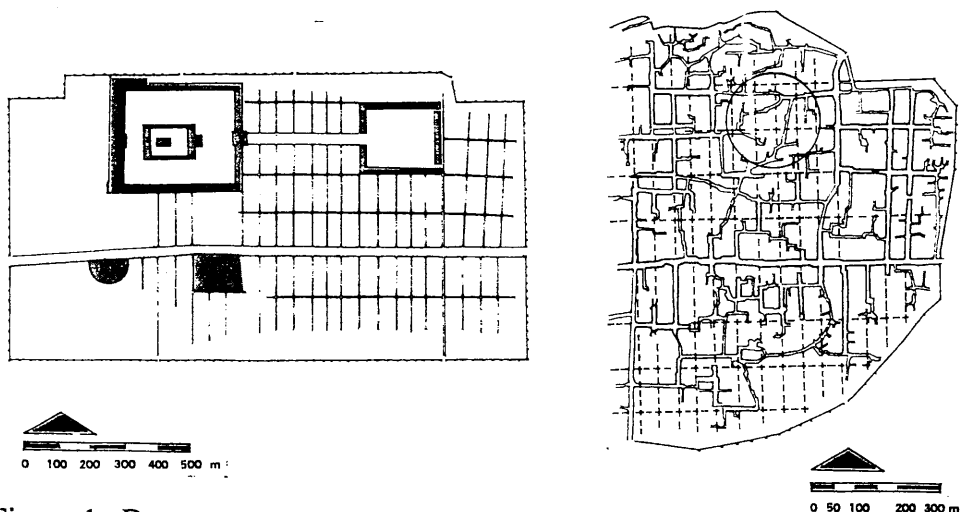


Figure 1: Damascus

(left) original plan of antiquity.

(right) part of the original plan transformed during the Arab-Muslim era.

Source: Sauvaget, "Le plan antique de Damas", Syria, XXVI (1949), pp. 342, 356.

In his comparison of the Greco-Roman and Muslim city, Von Grunebaum, unfortunately, seems to take the Greco-Roman model as his base, with the eventual result that the Muslim city is seen as lacking order and city institutions. According to him, the highly-ordered Hellenistic plan was supported by certain city institutions; as soon as the city fell under the Arab-Muslim domain, the institutions ceased to exist, and chaos replaced law and order, with the result that the city plan was radically altered.

Dealing with this same issue in the context of Damascus and Aleppo, Jean Sauvaget puts the question in a slightly different form. Seeking to find out not only why but also how such a process of change in city form took place, Sauvaget suggests how the colonnaded avenue of antiquity was transformed into the *suq* of medieval Damascus or Aleppo. (Figure 2). Sauvaget sees this transformation as a temporal process; within the general evolution of these cities the avenue, through an incremental process of encroachment onto spaces that had fallen out of use during the Muslim period. Thus he comes to the conclusion that given these historical circumstances, it would have been surprising if this transformation had not taken place.⁷

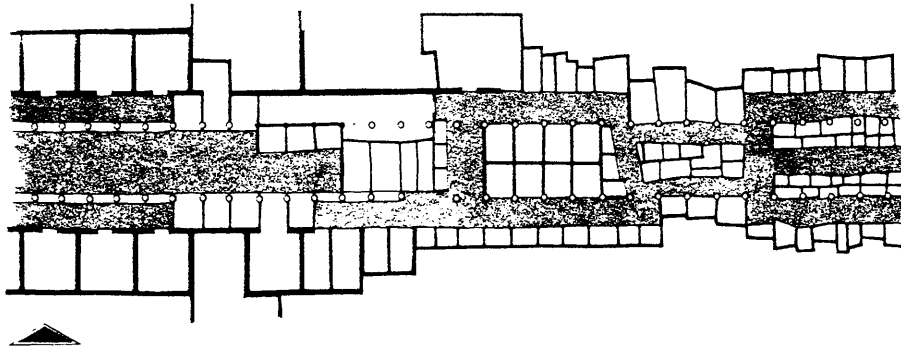


Figure 2: Damascus and Aleppo

A schematic illustration of the process of transforming the colonnaded avenue of antiquity into the *suq* of medieval Islam.

Source: Sauvaget, "Le plan de 'Laodicee-sur-mer,'" Bulletin d'Etudes Orientales, (1934), p.100.

Now, the fact that Von Grunebaum's description applies to both newly-founded cities and to inherited ones with initially highly-ordered plans, and more important, the similarity of plans such as those of medieval Damascus and medieval Medina, (Figures 3, 4, 5) suggest a very difficult and important question: starting from two or more quite different urban patterns, how did Arab-Muslim society develop cities of a similar pattern and a distinctly similar character?

To begin with, it is clear that we lack the necessary information to show how this transformation took place specifically in Damascus and Aleppo. However, in the following three chapters, we will provide evidence to account for this incremental process of change on the basis of certain conceptions and belief held by the inhabitants of these cities.⁸ By virtue of our evidence, the transformation described by

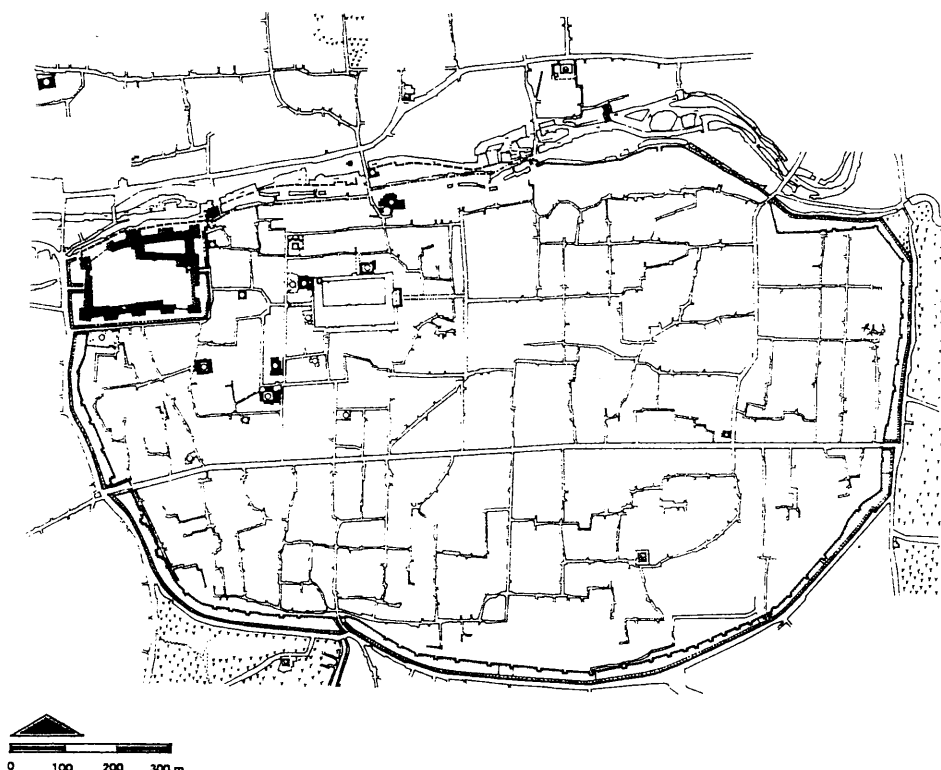


Figure 3: Damascus

Street plan of medieval Damascus

Source: Ibn ʿAsakir, *Tarikh Madinat Dimashq*, v. II, part I,
edited by S. al-Munjid, (1954).

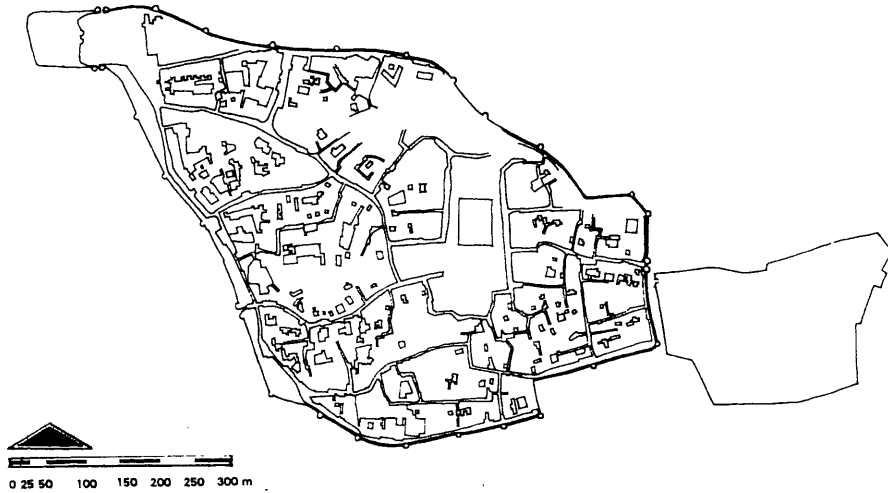


Figure 4: Medina

Street plan of medieval Medina

Source: Author's reconstruction from medieval accounts and contemporary aerial photographs and plans.

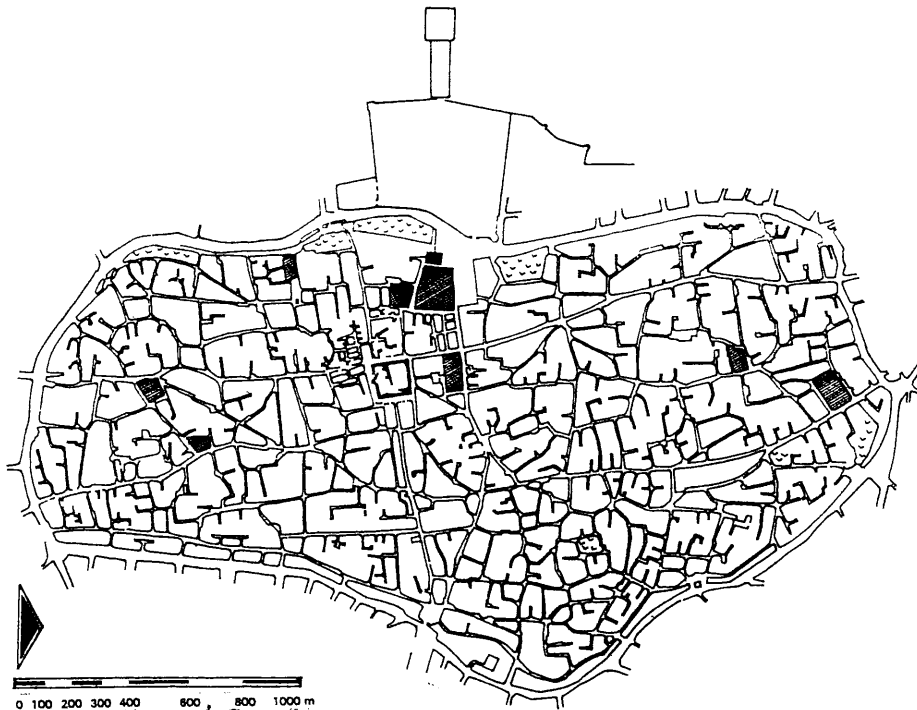


Figure 5: Tunis

Street plan of medieval Tunis

Source: Lezine, *Deux Villes d'Ifriqiya*, Paris (1971), p. 144.

Sauvaget can be accounted for with reasons more decisive than a mere lack of authority or an instability. In effect, we will show that the beliefs and conceptions of the cities' inhabitants, coupled with the disappearance of the wheel as a mode of transportation⁹ and the climatic need for protection from the sun, which did not seem to have been considered in the Hellenistic plans, must have played a major role in such a transformation.

As to the newly-founded cities, we will attempt, in the following section, a brief exposition of how they were planned and how they developed to the point of an abstracted model, such as described by Von Grunebaum. We will look, first, at Medina, Islam's first settlement, and then at the *amsar* or Basrah, Kufah, and Fustat, camp-towns founded during the reign of 'Umar b. al-Khattab (13/634-23/644). Lastly, we will look at both Baghdad and Samarra', two princely towns that were founded with ordered plans during the Abbasid period. The accounts we have of these cities at their founding stages are quite fragmentary, and details are often lacking. Therefore, we will attempt to do no more here than to sketch a somewhat incomplete image of their physical development.

B. Physical Development Process

1. Medina¹⁰

Before 622 A.D., Medina was a group of independent settlements, not united into one city until after the Prophet Muhammad's *hijrah* from Mecca. The original settlements, however, seem to have preserved their names as *manazil* or *buyut* of each tribe, and seem to have later taken the form of quarters within the city.¹¹

The new immigrants from Mecca who accompanied the Prophet or came afterwards and those who were attracted to the city from other places seem to have settled either on non-arable land which was left unoccupied by the original tribal settlements, or on some of the lands that were given up to the Prophet by the *ansar*.¹² In the process of

settling, the newly arrived tribes or clans appear to have clustered together. Even the early *muhajrun*, the people who accompanied the Prophet from Mecca, settled around the mosque of the Prophet, forming more or less one unit.¹³ During the remaining ten years of the Prophet's life in Medina, the city grew enormously, but appears to have continued to preserve its tribal character, at least in its spatial organization.¹⁴

To see how this settlement process took shape during this time, we start with the location of the Prophet's mosque and his residence. It is said that when the Prophet entered Medina, he did not want to decide by himself where to settle, and he therefore left it to his camel to decide, asking the *ansar* not to make the camel kneel down in any of the places but to leave her until she would stop and kneel down herself. Once she did, he decided that this would be his dwelling place (*manzil*).¹⁵ The area surrounding the site of the Prophet's dwelling and his mosque at that time seems to have been open or very slightly used.¹⁶ From then on, it seems that the area, designated as the main mosque, became the center of the city.

Al-Baladhuri (d. 279/892) relates that, from that point on, the *ansar* gave to the Prophet whatever extra land they had within their own *khitat* (quarter).¹⁷ Yagut (d. 626/1229), in an account of the fiefs granted by the Prophet, gives the impression that the Prophet assumed chief responsibility for distributing land and settling people in Medina. He says:

..."When the Prophet arrived at Medina he granted (*aqta^c a al-nas al-dur wa-al-riba^c*) the *dur* and quarters to the people. Thus, he marked a *khittah* for Bani Zahrah in a part of the place behind the mosque, ..., and granted Abdallah and ^cUtbah the sons of Mas^cud' al-Hudhali their well-known *khittah* near the mosque, and granted al-Zubayr b. al-^cAwwam a large spot (*baqi^c wasi^c*) and granted Talha b. ^cUbayd-allah the site of his *dur*, and for Abi Bakr al-Siddiq the site of his *dar* near the mosque. And he granted each of ^cUthman b.

ʿAffan, Khalid b. al-Walid, and al-Miqdad and others the sites of their *dur*. When the Prophet was granting these fiefs to his companions, those which were non-arable land (*ʿafa' in al-ard*) he granted them, while those *khitat* which were settled, were donated to the Prophet by the *ansar*. Thus he granted from these whatever he wished..."¹⁸

It can be inferred from Yaqut's statement here that the Prophet granted fiefs for tribes and individuals. Ibn Shabbah, in his account of the settlements (*manazil*) of the *muhajirun* tribes, also makes it clear that these were grants from the Prophet. He states that "the Banu Ghifar dwelled in the plot (*qatiʿah*) granted to them by the Prophet..." Then Ibn Shabbah goes on to describe the locations of settlements granted to the *muhajirun* tribes. He mentions, among others, Banu Layth b. Bakr, Banu damurah b. Bakr, Banu al-Dhayl, Muzaynah, Juhaynah and Bali, Qays b. ʿAylan, Banu Jashm, and Banu Kaʿb b. ʿAmr.¹⁹ Ibn Shabbah's account of the settlements of the *muhajirun* and of those of *al-ansar* shows that Medina at the time of the Prophet was organized into quarters, and that each quarter was settled by members of one tribe or clan.

The account of the fiefs granted to the tribes or clans indicates nothing about how each grant was subdivided. However, it seems that the subdivision inside each *khittah* was left to the tribe itself. This was what al-Zubayr did with his large *khittah* (*baqiʿ al-Zubayr*). Ibn Shabbah enumerates six *dur* in this *khittah*; all were for al-Zubayr's heirs, while Ibn Zabalāh, speaking of the *suq* of Medina during the reign of Hisham b. ʿAbd al-Malik (105/724-125/743), indicates that some areas at that time were still left open in *baqiʿ al-Zubayr*.²⁰ This shows that each tribe, clan, or individual subdivided their respective *khittah* according to need, and that not necessarily all the *khitat* in Medina were built up during the early period. As to what each *khittah* or quarter of a tribe included, Ibn Shabbah, again when enumerating the *muhajirun's* quarters, mentions the existence of a mosque in several of them.²¹ And Bukayr (d. 122/740) relates that, during the Prophet's time, there were nine mosques in Medina other than the Prophet's own

mosque and that all of the nine used to perform prayers according to Bilal's call.²² In Bukayr's account these mosques were named after different neighborhoods or quarters in the city. The fact that people in these mosques heard Bilal's call for prayers indicates that these neighborhoods were in the proximity of the Prophet's mosque and within what one would consider Medina proper. As to cemeteries for each tribe it seems to have been a tribal tradition to have them within the vicinity of each tribe's settlement. Within Medina this practice seems to have been followed at least by some of the tribes until the year 10/631. In that year, al-baqi^c, still the cemetery of Medina, was used as a collective burial ground. However, even then, each tribe selected a spot for its own and "each tribe knew its burial grounds within al-baqi^c.²³

As to Medina's *suq*, Ibn Shabbah mentions four markets in pre-Islamic Medina, and relates that the Prophet pitched a tent in the place of baqi^c al-Zubayr, at that time owned by Ka^cb b. al-Ashraf (d. 3/624-25), and said: "this is your *suq*." When Ka^cb b. al-Ashraf arrived, he went into the tent and cut its ropes. Then the Prophet moved the *suq* to its present place and said: "this is your *suq*, it is not to be built or acquired (*la-tatahajjaru*), and no tax is to be levied on it."²⁴ This order seems to have been followed for many years thereafter. Several years later, we have reports that the *suq* was still open with no buildings. Also, the *suq* was still open during the reign of ^cUmar b. al-Khattab and he seems to have, on several occasions, insisted on keeping the *suq* open the way it was during the Prophet's time. The first building within the *suq*, it seems, was constructed during the reign of Mu^cawiyah b. Abi Sufyan (41/661-60/680). This was followed by a major construction project during the reign of Hisham b. ^cAbdal-Malik. According to al-Samhudi, this *suq* is bordered by *al-musalla* on the southern side and reaches nearly to *thaniyat al wada^c* on its northern side.²⁵ In present day Medina this area is known as *al-manakhah* and parts of it still serve as markets. Ibn Shabbah's report that the Prophet chose baqi^c al-Zubayr as the site of the *suq* but was forced to move it to its present place suggests that the Prophet wanted the *suq* to be close to the Mosque. Baqi^c al-Zubayr, according to al-Samhudi's description, is not more than 150 m. from the mosque, while

al-musalla, which is the beginning of the *suq* from the south, is about 500 m. from the Prophet's mosques.²⁶

Very little more can be said about Medina's spatial organization or its morphology during early Islamic time. Information on the pattern of the city streets -- their form and size and how they were laid out -- is lacking. To use information from later times, there was during Mu^cawiyah's reign what is known as *al-balat* which according to al-Samhudi's description covers most of the city's three major thoroughfares. At some point at the end of this *balat* near *al-musalla*, its width during the time of Ibn Shabbah (d. 262/876) was ten cubits while at its beginning near the gate of Mercy, in the Prophet's mosque, its width was six cubits. Ibn Shabbah also enumerates several other streets branching from the mosque with widths of five and six cubits. As to Medina's *suq*, it seems to have continued in its original site though other specialized *suqs* evidently appeared in the area between the original one and the Prophet's mosque. Within this area, Ibn Shabbah refers to several which existed during his lifetime. Among those were the *suq* of date sellers, fruit sellers, bakers, dyers, tailors, leather merchants, sellers of copper utensils, and smiths.²⁷

2. *Al-Amsar*

During the reign of ^cUmar b. al-Khattah (13/634-23/644), the Muslim territories were expanded into Syria, Iraq and Egypt. To manage these territories, six *amsar* were designated. These served both as garrisons for the Arab armies and as administrative centers for their provinces. Some of these *amsar*, such as Basrah, Kufah and Fustat, were newly founded, while Medina was by then already a prosperous city. The other two were Jabiyah and Jawwathah, but these were to be abandoned later; Qayrawan was founded during the reign of Mu^cawiyah. The term *amsar* was also applied to other administrative centers such as Qazwin, Ardabil, Ray and Marw, in which Arab garrisons were stationed permanently.²⁸

*Al-Basrah.*²⁹ Al-Basrah was founded as a military camp in the year 17/638 by ^cUtbah b. Ghazwan, on orders from ^cUmar b. al-Khattab.

According to al-Baladhuri, the first *khittah* planned was the mosque, then the *dar al-Imarah* which was originally located some distance from the mosque. During the reign of Mu^cawiyah, Ziyad moved *dar al-Imarah* to the *qiblah* of the mosque.³⁰ Regarding the laying out of the city, al-Mawardi relates that the settlers divided the city into *khitat* according to tribes, assigning a *khittah* for each tribe, and made the width of its main street sixty cubit. The main street also served as a kind of way station (*marbad*). The width of all other streets was twenty cubits, and each lane seven cubits. In the middle of each *khittah*, they provided a wide *rahbah* where they could station their horses and bury their dead. In addition their *manazil* abutted each other.³¹ Although al-Mawardi is less reliable as a historian, his summary is confirmed by al-Baladhuri who, when speaking of subdivision inside the *khittah* simply states: "The people subdivided and built the houses."³² This gives the impression that land-subdivision within each *khittah* was left to members of the tribe.

Al-Kufah.³³ Also a military camp, al-Kufah was founded in the year 17/638 by Sa^cd b. Abi Waqqas on orders from ^cUmar b. al-Khattab. According to al-Tabari (d. 311/923) ^cUmar wrote to Sa^cd advising him on how to plan the city, and he in turn delineated these orders to Abi al-Hiyaj, the person charged with the actual laying out of the city. Al-Tabari states that ^cUmar "... ordered main roads (*al-manahij*) to be forty cubits, those following them to be thirty cubits, those in between to be twenty, and lanes (*al-aziqqah*) to be seven cubits, nothing being made less than that; the *qata'i*^c, (land granted to tribes) were to be sixty cubits except those of Bani Dabbah..." Al-Tabari also relates that the *ahl al-ra'y*, a kind of appraisal committee, then gathered for estimation; when they decided on something, Abu al-Hiyaj divided land accordingly.³⁴

As to the actual process of laying out and building the city, al-Tabari relates that the first element to be laid out was the mosque. He marked out an area surrounding it which took the shape of a square platform (*murabba^cah ^culwah*, which he later calls *sahn*) with the mosque in the middle of it. Besides the *sahn*, the *dar* of Sa^cd, which was to be known as *dar al-Imarah*, was built. Of the *sahn* to the north

five roads (*manahij*) were laid out, to the *qiblah* four, to the east three and to the west another three. These according to al-Tabari, were the city's major roads (*manahijuha al ʿuzma*). He also adds that they laid out secondary roads (*manahij dunaha*) running parallel to the major ones and eventually meeting with them. Other roads that followed the secondary ones were also laid out, but these were less in width.³⁵

Regarding the residential areas within al-Kufah, al-Tabari reports that the encampments (*al-mahall*) were placed behind and in between the roads. He describes the locations of the tribes within the city in relation to the *sahn* and the major roads. His description gives the impression that the city was divided into *khitat*, which were assigned to different tribes, and that there was an average number of people to fit each *khittah*. Thus, when the number of the tribe was larger than this average, the tribe was probably assigned more than one *khittah* or larger one, while those tribes whose number was smaller, such as Juhaynah, were forced to share their *khittah* with a group of people who do not seem to have belonged to one tribe (*akhlāt*).³⁶ As to the subdivision of the *khitat*, al-Yaʿqubi states that "each tribe subdivided its own designated place,"³⁷ indicating that this was left to the discretion of the tribes' members. The *khitat*, or at least most of them, seem to have had mosques of their own.³⁸ As to open spaces and cemeteries, al-Yaʿqubi mentions that each tribe had a cemetery that was known by the tribe's name. When he names these cemeteries he includes the names of three open spaces: *sahra'* Uthayr, *sahra'* Bani Yashkur, and *sahra'* Bani ʿAmir.³⁹ This suggests the possibility that the system of having a *rahbah* in each *khittah*, mentioned earlier in al-Basrah, was also applied in al-Kufah, and that these were used both as a burial ground and for other purposes.

The *suq* of Kufah was, according to al-Tabari, located in the *sahn*. He relates that the *sahn* preserved its form during the reign of ʿUmar with the mosque and the palace as the only buildings, and the *suqs* remaining unbuilt. He also relates that ʿUmar said: "*suqs* are to follow the tradition of mosques; whoever proceeds to a space, that space becomes his until he leaves it to his home or finishes what he is selling." Al-Yaʿqubi also reports that the market area of Kufah was

open with no buildings or roofs except for the shades erected by the sellers at their chosen location, and that this tradition continued until the reign of Hisham b. ^cAbd al-Malik (105/724-125/743) when Khalid al-Qasri, the governor of Kufah, undertook construction of the *suqs*.⁴⁰

Al-Fustat.⁴¹ Al-Fustat was founded in the year 20/641 or 21/642 by ^cAmr b. al-^cAs on orders from ^cUmar b. al-Khattab, who told ^cAmr to settle in a place where no water would separate them from each other. Before that, it seems, ^cAmr had decided to settle in Alexandria but, as a result of the Caliph's orders⁴² was obliged to move to the place of al-Fustat. The situation in al-Fustat seems to have been different from that of al-Kufah and al-Basrah. This might have resulted from the effect of two factors. First, there is the difference in local conditions between al-Fustat and the other *amsar* towns. The site of al-Fustat was close to an old settlement, whereas those of al-Basrah and al-Kufah were isolated sites with no existing settlements in their proximity. Secondly, there is the difference in character between ^cAmr b. al-^cAs and other *amsar* generals. His strong personality and independence must have played a major role during al-Fustat's foundation. In spite of this difference, enough information is available to suggest that the process of settlement in al-Fustat was similar to that of al-Kufah and al-Basrah.

On the laying out of the town, al-Ya^cqubi reports that when the decision was made to settle there, ^cAmr undertook the laying out of the congregational mosque and designated the area surrounding it as the *suq*.⁴³ The *khitat* seem to have extended from there. Near the mosque was the *khittah* of *ahl al-rayah*. This, according to Ibn ^cAbd al-Hakam (d. 257/871), was settled by ^cAmr himself, Quraysh, al-Ansar, Aslam, Ghifar, Juhaynah, and those whose tribes did not have enough members in the army of Amr at the time.⁴⁴ Subsequently, other tribes seem to have undertaken it to settle themselves in their own *khitat*. The description of these *khitat*, however, shows that some tribes by themselves formed a separate *khittah* in the town; others banded together to constitute a *khittah*; and still others were split up, each into two or more *khitat*. This is explained by two reports from al-Maqrizi. He relates on the one hand that *ahl al-rayah* were obliged to combine,

because as individual groups they were too small for a separate muster in the *diwan*, and that the *khittah* of *ahl al-zahir* combined various parties who had arrived late and found the places near their own people filled up.⁴⁵ To some extent, this suggests that a relationship existed between the *khittah* in the town and the muster in the *diwan*, and that the arrangement of settlements within the town probably followed the organization of the army detachments. The story of *khittat al-latif* tends to support this view. According to al-Maqrizi, this *khittah* was formed by the voluntary union of detachments from tribes having kinsmen elsewhere in other *khitat*. A separate muster in the *diwan* was desired for this *khittah*, but was refused owing to the objections of their kinsmen. Thus, it was arranged that the various constituents should muster with their own tribes, while remaining associated in their dwellings.⁴⁶

As to the *khitat* themselves, Guest mentions forty-nine in al-Fustat at its foundation.⁴⁷ Most of these were named after the tribes which settled in them. The way our sources describe how these *khitat* were settled definitely suggests that the subdivision within the *khitat* was left to the discretion of the tribes. Within each *khittah* there appears to have been one or more mosques, and some *khitat* are referred to have open space (*fada'*).⁴⁸

Information from al-Fustat suggests two issues that were certainly applicable in the other newly-founded *amsar* towns: the *khittah* as a system of planning; and the actual process of physical development within the city, including the formation of the street patterns. Regarding the first, the report of al-Maqrizi about the three *khitat*, *ahl al-zahir* and *al-latif*, suggests that the *khittah* was used as a unit of planning and that it is represented a system that was repeated in all three towns. This system was based on the tribe as an already existing institution. However, this institution was flexible enough to expand or shrink to suit the standard number of inhabitants that seems to have been established for the *khittah*. The combination of tribes to form a *khittah* shows that a small party was not able to stand alone, and yet so the division of tribes to form two or three *khitat* reveals that a contingent could be too large. Also the flexibility of the system can be

seen in the *khittah* of *ahl al-rayah* who were without any tribal links but were still accommodated within the system. And as an example of the system's own controlling mechanism the report of *khittat* al-Latif shows that no one group could form a *khittah* without the consent of the town's kinsmen.

As to the second point, the process of physical development within the *amsar* town and the formation of their street pattern, al-Suyuti who is a late source relates the way in which this process occurred in al-Jizah, a part of al-Fustat on the western side of the Nile. In al-Jizah, he says, there were at first spaces between the tribal *khitat*. When reinforcements arrived, in the reign of ʿUthman b. ʿAffan (23/644-35/656) and later, and the people became numerous, each party made room for its relations, till the building so increased that the *khitat* of Jizah closed into one.⁴⁹ Al-Suyuti's account suggests that the intervals dividing the *khitat* in al-Fustat must have formed the basis for street locations. One can then hypothesize that in early Fustat, these intervals of which al-Suyuti speaks represented the city's road system and that, at that time, streets proper were not precisely defined or marked. Therefore later pressure for land created a huge demand which caused the *khitat* to close in on each other, thus forming the tortuous streets and ways known to us in al-Fustat.⁵⁰ This can also be said of Medina, al-Basrah, and al-Kufah. However, knowing that at least in the latter case, according to the report of al-Tabari referred to earlier, regular roads were established first, how could one account for the irregular street pattern that resulted later? This will be the subject of Chapter three.

One final point on the *amsar* towns should be raised, namely, their striking similarity to Medina. The way their *khitat* were assigned resembles that of Medina at the time of the Prophet. The placement of the *khitat* Ahl al-rayah, in both Kufah and Fustat, at the center of the town near the mosque resembles the placement of the *dur* of the Prophet's companions, especially the *mahajrun*, around the Prophet's mosque. And, indeed, when one looks at the internal organization of the *khittah* in Medina and al-*amsar*, one finds that they resemble each other. During Umar's reign, Medina had already reached a visible

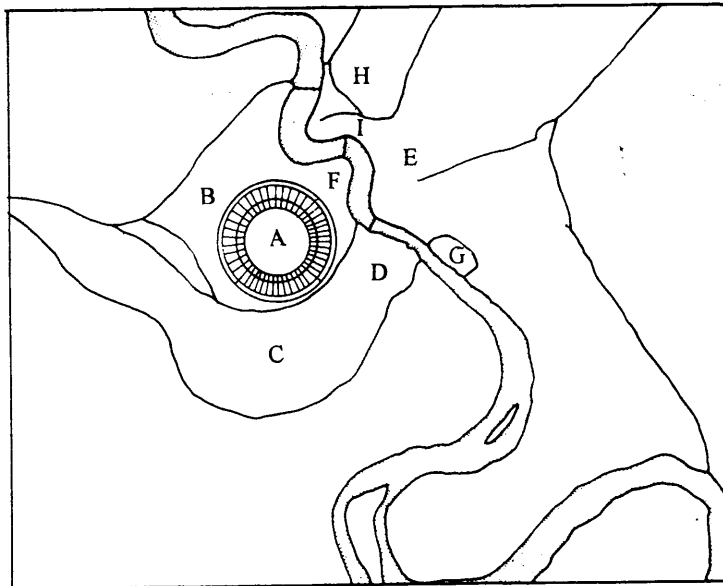
mature stage, with the Prophet's mosque assuming a role as the center of the city. In view of the fact that most of the leaders of the Arab armies came from Medina, it seems clear that the *amsar* towns were attempts at replicating Medina.

3. *Baghdad and Samarra'*

*Baghdad.*⁵¹ Baghdad was founded as a residence and capitol by al-Mansur, the second ^cAbbasid Caliph (136/754-158/775), in the year 145/762. According to al-Khatib (d. 453/1071) after deciding to build his city, al-Mansur brought together the engineers, builders, and surveyors, and described to them his plan for a city having a circular shape.⁵² According to the differing reports in regard to the size of the city, the total area ranged from 576,000 to 64,000,000 square cubits. Most historians, however, tend to rely on a report by Rabah, the architect of the city wall which states that there was a distance of one mile (a measure used then that is different in length from the contemporary mile) between each gate and the following one in the city's circumference.⁵³ This would make the diameter of the city 2512 meters.⁵⁴

The circular city was divided into three zones. First, at the center, there was the *al-rahbah*, within which the palace of al-Mansur, the congregational mosque, and two other buildings were located. These two buildings were used by the chief of police and the chief of the guards. In the second zone, the inner ring surrounding the *rahbah*, there were the residences of the younger sons of al-Mansur and his servants, and the different government agencies. In the third zone, the outer ring, there were the residences of the Caliph's army chiefs and his *mawali*. The city was walled and had four gates, each with an arcade street going all the way to the *rahbah* and thus dividing the city into four quadrants.⁵⁵ (Figure 7).

Writers on Baghdad have been fascinated by its circular shape and have, therefore tended to neglect the areas surrounding it which, according to al-Ya^cqubi, were planned and developed at the same time. In this regard, he relates that al-Mansur assigned the laying out of the



Legend

- A. The Round City, also known as Madinat al-Mansur. The first palace complex of the 'Abbasid Capital, it contained the palace-mosque of the Caliph, the administrative agencies of the government, and the residence of various public officials. Construction began in A.H. 145 and was completed in A.H. 149.
- B. Al-Harbiyah. A suburban area north of the Round City, it contained the military cantonments of the Khurasani army stationed at Baghdad. Its development was concurrent with the construction of the Round City, with its major growth in A.H. 151 and 157.
- C. Al-Karkh. The great market suburb of the greater urban area, it was occupied in Pre-Islamic times, with large-scale development concurrent with the construction of the Round City. It was redeveloped in the suburban expansion of A.H. 157.
- D. Al-Rusafah. The Palace complex of the Caliph al-Mahdi, it contained his residence and a second principal mosque. Construction began in A.H. 151 and was completed in A.H. 159.
- E. Al-Mukharrim. A residential district, it was possibly occupied as early as A.H. 151, with significant development after A.H. 159.
- F. Al-Khuld. Al-Mansur's second residential palace, it was built in A.H. 157 and later occupied by Harun al-Rashid and Muhammad al-Amin.
- G. Dar al-Khilafah. The third palace complex, it was built by the 'Abbasid Caliphs in stages, subsequent to their return from Samarra in A.H. 279.
- H. Al-Shammasiyah. Originally a staging ground for military reviews and a camping ground, it was developed as a palace area by the Buyid amirs in the tenth century.
- I. Bab al-Taq. Contained the commercial section serving al-Rusafah and the upper reaches of al-Mukharrim. The general area probably underwent some development as early as A.H. 151 with great expansion after A.H. 159.

Figure 6: Baghdad

Chronological map of Baghdad.

Source: Lassner, *The Shaping of the 'Abbasid Rule*, Princeton (1980), pp. 186-187.

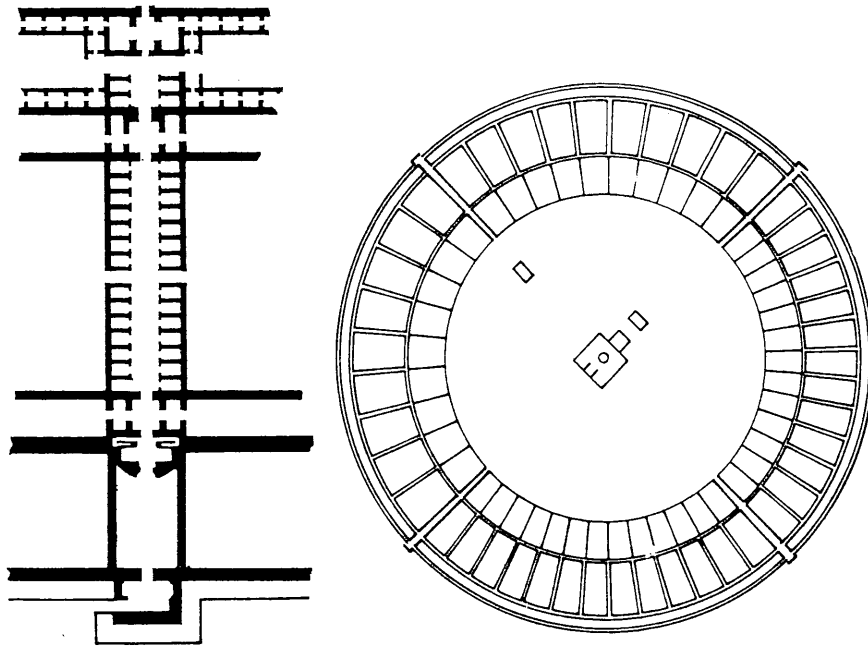


Figure 7: Baghdad

(right) the round city of al-Mansur.

(left) plan of the arcades between one of the gates and the rahbah, showing the outer and inner ring.

Source: Lassner, *The Shaping of the Abbasid Rule*, op.cit., pp. 190-191.

city to four engineers, each of them, along with two other persons, being charged with a quadrant extended out from the city's inner quadrants. Within each extended quadrant, al-Mansur defined the grants of each individual and his followers; he estimated areas for the shops and markets within each *rabad* (quarter), and instructed the engineers to make street widths fifty cubits and lane widths sixteen cubits. Al-Ya^cqubi then goes on to enumerate and describe the fiefs (*qata'i^c*) and *arbad* (pl. of *rabad*, quarter) in each quadrant. In each of these, he starts his description from one of the gates making it very explicit that what he was describing was outside the circular city. At the end of his description of each quadrant, he states the names of the engineer and the other two persons who were charged with its laying out.⁵⁶ All of these facts together tend to support the view that the circular city was more of a palace precinct than an integrated city,⁵⁷

especially when one remembers that al-Mansur granted all of his relatives areas outside the circle of the inner city.

In describing the organization of the city's neighborhoods, al-Ya^cqubi differentiates between those located in the outer ring inside the city, and those located outside the city. Those inside were divided into *sikak* (pl. of *sikkah*, lane). Each *sikkah* was designated as a residence for an army chief or a *mawla* and their respective retinue. The two ends of each *sikkah* were locked with heavy doors. As to the neighborhoods outside the city, al-Mansur gave orders to the engineers to make *sikak* and *durub* (pl. of *darb*, path or lane) in each *rabad*, which made them adequate for living, and to name each *darb* after the army chief or the famous person living there, or after the city or country from which the inhabitants of that *darb* came. He also ordered that, within the fiefs granted the chiefs of the army and the soldiers, certain areas should be subdivided for merchants, the general public, and those from other towns and countries.⁵⁸

An indication that these orders were followed is al-Ya^cqubi's own account of the different quarters and roads which he names after either persons, cities, or countries. As to the administrative arrangement for each quarter, al-Ya^cqubi refers to the existence of a *qa'id* (a commander) and a *ra'is* (a chief) for each quarter.⁵⁹ Regarding the services within each quarter, al-Ya^cqubi relates that al-Mansur instructed the individuals in charge of laying out the city to provide for markets, streets, mosques, and public baths in each quarter.⁶⁰

Changes in the circular city of al-Mansur started as soon as it was constructed; however, the city seems to have preserved its general shape for many years thereafter. One of the changes that took place soon after its foundation was the closing of the portals from the inner ring opening onto the *rabah*, thus separating the government agencies and the residences of al-Mansur's younger sons from the *rahbah* and minimizing the need for entering the *rahbah*. Another change was the transfer of markets to each of the four arcades leading from the gates at the outside wall to the *rahbah*.⁶¹ Then, in the year 157/773, these markets were moved to al-Karkh outside the circular city; al-Mansur

widened the city's streets to specified widths and ordered all *dur* which interfered with the street widening to be demolished. Finally, al-Mansur built his palace, named al-Khuld, outside the circular city and moved there in the year 158/774.⁶² Despite this, the general shape of the city was preserved and still functioned in part, it seems, until at least the year 307/919-20. During that year, it is reported that a break-in took place in the prison inside the round city, and therefore, the outside gates of the city were closed so that none of the prisoners could escape. Soon after that, in the year 329/941, it is reported that the green dome in al-Mansur's palace inside the round city had collapsed because of heavy rain, and in the 330's/940's, a flood caused the collapse of the Kufah gate, permitting water to enter the city which demolished many buildings.⁶³

Samarra'.⁶⁴ Samarra' was founded by al-Mu^ctasim (218/833-227/842) after moving from Baghdad in 221/836. It served as the residence and capitol of the Abbasids for about half a century after which the caliphate returned to Baghdad and the city fell in ruin. The remains of Samarra' show that the city extended for approximately 35 km. along the eastern side of the Tigris (including al-Ja^cfariyah built by al-Mutawakil), and that it followed an orthogonal grid plan. (Figure 8) The remains of Samarra' as well as the textual evidence both show that the city was conceived according to a well defined plan. Al-Ya^cqubi relates that when al-Mu^ctasim acquired the land he brought the engineers together and asked them to choose the best sites for his palaces. He then laid out the fiefs and grants for his generals, his secretaries and the general public. In addition, he laid out the congregational mosque and the markets around it. After establishing buildings on the eastern bank of the Tigris, al-Mu^ctasim then built a bridge to the western bank and laid out the buildings and gardens there. Al-Ya^cqubi goes on to describe the forms of the Samarra' buildings. He reports that they were built in the form of palaces within gardens. Each palace included its own sitting areas (*majalis*), pools and squares (*mayadin*)⁶⁵ (Figure 9).

Regarding the spatial organization of Samarra', al-Ya^cqubi reports that al-Mu^ctasim designated certain quarters for his Turkish troops,

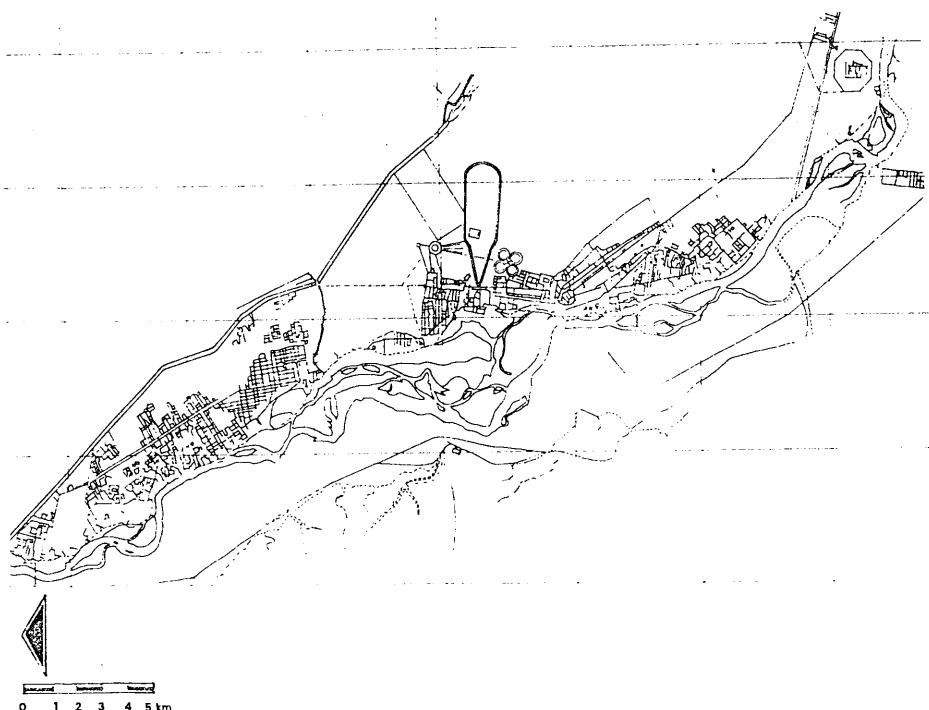


Figure 8: Samarra'

Map of Samarra' al-Ja'fariyah, and surroundings.

Source: Herzfeld, *Geschichte der Stadt Samarra*, Hamburg (1948).

imposing very strict regulations on their social and economic life. These quarters were separated from those of the general public, and each of them had its own mosques, public baths, and market which included the necessities of daily life. They were located in the far east and far west corners of the city, away from the main markets and its crowds, and had wide streets and long lanes. As to the generals from Khurasan, the secretaries and some of the government agencies, they were located along the major street (*al-shari' al-A'zam*), while the general public inhabited the streets and lanes branching from this major road.⁶⁶

The growth of Samarra' continued after al-Mu'tasim's death. The Caliph Al-Wathiq (227/842-232/847) is said to have built a palace for himself there, increasing the grants and fiefs, and extending the markets. This gave the local landowners the impetus to restore their homes, since up to that time they had regarded Samarra' only as an encampment. However, the major growth and development of



Figure 9: Samarra'
 Plan of Jawsaq al-Khaqani palace.
 Source: Creswell, *Early Muslim Architecture*, v.II.

Samarra' had not yet reached its peak. This was to take place during al-Mutawakkil's reign (232/847-247/861). He rebuilt the congregational mosque at the beginning of the area known as al-Hayr and undertook the development of that area, adding two major streets. It is also reported that he redesigned the area at the end of the city's main street near the mosque, which was laid out into three wide lanes connecting the mosque to the main street. Each lane was made one hundred cubits in width with shops on both sides.⁶⁷

A major development which al-Mutawakkil undertook, however, was to have founded al-Ja^cfariyah, which he regarded as new city, in the proximity of Samarra's north-western section. Al-Ja^cfariyah, founded in 245/859, took a linear form parallel to the river. It was planned around a major street, which was approximately eleven kilometers (3 *farsakh*) in length and ninety-eight meters (200 cubits) in width. The street begins with the *dur* of Ashnas, at the north-western end of Samarra' and ends with al-Mutawakkil's palaces. On both sides of the street al-Mutwakkil granted areas to his generals, secretaries, soldiers and the general public. (Figure 10). However, al-Ja^cfariyah's history is a short one. When al-Mutawakkil was killed in 247/861, his son al-Muntasir (reigned 247-861-248/862) decided to return to Samarra'. He is reported to have ordered the inhabitants to raze the buildings and to carry back with them any movable materials.⁶⁸



Figure10: Samarra'

Plan of al-Ja^cfariyah built by al-Mutawakkil.

Source: Tamari, "Aspetti Principali Dell' Urbanesimo Musulmano",
Palladio Rivista di Storia Dell' Architectura, XVI (1966), p. 55.

To recapitulate the development of Baghdad and Samarra' one can clearly see the existence of one important phenomenon, namely, the town as the "glorious garment" of the ruler. The development of Samarra' and al-Ja^cfariyah was a mere continuation of a process begun by al-Mansur in al-Hashimiyah, the circular city, and the palatial development in Baghdad that followed after he left the round city. This development continued throughout the Abbasid period. However, with the later Abbassids, the desire to emulate and excel the past had become paramount, and shows that there was a fundamental change of attitude from that of al-Mansur's time. Al-Mansur's building programs in al-Hashimiyah and Baghdad were conceived within a general framework that was intended not to strengthen al-Mansur himself as a ruler but to glorify and ensure the continuation of the Abassid rule, while later building programs were intended to glorify the reign of the specific ruler and thus were associated with the ruler himself. As a result, once that ruler had vanished, they tended to fall apart.

By comparing Baghdad and Samarra' on the one hand and the *amsar* towns on the other, one finds many similarities. The use of the system of fiefs or grants as a means of developing the town existed in both; and, in both cases, the internal development was left to the members of the various groups, whether they were of a tribe, of an army contingent, or of a group which came from one country. Also to be found in both is the conception of the congregational mosque and the *dar al-Imarah* as the center of the town, although this is not as clear in the case of Samarra' as it is for Baghdad. And, in both Samarra' and the *amsar*, the markets were located around the congregational mosque. In this respect, Baghdad is an exception. A major difference between the *amsar* towns and Baghdad and Samarra', however, exists in the way they were planned. Baghdad and Samarra' were laid out according to a highly ordered city plan, while the *amsar* towns seem to have been laid out to fit a general conception without necessarily having a preconceived and ordered plan. Most interestingly, however, the plan of Baghdad came to be completely transformed to the point where the city pattern resembled that of the *amsar* towns of the medieval period. This, of course, leads me to speculate as to what

would have happened to Samarra's highly ordered plan if the city had remained in use for two or three more centuries?

C. Land Subdivision

The process of physical development within Medina, the *amsar* towns, and Baghdad and Samarra' shows that land was usually given to tribes, army detachments, or individuals. These grants or *khitat* formed, it seems, the origin for city quarters. The subdivision of land within the *khitat* or grants was evidently left to the discretion of the quarter's inhabitants. This should not, however, suggest that there were no rules on how to proceed in regard to the internal spatial organization of the *khitat*. This process was started by the Prophet himself in Medina, where he granted the *khitat* for the different tribes and the *dur* for individuals. On instruction from 'Umar, this process was also followed by the army generals in the *amsar* towns. And the laying out of Baghdad and Samarra' shows that this process continued to be in use during the second and third (eighth and ninth) centuries.

Land subdivision within the *khitat* appears to have developed according to needs. This can be seen in al-Suyuti's account of al-Fustat. As we saw earlier, he reports that when reinforcements arrived and people became numerous, each party made room for its relatives, till the building so increased that the *khitat* of Jizah closed in on itself.⁶⁹ Another indication of this is the *baqi'* of al-Zubayr in Medina, granted to him by the Prophet. There, Ibn Shabbah enumerates six *dur* for Al-Zubayr's sons and relatives, and another account shows that more than one hundred years later part of the *baqi'* was still left open.⁷⁰

Islamic jurisprudence is an important factor in regard to the process of transformation within these quarters and to the subdivision of *durs*. Two notions within the law appear to have played a major role in this process. First, the development within Islamic jurisprudence of the system of *shuf'ah* (pre-emption), which gives a preferential right for a neighbor to buy his neighbor's house or land if the latter decides to sell, should have helped the quarters within the city preserve their own

character. Using this system, the members of a *khittah* could have easily denied access to the quarter by any outsider. El-Ali states that this was the case in the early *amsar* towns,⁷¹ and it seems logical to suggest that this must have been the case in other Arab-Muslim cities as well.

The second factor which seems to have played a major role in land subdivision is the partition of *dur* according to the rules of inheritance. Inheritance law and its application in Islam may explain a great deal about the structure and process of transformation of land and property within the city. The *fiqh* (jurisprudence) books introduce many hypothetical cases regarding this subject, which usually comes under inheritance laws. These cases deal with what can be divided and with the question of access when a large house has been partitioned. Malik had the opinion that any property, either land or buildings, inherited by a group must be divided among them, should anyone of them demand it.⁷² He said,

The bath-house, the cistern, the house, the piece of land or the small shop in the market, are all to be divided (among the inheritors) ...even if the share of each one cannot be used.

On this he invoked the Quranic Verse:

From what is left by parents and those nearest related there is a share for men and a share for women, whether the property be small or large -- a determinate share. (Q, IV, 7)

Malik also related that this was the practice of the people of Medina, a practice they followed even when some people could not make use of their shares.⁷³ Ibn al-Qasim (d. 191/807) also related that he was told by some of the people of Medina that when someone died and left several houses where the inheritors resided in one of these and where the houses, including the one where they resided, were equal in their value and in their location within the city, but where the inheritors

disputed in regard to the house in which they resided, then, the practice was to divide this house so each one would have his share within it. The remaining houses were then to be partitioned so that each individual would have his whole share in one place when possible.⁷⁴

Many examples of the practice of the people of Medina during the first century can be extracted from the accounts of Ibn Shabbah. When he enumerates the *dur* of the *muhajirun* up to his own time (first half of the third century A.H.), he also refers to the way they have been subdivided and through whose ownership they have passed. His account delineates the impression that all the *dur* of early Medina were later divided into at least two parts, some into three or more. The *dar* of Talhah b. ʿUbayd Allah, for instance, was divided by his sons into three *durs*, and that of ʿAmmar b. Yasir was first divided into two parts, and then, later, one of these parts was again divided into two. Those *dur* which were divided into two parts are far too numerous to mention here.⁷⁵ Sources are very vague concerning the size of those *dur* which could be divided into two or more parts, with each part still being functional enough to serve as a *dar*. However, an account of Ibn Shabbah, when he defines the boundaries of one of these *dur*, gives us some idea about their size. In defining the limits of *dar* Subh which was first built by Huwaytib b. Abd al-ʿUzza, he reports that, from the *qiblah* side, it abutted *rahbat* al-Hukm; from the north, the *zuqaq* (a lane) leading to the *dar* of al-Muttalib; and from the west the street leading to *rahbat* al-Hukm.⁷⁶ The fact that this *dar* was bordered by three streets implies that it must have been large enough to reach the size of a half block. By comparing this with the subdivision plan of old Medina (Figure 11), one would get the idea that each of these *dur*, of which Ibn Shabbah speaks and which according to his description of *dar* Subh reached the size of about half a block, must have encompassed several of the present houses.

Regarding access when a house is divided, Ibn al-Qasim was asked about the legality according to Malik of an arrangement in a house that was divided between two individuals where one owned the passageway while the other had been granted the right to use it in order to reach his part of the house. His reply was that this was permitted. In another

question about whether one could buy only the right to pass through another house, Ibn al-Qasim affirmed his previous answer that this also was permitted.⁷⁷ A witness to this effect is reported by Ibn Shabbah in early Medina. There he refers to a *dar* owned by Sa^cd b. Abi Waqqas which was in the back of another *dar*, and he states that *dar* Sa^cd has the right of way through this other *dar*. As to how this came about, it is reported that the two were originally one unit owned by Sa^cd.⁷⁸

We can see from the practice regarding the partition of houses in Medina, the opinion of Malik, the story of Ibn al-Qasim, and the hypothetical cases about access, that the practice of dividing the *dar* into parts did take place in Medina during early Islamic times, and that it must have continued. These cases also suggest that such a practice also took place in other Arab-Muslim cities; it explains very well how the non-regular subdivision of land in these cities came about. (Figures 11, 12, 13).



Figure 11: Medina

Land subdivision plan of the old city.

Source: Author's reconstruction from several land subdivision maps of separate neighborhoods. The maps were the result of surveys carried out by the Medina Town Planning Office, the Medina Department of Finance, and the author.

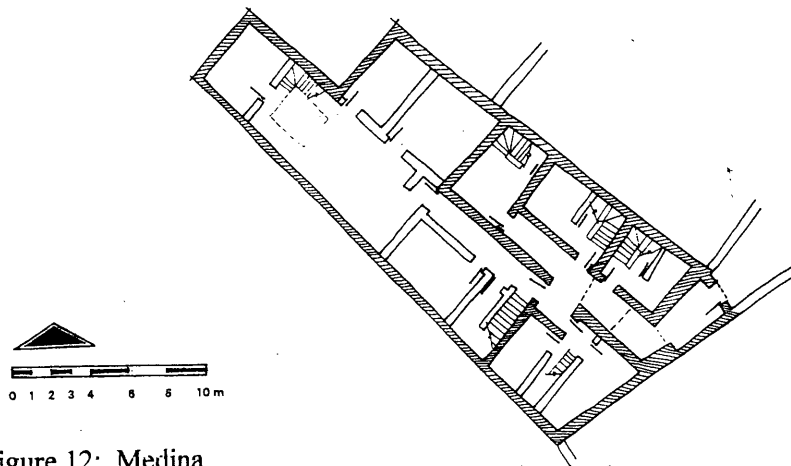


Figure 12: Medina

A *dar* divided into five houses. A cul-de-sac is in the center to provide access with the original door of the *dar* still in place at the beginning of the cul-de-sac. The *dar* was owned by al-Miknas family who made it into a *waqf* which is still named after the family. For the interest of the *waqf* the *dar* was later divided and rented.

Source: Plan- a survey undertaken by the author. Socio-economic data - Medina Department of Endowment; and Medina Town Planning Office, "Dirasat Mantiqat al-Aghawat," a report prepared for the Ministry of Municipal and Rural Affairs (1977).

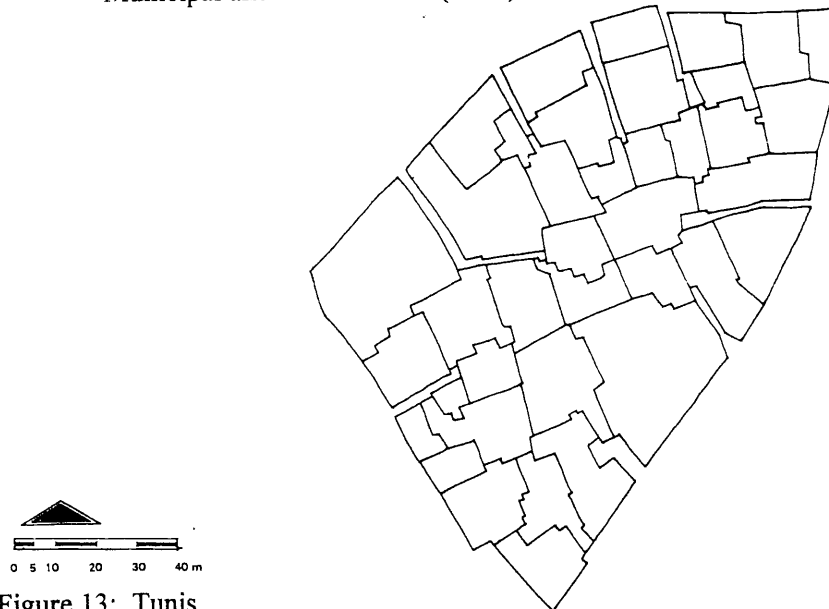


Figure 13: Tunis

Example of an irregular land subdivision. The plan clearly indicates that lots have been subdivided according to needs and sometimes after being built where people were forced to follow building lines and thus producing an irregular subdivision.

Source: Lezine, *Duex Villes d'Ifriqiya*, op. cit., p. 161.

To cite only a few actual cases, which took place in later times, there is that which Ibn al-Rami (d. 734/1334) relates from Tunis, where two individual owned two houses. The houses were back to back and each one of them opened onto separate lanes. Between the two houses, there was a covered passage of ten palms in length. At both ends of this passage, there were old doors which the owner of each house used to close. Each of the two houses claimed the passage for himself. The judge ordered the experts, among them Ibn al-Rami himself, to look at the houses and to report back to him about the case. The experts found that the passageway opened at the middle of the eastern house and at the corner of one of the rooms west of the door in the western house. The judge, Ibn al-Rami relates, ordered them to divide the passageway between the two in half. Thus, they built a baked brick wall in the middle of the passageway where half of it was left at the middle of the eastern house and the other half became a kind of storage space for one of the rooms of the western house.⁷⁹ In another case, also from Tunis, where two neighbors disputed the ownership of the wall between them, Ibn al-Rami was asked to investigate and he related that there was a wall running from east to west, at the middle of which there was a door where one could go from one of the places to the other. The two places, he said, were originally one and their old owner had divided it in half and sold each half separately. The judge ordered the door to be closed.⁸⁰ The third case is that of a person from Medina (1080/1669) who owned a hall (*qa'ah*) within a *ribat*, where he had the right of access through the *ribat* as well as that of using the well and the latrine. A dispute took place about the access and a separate entrance was provided for the hall,⁸¹ thus granting it the privilege of being an independent lot.

In this chapter an attempt has been made to trace the origin and process of development of the traditional physical environment in the Arab-Muslim city. Islam came to an already existing world -- the Arabian peninsula, and the Persian and Byzantine empires. As *Dar al-Islam* spread throughout these territories, the Arab-Muslims inherited several traditions and, more specifically, several models of towns and cities. With the spread of Islam the Arab-Muslims also founded their own towns and cities, which seem to have followed one model.

The model for the cities founded by the Arabs use the main mosque, the *dar al-Imarah*, and the *suq* as the focal point of the town. Surrounding this center were the *khitat* which when the town were later fully built formed their different quarters. The *khittah* system had been used as a unit of planning. This system was repeated in Medina, in the *amsar* towns, and in Baghdad and Samarra'. This system was based on the tribe as an already existing institution, with each tribe assigned its own *khittah*. However, this institution was flexible enough to expand or shrink to suit the standard size, that is the certain number of people which seems to have been established for the *khittah*. In this model routes were evidently designated from the beginning; however, streets as such were not precisely defined and marked. Therefore, later pressure for land development, coupled with certain conceptions in regard to land ownership in general and public vs. private ownership in particular, resulted in the tortuous street pattern which characterizes this model.

The origin of this model, especially the *khittah* system, can be found in the territorial conceptions of Arab tribes where each tribe knew more or less its own territories. These territories were usually collectively owned by the tribe and were used according to the needs of the tribe's members. The model seems to have been applied in pre-Islamic Medina (Yathrib) which was formed of several settlements, each of them belonging to a certain tribe. After the *hijrah*, the model was confirmed and continued by the Prophet but with the clear intention of unifying these individual settlements into one city. This can be seen in the designation of his mosque as the only congregational mosque and in the defining of the area of the main *suq*, thus bringing a focus for the originally scattered settlements. The model of Medina as it developed during the Prophet's time was replicated in the *amsar* towns of Basrah, Kufah, and Fustat. The model was also followed in the second and third (eighth and ninth) centuries in the more orderly plans for the cities of Baghdad and Samarra'.

Land subdivision within the *khittah* seems to have also been affected by this conception of tribal territories. Since the *khittah* was looked at as collectively owned by the members of the tribe, individual

members could appropriate land and use it according to their needs. Members of the tribe who came later did have the right to settle in the *khittah* if there was available space. However, within the *khittah*, once a member of the tribe built on a piece of property this property legally became his own. Therefore, in order to preserve the character of the *khittah* and to exclude outsiders from moving in, the inhabitants usually opted for *shuf'ah* (pre-emption), a system in Islamic law giving a person the preferential right to buy his neighbor's house or land if the latter decided to sell. This system must have continued to work not only in the quarters of the early *amsar* towns but also in their later stages of development and in other Arab-Muslim cities as well.

Another factor which seems to have played a major role in affecting the subdivision of land and property in the Arab-Muslim city is the Islamic law of inheritance. This law and its application indicate how the process of subdivision and transformation of land and property worked within the city. The insistence of the law on subdividing any property among the inheritors if they preferred to do so explains the non-regular land subdivision in these cities.

Notes

- 1- For the classification of these cities and the process of urbanism in Islam, see, A. Ismail, *Origin, Ideology, and Physical Pattern of Arab Urbanization*, a Ph.D. dissertation, Univ. of Karlsruhe, 1969, Ch. 6; E. Pauty "Villes spontanees et villes crees en Islam", *Annales de l'Institut d'Etudes Orientales*, Universite d'Alger, IX (1951), pp. 52-57; G. Marcais, "La conception des villes dans l'Islam", *Revue d'Alger*, II (1945), pp. 517-533; F. Bent, "The Ideology of Islamic Urbanization," *Int. J. of Comparative Sociology*, IV, No.2, (1963), pp. 211-226; G. von Grunebaum, "The Structure of the Muslim Town," in his *Islam: Essays in the Nature and Growth of a Cultural Tradition*, London, (1955), pp. 141-158.
- 2- Von Grunebaum, op. cit., pp. 146-148. Von Grunebaum is taken here as the best example of these descriptions of the Muslim town. See also, R. LeTourneau, *Les villes musulmanes de l'Afrique du nord*, Alger (1957); X. dePlanhol, *The World of Islam*, Ithaca, (1959).
- 3- Brunschvig, "Urbanisme medieval et droit musulman," *Revue des Etudes Islamiques*, XV (1947), pp. 137-155. Brunschvig points out in this article that

Muslim jurists dealt with questions concerning the use of public and private space within the city, the uses of streets and lanes, the duty to repair walls endangering public safety, and comparable matters. He draws his material primarily from North African authorities of the Maliki School. Several others have alluded to the treatment of these problems in the Muslim city. O. Grabar, for instance, mentions briefly disputes about property rights, the ownership of walls between houses, and the uses of the street lanes. He suggests that the Medieval Muslim world was moving towards zoning regulations. See his "Cities and Citizens," in B. Lewis (ed.), *Islam and the Arab World*, London (1976), p. 93; Also J. Abu-Lughod, "Contemporary Relevance of Islamic Urban Principles," *Ekistics*, V.47, N. 280 (Jan-Feb 1980), pp. 6-10, the whole issue is devoted to Islamic Human Settlements: M. Serageldin. Land Tenure Systems and Development Controls in the Arab Countries of the Middle East," the Aga Khan Award for Architecture, *Housing Process and Physical Form*, Proceedings of Seminar Three, (March, 1979), pp. 75-78.

- 4- Von Gruenebaum, op. cit., p. 153.
- 5- J. Sauvage, *Alep*, Paris, (1941), pp. 66-67; "Esquisse d'une histoire de la ville de Damas," *Revue des Etudes Islamiques*, VIII, (1934), pp. 441 and 452.
- 6- Von Grunebaum, op. cit., p. 149.
- 7- Sauvaget, *Alep*, op. cit., pp. 104-105.
- 8- See sections B and C in this Chapter and Chapters II and III.
- 9- R. Bulliet, *The Camel and the Wheel*, Cambridge, Mass.: Harvard University Press, (1975).
- 10- The best source on the early morphology of Medina is, 'Umar b. Shabbah (d. 262/876), *Tarikh al-Madinah al-Munawwarah*, Manuscript of Medina, being edited by F. Shaltut, the reference hereafter is to the type-script of Dr. F. Shaltut. The best published source is A. al-Samhudi (d. 911/1505), *Waf' al-Wafa'*, 2nd ed., Beirut (1971). See also, S. El-Ali, "Khitat al-Madinah" *Al-^cArab*, V.I., No.12, (1967), pp. 1057-1122; and "Muslim Estates in Hidjaz in the First Century A.H." *Journal of the Economic and Social History of the Orient*, V.II, Part 3, (Dec. 1959), pp. 247-261; H. al-Jasir, *Qata'ir al-Nabi*, Riyadh Dar al-Yamamah, (forthcoming). For a brief historical account, see, Fr. Buhl, "Al-Madina," *Encyclopedia of Islam*, 1st ed., Leiden, (1936), v. III, pp. 83-92.
- 11- Al-Samhudi, op. cit., v.I., pp. 156-166 for the settlements of the Jews: and v.I., pp. 190-215 for the settlements of the *Ansar* tribes.

- 12- The *ansar* is a term ascribed to the settlers of Medina from the tribes of al-Aws and al-Khazraj who accommodated the Prophet and the companions who migrated with him from Mecca. The latter were called *al-muhajirun*.
- 13- Al-Samhudi, op. cit., v.II, pp. 717-734, "the *dur* surrounding the Prophet Mosque."
- 14- Ibid., "The *ansar* settlements", v.I, pp. 190-215; "*al-Muhajirun* Settlements," v.II, pp. 757-765.
- 15- The specific area where the camel knelt down is reported to have been owned by two orphans; the Prophet bought it from them. Al-Samhudi, op. cit., vo.I, pp. 254-270, 322-340.
- 16- A witness to this effect is a report which relates that when the Prophet riding on his camel, passed by Banu Salim, he took a right when he reached the settlement of Ibn Ubay; then he went on the road, which was open (*fada'*) then, till he reached Sa'd b. 'Ubadah. Ibid., v.I, p. 259. Also, the settling of *al-muhajirun* in area around the mosque indicates that it must have been open.
- 17- Ibid., v.I, p. 326. *Khitat* pl. of *khittah*. It "seems to convey the idea of marking out with a line; its general meaning is ground occupied for the first time, a 'pitch' or holding; hence it comes to mean a site of any sort. In connection with Fustat, as with other towns founded by the Arabs, the sense is often connected specially with the foundation... The area occupied by individuals among the founders for their houses were known as their *khittahs*... The term applies equally to collective holdings. Where the dwellings of bodies, such as tribes or sub-tribes, were grouped within a common boundary, the ground included was called the *khittah* of the group. It is to be noticed that a *khittah* of this kind might be a part of another, as, for instance, the *khittah* of a tribe might contain *khittahs* or sections, and these, in turn, *khittah* of families." A.R. Guest, "The Foundation of Fustat and the Khittahs of that Town," *J. of the Royal Asiatic Society of Great Britain and Ireland*, (January 1907), pp. 49-85.
- 18- Yagut (d. 626/122g) *Mu^cjam al-Buldan*, Beirut, (1955-57), v.V, p.86.
- 19- Al-Samhudi, op. cit., v.II, pp.757-765.
- 20- Ibid., v.IV, pp. 1153-54, v.II, pp. 752.
- 21- Ibid., v.II, pp. 757-765.
- 22- Bukayr refers to these mosques by name. They are the mosques of Banu ^cAmr b. al-Najr, Banu Sa^cidah, Banu Salamah, Banu Rabih of b. ^cAbd al-Ashhal, Banu

- Zurayq, Ghifar, Aslam, and Juhaynah. He could not remember the name of the ninth mosque. A. al-Kittani, *al-Taratib al-Idariyah*, 2 vols., 2nd ed., Beirut, (1971), VI, pp. 77-78.
- 23- Al-Samhudi refers to several of the tribal cemeteries in Medina. Among them that of Banu Haram and that of Banu Salamah. Al-Samhudi, op.cit., v.III, pp. 888-892; v.I, p. 326.
- 24- Ibid., v.II, pp. 747-748.
- 25- An indication that the suq of Medina was still left open during ^UUmar's time can be induced from two reports by Ibn Shabbah and Ibn Zabalāh. The former relates that ^UUmar saw a bellows owned by an iron smith (*kir*) in the market, and that he kept kicking it with his foot until it was demolished. Then ^UUmar shouted to the blacksmith: "Do you disparage the market of the Prophet?" The latter also relates that ^UUmar passed by the door of some Mu^Uammar in the market where he had a jar located beside his door. ^UUmar ordered the jar to be removed, but Mu^Uammar told him that it was a water jar from which the passersby drink. Therefore ^UUmar conceded. However, some time later, ^UUmar found out that a shade was constructed for the jar. He then ordered both to be removed. Al-Samhudi, op. cit., v.II, pp. 748-753.
- 26- Al-Samhudi suggests that Baqi^U al-Zubayr was located within what we know today as the al-Aghawat neighborhood, and that the *rahbah* known as *rahbat* al-Khudam or al-Aghawat on the street between the mosque and al-Baqi^U was part of Baqi al-Zubayr. Ibid., v.IV, p. 1153. For the distance between al-Musalla and the Prophet's mosque also see, Ibid., v.II, pp. 739-740.
- 27- For al-Balat see al-Samhudi, v.II, pp. 734-747; Regarding the streets' width reported by Ibn Shabbah, al-Samhudi indicates that some of them still had the same width in his own time. Ibid., v.II, pp. 725, 726, 727, 732, 733, 740. for the specialized *suqs* during Ibn Shabbah's time, see, Ibn Shabbah, op. cit., pp. 139-140, 146, 148, 149, 151, 152, 173. The Cubits during that time equals 49.5 cm; see, note 54.
- 28- El-Ali, "The Foundation of Baghdad," in A.H. Hourani, S.M. Stern (eds.), *The Islamic City*, Oxford, (1970), pp. 88-89.
- 29- al-Baladhuri, (d.279/892), *K. Futuh al-Buldan*, Leiden, (1968), pp. 346-372; S. El-Ali, "Khitat al-Basrah," *Sumer*, v.VIII, (1952), pp. 72-83, 281-302; *Al-Tanzimat al-Ijtimaciyyah wa-al-Iqtisadiyah fi al-Basrah*, Baghdad, (1953); S.H. Longrigg, "Al-Basra", *Encyclopedia of Islam*, 2nd ed., Leiden, (1960), v.I, pp. 1085-1087.
- 30- Al-Baladhuri, op. cit., p. 347.

- 31- Referred to by J. Zaydan, *Tarikh al-Tamdun al-Islami*, 2nd ed., Cairo, (1959), v.II, p. 176.
- 32- Al-Baldhuri, *op. cit.*, p. 347.
- 33- Al-Ya^cqubi (d. 284/897), *Kitab al-Buldan*, Leiden, (1860), pp. 94-96; M. al-Tabari (d. 311/923) *Tarikh al-Rusul wa-al-Muluk*, Beirut, (1965), Part I, v.5, pp. 2486-2495; al-Baladhuri, *op. cit.*, pp.275-289, L. Massignon, "Explication du plan de Kufa," *Melange Maspero*, v.III (1937), pp. 336-360; K. al-Janabi, *Takhtit Madinat al-Kufah*, Baghdad (1967); T.M. al-^cAmid, "Ta'sis Madinat al-Kufah," *al-Mu'arrikh al-^cArabi*, no.6, (1978), pp. 99-116.
- 34- Al-Tabari, *op. cit.*, p.2488.
- 35- Ibid., pp. 2489-90.
- 36- Ibid., p. 2490.
- 37- Al-Janabi, *op. cit.*, p. 74.
- 38- Al-Janabi lists twenty-three of these mosques. Ibid., p. 88.
- 39- Al-Ya^cqubi, *op. cit.*, pp. 95-96; for a list of some of the open spaces and cemeteries in al-Kufah, see, al-Janabi, *op. cit.*, pp. 82, 93-94.
- 40- Al-Tabari, *op. cit.*, p. 2491.
- 41- Ibn ^cAbd al-Hakam (d. 257.871), *Futuh Misr*, Leiden, (1920), pp. 91-139; al-Maqrizi (d. 846/1442), *al-Mawa^ciz wa-al-I^ctibar fi Dhikr al-Khitat wa-al-Athar*, 2 vols., Cairo (1272 A.H.) v.I, pp. 297-ff.; A.R. Guest, "The Foundation of Fustat," *op. cit.*; A. Bahgat, A. Gabriel, *Les Fouilles d' al Foustat*, Paris, 1921; Egyptian Service des Antiquites, *Comptes Rendus des Exercices*, (1920-24), pp. 159-64; G. Scanlon, "Housing and Sanitation," in Hourani, Stern (eds.), *op. cit.*, pp. 179-194.
- 42- Ibn ^cAbd al-Hakam, *op. cit.*, p. 91.
- 43- Al-Ya^cqubi, *op. cit.*, p. 118.
- 44- Ibn ^cAbd al-Hakam, *op. cit.*, p. 98.
- 45- Al-Maqrizi, *op. cit.*, v.I, pp. 297-298; referred to by Guest, *op. cit.*, pp. 58-59.
- 46- Ibid.

- 47- Ibid., p.83.
- 48- Ibid., mosques, p. 80; open spaces, p. 77.
- 49- Al-Suyuti, *Husn al-Muhadarah*, Cairo, (1299 A.H.), v.I, p. 81; referred to by Guest, op. cit., p. 78.
- 50- See the description of medieval Fustat, al-Maqrizi, op. cit.; and the archaeological investigation, Scanlon, op. cit.
- 51- Al-Ya'qubi, op. cit., pp. 4-28; al-Katib (d.463/1071), *Tarikh Baghdad*, 12 vols., Beirut (1966), v.I; J. Lassner, *The Shaping of the Abbasid Rule*, Princeton (1980), pp. 139-247; also, "The Caliph's Personal Domain: The City Plan of Baghdad Re-Examined," in Hourani, Stern (eds.), op. cit., pp. 103-118. S. El-Ali, "The Foundation of Baghdad," in Hourani, Stern (eds.), op. cit., pp.88-101; M. Jawad, Al Susah, "Madinat al-Mansur wa-Jami 'uha," *Sumer*, v.XXII, parts 1 & 2 (1966), pp.1-19.
- 52- Al-Khatib, op. cit., v.I, pp. 66-67.
- 53- Lassner, "The Caliph's," op. cit., p. 108. Rabah's reference seems to be to the length of the wall. In the same report he also gives the number of sun-dried bricks used in each layer between each two successive gates. al-Khatib, op. cit., v.I, p. 71.
- 54- Jawad uses 49.5 cm. for the cubit (*al-dhirā' al-sawda'*), and 4000 cubits for the Arabic mile used then. This brings the circumference of the city to 16,000 cubits = 7893 meters, with a diameter of 5093 cubits = 2512 m.; and a total area of 20,368,000 sq. cubits. Jawad, op. cit., p. 2.
- 55- Al-Yaq'ubi, op. cit., pp. 9-11.
- 56- Ibid., pp. 13-23.
- 57- Lassner, *The Shaping*, op. cit., pp. 184-197; "The Caliph's", op. cit.; also El-Ali, "The Foundation," op. cit.
- 58- Al-Yaq'ubi, op. cit., pp. 12,14.
- 59- Ibid., pp. 14-22, 23.
- 60- Ibid., p. 14.
- 61- Lassner, *The Shaping*, op. cit., pp. 194-196.

- 62- Al-Khatib, op. cit., v. I pp. 79-80.
- 63- Ibid., pp. 73, 76.
- 64- Al-Ya^cqubi, op. cit., pp. 28-44; E. Herzfeld, *Geschichte der Stadt Samarra*, Hamburg (1948); A. Sousa, *Rayy Samarran' fi 'Ahd al-Khilafah al-'Abbasiyah*, 2 vols., Baghdad (1948-9); J.M. Rogers, "Samarra': a Study in Medieval Town Planning," in Hourani, Stern (eds.), op. cit., pp. 119-155.
- 65- Al-Ya^cqubi, op. cit., pp. 32, 38, 39.
- 66- Ibid., pp. 32-35.
- 67- Ibid., pp. 39-41.
- 68- Ibid., pp. 41-43.
- 69- Al-Suyuti, op. cit., v.I, p. 81; referred to by Guest, op. cit., p. 78.
- 70- Al-Samhudi, op. cit., v.IV, pp. 1153-1154, v.II, p. 752.
- 71- El-Ali, "The Foundation," op. cit., p. 90.
- 72- Malik, (d. 179/795), Sahuun's compilation (d. 240/854), *al-Mudawwanah*, 16 vols., Cairo (1323/1905), cited hereafter as al-Mudawwanah, v. XIV, p. 222.
- 73- Ibn al-Rami (d. 734/1334), *Kitab al-I^clan bi-Ahkam al-Bunyan*, Manuscript of Rabat, Dar al-Khizanah al-'Ammah, No. A8^o2834, p. 104.
- 74- Al-Mudawwanah, op. cit., v.XIV, p. 233.
- 75- Ibn Shabbah, op. cit., pp. 136-148; al-Samhudi, op. cit., v.II, p. 726.
- 76- Ibn Shabbah op. cit., 143.
- 77- Al-Mudawwanah, op. cit., v.XIV, p. 169.
- 78- Al-Samhudi, op. cit., v.II, p. 740.
- 79- Ibn al-Rami, op. cit., pp. 106-107.
- 80- Ibid., p. 8.
- 81- Medina Court Records, R.33, No. 859; see Appendix I.

Chapter II

RULES OF CONDUCT IN THE TRADITIONAL PHYSICAL ENVIRONMENT: LAND-USE CONTROL

Chapter II

Rules Of Conduct In The Traditional Physical Environment: Land-Use Control

A. Markets: Location And Arrangements

"..., The markets or *aswaq* (plural of *sug*), do exhibit everywhere in Islamic lands the same general structure. For one thing, the producers or retailers of the same kind of goods will always occupy adjacent stalls; in fact, each trade is likely to have one of the market lanes completely to itself. More important still, the order in which the several trades follow one another in the layout of the market is apt to be substantially the same wherever we go in Muslim territory. Near the mosque as a religious center we will find the suppliers of the sanctuary, the *sug* of the candle merchants, the dealers in license and other perfumes. Near the mosque as an intellectual center we will find also the *sug* of the booksellers, the *sug* of the bookbinders, and, as its neighbor, the *sug* of the leather merchants and the makers of slippers, all of whom are in one way or another concerned with leather goods. Adjoining this group of markets we enter the halls of the dealers in textiles, the *qaisariyya*, the only section of the *sugs* which is regularly roofed and which can be locked and where, therefore, precious materials other than fabrics will also be stored and exchanged... Next to the textile trade, the carpenters, locksmiths, and the producers of copper utensils will be located; and somewhat farther from the center, the smiths. Approaching to the gates of the town one will find, apart from the caravanserais for the people from the rural districts, the makers of saddles and those of pack-saddles whose clients are recruited from amongst those very country people. Then the vendors of victuals brought in from the country who sometimes

will form a market outside the gates, together with the basket makers, the sellers of spun wool and the like. On the periphery of the town will be situated such industries as require space and whose vicinity might be considered undesirable; the dyers, the tanners, and almost outside the city limits, the potters. Fairs will be held before the city gates where, in such towns for which the caravan trade is important, an area will be kept open in which the caravans may be assembled and unloaded; ..."1

Why do these markets exhibit the same general structure? Why does their arrangement follow one and the same pattern? Rather than looking at the *aswaq* throughout the whole Islamic world, we will briefly follow their development within the Arab-Muslim city, specifically in our previously discussed cases of Medina, the *Amsar* towns, and Baghdad and Samarra'. From this we will attempt to throw some light on the origin and the process of development of the pattern. We will look at the concept of locating a certain site for markets within the city, the development of the *qaysariyah* or the built-up *sug*, the development of specialized areas within the market, and the themes underlying the assigning of specialized uses within the market area.

The idea of designating a certain site for the market within the city was started by the Prophet himself in Medina. There, as we saw earlier, he chose baqi^c al-Zubayr, which is very close to the mosque, as the site for the market, but because of the opposition of Ka^cb b. al-Ashraf, he moved it to what is known in present-day Medina as *al-manakhah*. When the Prophet declared the site of the market, it is reported that he said: "This is your *sug*, it is not to be built or acquired, and no tax is to be levied on it." The market of Medina continued to occupy the same site without being built on until the reign of Mu^cawiyah. (41/661-60/680). The same pattern was followed in the *amsar* towns. In each of the three towns of al-Kufah, al-Basrah, and al-Fustat, the market was located from the beginning in the areas surrounding the mosque or near it. The markets in the *amsar* were left open without any building in their early years. The first building of the markets of al-Kufah, for instance, is reported to have taken place during the reign of Hisham b. ^cAbd al-Malik. (105/724-125/743). In

al-Fustat, on the other hand, building activities in the market are reported to have taken place in the reign of ^cAbd al-Malik (65/685-86/705).²

The earliest development of covered markets, or *qaysariyah* we know of took place in Medina. There, it is reported, Mu^cawiyah b. Abi Sufyan built two buildings within the market area and levied taxes on those who occupied them. The two buildings were known as *dar al-qatran* and *dar al-nuqsan*. The market of al-Fustat seems to have been next, where during the reign of ^cAbd al-Malik b. Marwan, it is reported that his governor of Egypt built several *qaysariyat* (pl. of *qaysariyah*). Among them were those of *al-^casal* (honey), of *al-hibal* (ropes), of *al-kibash* (rams), of *al-bazz* (textile). Al-Qayrawan, founded during the reign of Mu^cawiyah in the year 50/670, seems also to have had a covered *suq* around the end of the first century (beginning of the eighth century). Al-Bakri (d. 487/1094) relates that al-Qayrawan had a *suq* abutting the mosque on the *qiblah* side and that this *suq* had a roof which encompassed all stores and crafts. As to when this was first built, he does not say, but he relates that the roof had been exposed to some damage, and that Hisham b. Abd al-Malik ordered it to be removed in the year 105/724.³

The previous cases of Medina, al-Fustat and al-Qayrawan show that the tradition of having covered markets within the Arab-Muslim city began in the early Umayyad period. However, this tradition seems to have reached its peak during the reign of Hisham b. ^cAbd al-malik (105/724-125/743). He undertook a huge building program of markets in Medina and in all the *amsar* towns. In al-Qayrawan the above mentioned renovation of the roofed market was carried out in the first year of his reign. And in al-Fustat it is reported that he built a large *qaysariyah* which was known by his name. The most ambitious projects, however, were those of al-Kufah and of Medina. In al-Kufah, it is reported that Khalid al-Qasri, the governor of Iraq during the most of Hisham's reign was the first to have the markets built and covered. He is also reported to have assigned the sellers of each trade to a *dar* with an entrance of their own within the market area, and to have levied taxes on the markets. In Medina, Hisham, on the advice of his

governor there, undertook a development of the whole market area. This development was known as *dar* Hisham. It abutted the *al-musalla* area on the *qiblah* side and extended all the way to *thaniyat al-wada* in the north. Ibn Zabalāh reports that *dar* Hisham blocked all the houses and quarters in the western part of Medina, therefore, passageways with gates were provided within it in front of the quarters of each tribe and opposite to the streets and lanes of the city as well. Some lanes are reported also to have been provided with doors which could be closed when needed. The *dar* is reported to have been built in the form of *buyut* (pl. of *bayt*, a residence) of two stories; the ground floor was used for shops, which were rented to merchants and shopkeepers, while the upper floor was rented as apartments for residential purposes. Ibn Zabalāh also reports that Hisham did the same thing with the open area of *baqi*^c al-Zubayr, where this open area was built, the lanes were provided with gates that could be closed, and the whole complex was rented.⁴

It seems that specialized areas within the *suq* developed simultaneously with, if not earlier than, the development of covered markets and the involvement of the state in their building. The names of the *qaysariyat* built during ^cAbd al-Malik's reign in al-Fustat could have been an indication of the activities taking place inside them although no explicit reference to this effect is made. In the case of al-Kufah's market, it is explicitly stated that when Khalid undertook the building of the market area, he assigned the sellers of each trade to a *dar* of their own with a separate entrance. Baghdad and Samarra's markets were also laid out with specialized areas. For Baghdad it is reported that when al-Mansur decided to transfer the markets from both the circular city and al-Sharqiyah to al-Karkah, he called for a wide garment and traced the plan of the market on it. He also assigned for the seller of each trade a place of their own where they were confined to one kind of trade. Describing the market areas at al-Karkh, al-Ya^cqubi relates that for the traders of each specific good or service there were defined lanes, and that no group or trade mixed with any other nor was a category being sold with another category. He also relates that the crafts within the market area were kept separated from each other, with each type of craft having its own lane. As to the

markets of Samarra', al-Ya^cqubi reports that they were laid out around the congregational mosque with wide lanes, with each trade being separate from other types of trade, following the same pattern of the markets of Baghdad.⁵

By the time Samarra' was founded, in the early third (ninth) century, it seems that the system of covered markets with their specialized zones had become the tradition within the Arab-Muslim city. These markets were either developed by the State at once, such as the building of al-Kufah's markets or the laying of the markets of Baghdad; or they followed an incremental process of development, such as in the case of Medina after the demolition of *dar* Hisham, or the case of al-Fustat where parts of its market were built by the State at different intervals while the rest was probably developed privately. Such a system most probably developed out of the need for a steady income for the State and the cities. Thus, during the Umayyad period and especially during Hisham's reign, we have the huge building programs, referred to earlier, where markets were built and rented to shopkeepers in several cities. In other cases taxes were levied on shopkeepers too. Such was the case in Baghdad where al-Mahdi is reported to have levied taxes on the al-Karkh markets after al-Mansur's death.⁶

Once the State and the cities began to look at the markets as a source of income, and administrative machinery had to be created to supervise the markets' organization and to ensure a steady flow of income. This was to be found in the person of the *Muhtasib*, an already existing post which had been in use since the Prophet's time, and whose main concern then was to supervise the quality of merchandise and to ensure that the process of buying and selling within the market followed prescribed religious principles.⁷ It appears that the importance of this post gradually increased with the growth of the specialized market system within the Arab-Muslim city. Very soon, the role of duties of the *muhtasib* and his responsibilities in the market areas began to be specified in treatises. The treatises developed into manuals instructing the *muhtasib* on how to conduct his duties and responsibilities. Of these manuals the earliest referred to are two books

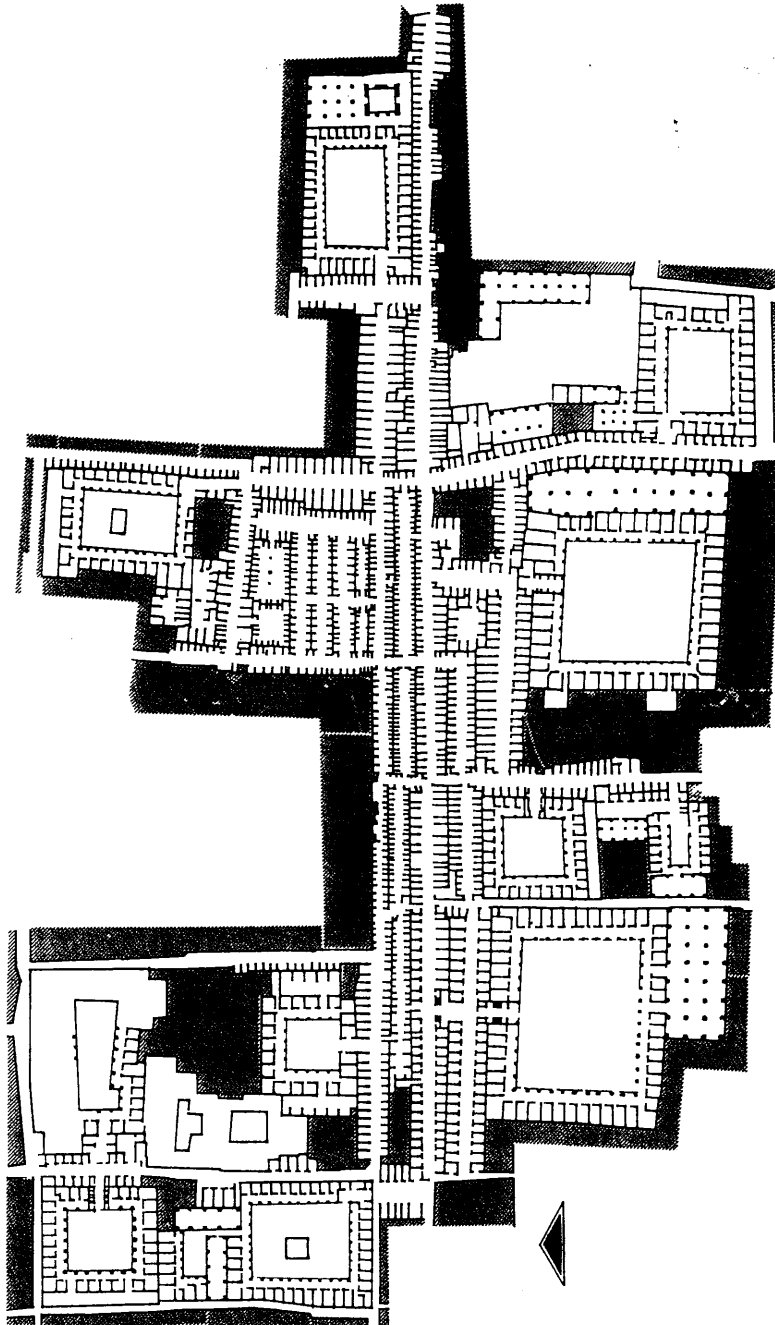


Figure 14: Aleppo

Plan of the central bazaar with its specialized *suqs*.

Source: Sauvaget, *Alep*, Paris (1941), album.

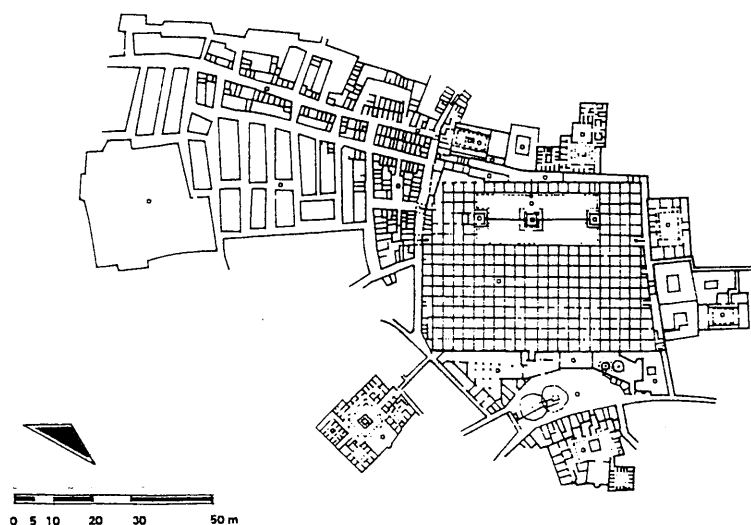


Figure 15: Fez

Plan of the main mosque and the various markets in its vicinity.
 Source: Bianca, *Architektur und Lebensform*, Zurich (1975), pp. 108-109.



Figure 16: Tunis

Plan of the Zaytunah mosque and the various markets within
 its vicinity.
 Source: Lezine, *Deux Villes d'Ifriqiya*, op. cit., p. 156.

written by al-Sarkhasi (d. 286/899) who assumed the post of *hisbah* in Baghdad during the reign of al-Mu^ctasid (279/892-289/902).⁸ The manuals of the *hisbah* provide a fairly elaborate set of customary land-use zoning regulations for the Arab-Muslim city. These regulations seem to have been exacted from an already existing pattern whose development we saw above.

Regarding the organization of the markets, al-Shayzari (d. 589/1193), informs us in his manual that:

... (the *muhtasib*) should see to it that producers or retailers of the same kind of goods have one of the market lanes completely for themselves, so the lane will be known by their trade, since this will make it easier for their customers and will make their product more saleable. As for the artisans whose products need the setting of fire - such as bakers, cooks, and blacksmiths - it is preferable for the *muhtasib* to place them at a distance from the dealers in perfumes and the drapers, since they share no similarities and because of the possibility of causing harm.⁹

The order in which the several trades follow one another in the layout of the market evolved, it seems, from the concept of similarity as well as from the notion of avoiding harm or damage to anyone. Also, the grouping together of retailers of similar goods made it easier for the *muhtasib* to control the quality of goods and to collect taxes. As for the retailers themselves, the grouping gave them a greater opportunity to organize themselves and to control their trade. Finally, it was clearly easier and more convenient for the consumer, as al-Shaysari points out, to shop in one place.

The concept of need is also invoked. Regarding those products and crafts which are not suitable for the main market, the manual specifies that they must be located either outside the walls or in places within the town accessible to those who need them, while at the same time causing no harm to the passersby. For instance, firewood "should be

sold in certain places... So should plaster and comparable materials. All should be sold in well known places so people can go there when they need them."¹⁰ The *muhtasib* should also see to it that bakers and bread-makers "are distributed throughout the neighborhoods, lanes, and the far reaching points in the city, since they are considered to be part of the general services and because of the inhabitants' great need for them"¹¹

Other items which the manuals deal with specifically can be classified as causing harm and damage, such as slaughtering livestock and fish, or creating smoke.

Butchers must not slaughter at the doors of their shops, for they befoul the roads with blood and dung and obstruct the roadway and do harm to the public by the splashing of unclean matter; the slaughterhouse is the proper place.¹²

The fish market must be far from the main street because of its bad odor and because of the manner in which its sellers are usually dressed...

...(the *muhtasib* should also) prevent the dyers from having their ovens on the street since the smoke causes discomfort to the passersby ...¹³

Thus, three themes can be identified as underlying the regulation pertaining to the location of goods and services in the market. The first, the concept of similarity, has been applied to the market arrangement. The second, the relative frequency of the need of inhabitants to avail themselves of certain products as well as the need of these businesses, was instrumental in choosing their locations. The third, avoiding causing harm and damage, was the determining factor in locating all business that were considered to be the source of either smoke or repulsive odors. This concept coupled with that of similarity, helped to keep sources of damage within the market near each other.

B. Residential Areas And Industry

The concept of causing harm and damage invoked earlier seems to have been decisive in determining the location of industries and in separating them from residential areas within the city. This concept was elaborated and developed by the *fuqaha'* (pl. of *faqih*, jurist). They invoke the tradition of the Prophet which states "(there shall be) no damage and no mutual infliction of damage" (*la darar wa-la dirar*). The Maliki jurists look upon damage as falling into two categories: pre-existing and new. All the Malikis agree that a new source of damage has to be removed. As for a pre-existing source of damage, they identify two sub-categories. The first concerns cases of activities which were established before the surrounding properties were developed. As generally regarded by the *fuqaha'*, prior occurrence confirms the continuation of the activity since the source of damage existed before others came (*li'anrahu dararun dukhila 'alayh*). The second sub-category concerns cases of activities which commenced after the development of neighboring properties but existed for a long time before any objection was lodged by the neighbors. In this sub-category, there are two possible rulings. If the damage is considered severe, such as the smoke from bath-fires and furnaces, the dust of threshing, or the odor of tanneries, then the activity does not have the right to continue. If, on the other hand, the damage is considered minimal or necessary for a livelihood, such as the smoke from a baking oven or a kitchen in a house, then it should be accommodated.¹⁴

Two examples will illustrate:

Ibn al-Qasim (d. 191/807) was told about a hypothetical individual who wished to build a bath house, a furnace or a flour mill in his vacant lot. Since the neighbors would object, he was asked whether, according to Malik (d. 179/795), the neighbors had the right to prevent him. He responded, "if it would cause a damage for the neighbors such as smoke or comparable matters, then they have the right to prevent him from doing so, because Malik said that one should be prevented from causing harm to his neighbor."¹⁵

Additionally, Ibn al-Qasim was also asked if the hypothetical individual were a blacksmith, and he were to build a bellows or an oven to melt gold and silver in the lot, or set up a quern for milling that would cause damage to the neighbor's wall, or dig out wells, or set up a latrine near his neighbor's wall, would they have the right to prevent him from doing so. He said, "Yes, that is what Malik said in more than one of these cases, regarding smoke and other comparable matter." However, when asked whether, according to Malik, he would consider the smoke of a baking oven damaging, he replied, "I heard nothing about it from Malik, but I would consider it very slight."¹⁶

Muslim jurists considered extensively the sources of damage, i.e., smoke, odor, sound, and vibration. They discuss the types of sources of damage, their origin, and their necessity to the livelihood of their owners.

1. *Smoke:* Smoke of all kinds was considered harmful because of the reference in the Quran to it as a "penalty grievous."

Then watch thou for the day that the sky will bring
forth a kind of smoke (or mist) plainly visible.
Enveloping the people: this will be a Penalty Grievous.
(Q, XLIV, 10, 11) ¹⁷

Smoke coming from new and pre-existing sources was treated separately. Two types among the pre-existing sources of smoke were identified: the smoke of the baking oven, the kitchen and similar things considered to be necessities was to be allowed; the smoke of bath-fires, furnaces and comparable matters was to be suppressed.¹⁸ In this latter category are the mills, mentioned by Ibn al-Rami, in which barley was boiled in the streets and the houses of Tunis at his time. He refers to a case of a group of individuals who complained to the judge, Ibn ʿAbd al-Rafiʿ (d. 733/1333), about the damage caused by the smoke of such mills. Ibn al-Rami relates,

...the judge asked us to investigate the matter, and we
wrote in a document that it produced too much smoke,

and that it caused damage to the neighbors. The judge, then, ordered (the mill) to be stopped.

Regarding the damage caused by the new or unobjected to sources of smoke which originated later than other uses, of an area such as baths and furnaces, Ibn ^cAbd al-Rafi^c said,

It has to be stopped, or they (the owners) should manage to remove the damage caused for neighbors, be it old or recent, since such damage cannot be justified by being old.¹⁹

Now if the jurists agree that a pre-existing source of damage has the right to continue, what if the owner of such a source wants to create a new source within the same place to enlarge the old one? According to Ibn al-Qattan (lived in Tunis in the late seventh, early eighth century A.H.) new or additional sources should be prevented. In an actual case, which took place in Tunis, Ibn al-Rami relates that:

...an individual owned a lime-kiln (*kawshah*) with a fireplace. He decided to make another fireplace and to connect it to the chimney of the existing one. His neighbors objected on the grounds that he created a new source rather than an addition to the old one. They sued him before the judge Ibn al-Qattan, who ordered the new fireplace closed.²⁰

2. Odor: The origin invoked for preventing impurities and repulsive odor is the Tradition of the Prophet which states: "He who eats from this tree should not come to our mosque; (he) annoys us with the garlic's smell."²¹ If the individual who eats garlic should not go to the mosque because he annoys others by the smell, then it would be obvious that repulsive odors that spread throughout the city and cause harm to the inhabitants should not be tolerated. Mutarrif (d. 220/835), Ibn al-Majishun (d. 213/828) and Asbagh (d. 225/840) were asked about an individual who had set up a tannery in his house. His neighbors complained about the odor and asserted that this caused

them harm and damage. Did they have the right to stop him? All three argued that the neighbors had the right and that the tannery should be closed. Also considered to be harmful was the setting up of a latrine, an uncovered canal, or anything with an offensive odor near the house of a neighbor. All these, according to Ibn ʿItab and Ibn ʿAbd al-Ghafur "should be stopped and one should be compelled to cover them in order not to annoy his neighbors, since the offensive smell hurts the nostrils and annoys human beings."²²

In an actual case that took place in Tunis, Ibn al-Rami relates the story of an individual who built an *arwa*²³ for a small animal behind his neighbor's house. The neighbor complained about the damage caused to him, and the judge ordered Ibn al-Rami to investigate the case. By looking into the case, he found that the *arwa* was new and so told the judge. The judge then ordered both the *arwa* and the animal removed. However, the animal's owner appealed on the grounds that his livelihood depended on the animal, and requested the opinion of experts to ascertain if there might not be some way to protect his neighbor while keeping the animal. The experts, including Ibn al-Rami, ordered the owner to dig a foundation behind his neighbor's wall to a depth of the height of a man, to build on his own property a wall which should begin five palms below the ground's level, with a thickness of two palms, and with about half a palm of air space left between the two walls for ventilation. The air space was required to start five palms below the ground level and continue up to the roof. The experts informed the judge of what they said to the owner and, when it was done, the damage to the neighbor was considered removed.²⁴

3. Sound and Vibration: Damage caused by these two sources is divided into two categories. One is vibration which causes damage to the building. This is considered dangerous and, as generally regarded, should be prevented. Ibn al-Rami related that a group of people in Tunis built a gate for their lane, where the door opened against the wall of another person. This person sued them in the court on the grounds that the continuous opening and closing of the door caused him damage and discomfort. Ibn al-Rami was ordered by the judge to

investigate the case, and thus he looked to whether the wall vibrated when the door was opened or closed, and the wall did. Once this was proved, the judge ordered the gate to be demolished and the door to be removed.²⁵

The other category is the sound which causes only discomfort to the inhabitants. On this matter, the Malikis differ. The earlier jurists did not consider sound to cause any kind of harm. For instance, Mutarrif, Ibn al-Majishun, and Asbagh had the opinion that the laundryman and the hammerer (*al-darrab*) should not be stopped only because the neighbors were annoyed by their noise. Ibn al-Qattan goes even further to say that "one should not be prevented from hammering iron in his house, even if he will do so day and night, provided that his livelihood depends on it."²⁶ However, the later jurists seem to have had a different opinion. They look upon sound, echo and noise as some sort of harm that should be prevented. The judges of Toledo, according to Ibn al-Rami, ruled to stop the appliers of hot packs (*al-kammadin*; pl. of *kammad*) when the neighbors were annoyed and harm was caused as a result of hearing their sounds.²⁷ And Ibn al-Rafi, the judge of Tunis, states that "one should be prevented from establishing a stable beside his neighbor's house because ... (the animal's) movement during the day and night prevents one from sleeping."²⁸ Thus, noise seems to have been considered by later jurists as a sort of harm, which should be prevented.

From the previous cases one can see that Muslim jurists differentiated among the types of uses in the city. Since they were concerned with the fulfillment of the inhabitants' needs as well as with preventing harm and damage that might be caused to them, they looked at the uses in two ways. One was according to the needs of the inhabitants where two types are identified: the frequently needed and the rarely needed business or industry. This can be seen in almost any Arab-Muslim city of the 19th century, where large industries which were rarely needed such as those of building materials and comparable factories were located outside the city walls. Such was the case in Medina of 1303/1885, where factories of building materials and pottery

were located on the south-eastern side outside the *quba* gate, while other factories were reported outside the *shami* gate in the north.²⁹

The other, in which the jurist looked at the uses, was from the point of view of the causing of harm or damage, where also two types are identified: that which causes harm or damage and that which is harmless. By locating the rarely needed industries outside the city, or granting those which caused harm or damage the right to continue when they originated before the surrounding properties were developed while preventing new ones from taking place in areas where neighbors would object to them, Muslim jurist accommodated the idea of declaring zones for specific types of uses within the city. Based on the concept of avoiding the causing of harm or damage, they give priority to the use which originated first, whether it was residential or industrial. Once this specific use had been established, the other types might move in provided that they would not cause harm or damage to existing users. However, it should be pointed out here that the jurists always tended to support the right of residents more than those of industry. Even when they granted a certain industry the right to continue since it originated before the surrounding properties were developed, they still would not allow this industry to expand nor would they allow new ones to move in when neighbors would object to them since this would mean an increase in the amount of harm or damage caused to the residents of that area. This attitude explains the continuous tendency of industries and places of production to move to the peripheries within the Arab-Muslim cities whenever expansion and physical growth take place. This was the case in Aleppo, where place of production moved from areas within the central bazaar to an eastern suburb, and later to the northern Christian quarter.³⁰

Notes

- 1- Von Grunebaum, op. cit., pp. 146-147.
- 2- For Medina, al-Samhudi, op. cit., v. II, pp. 747-750; also Chapter I, section B, "Medina." For al-Kufah, al-Ya^cqubi, op. cit., p.96. For al-Fustat, Ibn ^cAbd al-Hakam, op. cit., pp. 113, 136; also Chapter I, section B, "Al-Amsar."

- 3- For Medina, al-Samhudi, op. cit., v.II, p. 750. For al-Fustat, Ibn ^cAbd al-Hakam, op. cit., p. 136. For al-Qayrawan, al-Bakri (d. 487/1094), *al-Mughrib fi Dhikr Bilad Ifriqiya wa-al-Maghrib*, Paris (1911), p. 25; referred to by al-Janabi, op. cit., p. 105.
- 4- For al-Fustat, Ibn Abd al-Hakam, op. cit., p. 136. For al-Kufah, al-Ya ^cqubi, op. cit., p. 96. For Medina, al-Samhudi, op. cit., v.II, pp. 750-752. Ibn Shabbah relates that when the news of Hisham's death reached Medina in the Year 125/743, the people demolished his *dar* and took its wood and its doors, and that it was leveled to the ground within three days. Ibid., p. 753.
- 5- For Baghdad's market, al-Katib, op. cit., pp.79-80; al-Ya ^cqubi, op. cit., p. 18. For Samarra', al-Ya ^cqubi, op. cit., pp. 32, 35.
- 6- Al-Khatib, op. cit., p. 81.
- 7- The *muhtasib* is the traditional inspector of the market in Arab-Muslim cities. He derived his authority from the religious injunction *hisbah*; "to promote good and forbid evil." The post of *hisbah* existed at the Prophet's time. It is reported that he assigned ^cUmar b. al-Khattab to the market of Medina, and Sai^d b. al-^cAs to the market of Mecca. Al-Kittani, op. cit., v.I, pp. 284-290. For the duties and responsibilities of the *Muhtasib*, see Chapter IV, "the *Muhtasib*."
- 8- Al-Sarkhasi, Abu al-^cAbbas, Ahmad b. Muhammad b. Marwan (d. 286/899), *K. Ghish al-Sina ^cat wa-al-Hisbah al-Saghir*, and *K. al-Aghshash wa Sina ^cat al-Hisbah al-Kabir*. See, *Majallat al-Majma^c al-^cIlmi al-^cArabi*, v.XVIII, No. 9 and 10; (1943) pp. 417-428, p. 420. A bibliographical account of the manual and treatise written on the *hisbah*.
- 9- Al-Shayzari (d. 589/1193), *Nihayat al-Rutbah fi Talab al-Hisbah*, 2nd ed., Beirut (1969), pp. 11-12.
- 10- Ibn ^cAbdun (d. first half of 6th/12th century). "Risalat Ibn ^cAbdun fi al-Qada' wa-al-Hisbah," E. Levi-Provencal (ed.), *Thalath Rasa'il Andalusiyah fi Adab al-Hisbah wa al-Muhtasib*, Cairo (1955), p. 38.
- 11- Al-Sharyzari, op. cit., p. 24.
- 12- Ibn al-Ukhuwwah (d. 729/1329), *Ma^calim al-Qurbah fi Ahkam al-Hisbah*, R. Levy (ed.) with an English abstract, Cambridge, Cambr. Univ. Press (1938), p. 99.
- 13- Ibn ^cAbd al-Ra'uf (d. 6th/12th century), "Risalat Ibn ^cAbd al-Rauf fi Adab al-Hisbah," in Levi-Provencal, op. cit., pp.97-111.

- 14- Ibn al-Rami, op. cit., p. 20.
- 15- Al-Mudawwanah, op. cit., XIV, p. 235.
- 16- Ibid., XIV, p. 235.
- 17- Ibn al-Rami, p. 20. However, the word smoke should not be taken here on its simple meaning. According to A.Y. Ali "The 'smoke' or 'mist' is interpreted on good authority to refer to a severe famine in Mecca, in which men were so pinched with hunger that they saw mist before their eyes when they looked at the sky..." A.Y. Ali, *The Holy Qu'ran*, Cambridge, Mass., 1946, II, p. 1345, ft. n. 4696.
- 18- Ibn al-Rami, p. 20.
- 19- Ibid., p. 21. Old, here, does not imply that the activity took place before other uses in the area, but that it continued for a long period before an objection was lodged by neighbors.
- 20- Ibid., p.21
- 21- Ibid., p. 22
- 22- Ibid., p.22. Ibn al-Rami uses the term *khayashim*, literally translates as gills, to mean nostrils.
- 23- Arwa as used here by Ibn al-Rami refers to a sort of a stable. However, *arwa*, pl. of *urwiyah* is the female of the mountain goat. See: Ibn Manzur, *Lisan al-Arab*, Beirut, 1968, vol. 14, pp. 350-351.
- 24- Ibn al-Rami, p. 24. The palm referred to as a unit of measurement in Muslim literature, is not precisely defined. However, it is believed to be approximately 22 cm.
- 25- Ibid., pp. 22, 45.
- 26- Ibid., pp. 22, 23.
- 27- Ibid., p. 22. *Kammadin*, pl. of *kammad* from the verb *kamada*, that is, to apply a hot compress or a hot pack to a limb.
- 28- Ibid., p. 24. In his statement Ibn ^CAbd al-Rafi^C also invoked the damage for the neighbors' wall and offensive odors that usually result from stables. He says, "one should be prevented from establishing a stable besides his neighbor's house

because of the damage that is usually caused, the urine of animals and its movements during day and night which prevents one from sleeping."

- 29- ^cAli b. Musa, "Wasf al-Madinah al-Munawwarah," (wr. 1303/1885) in H. al-Jasir (ed.), *Rasa'il fi Tarikh al-Madinah*, Riyadh (1972), pp. 45, 48.
- 30- Gaube, work in progress on the "Bazaars and Commercial Establishments of Aleppo." Lectures on Aleppo, Sept. 15-24, 1980, Dept. of Arch., M.I.T. Also see, Sauvaget, *Alep*, op. cit., pp. 221-231. Within the same city, Sibṭ b. al-^cAjmi (d. 884/1479) records an instance of a qadi removing a slaughter house from a location where it inconvenienced the residents of that area. Sauvaget, *Materiaux pour servir a l'histoire de la ville d'Alep*, Beirut (1933-50), v.II, p. 54; referred to in von Grunebaum, op. cit., p. 156, ft. n. 17.

Chapter III

RULES OF CONDUCT ON THE TRADITIONAL PHYSICAL ENVIRONMENT: URBAN FORM

Chapter III

Rules Of Conduct In The Traditional Physical Environment: Urban Form

In this chapter we look at the traditional form and physical pattern of the Arab-Muslim city; how they came to be what they are and the reasons for their development. Two issues are addressed here. First, how did the Arab-Muslim city start with two or more different patterns and end up with a more or less similar pattern and character? Secondly, why were cities like Damascus and Aleppo, with highly ordered plans, transformed into cities with irregular plans and how did this process of transformation take place? Through legal opinions and actual cases, we will develop an image of how the incremental process of change worked within the Arab-Muslim city, and how this process was affected by certain beliefs and conceptions held by its residents. To show how this worked we will look at notions concerning the right of way; conceptions of space, privacy, light control and the guarantee of fresh air; and precedents established to deal with walls and buildings threatening collapse. We will be concerned to show how these issues were conceived from a legal point of view and how they were treated within the actual context of the city.¹

A. The Right Of Way

In the city, Muslim law distinguishes the through street (*shariʿ*, *tariq nafidh*, *tariq al-muslimin*), the public way in which all people have the right of way, from the lane or cul-de-sac (*tariq ghayr nafidh*, *sikkah*, *zuqaq*), which most jurists consider a private road appertaining to its surrounding properties. A notion complimentary to this is that of the *fina'*, an open space around or along a building, which in the conception of most Muslim jurists is considered part of the property.

1. Thoroughfares

Supervising and maintaining the *suqs* and thoroughfares is the responsibility of the *muhtasib*. In detailing his obligations, the manuals specify that he must keep from the streets and *suqs* of the Muslims anything that may cause them to be dirty, or make them dark, or narrow..."² They go even further and provide specific rules for maintaining streets and the flanking buildings. To quote only one of our sources, Ibn al-Ukhuwwah (d. 729/1329):

"In narrow streets, traders must not set out seats or benches beyond the line of pillars supporting the roof of the *suq* so as to obstruct the way for passersby. The prolongation of wooden beams (*al-fawasil*, pl. of *fasil*) and projections (*al-ajnihah*, pl. of *janah*), the planting of trees, and the building of benches (*dakkah*) are forbidden in the narrow streets, the way through the *suq* being common property through which the public has the right to pass... So also the tethering of animals is forbidden except as required during alighting and mounting. Sweeping refuse into the passageway, scattering melonskins and sprinkling water, which may cause slipperiness... these are all forbidden. Water spouts may not be allowed to project from walls so as to cause defilement of the clothes of passersby and obstruct the streets. Rain water and mud must be swept away from the streets and it is the duty of the *muhtasibs* to compel people to take care of such matters..."³

The encroachment on public or private non-built property is forbidden by the Tradition of the Prophet which states: "He who may appropriate without right one palm of ground will be yoked by God of seven grounds at the Day of Resurrection." However, this prohibition did not characterize all the jurisdiction or opinions of the Muslim jurists. Even jurists belonging to the same school had different opinions on issues of trespassing or the appropriation of portions of the streets.⁴

Sahnun (d. 240/854) was asked about an individual who had appropriated a portion of the public road within his house. His neighbors had neglected to denounce the act until twenty years later. Should he be permitted to keep it? The jurist replied that if the matter was proved, then he had to give back what he had taken since the right of way could not be obstructed.⁵ Ibn Kinanah (d. 186/802) gave the same opinion on a similar case and suggested that the authorities should punish anyone who had acted in this way. In another case reported by Ibn Wahb (d. 197/813) the jurist Rabi^cah (d. 136/753) was asked whether or not an individual who had built a mosque in his house could encroach on the street. Rabi^cah responded that he had no right to do so.⁶ Malik, however, would not have objected if no harm was caused and the right of way was not hindered. Ashhab (d. 204/819) was asked about an individual who had built a house which encroached on the road by one or two cubits. After the house was built, the neighbor facing it on the other side of the road objected on the grounds that the road was the *fina'* of his house; he demanded the demolition of what had been built there. Ashhab replied that it should be demolished. However, in another case, where the house crept on a *fina'* which was spacious and unoccupied and where the street was not touched by the action, Ashhab had the opinion that the owner would not be obliged to have the building demolished since the way was large and entirely open, one did not need all of its width, and the building did not cause any damage.⁷

Asbagh had the same opinion even of a house which encroached on the street. When asked about it, he stated that, "...if the road is very wide and the encroachment is very small in comparison to its width so that it will cause no real damage, I think that it should not be demolished and that one must not worry." The authority here invoked was that of ^cUmar b. al-Kattab (d. 23/644), who attributed the ownership of spaces in front of houses to the owners of the houses.⁸

These cases clearly show the concern of Muslim jurists about the right of way and their underlying agreement on not narrowing the way, hindering circulation or causing damage to the public. However, despite this common theme, when they were faced with specific cases,

jurists' opinions differed. For instance, if Malik did not object to the mosque encroaching on the street or if Asbagh did not demand the demolition of a house which encroached on only a small portion of the street, then the net result was clearly predictable: people would occupy portions of the streets or of spaces along their houses whenever they had a chance to do so. Both continuous concern of the jurists about these questions and the large number of hypothetical cases posed in the books of *fiqh* suggest that such appropriations did take place. At a later time than these jurists, Ibn al-Rami (d. 734/1334) indicates that such a practice was very common in Tunis. He states that he was ordered several times by the great judge Ibn ʿAbd al-Rafiʿ to demolish a number of buildings and wooden structures which encroached on part of the public way.⁹ This also seems to have been the case in Cairo where, in 882/1478, it is reported that Prince Yashbuk undertook the widening of streets and lanes of Cairo, especially that of the main street from al-Futuh to the Zuwaylah gate (Shariʿ al-Muʿizz). He is also reported to have asked the Shafiʿi judge to rule in demolishing all encroachments on streets and lanes, whether they were buildings, wooden structures, or built up benches.¹⁰

At a still later date (978/1570) at Medina, we have the case of a person who asked the court to have the width of the street in front of his house measured before he rebuilt the house. Why was such a request presented? So that, according to him, no one would afterwards claim that he had encroached on a portion of the street.¹¹ This case is very significant in that it shows that there were constant disputes on this matter among the inhabitants and that such encroachments frequently occurred.

Another later case from Medina (1268/1852) is that of a group of people who sued their neighbor on the grounds that he had closed their lane by extending part of his house across the lane to the building opposite his.¹² They did not win their case and the lane continued to be closed. Another example is a case which took place at the center of the city of Medina, just west of the Mosque of the Prophet around the year 1237/1821. There the owner of a house acted in a way which indicated his intention to appropriate the public passageway next to his

house for himself. The residents sued him in court and the judge ordered all that he had built there demolished.¹³ These two cases again show that this practice was neither new nor strange to the jurists in Muslim cities. As a matter of fact, it appears that the gradual usurping of the space of streets and the closing of lanes has been common in Muslim cities throughout their existence. In fact, one might say that we could not have the distinctive physical characteristics that we now observe in these cities without such a continuous and gradual practice.



Figure 17: Medina - al-aghawat neighborhood.

Locations of examples illustrated in figures 18, 19, 22 and 24.

Buildings on top of the street. Dotted line separating the lot from the street proper indicates that the projection belongs to this lot and not to the lot on the other side.

To illustrate how this practice within the Arab-Muslim city took form on the physical level, we may cite the case of the streets of Damascus which had been transformed and in many cases closed and turned into dead-end streets (Figures 1 & 3). The street and land subdivision plan of old Medina is another example (Figure 11). From there one can point out many instances that were probably the result of such a practice among the residents of Arab-Muslim cities (Figures 18 & 19).

2. *Width of Streets and Lanes*

The Prophet, on the authority of Ibn Wahb, had set the limit at seven cubits "When the people are at dispute on the width of the road, (he said) its limit is seven cubits." Ibn Kinanah stated that people

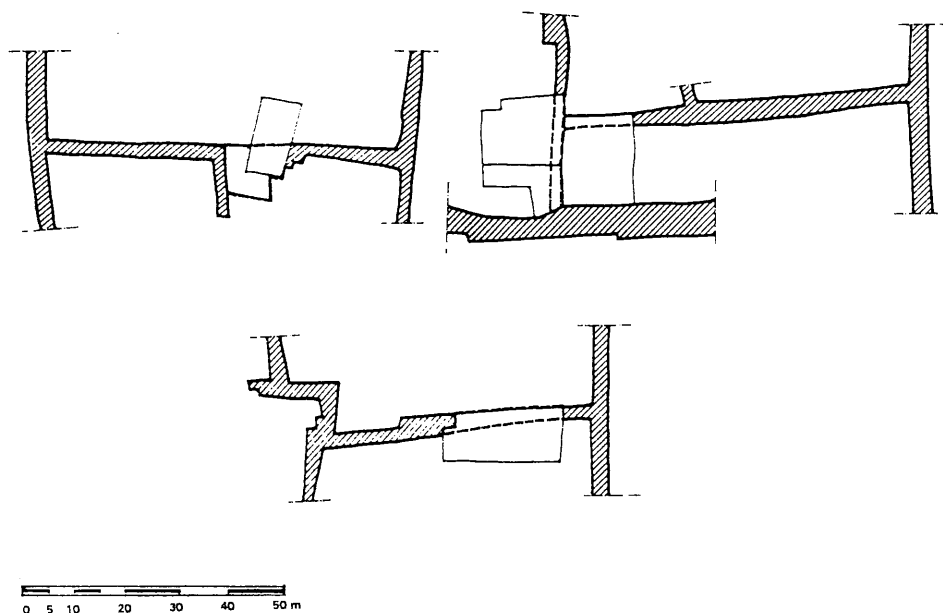
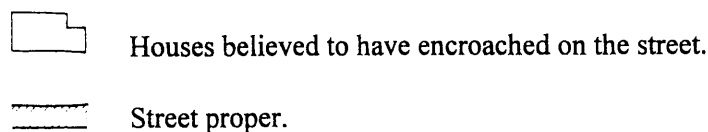


Figure 18: Medina - street closing.

Examples of cul-de-sacs which seem to have originally been through lanes. (For locations on the land-subdivision plan, see Figure 17).



should leave for the width of their roads and their *aziqqah* (pl. of *suqq*) what accommodated the highest and greatest thing that passes through them, and that this should not be limited by the load of the camel.¹⁴ Malik also had a similar opinion, when asked about how to decide on the width of the road for a group of people who were at dispute. He said that "... they should leave a road that is wide enough for the loads and for themselves to pass through..."¹⁵

In an actual case where Ibn al-Rami was chosen to subdivide some land around Tunis, he relates that he made the width of the road eight palms, enough for the camel to pass and not less than that.¹⁶ In a more recent case, in 1845 in Cairo, M. Clerget relates that the width of a major street was determined by measuring the combined width of two loaded camels.¹⁷

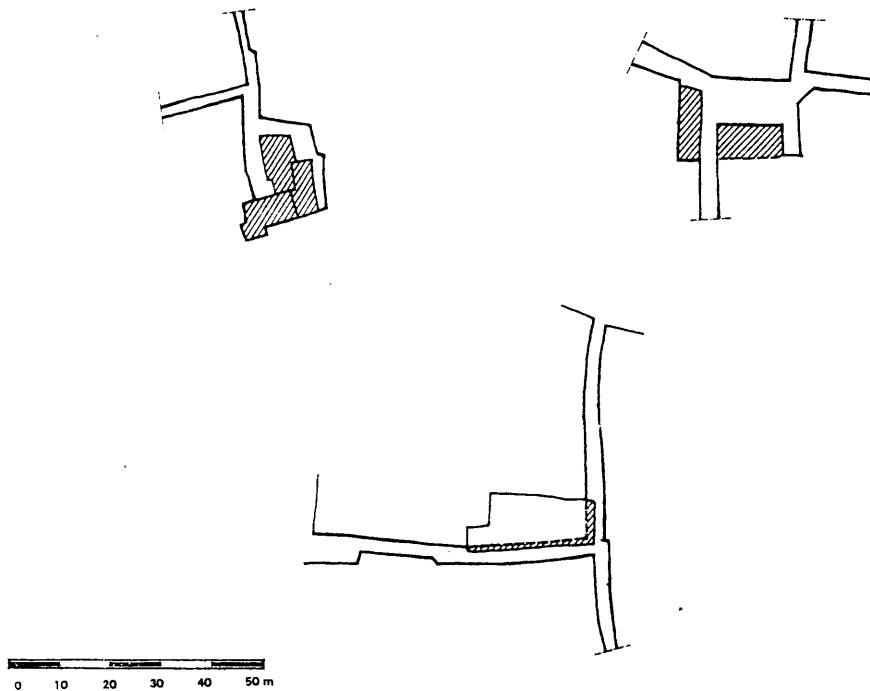



Figure 19: Medina - encroachment on public space.

Examples of houses believed to have encroached on the street proper or on public open spaces. (For location within the city, see Figure 17).

 Parts believed to be appropriated from public roads and open spaces.

B. The Conception Of Space

1. *The Fina' and the Zuqaq*

The *fina'*, an open space around or along a building, and the *zuqaq* seem to have been treated by the jurists as well as by the inhabitants of Arab-Muslim cities as semi-private, collectively-owned spaces. They are conceptualized as part of the surrounding properties or at least considered to belong to and to be susceptible to collective use by the residents of these properties. Malik was asked whether these spaces (*afniyah*, pl. of *fina'*) situated in front of houses along a publicly used road could be leased by the owners. His response was:

"... For spaces of small width, where the least thing posed would hinder the circulation, I think that no one has the right to reserve their use for himself, and that the authorities must intervene; but for those where the width is such that the circulation would not be hindered at all if the neighboring owners utilize them for their own needs, I see no harm if the authorities do not intervene..."¹⁸

Sharing the same opinion, Asbagh is reported to have said that the *afniyah*, whether at the front or at the back, are part of the houses. "The owners (he said) should not be prevented from using them as long as the way is not narrowed, the circulation is not hindered, and no damage is caused to the public..."¹⁹

The lanes and cul-de-sacs seem to have had uses identical to the *fina'*. However, the owners surrounding them enjoyed more freedom than those surrounding a *fina'* which opens to a thoroughfare. Since nobody was affected by actions taken in regard to these lanes, the jurists avoided interference as long as all the owners surrounding them were in agreement concerning their use and no claims were made. To cite only a few examples, there is the Medina case of closing a lane and not having the case heard until fifty years later, when some of the residents of that lane sued their neighbor in court.²⁰ Another example is that given by Ibn al-Rami who tells us of a group of people who had

built a gate, or *darb*, for their lane, where the door opened against the wall of another person. This person sued them in court on the grounds that the continuous opening and closing of the door caused him damage and discomfort. Once this was proved, the judge ordered the gate demolished and the door removed. Remarkably there was no question about the right of those people to have or not to have a gate for their lane. A final example is also from Tunis, where a man owned all the houses surrounding a *zanqah* (a small cul-de-sac), except for one. He built a gate for the *zuqaq*, but the owner of the remaining house sued him in court, where the judge ordered the gate demolished since that the owner did not agree to the act. However, Ibn al-Rami emphasized that it had been the custom (*wa al-darb jara al-ʿUrf bihi ʿindana fi al-shawariʿ*) to have gates on streets in Tunis and that no one usually objected except when damage (*darar*) occurred.²¹

The non-interference of jurists and presumably of *muhtasibs* in the affairs of lanes and cul-de-sacs, except when petitioned by some of the residents of those lanes, provides a very sound reasoning for the development of the large number of gates to be found within the neighborhoods of which Ibn al-Rami speaks in Tunis, and, indeed, in all Arab-Muslim cities. The gate system has always been explained as a security measure to be used when the cities suffered either internal troubles or external invasion, a reason that cannot be denied.²² However, the existence of a large number of them within each neighborhood in the city clearly reveals the fact that these lanes and cul-de-sacs were looked upon as semi-private, collectively-owned spaces. (Figure 20).

As for the types of uses of the *fina'*, the owners of surrounding houses seem to have had the right to use them for whatever they wished, provided the above-stated conditions were fulfilled. Ibn Nafiʿ (d. 212/827) was asked about the houses of several individuals stretching along an open space on which they opened their doors. The owners wanted to use the *fina'* for trading to their grain, for setting up their querns for milling, for disposing of their trash, and for herding their cattle. But others whose houses were separated by the road from the space wanted to benefit, too. Did they have the right to that? He

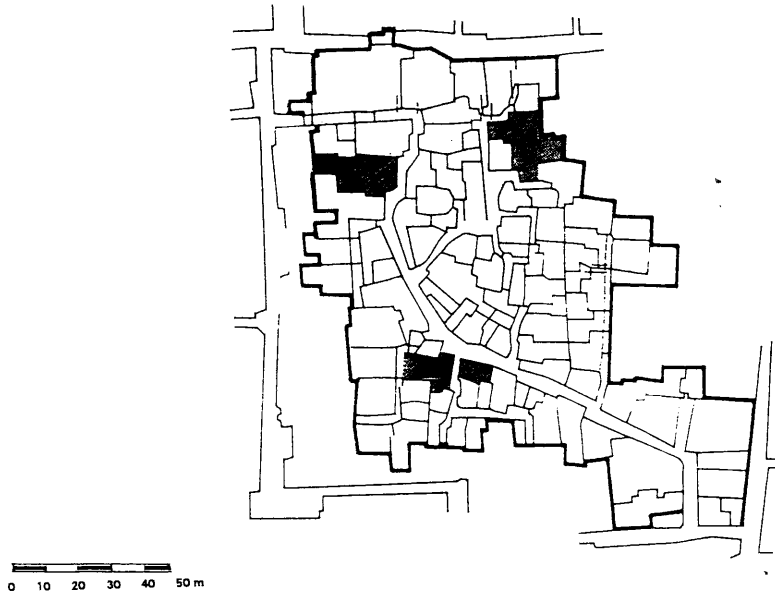


Figure 20: Damascus - the gate system.

Plan of a quarter showing gates built in through lanes.

Source: Sauvaget, "Esquisse d'une histoire de la ville de Damas,"
Revue des Etudes Islamiques, 1934, p. 452.

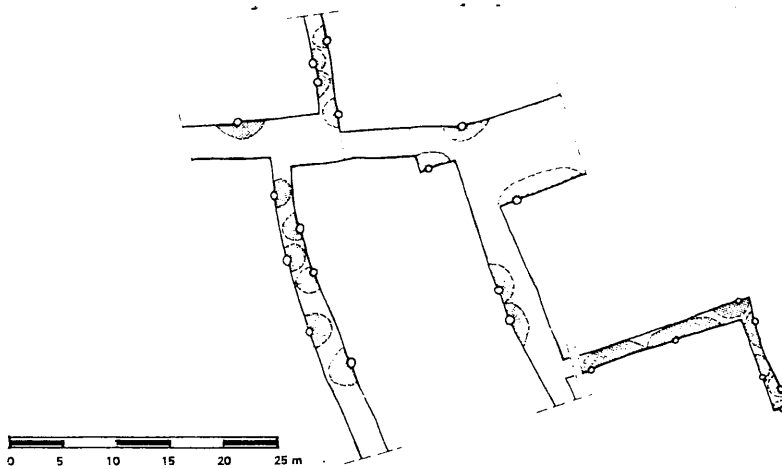


Figure 21: The *Fina'*

An illustration of the concept of the *fina'* as elaborated by the jurists. In a main thoroughfare the *fina'* is the part near the house door and it does not extend to more than half of the width of the street. In lanes and cul-de-sacs the *fina'* covers the whole area abutting the house and it usually extends to the whole lane's width.



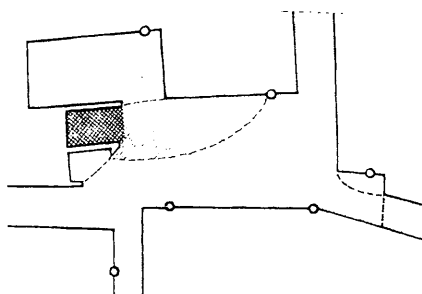
Areas looked upon as a *fina'*.

responded in the negative, saying that they had no actual right to the space because their houses did not border the *fina'*.²³ Thus, in addition to clarifying some of the uses of a *fina'*, this case also shows that the *fina'* belonged only to the houses abutting it.

This conception seems to have been maintained in Arab-Muslim cities. In the case of Medina, the *fina'* was used for activities related to domestic life as well as to the community. It was also used for selling and for producing goods. As for who had the right to use the *fina'* the residents' conception corresponds to the previously stated case. For example, Figure 22 shows a small coffee shop utilizing most of the *fina'* which this shop shares with two neighboring houses. Other houses, separated by the street, seem to have nothing to do with this *fina'*. When the residents of these houses need to use the outside space, they always use what is conceptualized as their *fina'*, that is the space near their doors. Another example, which shows the use of the *fina'* for selling and for light production, is the case of the shops in the market of Medina and other Arab-Muslim cities as well. There, all shops within the old city use their frontage to exhibit and sell their goods. This, therefore, causes most of the activities to take place within the street proper, which is conceptualized as part of the shops. (Figure 23).

As for lanes and cul-de-sacs, the case seems to be somewhat different. Small shops scattered in these lanes usually utilize the whole width of the lane in front of the shop, leaving only a passageway in the center of the lane (Figure 24). As for domestic activities, these spaces are conceptualized as semi-private areas used by all the surrounding residents for ceremonial or recreational purposes (Figure 25). For permanent types of use, such as receiving one's own guests regularly, or storing items not used regularly, it was clear to every resident where his *fina'* started and where it ended. This was also reflected in the maintenance of the lanes and cul-de-sacs where each resident was responsible for the area in front of his house.

Now, with all the freedom of use of a *fina'* granted by the jurists to the abutters, did the abutters have the right to partition the *fina'* among themselves? Malik said no, even if the abutters agreed. He invoked



0 5 10 15 20 25 m

Figure 22: Medina - *barhat al-aghawat*.

A small coffee shop utilizing most of the *fina'* which this shop shares with two neighboring houses. Other houses, separated by the street, seem to have nothing to do with this *fina'*. (For location within the city, see Figure 17)



Coffee shop proper.



Area utilized as a *fina'*.



Figure 23: Medina - the bazaar.

Shops in the bazaar of the old city using their frontage as a *finā'* to exhibit and to sell their goods.

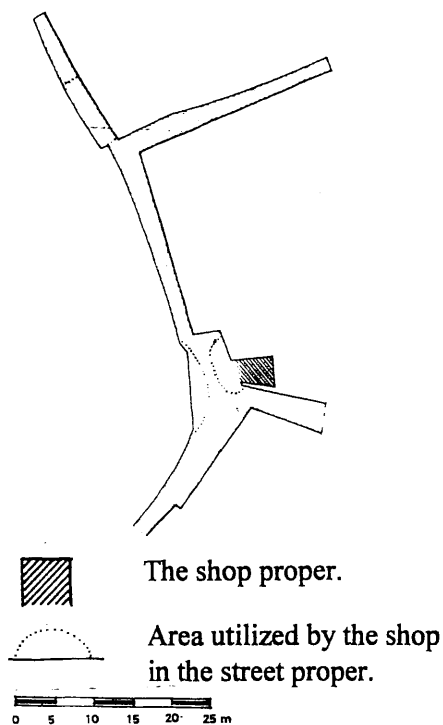


Figure 24: Medina - shops within residential areas.

A small shop in one of the lanes in the *aghawat* neighborhood. The shop utilizes the whole width of the lane leaving only a passage-way in the center of the lane. (For location within the city, see Figure 17).



Figure 25: Medina - the *finā'* as a semi-private space.

The cul-de-sac, or *hawsh* (courtyard) as it is known in Medina, is conceptualized as a semi-private space used by all surrounding residents for ceremonial, social, and recreational purposes. In the past, these spaces used to have gates with doors on their entrances. (left) *hawsh al-jimal*. (right) *hawsh al-turki*.

the idea that keeping these spaces open would benefit the public and that the people might use them should the public road be crowded with people and animals. Thus, he concluded that the owners of these spaces had no right to narrow or change them.²⁴ However, in regard to the lanes and the *afniyah* which are less accessible to the public, the practice seems to have been different. Ibn al-Ukhuwwah, for instance, relates that it had been the practice of some Shafi'is to allow the building of a bench or the planting of a tree near the door of the house and within the *finā'*.²⁵ Also, the cases of encroachment of the *afniyah* and the closing of lanes in Medina are another example. (Figures 18 & 19).

2. Projections and the Building of Chambers Over the Street.

Related to the concept of the *finā'* is the projection on top of the street. Projections and second floor chambers built over the street are dominant features of Arab-Muslim cities (Figure 26). Our sources show that their use had been in practice since early Islam and that Muslim jurists saw no objection to such a practice as long as no harm was caused and the circulation was not hindered. Ibn al-Rami states that "the *ajnihah* (pl. of *janah*, projection), parts that are fitted to the

walls and project into the streets, should not be prevented." This also seems to be the opinion of Malik and of Ibn al-Qasim. Ibn al-Qasim (d. 191/807) even relates that the *ajnihah* are usually built at Medina and that the inhabitants do not object to them, and that Malik himself bought a house which has a *ʿaskar* (projection).²⁶

Regarding the clearance between the projection or the chamber and the street's ground, the jurists were specific enough. Ibn al-Qasim, when asked whether an individual could build on the street a balcony providing very low clearance, stated that "if the action would cause the least harm to the circulation on the street, one would prevent him..."²⁷ "the limit (he said) for its (the *janah*) distance from the street's ground is that which accommodates the rider of the greatest camel while there is still enough clearance over his head."²⁸



Figure 26: Medina - projections on the street proper.
 (right) the mashrabiyyat (pl. of mashrabiyyah) projecting onto the street.
 (left) a second floor chamber built on top of the street. (for a street plan indicating buildings on top of streets, see Figure 17).

The concept of the *finā'* comes in when the question arises as to which house has the right to project on the street and to what extent. The jurist Ibn Sha^cban had the opinion that when the house's door opens on the street and the owner wants to build a *janah*, he should not be prevented, even if he would take all the street, since he preceded others. However, should the issue be at dispute among two neighbors, Ibn Sha^cban would then have the air rights over the street divided in half among them.²⁹ This shows that the priority to project on a street is for houses whose doors open onto it. However, it does not deny other abutting houses from having projections onto that street even if their doors do not open onto that street.

In relation to the building of chambers, Sahnun was asked whether or not an individual who owned two houses, one on each side of the street, had the right to build a chamber on top of the street. He replied that:

"he should not be prevented from doing so, unless he introduces into the street something that may narrow it or cause harm, then, he must be stopped. But for acts that cause no harm to either the street or to the public, he should not be prevented."³⁰

The same criteria were applied in an actual case at Medina in 1208/1794 where the owners of a house had a *dakkah* (built in bench) on the other side of the street on which they wanted to build supports for a chamber that was to cover the street. When the judge was assured that no harm would be caused to the public and that circulation would not be hindered, he allowed them to build in spite of their neighbor's objection.³¹

C. The Concern For Privacy

With the intensely close family life and the strictly followed code of conduct of Muslims, it is not unusual to have the privacy issue come under the purview of the jurists. To be able to see into a house more

than what a passerby on the street would see is looked upon as an intrusion into the private life of the household, one which could not be tolerated either by residents or by the jurists. Such an act is considered to cause great harm and damage, and Muslim law has always insisted on the removal of the damage.

The concern for privacy was reflected in the physical form of the city in several ways. Among these are the limits on building heights throughout the city, avoidance (or architectural treatment) of windows on the street, and the placement of doors within the street.

1. Building Heights and the Opening of Windows

Restriction on building heights per se did not prevail in Arab-Muslim cities. When the famous General Khalid b. al-Walid complained to the Prophet that his house on the eastern side of the Prophet's mosque was too small to accommodate his family, the Prophet replied "build higher in the sky and ask God for spaciousness."³² However, damage caused by raising up a building was not tolerated. When asked whether an individual could raise his edifice higher than that of his neighbor and thus be able to look into the neighbor's house, Ibn al-Qasim stated that "one has the right to raise his edifice, but I heard Malik say that he should be prevented from inflicting damage..."³³ Since intrusion into the private life of the residents is considered to be a great damage not to be tolerated, it is obvious that the residents would not tolerate being under the constant view of others.

To begin with, the highest point in the city is the minaret. Although it serves a very basic religious function, this did not exclude it from being looked on as a place from which the muezzin, who is expected to be a pious man, could look into the surrounding houses. Sahnun was asked about the muezzin of a mosque who, from the minaret, looked upon the interior of neighboring houses, and whether or not the inhabitants who were separated from the mosque by a wide *fina'* or a street could prevent the muezzin from ascending this minaret. He stated that "...they can, since it causes damage for them; the

Prophet prohibited the causing of damage."³⁴ In an actual case at Medina, the Umayyad caliph Sulayman b. ʿAbd al-Malik (d. 99/717), while en-route to Mecca for pilgrimage, resided at the house of Marwan at the southwestern corner of the Mosque of the Prophet. When the muezzin ascended the minaret situated at that corner to call for prayer, the caliph came under his view. The caliph then ordered the minaret to be demolished and leveled with the roof of the mosque.³⁵

Other sources which indicate the sensitivity of this issue to the residents of the city are the *muhtasibs'* manuals. They specify that it is the *muhtasib's* duty to see to it that "... when he (the muezzin) ascends the minaret, he must keep his gaze lowered and not gaze into the houses of the people -- an oath to this effect shall be exacted from him; and no one is to ascend the minaret but the muezzin at prayer time..."³⁶ Al-Saqati, in his manual, reports a very unusual case of a *muhtasib* at al-Kufah who did not allow any muezzin to ascend the minaret unless blindfolded, so that he would not intrude on the surrounding dwellings.³⁷

In another case related to a mosque, Sahnun was asked about an individual who, on the top of his shops, established a mosque with a terrace where one could see into the neighboring houses and whether or not he had the right to do so in spite of the neighbors' protest. Sahnun stated that "... he must build a wall around the terrace in order to protect his neighbors, and people should not be allowed to pray on the terrace before it is walled."³⁸ The minaret and the mosque cases are very significant for our discussion. They clearly reflect the awareness of the inhabitants, the jurists, and the *muhtasibs* concerning the issue of privacy. If pious men and religious buildings were not excluded from suspicion, then it was clear that the general public in secular buildings was to be restrained. Our sources include numerous cases in this regard, all of which deal with the intrusion into the privacy of residents as a result of having higher buildings erected. This intrusion is usually facilitated in two ways. One is the opening of windows. The other is the use of the rooftop.

Window Openings. The opening of windows which overlook other houses seem to have always been condemned. The earliest opinion we have is that of ʿUmar b. al-Khattab in regard to a case that took place in al-Fustat during his reign. It is reported that he wrote to ʿAmr b. al-ʿAs to demolish a *ghurfah* (room) that ʿUmar thought was built for the purpose of overlooking neighboring houses. However, when he was convinced that this was not the intention of the owner, he wrote again to ʿAmr ordering him to place a bedstead (*sarir*) at the back of the window where a man could ascend on top of it; if the man could see into the neighboring house, then the window was to be sealed, but if one could not see, the owner was to be allowed to keep it.³⁹

Ibn al-Qasim was asked whether or not an individual could be prevented from opening a door or a window (*Kuwwah*) in his own wall, from which he looked upon his neighbor and therefore inflicted some damage to him. He related the following to Malik. "...One has no right to create something that will inflict harm or damage to his neighbor, even when what is done is within his own property..." However, in another case where there was a pre-existing opening, Ibn al-Qasim had a different opinion. He was asked whether or not an individual should be compelled to seal pre-existing door or window which looks upon his neighbor's house and which has no benefits for the owner while it inflicts damage to the neighbor. He stated that, "...he (the neighbor) cannot compel him to do so, since this is something he (the owner) did not create..."⁴⁰ But Mutarrif and Asbagh would not tolerate the infliction of damage, even if the source originated earlier than the object on which the damage was being inflicted. Mutarrif was asked about an individual who, in his upper chamber, created an opening which looked upon a neighboring property on which no building had yet been erected. The owner of this property wanted to prevent him on the grounds that this would cause him damage when he built on his lot. Should the claim be recognized? Mutarrif stated:

"the neighbor has the right of opposition as much before as after building. He has the right to prevent this which will cause him damage when he builds, and if he did not object before building, he could do so after; his earlier

silence does not subsequently prevent him from asserting his own right."

Asbagh also had the same opinion.⁴¹ It is worth noting here the difference of opinion in the previous two cases. In his opinion, Ibn al-Qasim looked on the source as pre-existing the object on which damage was being inflicted and therefore said it should be left as it was, while Mutarrif and Asbagh looked at it as a source of damage that could not be tolerated even if it pre-existed other activities.

At a later time, Ibn al-Rami, when speaking of doors and windows that looked upon neighboring houses, introduced two types of openings: new (*hadith*), which according to general belief (*al-mashhur*) were to be sealed, and pre-existing ones (*qadim*), which were left as they were. However, he emphasized the fact that "as it is generally understood, the viewer is to be prevented." This implies that even if the opening was not sealed, one should not be allowed to use it in order to look upon his neighbors. Ibn al-Rami also relates that, in Tunis, the customary judgment as well as the actual practice was to prevent intruding and uncovering. This, he says, was the opinion of the judge Ibn ʿAbd al-Rafiʿ, who in many cases occurring during his time, ordered the windows sealed.⁴² This seems also to have been the practice in Baghdad during the third (ninth) century. There, al-Suyuti relates that one of al-Muʿtadid's secretaries built a very high building which overlooked his neighbors' houses. Al-Suyuti relates that no one objected because of the secretary's status and his close relationship to the Caliph. This, however, indicates that such a practice was usually not tolerated in Baghdad at that time.⁴³ At still a later time, we have the case from Medina (981/1573) in which an individual sued his neighbor in court for the latter's opening of windows in his upper chamber. The former claimed that the windows caused him damage and denied him the right to privacy within his own house. After investigating the case and being assured that the damage was being inflicted, the judge ordered the windows to be closed, so that the damage to the neighbor would be removed.⁴⁴

Rooftop. Another way which facilitates intrusion into neighboring houses is the use of the rooftop where other buildings come under the view of the user. Since most Arab-Muslim cities are within the arid climate zone, roofs serve basic functions during the summer. They are usually used for living and sleeping during the night, especially in urban areas where large open yards rarely exist. Related to this, two elements come into discussion in the literature: the staircase leading to the roof and the roof itself. Ibn Wahb stated: "...if the opening of the roof's door inflicts damage to the neighbor, such as permitting one to look into his house each time one moves or goes onto or off of the roof, then it should be proscribed, one having no right to open it..."⁴⁵ At a later time, however, Ibn al-Rami stated that the stairs to the roofs (Matali al-Sutuh, pl. of Matla) are not to be proscribed unless their doors look upon the neighboring house. But if they are placed aside from the house, they should not be eliminated.⁴⁶ As regarding the use of the roof we have the opinion of Sahnun in the previously introduced case of the mosque. There he emphasized that a protecting wall had to be built and that no one was to be allowed to pray there before it was walled.⁴⁷ At a later time, Ibn al-Rami related a case that took place in Tunis where an individual had a stair to his roof. Both the stair and the roof were protected by a wall. The wall fell down and therefore a person ascending the roof was able to look into the neighboring house. The neighbor asked the owner to rebuild the protecting wall, but he refused and was therefore sued in court. The judge did not compel the owner to rebuild the wall but made him liable to punishment should he or anyone else ascend the roof.⁴⁸ The liability to punishment here is very significant because it indicates how serious the violation was considered in the eyes of both the jurists and the citizens.

The two previous cases indicate that roofs could not be used without being surrounded by walls in order to protect neighboring houses from exposure. But for people to be able to use a roof, how high should the protecting wall be? To determine this, one might look to the opinion of ^cUmar b. al-Khattab stated earlier on a case related to a window that was opened on a neighboring house. There ^cUmar stated that the window could be kept only if one could not see into the house when ascending on a bedstead placed behind the window.⁴⁹

Another opinion was given by Ashhab when he determined that the wall should be raised to a level where the passerby would not be able to see behind it (*ma-la ynalū al-nazir minh*). A third opinion was that of Ibn al-Rami in which he stated that seven palms were enough to obstruct the passerby's view if he was not alerted to observe or had any intention to look.⁵⁰

2. *The Placement Of Doors Within The Street*

The Maliki scholars did not allow the opening of a door in front of another door or near it. The reason given by Ibn al-Qasim was that the neighbor who owns the existing door has the right to say:

"I benefit from the place in front of my door in which you want to open yours. I open my door with no one intervening on my privacy, and I bring my loads near my door without causing inconvenience to anyone. Thus, I wouldn't let you open a door in front of mine or near to it since you may use it as a reception and entertainment area or for comparable matters."

However, in a thoroughfare, Ibn al-Qasim allowed the owner to open his door wherever he wished and related that Malik did so, too.⁵¹ But Ashhab related that Malik did not allow this in a through street. When asked about a thoroughfare (*tariqun sabilah muhstarakah bayn jami^ʿ al-nas*) in which an individual wanted to open a door in front of an existing one, Malik replied that, if this causes the owner of the existing door a harm, such as that the person using the new door can see what is behind to existing door, then he should be prevented from opening it.⁵² Sahnun goes further to say that "one must place his door at least one or two cubits from the facing door," even in a through and large street.⁵³

Looking at this issue in the actual context of Muslim cities, Ibn al-Rami stated that it had been the practice not to prevent doors from facing others when they were on wide thoroughfare. He also added that this was the decision of Ibn ʿAbd al-Rafi^ʿ in an actual case where a dispute took place among two facing neighbors on a wide and publicly-

used thoroughfare. The limit set for thoroughfares, according to Ibn al-Rami, was seven cubits, which seems to be large enough when compared with the average width of streets in most Muslim cities.⁵⁴ Another actual case comes from Medina, where a field survey of al-Aghawat neighborhood, the oldest in the city, shows that only two doors face each other in a group of more than two hundred houses. The area even includes one of the main streets that goes from the Mosque of the Prophet to one of the four gates of the old city.⁵⁵ (Figure 27).

Judging by our actual cases as well as the jurists' discussions, the issue of privacy seems to have been a very sensitive one to the residents of Arab-Muslim cities. The necessity of preventing someone

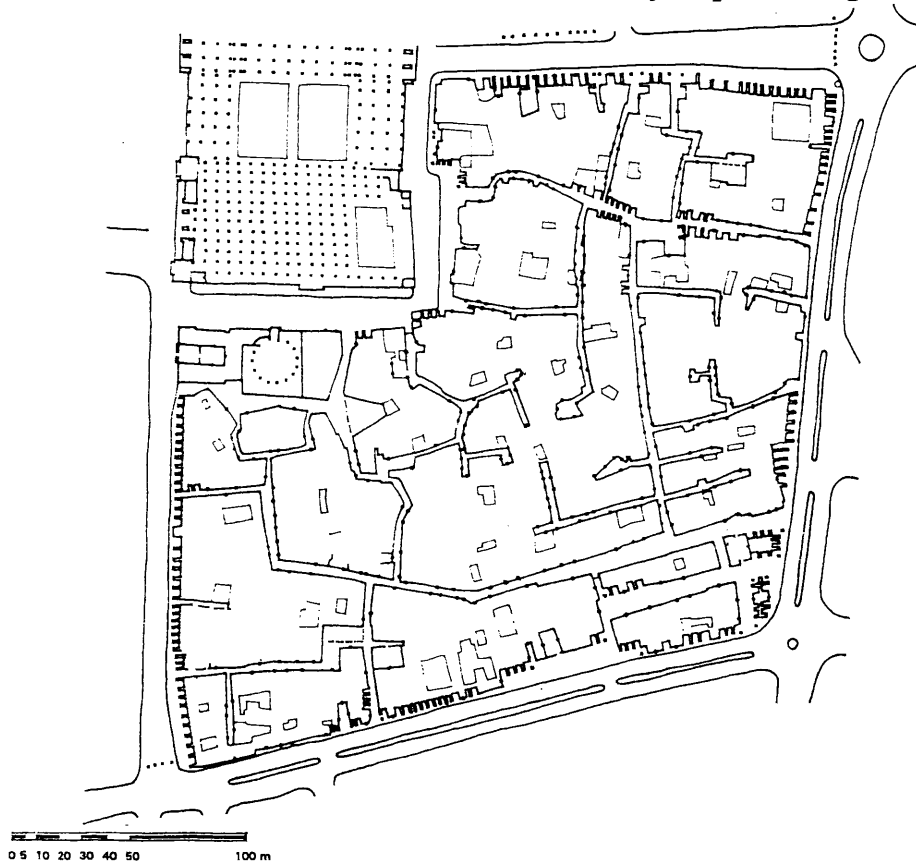


Figure 27: Medina - *al-aghawat* neighborhood.

Plan showing the locations of the doors of houses on the streets.

—●— Indicates the door's location.

from behaving as he wished upon his own property in order not to cause damage or inconvenience to others is sufficient enough to show the importance of maintaining privacy in the life of Muslim citizens. With all the building activities in the city, Islamic law always guarantees the right of the citizens to privacy. In most instances, including our cases, it works on a first-come first-served basis. The law grants earlier actions the right to continue and it protects this right from being either violated or withdrawn by others' later actions.

The concern for privacy seems to have substantially affected but not limited the variety of urban form throughout the city. By observing the traditional neighborhoods of Medina, one finds that building heights are always similar. They all fall within the category of either two, three, or four stories buildings, and it is very rare to find these different heights within one district. On the rare occasions when this does occur, care is usually taken to avoid openings that will cause harm or damage to the neighbors (Figure 28).



Figure 28: Medina - building heights.

View of *al-aghawat* neighborhood in the foreground showing similar heights of buildings. The rest of the city in the background and to the right also shows similar building heights.

Although building heights were consistent throughout each neighborhood in Medina, variety existed in house type and form. The dominant type in Medina seems to have originally been the courtyard house which is typical of other Arab-Muslim cities (Figure 29). However, in later times, two other types had emerged: the *qa^cah* house and the *mashrabiyyah* house.

The *qa^cah* house is, in simple terms, a house with a small covered courtyard in the center, usually known as a *qa^cah*. The *qa^cah* is used as the main reception room and is usually divided into three parts with the central part going all the way to the roof where there is a movable cover (*jala'*) while on the sides, the other two parts have a lower roof with one or more floors above them (Figure 30).

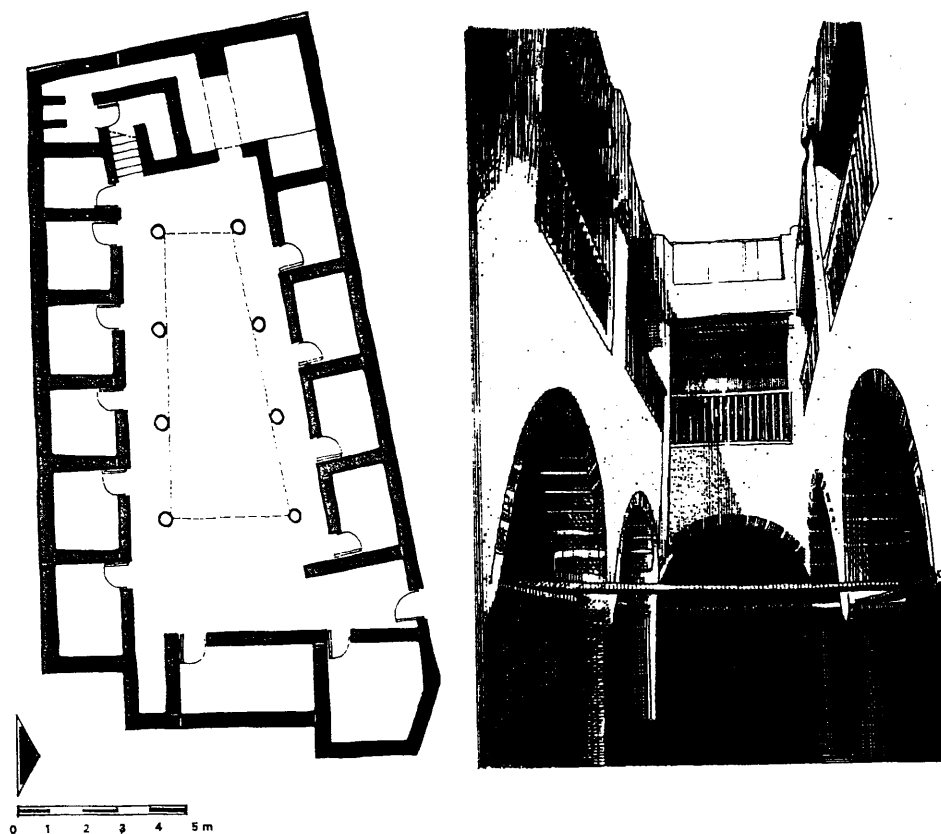


Figure 29: Medina - a courtyard house.
(left) view from the courtyard. (right) ground floor plan.

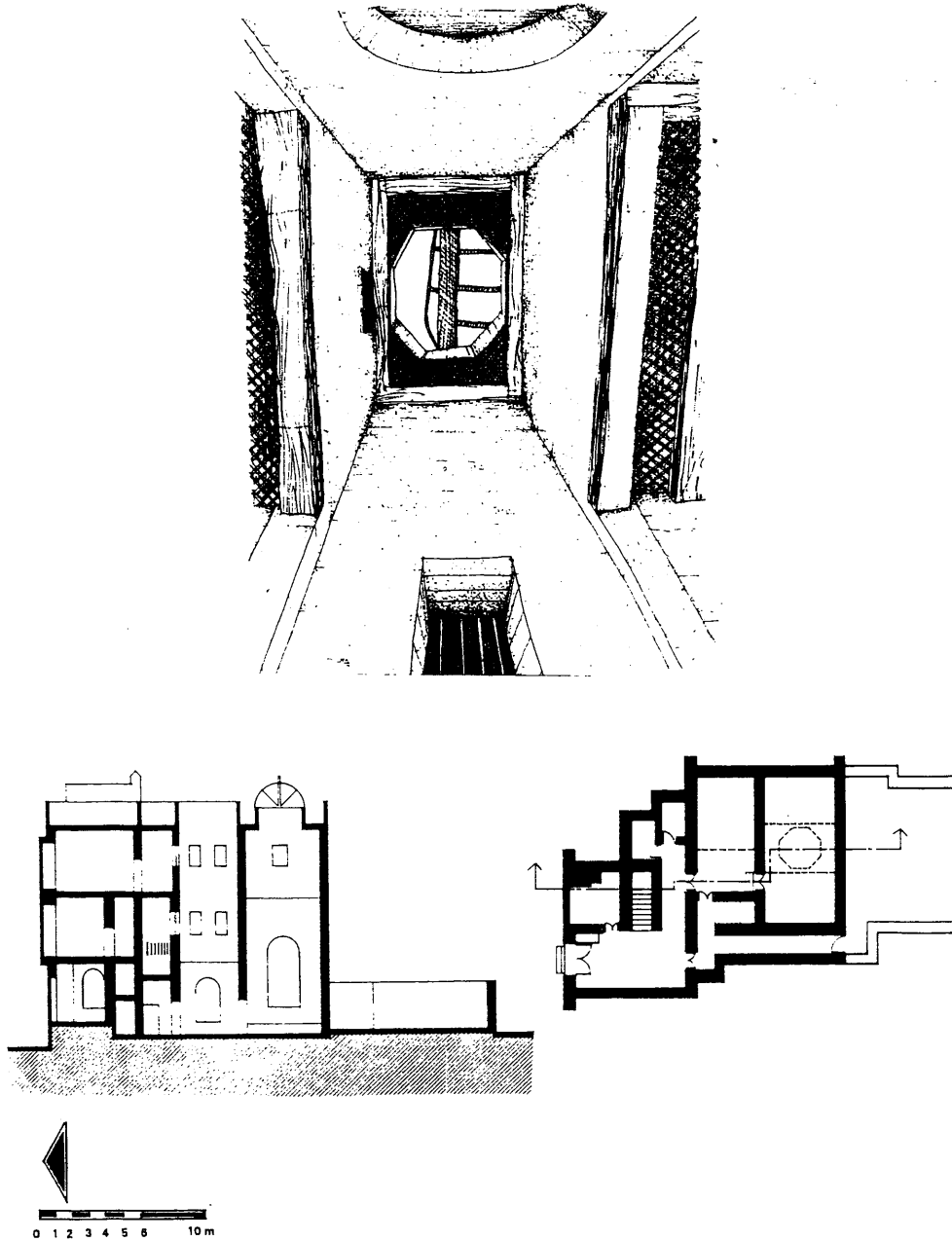


Figure 30: Medina - a *qa'ah* house.

(upper) view of the *jala'* looking up from the floor of the *qa'ah*. (this view is from another house in Medina).
 (lower right) ground floor plan. (lower left) section.

Source: (plan and section) M. Saleh, *The Development of Energy Efficient Building Systems*, a doctoral dissertation, University of Michigan, 1980, p. 146.

The *mashrabiya* house, in its simplest form, is a typical row house with openings on the street, each covered with a *mashrabiya* and high openings on the opposite side that allow ventilation and sun but do not provide a view onto other houses (Figure 31). This type usually averages four to five stories in height, while the courtyard house rarely exceeds two stories. The *qa^cah* house ranges between two and three stories.

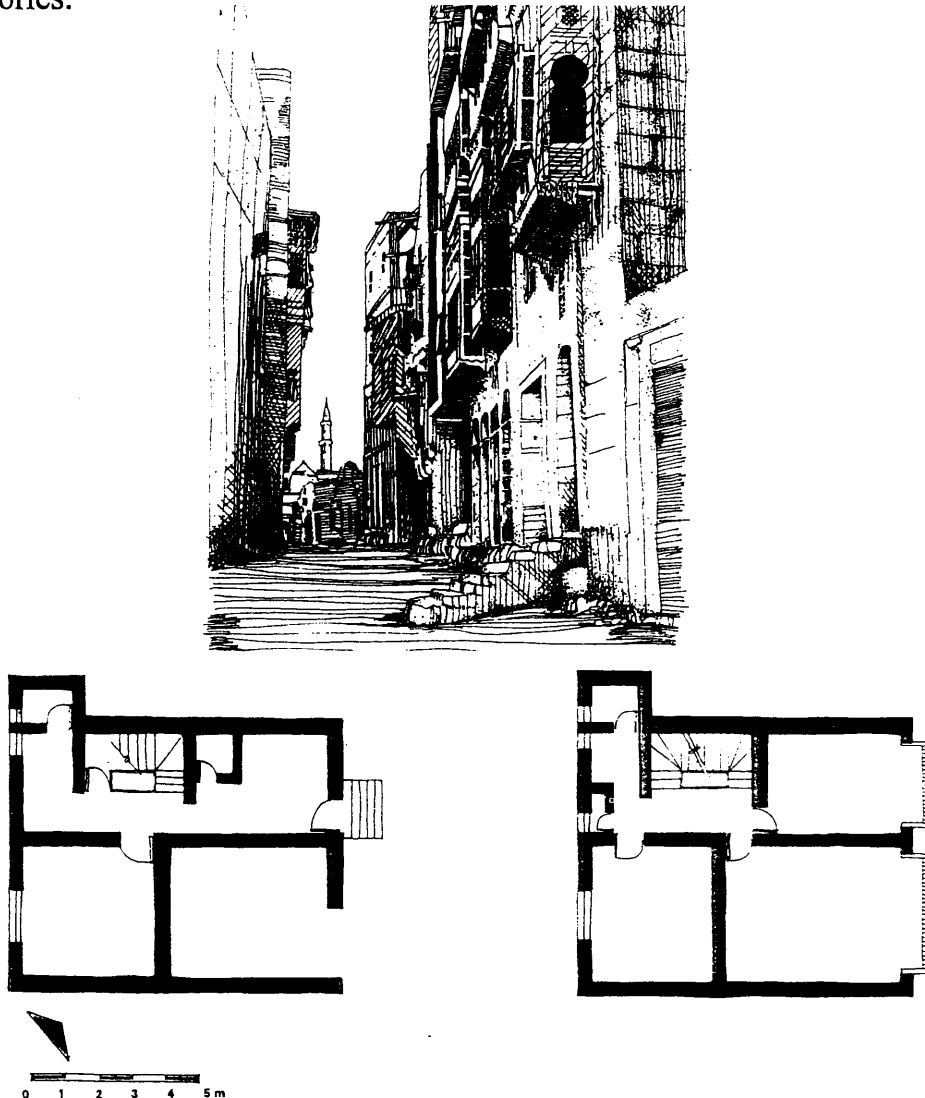


Figure 31: Medina - a *mashrabiya* house.

(upper) view of *al-sahah* street with the *mashrabiya* house on the right side in the foreground.

(lower right) third floor plan, second and fourth floor differ slightly.

(lower left) ground floor plan.

It is believed that the sequence in which the three types emerged in Medina followed the previously explained classification. However, the emphasis here is primarily on the fact that even with the changes in shape and building elements used in each type, all of the three house types continued to subscribe to the previously discussed legal conventions on privacy. In the placement of the door on the street; in the opening of windows; in the raising of the building; and in the treatment of the roof, solutions in each type differ but they have all subscribed to the same rules and conventions.

D. Provision Of Light And Fresh Air

Regarding the provision for sun light and fresh air, early jurists have very little to say. Discussion of such matters comes usually under the opening of windows and their relationship to the issue of privacy. This, however, should not be taken to express a lack of concern on the part of Muslim jurists. Keeping in mind the very harsh climate with its very hot sun and the huge amount of light available, and the tendency within the Arab-Muslim city to have more or less similar heights within each neighborhood, it is very probable that this issue rarely came into question.

On this matter Ibn al-Qasim was asked about someone who would erect a high building that would block his neighbor's windows, darken his rooms, and prevent the sun from reaching his courtyard and the fresh air from blowing there. Could such a building be allowed? Ibn al-Qasim stated that he heard nothing from Malik in regard to sun and air, and that he would not prevent a person from raising his buildings. However, he invoked Malik as saying "one should be prevented from inflicting harm or damage onto his neighbors." In response to a similar case Malik, on the authority of Ibn Nafi^c, is reported to have said: "The owner has the right to his property; after all, if he blocks the sun from the east, the neighbor will be able to get enough sunlight when it moves westward." In another case Malik was asked about an individual who opens his windows onto another *dar*, or lane, to get sunlight and air. His neighbor builds a high wall that prevents these

windows from getting any sunlight. Is the neighbor allowed to do so? Though Malik responded in the positive, Ibn Nafi^c and Ibn Kinanah had a different opinion. Ibn Nafi^c could not allow the building of the wall if this inflicted harm and damage, but only if the owner of the wall had nothing to gain by building it.⁵⁶

In regard to opening windows for light and air, the jurists seem to have been very sympathetic as long as the windows did not facilitate intrusion onto neighboring houses. Ibn Nafi^c went as far as to allow an individual to open his window right onto his neighbor's property in order to get sunlight and fresh air, even if the neighbor disliked such an act, so long as no harm or damage was being inflicted. Ibn Wahb and Ashhab did not go as far; however, they did give an individual the right to open windows within his own house in order to avail himself of sunlight and fresh air, even if neighbors objected on the grounds that these windows might facilitate intrusion onto their private homes. They both expressed the opinion that as long as the window was high enough so that the passerby would not be able to see behind it, then it should be allowed.⁵⁷

As to actual practices within the city we have the previously stated case from al-Fustat, where ^cUmar allowed the person to keep his window so long as it was high enough not to cause any intrusion onto other houses. Ibn al-Rami also relates that it had been the practice in Tunis to allow windows for the purpose of getting sunlight and fresh air so long as they did not facilitate overlooking other houses. He even relates a case which took place in Tunis, during his lifetime, where an individual opened a window onto his neighbor's house to get sunlight and fresh air, and the window was high enough so as to avoid overlooking the neighbor's house. The neighbor sued on the grounds that harm was being inflicted upon him since his neighbor could overhear what took place in his courtyard. Ibn al-Rami relates that opinions were divided on this issue but it was ruled in favor of keeping the window.⁵⁸ A third case, alluded to earlier, is that of Medina in 981/1573. There the judge ordered the windows on the second floor sealed since they facilitated intrusion onto another house. However,

the owner was allowed to open two new higher windows so he could still avail himself of sunlight and fresh air.⁵⁹

E. Ruins And Walls Or Buildings Threatening Collapse Within The City

The concern for walls or buildings threatening collapse seems to be deeply rooted within the harm and damage theme pursued by the Muslim jurists. The jurists were not concerned with the property itself but with the safety of the people, including the owner. They were also concerned with the damage that might be caused to the property of others. These cases were looked at by the jurists on two levels: first, those case of walls incapable of making appropriate repairs; and secondly, cases of decaying buildings which proved harmful to the community if left the way they were.

1. Walls or Buildings Threatening Collapse

Sahnun was asked what to do with an individual who claimed that his neighbor's wall or chamber was threatening collapse. He replied, "If the danger is obvious, harm and damage should be prevented." On a similar question, Ibn Kinanah had the opinion that the wall should be examined by a group of trustworthy experts. If they declared that there was a danger, the authority should order the owner to strengthen his wall. If he was not capable of doing it or he was completely without resources, the authority should order him to sell it, and he should be made to comply by agreement or by force.⁶⁰

In practice, Ibn al-Rami related that he used to be ordered by the judge, Ibn ʿAbd al-Rafiʿ, to walk through the *azziqah* (pl. of *zuqaq*; lane) of the city of Tunis, watch for walls threatening collapse and tear them down. He reported that one afternoon he came to a wall that was threatening collapse and he ordered his owner to tear it down. The owner asked to be given until the next day to do so. Not having the authority to allow that unless the judge agreed, Ibn al-Rami took him to court and told the judge what had happened. Upon hearing the case,

Ibn ʿAbd al-Rafiʿ did not accept any reason for delay and ordered the wall to be torn down the same day. In another case, Ibn al-Rami related that one day he came to see Ibn ʿAbd al-Rafiʿ to ask of him what to do with a wall that he found threatening collapse, but of which he could not find the owner since the house with the wall was not inhabited. The judge ordered him to tear the wall down and to sell a quantity of its rubble that would be enough for the fee of the labor. These cases indicate the real concern of jurists and judges for the dangers that existed and the possible consequences that might occur if such walls were left standing. Reflecting this awareness, Ibn al-Rami related that when Ibn ʿAbd al-Rafiʿ heard or saw a wall threatening collapse, he never absolved the owner or accepted his excuse until the wall was torn down.⁶¹

The jurists' concern, however, did not end with the demolition of the shaky wall. Since they were concerned with the harm and damage that might be inflicted to others, they went further to see if, by being torn down, the wall had caused some damage to the neighbors and if, therefore, one should be compelled to rebuild it. On this, Malik stated:

"When the wall has been demolished by the owner and he has sufficient sources to rebuild it, then one would oblige him to do so in order not to cause damage to his neighbor; one would still oblige him even if the wall collapsed by itself and he had enough to rebuild it. However, if the owner is poor, whether the wall collapsed or he demolished it, one would dispense him of the rebuilding and would say to the neighbor, protect yourself by building a wall on your own property in front of your own house."⁶²

Ibn al-Qasim, however, had a different opinion. He thought that when the owner was ordered to tear down his wall, then he should not be compelled to rebuild it. The only instance where he would compel the owner to rebuild a wall which had protected his neighbor was when the demolished wall had been in good condition, and then only if the owner was capable. The jurist would not compel the owner to do so if

he was poor. Sahnun and Ibn al-Majishun, on the other hand, said that the owner must be compelled to rebuild his wall in both cases. They invoked that protection "...is a right for the neighbor which is acquired when building his house" while the wall was there.⁶³

2. *Decaying Buildings and Ruins*

Regarding the issue of decaying buildings which prove to be harmful to the community if left the way they are, the jurists tended to compel owners to rebuild. Two cases from Medina illustrate this. One took place in the year 1242/1826 and the other in the year 1244/1829. Both cases were related to decaying houses which were owned by more than one individual. The owners were sued in court either by neighbors or by the users of the surrounding property. In both cases the absence of one of the shareholders seem to have been used as an excuse not to undertake either the needed renovation or the rebuilding. However, the judge, after being assured that leaving the two houses the way they were caused harm and damage, ordered in both cases that the present shareholder undertake the responsibility for rebuilding and charge his partner for the cost of his share.⁶⁴

In certain cases, where the owner was financially incapable of rebuilding, or where the building was *waqf* (pious foundation) with no funds available, judges tended either to order the property to be sold and exchanged for another one, or to grant to the *waqf* authority or another private individual the right to rebuild the structure and collect from its income an amount equal to the cost spent. The title of the property was beset in the name of the original owner, who returned to the management of the building once the costs were exacted. An example of the former is a case which took place in Medina in 1251/1836 where the judge ordered an upper floor decaying apartment which was a *waqf* to be sold and exchanged for a better property.⁶⁵ An example of the latter is also another case from Medina which took place in 1206/1792. In this case a decaying house which was a *waqf* with no funds available to rebuild it was rented to an individual for twenty-one years, on the condition that he would rebuild the house according to a certain prescribed design. He was supposed to pay half

of the amount of the rent annually and to keep the other half as a payment towards the settlement of the cost of construction. By the end of the twenty-one years, the house was to be returned to its original management.⁶⁶

The material introduced and analyzed in this chapter shows a constant concern on the part of the jurists and judges towards the inhabitants' needs in the Arab-Muslim city. The cases implied basic themes which were deduced from Islamic religious principles. It is these themes that produced the striking similarities in the city's organization and in its physical form all over the Arab-Muslim world. Islamic law constituted a common base which regulated the physical development and the spatial organization in Arab-Muslim cities in spite of the climatic, regional, or sectarian variations.

This common base, the implicit themes out of which the rules of conduct evolved, can be briefly summarized. For the functional appropriation of city territory, the themes implied were avoiding the causing of harm and damage, having regard for the inhabitants' needs as well as for those of businesses, and grouping together similar types of uses. Regarding thoroughfares and lanes, there was the concern, first, for public interest; that is, protecting the right of way and insuring that any action or activity would not narrow the way, hinder the circulation, or cause harm or damage to the public. As long as these criteria were satisfied, private interest was then considered; projections and chambers were allowed to be built above streets and lanes.

The privacy of the family was strongly emphasized by the law. This was very well reflected in the cases regarding building heights, openings, and the placement of doors. Although there was no restriction on height *per se*, it was the damage caused by raising up a building and therefore intruding onto the privacy of others which was not allowed. This in turn worked as a measure to restrict building heights all over the city. The same measure was applied to prevent openings in high chambers that would look onto other houses as well as to prevent the placement of doors in front of each other.

The privacy issue was also invoked when compelling someone to rebuild his own wall which used to protect his neighbor. Protecting the life and the property of the public were the reasons invoked by the jurists in regard to walls and buildings threatening collapse and their continuous insistence on rebuilding ruins or decaying buildings within the city proper.

Judging by the existing traditional environment, the application of these rules did not seem to have been equally enforced. In the instances where the interest of individuals was involved, such as the intrusion into the privacy of the household, be it from a higher building, through an opening, or through a door, the rules were always enforced. While in other instances pertaining to the public interest, in which no interest of a private individual was involved, the law seems to have been very flexible. This had a major effect on the general street pattern where encroachment on parts of these streets and the appropriation as well as complete closing of lanes was regularly practiced in Arab-Muslim cities. The reasons for such a practice can be seen within the conception of the law itself and within its enforcement. Regarding its conception, Islamic law looked on the part of the street or the lane in front of the house as the *fina'* of that house; the law was flexible enough to allow air right of public space such as streets and lanes which, through time, was appropriated and assembled within the private property; and there was the difference of opinions regarding encroachment of public spaces, especially when there was no harm or damage involved. Regarding the enforcement of the law two levels can be differentiated from each other. On one hand, there are thoroughfares and public spaces, and on the other, lanes and semi-private spaces. Regarding the former, there was the occasional absence of a public prosecutor or lack on his part of sufficient power, an obligation of the state that was usually delegated to the *muhtasib*. Regarding the latter, lanes and cul-de-sacs, judges and *muhtasibs* never intervened without a complaint. Since the practice of encroachment was not uncommon especially in lanes and cul-de-sacs, and since Maliki jurists would not accept any statute of limits regarding the number of years after which a complaint can not be lodged, then most

neighbors might well not object to new encroachments for fear of retaliation against their earlier actions.

Notes

- 1- In the books of *fiqh*, these issues are dealt with as part of the laws regulating neighbors and adjacent properties. Therefore, they always come under the study of private property rather than as part of public law.
- 2- Al-Jarsifi, ^cUmar b. ^cUthman b. al-^cAbbas, "Risalat al-Jarsifi fi al-Hisbah," in Levi-Provencal, op. cit., p. 122.
- 3- Ibn al-Ukhuwwah, pp. 78-79; see also al-Shayzari, p. 11; Ibin ^cAbdun, p. 37; and Ibn Bassam, Muhammad b. Ahmad, *Nihayat al-Rutbah fi Talab al-Hishah*, Baghdad (1968), p. 17.
- 4- Ibn al-Imam, (d. 386/996), manuscript of Algiers, al-Maktabah al-Wataniyah, No. 1292. (Cited hereafter as Ms.) French translation, Barbier, "Des droits et obligations entre proprietaires d'heritage voisins," in *Revue Algerienne et Tunisienne de Legislation et de Jurisprudence*, 1900 and 1901 (cited respectively hereafter as I and II). Ms., pp. 29, 31, I, p. 140, II, p. 65. See also Ibn al-Rami, op. cit., pp. 40, 43.
- 5- Ibn al-Imam, op. cit., Ms., 31-32, II, p. 66.
- 6- Ibid., Ms., p. 29, I, p. 140. Also Ibn al-Rami, op. cit., p. 40.
- 7- Ibn al-Rami, op. cit., pp. 41-42. Also Ibn al-Imam op. cit., Ms., p. 29-30, I, pp. 141-142.
- 8- Ibid., Ms., p. 30, I, pp. 142-143. Also Ibn al-Rami, op. cit., p. 43.
- 9- Ibn al-Rami, op. cit., p.41.
- 10- Ibn Iyas (d.930/1524), *Bada'i'c al-Zuhur*, Cairo (1894), v.II, pp. 171-177; cited by ^cAbd al-Wahhab, *Takhtit al-Qahirah wa Tanzimuha Mundhu Nash'atiha*, Cairo (1957), pp. 12-13.
- 11- See Appendix I, R.3 (v.2), Case No. 1676.

12- See Appendix I, R. 156, Case No. 28.

In this case, the difference is between the law schools. The judge in this case is a hanafi, and he refers to the period which has elapsed since the street was closed and when the case was presented to the court, which is more than fifteen years, the limit after which the hanafis would not hear the case. This contradicts the preceding case of Sahnun (d. 240/854), a Maliki, in which he would order a house to be demolished even if the neighbor did not denounce the action until twenty years later.

13- Stated in a letter addressed to the trustee of Medina's Treasury, dated 17/5/1237 A.H. Documents No. 133-34, Book No. 10 *Ma'iyh Turkey*, Portfolio No. 2 of Mahafiz Abhath al-Hijaz in the Egyptian National Archives. See Appendix II.

14- Ibn al-Rami, op. cit., p. 109.

15- Al-Mudawwanah, op. cit., v.XIV, p. 234.

16- Ibn al-Rami, op. cit., p. 103.

17- Marcel Clerget, Le Caire: *Etude de Geographie et d'Histoire Economique*, Paris, Paul Geuthner, 1934, I, p. 289.

18- Ibn al-Imam, op. cit., Ms., p. 29, I, p. 141.

19- Ibid., Ms. p. 30, I, p. 143; Also Ibn al-Rami, op. cit., p.43.

20- See Appendix I, R. 156, Case No. 28.

21- Ibn al-Rami, op. cit., p. 45. Ibn al-Rami uses the word *darb* to mean a covered gate with a door, he says, "wa amarani an aqla^ca al-bab wa ahdim al-darb," Note also that he uses the term *zaniqah* and *zuqaq* as interchangeable.

22- In this regard Ibn Iyas relates for instance that in the year 903/1497, the governor of Cairo ordered the inhabitants to erect gates on streets and lanes because of the increase in the number of thefts that year, and that the order was carried out in several streets and lanes. Another instance which he recorded in Cairo is that which took place in the year 922/1516. Ibn Iyas reports then, that the chief of police gave similar orders and that several gates were built. However, the fact that these orders were given by the officials and carried out by the inhabitants indicates that both conceived of the lanes and the *aziqah* as belonging to the inhabitants abutting them and that they have the right to alter them in order to protect themselves. Ibn Iyas, op. cit., v.II, p. 336; v.III, p. 33; cited by ^cAbd al-Wahhab, op. cit., p. 35-36.

- 23- Ibn al-Imam, op. cit., Ms., p. 32, II, p. 67.
- 24- Ibid., Ms. p. 29, I, p. 141, also Ibn al-Rami, op. cit., p.44.
- 25- Ibn al-Ukhuwwah, op. cit., p. 78.
- 26- Ibn al-Rami, op. cit., p. 80. *Ajniḥah* pl. of *janah* defined by Ibn al-Rami as "al-khawarij allati tu^ḥmal ala al-hitan fi al-Shawari^ḥ." He uses *janah* and *askar* interchangeably.
- 27- Ibn al-Imam, op. cit., Ms. p. 8, I, p. 47.
- 28- Ibn al-Rami, op. cit., p. 80.
- 29- Ibid., p. 80. Ibn Sha^ḥban was a Maliki jurist. He was quoted, according to Ibn al-Rami, by the Qayrawanian jurist Ibn Abi Zayd (d. 386/996) in his book al-Nawadir.
- 30- Ibid., p. 81. Also Ibn al-Imam, op. cit., Ms. pp. 8-9, I, p. 47.
- 31- See Appendix I, R.126, Case No. 263 and 265.
- 32- Al-Samhudi, op. cit., v.II, p. 370.
- 33- Al-Mudawwanah, op. cit., v.XIV, p. 235.
- 34- Ibn al-Imam, op. cit., Ms. p. 16, I, p. 100, Ibn al-Rami, op. cit., p. 33.
- 35- Al-Samhudi, op. cit., v.II, p. 526. "Ibn Zabalah relates that ^ḥUmar b. ^ḥAbd al-^ḥAziz during al-Walid's rebuilding of the mosque constructed four minarets for the Mosque of the Prophet, one at each corner." Ibid., vol. 2, p. 526. "al-Matari said: the mosque continued to have only three minarets since, until the fourth one was reconstructed... in the year 706 A.H. at the order of Al-Nasir, Muhammad b. Qalawwn." Ibid., vol. 2, pp. 527-528.
- 36- Ibn al-Ukhuwwah, pp. 176-177.
- 37- Al-Saqati, *Kitab fi Adab al-Hisbah*, Paris (1931), p. 7. Al-Saqati states that since he saw this, he kept questioning himself, why the *muhtasib* did so, until someone whom he considered trustworthy related the story of the *muezzin* of Marrakish, who looked upon someone's house. Al-Saqati also introduces another story of a painter who he met at Granada. The painter was a *muezzin* earlier in his life. He left his post because of a love relationship that he developed with a girl who lived

in one of the houses surrounding the mosque where he used to see her from the minaret. Ibid., pp.7-8.

- 38- Ibn al-Imam, op. cit., Ms. p. 16, I, p. 100. Ibn al-Rami introduces the story with the mosque's roof as the matter of disputes. Ibn al-Rami, p. 33.
- 39- Ibn ^cAbd al-Hakam, op. cit., pp. 104, 107. Ibn al-Rami, introduces three different definitions for a sarir.
1. *farsh al-ghurfah*; what is spread on the ground as bedding.
 2. *al-sullam*; the ladder.
 3. *al-kursi*; the chair.
- Ibn al-Rami, pp.25-26. Also Ibn al-Imam, op.cit., Ms. p.12, pp.55-56.
- 40- Al-Mudawwanah, op. cit., v.XI, p. 37.
- 41- Ibn al-Imam, op. cit., Ms. p. 13, I, p. 94.
- 42- Ibn al-Rami, op. cit., pp. 25, 26.
- 43- Al-Suyuti, Jalal al-Din, (d. 911/1505), *Tuhfat al-Mujalis wa Nuzhat al-Majalis*, Cairo (1908), pp. 311-314.
- 44- See Appendix I, R.6, v. , Case No. 418.
- 45- Ibn al-Rami, op. cit., p. 29.
- 46- Ibid., pp. 28-39.
- 47- See above and footnote 38.
- 48- Ibn al-Rami, op. cit., p. 29.
- 49- See above and footnote 39.
- 50- Ibn al-Rami, op. cit., p. 26.
- 51- Al-Mudawwanah, v. XIV, p. 237.
- 52- Ibn al-Rami, op. cit., p. 34.
- 53- Ibn al-Imam, I, p. 98, Ms. p. 15.
- 54- Ibn al-Rami, pp. 34-35. The seven cubits standard seems to have come from the Tradition of the Prophet which states: "when the people are at dispute on the

width of the road, its limit is seven cubits," Ibid., p. 109. Seven cubits equals nearly three and a quarter meters. The average width of the streets of old Medina does not exceed two meters. See Fig. 11 and Appendix I.R.3 (v.2), Case No. 1676.

- 55- The survey was carried out by the author during the summer of 1976 as part of his current work on the city of Medina.
- 56- Ibn al-Imam, op. cit., Ms. pp. 12-14.
- 57- Ibid., Ms. pp. 12-13
- 58- Ibn al-Rami, op. cit., p. 28.
- 59- See Appendix I, R.6 (1), Case No. 418.
- 60- Ibn al-Rami, op. cit., p. 83. Ibn al-Imam, op. cit., Ms. pp. 23-24, I, pp. 126-127.
- 61- Ibn al-Rami, op. cit., p. 83-84.
- 62- Ibn al-Imam, op. cit., Ms., pp. 18-19, I, pp. 116-117.
- 63- Ibn al-Rami, op. cit., p. 12. Ibn al-Qasim seems always to oppose compelling the owner to rebuild his wall in order to protect his neighbor. The only instance in which he agrees with others is the one stated here which is related by Ibn al-Rami on the authority of Yahya (d. 233/848).
- 64- Medina Court Records, R. 140, p. 42, Case No. 252, dated 10/4/1242/1826. And R. 140, p. 92, Case No. 543, dated 18/11/1244/1829.
- 65- Ibid., R. 144, p. 12, Case No. 86, dated 7/11/1251/1836.
- 66- Ibid., R. 125, p. 30, Case No. 275, dated 5/11/1206/1792.

Chapter IV

INSTITUTIONS, PRINCIPLES AND PROCESSES INVOLVED IN REGULATING THE TRADITIONAL PHYSICAL ENVIRONMENT

Chapter IV

Institutions, Principles And Processes Involved In Regulating The Traditional Physical Environment

Islamic law is a jurists' law, created and further developed by the *fuqaha'* who were private specialists. Its formation was shaped more by religious and ethical ideas than through the impetus of the needs of practice and juridical technique. Because it is a jurist law, Islamic legal science is amply documented, whereas the reality of actual cases is far less. However, the numerous hypothetical cases composing this science should not be looked at as abstract thoughts that are very remote from reality. In most instances, as our previously discussed cases show, these hypothetical cases represent the actual realities of life within the city. The jurists' opinions on hypothetical cases always corresponded to the cases decided by courts and to the conception and actual practice of the residents.

A. Institutions In Charge Of Supervising The Traditional Physical Environment.

The jurists' opinions and the actual cases presented earlier provide the background and the ideals implied by the general rules of conduct within the Arab-Muslim city. Their application was undertaken by the *qadi* and the *muhtasib* whose responsibilities and roles are to be discussed briefly with emphasis on their role in regard to urban and building issues.

1. *The Qadi*

The *qadi* is a single judge, appointed by and representative of the authorities, invested with the power of jurisdiction (*qada'*). His responsibilities include:¹

"... in addition to the settling of suits, certain general concerns of the Muslims, such as supervision of the property of insane persons, orphans, bankrupts, and incompetents who are under the care of guardians; supervision of wills and mortmain donations and of the marrying of marriageable women without guardians to give them away, ...supervision of public roads and buildings; examination of witnesses, attorneys, and court substitutes, to acquire complete knowledge and full acquaintance relative to their reliability or unreliability..."²

Al-Mawardi (d. 450/1058) elaborates more on the *qadi's* responsibility to supervise public roads and building. He states:

"(the *qadi*) ... exercises police powers in his district. He stops all infringements on streets and public places and causes the removal of all projections of buildings and of all buildings which are too tall. He may proceed on his own initiative regarding these duties without anybody having to lodge a complaint... These are questions of public order and it is hardly important whether or not there is a request for intervention..."³

Regarding the actual practice of the *qadi* to protect the public's interest in our aforementioned cases, two types of action were taken. The first was that taken by Ibn 'Abd al-Rafi', the *qadi* of Tunis, where he or the person whom he authorized would walk through the streets of the city, watch for the walls threatening collapse and tear them down without having a complaint lodged with the court.⁴ The other type was the action taken by the judges of Medina, i.e.,

measuring the width of the street in front of a house which was to be rebuilt, investigating into the case of a closed lane which allegedly used to be open, or ensuring that the public's right of way was being protected when someone decided to build a *saqifah* (chamber) above the street. These actions were carried out after complaints were lodged with the court.⁵

Ahl al-Khibrah. [*Ahl, arbab, or ashab al-khibrah, also called ahl al-nazar, ahl al-basar, and ahl alma^crifah (experts)*]. A group of trustworthy individuals chosen by the *qadi* to investigate cases where both litigants have no evidence. The group was not a permanent body but usually designated by the *qadi* each time a case arose. *Ahl al-khibrah* had no authority to decide matters under dispute. Their role was limited to investigating these matters and communicating their findings to the *qadi* who in turn decided the case.

The practice of asking experts to investigate disputes, especially those of buildings, was, according to Ibn al-Rami, begun by the Prophet himself. In a dispute regarding the ownership of a shared wall, the Prophet sent Hudhayfah b. al-Yaman, who was believed to be a masterbuilder, to investigate the case and the Prophet decided accordingly.⁶ The practice continued, it seems, from that point on. In two hypothetical cases, the role of experts was recognized. The first, mentioned earlier in this study, was presented to Ibn Kinanah, asking what to do with an individual who claimed to the authority that his neighbor's wall or chamber was threatening collapse. He responded that the wall should be examined by a group of trustworthy experts.⁷ The second case was presented to Sahnun, regarding the ownership of a shared wall. The case stated that the wall was examined by two trustworthy masons (*aminan min al-banna'in*).⁸ Both cases indicate that this was the practice during the second and third (eighth and ninth) centuries.

The practice must have continued through the centuries. In Tunis during the eight (fourteenth) century, we have Ibn al-Rami's account of numerous cases in which he was asked by the *qadi* to investigate either alone or as a member of a group of experts. In Medina, our cases,

which begin in the year 963/1555, show that this was also the practice there. In each case where either public interest was involved or a dispute occurred and no evidence was produced by any of the litigants, the *qadi* designated a group of *ahl al-khibrah* to investigate the case.

The role of *alh al-khibrah* and their responsibilities can be classified in three major areas: First, damage complaints; second, ownership disputes; and third, the transaction, rent or rebuilding of the *waqf*. In damage complaints, they were supposed to investigate whether or not an inherent damage was inflicted. They were also expected to advise on how this damage could be removed. This was very well expressed in the response of Ibn al-Ghammaz to two questions presented by Ibn al-Rami. The first regarded an individual who wanted to build a quern for milling in his house and Ibn al-Rami asked how far the quern should be from the neighbor's wall. On this Ibn al-Ghammaz responded, "you are the expert who know that." The second regarded an animal's stable that was to be set up beside a neighbor's wall, where Ibn al-Rami asked him when the damage would be considered removed. Ibn al-Ghammaz again responded, "this depends upon your (the expert's) honesty: when you deem that damage, vibration, and dampness cease to reach the wall."⁹ Regarding ownership disputes, the experts were supposed to investigate the case on the site, such as shared walls, the encroachment of neighboring properties, or the use of space on thoroughfares and lanes, then report back their findings to the *qadi*. *Ahl al-khibrah* were also asked by judges to investigate cases related to *waqf*. Since *waqf* foundations were placed under the *qadi's* general supervision, all actions or transactions regarding those foundations had to have his initial approval. Thus the *qadi* usually asked the experts to investigate in order to ensure that the activities to be undertaken were intended to benefit the *waqf* and not anything else.

Members of *alh al-khibrah* were drawn mainly from the experts in the field of building in early times. During Ibn al-Rami's time, the eighth (fourteenth) century, it was not clear whether the group included members who were not experts in building activities. But from the tenth (sixteenth) century on, as the Medina court cases show, the group

included several members who were not considered competent in building practice. The cases show that the members of the group usually ranged between five and twelve, with an average of eight members in several cases. The group usually included one court official; on some occasions the *qadi* himself, at other times his deputy or the registrar of the court;¹⁰ one or more engineers (*muhandis*); one or more masons (*mu^callim*); and several distinguished persons. As of 1211/1796 a new member appeared, who from this time on participated in any group of experts designated by the *qadi*; this new member was the city engineer (*muhandis al-baldah*).¹¹ This position might have existed in Medina as well as in other Arab-Muslim cities before this time. Ibn al-Rami's continuous participation with the experts in the city of Tunis as well as his cooperation with the court regarding walls threatening collapse and buildings encroaching on the public way suggests that he had some sort of official status within the city, whether as city engineer or some similar position.¹²

2. *The Muhtasib*¹³

An officer who was effectively entrusted with the application of *hisbah* ("to promote good and forbid evil") in the supervision of moral behavior within the town and particularly within the markets. He was usually appointed by the state or its in-town representative to whom the state officially delegated the function of *hisbah*, not in order that the representative should perform it in person, but so that he might ensure that it was carried out.

In order to be able to perform his duties properly, the *muhtasib* usually appointed subordinate officers who enable him to be hastily represented anywhere, to summon delinquents, and so on. In the case of the markets where the *muhtasib* was unable to supervise every single trade, either personally or through his subordinate officers, he designated a chief in each group (*amin*, or *carif*) according to their trade or profession, who would represent that trade and at the same time be responsible for any misconduct in the behavior of any member of his group.

The *muhtasib's* duties evolved out of the nature of his position, the *hisbah*, and therefore encompassed a two-fold responsibility: that of promoting what was good and that of prohibiting what was bad or evil. According to al-Mawardi, each responsibility fell under three categories; those of a religious, those of a worldly, and those of a mixed character. Within the first category, promoting what was good, matters of religious character were obligations enforceable on the community, not on the individual. Those of a worldly concern could be concerned with either the general public or with individuals. Regarding the public, the *muhtasib* was responsible for the cleanliness of the streets, for ensuring the supply and regular distribution of water, for the repair of ruined city walls, and for the arrival of the needy wayfarers for whom the local people failed to provide. Regarding individuals, cases exist where rights were withheld and debts unpaid without an excuse. In the former case, the *muhtasib* had to act on his own initiative, while in the latter case he acted only if a complaint was lodged. Matters of mixed character were those where the interest of the individual was in some sense connected with religious rights.¹⁴

Within the second responsibility, prohibiting what was bad or evil, that which related to worship, to reprehensible acts, or to commercial transactions was of a religious nature. Matters of worldly concern are exemplified by such acts as encroaching on a neighbor's boundary, or extending beams beyond one's outside wall. In these matters the *muhtasib's* interference was contingent on a complaint. Only then could he act, provided the two neighbors were not actually in dispute, in which case the judge had to act. Under this category also fell the responsibility of the *muhtasib* to ensure that during the building and repair of houses and the erection of shops within the market, nothing was done which was prejudicial to public safety or which impeded the path of pedestrians. Here the *muhtasib* could intervene of his own accord and he was at liberty to deduce principles of decision from custom (*ʿurf*) as distinct from revealed law (*sharʿ*). Also of worldly concern was the responsibility of the *muhtasib* to supervise the classes of professional craftsmen, especially where their avocation required a special regard for competency or incompetency, for honesty or dishonesty, or for the good or bad and worldly character were those

such as not overtopping other buildings. "...A man who hightens his house is not bound to block the view from his roof, but he is bound not to command a view over another house."¹⁵

Comparing the office of the *muhtasib* to that of the qadi, al-Mawardi states:

"... The jurisdiction of *hisbah* corresponds to that of the *Qadi's* court in the right to hear and adjudicate on complaints in worldly matters, ... but only those which imply a clear wrong and are identified with obvious right, ..."

"In two respects his jurisdiction falls short of that of the *Qadi*. He is incompetent to deal with claims which do not result from wrongful acts, ... Secondly, his jurisdiction is restricted to such liabilities as are admitted ..."

"In two respects the *Muhtasib's* powers exceeded those of a *Qadi*: he is entitled to examine matters within his jurisdiction in the absence of a complainant, whereas a *Qadi* must have a litigant competent to complain before him, otherwise he is exceeding his jurisdiction. And, for the purpose of repressing wrong, the *Muhtasib* is invested with the extreme powers of sovereign protector, for, his authority being based on fear, to enforce it by means of fear is no excess of jurisdiction; whereas the *Qadi's* power being based on justice, his characteristic is a sense of responsibility, and for him to wield the stern powers of the *Hisbah* would be unbenefitting..."¹⁶

The duties of the *muhtasib* indicate his specific and exclusive concern with urban matters. He was in charge of ensuring the implementation of the rules of conduct within the market and all over the city, of supervising the quality and the standards of building materials, and of maintaining public utilities and public thoroughfares. All of these show that he was no less than a municipal official --

indeed, together with the *qadi*, the only municipal official in the Arab-Muslim city.¹⁷

B. Principles And Processes Involved In Shaping The Traditional Physical Environment

1. Sources of the Law and Social Conventions

Most of the themes invoked in the decisions on our cases fall within the jurisdiction of the *shari'ah*. The injunction to avoid the causing of harm and damage, a theme invoked by the jurists and applied in most of the material in this part of the study, comes from the *sunnah*, the second source of Islamic Law. This theme was applied to regulate the functional appropriation of city territories, and to regulate building heights and the opening of doors and windows. Another theme invoked was that of having regard for the public interest (*maslahah*) when the meaning of the law or the applicable rules were in doubt. When the public's interest comes under consideration with other issues, it is always given priority by the Malikis. On this they invoke *al-masalih al-mursalah* (a theme which gives priority to the public welfare regarding matters on which the law is not specific) as one of the *usul* (pl. of *asl*, source or foundation) or of the law.¹⁸ This was invoked in maintaining thoroughfares and public utilities within the city, and when there was a choice between public and private interest, the former always prevailed. However, when no conflict existed, private interest was also considered. This was the case in allowing projections and buildings above streets. Another source invoked for deciding some of our cases was the general consensus. Besides this, the Malikis also recognized the practice of the ancients of Medina (*'amal ahl al-Madinah*) as part of the general consensus. This was invoked by Maliki scholars to justify projection of buildings on streets and the subdivision of houses.

Another source upon which Islamic law draws for its judgment of actions is the *'urf*, that is, "action or belief in which persons persist with the concurrence of the reasoning powers and which their natural

dispositions agree to accept as right."¹⁹ *ʿUrf*, therefore, represents custom as distinct from revealed law (*sharʿ*). Some of the themes invoked to decide on our cases fall within the acknowledged *ʿurf* or custom prevailing in a specific country or among specific groups of artisans. Cases that experts were asked to investigate were always decided according to the prevailing *ʿurf*. The concept of declared zones of use for activities first invoked by the *fuqaha'* was also based on the acknowledged axiom: "the old should be left as it is" (*al-qadim yutraku ʿala qidmih*). On the basis of this axiom, the Malikis even allowed the continued existence of sources of damage that pre-existed other activities, and protected these established activities from new source of damage.

Out of these themes and principles came a body of legal theory which forms the basic structure of Arab-Muslim society. To maintain the continuity of its structure, the society relied on certain behavioral rules of conduct. These rules, in as much as they were related to the physical environment, were not written. They were retained in the form of acknowledged social conventions which were at work in everyday life. The documentation of these conventions took place only when they were in doubt, that is, when change took place and social conflict arose. This took place either through the imposition of a different value system or through the introduction of some new materials, techniques, and methods of building. The continuity of a certain tradition, therefore, was maintained during the process of development of the traditional physical environment in the Arab-Muslim city. This tradition was continuously modified, adapted and perhaps even changed, but the sense of continuity always persisted.

To see how this process of continuity was maintained, let us analyze the levels at work within the traditional physical environment in the Arab-Muslim city. Taking up the issue of privacy as an example, our previously discussed cases show that intrusion onto the privacy of others within the city was not socially acceptable. Therefore, on the level of practice and everyday life, city residents accepted the convention that one should not create in his house anything that would facilitate intrusion onto his neighbor's privacy.

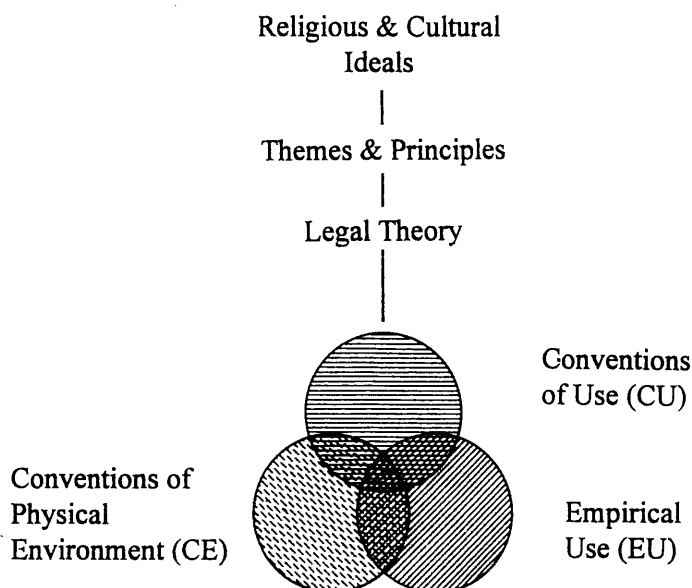
When this did happen, it resulted in a conflict on the social level. An example of this is the case from Medina where the individual who opened windows in his second floor chamber was sued by his neighbor on the ground that he was denied his right to privacy.²⁰ The judge had to decide the case on the basis of the formulated legal theory of Islamic jurisprudence. The theory advocates a theme that prohibits infliction of harm and damage by an individual onto another. But for the judge to decide that intrusion onto the privacy of neighbors inflicted harm and damage, he had to look back to the acknowledged social conventions.

2. Social Conventions vs. Physical Conventions

Within the rules of conduct applied in the Arab-Muslim city, the emphasis was on social behavior rather than on prescriptive physical regulations. The convention, again to take up the privacy issue, was to prevent intrusion onto a neighbor's privacy rather than to prohibit the opening of windows. An example is again in the case from Medina. When the judge ordered the windows sealed he was concerned about the damage being inflicted onto the neighbor. Therefore when the owner asked permission to open higher windows that would not cause his neighbor any harm but would benefit him by providing sunlight and fresh air, the judge agreed, since according to the law this was his right.

Another example which shows the flexibility of these conventions and their emphasis on matters of conduct rather than on physical form is the case of the house types in Medina alluded to earlier under the concern for privacy. Three house types developed there, each with its own distinctive form. (See Figures 29, 30, 31). The three types all subscribed to the rules of conduct and seemingly satisfied accepted social conventions. However, when one looks at these three types on the basis of conventions of form, they differ markedly in their shape, height and elements. This shows how legal theory and legal decision regarding form and use mediated between specific problems of use and urban form as it gradually developed. Since the emphasis was on the conventions of use and more specifically on prescribing what is not to

be done, any urban form suitable to serve these uses was accepted. This process can be illustrated in the following Venn diagram.²¹



The Process In Traditional Arab-Muslim Cities

- The weight of the lines indicates a relative degree of emphasis with conventions of form as slightly less powerful than the conventions of use or the empirical use.

Notes

- 1- For evolution of the office of the *qadi* see E. Tyan and G.Y. Kaldy Nagy "Kadi" art., *Encyclopedia of Islam* (2nd ed.), vol.4, pp. 373-375. For the office's requirement and the *qadi's* responsibilities in theory and practice see H.F. Amedroz, "The office of Kadi in the Ahkam Sultaniyya of Mawardi," *The Journal of the Royal Asiatic Society*, (July, 1910), pp. 761-796. For more on the *qadi* and procedures in Islamic law see J. Schacht, op. cit., Ch. 25.
- 2- Ibn Khaldun, *The Muqadimah: An Introduction to History*, N.J. Dawood (ed.), Princeton, 1967, p. 174.
- 3- Al-Mawardi, *al-Ahkam al-Sultaniyah*, Fagnan, pp. 140-146. Quoted by H.J. Liebesny, *The Law of the Near and Middle East*, Albany, 1975, p. 242.

Regarding whether the qadi may or may not proceed on his initiative, al-Mawardi here represents that Shafi^c school's point of view. Other schools of law may differ on procedural issues such as this one. According to the Hanafi school the judge may proceed only if a complaint was lodged with him.

- 4- See Chapter III, "*Walls and Buildings Threatening Collapse*."
- 5- See Chapter III. "*Thoroughfares*" and "*Projections*." One should note here that Ibn al-Rami gives an account of the actions taken by Ibn ^cAbd al-Radi^c, the judge of Tunis, which are not initiated by complaints and therefore not included in the court's records. This is a sort of urban history that is lacking for the city of Medina. Were the judges of Medina following the same practice? They might, but there is no textual evidence.
- 6- Ibn al-Rami, pp. 3-4.
- 7- For a complete account of the case see Chapter III, "*Walls and Buildings Threatening Collapse*" and Ibn al-Imam, I, pp. 126-127.
- 8- For a complete account of the case, see Ibn al-Rami, p. 6.
- 9- Ibn al-Rami, p. 23, 25.
- 10- On few occasions where none of those was present, there was one called *muhadir qassam* who might have had an official affiliation with the court.
- 11- A further investigation is needed to determine the nature of this position and its responsibilities.
- 12- See Chapter III "*Thoroughfares*" and "*Walls and Buildings Threatening Collapse*."
- 13- For evolution of the *hisbah* and the office of the *muhtasib* see R. Levy, "Muhtasib" art, *Encyclopedia of Islam* (1st. ed.), Vol. 3, pp. 702-703. Also, Cl. Cahen and M. Talbi, "Hisba; general sources, origins and duties," R. Mantran, "Hisba: Ottoman Empire," A.K.S. Lampton, "Hisba; Persia," A.S. Baseem Ansari, "Hisba; the Indian subcontinent," arts., *Encyclopedia of Islam* (2nd. ed.), Vol. 3, pp. 485-493. For the office's requirements and the *muhtasib's* responsibilities in theory and practice see, in addition to the *muhtasib's* manuals referred to earlier, H.F. Amedroz, "The Hisba jurisdiction in the Ahkam Sultaniyya of Mawardi," *The Journal of the Royal Asiatic Society*, (January 1916), pp. 77-101; (April 1916), pp. 287-314.
- 14- Amedroz, 1916, pp. 80-85.

- 15- Ibid., pp. 77, 95-98.
- 16- Ibid., pp. 78-80.
- 17- It should be pointed out that the *muhtasib* is still at work in Saudi Arabian cities and towns. It is no more a simple individual but an "Organization to Promote Good and Forbid Evil," *Hay'at al-Amr bi al-Ma'ruf wa al-Nahy 'an al-Munkar*. Before the development of municipal authorities in Saudi Arabia, these organizations shouldered most of the *muhtasib*'s responsibilities. At the present, they are only concerned with the moral aspects; that is acts of religious character, while acts of worldly character, urban matters, are the municipalities' responsibility.
- 18- The four orthodox schools are divided on this point; that is *al-masalih al-mursalah*. It is invoked by the Malikis and the Hanbalis who consider it one of the *usul* (p. of *asl*; source or foundation) of *fiqh*. The Hanafis allow for the public welfare in what is called *istihsan*, while the Shafis oppose it on the grounds that the *mujtahid* does not know what is good for the public and therefore he has to have a quotation from the *shari'ah* to serve as a textual evidence. Abu Zahrah, *Malik*, Cairo, (1952), pp. 365-370.
- 19- R. Levy, "Urf" art, *Encyclopedia of Islam*, (1st ed.), Vol. 4, p. 1031. For more on *urf* see also Abu Zahrah, op. cit., pp. 420-427 and *Usul al-Fiqh*, Cairo, (1957), pp. 261-264. Also, Ibn 'Abidin, *Majmu'at Ras'il Ibn 'Abidin*, Vol. 2, "Risalat al-Urf."
- 20- See Appendix I, R.6 (1), Case No. 413.
- 21- This diagram is adapted from a conceptual and theoretical analysis developed by Stanford Anderson. See his "Conventions of Form and Conventions of Use in Urban Social Space," a paper presented to the Int. Symposium on Islamic Architecture and Urbanism, K.F.U., Dammam, (January 5-10, 1980).

Part II

CONTEMPORARY PROCESSES AND REGULATIONS: THE CASE OF SAUDI ARABIA

Part II

Contemporary Processes And Regulations: The Case Of Saudi Arabia

Contemporary urban form in Arab-Muslim cities differ markedly from the traditional urban form of these cities. In this part, we will follow the development of the contemporary physical environment in Saudi Arabia during the past four decades. We will be concerned mainly with the development of a certain physical pattern and physical character which spread not only throughout Saudi Arabian cities but to other Arab-Muslim cities as well -- namely, the adoption of the grid as a street pattern and the villa as a dwelling type.

To understand the process of development of the present physical environment, we will follow, first, the evolution of its pattern and character and secondly, the development and evolution of zoning regulations which governed, directed and shaped this environment. We will then try to show where and how the departure from the traditional physical environment took place and will attempt to explain the nature of the cultural conflicts caused by this departure as well as its physical and social implications.

Chapter V

DEVELOPMENT OF THE CONTEMPORARY PHYSICAL ENVIRONMENT

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DEVELOPMENT OF THE CONTEMPORARY PHYSICAL ENVIRONMENT

In this chapter we will deal with the grid as a street pattern and the villa as a dwelling type. We will show how they were introduced in Saudi Arabia and the process through which they were developed and institutionalized. In the first section, we will follow the development of the grid in Dammam, al-Khobar, and Riyadh. Then we will look at the emergence of the detached house type (the villa) with its square lot through the ARAMCO Home Ownership Plan (a loan program for oil-company employees) and al-Malaz (a housing project for government employees). In the second section, "the Institutionalization of the System," we will show how these two developments were solidified -- the grid through the Doxiadis master plan for Riyadh, and the villa, with its square lot, through zoning regulations and decrees, directives, and circulars -- and hence became the basis of new developments throughout the country.

A. Background

1. The Grid Pattern: Dammam and Al-Khobar

The physical development of Dammam and al-Khobar resulted from the expansion and growth of the oil industry in the Eastern Province of Saudi Arabia. The Arabian-American Oil Company (ARAMCO) played a major role in the planning and development of these two cities as well as of other communities in the Eastern Province.

The expansion and growth of the oil-producing industry took place in areas somewhat distant from existing communities such as Hofuf and Qatif. When oil exploration began in the 1350's/1930's, the nearest community to the oil fields was Dammam, an old fishing village of about 3,000 inhabitants.¹

Since the existing communities were not close enough to be called upon to provide housing and related facilities for the developing industry, ARAMCO found it necessary to establish its own field camps. The first oil-camp was started in 1938 at Dhahran, 18 km. south of Dammam. a year later, a second oil-camp was built at Ras-Tanura, 60 km. to the north of Dammam, and again in 1944, a third camp was established at Abqaiq, 65 km. southwest of Dammam and 60 km. north of Hofuf. By the early 1370's/1950's, these three camps had been enlarged into industrial towns in order to accommodate the increasing number of workers, about 22,000 by 1372/1952.

But by this time, the camps had started to shrink as new urban centers developed. First, the village of Dammam, which was located just 18 km. north of the oil company's fields at Dhahran, began to grow out of its old wall. Then, from a process that started in the late 1350's/1930's, a community began to emerge around the activities of a new ARAMCO pier. The company had built the pier on the coast (10 km. east of the Dhahran camp and 20 km. southeast of Dammam) in 1354/1935 in order to accommodate both incoming materials and oil shipments to Bahrain. In the same year the government established a customs post in the area.² Together, these stimulated the beginning of a small community to be known as al-Khobar. Finally, in addition to these organic growths, ARAMCO itself in the early 1370's/1950's sponsored new towns next to the Ras-Tanura and Abqaiq camps, Rahimah in 1372/1952 and Madinat Abqaiq in 1376/1956.³

The initial growth of Dammam and al-Khobar in the late 1350's/1930's and early 1360's/1940's was not planned in an orderly fashion. As the population grew, people took over any available land and erected basic shelters and fences of local materials. Following the traditional pattern of Arab-Muslim cities, the streets were narrow and

irregular. When the physical development of the two towns increased substantially in the mid-1360's/1940's, the government felt the need for a controlled layout. So in 1366/1947, the Governor of the Eastern Province requested assistance from the oil company to help in producing a layout for both Dammam and al-Khobar. In response to this request, ARAMCO had its surveyors prepared land subdivision plans and staked out the streets and blocks on the ground. These original plans only covered limited areas and were laid out in a gridiron pattern.⁴

Dammam. In 1366/1947, when the request was lodged with ARAMCO to produce a land subdivision plan, the built-up area of Dammam covered 170 acres (70 hectares) following a traditional development pattern. The ARAMCO land subdivision plan covered an area of 400 acres surrounding this existing core. The plan followed a grid pattern with blocks measuring 300 ft. by 600 ft. (90 x 180 m.) with a north-south orientation. The width of streets ranged from between 70 to 100 ft. (20 to 30 m.) (Figure 32). The plan did not disturb the built-up complex of old Dammam, but no attempt was made to adapt the new street pattern to the old one. This took place later through a physical intervention process of demolition and widening of streets in the old town.⁵

Around 1370/1950, a speculative demand for land developed in Dammam. This was largely the result of two actions taken by the central government. The first was the building in 1950 of a port terminal east of the city, extending 11 km. into Tarut Bay and connected to the mainland by railroad.⁶ The following year, the railroad was extended 550 km. via Abqaiq and Hofuf to Riyadh,⁷ thus making Dammam the main seaport for Riyadh, the country's capital. Probably, because the blocks were originally subdivided into plots, land speculation was oriented toward entire blocks, which were acquired either by purchase or by grant.⁸

The block purchases and grants had a major effect on the original plan. To meet the need for more blocks, the town responded by reducing the original size of the block. First, reducing the size to

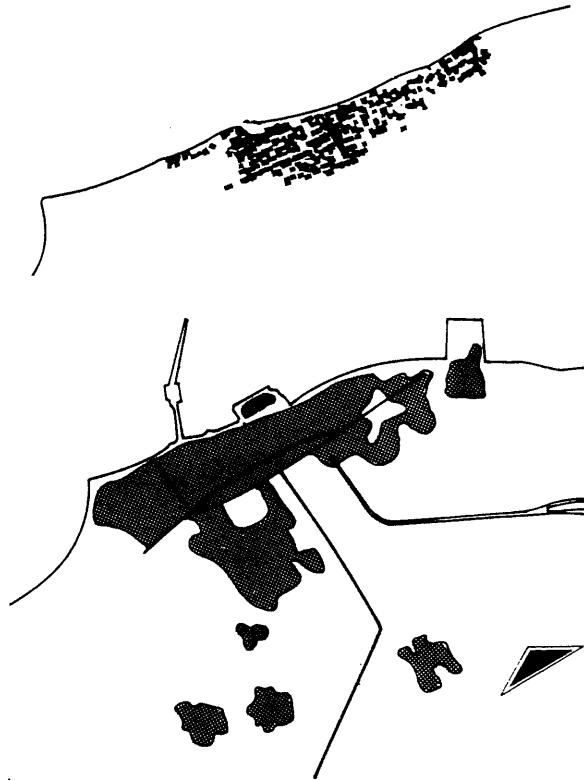


Figure 32: Dammam
 (upper) 1934, old Dammam.
 (lower) 1956, the grid plan of ARAMCO on the west
 and south sides of old Dammam.

Source: Candilis, *Eastern Region Plan, Dammam*, Existing Conditions, 1974, p. 31-21.

around 300 ft. square; thus dividing the original block into two. Then, as pressure for more blocks continued, the 300 ft. square was subdivided into four blocks of approximately 150 ft. square. The original street pattern and widths were retained with the addition of new alleys to allow access for the new subdivisions (Figure 33). In the subdivision containing the smallest blocks, this brought the percentage of land given to streets to nearly 55 percent.⁹

Another government action, making Dammam the provincial capital of the eastern province, further increased pressure for development. Government offices moved from the old Capital of Hofuf in 1372/1952; by the end of that year, Dammam was comprised

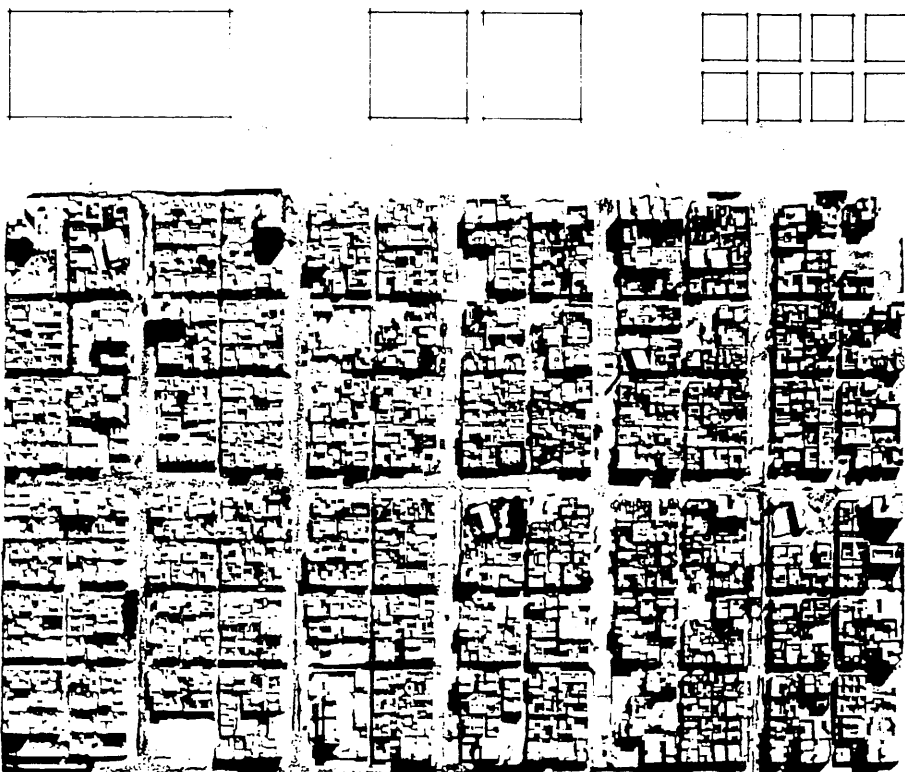


Figure 33: Damman - the evolution of the block in the ARAMCO grid plan.
 (upper) Shiber's account of the evolution of the blocks.
 (lower) Aerial photo showing original blocks that have
 been divided into six smaller ones.

Note that there is a discrepancy between Shiber's account and the aerial photograph above. However, when referring to the percentage of land given to streets, Shiber alludes to the fact that not all the blocks were subdivided into eight smaller ones.

Source: (lower) Candilis, Eastern Region Plan, Damman, Existing Conditions, 1974, p.31-41 (no. 4).

of 525 acres plus the 400 acres of ARAMCO's subdivided plan and a population of 25,000.¹⁰ Since ARAMCO at that time had engaged engineers to prepare town plans for its new communities,¹¹ their services were now made available to local government agencies. In cooperation with the municipality of Damman, the engineers developed a major thoroughfare plan for the city that is still being followed today. They also developed a layout scheme for the next

1,000 acres. These were subdivided and sold off by the municipality of Dammam.

Subsequent subdivision areas were laid out by the municipality and followed the earlier gridiron layout,¹² in some areas only roughly, but in others with precisely the same dimensions (Figure 34).



Figure 34: Dammam, 1974.

Areas laid out by the municipality followed the earlier grid-iron layout.

Early grid-plan is in the center of the map with darker lines.

Source: Candilis, Eastern Region Plan, Dammam, Existing Conditions, 1974, p. 13-10.

Al-Khobar. Between 1354/1935, when ARAMCO built its landing pier and storage yard and the government established its customs port, and 1366/1947, when the Governor of the Eastern Province asked ARAMCO to help in producing plans for Dammam and al-Khobar, the new community of al-Khobar mushroomed. Clusters of houses had grown up on both sides of the landing pier and the storage yard. Under the conditions that prevailed at the time, land ownership could neither be ascertained nor recorded, and possession was based on actual occupancy.

The ARAMCO land subdivision plan of the late 1360's/1940's covered 160 acres (64 hectares) north of the company's pierhead and storage yard. The blocks averaged 130 x 200 ft. (40 x 60 m.), with separating streets of 40 and 60 ft. in width (12 and 18 m.). The grid was oriented north-south and was to be carried out irrespective of the growth of the previous fifteen years; this earlier development was treated as insignificant and structures were demolished to open up the new streets and to preserve the grid pattern of the plan.¹³ Next, al-Thuqbah, a western suburb, and the section south of the pier were laid out in gridiron blocks having a northwest-southeast orientation¹⁴ (Figures 35, 36, 37).

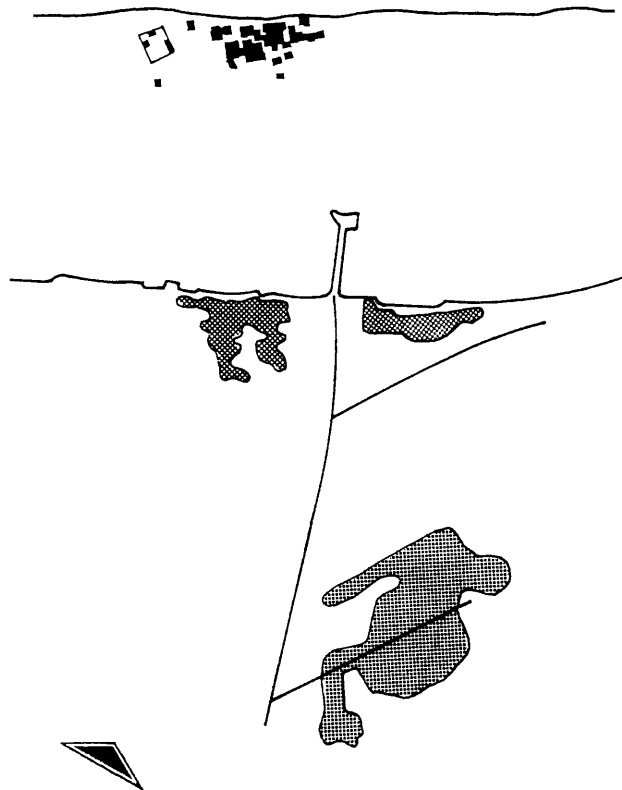


Figure 35: Al-Khobar
(upper) 1934. (lower) 1956.

Source: Candilis, *Eastern Region Plan, Al-Khobar*, Existing Conditions, 1974, p. 31-21.

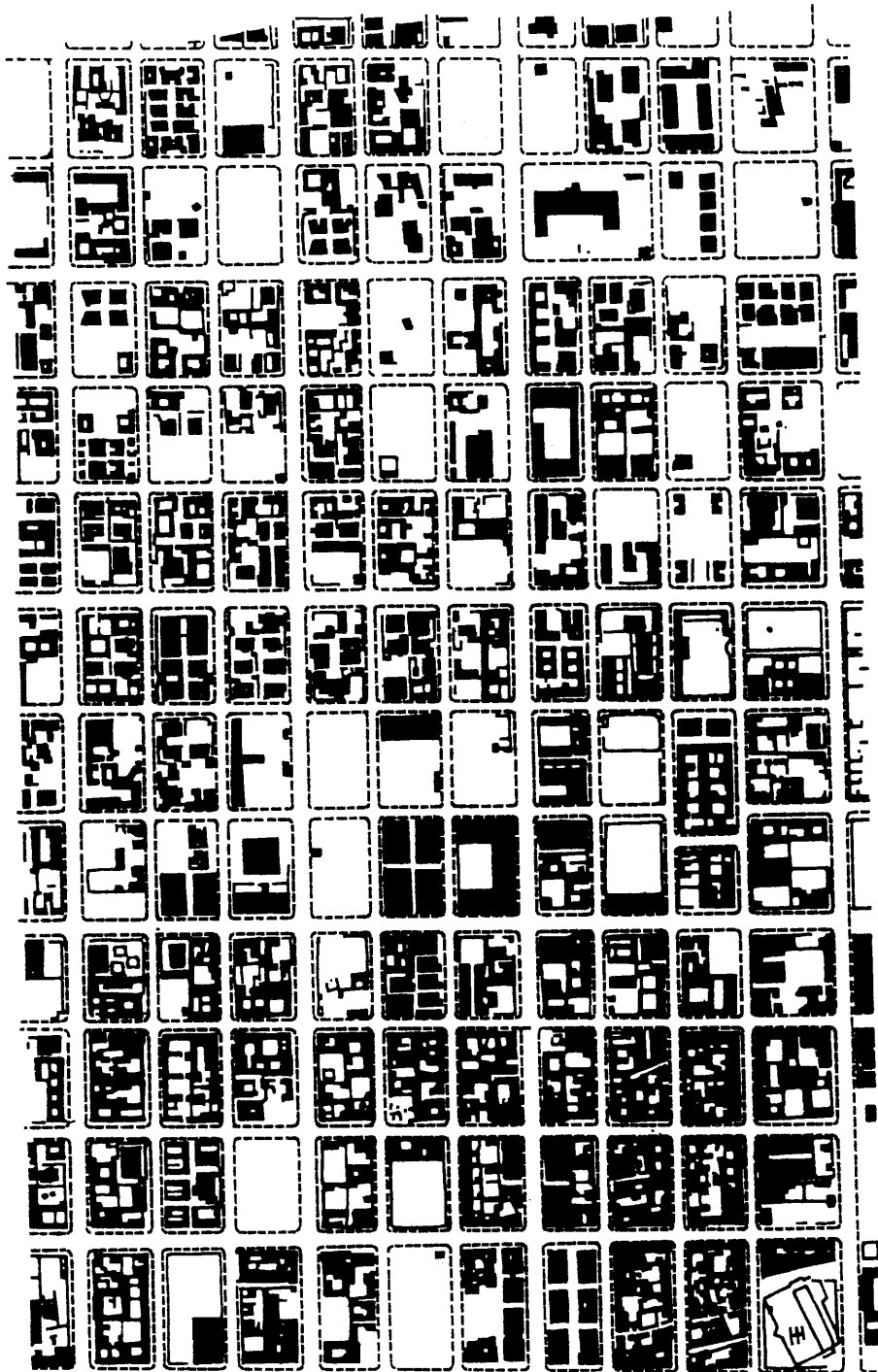


Figure 36: Al-Khobar

Part of the ARAMCO grid-plan showing the block and the street pattern.

Source: Candilis, *Draft Master Plan, Al-Khobar*, 1976, p. 45 (no.3).



Figure 37: Al-Khobar, 1974.

Land subdivision with the built up area shaded.

1. Old Khobar, 2. Madinat al-^cUmmal, 3. Al-Thuqbah.

Source: Candilis, *Draft Master Plan, Al-Khobar*, p. 9.

As a new community, al-Khobar stands out in the history of modern urbanism in Saudi Arabia; taken as a model for many years, its planning established numerous demonstrably unfortunate precedents. It was the first community to be wholly planned, and the first to have an overall grid-plan. It was the first to start the demolition process of the old or, rather, "unplanned" physical development. It also provided the first street name signs, and even initiated the convention of numbered avenues, forsaking the traditional use of persons' names. In other words, al-Khobar, whether consciously or not, led the way and set up a model which other Saudi Arabian cities were to follow in the 50's, 60's and 70's.

2. *The Grid Pattern: Riyadh*

Riyadh was founded on the ruins of several communities around 1150/1740 A.H./A.D. The city assumed little prominence, however, until Abd al-^cAziz al-Sa^cud took over in 1319/1902 as its independent Governor and began his campaign for the consolidation of modern Saudi Arabia. From that time, Riyadh was the permanent residence of the King and it also eventually became the capital of the Kingdom, though Mecca, the religious capital, continued to house most government agencies until the 1370's/1950's.¹⁵

Riyadh preserved its size during the first thirty years of Abdal-^cAziz's reign (Figure 38). Only after the consolidation of the Kingdom and the end of the campaign did the King himself, in the 1350's/1930's, took the first step in affecting the city's physical development. Here we will follow three prominent events in the process of Riyadh's physical development: the planning and construction of three different complexes, two of them royal residences and administrative centers, known as al-Murabba^c and Nasriyah, and the third a housing complex, known as al-Malaz (Figure 39). We will try to trace the impact of each of these building programs on the city's character and physical development.

Al-Murabba^c and al-Futah. In 1357/1938, King Abd al-^cAziz decided to move outside the old city of Riyadh. Accordingly, two kilometers north of the center of town, he built al-Murabba^c -- a large complex of palaces and administrative buildings for himself and his entourage.¹⁶ The complex covered an area of approximately 16 hectares (a square of 400 x 400 m.) with an average height of two and one-half stories (Figure 40).

As an urban design scheme, al-Murabba^c preserved the general characteristic of the massing of volumes found in Riyadh's traditional urban pattern. This pattern and characteristics can be seen in the continuity of al-Murabba^c solid mass, in its covered and somewhat narrow streets, in its squares and courtyards, and in the repetition of the basic rectangular theme in its general layout and through its detailed

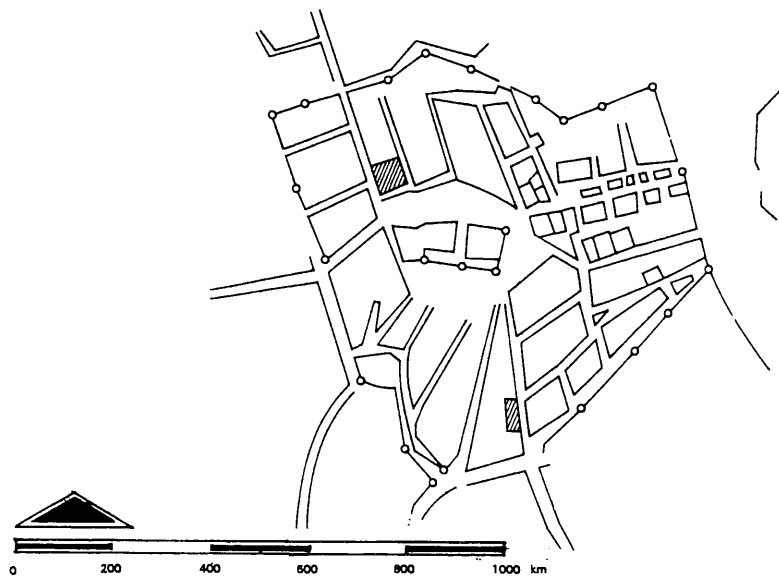


Figure 38: Riyadh, 1919.

Philby's map

Source: Doxiadis, *Riyadh Existing Conditions*, 1968, p. 27.

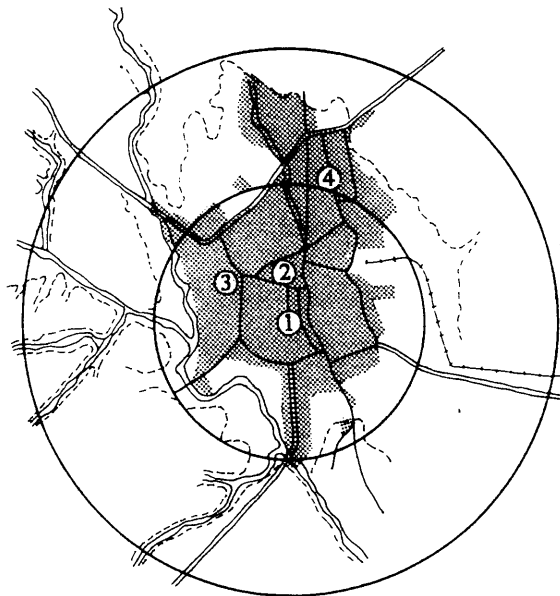


Figure 39: Riyadh, 1970.

Sites of the three building programs and other related areas:

1. Old Riyadh, 2. al-Murabba^c, late 1930's, 3. Nasriyah, mid-1950's, and 4. al-Malaz, late 1950's.

Source: Al-Hathloul, et al., *Urban Land Utilization*, p. 3.

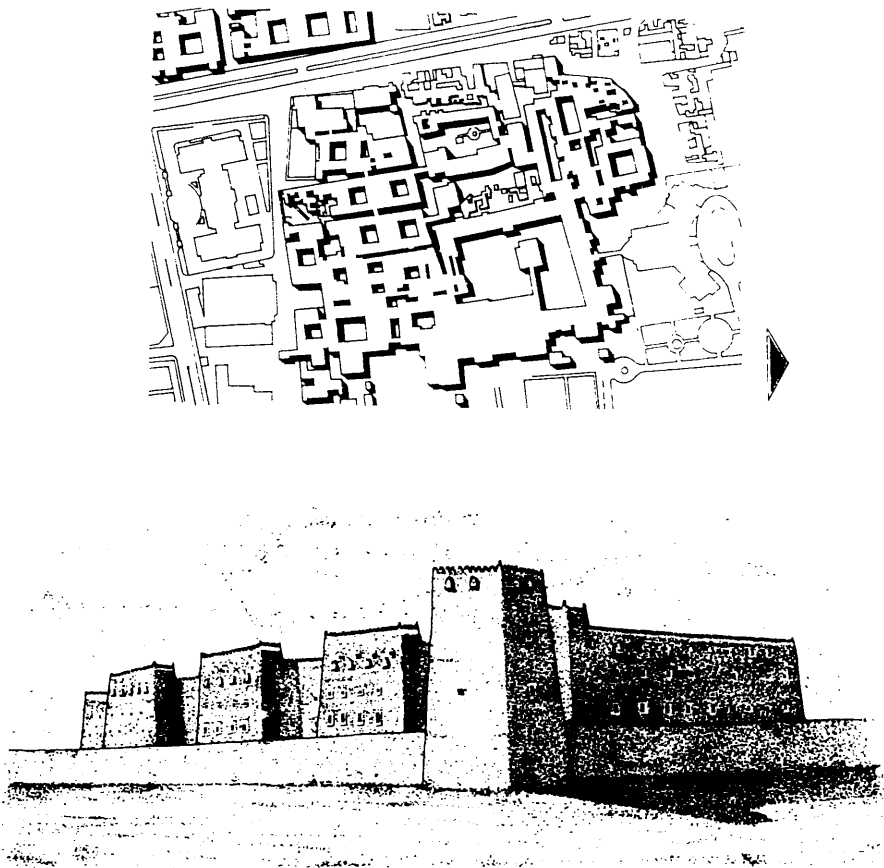


Figure 40: Riyadh - al-Murabba^c.
 (upper) View of the royal palace.
 (lower) Site plan.

Source: De Gaury, *Arabia Phoenix*, London, 1946, ff.p. 64.
 Doxiadis, *Existing Conditions*, p. 291.

component. The departure of al-Murabba^c from the traditional urban pattern lies mainly in the larger size of its components and the huge scale of the building program.

By building al-Murabba^c, King Abd al-^cAziz established a precedent for Riyadh. The affluent now felt that they could build and live outside the city's walls, especially to its north. During the same year of 1357/1938, Crown Prince Sa^cud also built himself a palace on the al-Murabba^c site. Finally, a spacious mansion was added to serve

as the royal guest house, and the complex was linked to the town by road. On the road halfway between al-Murabba^c and the town, Faisal followed in due course by building a palace for himself, which was to be taken over as an additional guest house once it was completed. In the mid- and late 1940's, several palatial mansions of identical pattern sprang up in a new quarter called al-Futah, on the western side of the road between al-Murabba^c and the town. These palaces were to be the residences of the King's younger sons.¹⁷

This building program affected Riyadh in two ways. First, it stretched the size of the town and set up the direction of its physical growth; it showed that the walls could no longer be a barrier for growth and that north was the preferred direction for development. Secondly, it introduced a new means of transportation, the motor vehicle, which subsequently became the only significant transportation system used in Riyadh. This had a major impact on the old town which had to accommodate the demolition and widening of streets in the 1370's/1950's; and, of course, all new developments now had to provide for the automobile, a factor which was not at work during the building of the traditional environment.

Al-Murabba^c stands out as an example, which shows that traditional processes and building techniques can be continued while at the same time providing for new means of transportation, utilities, and services. Within the laying out of the complex, provisions were made for automobile access, for electricity, and for modern bathroom facilities. However, throughout the new building program, the traditional architecture of Najd was adhered to, and the expanding town continued to preserve the character of the core.

Nasriyah. In 1373/1953 when Sa^cud succeeded his deceased father to the throne, he made two decisions that were to have a significant impact on the physical growth of Riyadh. One was his decision to transfer all government agencies from Mecca to Riyadh and to begin a building program along the road to the airport to house them. The other decision was to expand and rebuild Nasriyah, a country estate 3 km. west of the town, as his royal residence.

In the early 1360's/1940's, Nasriyah was a small estate owned by Sa'ud, who was a Crown Prince at the time. It comprised no more than a well and a four-acre garden. By the late 1360's/1940's, Sa'ud decided to develop Nasriyah as a summer residence. Thus, new deeper wells were dug out, the area was extended to approximately 100 acres (40 hectares), and a huge two-story country palace was built.¹⁸ When the decision was made in 1373/1953 to rebuild Nasriyah as the royal residence, the palace was demolished, the area was again extended to approximately 250 hectares, and Nasriyah, the new royal residence, was planned according to a grid pattern with modern, more grandiose palaces, boulevards and gardens. When the whole complex was completed in 1377/1957, it comprised the Royal Divan, the King's private palace, Palace of the King's Mother, the guest palace, four smaller palaces, thirty-two large villas, and thirty-seven smaller villas. The complex also included a museum, a library, a school for boys, a school for girls, a hospital, recreation areas, and a zoo. The complex had its own generating plants and other support facilities.¹⁹ (Figure 41).

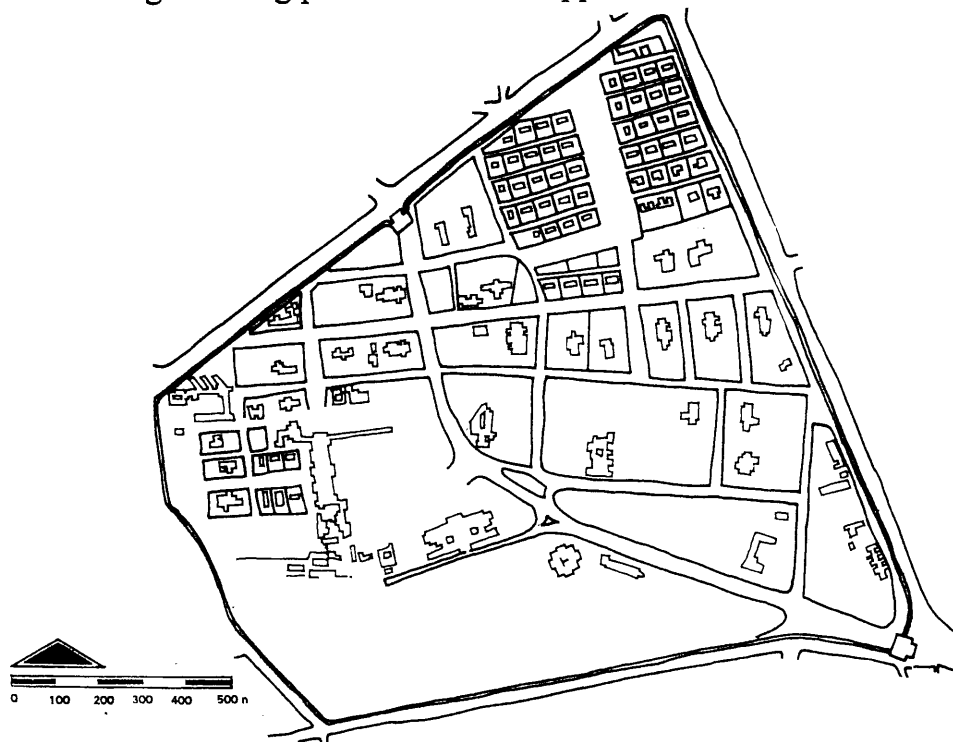


Figure 41: Riyadh - Nasriyah.

A new way of planning and building is being introduced. Site plan.

Source: Town Planning Office-Riyadh.

Nasriyah was probably the first step in the process of building what later came to be known as new Riyadh (al-Riyadh al-Jadidah), though al-Malaz in particular acquired this name. From that time on, the conflict of the old versus the new began to be consciously felt by the city's residents. In contrast to the traditional pattern, Nasriyah was orthogonally planned. It was built out of cement and reinforced concrete as opposed to the traditional materials of clay, sundried mud bricks and wooden roofs; and it was spacious with wide boulevards as opposed to the compact, traditional environment with its narrow and winding streets. In terms of its impact on Riyadh, Nasriyah was a clear demonstration of an alternative way of planning and building, a new way for the inhabitants of the city. Though the size of a large neighborhood, Nasriyah was, however, still considered a palace. Surrounded by a high wall with its own gates, only those who were invited were able to go inside and this confirmed the public conception of it as no more than a royal residence. As such, no one could really aspire to imitate it.²⁰ Still, by virtue of offering a new possibility, it had a clear effect on al-Malaz and other subsequent developments on the airport road.

The immediate and direct impact which Nasriyah had upon Riyadh was, again as in the case of al-Murabba^c, stretching the city westward for four more miles, and thereby necessitating another elaborate road program. To link it with the al-Murabba^c palace and the town, a two-way, three-kilometer boulevard divided by a central line of flower beds was constructed. A similar road branched from the boulevard, leading to the railway station 4 km. east in one direction and to the airport 7 km. north in another.²¹

Al-Malaz: The New Riyadh. When the government decided in 1373/ 1953 to move its agencies from Mecca to Riyadh and, subsequently, to build the ministries along the airport road, the need to provide housing for the transferred government employees was realized. The site of al-Malaz, 4.5 km. northeast of the city center, was chosen, and a housing project was initiated by the Ministry of Finance to satisfy this purpose. In 1377/1957, when the transfer took place, the project was already underway and some parts were completed.

The al-Malaz project consisted of 754 detached dwelling units (villas) and 180 apartment units in three apartment buildings. The detached houses, which were in three sizes, were built and sold to employees on a long-term payment plan, while the apartments were rented on a permanent basis.²² Al-Malaz, which acquired the name "New Riyadh," included a public garden, a municipal hall and a public library. It also housed the buildings, originally planned as schools, for the newly founded University. In addition, it also had a race course, a football field, and a public zoo; supporting facilities such as schools, markets, and clinics were also planned, although they were built by different agencies.

The physical pattern of al-Malaz follows a gridiron plan with a hierarchy of streets, rectangular blocks, and large lots which in most cases take a square shape. Thoroughfares are 30 m. in width, main streets 20 m., and secondary or access streets 10 and 15 m. A 60 m. boulevard divides the project into two parts. Most blocks are 100 x 50 m. The typical lot size is 25 x 25 m., but within some blocks there are a variety of widths, such as 25 m., 37.5 m., and 50 m. The depth of 25 m., however, remains constant in almost all the blocks (Figure 42).

Comparing this newly introduced pattern with the traditional pattern of al-Dirah, Riyadh's oldest neighborhood (Figure 54), one can see that new values in the conception of space have been introduced: a very low density, one-fifth that of the traditional; a large area assigned to streets, three times that of the traditional; and only half of the area reserved for private lots, as compared to more than seventy-five percent in the traditional. In addition, no provision is made for semiprivate space, an essential element in traditional environments²³ (Table 1).

Al-Malaz's impact on the size of Riyadh can be easily seen. It covers an area of about 500 hectares. It is a city by itself as the invention of the name New Riyadh implied. But what was not seen at the time of its initiation was the impact it should later have on the pattern of physical development in Riyadh as well as all over the country. Al-Malaz introduced new patterns and new types. The grid

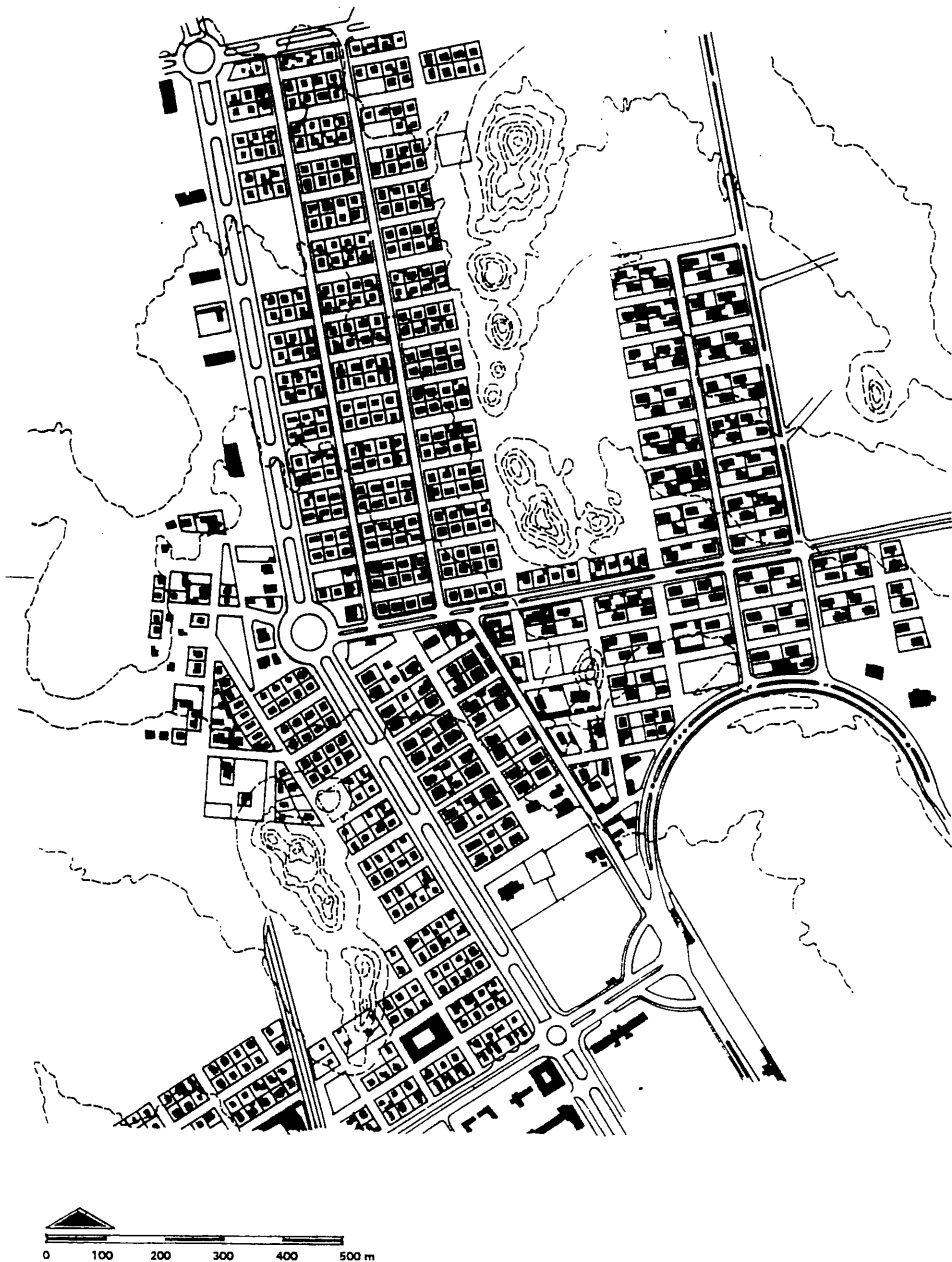


Figure 42: Riyadh - Al-Malaz

A new street pattern - the grid, and new house type - the villa.

Source: Al-Hathloul, et al., *Urban Land Utilization*, 1975, p.39.

	Al-Malaz	Al-Dirah
Density	60.38 p/h	306.25 p/h
Areas:		
Public	45%	18%
Semi-Public	2%	3%
Private	53%	77%
Semi-Private	--	2%

Table 1: Riyadh: Comparision of the Neighborhoods of Al-Malaz and Al-Dirah
Source: Al-Hathloul, Al-Hussayen, and Shuaibi, Urban Land Utilization,
Case Study: Riyadh, Saudi Arabia, 1975, pp. 12 and 42.

as a street pattern and the villa as the new house type both became models for the new physical development that took place in the 1380's/1960's and 1390's/1970's in every city and town in Saudi Arabia.

The question does arise as to why al-Malaz, rather than al-Murabba^c or Nasriyah, became the model to be reproduced in future developments in Riyadh and elsewhere. Three main reasons suggest themselves. The first is that the project was sponsored by the government for its employees. It was, therefore, an authoritative statement by the government on how a modern neighborhood should be planned. As such, it reflected the government's vision and point of view on how the new and vastly growing Riyadh should be built. And, of course, it was taken for granted that what is good and suitable for Riyadh must be good for the country's other cities as well. The second reason is that al-Malaz was seen as a symbol of modernity, in sharp contrast to tradition. It was the only project to use new materials and techniques, no other modern alternative was available for the inhabitants of Riyadh to see, admire and then imitate. The third reason is that, in contrast to the royal residences of al-Murabba and Nasriyah, al-Malaz was built for government employees who were part of the public. As leading opinion makers in establishing the taste and style of

life in Saudi Arabia in the 1370's/1950's and early 1380's/1960's, government employees were highly regarded by other segments of the society, and their lifestyle was greatly coveted. When they moved to al-Malaz with its villas and newly planted trees, almost everyone dreamed of settling into a new and similarly planned neighborhood. Rising expectations continued to mount and land speculators made good use of them. Riyadh now covers an area of more than 300 sq. km. with an estimated density of 50 p/h²⁴ (in Year 1980). Almost all of this area follows the grid pattern and has the villa as its dominant building type.

3. Land Subdivision: The Square Lot and the Villa Type

As we have just seen, new concepts of planning and building were introduced by the al-Malaz housing project. These were the street pattern as a grid and the dwelling as a detached type (villa); both had also been introduced earlier by ARAMCO in the cities of the Eastern Province -- the first, through the ARAMCO grid plans for Dammam and al-Khobar, in the late 1360's/1940's,²⁵ and the second, through the ARAMCO Home Ownership Plan, a loan program first initiated in 1371/1951.²⁶ Having given some treatment of the grid plans, our concern here will be with the second: the dwelling as a detached type, and its role in shaping the subdivision of land.

ARAMCO Home Ownership Plan. This program was initiated in 1951 when the company felt the need to resettle its Saudi Arabian employees in surrounding communities rather than keeping them in the oil camps. By the provisions of the program, which is ongoing, the government provides the land, either as a grant or for a nominal price, to the employees. The company undertakes the stages of planning and land subdivision, such as happened in the case of Madinat al-^cUmmal, in Dammam, and Madinat al-^cUmmal and North ^cAgrabiyah, in al-Khobar (Figure 37). Then the employee is given an interest-free loan by the company. The company wrote off 20 percent of the total amount of the loan, which includes a 5 percent service charge, and the employee paid the balance through monthly deductions from his pay.²⁷

The terms of the loan state that the employee can choose his own design and his own contractor.²⁸ The problem is that, in order to qualify for the loan, he has to submit a design for the house, and this design has to be precisely implemented without any major changes. Now, in the early 1370's/1950's, there were very few, if any, architects in Saudi Arabia other than ARAMCO's. Therefore Saudi employees had to rely on company architects and engineers to produce these designs. In order to alleviate the pressure, the company had several design alternatives out of which the employees could choose. Put forward by architects and engineers who were not familiar with the culture and tradition of the area, the designs, of course, relied heavily on the background of the architects and produced, not too surprisingly, the typical suburban detached house; a type that is closer to an international Mediterranean than to a local house. Candilis' account that 15 to 25 percent of the houses in Dammam, al-Khobar, Safwa, Rahimah, Qatif and Sayhat are of this same type clearly testifies to the effectiveness of their influence.²⁹

The program, in short, had a considerable impact on the Tarut Bay communities, especially on Dammam, al-Khobar, and Rahimah. It affected their physical growth by accelerating house construction and their physical character by introducing the villa as the most favorable type (Figure 43). By 1394/1974 the program had sponsored more than 7,500 houses in these communities, most of them villas.³⁰

In land subdivision, whether in Dammam, al-Khobar, or other communities, the lot sizes ranged from 400 to 900 sq. m.,³¹ huge as compared to traditional lot sizes. These new lots generally tended to be approximately square in shape, with the villas planted in the middle of them. (See, for example, Madinat al-^cUmmal, al-Khobar, Figure 37).

Al-Malaz. The basic lot size in al-Malaz is a square of 25 x 25m. The very few variations are still derivative of the basic dimension, that is, 25 x 37.5 or 25 x 50 m. This shows that the average block of 50 x 100 m.³² was originally conceived as 8 lots of 25 x 25 m. so that, if the need ever arose, the frontage could be increased to have either three lots of 25, 37.5 and 37.5 m., or two of 50 m., each on one side of the

block. The villa, opening to the outside on all four sides, was planted within this lot (Figures 44, 45).

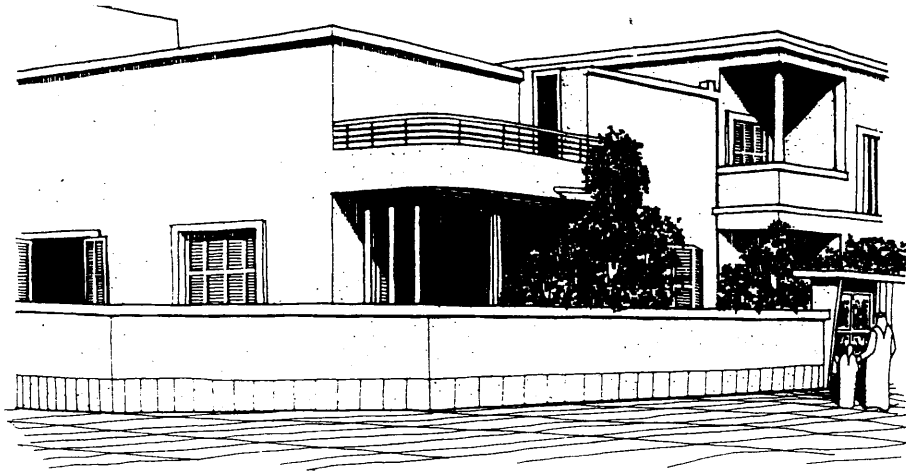


Figure 43: Dammam

A typical dwelling built through the ARAMCO Home Ownership Plan.

Source: ARAMCO, *Aramco Handbook*, 1967, p. 160.



Figure 44: Riyadh - al-Malaz

A block with lots' subdivision. Auxiliary buildings on corners were added later.

Source: Al-Hathloul, et al., *Urban Land Utilization*, 1975, p. 44.

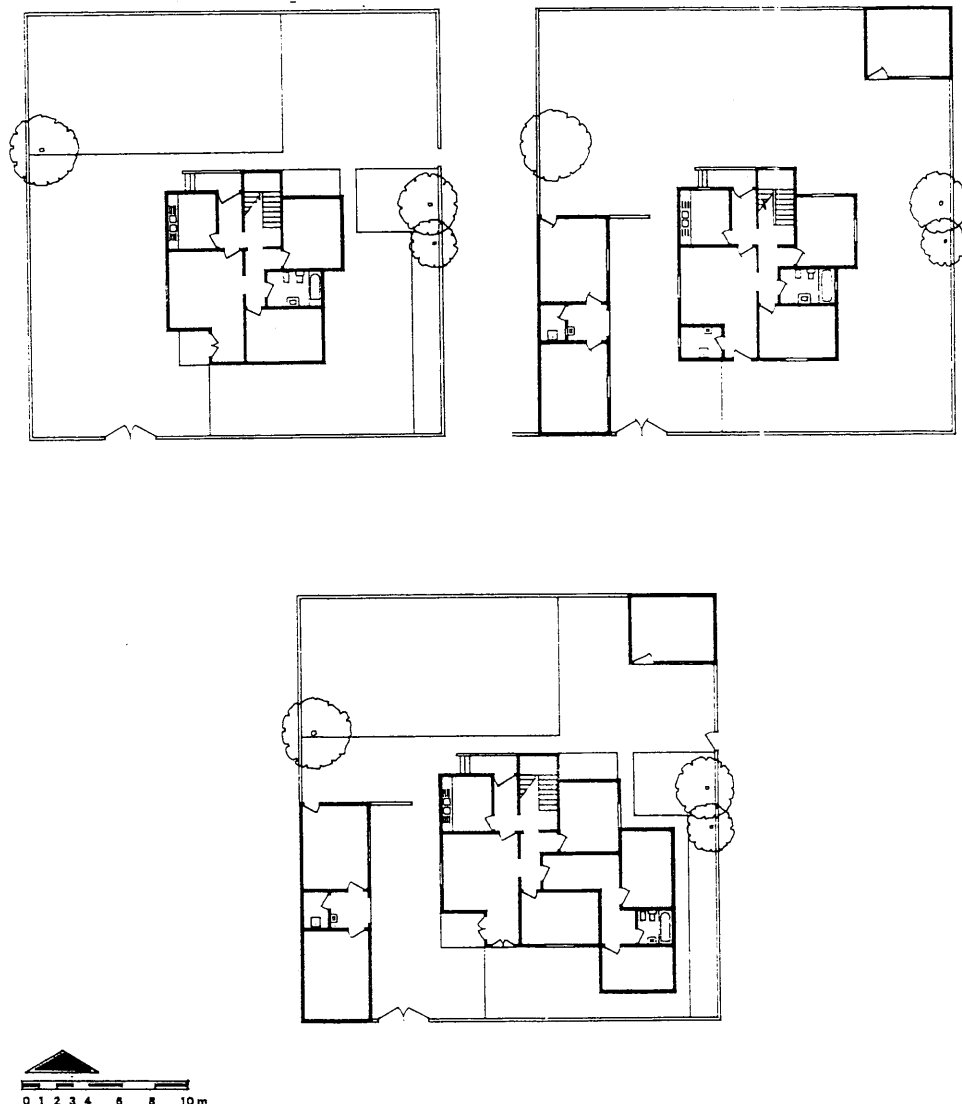


Figure 45: Riyadh - al-Malaz

A typical dwelling (villa).

The three plans show us the past modification which the owner added to the original design (upper left). The original design is clearly inadequate for local conditions. It assumes either that life style in Saudi Arabia is similar to the context within which the design developed, or that eventually life style will change and that it is only a matter of time until this design becomes suitable.

A concerted study of al-Malaz project and it's impact on physical development in Riyadh and elsewhere: specifically the dwelling unit, the original plan, it's evolution and change.

Source: Al-Hathloul, et al., *Urban Land Utilization*, 1975, p. 46.

In effect, the al-Malaz project and the ARAMCO Home Ownership Plan set up the pattern and shape of lots, and introduced the villa as the favored house type. Both were taken as models, whose use spread to other developments, and indeed the models were later to be institutionalized by the government: the square lot through decrees, directives and circulars, and the villa through zoning regulations and setback requirements.³³

B. Institutionalization Of The System

The two main features of the contemporary physical environment in Saudi Arabia -- the grid pattern and the villa on a square lot -- were institutionalized through master plans, zoning regulations, and decrees, directives and circulars. To insure the constitutionality of these measures, statutes were issued periodically by the Council of Ministers after 1357/1938. These statutes regulate the procedures and methods to be followed in developing the plans and regulations, and delegate the authority to develop them. In this section, we will concentrate on the effect of the master plans, only making occasional reference to the statutes and zoning regulations in order to show their mutually supportive effect.³⁴

1. The Supergrid: A Plan for Greater Riyadh

In the late 1380's/1960's the government of Saudi Arabia felt the need to control and direct growth in urban areas. Riyadh, the capital, was the fastest growing city in the country and the most important from the government's point of view. It was therefore the first to attract the attention of authorities, and in 1388/1968 the task of planning the capital was assigned to Doxiadis Associates. A contract was signed between the Ministry of the Interior for Municipalities³⁵ and Doxiadis Associates, Consultants on Development and Ekistics of Athens, Greece. The contract provided for the formulation of a Master Plan and Program that would guide the development of the city of Riyadh.³⁶ The contract states that:

the Master Plan study will identify, in quantitative terms, present and future needs affecting the urban development of Riyadh, will formulate policies, and will prepare a Master Plan and Programme to ensure the proper development of the City up to the year 2000.⁽³⁷⁾

and was approved and sanctioned by the Council of Ministers in 1393/1973.³⁸ Here we will introduce a brief description of the plan, its goals and policies, and its provisions for land use, circulation, and overall structure. Then we will review some of the plan's contradictions.

Goals and Policies. The goals and policies for the city are divided into two parts: the first for the future growth of the city, and the second for the existing city. Regarding the city's future growth, the goals and policies touch on a variety of subjects such as the form and shape of expansion, community buildings and open spaces, communication links, arrangement of functions, housing, transportation, public utilities, and industry. They state:

In order that the city of Riyadh will be able to grow within the broader area that surrounds it, it should take a shape or form that is adapted to dynamic growth. Such a pattern should be open-ended with a central spine allowing the city to grow as its population increases. The spinal cord of such a plan should be a zone of central commercial business and administrative functions designed so that it can expand at the same time as the residential and other functions it will serve are growing...

The movement of inter-urban traffic from Dammam to the Hejaz and Dammam to Kharj, would be made without having to traverse the city...

Human settlements (should be seen) as living organisms that are supposed to serve the needs of their inhabitants from every point of view. This leads to two basic

principles. The first dictates the adoption in general lines of a linear growth pattern for the city...

The second regards the structuring of communities of the city... The organization of the characteristic elements of city life (should) be made on the basis of a unit that is richer in variety and content than the present day building block...

All housing needs should be conceived as part of one integrated housing programme that will create the setting for the construction of adequate housing for all income groups...

A balanced transportation network with a hierarchy of streets that are well-tied in with a balanced distribution of functions in the city should be one of the main goals for the normal growth of Riyadh...

...All public utility systems will have to be revised and plans made for their extension in a manner that will be coordinated with the final Master Plan...

The Master Plan and Programme must make provision for community buildings and open spaces in such numbers and at such sites as to serve the population adequately.

A distribution and redistribution of handicrafts and industry to new locations according to a plan that will achieve a balanced pattern of employment related to places of residence is required in order to alleviate some of the problems of Riyadh...(39)

Regarding the existing city, the goals deal with the congestion of the center, the proper location of community buildings and open

spaces, the tracing of new streets within the old city, and the preservation of the city's character. The goals state:

...One of the main tools for relieving traffic pressures on the existing commercial center will be the creation of a linear city that will permit decentralization of some of these central functions...

One additional factor (is) the formation of zoning regulations ensuring the provision of adequate parking and the separation of fast traffic from the movements of pedestrian and local traffic in the center.

New schools and other community buildings must be properly located within the existing city, so that the movement of people walking to these buildings can be as free as possible from conflict with motor vehicles...

New streets within the old city should be traced as far as possible around the existing neighborhood units that have been identified in the analysis of the existing structures of Riyadh. Such roads should serve neighborhoods by vehicular traffic on their peripheral while other new streets for vehicles could penetrate into these in the form of loops or cul-de-sacs, without traversing them. Circulation of the motor vehicle in the existing streets will cease to be a nuisance, once it is attracted by the new and better streets to be created. Parking areas should be foreseen at points where new streets intersect old ones.

Special principles must be defined and policies be enforced for each one of the various distinctive sections of the existing city...

In any new comprehensive planning legislation, special building rules and regulations should be drafted to

ensure the maintenance of the basic principles of local architecture (i.e. internal courtyard, etc.) without necessarily mimicking old and obsolete architectural forms and construction techniques.

In the new areas into which the city will expand in future, construction should also be covered by rules and regulations that will attempt to unify the new city with old one, thus enhancing its character.⁽⁴⁰⁾

The Master Plan and its Provisions. With respect to land use, the physical plan for the development of Riyadh is composed of a major commercial and civic spine which extends to the northwest and the southeast of the existing business district; and administrative area which is situated perpendicular to the civic and commercial spine; and residential districts which extend from both sides of the spine. A strip of industrial and special-use areas runs parallel to the spine forming a man-made boundary on the northeast. On the other side, the southwest, the steep cliff formations of Wadi Hanifah form a natural boundary for the city. These boundaries direct the development of the residential areas into a line parallel with the city spine⁴¹ (Figure 46).

In terms of circulation, the plan of Riyadh shows that the private automobile will continue to be the only mode of transportation. The circulation pattern is planned to have the following hierarchy: four major freeways, connecting the city with the country freeway system, and serving high-speed, long-distance and through-trip traffic on a national, regional and urban scale; expressways, intended to serve large volumes of high-speed, long-distance urban trips with partial control of access; arterial roads, designed to accommodate a large volume of medium- and long-distance urban trips, and whose role is to facilitate through movement and direct service to the adjacent communities; collector roads, which are streets intended for short urban trips and direct connection of communities with the city's main network; and local roads, intended exclusively for access to abutting properties and for very short trips⁴² (Figure 47).

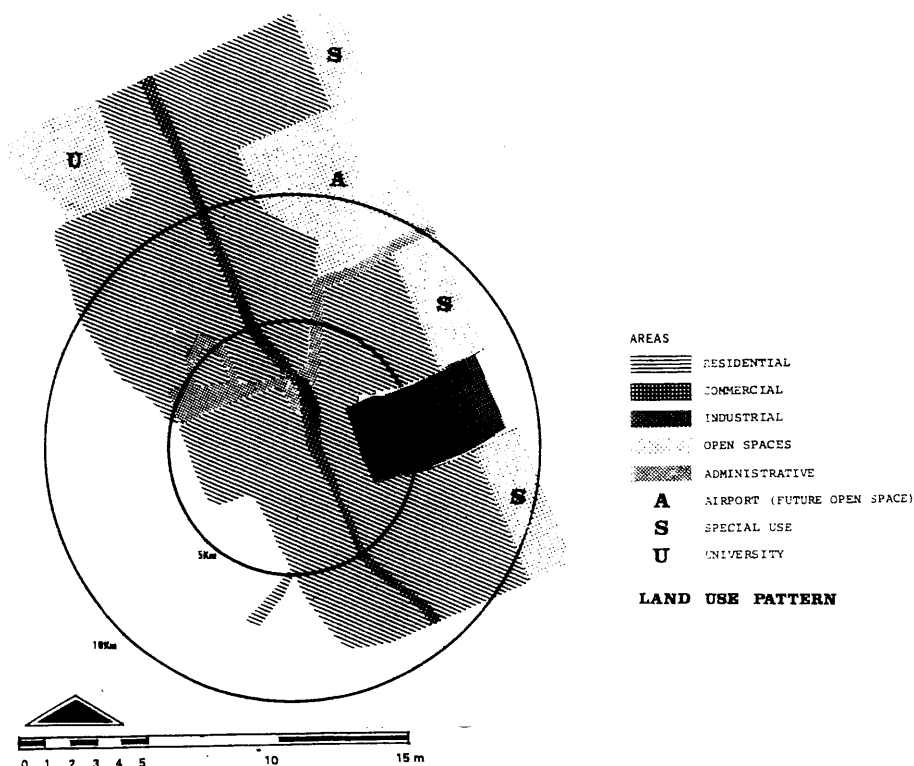


Figure 46: Riyadh - Doxiadis Master Plan. Land Use.
Source: Al-Hathloul, et al., *Urban Land Utilization*, 1975, p. 69.

Concerning structure, the plan is composed of a supergrid which runs in a north-south and east-west direction. In this grid, the city is cut into six large divisions, each composed of eight to twelve localities of 2 x 2 km. (Figure 47). This square unit represents the basic component of the grid and, according to the plan, is determined to be the best size for a neighborhood.

...this basic community of 2 by 2 km. has been chosen as (the) unit... (since) its dimensions have proved convenient and... (since) it coincides with the idea of Murabba^c which is a basic traditional element in the city.
(43)

The Contradictions Within the Plan. The goals and policies of the Doxiadis plan for Riyadh reflect the nature of the problems and needs encountered at the time of its adoption. So far, most of the criticism

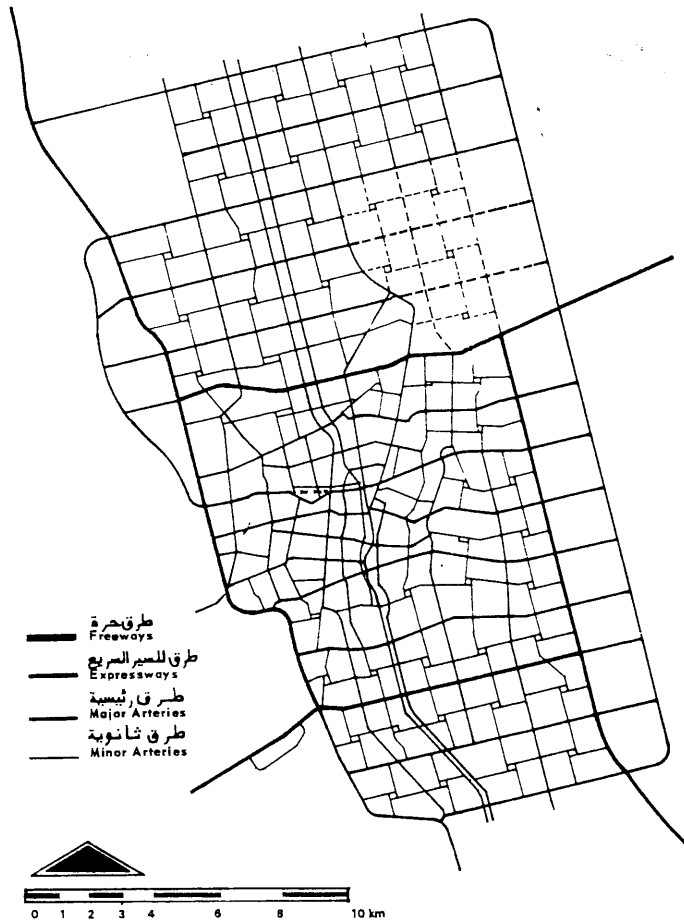


Figure 47: Riyadh - Doxiadis Master Plan
Hierarchy of main road network and city structure.
Source: Doxiadis, Riyadh Master Plan, A 19, 1971, p.137.

that has been leveled at the plan is based on the fact that it did not adequately anticipate the size of urban growth which took place in Riyadh in the mid and late 1390's/1970's.⁴⁴ This growth, of course, made the plan obsolete, but it was beyond the capability of the consultant to predict the economic oil boom of the 1390's/1970's and its adverse effect on the city's physical growth. Therefore, we will deal, here, with the plan itself and the means through which the stated goals and policies were to be realized. We will show through two issues -- density, and scale and character of the city -- that there is a

contradiction between the plan's stated goal and how it proposes to achieve that goal.

Density and Its Relation to the Traditional Urban Pattern. On density, the plan states:

The actual land area that the city will eventually occupy in the year 2000, depends upon the gross density at which it will be planned. This must be relevant to time and place, i.e. traditional urban patterns, social customs and climate, that determined the planning standards for the future city...

In order to promote the goal of compact planning, an overall density or the order of 60 persons per hectare would be desirable for the future city. Such an overall density would lead to net residential densities of about 200 persons per hectare...(45)

A net residential density of about 200 p/h would approximately be two-thirds of the net residential density of Riyadh's traditional neighborhoods.⁴⁶ However, the proposed regulations advanced by the plan can never achieve this objective. As a matter of fact, they inhibit its realization. Three elements introduced by the plan's regulations make it impossible to reach the desired density. Indeed, the plan rather establishes certain standards which ensure that gross residential density could never exceed 87 p/h and net residential density could never exceed 142 p/h -- namely, the minimum lot size (Figure 48), the bulk and height regulations (Figure 49), and the standard minimum street widths (Table 2 and Figure 50). The most common residential district in the plan is R12. This district has a minimum lot size of 400 sq. m. (Figure 49). R12 is classified as a single family district. Following the simple exercise of taking one hectare of land and subdividing it according to minimum lot size standards and to minimum street standards (Table 2 and Figures 48, 49, 50) of 10 m. and 20 m. widths, for streets within residential areas, one would reach a result such as the one depicted in Figure 51. Following the same approach to land

subdivision as being practiced in Riyadh (grid with square lots), on would have 16 dwelling units per hectare for R12. Assuming an average household size of 5.4,⁴⁷ the maximum gross and net residential density for R12 would be, respectively, 87 p/h and 142 p/h. Taking into consideration the minimum lot size standards (Figure 48) introduced for Riyadh (with more than two-thirds of the city having a minimum of 400 and 600 sq. m. lots), one can see that the most that can be achieved is an 87 p/h gross residential density and a 142 p/h net residential density.

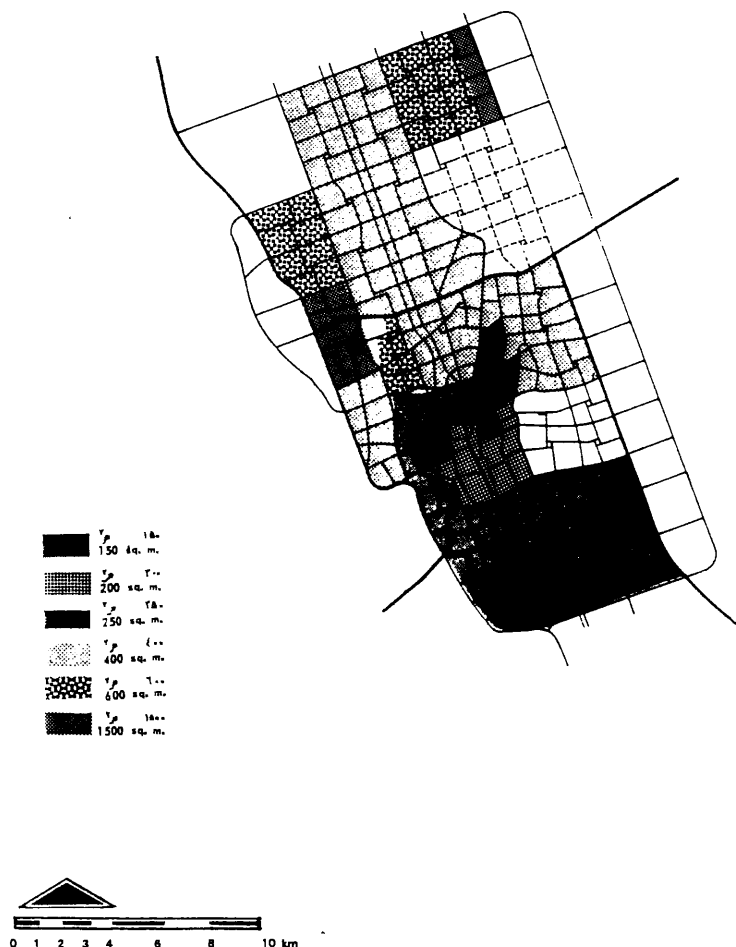


Figure 48: Riyadh - Doxiadis Master Plan

Average residential plot sizes.

Source: Doxiadis, *Riyadh Master Plan*, A 19, 1971, p. 146.

Scale and Character of the City. With respect to this issue, the plan states:

...The task is not simply the development of a well-structured Master Plan that will function well, but also of a Master Plan expressing the characteristics of Riyadh, Saudi Arabia. There are, therefore, certain conditions to be respected. These conditions are imposed by existing city and its traditional elements, by the climate and by its character.

... if one excludes some residential developments indifferently planned on Western prototypes, the rest of the city has a cohesion and style, which is given by the rectangular formation of its blocks, by the use of certain basic dimensions within the city and by the use and repetition of traditional patterns and aesthetic elements.

... The difficult task ahead is not that of creating an entirely new city, but a city that will be a continuation and an extension of an existing one. Respect the old one and build a new environment in harmony with it, is the task for the future.

This can be achieved only if one understands the rhythm and meaning of the existing city. That is, the rhythm deriving from traditional urban patterns, the orientation of streets and urban spaces, which are not simply of aesthetic but also of climatic and economic importance. Their physical dimensions, in turn, reflect human dimensions, human contacts and human life. These values are the values that must be preserved in the planning and design of the future city.⁽⁴⁸⁾

Were these values preserved in the planning and design of the future city? The implicit assumption of the above statements is that they were. However, again, the proposed measures introduced by the

S/N	Road Characteristics and Standards	Road Classification				
		Main Road Network			Community Network	
		Freeway	Expressway	Arteries	Collector Roads	Local Roads
1.	Traffic Function	Long distance National, Regional and Urban trips	Long distance Urban trips	Long and Medium distance Urban trips	Short trips and access to abutting properties	Access to abutting properties
2.	Access Control	Full	Partial	None	None	None
3.	Service Roads	Always	Where possible	None	None	None
4.	Median	Included	Included	Included	No	No
5.	Design Speed in km/h	120	100	70	60	30
6.	Operating Speed in km/h	90	45-65	40-55	20-30	15-20
7.	Practical Capacity in Passenger Cars per Hour and Lane	1,500	1,000	500-700	400	300
8.	Divided Flow	Always	Always	Frequently	Not Usually	Never
9.	Number of Lanes (Main roadway only. Parking lanes excluded)	4-6	4-6	4-6	2	2
10.	Right-of-Way (m) Restricted - Desirable	84-100	32-80	22-60	12-20	7-12
11.	Maximum Grade a. Through Pavement b. Ramps Down c. Ramps Up	3 6 7	4 7 8	5 7 8	7 - -	10 - -
12.	Minimum Horizontal Radius in Meters	400	400	200	150	20
13.	Lane Widths (m)	3.50	3.50	3.50	3.25-3.50	2.50-3.00
14.	Parking	Prohibited	Prohibited	Prohibited in general	Permitted	Permitted
15.	Intersection Type	Always grade separated	Always high type signalized at grade	Mostly high type signalized at grade	At grade signalized or stop sign controlled	Stop sign or non-controlled

Table 2

Roads Classification and Standards

Source: Doxiadis, Riyadh Master Plan, A 19, 1971, p. 141.

plan seem to have been designed to ensure a totally different pattern of development from the traditional one. In spite of the consciousness of the planners regarding the residential areas in Riyadh that were planned on "Western prototypes," the plan actually requires, not in words but through regulations, that this specific prototype become the type for new development all over Riyadh. By mandating a large minimum lot size and setback requirements (Figure 49) in all of Riyadh's new developments, the plan actually ensures the departure of new Riyadh from its traditional past, both in scale and in character⁴⁹ (Figure 58).

One can say, therefore, that the Master Plan of Riyadh merely confirms and enhances the trends of the 1370's/1950's and 1380's/1960's. By introducing the supergrid as a plan for the city and using the grid pattern in its proposals for the Action Area Studies,⁵⁰ the plan institutionalizes the grid as the most desired pattern to be followed

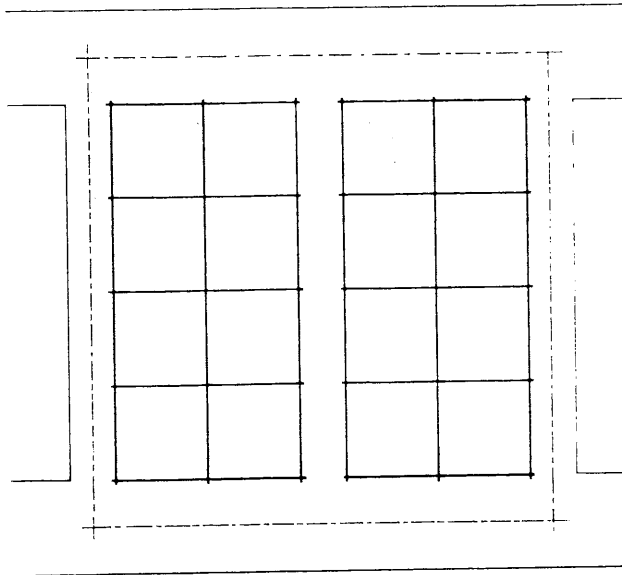


Figure 51: Riyadh - Doxiadis Master Plan

Following a simple exercise of taking one hectare of land, subdividing it according to minimum standards introduced by the plan: lot size 400 sq. m., streets width within a residential community 10 m. & 20 m. By applying these standards to the land subdivision approach practiced in Riyadh (grid with square lots) one would have 16 dwelling units per hectare for R12.

in the planning of Riyadh as well as in other cities of the country. And by continuing and preserving the trends of large lot sizes that were introduced in al-Malaz and the setback requirements that were developed from there, the plan also institutionalizes the villa as the most desirable dwelling type. In other words, the plan institutionalizes a new physical environment for the city of Riyadh -- an environment that has no relation to the traditional one, either in density, in scale, or in pattern.

2. *The Square Lot and the Villa*

The Square Lot. Although the Doxiadis Master Plan for Riyadh did try to alter the trend towards using the square lot as the model for land subdivision⁵¹ (Figure 49), its proposal was never followed. This can

be explained on two grounds. First, the plan had already mandated the setback requirements, and to satisfy these requirements, in a lot of 400 sq. m. with the dimensions of 16 x 24 or 25 m. as the plan proposes, would only result in passageway alleys on both sides -- as result that would contradict the already established image of a villa. And secondly, the plan also continued and confirmed all the new trends introduced by al-Malaz and other later developments, and to draw back on only one issue, the lot dimensions, made the position and the argument of the plan very weak so long as it not only accepted other innovations but confirmed and institutionalized them.

Thus, the square lot continued to be the model for land subdivision and although it was not confirmed and sanctioned by the plan, its institutionalization came from other more powerful sources. It was confirmed through royal orders and ministerial directives and circulars. This can be seen mainly in royal fiefs and grants of land given to people from a wide spectrum of the society, that is, government employees, army officers, university graduates, and people with limited income. These grants ranged in area from 400 to 10,000 sq. m. with dimensions of 20 x 20, 25 x 25, 30 x 30, 40 x 40, 50 x 50, or 100 x 100 m.⁵² The decisive and most important element here is the dimension of the lot. Throughout almost all the directives and circulars as well as royal orders dealing with fiefs and grants of land, the lot area is always defined not by square meters but by dimensions. In the following two directives, for example, one notes that the land grant is not given in terms of an area of 400 square meters but rather with a specific dimension of 20 x 20 m.:

In reference to questions from some municipalities regarding the area to be granted for those persons to whom grants have been issued without specifying the land area to be granted... since this subject has been presented to his excellency the vice-minister with explanations regarding orders usually issued to specify areas of fief granted to different persons, therefore his excellency orders that, for persons with royal orders

which do not specify the area, they be granted one plot in the limit of 20 x 20 m.⁽⁵³⁾

Included are several requests which were presented by those concerned to his Majesty, my Lord, in which they asked for plots of land as grants... And since his Majesty, God bless him, had ordered their request to be transferred to this ministry, thus it is expected that you will grant each one of them a plot with an area of twenty meters by twenty meters, from government lands that are planned and marked as residential areas.⁽⁵⁴⁾

The final and most decisive directive in this process is one from the Minister of Municipal and Rural Affairs to all municipalities, which states that:

Since the government of his Majesty the King is deeply committed, on every level, to find suitable solutions in order to minimize the housing crisis... thus do we urge all municipalities to undertake a search for government land suitable for building within the limits of the master plan of their cities and, in cooperation with the town planning office, to subdivide these lands into residential plots with an area in the limits of 20 x 20 m. each. And then to distribute them to fellow citizens (especially those of limited income), either as grants or by selling them according to the rules designed for this purpose.⁽⁵⁵⁾

This directive brought the final institutionalization of the square lot as the preferred model for the subdivision of land throughout the country. As a result, every city and town did subdivide its government lands accordingly. To use only one example, again Riyadh, we may look at the area of al-^cUrayjah, designated for people with limited income. This area was planned and subdivided by the municipality and the town planning office of Riyadh with more than 20,000 plots of 20 x 20 m. At the time of this writing, the land is in the process of being distributed to people (Figure 52).

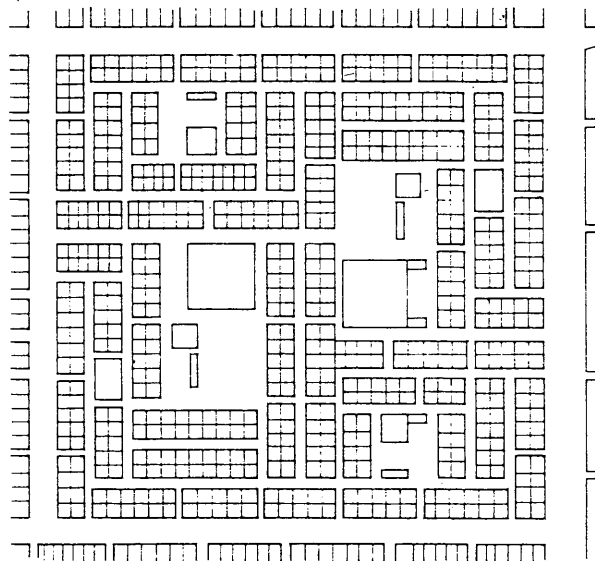
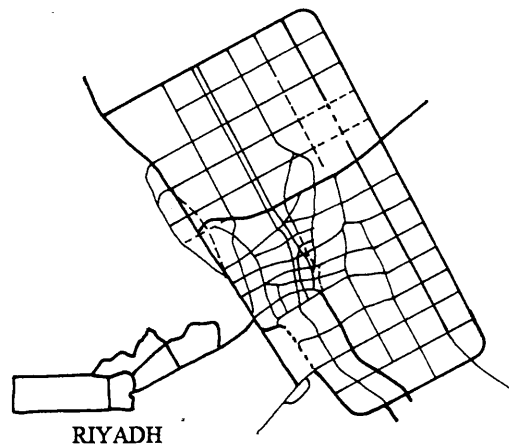


Figure 52: Riyadh - al-^cUrayja

(upper) A neighborhood planned for people with limited income.
More than 20,000 plots all measuring 20 x 20 m.

(lower) Part of plan no. 2008 with 17,000 plots.

Source: SCET, Riyadh Action Master Plan, T.R. No. 10, Land development policies, p.11.

The Villa. By institutionalizing the square lot as the model for land subdivision, the way was clearly established for the development of the villa as the preferred dwelling type. To further ensure this, setback requirements were established in the late 1380's/1960's.⁵⁶ These required a setback of one-fifth of the street on the front and a minimum of 2 m. on the sides and the rear.

The Doxiadis Master Plan of Riyadh, by introducing the minimum lot size regulations and continuing the setback requirements,⁵⁷ completed this process of institutionalization. Hence, the villa became the only dwelling type for the people of Riyadh, if not out of preference, then by law.

Notes

- 1- S. G. Shiber, "Report on City Growth in the Eastern Province, Saudi Arabia," in his *Recent Arab City Growth*, (Kuwait, 1967), p. 430.
- 2- Ibid., p. 428.
- 3- Ibid., pp. 428-430.
- 4- Ibid., pp. 430-432.
- 5- Ibid., p. 430.
- 6- Ibid., p. 430.
- 7- Doxiadis, *Riyadh Existing Conditions*, a report prepared for the Deputy Ministry of Interior for Municipalities, A-2, July 1968, p. 28.
- 8- This is only speculation on my part since I do not have any information as to whether blocks were subdivided into plots at the time of the plan preparation.
- 9- Shiber, op. cit., p. 430.
- 10- Ibid., p. 430.
- 11- Rahimah and Madinat Abqaiq. Ibid., p. 430.

- 12- Ibid., p. 430.
- 13- This is the first demolition for the purpose of opening new streets in an existing community in Saudi Arabia, not including, of course, the widening of al-Mas^ca Street in Mecca and the opening of the new street of al-^cAniyah in Medina, both done near the end of the Ottoman era in the early twentieth century.
- 14- Shiber, op. cit., p. 430.
- 15- H. al-Jasir, *Madinat al-Riyadh ^cAbr Atwar al-Tarikh*, (Riyadh: Dar al-Yamamah, 1386/1966), pp. 94-95, 116.
- 16- J. B. Philby, "Riyadh: Ancient and Modern," *Middle East Journal*, 13, no. 2 (Spring 1959), 133.
- 17- Loc. cit.
- 18- Ibid., p. 135.
- 19- R. Nolte, "A Tale of Three Cities: Riyadh," *American Universities Field Staff Reports, South-West Asia Series*, V.XX, No. 1 (Aug. 1977), p. 21.
- 20- Several princes built palaces west of Nasriyah but no one aspired to even half of its size.
- 21- Riyadh was connected to Dammam by a railroad in 1951. (Doxiadis, op. cit., p.28) Riyadh airport was re-laid by Bechtel Corporation in 1949 with landing facilities, repair shops, warehouses, offices and living quarters. The corporation also built some roads and completed a power plant for the electrification of Riyadh. [H. Lackner, *A House Built on Sand*, (London, 1978), p. 137].
- 22- S. Al-Hathloul, M. al-Hussayen and A. Shuaibi, *Urban Land Utilization, Riyadh, Saudi Arabia*, Education/Research Program, USD, (Cambridge: MIT, 1975), p. 38.
- 23- See Section B of Chapter III, "The Conception of Space," where the role and the functions of the fina' as a semi-private space in traditional environments are elaborated. Also, see, fig. 25.
- 24- See Doxiadis, *Riyadh Master Plan*, A-19, 1971, pp. 119-121. SCET International/SEDES, *Riyadh Action Master Plans*, Technical Report No. 15: Action Plan for 1405-1410 A.H. (Arabic text), 1979, pp. 17, 25,29, 37, 41, 46.

- 25- See action A.1 of this chapter, *The Grid Pattern: Dammam and al-Khobar*, above.
- 26- Arabian-American Oil Company, *ARAMCO Handbook, Oil and the Middle East*, rev. ed., (Dhaharan, 1968), p. 160.
- 27- Ibid., pp. 160-161; Shiber, op. cit., p. 431; Candilis, Metra Int., *Draft Master Plan, al-Khobar*, (February, 1976), pp. 13, 16.
- 28- ARAMCO, op. cit., p. 161.
- 29- Candilis, Metra Int., *Eastern Region Plan, Existing Conditions, Dammam*, (June, 1974), pp. 32-33.
- 30- Loc. cit.
- 31- Candilis, Draft, pp. 13, 16.
- 32- See section A.2 of this chapter, *The Grid Pattern: Riyadh*, above.
- 33- See section B.2 of this chapter, *The Square Lot and the Villa*, below.
- 34- Because of the complexity and importance of the statutes pertaining to planning and zoning, they will be given a detailed treatment in Chapter VI.
- 35- Other cities followed in due course. The task of planning the Western Region's cities -- Mecca, Medina, Jeddah, Taif and Yanbu^C -- was assigned to Robert Mathew, Johnson-Marshall and Partners in 1971. The planning of the Eastern Region's cities -- Dammam, al-Khobar, al-Qatif, al-Ahsa, and al-Jubayl -- was assigned to Candilis, Metra International in 1973. The Central and Northern Regions were assigned to Doxiadis in 1973, and the Southern Region to K. Tang in the mid-1970's.
- 36- This has been one of the most fatal mistakes in the planning process in Saudi Arabia. The client, which in this case is the city of Riyadh represented by its municipality, its local committee (*al-majlis al-baladi*), and its town planning office, was never represented in the early stages of the plan's preparation and assumed only a minor role in the latter stages. It is the Ministry itself which assumed a leading role in dealing with the consultant and therefore shaping the final outcome of the plan. This was the case for other cities as well, and this process is still being followed in the preparation of the new Master Plan for Riyadh, being done by SCET International/SEDES.
- 37- Doxiadis, *Riyadh Existing Conditions*, p. i.

- 38- *Taqrir al-Lajnah al-^cUliya li-Tagyim al-Mukhatat al-^cAmm li-Madinat al-Riyadh*, a Report prepared by the High Committee of the Evaluation of the Riyadh Master Plan, 1393/1973, pp. 178-182.
- 39- Doxiadis, Riyadh Master Plan, A-19, p. 100-106.
- 40- Ibid., pp. 106-107.
- 41- Ibid., pp. 126-137.
- 42- Ibid., pp. 136-144.
- 43- Ibid., pp. 134, 134-136.
- 44- This criticism was voiced by many officials in the municipality as well as in other government agencies.
- 45- Doxiadis, *Riyadh Master Plan*, A-19, p. 119.
- 46- Net residential density in traditional Riyadh is 315.5 P/h. Al-Hathloul, et al., op. cit., pp. 12, 14.
- 47- This is based on Doxiadis' findings in his *Riyadh Existing Conditions*, pp. v, 102-105.
- 48- Doxiadis, Riyadh Master Plan, p. 122.
- 49- Some of the adverse socio-cultural effects of this departure are treated in section B of Chapter VI below.
- 50- Doxiadis, *Riyadh-South Eliya Community Study* (A-16), (Feb. 1971); *Riyadh-Shamal Murabaa Community Study* (A-17), (March 1971); *Riyadh-Murabaa-Futah Community Study* (A-18), (June, 1971).
- 51- In its proposed Bulk and Height regulations, the Plan made the frontage width of the lot equal to two-thirds of its depth. *Taqrir al-Lajnah*, p. 132.
- 52- SCET International/SEDES, *Riyadh Action Master Plan*, Technical Report No. 10: Land Development Policies, p. 9.
- 53- A circular from the Deputy Minister of Municipal and Rural Affairs to all municipalities, No. 331/5 on 16/9/1395/1975, in Deputy Ministry of Interior for Municipalities' Affairs, *Al-Anzimah, al-Lawa'ih, al-Ta^climat*, 4 vols. (1973-1976), vol. 4, p. 13.

- 54- A circular from the Deputy Minister of Municipal and Rural Affairs to one of the municipalities, No. 268/5 on 20/7/1395/1975. *Al-Anzimah*, vol. 4, p. 12. There are numerous circulars and directives of this sort. See, for example, *ibid.*, vol. 3:

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- 55- Directive No. 381/5, dated 16/11/1395/1975. *Ibid.*, vol.4, p. 29.
- 56- See Section A of Chapter VI, Regulations in Practice before the Master Plans, below.
- 57- See Bulk and Height regulations introduced by the plan. *Taqrir al-Lajnah*, p. 132.

Chapter VI

DEVELOPMENT AND EVOLUTION OF ZONING REGULATIONS

Chapter VI

Development And Evolution Of Zoning Regulations

The emergence, development and evolution of zoning regulations in Saudi Arabia is perhaps best treated in three different phases. First, we will look at the development of regulations before 1390 A.H./A.D. 1970, the year when the first master plan for Riyadh was adopted. In this phase of development, we will deal with three general issues of interest: the early statutes and their provisions, and how they established precedents for later regulations; the effect of the development of the villa as the preferred dwelling type and the introduction of high rise buildings in the 1380's/1960's; and how all of these previous developments culminated in a package of rules that were applied throughout the country before the introduction of the master plans. For the second phase, we will review the regulations introduced by Doxiadis with the master plan for Riyadh, treating two issues in particular: the setback requirements and the minimum lot size standards, and their physical and social repercussions. Finally, for the last phase, we will review the zoning regulations as they were modified by the new proposed master plan for Riyadh. Here our attention will be focused on three specific issues: the abandonment of setbacks and the provisions for privacy; the tendency towards square lots; and the role of eminent domain and its use in the case of non-conforming lots and non-conforming uses and structures.

A. The Emergence Of Zoning Regulations

In this section, we will follow the emergence and development of zoning regulations in Saudi Arabia up to the introduction of the master plans and the accompanying comprehensive zoning regulations.¹

1. Statute of the Mecca Municipality and Municipalities²

The statute was issued under Royal Order No. 8723, dated 20 Rajab 1357/1937. It concerns itself with the administrative organization of a municipality and the duties and responsibilities of each department within it. Article 3 of the statute states:

The municipality of Mecca and (other) municipalities are (the bodies responsible) for the supervision of the towns' organization, their beautification, and the work needed to result in their having an enhanced scenic setting. (The municipalities also) have the authority of general supervision for the public interest and for the betterment of utilities and services according to the limits stated in this statute.⁽³⁾

In specifying the duties of the municipalities, the statute adds a very extensive list of responsibilities, including the following: organize, clean, and light the town; make a map for the town, showing public and private property, public roads, etc.; designate and construct certain places for the selling of firewood, construction materials, meat, vegetables, etc.; supervise general housing conditions; supervise public and private structures and buildings according to the special statute developed for this purpose; prevent projections and encroachments on streets and public spaces; extend, widen, clean, and pave roads, constructing necessary shaded areas on some of these roads and creating public open spaces for the comfort of inhabitants; demolish walls and buildings threatening collapse; and register and number real estate.⁴ In addition, the administrative council of the municipality is given responsibility for drawing up proposals for statutes needed by the municipality, especially as concerns buildings and structures, roads, and the enumeration and numbering of real estate.⁵

By assigning these responsibilities, the statute in effect gave the municipality a preliminary authority to develop zoning regulations and building codes. In other words, in order to facilitate the implementation of their work, the municipalities developed regulations

and codes, though only as needed on a fragmentary and case-by-case basis. At least, this was the case in all areas except those covered by the more comprehensive and detailed Roads and Buildings Statute.

2. *Roads and Buildings Statute*⁶

The statute was issued in 1360/1941; it was probably prepared by the administrative council of the Mecca municipality. It indicates the authorities' conception of town planning at the time. This conception emerged from the need and pressure for physical development, especially in Mecca, the country's religious capital and administrative center in the 1350's/1930's. The statute concerns itself mainly with three issues: planning procedures, building codes, and zoning and the right of way. In line with the interest of this chapter, we will deal here only with the last issue, zoning and the right of way.

Article 6 of the statute emphasizes the need for towns to establish land use maps. The statute requires that these maps indicate sites for slaughter houses, stables and barns, workshops and factories, and storage areas for construction and fuel materials; in addition, the relation of these to buildings designated for residential purposes should be clearly set forth. The maps were also to indicate the following: the placement and width of roads and lanes, the areas designated for building, the special zones assigned to buildings according to their use, the existing built-up areas, and the areas designated for future growth.⁷

Article 20 states uses that are excluded in each zone and the rules and regulations to be applied in such cases. It requires that the following should be taken into consideration when designating zoning districts:

It is not permitted to use any building in the residential area as a shop or a workshop for any purpose related to marketing or any malodorous craft.

It is not permitted to use any building in the markets and bazaars as a workshop for any malodorous craft.

It is not permitted to use any building in the area designated for factories for purposes related to malodorous crafts.

It is not permitted to use residential buildings as a substitute for public buildings... and vice versa...

It is not permitted to construct any building, be it temporary or permanent, in these districts except with a clear written permission from the building authority.⁽⁸⁾

Article 24 introduces a limited case of setback requirements. It states:

It is permissible for the building authority to establish a building line with a maximum of fifteen meters from the organization line (the street limit), on the condition that establishing such a line would in no way prevent the construction of buildings that are suitable for the status of the district.

When the building line is established in any residential district, then no building should be erected beyond this line, except for the fence.

When a building line is established in a street or in a part of a street related to markets and bazaars, then no building could be erected beyond this line, except for arcades and balcony projections...⁽⁹⁾

Article 28 introduces two important concept: the minimum size of a lot and its minimum dimensions. it states:

It is not permitted to erect dwellings on any lot from land designated for building inside any new district unless it complies with the following conditions:

(a) that the area of the lot from land designated for building is not less than 175 sq. cubits (98.45 sq. m.)⁽¹⁰⁾ according to the decision of the building authority.

(b) that the dimension of the lot's frontage width on any street is not less than one-third of the lot's length perpendicular to that street, and it should in no way be less than nine meters or twelve cubits.

(c) The conditions stated in paragraph (a) of this article do not apply to any lot in market or bazaar districts if it is not used as a room or a building for human habitation...

(d) The building authority does not have to adhere to either all or part of the conditions stated in paragraph (a) of this article.⁽¹¹⁾

Regarding the right of way, the statute indicates the need for widening roads in existing communities and or taking into consideration the planning of roads in future communities.

The straightness of roads and their design are to be designated according to the map...⁽¹²⁾

Roads are to be planned according to the approved design, on the condition that this design be gradually implemented either when reconstructing dilapidated buildings or when constructing new ones. To be excepted from this are buildings whose removal is required by the public interest...⁽¹³⁾

Existing streets are to maintain their present condition unless public interest requires their widening according to the approved design in the town's map, on the condition that these newly opened streets do not exceed

the following widths: main streets, not less than 15 m.; secondary streets, not less than 8 to 12 m.; and lanes, not less than 4 to 6 m.⁽¹⁴⁾

Most of the concepts advanced by the statute were elementary in nature and, in practice, they were seldom resorted to since the standards they established were the ones usually followed in traditional cities. The minimum lot size, for example, equals the average area of traditional dwellings,¹⁵ and the restrictions on use were already in practice.¹⁶ For our purposes, however, the statute is very important since, for the first time, minimum standards were coded by regulation rather than being merely followed by virtue of the community's traditional adherence. In short the statute established a precedent that was to be followed later on, sometimes in a very stringent and thoughtless way. In particular, the setback requirements and the minimum lot size, which were later to be enforced with standards at variance with traditional ones, were imposed irrespective of the physical character and socio-cultural values of the community.¹⁷ The opening of new streets and the ruthless demolition of old neighborhoods which reached their peak in the early 1390's/1970's can be said to derive their legitimacy from this statute.

Since the statute required municipalities to produce maps of their cities, the Egyptian Survey Department was assigned to carry out this responsibility for the cities of Mecca and Medina. A fairly detailed map of a scale 1:5000 was prepared for Mecca in 1366/1947. A less detailed map on the scale of 1:10,000 was prepared by the Department for Medina in 1365/1946. Riyadh had to wait until the 1950's to have its first map drawn, and until 1380/1960 to have the Egyptian Survey Department prepare a more detailed version.¹⁸

3. ARAMCO Home Ownership Plan and Al-Malaz

As we saw in the previous chapter,¹⁹ the ARAMCO Home Ownership Plan and the al-Malaz project introduced the large lot and the villa as a dwelling type with setbacks on all sides. They established the taste and style for a modern neighborhood. After the

precedent of enforcing minimum lot size standards and setback requirements had been established by the Roads and Buildings Statute, al-Malaz and the ARAMCO Home Ownership Plan were decisive in reinforcing conformity to such standards. The crucial point, however, is that instead of a minimum lot size of 100 sq. m., these two projects relied on the untraditional lot size of 400 sq. m. And rather than having an optional setback in certain areas, they showed that it was possible and, according to their standards, actually preferable to have setbacks on all sides in every dwelling and in all areas. Therefore, the regulations were relied upon in such a way as to result in confirming the villa as the preferred dwelling type.

4. Regulations and the Development of Apartment Buildings

The development of modern apartment buildings in the central region of Saudi Arabia began in the 1370's/1950's. Not until the late 1370's/1950's, however, did the pattern of living in an apartment established itself, especially in Riyadh. This was the result of two factors. First, the influx at that time of people from the surrounding Arab as well as other countries who preferred an apartment building to a traditional house. Secondly, the al-Malaz project had three apartment buildings which were rented to government employees (Figure 53); this enhanced the image of the apartment building as an appropriate residence for Saudis. As a result, the pattern was established and the process of erecting apartment buildings prospered.

Though not obvious at first sight, the relationship between the development of regulations and the construction of high rise buildings forms a crucial part of the history of contemporary development in Saudi Arabia. Privacy has always been a basic issue in Saudi Arabia. Through three examples from Riyadh -- buildings that were constructed successively between the late 1370's/1950's and the end of the 1380's/1960's -- we will try to reveal the relationship and the process of interaction between the development of the regulations and the construction of high rise buildings. Parenthetically, we should note that building heights perse did not become a major issue until the late 1380's / 1960's, when the municipality of Riyadh stepped in and

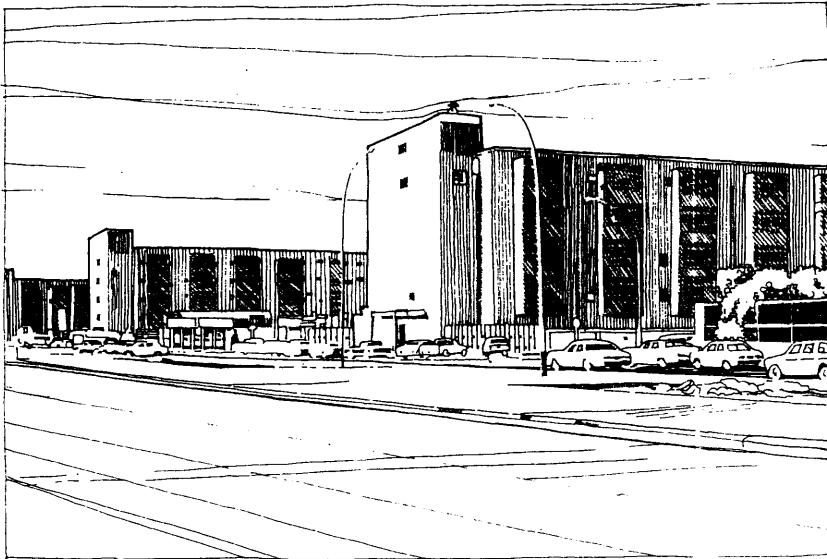


Figure 53: Riyadh - al-Malaz

The apartment buildings built with the project in the late 1950's.

Source: Al-Hathloul, et al., *Urban Land Utilization*, 1975, p. 47.

established a ceiling on heights on a street by street basis. Before this step was taken, building heights were left to the discretion of the municipality on a case by case basis. All our examples come from this era (Figure 54).

*The F.M. Building.*²⁰ A six-story apartment building with shops on the ground floor, the F.M. Building was constructed in the late 1370's/1950's on a site looking directly on the al-^cAdl Square (al-Sufat) at the center of Riyadh. North of the F.M. Building is the square and to its west is the Qasr al-Hukm Building (the Governor's Office); both are for public use. On the building's east side is Ahmad b. Hanbal's street, on the other side of which there was a three-story structure at the time of its construction. This three-story structure helped to break the line of vision between the balconies of the F.M. Building and the two-story, single-family dwellings in the area east of the structure. Hence, for the three sides on which the F.M. Building had openings, there was no violation of privacy. On the remaining south side, an area that used to be composed of traditional dwellings of



Figure 54: Riyadh

Sites of the three apartment buildings, 1. the F.M. Building,
2. al-Riyadh Building, 3. Zahrat al-Riyadh Building.

Source: Al-Hathloul, et al., *Urban Land Utilization*, 1975, p. 9.

one and two stories, the building's facade was kept solid with no openings; light wells to provide light and ventilation for the kitchens and bathrooms were kept in the center of the building²¹ (Figure 55).

Al-Riyadh Building. A ten-story apartment building with a shopping area on the ground floor, the al-Riyadh Building was constructed around 1380/1960 on King Faisal Street, previously known as al-Wazir Street. This building is unique in the sense that its site is bordered by streets on all four sides; with a height of ten stories, the building overlooks the whole area of old Riyadh, situated to its west. Many of the well-established and well-known families of Riyadh used to live in this area in the early 1380's/1960's.

The siting of the building near such an important residential area played a major role in shaping its design. Every precaution was taken to ensure that the people in the area to its west were not offended by

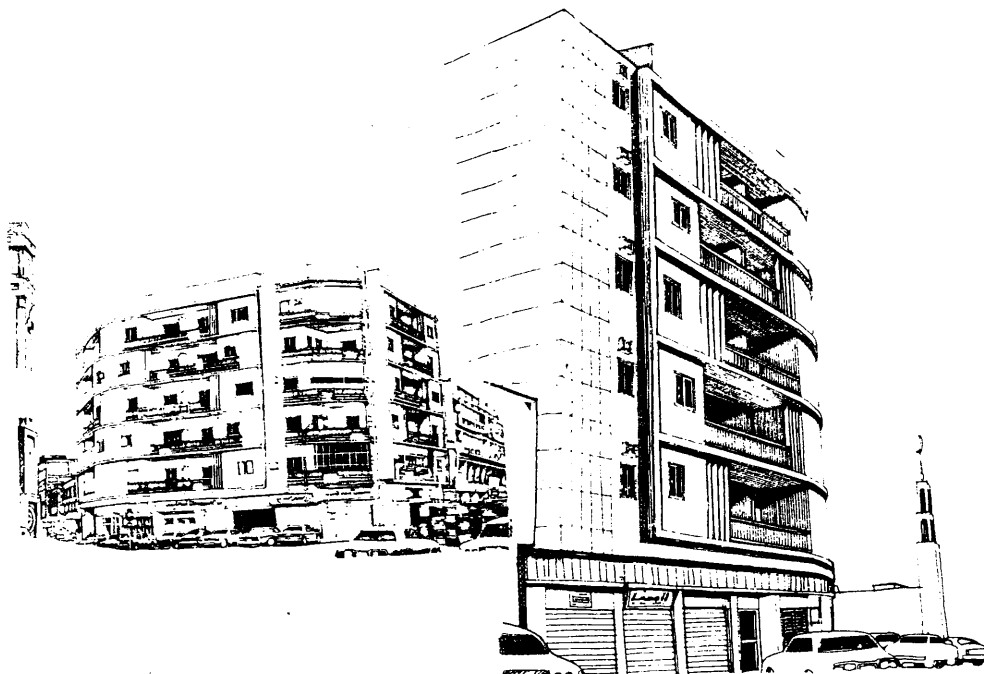


Figure 55: Riyadh

Riyadh - the F.M. Building, Constructed in the late 1950's.

(left) View from al-ʿAdi square (north), showing Qasr al-Hukm to the right.

(right) View from the east and south side with the south facade solid.

Source: Courtesy of Mehmet Karakurt, Beeah Group Consultant, Riyadh.

having their privacy invaded. Consequently, the west facade was built solid, except for the inward looking light wells and a stairwell with high openings (Figure 56). The inward form of these provided light and ventilation and at the same time prevented the building's inhabitants from overlooking the roofs and courtyards of surrounding houses. On the south facade, precautions were taken to make sure that no one would be able to look westward. The balconies were designed in a triangle with a small space that is suitable for looking towards the east and south and with openings towards the south where low rise commercial buildings on the western side of King Faisal Street can be seen (Figure 56). Regarding the north and east facades, no problems were encountered. The north facade looks towards another lower apartment building (al-ʿAziziyah) and to the intersection of al-Khazzan

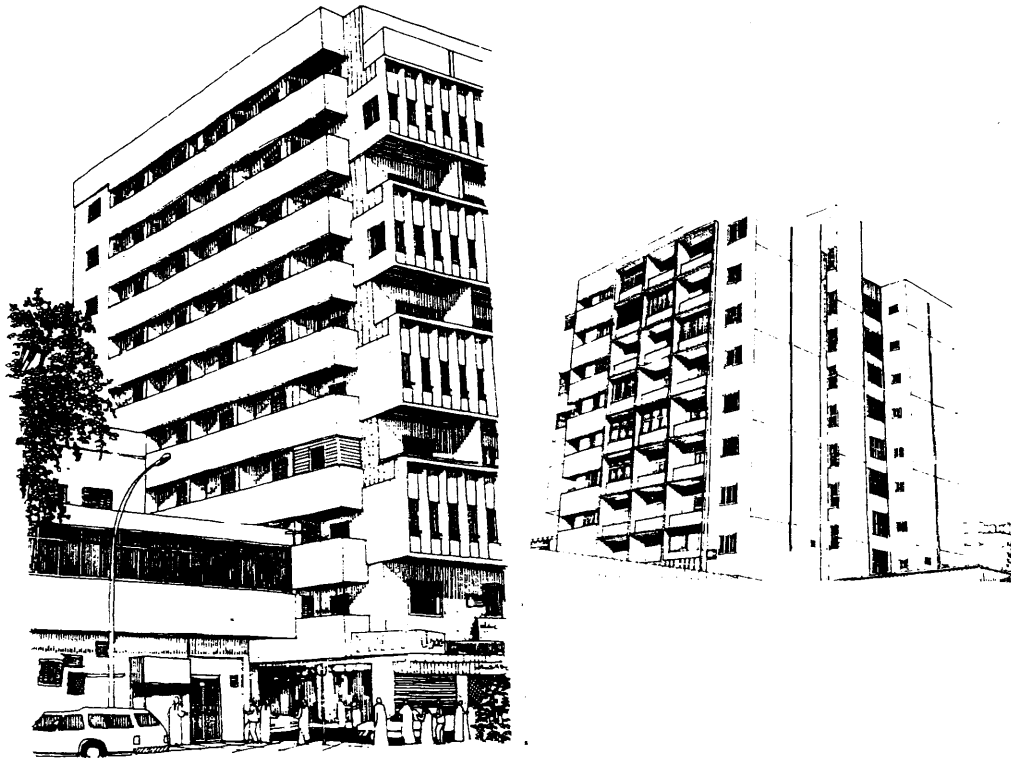


Figure 56: Riyadh - al-Riyadh Building, constructed around 1960/61.

(right) The west facade built solid except for the light wells and stair well with high openings.

(left) The south facade, precautions were made to ensure that more that no one will be able to look west-ward

Source: Courtesy of Mehmet Karakurt.

and King Faisal Streets, while the east facade looks out on King Faisal Street and the two huge cemeteries to its east. Hence, balconies as well as openings were provided on these two sides.

With the beginning of the development in the late 1370's/1950's of high rise buildings around neighborhoods with single-family dwellings, pressure was put on the municipality to protect the privacy of people living in these areas. As a result, the municipality tried to ensure that the buildings were designed so as to guarantee the privacy of these areas. A witness to this effect is al-Riyadh building. In addition, the municipality imposed some restrictions on the management of these buildings. One restriction was that no single

people could rent an apartment higher than the third floor, and that, furthermore, the movement of single persons was restricted to the floor where they lived and to lower floors.²² Another restriction was that no strangers were to be allowed into the buildings. The development of high rise buildings as well as of the previously stated rules created by the circumstances highlight a contradiction that should not have been there in the first place. The restrictions were also applied in our third example, the Zahrat al-Riyadh Building.

Zahrat al-Riyadh Building. A ten-story apartment building constructed in the late 1960's, the Zahrat al-Riyadh Building is situated on al-Khazzan Street overlooking the whole area of Old Riyadh to its south. It also has a site bordered by four streets, but its unique design lies in the fact that it paid no respect whatsoever to existing neighborhoods and their need for privacy. The four facades of the building were treated equally with balconies and windows (Figure 57) and therefore the large neighboring areas of traditional single-family homes to the building's south and west were denied their right to privacy; the neighborhood residents were kept under the constant view of the building's inhabitants.

When construction was well ahead and the residents of the neighborhood realized the impact of the building, they protested, without success, to the municipality, and finally ended up taking their case to court. As far as can be determined, the case resulted in *sulh* (an agreement acceptable to both sides).²³ Irrespective of the nature of this agreement, it did not seem to touch on the problem at hand, namely, the issue of invasion of privacy. Instead, the question was somehow evaded, and the promoters of the building went ahead with construction, making no alterations in design. In the end, the building was completed and inhabited.

Two questions come to mind regarding this case. First, why did the al-Riyadh Building provide for the protection of the surrounding area's privacy while the Zahrat al-Riyadh Building, looking into the same area, did not? And, secondly, what impact did the Zahrat al-Riyadh Building have on later developments?

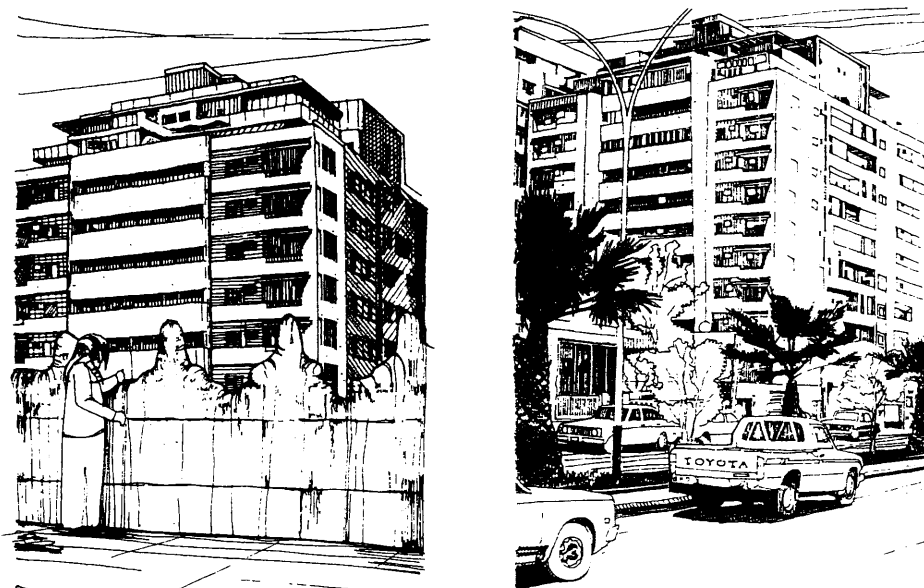


Figure 57: Riyadh-Zahrat al-Riyadh Building, constructed in 1967/68.
 (upper) View from the roof of one of the houses in the area south
 of the building showing southern and eastern facade.
 (lower) View of northern and western facade.

Regarding the first question, the answer appears to be that there was a change in the balance of power among the contending groups involved. On the part of the neighborhood, the power and influence of its residents was greatly diminished during the period between the construction of the two buildings. By the late 1380's/1960's, when the construction of Zahrat al-Riyadh began, many of the well-known and long-time residents of Old Riyadh, who would undoubtedly have played a major role in the resolution of the case, had already moved from the area. As for the municipality, restrictions regarding privacy were already relaxed by the end of the 1380's/1960's; the municipality by this time was allowing people in villas to have second-story windows and balconies, even if they overlooked their neighbors' houses. Finally the promoters of the building appear to have been very influential.

Regarding the second question, the building's impact on later development appears to have been very great and, indeed, devastating; the case established a precedent that had a far ranging influence. Before this building was constructed, the legitimacy of objections to

invasion of privacy were taken for granted; after the Zahrat al-Riyadh Building, such violations of privacy became a fact of life that had to be accepted and lived with. In short, the Zahrat al-Riyadh Building represents a dramatic turning point in attitudes with respect to the issue of invasion of privacy; the sheer existence of the building gave the impression that objections to violation of privacy would be futile. Indeed, in areas with single-family dwellings of the villa type, complaints to authorities regarding intrusion of privacy diminished greatly after this case, and people resorted to individual action on their own property to protect their privacy when it was invaded by neighboring houses.²⁴ In effect, then, the Zahrat al-Riyadh Building introduced a new value of individual self-interest that was unprecedented -- namely, a person's right to get the most benefit from his property regardless of the harm and damage inflicted on his neighbors.

5. Regulations in Practice Before the Master Plans

The various processes which we have been investigating -- the emergence of zoning regulations in the late 1350's/1930's and early 1360's/1940's, and the introduction of the villa and the high rise building in the 1370's/1950's and 1380's/1960's into certain rules that were applied uniformly throughout the entire country. These were issued in the form of a circular by the Deputy Ministry of Interior for Municipalities to all municipal and town planning offices in the country. The circular reads as follows:

Regulations concerning building on plots of land:²⁵

- 1- Prior to the issuance of building permits, confirmation must be made of the existence of concrete posts.
- 2- Plots are to be sold according to their drawn and established boundaries, and should be strictly prohibited from further subdivision.
- 3- Heights should not exceed eight meters, except with the approval of the concerned authority.

- 4- A built-up area generally should not exceed sixty percent of the land area, including attachments.
- 5- Front setbacks should be equal to one-fifth of the width of the road and should not exceed six meters.
- 6- Side and rear setbacks should not be less than two meters and projections should not be permitted within this area.
- 7- Building on plots of land specified for utilities and general services should only be permitted for the same purpose.
- 8- Approval of the plan does not mean confirmation of ownership limits (boundaries) and the municipality should check the legal deed on the actual site.
- 9- The owner should execute the whole approved plan on the land by putting concrete posts for each plot of land prior to its disposal either by selling or building.
- 10- Irregular plot cuts should be extracted according to Circular No. 4855 of H.E. the Deputy Minister of Interior, dated 22/12/1389 A.H.
- 11- The municipality should extract the legal deeds of lots intended for public gardens and squares according to Decree No. 1270 of the Council of Ministers, dated 12/12/1392 A.H.
- 12- These regulations cancel all other stipulations which are in contradiction with them.

These rules show that on the eve of preparing the Master Plans for the country's cities, the pattern and model for most of the regulations introduced by the plans had already been established by the late 1380's/1960's.

B. The 1390's/1970's: Regulations Introduced By The Doxiadis Master Plan Of Riyadh

The Doxiadis Master Plan divides Riyadh into three zones. Each of these zones has its own set of regulations. The first zone, the Action Area, includes 11.2 sq. km. in South al-^cUlaiya, al-Murabba^c, al-Futah,

al-Duhayrah, and Dukhnah. Its detailed ordinances consist of zoning by-laws (Figure 49) and zoning plans for each of these communities.

The second zone, the Master Plan Area, has no detailed zoning regulations, except those controlling density, building heights and minimum lots sizes. Residential development in this area is entirely controlled by subdivision legislation.

The third zone, the Controlled Development Area, is loosely regulated by a set of land use controls which prohibit all construction except for community facilities and residential or public buildings of not less than 200 sq. m on plots of not less than one hectare.²⁶

Most of the detailed ordinances proposed by the Master Plan for the first zone were not new. They were in practice by the late 1380's/1960's. In essence, the Master Plan merely confirmed the existing regulations: in some cases continuing what existed before, such as the setback requirements, even if this contradicted the goals and policies of the plan, while in other cases preserving the concept but proposing different standards, and therefore introducing a new value system. Such is the case with the minimum lot size. These two steps, the confirmation of setbacks and the introduction of different standards for minimum lot sizes in different areas of the city, had a major impact on the development of Riyadh in the 1390's/1970's.

1. The Confirmation of Setbacks

Except for existing buildings, the Doxiadis regulations mandate setbacks throughout all residential areas of the city. This, as stated earlier, contradicts the goals and policies of the plan regarding scale and character.²⁷ The Plan's statements on this subject bear repetition here:

The distinctive character (of older Riyadh) which reflects a rich historical and cultural tradition, is a valuable asset. This character should, as far as possible, be preserved and its principles, which reflect the social life and

customs of the people and the physical conditions in Riyadh, should be used to inspire the design of the new public zones and residential communities to be built in the city.

Many of the newer parts of the city are constructed in a manner that has paid very little tribute and attention to the design and aesthetic quality of traditional architecture. If this were to continue, Riyadh would rapidly become a city of no character.⁽²⁸⁾

With this in mind, however, the Plan goes on to preserve the setback requirements throughout all residential areas. To find out how these setback requirements worked and what their net results were, two residential zoning districts are introduced here. These are R12, a single-family residential area, and R13, a two-family dwelling residential area. These are graphically represented in Figure 58 according to the minimum requirements, taking into account the minimum setback requirements and the minimum and maximum lot areas as well as their minimum dimensions (Table 3).

	Minimum Area	Coverage	Minimum Width	Minimum Depth	Setbacks f. s. r.	Floor Area Ratio
R12	400	35%	16	24	4 2 10	0.7
R13	400	40%	16	24	4 2 8	0.8

Table 3: Zoning: Bulk and Height Regulations

Source: Taqrir al-Lajnah, op. cit., p. 144

As we noted elsewhere,²⁹ the dimensions proposed by the Plan for plot sizes were never followed, and the process continued towards the square lot. Since the Plan had more or less adopted the trend of the setback requirements that were previously in practice, the municipality continued its own setback requirements rather than adopting the new ones. These requirements were one-fifth of the width of the street for front setbacks with a maximum of 6 m. and 2 m. for side and rear setbacks; that is in addition to area coverage and floor area ratio

requirements.³⁰ Therefore, in reality, the previous examples were implemented as in Figure 58.

By confirming the setback requirements and mandating them in all residential areas, the Plan defied the socio-cultural values of the people and the physical conditions of Riyadh. By allowing buildings with setbacks to open windows which overlook surrounding dwellings, the concept of privacy to which the design of traditional houses adhered was totally disregarded. And mandating the setbacks promoted and reinforced the tendency to open to the outside rather than to the inside, a feature that contradicts Riyadh's climatic conditions and needs. Therefore, the Plan actually paid no tribute at all to the principles implied by the city's traditional architecture, and Riyadh, indeed, became a city of no character.

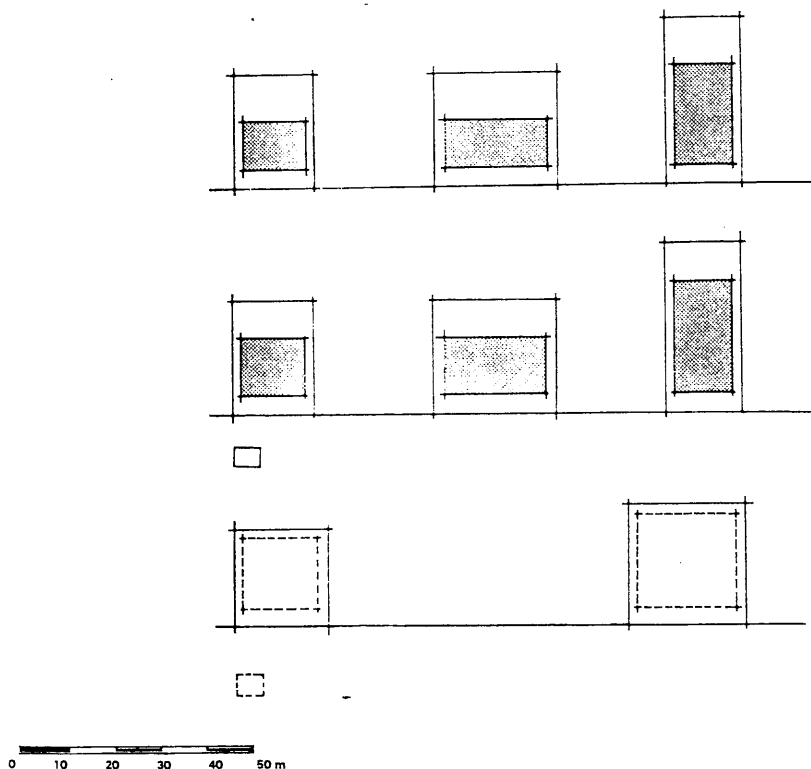


Figure 58: Riyadh - Doxiadis Master Plan
Setback Requirement
(upper) Requirement for R12 district.
(middle) Requirement for R13 district.
(lower) R12 & R13 actual implementation in Riyadh.

Because of the earlier developments in high-rise buildings and in new neighborhoods of single-family dwellings in the late 1380's/1960's, the municipality of Riyadh had already relaxed its restrictions regarding openings and privacy. The confirmation of the setback requirements by the Plan completed this process. It gave the municipality the authority it needed to make the setback requirements legal.³¹ After that time, the municipality made it explicitly acceptable to have second floor windows, even if they intruded on the privacy of a neighbor, as long as the setback requirements were satisfied. This was in clear defiance of accepted norms and acknowledged social conventions. Nonetheless, the requirements went into effect not only in Riyadh but also in all of the country's other cities and towns.

People who refused to accept the violation of their privacy had two choices: they could either sue their neighbors in court, or take steps to change their own property so as to protect themselves. Regarding the first alternative, courts in Saudi Arabia continued to rule in most cases that no one has the right to invade the privacy of his neighbor by opening windows that overlook his house, regardless of municipal and zoning provisions. A case in point is one from the court of Bada'i³, a small town in the district of Qasim in central Saudi Arabia. The case took place in Safar 1400/January 1980. It concerned a house that was being built with provisions for setbacks and, therefore, its design which included second-floor windows was approved by the municipality. These windows overlooked a neighboring house and the neighbor sued in court on the basis of the violation of his privacy. The judge ordered the litigants to reach a *sulh* and told them that, if they did not, then he would decide the case. The litigants, therefore, reached an agreement according to which the owner of the new house would make certain changes in the design of his windows that would ensure the protection of the neighbor's privacy and at the same time give light and air to the new house (Figure 59). The nature of the agreement and the feeling of the owner of the house, who was my source, suggest that if a decision had been made by the judge, it would have been to the effect of sealing the windows.³²

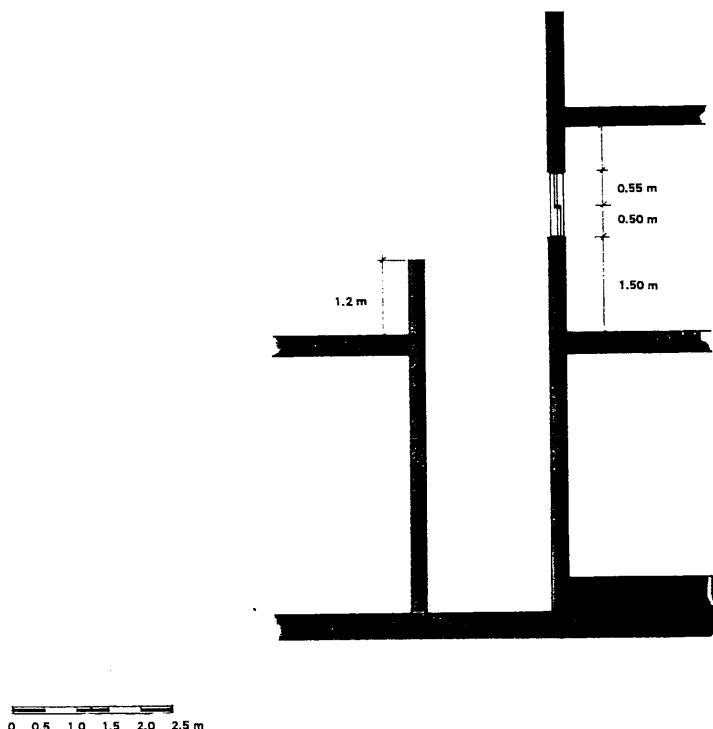


Figure 59: Bada'i^c

Section showing the agreed upon treatment of windows.

Window sill is 1.5 m. from roof floor.

Lower part of the window 0.50 m. from window sill (fixed)

Upper part 0.55 (moveable).

Both with opaque glass.

Even though courts in Saudi Arabia have in most cases supported the social conventions regarding the protection of an inhabitant's privacy, most people resort to individual action rather than sue their neighbors in court. The following examples from Riyadh will illustrate the resulting widespread practices, not only in Riyadh but in the country's other cities as well.

In the first case, two houses sharing a fence wall are built as villas with setbacks on both sides of the fence of at least 2 m. (Figure 60). On the space resulting from the setback, they have windows on the ground and second floors. The windows on the second floor of each house usually overlook the space resulting from the other house's setback. To be able to use this space without being constantly watched

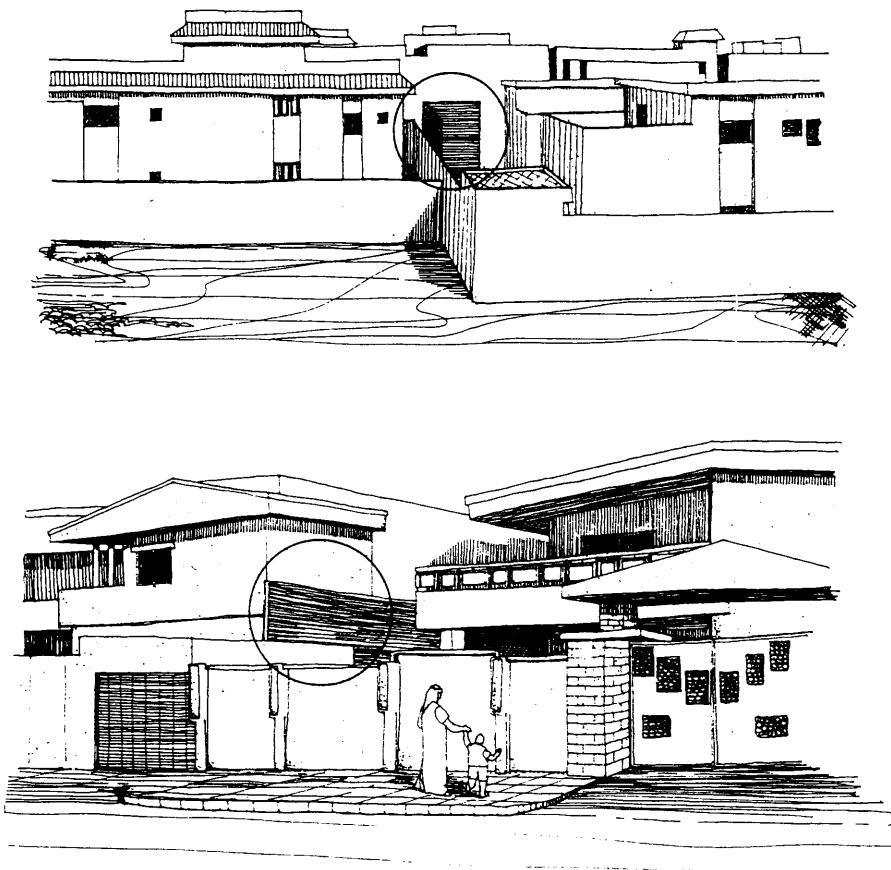


Figure 60: Riyadh

Use of plastic corrugated sheets to ensure privacy.

(upper) al-^cUlaiya.

(lower) al-Malaz-southeast.

by his neighbor, the owner of one of the houses, using a steel frame and plastic corrugated sheets, extends the height of the fence wall to the point where it breaks the line of vision coming from the windows of his neighbor's house.

In the second example, the two houses face each other on a street. In one case, one of the houses is built on the street line without setbacks and with a balcony on the second floor. The house on the opposite side of the street is a villa type with a frontage setback. In order to be able to use this frontage setback freely without being watched by people on the balcony, the owner, using plastic corrugated

sheets, extends the height of his fence wall to a point where the line of vision between the balcony and his front yard is broken (Figure 61).

In the last example, both houses abutting the street have setbacks. In addition to the street's width being small, one of the houses has used only the minimum frontage setback, while the other has a large front yard. This yard is intruded upon by the second floor windows of the other house. Again, the owner, using plastic corrugated sheets, extends his fence wall abutting the street to break the other house's line of vision (Figure 61).

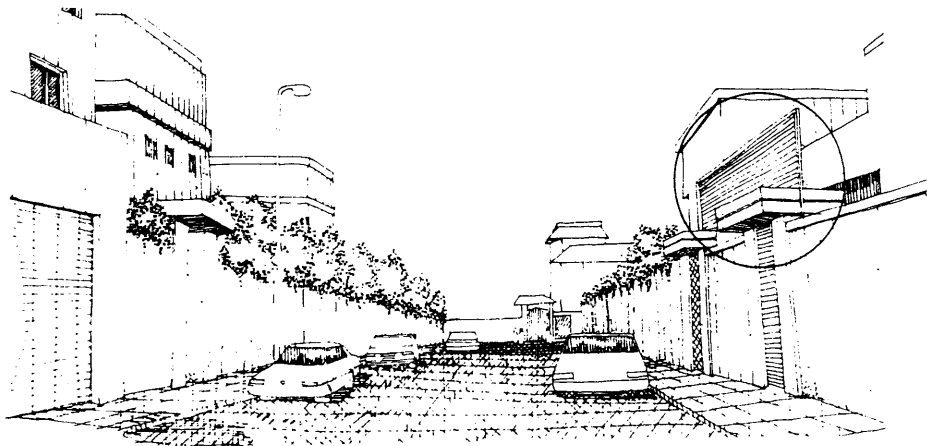
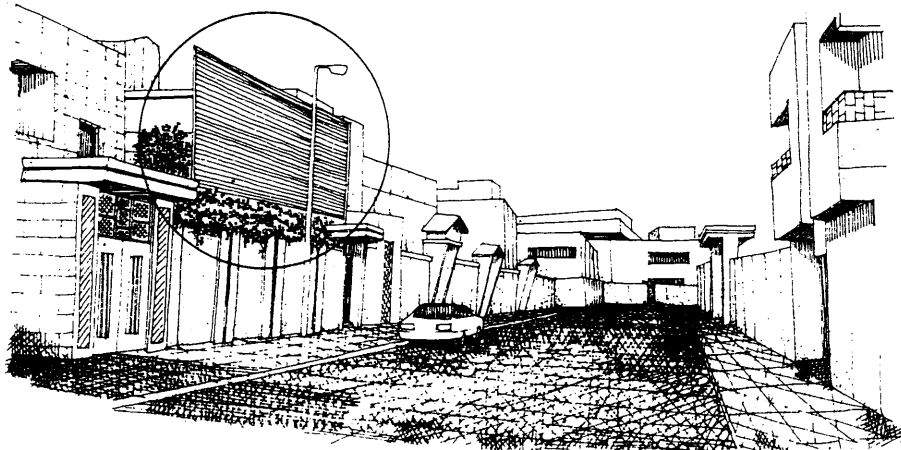


Figure 61: Riyadh

Use of plastic corrugated sheets to ensure privacy.

(upper) al-Malaz-southeast, the case of a house built on the street line with a balcony which overlooks the house on the opposite side of the street.

(lower) al-Malaz-southeast, the case of the two houses abutting the street.

2. The Minimum Lot Size: Segregation According to Income

The concept of minimum lot size standards was introduced by the Roads and Buildings Statute, adopting the standard of 98 sq. m. for whole areas within each city.³³ The Doxiadis plan for Riyadh preserved this concept of minimum lot size. However, instead of proposing one standard size for the whole city, it proposed different standards for different areas (Figure 48). To explain the reasoning for this differentiation, the Plan states:

The proposed average residential plot sizes range from a low of 150 sq. m. in the old parts of the existing city to 1500 sq. m. in certain high income areas. Calculations have been made on the basis of income, cost of infrastructure works, climate, desirable densities and traditions.⁽³⁴⁾

The minimum lot size standards introduced by the Plan divide Riyadh into two parts. North of the old city, the minimum sizes start with 400 sq. m. and up, while in the old city and in the southern part, the minimum sizes range from between 150 sq. m. to 250 sq. m. Traditionally, the area north of Riyadh has always been preferred by high and middle income groups, as can be seen in the developments of al-Murabba^c and al-Futah, Nasriyah, and al-Malaz. However, people with limited and low income who came to these areas live side by side with high and middle income groups, as exemplified in the growth of the area west of al-Murabba Palace in the 1360's/1940's and 1370's/1950's, and in Um al-Hammam, a low income neighborhood that developed directly on the southern edge of Nasriyah. Such mixing of income groups follows a centuries old tradition in Arab-Muslim cities. Neighborhoods were never based on income, but on place of origin, ethnic background, or religious belief, so that people in these neighborhoods, some with vast incomes and therefore large and sometimes palatial homes and others with very limited income and therefore small, modest houses, lived side by side with one another.

In sharp contrast to this, the Plan's designation of certain minimum lot sizes for certain areas was actually based on income, and not on tradition as the Plan itself claims. The impact of this arrangement was two-sided. First, it introduced a new value system into Saudi Arabian society, that is, segregation according to income.³⁶ This had a major impact on Riyadh and on the country's other cities where the practice developed into designating a whole area for people with limited income, thereby creating and enforcing segregation. An example of this is the new neighborhood of al-^cUrayja in Riyadh with more than 20,000 plots, all allocated for people with limited income³⁵ (Figure 52). Secondly, it divided Riyadh into north and south, and rich and poor, respectively. By establishing a large size standard in the north, the Plan, in effect, prevented low income groups from being able to move to the north after land prices soared in the 1390's/1970's. Thus the new value system was finally institutionalized, and from that point on neighborhoods were seen as high, middle, or low income areas.

C. The 1400's/1980's: Zoning Regulations Proposed By The New Master Plan For Riyadh

By the mid 1390's/1970's, Riyadh grew beyond the boundaries designated by the Doxiadis plan. This resulted from the economic boom and concomitant pressure for development which Saudi Arabia experienced after 1393/1973. By this time, it became clear that the forecasts and predictions, and hence some to the proposals, of the Doxiadis plan had become obsolete. Thus new studies based on new facts and a different context had to be prepared.

In 1396/1976 the Deputy Ministry for Physical Planning of the Ministry of Municipal and Rural Affairs assigned the task to SCET International/SEDES of Paris. SCET was required to revise the Doxiadis Master Plan, and to prepare Execution and Action Master Plans and development studies for the city of Riyadh in cooperation with the Deputy Ministry. A document entitled "Planning Regulations,"³⁷ which encompasses the zoning regulations and standards proposed for the city, forms part of these studies. Here, we

will present a brief description of this document and discuss three issues with which the Regulations deal and which are most pertinent to our subject. These are the abandonment of setbacks and the provision for privacy, the confirmation of the square lot, and the role of eminent domain.

1. The Proposed Regulations

The aim and objectives of the proposed regulations as stated by the new Plan are as follows:³⁸

- a- To give effect to the policies and proposals of the Master Plan.
- b- To protect the privacy of individual homes and private grounds.
- c- To preserve the value of land and buildings.
- d- To define the intensity of land use and net residential density.
- e- To safeguard and provide proper light and air, a healthy environment, privacy, access, and aesthetics.
- f- To ensure a smooth transition between existing and proposed regulations.
- g- To establish coordination with the Execution Plan recommendations.

In the proposed regulations, the city of Riyadh is divided into zoning districts on the basis of the revised Master Plan, covering the whole area of the original Plan without exception. The boundaries of these districts are established on a series of maps entitled "Zoning Districts, City of Riyadh." The districts are classified into six principal land use categories; residential areas, special residential areas, mixed use areas, government-use areas, industrial areas, and open spaces. Other categories include districts for various specialized uses.³⁹

The principal land use categories are further divided into sub-categories, which define each type's permitted land use. In a residential area, for example, the plan would call for a varied number of basic sub-categories, comprised of single-family, low-, medium-, and high-density areas, and multi-family, low-, medium-, and high-density areas.⁴⁰ The breaking down into categories and sub-categories

occurs in the first part of the zoning ordinance. Also covered in this part of the ordinance are the multiplicity of details, presented in table form, governing each sub-category of land use: dimensional regulations, parking requirements, permitted uses, restrictions on secondary uses, statutory and other special features of each zone.⁴¹ The second part of the ordinance, articles of application, is a series of articles which complement the first part and defined their mode of application in specific instances.⁴²

2. The Rise of Consciousness: Abandonment of Setback Requirements, Provisions for Privacy, and Concern for Preservation

Privacy is one of the most important issues treated by the revised regulations. One of the aims of these regulations is "to protect the privacy of individual homes and private grounds." The regulations state that:

...visual privacy is the most important factor determining the design of private homes in Saudi Arabia. Zoning regulations should provide a legal framework for safeguarding the privacy of each home and ensuring the full use of a property by its owner, in accordance with Saudi traditions and jurisprudence.⁽⁴³⁾

To achieve this objective, the regulations take two important steps. First, side and rear setback requirements in residential areas are abolished. Secondly, for owners who elect to have setbacks, certain conditions are established, to insure that a neighbors' privacy is protected. Regarding the first, side and rear setbacks, the regulation state:

...In most R & C districts the owner can elect to build to the side property line... The elimination of side setbacks in residential districts allows the design and construction of a greater variety of housing types more suited to local climate and social customs.⁽⁴⁴⁾

...Rear setbacks are optional in R districts, but mandatory in RS and C districts...(45)

Regarding the second step, the regulations follow an elaborate standard to protect the privacy of a neighbor if an owner elects to have setbacks.

Section 9.1 Minimum distance for unobstructed window openings.

In R districts, the elimination of setback requirements necessitates control of visual privacy by regulation of window openings and sight lines. A property owner is allowed to enjoy his house and grounds without his privacy being infringed (on) by people looking from second or higher floor windows of adjacent houses. The minimum distance at which a window can be opened without infringing on another's privacy is given by the following formula:

$$x = d \frac{5-L}{L-2}$$

Where d is the width of the ground to be visually protected, L is the height of the dividing wall, (and) x is the minimum distance at which a window can normally be opened in a facade.

If x is less than $d (5-L / L-2)$, the owner of house B (Figure 62) must either build a blind facade from the second floor up (without windows) or comply with a window opening design which prevents direct sight lines into his neighbor's property as specified in section 9.3...(46)

Section 9.2 Calculation of distance d (width of zone to be visually protected) (Figure 62).

The distance d is the theoretical distance which a person standing at 5 m. above grade level can see in his neighbor's ground. This distance can vary according to the respective location of the two houses on the lot. Two cases are presented (in Figure 63).

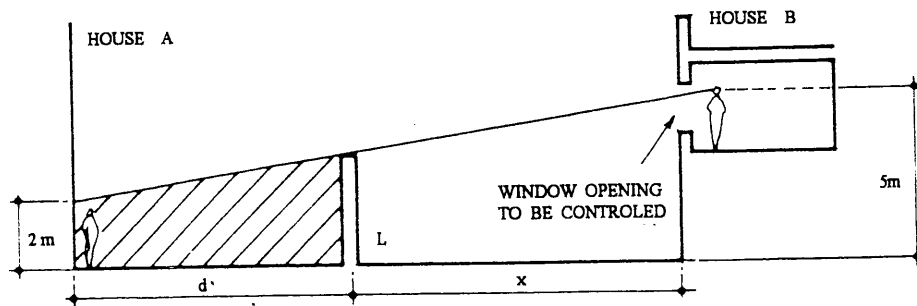


Figure 62: Riyadh - Proposed Zoning Regulation

Article 9:1 minimum distance for unobstructed window openings.

Source: SCET, *Riyadh Action Master Plan*, T.R. No.9, v.2, p.71.

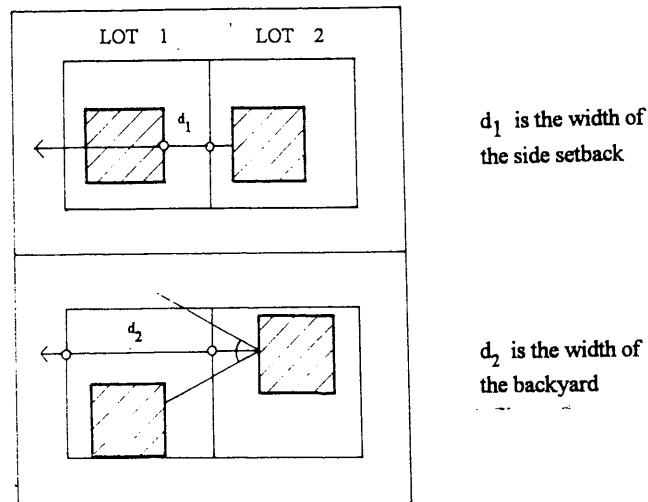


Figure 63: Riyadh - Proposed Zoning Regulation

Article 9:2 distance to be protected in the neighboring house.

Source: SCET, *Riyadh Action Master Plan*, T.R. No.9, v.2, p.72.

In the event of a dispute between neighbors, the interpretation of the regulations and exact determination of d shall be left to the zoning authority.⁽⁴⁷⁾

The regulations do not totally prohibit window openings from the second floor up, if the formula introduced is not met. They make it clear that windows can be opened if they are designed so as to prevent direct sight lines onto neighboring properties. They state:

Section 9.3. Authorized window openings for blind facades.

The following types of window openings are recommended for use in blind facades (Figure 64). Any other design shall be subject to review and approval by the authority.⁽⁴⁸⁾

The concern for the protection of privacy is not limited to residential areas; the regulations also treat edges of interface between different zones. The interface of zones has always proved to be a very delicate and very critical issue in the past, especially between zones designated for single family dwellings and those designated for apartments or commercial buildings. By creating a rear-sky exposure plane, the regulations hope to protect the privacy of homeowners at the rear of multi-story buildings.

The sky exposure plane limits the bulk of a building to an envelope defined by the front setback building line, the rear setback building line, the maximum height limitation of an imaginary plane drawn at a 45° angle from the limit of the rear property line.

Within the building envelope thus defined, the owner shall be free to build according to his own design as illustrated below provided the maximum ground coverage ratio is not exceeded.⁽⁴⁹⁾ (Figure 65)

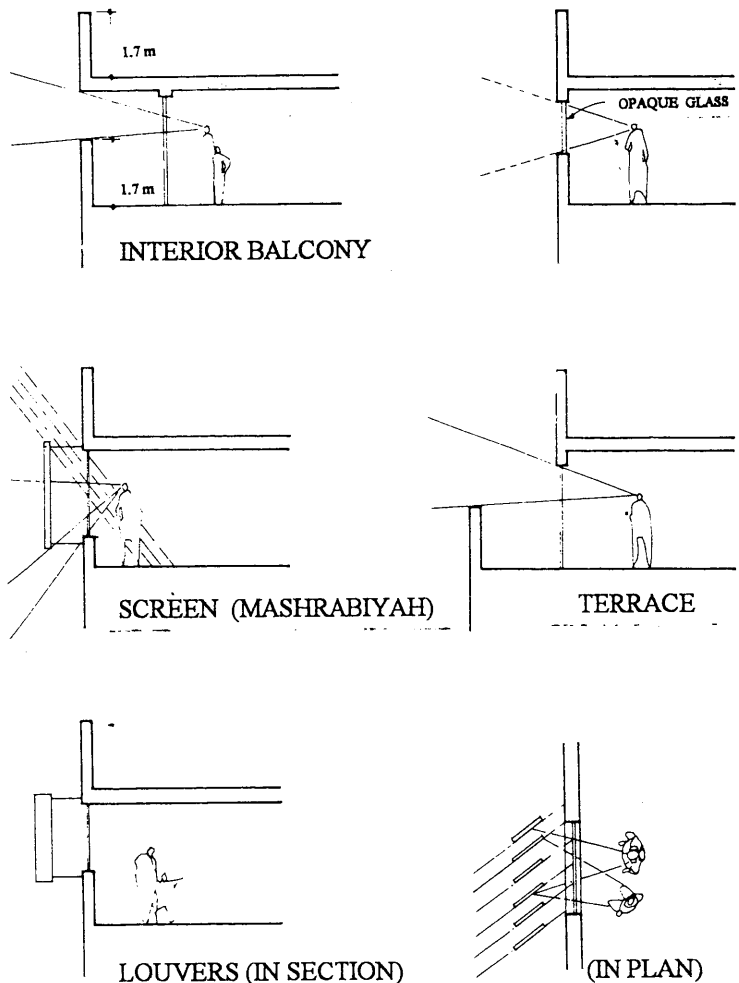


Figure 64: Riyadh - Proposed Zoning Regulation

Article 9:3 authorized window openings for blind facades.

Source: SCET, *Riyadh Action Master Plan*, T.R. No.9, v.2, p.73.

Another issue for which the regulations deserve credit is their concern for preservation. The new regulations recognize the need for preserving certain traditional areas, and suggest the creation of a public agency to control architectural quality and to specify the standards for materials, construction type, and other regulations. They state:

With the purpose to preserve certain areas or buildings which have historical or cultural value, certain zoning districts and their regulations will apply to such zones.

They are comprised of historic districts with special regulation(s) on construction activities in terms of scale, functions, styles, and materials according to specifications provided by (a) specially appointed commission. It also applies to areas designated for urban renewal near the city core where certain type(s) of traditional buildings are to be improved in a manner appropriate to the traditional physical environment.⁽⁵⁰⁾

Whether the regulations will be approved and hence implemented is not yet known. However, should they be applied, the regulations' concerns both for the protection of privacy and for preservation will, no doubt, have a major impact on the physical character and pattern of the city, especially with respect to dwelling types adopted and developed. Furthermore, their adoption by the city of Riyadh will undoubtedly have a wide-ranging impact since other cities are likely to follow its lead as they have in the past.

Regardless of the question of implementation, however, it is clear that so far the new regulations have raised the consciousness of planners, urban designers, and architects, as well as of municipal officials, to some of the critical issues which need to be dealt with. They show that the cultural context and some of the problems encountered in Riyadh or in any Arab-Muslim city are totally different from those of a Western city. Because of this difference, the problems require the development of unique solutions -- solutions, in other words, that are pertinent to the cultural context of these cities, and not deleterious, as borrowed solutions have proved to be.

3. The Confirmation of the Square Lot

As we saw earlier, the Doxiadis regulations attempted to set up the lot's dimensions so that the frontage (width) would equal two-thirds of the lot's depth. In other words, they were designed so that the lots would never come to a perfect square (Figure 49).⁵¹ Doxiadis' proposal, however, was never implemented and the trend to a square shape continued unabated.

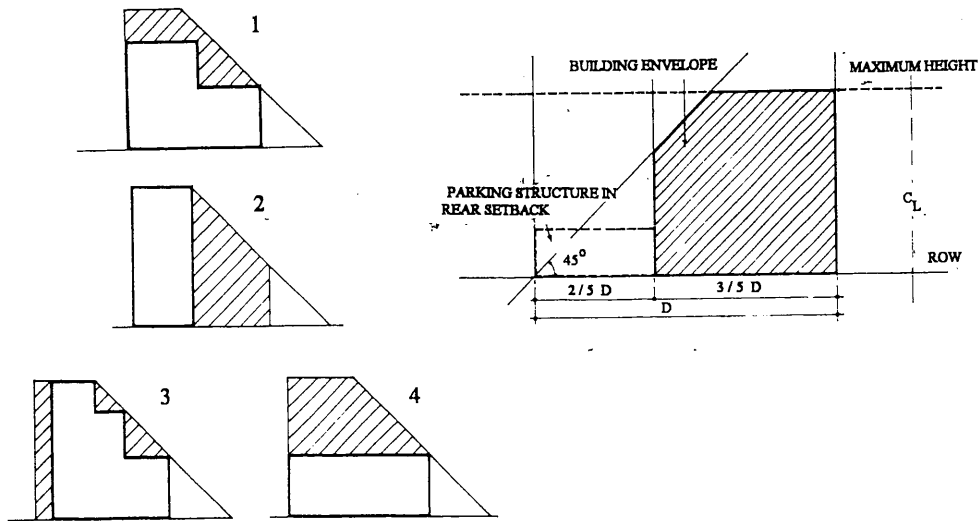


Figure 65: Riyadh - Proposed Zoning Regulation
 (right) Article 10:2 the sky exposure plane.
 (upper & lower left) Illustrative examples. 1-4.
 Source: SCET, *Riyadh Action Master Plan*, T.R. No.9, v.2, pp. 74-75.

The new regulations seem to accept the general tendency toward square lots. They set up minimum lot dimensions which are not exactly square, but come very close to it (Table 4).

Minimum Area (m ²)	Minimum Dimensions (m) ⁵² [Doxiadis]	Minimum Dimensions (m) ⁵³ [SCET]
400	16 x 24	16 x 20
600	---	20 x 25
800	20 x 30	25 x 30

Table 4: Minimum Lot Size and Minimum Dimensions

The SCET dimensions are very suggestive of the square, especially when dealt with by persons who have already acquired the habit of subdividing lots into a square shape. For example, for an area of 400 sq. m., the minimum dimensions are 16 x 20 m. The alternative would

be either 16 x 24 m. or 20 x 20 m. Keeping in mind that the Doxiadis dimensions of 16 x 24 m. for a 400 sq. m. lot were never implemented, the most predictable outcome would be a 20 x 20 m. lot or one very close to this.

The problems associated with using a square shape for lots are mainly economic ones. Subdividing on the basis of a square shape usually doubles the length of infrastructure and utilities.⁵⁴ This, in turn, doubles not only the initial cost of constructing these infrastructure and utilities, but the cost of their maintenance throughout the years, a problem which Riyadh and other Saudi Arabia cities would have to live with as long as they exist.

4. New Problems Encountered: The Role of Eminent Domain

Minimum Lot Size and Non-Conforming Lots. The proposed regulations establish a minimum lot area for each zoning district and for sub-districts as well.⁵⁵ In order to ensure the maintenance of these standards, the regulations give the municipality the authority to use eminent domain in the case of non-conforming lots. In Article 1, dealing with lot area, the regulations state:

Section 1.1 Minimum Lot Size.

Lot size shall conform to the regulations of each zoning district...

Residential and commercial lots smaller than this (the specified minimum size for each zone) shall be considered non-conforming, in which case the regulations for non-conforming lots shall apply.

Section 1.2 Non-Conforming Lots.

Any parcel of land smaller than the minimum lot size specified may be acquired by the municipality or sold to the owner of the adjoining property.⁽⁵⁶⁾

The preceding sections of the article regarding minimum lot size and non-conforming lots have two effects. First, they confirm the different standards of lot sizes for different areas, introduced earlier by Doxiadis, and hence, reinforce segregation according to income. And secondly, they develop a legal mechanism to ensure its application, that is, granting the municipality the right to use eminent domain against non-conforming lots.

Non-Conforming Uses. The role of eminent domain is again invoked by the regulations to control non-conforming uses. Article 14 on non-conforming uses states:

Section 14.1 Non-Conforming Use: Buildings.

Any non-conforming use building or structure, which existed lawfully at the time of the adoption of the present zoning regulations and which remains non-conforming after the adoption, may be continued for specified periods, at the discretion of the (zoning) authority...

The article goes on to say:

The (zoning) authority may at its discretion, decide on the acquisition of land and buildings with non-conforming uses. After acquisition, non-conforming uses cease to exist, and the Authority may remove or demolished such non-conforming buildings thus acquired or may hold and use them for appropriate public purposes only, subject to the provisions of the present zoning regulations or may sell, lease or exchange them. Such action is lawful provided it is duly justified after a detailed study has been made.⁽⁵⁷⁾

The use of eminent domain in the case of non-conforming lots cannot be reasonably justified.⁵⁸ In other words, an important question needs to be raised here: whose interest is being protected by confiscating a lot which is smaller than the minimum standard size in a

certain area? And whose interest is being served by declaring a 400 sq. m. minimum lot size to the north of Riyadh while in the south the minimum lot size is declared to be 150 sq. m.? To put it differently, is the public interest being served by reinforcing this new system of segregation? And, moreover, by making it legal through eminent domain?

Another issue that has to be raised in connection with both non-conforming lots and non-conforming use buildings or structures is the issue of public good versus individual interest. A certain line has to be drawn here to ensure that serving the public good does not go beyond its limits and therefore become injurious and unfair to individuals.⁵⁹ The municipal authority has full power to impose reasonable regulations in order to ensure proper uses and to protect the public interest. But to force someone to give up his own property, either to the municipality or to the owner of the adjoining property, simply because it does not meet the minimum zoning standards for that area can never be justified on the basis of Islamic jurisprudence.⁶⁰ Also, to give the municipality the right to acquire at its discretion land and buildings with non-conforming uses and then to dispose of them by sale, lease, or exchange is neither reasonable nor justified. The municipal authority should and does have the full power to stop the continuation of non-conforming use. Therefore, there is no reason to use eminent domain in such cases. Even if the acquisition by the municipality can be justified on the basis of public interest, the disposition cannot. The municipality should never be given the right to expropriate the private property of one individual in order to sell it to another.⁶¹

Notes

- 1- Among some of the important Statutes not specifically covered in this chapter are the following.

Statute of Premises Causing Discomfort, Nuisance, Health Hazards or Danger. The statute was issued in 1382/1962. Its aim is to protect persons and property from any danger or inconvenience produced by the premises. [*Nizam al-Mahillat*

al-Muqliqah li-al-Rahah wa al-Mud irrah bi-al-Shihha wa-al-khatirah, Royal Decrees No. 17, on 18/3/1382/1962, 2nd. ed., (Mecca: Government Printing Press, 1387/1967)]. The statute was supplemented in 1393/1973 with a bill that classifies the premises into three categories: first, establishments that are dangerous and should be located far from residential areas; second, establishments which do not necessarily need to be located far from residential areas but for which certain arrangements and precautions have to be made; and third, crafts which are neither dangerous nor cause harm but need to be controlled in order to guarantee the comfort of inhabitants. "la'ihat al-Mu'assasat wa al-Muqliqah li-al-Rahah," Council of Ministers Decision No. 1054, on 7/9/1393/1973, *Al-Anzimah*, vol. 3, pp. 23-47.

Statutes of Public Places. The statute defines what is to be considered a public place (e.g., markets, parks, hotels, restaurants, etc.) and also prescribes the conditions to be satisfied by these places in order to safeguard the public's health. [A.A. Bakshish, *Legal Study of Legislations Applied in Saudi Arabia*, a Report prepared by the U.N. legal expert, (April 1977), p. 11; also "Ihsa' al-Mahillat al-^cAmmah," *Al-Anzimah*, vol. 2, pp. 9-10].

Statute for Landed Property Expropriation for Public Interest. The statute, issued in 1392/1972, prescribes procedures for the compulsory acquisition of land needed for public interest projects. It also prescribes procedures for estimating compensations, the method for their payment, and the procedure for appeals. [*Nizam Naz^c Milkiyat al-^cAqarat li-al Manfa^cah al-^cAmmah*, Royal Decree No. 65/m, on 16/11/1392/1972, (Mecca: Government Printing Press, 1393/1973)]. The statute is supplemented by several explanatory directives and circulars. Up to June 1976, most of these are documented in *Al-Anzimah*, vol. 1, p. 71; vol. 3, pp. 57-60, 119, 121-122, 182; vol. 4, pp. 25, 30-31, 44.

The statute is now under the study for revision (Year 1980). An important part of the proposed revision is a new section that will give municipal authorities the right to use eminent domain to expropriate land and buildings in older neighborhoods for urban renewal projects. This revision is being prepared by the Ministry of Municipal and Rural Affairs. It is now at the Department of Experts, Council of Ministers, awaiting final revision and approval by the Council. An important issue raised by new section regards the use of eminent domain in old areas. The Department argues that, if the expropriation is to be done on the basis of public interest, then it does not require separate treatment in the statute; on the other hand, if the expropriation is not based on public interest, then it should not be covered by the statute.

This information is based on a conversation with Dr. Motleb Nafisa, Director, Department of Experts, Council of Ministers, on 7/10/80.

Statute of Measures to be Followed in Disposing of Municipal Lands. In 1374/1955, a royal order gave the municipalities all government lands in the vicinity of each township. [Royal Order No. 20-1-13-1009, dated 17/6/1374/1955, *Al-Anzimah*, vol. 2, pp. 21, 153].

This statute, issued in 1392/1972, as well as several supplementary directives and circulars define what is to be considered a municipal land, and the methods and procedures for selling, renting, or granting easement rights of these lands to the public. ["Nizam al-Tasaruf fi al-^cAqarat al-Baladiyah," Royal Decree No. 64, on 15/11/1392/1972, *Al-Anzimah*, vol. 1, pp. 23-25. See also vol. 2, pp. 21-24; vol. 4, pp. 13, 18, 20, 44].

- 2- "Nizam Amanat al-^cAsimah wa-al-Baladiyat," *Al-Anzimah*, vol. 1, pp. 11-22. The statute was augmented by the Statute of Municipalities and Villages, issued on 21/2/1397, 11/3/1977, for which see Bakshish, op. cit., p. 2.
- 3- *Al-Anzimah*, vol. 1, p. 11.
- 4- Article 9, "Duties and Responsibilities." Ibid., p. 12.
- 5- Article 42, "Functions of the Administrative Council." Ibid., p. 16.
- 6- "Nizam al-Turuq wa al-Mabani," *Umm al-Qura*, vols. 18-19, beginning with No. 863, 10/6/1360, 4/7/1941, and ending with No. 912, 5/6/1361, 19/8/1942. Also *Nizam al-Turuq wa al-Mabani*, (Mecca: Government Printing Press, 1392/1972). The statute was augmented by several royal decrees and numerous ministerial directives and circulars. Up to June 1976, many of these are documented in *Al-Anzimah*, vol. 1, pp. 54-55; vol. 2, pp. 95-97, 99-111, 191-192; vol. 3, pp. 57-58, 89, 176; vol. 4, pp. 70, 71.
- 7- Article 6, *Nizam al-Turuq wa al-Mabani*, pp. 5-6.
- 8- Article 20, Ibid., pp. 8-9.
- 9- Article 24, Ibid., pp. 9-10.
- 10- The cubit is defined by the Statute to equal 75 cm. Ibid., p. 4.
- 11- Article 28, Ibid., p. 11.
- 12- Article 7, Ibid., p. 6.
- 13- Article 8, Ibid., p. 6.

14- Article 23, Ibid., p. 9. This article was revised according to the Council of Ministers' Decision No. 1270, dated 12/11/1392/1972. In its revised form the article reads as follows:

a. Existing streets in cities are to maintain their present status unless the public interest requires they be changed in order to widen them, to correct their curvature, or to alter them so as to conform with the design approved in the organization of the town. The newly opened or designed streets should not be less than 15 meters for main streets; 12 meters for secondary streets in large cities; 10 meters for secondary streets in small cities; 6 meters for secondary roads and lanes in large cities; and 5 meters for secondary roads and lanes in small cities. Secondary roads and lanes are to be reserved for pedestrians.

b. When deciding on the width of streets, the local situation for each town, its site, its development, its population density, its traffic and all requirements of planning and organization should be taken into consideration.

c. The Minister of Interior is the competent referent in deciding the width of streets and roads, and he had the authority to delegate this responsibility to whomever he may deem appropriate according to work requirements.

Al-Anzimah, vol. 1, pp. 54-55.

15- There are various references for traditional house types and sizes in Saudi Arabia. For Mecca, see: Yousef Fadan, "Traditional Meccan Houses: The influence of Socio-Cultural Themes on Arab-Muslim Dwellings," Paper submitted to the Symposium on Islamic Architecture and Urbanism, Dammam, January 5-10, 1980; Ghazi S. al-Otaibi, *Urban Dwelling Environments in Rapidly Growing Cities: Mecca, Saudi Arabia*, Education/Research Program, USD, (Cambridge: MIT, 1980). For Jeddah, see: T.M. Kurdi, and K.Z. Hasan, "Residential Environment in the Hejaz--Traditional and Contemporary," Paper submitted to the Symposium on Islamic Architecture and Urbanism, Dammam, January 5-10, 1980; Yousef Fadan, *Urban Dwelling Environments: Jeddah, Saudi Arabia*, Education/Research Program, USD, (Cambridge: MIT, 1977). For the Eastern Province, See: C. Winterhalter, "Housing Patterns in the Eastern Province of Saudi Arabia," in F. Dakhil, O. Ural, and M. Tewfik, eds., *Housing Problems in Developing Countries*, (New York, 1978), pp. 547-560; B. McCloskey "From al-Hasa to Jubail: A Guided Quantum Leap," in F. Dakhil, op. cit., pp. 598-609; A.L. Kanoo "A Study of the Need for Housing and Development of a Housing System for Saudi Arabia and the Arabian Gulf," Ph.D. Dissertation, University of Texas, Austin, 1970. For Riyadh, see: M.H. Abd al-Rahman, et al., "Local Architectural and Urban Patterns in Riyadh," Research Paper, Department of Architecture, University of Riyadh, 1973. M.S. Mousalli, F.M. Shaker, and O.A. Mandily, *An Introduction to Urban Patterns in*

Saudi Arabia, The Central Region, (London, 1977); S.A. Al-Hathloul, M.A. Al-Husasayen, and A.M. Shuaibi, *Urban Land Utilization*, Case Study: Riyadh, Saudi Arabia, Education/Research Program, USD, (Cambridge: MIT, 1975).

- 16- See Chapter II, above.
- 17- See section B.1 of this chapter, *The Confirmation of Setbacks*, below.
- 18- Amanat Madinat al-Riyadh, *Al-Riyadh fi ʿAhd Jalalat al-Malik Saʿud*, Riyadh, 1382/1962, pp. 27-28.
- 19- See section A of Chapter V. *Land Subdivision*, above.
- 20- This building is known as Fahd b. Muhammad's Building.
- 21- Here the argument can be reshaped on the ground that the south wall is actually not a facade on the street but a party wall. However, the building could have been designed so that the lightwells were on the south side of the building and therefore it would have had one side open. This was the practice adopted later in other buildings.
- 22- There is no written confirmation of these restrictions. They were usually communicated orally to the management which in turn informed all new tenants at the time of signing the lease.

In addition to similar experiences I had in Riyadh in the 1960's, the account related to these three buildings is based on the experience of Mr. ʿAbd. al-Ghafur Rozi, who lived as a single in the first two buildings and tried to lease an apartment in Zahrat al-Riyadh in the late 1960's.
- 23- I have had no access to the court records and it has been very difficult to extract and gather information regarding the case. According to the *sulh*, it seems that the developer agreed to buy any house in the area affected according to the market value if an owner wished to dispose of it.
- 24- Examples of these individual actions are introduced in section B.1 of this chapter, *The Confirmation of Setbacks*, below.
- 25- Doxiadis, *Riyadh Existing Conditions*, pp. 177-183; R. Mathew, *Medina Central-Action Area*, 1975, pp. 24-25; R. Mathew, *Shamal al-Madinah al-Munawwarah*, 1975, pp. 30-32; G. Candilis, *Draft Master Plan: al-Khobar*, p. 49.
- 26- Doxiadis, *Riyadh Master Plan*, A-19, pp. 144-150; *Taqrir al-Lajnah*, pp. 128-168. See also SCET International / SEDES, *Riyadh Action Master Plan*,

Technical Report No. 3: Evaluation of Existing Master Plan, and Technical Report No. 9, Part II: Planning Regulations, 1400/1979, p.1.

- 27- See section B.1 of Chapter V, *The Super-Grid*, above.
- 28- Doxiadis, *Riyadh Master Plan*, A-19, p. 11.
- 29- See section B.3 of Chapter V, *The Square Lot*, above, and footnote 50. Also, see section B.3 of this chapter, *The Confirmation of the Square Lot*, below.
- 30- See section A.5 of this chapter, *Regulations in Practice Before the Master Plans*, above.
- 31- As a document approved by the Council of Ministers in 1973, the Plan was sanctioned as a legal document.
- 32- My information here is based on a conversation with the owner of the newly-built house, Mr. Hathloul M. al-Hathloul.
- 33- See section A.2 of this chapter, *Roads and Buildings Statute*, above.
- 34- Doxiadis, *Riyadh Master Plan*, A-19, p. 144.
- 35- The origins of this development can also be traced earlier to developments such as Manfuhah, a community for people with limited income, and al-Malaz, a community for middle and upper income government employees.
- 36- See section B.2 of Chapter V, *The Square Lot*, above.
- 37- SCET International / SEDES, op. cit., T.R. No. 9-II. It should be pointed out that all of the studies of the Master Plan, although accepted by the Deputy Minister, must await the final approval of the High Committee for the Development of Riyadh and the approval of the Council of Ministers; only then can the Plan be put into effect.
- 38- Ibid., p. 4.
- 39- Ibid., pp. 13-14.
- 40- "Residential areas are divided into 11 sub-categories designated according to the following system. The first digit after the principle use symbol describes whether the area is for single or multi-family residences. The second digit indicates intensity of use, i.e., the net residential density expressed as dwelling units per hectare. The third digit indicates the exact number of floors allowed

above ground level..." Sub-categories in a residential area for example would be as follows:

R-11-1	Single-family low-density
R-12-1	Single-family medium-density
R-13-1	Single-family medium-density
R-14-1 A&B	Single-family high-density
R-15-0	Single-family high-density
R-15-1 A&B	Single-family high-density
R-15-2	Single-family high-density
R-23-2	Multi-family low-density
R-24-2	Multi-family medium-density
R-25-2	Multi-family high-density
R-25-6	Multi-family high-density

Ibid., p. 15. Other principle uses are subdivided according to the same system.

41- Ibid., pp. 18-64.

42- Ibid., pp. 65-82.

43- Ibid., p. 4.

44- Article 4, Side setbacks, section 7:1: minimum requirement. Ibid., p. 69.

45- Article 8, Rear setbacks, section 8:1: minimum setback. Ibid., p. 70.

46- Ibid., p. 70-71.

47- Ibid., p. 72.

48- Ibid., p. 73.

49- Article 10, section 10:2. Ibid., p. 74.

50- Ibid., p. 56.

51- *Taqrir al-Lajnah*, p. 132. See also section B.2 of Chapter V, *The Square Lot*, above.

52- Ibid., p. 132.

53- SCET International / SEDES, op. cit., T.R. No.9-II, p. 43.

54- H. Caminos, R. Goethert, *Urbanization Primer*, Cambridge, MIT Press (1978).

- 55- SCET International / SEDES, op. cit., T.R. No. 9-II, pp. 43-44.
- 56- Ibid., p.65.
- 57- Ibid., pp. 78-79.
- 58- Note here that this is a subjective judgment based on one's own values.
- 59- Establishing these limits is again a subjective matter, depending on value judgments; however, such judgments should be based on the tradition and the cultural context to be served.
- 60- On land subdivision and the issue of lot size, see Malik's opinion regarding the subdivision of *dur*, section 3 of Chapter I, *Land Subdivision*, above.
- 61- See the opinion of Muslim jurists concerning the issue of eminent domain as referred to in section B.3 in Chapter VII, *The Role of Eminent Domain*, below.

Chapter VII

CULTURAL CONFLICTS IN URBAN PATTERNS

Chapter VII

Cultural Conflicts In Urban Patterns

The zoning regulations being applied in Saudi Arabia seem to conflict not only with the socio-cultural values of its society but also with the physical and climatic conditions of its geography. In this chapter we will briefly follow the development of these regulations with particular reference to the cultural context out of which they evolved. Treating three issues -- minimum lot size, setback requirements and openings, and the role of eminent domain -- we will show in what context these regulations developed and how this context differs culturally and physically from that of Saudi Arabia's. Finally, we will look at the social and physical implications of imposing such regulations on the Saudi context.

Background: The Development Of Zoning Regulations In The Late Nineteenth And Early Twentieth Centuries

The zoning regulations presently being applied in Saudi Arabian and other Arab-Muslim cities originated and developed in the late nineteenth and early twentieth centuries in the context of a totally different value system -- that of the United States and Western Europe. Zoning regulations in the United States were originally conceived as an effective technique to protect single-family residential areas. When the notion of city planning came about in the early twentieth century, popular interest began to focus on only one of its phases -- zoning to protect single-family residential areas from invasion by undesirable activities or people. The purpose of zoning has focused on two issues: property value and planning. Regarding the first, zoning is seen as a means of maximizing the value of the property; therefore, it is

envisioned as an adjunct to the market mechanism. This approach calls for the use of every piece of property in a manner that will give it the greatest value without causing a corresponding decrease in the value of other property. Regarding the second, zoning is merely seen as a tool of planning. Therefore, a zoning ordinance must be based upon a plan, and the validity of the ordinance should be measured by its consistency with this plan, regardless of the consequences inflicted on certain activities and people in the municipality or in the surrounding communities.¹

The first case of zoning in the United States occurred in San Francisco in the 1880's. The regulations were intended to exclude Chinese settlers from the city. Since the Chinese used their laundries, scattered throughout the city, as social centers, the ordinance declared such laundries a nuisance and a fire hazard. By doing so, San Francisco hoped to exclude the Chinese from most sections of the city. The ordinance failed to pass in federal courts, however, because it gave arbitrary powers of racial discrimination to a Board of Supervisors. Nonetheless, the city of Modesto, by dividing its area into two zones, one permitting laundries and the other excluding them, was able to circumvent such a decision, and the courts, which had earlier struck down San Francisco's attempt at direct discrimination, went on to uphold the legality of Modesto's law.²

Fragmentary regulations continued to develop in other cities, but comprehensive zoning was not to emerge until 1913. In that year, the states of Wisconsin, Minnesota, and Illinois empowered cities of certain classes to establish residential districts. This came in response to the pleas of homeowners and real estate men who wanted to ban manufacturing and commercial establishments from residential areas. Since the preparation of a city plan was not a requirement for the establishment of districts, residential zones were designated on the petition of the property owners.³

In 1916, however, New York City provided the greatest stimulus to comprehensive zoning. A statute developed by the city that year became a prototype for most other cities throughout the United States.

The statute was mainly initiated to protect Fifth Avenue's luxury blocks and expensive retail land from encroachment by the new tall buildings of the garment district. Underlying this action was the fear that the skyscrapers, with their traffic congestion and other problems, would drive the middle class and wealthy customers from the Avenue.

New York's zoning was based on the rationale that it should not disturb current trends but that it should project these trends into the future and enhance them. Thus, the zoning of suburbs tended to protect homeowners by maintaining the uniformity of their neighborhoods; one-, two-, and multiple-family houses spread out in orderly paths, and apartment buildings were contained along principal streetcar lines and subway stations. Zoning, therefore, contravened none of the city's expansion patterns and, as a result, tended only to minimize gross disorder, and ignore long-term changes that might be socially desirable.⁴

New York's zoning law consisted of three elements: first, the assignment of all private land to particular areas or zones according to a specially drawn map of the city; secondly, the itemization of restrictions applying to each of these zones, that is, heights, number of floors, size of structure, lot coverage, size of yards, open spaces, courts, and population density; and thirdly, a statement to the effect that these restrictions on private property were legitimate and constitutional and that they were directed towards the protection of the health, safety, morals and general welfare of citizens. These principles, the statute continued, could best be served by preventing overcrowding, facilitating transportation, preserving the value of existing property, and guaranteeing adequate light and air in all living spaces.⁵ In effect, the statement of principles in the New York code ensured its constitutionality and made it defensible in courts. For this reason, the city's zoning ordinance was copied by more than five hundred other cities in the next decade -- cities that were far smaller in size and that actually had largely different problems.⁶

New York's zoning code did permit diminished economic land use, such as a residential development in commercial and industrial zones, a

practice that was continued by most cities which followed its example. In 1917, however, an ordinance by the city of Berkeley began another trend in zoning -- the rigid segregation of uses. It sought to protect industry from residences, and vice versa. The New York zoning law had established a more ambiguous pyramid of higher to lower uses, running the gamut from industrial areas to single-family residential ones, in which a lower use area could be mixed in a higher use area though not vice versa. The Berkeley ordinance, on the other hand, was rigidly classified so that no class could be mixed with another use in the established system of stratification.⁷

The zoning ordinance introduced in New York City and followed by other cities was finally institutionalized and sanctioned in 1926 by the U.S. Supreme Court in the case of the Village of Euclid vs. the Ambler Realty Company. The question raised by the case was over the validity of provisions in Euclid's zoning ordinance which excluded apartment buildings, commercial businesses, retail shops, and other similar establishments from its residential areas. As the court put it:

... This question involves the validity of what is really the crux of the more recent zoning legislation, namely, the creation and maintenance of residential districts, from which business and trade of every sort including hotels and apartment houses, are excluded...(8)

An earlier, lower-court decision regarding the Euclid case had declared the ordinance invalid by reasoning:

... The plain truth is that the true object of the ordinance in question is to place all the property in an underdeveloped area of sixteen square miles in a straitjacket. the purpose to be accomplished is really to regulate the mode of living of persons who may hereafter inhabit it. In the last analysis, the result to be accomplished is to classify the population and segregate them according to their income or situation in life.⁽⁹⁾

However the Supreme Court upheld the ordinance in its general scope and dominant features as a valid exercise of authority, and thereby, institutionalized the pyramid of higher to lower uses. The role of zoning, thus, became the establishment and preservation of this pyramid.¹⁰

The institutionalization and sanctioning of zoning ordinances by the U.S. Supreme Court, as first established by the Euclid case, had major consequences. One important result was the interaction and collaboration of these laws with real estate prices to reinforce segregation by income, national origin, and race. Provisions to protect single-family homes or to establish minimum lot sizes of one acre, instead of quarter-acre lots, in certain neighborhoods had powerful social repercussions. Instead of being purely limitations on land or structure, they proved, in fact, to be financial, racial, and ethnic limitations, designed to preclude certain undesirable groups from certain areas.¹¹

B. Cases Of Conflict

1. Minimum Lot Size, Minimum Floor Area, and Types of Uses

Minimum lot size has traditionally been used to regulate population density and to preserve the character of neighborhoods. One of the reasons invoked for maintaining low density in a neighborhood is to alleviate the problems arising from the inadequacy of public water, sewer and other facilities, so that a large minimum lot size is claimed to be a measure to protect public health. Another argument for a large minimum lot size is the need to protect the community's tax base through the preservation of high value neighborhoods. Underlying such arguments, however, there appears historically to have been an equally strong, though unvoiced, consideration in the minds of both municipal officials and community inhabitants, namely, to exclude certain undesirable people from these communities.¹² Certainly, one of the most effective devices to achieve this purpose has been the establishment of a large minimum standard for lot sizes.¹³

The practice of establishing minimum lot sizes developed concomitantly with zoning. In the United States, the practice was upheld by the courts, though lower courts and dissenting judges continuously expressed doubts about its validity as early as the 1920's. As we saw in the case of *Euclid vs. Ambler*, a lower court in 1924 ruled that the village's zoning ordinance, which established both minimum lot and floor areas, was invalid since it resulted in classifying and segregating the population according to income and life situation.¹⁴ By upholding the constitutionality of the ordinance, however, the Supreme Court in effect encouraged communities, especially suburbs, to develop large minimum-lot area standards that resulted in the exclusion of lower income families.

Minimum floor area standards are usually justified on the grounds that they promote the general welfare of the community by protecting its character. But again, in the United States, they have often been used as a device to enforce segregation by excluding lower income groups from certain areas. The ordinance of Wayne Township, New Jersey, which established minimum size for dwellings throughout the town, is a good example in this respect. When the ordinance's constitutionality was tested in court, one judge, in rejecting the claims of the town, wrote in his dissenting opinion:

...As I conceive the effect of the majority opinion it precludes individuals in those income brackets who could not pay between \$8,500 and \$12,000 for the erection of a house on a lot from ever establishing a residence in this community as long as the 768 square feet of living space is the minimum requirement in the zoning ordinance...

It should be borne in mind that threat to the general welfare and health of the community usually springs from the type of home that is maintained within the house rather than the house itself. Certain well-behaved families will be barred from these communities, not because of any acts they do or conditions they create, but

simply because the income of the family will not permit them to build a house at the cost testified to in this case...(15)

The ordinance was affirmed, however, by the court on the grounds that "...the township has sought to safeguard itself within the limits which seem ... to be altogether reasonable ..."16

District zoning according to type of use has also been used as a measure to exclude undesirable activities and people from particular areas. In American cities, such provisions have been instrumental in excluding public housing projects for low-income groups from areas dominated by white middle-income families. The case of public housing in Chicago is a good example. Of the 51 public housing sites chosen in Chicago between 1950 and 1969, only two were in white areas, the remainder being predominantly black. The case exemplifies the strong opposition by Aldermen to locating such projects in areas dominated by whites; according to the plaintiffs in court suits brought against such decisions, the reasoning of the municipal authorities is clearly based on the fact that the prospective inhabitants of such projects are expected to be blacks.¹⁷ Another example is that of California, where in 1950 the voters adopted Article XXXIV to the State Constitution. The article provided that:

...no low rent housing project should be developed, constructed, or acquired in any manner by a state public body until the project was approved by a majority of those voting at a community election.⁽¹⁸⁾

The article's constitutionality was questioned on the grounds that:

...the mandatory nature of the Article XXXIV referendum constitutes unconstitutional discrimination because it hampers persons desiring public housing from achieving their objective when no such roadblock faces other groups seeking to influence other public decisions to their advantage.

The constitutionality of the Article, however, was upheld by the U.S. Supreme Court on the grounds that the "...procedure for democratic decision-making does not violate the constitutional command that no State shall deny to any person 'the equal protection of the law.'"¹⁹

The previously cited cases regarding minimum lot size, minimum floor area, and zoning according to use were upheld by U.S. courts on the basis of promoting the general welfare by protecting a community's character. Implied in these decisions is the notion of protecting the social order. And embedded in this idea of social order is a model of land development which, unfortunately, implies social and economic discrimination. While this model is now being questioned in the United States,²⁰ its blind acceptance in another culture with different ideals and principles would certainly result in the introduction of a new social order in that culture. If planning and zoning processes are to be used properly in different cultures, then the social judgments inherent in any given set of such processes have to be made explicit and taken into account. Thus far, such judgments have remained largely unexamined and the resulting decisions about the physical environment can only be harmful in their effect.

2. Setbacks and Openings

Setbacks and building line requirements were developed in modern times to alleviate overcrowding, to avoid fire hazards, and to protect public health by providing light and air to all inhabitants. The concept of having an unbuilt space around buildings that is mandated by law first appeared in London's Building Act in 1844. According to the Act, a minimum amount of 100 sq. ft. was required for private homes, though no stipulations were made with respect to width.²¹ Setback requirements were also first introduced in London with the Building Act of 1894. In this Act, working-class dwellings were required to be setback so as to increase the width of the street to the same distance as the height of the building.²²

In the case of New York City, the arrival of the skyscraper in the downtown area had the effect of shutting off light and air from many

older properties. To alleviate this dangerous trend, an Advisory Commission on the Heights of Buildings was formed in 1913. One year later, the Commission recommended, among other restrictions, the following: one foot of setback for each four feet of increase in height above the maximum height limit (no building could be higher than twice the width of the street, though no limit was to be less than 100 ft. or more than 300 ft.) -- a stipulation that later resulted in the ziggurat building form; ten percent of interior lot to be left vacant above the first story; and the depth of side and back courts to equal one and a quarter times the number of stories above the first, with a minimum depth of six feet. In addition, towers were allowed any height, provided that lot coverage was not more than 25% and that there was a setback of 20 feet from lot and street lines. These restrictions became more detailed in the height and bulk districts introduced by the city's Zoning Ordinance of 1916.²³

Other reasons for the development of setback and building line requirements by modern zoning in the West have been either to anticipate future street widening or to accommodate aesthetic interest.²⁴ The justification for setback requirements by zoning has always been based on the contention that the assurance of large open space between rows of residences promotes public health, safety, morals, and general welfare.

Even this cursory examination should make it clear that the context in which setback requirements developed in the West differs markedly from the context of Saudi Arabian and other Arab-Muslim cities. These clearly have a different cultural tradition and different climatic conditions. From a cultural point of view, visual privacy has been a comparatively unimportant issue in Western culture, while in Arab-Muslim culture it is a uniquely important issue. The introduction of setbacks which allow for the opening of windows and therefore the constant violation of privacy inhibits the full use of a property by its owner in an Arab-Muslim city; in a Western city, this is an acceptable cultural norm.

From the point of view of climate, front, side and rear yards are an enjoyable space to have in a Western City. With abundant amounts of water and a moderate exposure to sunlight, it is easy to maintain and use, while in an Arab-Muslim city, with its hot and arid climate, such an open space is almost impossible to maintain and, therefore, to fully utilize, if it can be used at all.

When the Roads and Buildings Statute²⁵ first introduced the setback concept in Saudi Arabia, it implied the need to meet future street widening. One assumes that the new regulations proposed by SCET International, which establish front setback requirements, are also intended to meet this need, though in this case it is very clear that aesthetic values are also at work. On the other hand, there appears to be little justification for the setback regulations, especially the side and rear setbacks, which developed in the 1380's/1960's and were confirmed by the Doxiadis Master Plan for Riyadh in the 1390's/1970's. These were introduced in residential areas with very large lot sizes and therefore the possibility of overcrowding or even of a high density simply could not exist. Also, such factors could have been controlled through other means, that is, percentage of lot coverage, floor area ratios, etc. The only purpose for these requirements seems to have been to ensure the development of a certain dwelling type, the villa. Perhaps another intended purpose was aesthetic, that is, to maintain an even alignment of buildings, and thereby to preserve the landscape and presumably improve the general appearance of the street. If this was the intention, as it usually is in a Western city, then it is clear that the whole issue of differences in cultural contexts was glossed over by the promoters of these regulations. Instead of the expected result of wide streets with an open view and green gardens on both sides, Riyadh, as well as other cities, had a different outcome: the fence wall on both sides of the street. What the setback requirements actually introduced was a new lifestyle, based on the conception of outdoor living as opposed to the notion of the family as an inward looking unit. This style of living has been rejected in Saudi Arabia, first through fence walls around houses, and later through other measures that assured the protection of visual privacy.²⁶

3. *The Role of Eminent Domain*

Eminent domain, the right of a government to take or to authorize the taking, with just compensation, of private property for public use, has been used in modern times to ensure the implementation of master plans and programs. Many issues are involved here. Of these we will deal with only three: the conditions under which expropriations are made; whether such expropriations are for the "public good"; and what constitutes just compensation.

Eminent domain is often applied in cases where the public good is clearly being served. When seeking the right of way, or providing for utilities, facilities, and services, municipal governments resort to eminent domain in the interest of the community as a whole. Other cases where eminent domain has recently been used are those involving the implementation of zoning regulations, specifically as related to non-conforming lots, uses and structures.

In the first case, the use of eminent domain for the right of way or for the provision of utilities and services, the public interest seems to be very clearly established and, in such cases, its use has been challenged only on the basis of just compensation. As for the second case, the use of eminent domain for urban renewal and slum clearance or for implementation of zoning codes, two issues are involved. First, the public interest is not always so obvious and hence the constitutionality of the act is often challenged; and, secondly, there is the issue of who will use and benefit from the property once the reasons for its taking have been removed, that is, whether the government, when confiscating a property, has the right to give away this property to someone other than its original owner. Here we will introduce a case from the United States where such issues were involved, show some parallels in the case of the Qasr al-Hukm project in Riyadh, and then introduce the opinions of some Muslim jurists to show the difference in the ideals and principles involved in the two contexts.

The case of *Berman vs. Parker*, decided by the U.S. Supreme Court in 1954, involved a property in the District of Columbia that was being taken by Congress through eminent domain for the purpose of slum clearance and then given to a private firm for development.²⁷ The plaintiff challenged the constitutionality of the District of Columbia Redevelopment Act of 1945 as it applied to the taking of his property and argued that giving the property to a private firm amounted to taking it from one businessman only to give it to another. The court, when reviewing the case, stated:

...If those who govern the District of Columbia decided that the Nation's capital should be beautiful as well as sanitary, there is nothing in Fifth Amendment that stands in the way...

Once the object is within the authority of Congress, the right to realize it through the exercise of eminent domain is clear. For the power of eminent domain is merely the means to the end (that is, making the Nation's capital beautiful as well as sanitary) ... the means by which it (the object) will be attained is also for Congress to determine. Here one of the means chosen is the use of private enterprise for redevelopment of the area. Appellants argue that this makes the project a taking from one businessman for the benefit of another businessman. But the means of executing the project are for Congress and Congress alone to determine, once the public purpose has been established.⁽²⁸⁾

...Once the question of the public purpose has been decided, the amount and character of land to be taken for the project (and the means through which it is to be achieved) rests in the discretion of the legislative branch.

...If the Agency considers it necessary in carrying out the redevelopment of the project to take full title to the real property involved, it may do so. It is not for the courts to

determine whether it is necessary for successful consummation of the project that unsafe, unsightly, or unsanitary buildings alone be taken or whether title to the land be included, any more than it is the function of the courts to sort and choose among the various parcels selected for condemnation.

The rights of these property owners are satisfied when they receive that just compensation which the Fifth Amendment exacts as the price of the taking.⁽²⁹⁾

The court in the decision evaded the basic question by stating that the reuse of the cleared land by a private person is not the objective of urban renewal, that this result is incidental to the process, and that therefore the action is constitutional. In other words, the end justifies the means.³⁰

In the case of Saudi Arabia, eminent domain has been used only to provide for the right of way, or for utilities and services. An exception, however, is the Qasr al-Hukm project, an ongoing urban renewal program for downtown Riyadh. This is the first and only case, so far, where private property has been confiscated for the purpose of urban renewal. Some parts of the project are to serve government buildings, while other parts, such as al-Muḥayqiyah, are to be developed as a commercial zone. The issue of who is to develop this area (al-Muḥayqiyah) has been under discussion since the initiation of the project in the early 1970's. Several proposals are under consideration: to have the government develop the area so as to preserve its status as a government owned and managed public property; to hand the property over to a private developer on the condition that the proposed development plans are implemented; or to form a private holding corporation so that the original owners of the lots can be included in any benefits to be derived from the project. No decision seems to have been made on which alternative to follow, but undoubtedly the process to be followed in this case, together with the final revised version of the Statute of Landed Property Expropriation for Public Interest

mentioned earlier,³¹ will set the precedent for the use of eminent domain in the case of urban renewal for many years to come.

Concerning the opinion of Muslim jurists' and precedents dealing with the issue of eminent domain, we look here at two cases. Regarding its use for a public purpose, the first to be found in Islamic history is the case of ^UUmar b. al-Khattab (d. 23/644) and al-^UAbbas b. ^UAbd al-Muttalib.³² In this case, ^UUmar, the second caliph, decided to extend the size of the prophet's mosque to accommodate the growing Muslim community in Medina. He bought the surrounding houses in the direction of the extension, except for the home of al-^UAbbas who refused to sell. ^UUmar gave him three choices: to sell his house for whatever price he wished, a price he was to be paid from the public treasure; to accept a plot to be built up for him from the public treasure wherever he wished in Medina; or to give the house as a charity to the community in order to help them extend the mosque. None of these conditions was satisfactory to al-^UAbbas and the two sides agreed to an arbitration, which ultimately favored al-^UAbbas' position. Consequently, ^UUmar gave up his attempt to seize al-^UAbbas' property. Only after this did al-^UAbbas decide to give his house to the community as a gift. Subsequently, ^UUmar planned and built a house for al-^UAbbas, and paid for it with funds from the public treasure.³³

With respect to the use of eminent domain for slum clearance, the opinion of Muslim jurists' and their practices regarding walls and buildings threatening collapse should give us some insight.³⁴ These cases have been looked at by the jurists on two levels. First, the issue of walls and buildings threatening collapse, which proved to be either dangerous or harmful if left standing, and how they can be treated if the owner cannot carry on the task himself. In this case, the jurists usually ordered the walls or buildings to be torn down by the municipal authorities, with the sale of the rubble providing the cost of the labor.³⁵ Secondly, the issue of decaying buildings which proved to be harmful to the community if left the way they are. In this case, the jurists tended to compel owners to rebuild. In certain cases, where the owner was financially incapable of rebuilding, or where the building was a *waqf* (pious foundation), judges gave the municipal authorities or other

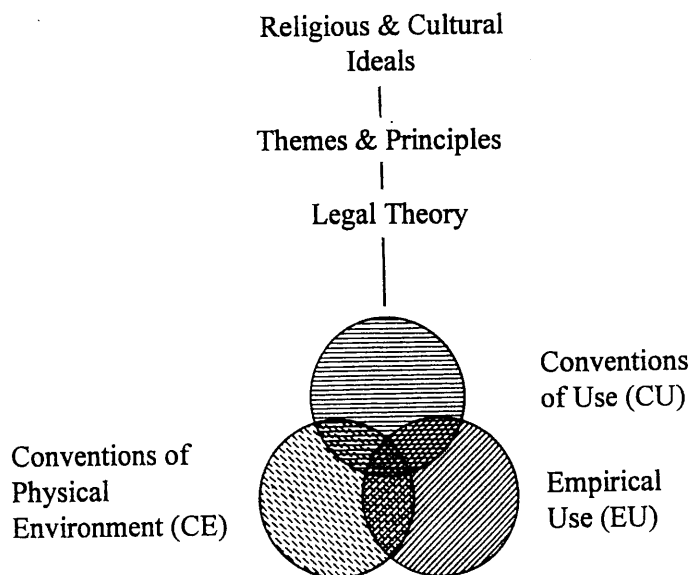
private individuals the right to rebuild the structure and to collect from its rent an amount equal to the cost, while keeping the title for the original owner and returning the management of the building to him once the costs were exacted.³⁶

The previously mentioned cases -- the U.S. Supreme Court decision, the case of ^ʿUmar and al-^ʿAbbas, and the opinion of the Muslim jurists with respect to urban renewal -- show that there are differences in conception regarding the public good and how it can be served. The U.S. Supreme Court case attempts to establish the constitutionality of the Act as serving the public good, and once that is satisfied, then all other actions being taken to achieve this end are left to the legislative branch to implement, while in the other cases serving the public good cannot come at the expense of injury to individuals. Their decisions were based on the desire to alleviate danger to the community; and since individuals are members of this community, decisions favoring the public good could not be injurious to them as well. This suggests that urban renewal has been and still is a justified public purpose in a Muslim context; however, the means to achieve it as they have been practiced and established in Islamic tradition differ from those practiced elsewhere.

C. Implications: Conventions Of Form And Social Conventions

Contemporary zoning regulations applied in Saudi Arabian and other Arab-Muslim cities evolved and developed, as we have seen, in the West, with a different cultural and physical context from the Arab-Muslim ones. It should be noted that these regulations are not merely codes pertaining to buildings and as such having universal applicability; they are part of a whole legal system and tradition. This legal system is based on a certain notion of social order that is peculiar to the context in which it developed. To borrow blindly from such regulations and apply them to another context means imposing these notions of social order onto this context. Such is the case of the contemporary Arab-Muslim city.

Traditionally, the Arab-Muslim city, as shown earlier,³⁷ went through an incremental, constantly rebalanced process of development. Its regulations were the result of certain socio-cultural and religious conventions. These regulations were formulated in a flexible way that ensured the satisfaction of these conventions, while at the same time allowing the development of appropriate physical forms. These forms were informed and molded by the need to satisfy these socio-cultural conventions. This process produced conventions of physical form unique to the Arab-Muslim city. Wherever departures from these conventions of form occurred, social conflicts arose and a review and possible return to the principles and ideals upon which the social conventions were based was necessary. As we have shown earlier in Chapter four, this process can be illustrated in the following diagram.



The Process In Traditional Arab-Muslim Cities

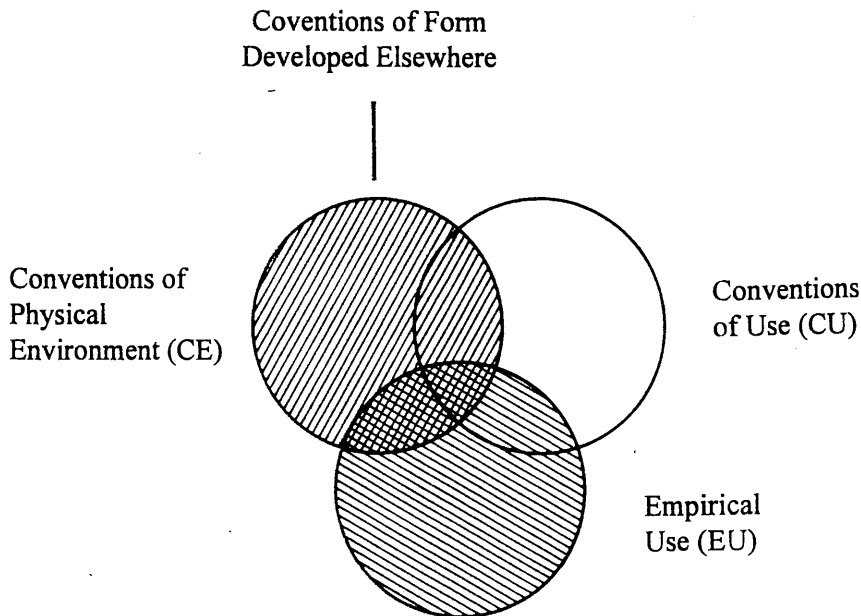
- The weight of the lines indicates a relative degree of emphasis with conventions of form as slightly less powerful than the conventions of use or the empirical use.

In the contemporary Arab-Muslim city, the process of relying on customs of use for the generation and control of change has been replaced by another process which relies on preconceived, prescriptive conventions of form. In the present city we have a master plan accompanied by a package of zoning regulations. These regulations prescribe street widths, setback requirements, densities, building heights, lot sizes, etc. The regulations are formulated to tell people what to do whereas the traditional social conventions prescribe certain patterns of conduct. This allows for as many possibilities as one can think of on the level of physical form. The traditional approach implies a reciprocal and possibilist relationship between the physical environment and the conventions of use. The prescriptive physical conventions on the other hand, allow only for what they prescribe. In fact by telling the residents what is allowed, they inhibit the development of reciprocal and possibilist relationship between form and use and thus severely limit the variety of urban forms within the city. This approach implies a determinist attitude toward the relationship of form and use.

Let us examine this difference in physical terms by looking at the house types within traditional and contemporary cities. Within the traditional and contemporary city of Medina at least three different house types alluded to earlier, were identified. These types differ in their form and in their arrangement, but all three subscribe to what we called rules of conduct.³⁸ With the present prescriptive setback requirements in the city of Riyadh there is only one model which cannot be deviated from, namely, the villa type. Even when people want to build a courtyard house or any other type they still have to provide for setback requirements.

Another issue that is important to point out here in regard to the prescriptive physical conventions is the fact that most of these conventions developed in a different social context. They pertain to and are based upon conventions that are alien to the residents of the Arab-Muslim city. In some cases these conventions are based on ideals and notions that even run counter to those of Arab-Muslim society. Such has been the case with the minimum lot size and the

setback requirements as well as with the opening of windows. This process may be illustrated by the following diagram.



The Process in the Contemporary Arab-Muslim City

- Lack of lines in the convention of use indicates that they play no role in the new system.

As a result of borrowing physical conventions from other contexts and applying them in the Arab-Muslim city a duality has developed in the system as a whole and more specifically in its regulatory mechanism. On the regulatory level this duality has resulted in confusion and contradiction. To illustrate this, let us look again at the issue of privacy within the contemporary city. In the case from Bada'i^c which took place in Safar 1400 /January 1980 the municipal authority allowed the owner to open window on the second floor so long as he provided for the required setback of two meters from his neighbor's wall. The plans were approved by the building authority and the owner proceeded to build the house. However, when the neighbor realized that his privacy was denied by these windows, he sued in court. The Judge upon hearing the case indicated to the owner that, unless the two parties could reach a mutual agreement that would satisfy both sides,

he would rule to the effect of sealing the windows. Since legal decisions usually coincide with accepted norms, the judge was obliged to refute what the municipal building authority had authorized (Figure 59).

This contradiction is helpful to us in the sense that it reveals the nature of the rules applied in both the traditional and the contemporary context. Modern zoning regulations and building codes applied in the contemporary Arab-Muslim city are looked at as "artificial" and "technical" and therefore devoid of any cultural connotation. This, in turn, implies that any group of technocrats (planners) can be asked to write the regulation and that these regulations can be changed at any time. Such has been the case with the city of Riyadh where Doxiadis Associates of Athens introduced a whole set of regulations in the 1390's/1970's, and where SCET International/SEDES of Paris proposed a different package for the 1400's/1980's. This could only lead to a systematic change from what is "Islamic Law," based on religious and socio-cultural conventions that are still at work, to a "technocratic zoning law," based on arbitrary rules that are being questioned even within their original context. Thus, the new regulations represent not only a change in rules but also a change in the system and method by which the law is derived.

Notes

- 1- R.F. Babcock, *The Zoning Game*, Madison (1966), pp. 115-125.
- 2- John Delafons, *Land Use Control in the United States*, (Cambridge: MIT Press, 1969), pp. 19-20; Sam Bass Warner, Jr., *The Urban Wilderness*, (New York, 1972), p. 28; Robert Goodman, *After the Planners*, (New York, 1973), p. 151.
- 3- Mel Scott, *American City Planning Since 1890*, (Berkeley, 1971), p. 152.
- 4- Mel Scott, op. cit., pp. 153-155; Warner, op. cit., pp. 29-31; S.J. Makielski, *The Politics of Zoning: The New York Experience*, (New York, 1966), pp. 7-40.
- 5- Warner, op. cit., p. 31.
- 6- Loc. cit.; Mel Scott, op. cit., p. 161.

- 7- Ibid., pp. 161-162.
- 8- Village of Euclid vs. Ambler Realty Co., in Charles M. Haar, *Land-Use Planning*, 3rd ed., (Boston, 1976), p. 201.
- 9- Village of Euclid vs. Ambler Realty Co., in Haar, op. cit., p. 203.
- 10- Ibid., pp. 194-203.
- 11- Warner, op. cit., pp. 31-32; Clark and Perlman, *Prejudice and Property, a Historic Brief Against Racial Covenants*, (1948).
- 12- For the argument of developing a large minimum lot size on the grounds of inadequate utility services, see: Appeal of Kit-Mar Builders, in Haar, op. cit., pp. 293-296. For the argument of supporting the tax base and therefore, the character of the community, see Oakwood at Madison, Inc., vs. Township of Madison, in Haar, op. cit., pp. 299-304. Both cases were interpreted as discriminatory by the courts and the zoning ordinances were ruled invalid, because of their exclusionary results. However, the Supreme Court itself in *Grube v. Mayor, etc., Raritan T.P.*, 39 N.J. 1, 9, 186 A.2d 489 (1962) recognized that "alleviating the tax burden and the harmful school congestion was a permissible zoning purpose if done reasonably and in furtherance of a comprehensive zoning plan." Haar, op. cit., p. 301.
- 13- For how this measure has been used in the United States, see: Mary Brooks, *Exclusionary Zoning*, (ASPO, 1970).
- 14- See section A of this chapter, Background, above; Haar, op. cit., p. 203.
- 15- Lionshead Lake, Inc. vs. Wayne Township (1952), and Appeal Dismissal (1953), in Haar, op. cit., pp. 285-292. Quotation from p. 291.
- 16- Haar, op. cit., p. 289.
- 17- Gautreaux vs. Chicago Housing Authority, in Haar, op. cit., pp. 904-907.
- 18- James vs. Valtiera, in Haar, op. cit., pp. 899-902. Quotation from p. 900.
- 19- Ibid., p. 901.
- 20- For a good treatment of these implied notions in zoning, see: D. R. Mandelker, "A Rationale for the Zoning Process," in M. Stewart, ed., *The City: Problems of Planning*, 1972, pp. 267-275; R.F. Babcock, *The Zoning Game: Municipal Practices and Policies*, (Madison, 1966).

- 21- W.R. Davidge, "The Development of London and the London Building Acts," *RIBA Journal*, 3rd. Series, 21, No. 11, (April, 1914), p. 364.
- 22- Ibid., p. 366.
- 23- Defalons, op. cit., pp. 21-23.
- 24- Russell Van Nest Black, *Building Lines and Reservations for Future Streets*, (Cambridge: Harvard University Press, 1935), 22-23.
- 25- See section A of Chapter VI, above.
- 26- Either suing in court or erecting devices which break the line of vision. See section B of Chapter VI, above.
- 27- Berman vs. Parker, in Haar, op. cit., pp. 636-639.
- 28- Ibid., p. 637.
- 29- Ibid., p. 639.
- 30- For the argument regarding the constitutionality of this decision, see Anderson, *The Federal Bulldozer*, 1967, p. 189.
- 31- See footnote 1 to Chapter VI.
- 32- The case of choosing the site for the Prophet's mosque and buying the land from the two orphans of Bani al-Najjar is not seen here as a use of eminent domain, since every tribe wanted the Prophet to build the mosque within their own land. Al-Samhudi, op. cit., vol. 1, pp. 322-338.
- 33- Ibid., vol. 2, pp. 482-484.
- 34- See section E of Chapter III, above.
- 35- Ibn al-Rami, op. cit., p. 83.
- 36- *Medina Court Records*, R 144, p. 12, Case No. 86, dated 7/11/1251/1836.
- 37- See section B of Chapter IV, above.
- 38- See section C of Chapter III, above.

Chapter VIII

CONCLUSION

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The main concern of this study is the present; the position here has been not to accept and proclaim the authority of the past, but to recognize its authenticity and therefore its value as a resource for the present. Tradition *per se* should have no authority, but it does have a value; it forms the most important source of our knowledge and serves as the base of our thoughts and actions.

In this study, tradition has been viewed as a process rather than as an unchanging object. Within the context of Arab-Muslim cities, a certain tradition of building developed. This tradition went through a continuous process of change, but a sense of continuity persisted. In recent times, however, this tradition has been challenged, and attempts to reestablish continuity seem to have failed. Thus, a contemporary physical environment that is markedly different from the traditional one has been introduced in these cities. Within the study we have attempted an exposition of the way in which this process took shape. We have looked at the traditional physical environment, its origins and how it developed. Then we looked at the contemporary physical environment, the process through which it was introduced into the Arab-Muslim city (Saudi Arabian cities), and the origins of this environment. Using the law for our analysis of both contexts we have been able to go farther than the level of urban form. The law informed us on two additional levels: on the ideological or structural level, and on the level of a socially effective mechanism. It has also helped us to look at physical forms within their socio-cultural context.

In the first part of the study concerning the origins and development of the traditional physical environment, we have seen that the traditional Arab-Muslim city was the result of more than one model. Since Islam came to an already existing world with many

different traditions, these traditions formed the base out of which the traditional Arab-Muslim city developed. Of these traditions, we have singled out two models of city patterns: The Hellenistic model with its highly ordered plan, as exemplified in Damascus and Aleppo, and the Arab model based on the tribe as an institution and on the *khittah* system. This latter model was undoubtedly the result of the Arab tribes' rooted tradition of territorial conceptions, where the territories of each tribe were always defined and known, and where these territories were looked upon as collectively owned by the members of the tribe. This model took its early development in Medina during the Prophet's time. Its full development however, materialized later in the *amsar* towns of Basrah, Kufah, and Fustat. The model continued to be followed in the second and third (eighth and ninth) centuries in Baghdad and Samarra, although with more orderly plans.

The different models with which the traditional Arab-Muslim city started have been transformed into the basically typical model which we know as the traditional Arab-Muslim city. This typical model and the process of its transformation are the result of certain conceptions and beliefs held by the residents of these cities. These conceptions and beliefs produced certain social conventions or rules of conduct which were accepted and followed by the city's inhabitants. A variety of urban forms were employed within the city and innovations were continuously introduced so long as they did not defy the accepted rules of conduct.

In the second part of the study concerning the development of the contemporary environment, we have seen how a certain physical pattern and character, namely, the grid as a street pattern and the villa as a dwelling type, were introduced into these cities. The process was first begun by ARAMCO through its plans for Dammam and al-Khobar in the late 1360's/1940's, and was continued through the new towns of Rahimah and Abqaiq, created by the company in the 1370's/1950's. The process was strengthened and advanced by the government's undertaking of al-Malaz, a housing project in Riyadh, sponsored by the government for its employees in the mid-

1370's/1950's. Both the ARAMCO plans and al-Malaz used and emphasized the villa as their only single-dwelling type.

Once this new model of development was introduced, a problem within the structural relationships of the society arose. The rules of conduct that were continuously at work within the society were disrupted and in many instances defied. To have continued these rules within the new context would have resulted in a transformation of the new model. Therefore, in order to ensure and reinforce the continuity of the new model, new rules and regulations were necessary. These rules and regulations were to be borrowed, as the model itself, from their place of origin, namely, the Western and more specifically, the American context. This process and the resulting implications are believed to be similar throughout the Arab-Muslim cities. However it would be extremely helpful to check how the process took shape in another context such as that of Egypt or Syria where the time-span was much longer as compared to the case of Saudi Arabia.

The two processes, the traditional and the contemporary, differ in their nature. The traditional Arab-Muslim city relied on customs of use for its generation and control of change, while the contemporary city relies on preconceived, prescriptive conventions of form. Within the traditional city, the process relied on rules of conduct or social conventions which informed the inhabitants of proscribed actions; such rules accord with Islam as a way of life. The *shari'ah* concerns itself with both the *'ibadat* (religious observances, or worship), and the *mu'amalat* (worldly affairs). Regarding the *'ibadat*, the individual is told what to do and how it is to be done, while under the *mu'amalat* the individual is informed about what is not to be done, implying that everything else is allowed. Most of the rules of conduct within the traditional city lie under the category of *mu'amalat*.¹ Within the contemporary Arab-Muslim city, the situation is different: first, the rules and regulations are purely physical and prescriptive, and secondly, rather than informing the inhabitants on what is not to be done, they prescribe in physical terms not only what is to be done but also how it is to be implemented. Implied with the traditional process is a reciprocal and possibilist relationship between form and use

without any preconceived final shape or form for the city. This allows for freedom of choice and for flexibility in the use of the different elements of urban form, while the contemporary process implies a determinist approach to the relationship of form and use. By telling the inhabitants what the final shape of their houses should be, the model imposes a certain conception of use which does not necessarily fit with the conventions of use accepted by the inhabitants. Indeed, in many instances, they defy these accepted conventions.

The difference in nature between the two processes -- and the belief that contemporary prescriptive physical regulations and codes are merely technical in nature and therefore devoid of any cultural connotations -- has resulted in a duality in the system as a whole and more specifically in its regulatory mechanism and in the physical environment. On the regulatory level there is, on the one hand, the building authority which bases its decisions on the prescriptive rules of the master plan, while on the other hand, there is the court which follows accepted social conventions among the inhabitants. Their respective decision-making have been constantly contradictory. On the physical level, we have the old and the new environments distinctly apart from each other. This, on the social level, has encouraged the segregation of the city's inhabitants into poor and rich respectively.

So far we have dealt with only two issues: the traditional physical environment, in terms of its origin and the process of its development; and the contemporary physical environment, how it was introduced into the Arab-Muslim city and how it differs from the traditional environment. The two remaining issues which need to be addressed are: the reasons behind the introduction of the contemporary physical environment and the problematic question of re-establishing a sense of continuity with the past so that we may have an authentic present.

Regarding the first issue, the reasons behind the introduction of the contemporary physical environment, three factors are believed to have encouraged and helped this process of change: first, the existence of certain implied ideologies; secondly, changes in scale, power and

technology; and thirdly, problems within the field of architecture and urbanism and their relationship to the Arab-Muslim context.

1. Ideology

Earlier in the introduction when dealing with the issue of tradition, we pointed out the existence of two approaches in the Arab world, that of the traditionalists and that of the liberals. The traditionalists reaffirm the authority of the past as the only guide for the present, a position which can only result in the traditionalization of the society and where the idea of *taqlid* (imitation) of the past becomes a central theme. The traditionalist position ascribes the technological backwardness of Arab societies to a deviation from the spiritual goals; hence, what is needed, according to them, is moral reform. The advocates of this position do not reject modern "foreign" technology. In fact, the adoption of some aspects of this technology is adjudged necessary, provided, as they believe, it is stripped of all cultural implications. The liberal approach not only denies the authority of tradition but does not even recognize its authenticity as a resource for the present. The advocates of this approach look at tradition as a destiny and, hence, an obstacle to progress. Therefore, the only way for the society to come out of its backwardness, according to them, is by wiping out everything and starting from scratch. As a result of this approach, the society embarks on an extensive process of borrowing ideas and technologies from other cultures.²

The two approaches meet at and agree on one point, that is, the desirability of introducing modern technology within their society. The traditionalists make this concession because of the society's clear need for such technology. As far as the liberals are concerned, two factors seem to be at work in their thinking. First, there is the obsession with modern technology and the implied assumption that all the problems of society can be dealt with and, in fact, can be solved through modern technology. Secondly, there is the illusion in the mind of the liberals which seems to have spread throughout society. This illusion equates modernization with westernization, thus, anything

western means modern and hence the process of borrowing is reinforced and enhanced.

Within each of the two positions, an outstanding problem exists. In the traditionalist position which states that the adoption of technology is desirable so long as it is stripped of all cultural implications, there is a misunderstanding of the nature of modern technology. The advocates of this approach seem to look at technology as a set of physical devices of technical performance or, to use Winner's term the "apparatus." Technology by its very nature, encompasses, in addition to physical devices, a body of technical activities or techniques. With modern technology, a variety of social and technical organizations and large-scale systems or networks have developed. These organizations and networks have become part and parcel of modern technology.³ By not understanding this, the traditionalists have been led to believe that technical devices can be stripped of their cultural context. For the liberals, the outstanding problem in their desire to start from scratch is their belief that tradition can be wiped out and that therefore there is no need to provide for it in any borrowed system or technology. These problems within the traditionalist and liberal positions created the duality, of which we spoke earlier within the system as a whole in the Arab society. This duality consists in the existence of parallel but incommensurable institutions and systems coming, on the one hand, from the past and, on the other, from the process of borrowing. This parallelism has continued to develop on every level without integration. Examples of this duality can be found clearly in the legal system, in the physical environment, and in the educational system.

2. Scale, Power, and Technology

The second factor which facilitated opting for the contemporary environment rather than continuing the traditional one was a change in the nature of technology, in the scale of urban development, and in the system of power. Regarding the nature of modern technology as opposed to traditional technique, the former, as pointed out earlier, requires and, with time, develops its own organizations and networks. Let us illustrate this within the context of our case study, Saudi Arabia.

When the decision was made in the late 1350's/1930's to use traditional techniques in the al-Murabba^C building program in Riyadh, both the physical devices of technical performance and the body of technical activities needed were already there, and so was the ability to administer them. But when the decision was made in the 1370's/1950's to undertake the huge building programs of al-Nasiriyah, al-Malaz, and the government complexes on al-Matter street in Riyadh, and to employ modern technology in implementing these programs, both the physical devices of technical performance and the body of technical activities such as skills, methods, procedures, and routines had to be brought from outside the country. With these came also seemingly invisible organizations and networks that were necessary to keep the new system working. The implication of introducing such organizations and networks were probably not recognized and considered at the time; once introduced, they were to stay. The two building programs illustrate nicely the changes in the scale of urban development. The latter, with its huge scale and short time limits regarding its implementation, could only have been conceived of and carried out within the context of modern technology.

With the growth of industrial society and the development of modern technology, their organizations and networks became the need for specialization. With increasing specialization, society could no longer work as one unit, and therefore requiring an integrating thread to manage and plan for the society as a whole. This integrating thread was to be filled by a new specialist or group of specialists acquired the power to manage the society, to make plans, to set up criteria, and to define roles; to use Alvin Toffler's words, "they fitted the pieces of the society together."⁴ This resulted in removing the people from the role of setting up its own standards. This is now the domain of the bureaucrats who do not necessarily always make the right decisions. An example of how this process worked in our case study is the development of the master plans for the city of Riyadh. There, a group of bureaucrats and technocrats set up objectives for the development of the city, and then went on to make the plans needed to satisfy these objectives. The outcome was their own vision of what the city should

look like, a vision not necessarily coinciding with the public's vision, needs and desires.

3. Problems in the Field of Architecture and Urbanism

The third factor which encouraged and probably reinforced the development of the contemporary rather than the traditional environment concerns the field of architecture and urbanism on both the intellectual and the practical level. The field of urban studies is an outcome of modern social science which itself grew out of and is based on the idea of urbanism in the West. Thus, with very few exceptions, whenever an Arab or Muslim city or, for that matter, any third world city has been studied, the basis has always been the western model of city development. This in turn convinced professionals, planners, and architects alike that, in some fashion or another, the Arab-Muslim city would move towards the Western model and that it was only a matter of time until it reached this Western model of city development. Another factor which certainly helped this process is the almost complete lack of analytic studies on the traditional Arab-Muslim city. Most of the studies done on the traditional physical environment tend to rely on descriptive methods which are barely, if at all, informative in understanding the process of physical development.

Another point which is worth raising here is that of modern architecture and its close relationship with modern technology. Because modern architecture developed and grew in parallel with modern technology in the western context of capitalism, its development was geared to satisfy this context. When the need arose in the Arab-Muslim city, this model was blindly borrowed without any concern for its implication.⁵

The last and most difficult issue remaining to be treated concerns the idea of having an authentic present and future while re-establishing a sense of continuity with the past. No answer can be provided here for such a complex issue. Rather, we will only set up the level of discourse and suggest terms for new topics. Three aspects will be discussed here: first, the theoretical approach of our own study and its

implications; secondly, the issue of duality and how it can be overcome and lastly, our way of looking at the past, how to understand it, define it, and choose from it.

The approach of this study is looked at as an alternative that can be pursued. As previously stated, our position implies that we should look at the present as it is, but with a full understanding of how it came about and how the past was different from the present; and that within the context of the present, we should define what the problems are, how they came about, and then attempt to provide suitable solutions for these problems while always keeping in mind what implications these solutions might have for the future. This should eliminate the idea of *taqlid* (imitation) and the consequent use of two approaches being used simultaneously, whether imitating the past or imitating another culture, and should also promote and encourage the idea of *ijtihad* (exertion of personal initiative and independent judgment) as a base from which we can start.

This position, by virtue of its recognizing the value of tradition and of its being aware of contemporary processes, should be able to produce coherent solutions and minimize as much as possible contradiction and duality within the society. As to the existing duality, a serious attempt to eliminate it stemming from a full understanding of its nature should be made. To take only a small example, one could establish programs for educating present and prospective employees of the building authorities both on Islamic law and its relationship to the problems of the city, and the study of modern zoning regulations and building codes. Graduates of such programs would certainly be more aware of and more responsive to the city's inhabitants and their needs than technocrats who have no previous training in this context.

Regarding the last issue -- ways of looking at the past and how to understand it, define it, and choose from it -- we go back to this study's position concerning tradition. This position sees tradition *per se* as having no authority but as having a definite value. Its value comes from the fact that tradition forms the most important source of our knowledge, and therefore it consists of a platform from which we

operate. To illustrate how this position can be applied let us look at one issue, namely, the attempt to define urban form within the Arab-Muslim city. Studies of the Arab-Muslim city have always looked at these urban forms as physical characters or elements -- such as *mashrabiya*, arcade, dome, etc. -- without ever attempting to find out the reasons behind their use.⁶ The unavoidable conclusion to such an approach is the belief that these forms do not lend themselves to change and, therefore, if we want to preserve continuity with the past, we have to continue to use these elements in more or less their original shape. But, if we follow the approach proposed above and look at these traditional forms as a platform from which we can operate, and attempting to understand these forms within their socio-cultural context, the result would be totally different.

Let us look at this within the context of privacy and its role in the development of the house form within the city. If we look back at the different house types that developed in Medina -- the courtyard, the *qa'ah*, and the *mashrabiya* house -- we find that the three types encompass different elements. However, they all subscribe to the rules of conduct accepted by the society. If one looks for a definition on this level rather than on the level of physical form then one reaches a different conclusion from that of having to continue with an arch or a *mashrabiya* in order to preserve continuity with the past. The conclusion here would be that since a definition of urban form within the Arab-Muslim city is to be found not within the physical elements themselves but within their system of arrangement (the rules of conduct), then these elements can be adapted or can even change so long as their system of arrangement or their relationships remain constant. This would lead to the idea that there is no form attached to the Arab-Muslim house or, for that matter, to urban form in the Arab-Muslim city as a whole, but there is a certain attitude towards how the individual should live and deal with his neighbors and with the community at large.

Notes

- 1- See chapter four of this study and al-Mawardi, op. cit. Chapters V, VI, and XX on the office of the *Qadi* and to the *muhtasib*. Amedroz, op. cit., 1910 and 1916.
- 2- For the analysis of the two approaches and how the process of introducing modern technology worked and its implication, see Laroui, op. cit., pp. 114-116.
- 3- L. Winner, *Autonomous Technology*, Cambridge, (1977) pp. 11-12.
- 4- Toffler, *The Third Wave*, New York (1980), p. 78.
- 5- The blindly borrowed model can be seen in all Arab-Muslim cities. For specific examples see, S.O.M. "National Commercial Bank, Jeddah, Saudi Arabia, 1977," *Architecture and Urbanism*, No. 121 (1980), pp. 107-109. Also see Tafuri's critique of Le Corbusier's work in Algeria, M. Tafuri, "Le Corbusier a Alger: La crise de l'Utopie," *Architecture, Mouvement, Continuite*, No. 49 (1979), pp. 85-90. See also J. Dunnet, "City of the Tiger," *Architectural Review*, No. 998 (April 1980).
- 6- A good recent example of this approach is an article by E. Grube "What is Islamic Architecture" in G. Michell (ed.) *Architecture of the Islamic World*, New York (1978).

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APPENDICES

Appendix I

The Medina Court Cases:

The following court cases are part of an investigation carried out during the summer of 1977. They were drawn from the records of the court of Medina, Saudi Arabia. These records are by far the oldest, most complete and comprehensive, when compared with those of other cities in the Peninsula and probably with the court records of many Arab cities.

The records start with the year 963/1555 and continue up to the present. For the early years, especially before 1000/1591, some were exposed to damage and therefore some of the cases are either completely or partially lost. However, after the year 1000/1591 the records are complete, very well preserved and in very good condition.

The way the records are classified in the court is by giving a serial number for each book starting from number 1 on. At the beginning, from 1 to 6, that is cases before the year 1000/1591, the number includes more than one volume. The volume may include more than one year. The numbering of pages within a volume starts from the beginning and goes up to the end even if it includes more than one year. But the case number starts from the beginning of each year.

Later on, as of the early 12th/18th centuries, at the end of each year, the records include an account of the people who died during that year and a listing of the property which they left to their inheritors.

Record No. 141 is an account of the recipient of the charity of Sultan Mahmud Khan during the years 1240/1824 - 1241/1825, which they got from the Welfare House (Dar al-Shunah) in Medina. For other years, this is sometimes listed at the end of the record for that year.

Another record is an account of the names of all the judges of the city during the Ottoman period.

The cases included here were copied from the original text. When a word in the original text was not clear either in its meaning or because I could not read it, then it is copied, as close as possible to the original, in brackets and is followed by a question mark (?). In the case of a calligraphic mistake in the original writing, it is copied the way it was, and then the correct way of reading it is included in brackets afterwards.

Appendix II

Documents Related To Hijaz In The Egyptian National Archives:

The following abstract of a document is part of an investigation carried out during the summer of 1977. This one and several others which do not pertain to our present subject were drawn from the collection of the Egyptian National Archives (Dar al-Watha'iq al-Qawmiyah), The Citadel, Cairo, Egypt. Pertaining to the Hijaz Region are four collections in the Archives:

- 1- Mahafiz Abhath al-Hijaz: These are copies translated into Arabic from the original Turkish text which is also preserved in the archives. They are in fourteen portfolios; the first twelve of which contain letters and reports exchanged between the Hijaz and Egypt during the period between 1220/1805 and 1287/1870. Portfolios No. 13 and 14 include the work of Mr. Dee, in French, about the war between Mohammed Ali of Egypt and the Wahhabis.
- 2- Al-Watha'iq al-Khassah bi-al-Hijaz: These are original documents; letters, legislations, and orders sent from Egypt to the Hijaz, most of which are in Turkish. They are in eleven portfolios which cover the years between 1220/1805 - 1297/1879.
- 3- Mahafiz al-Surrah al-Sharifah: Includes the deed for each year where the *Surrah* (money coming out of *waqfs* for the two holy places of Mecca and Medina) was sent with the pilgrims.
- 4- Hujaj Shar'iyah: Include the deeds of *waqfs* of the *Sultans* and the *Amirs*. These *waqfs* are in several regions including the Hijaz. They start with the year 554/1159, during the Fatimid period, and run to the year 1314/1896.

Appendix III

Proper Names:

Al-Jarsifi, cUmar b. cUthman b. al-cAbbas,
an Andalusian who lived in the 6th/12th century.

Al-Saqati, Abu cAbd Allah, Muhammad b. Abi Muhammad al-Malaqi,
al-Andalusi,
worked as a *muhtasib* at Malaga at the end of the 11th or the
beginning of the 12th century A.D.

Al-Shayzari, cAbd, al-Rahman b. Nasr b. cAbd Allah al-Shafi'i,
lived part of his life in Syria and died in 589/1193.

Asbagh, Asbagh b. al-Faraj b. Sa'id b. Nafi',
a student of Malik, died in Cairo in 225/840.

Ashhab, Ashhab b. Abd al-cAziz al-Qaysi al-cAmiri,
a student of Malik, died in Cairo in 204/819-20.

Ibn cAbd al-Ghafur,

Ibn cAbd al-Ra'uf, Ahmad b. cAbd Allah,
an Andalusian who lived in the 6th/12th century.

Ibn cAbd al-Rafi', Abu Ishaq, Ibrahim,
the great judge of Tunis, lived and died in Tunis in 733/1333.

Ibn cAbdun, Muhammad b. Ahmad al-Tajibi or al-Na Kha'i,
an Andalusian who is believed to have lived in Seville between
461/1068 and the end of the Moravids era in Seville in 541/1147.

Ibn Abi Zayd, Abu Muhammad, Abdullah b. Abd al-Rahman,
a Maliki jurist, lived and died at Qayrawan in 386/996.

Ibn al-Ghammaz, Abu ʿAbd Allah,
a Maliki *faqih*, lived in Tunis, contemporary of the Ibn al-Rami.

Ibn al-Imam, ʿIsa b. Musa b. Ahmad b. Yusuf b. Musa b. Khashab,
known also as *Abu al-Asbagh*,
born in Toledo, studied in Cordova, and in Qayrawan where he
died in Shaʿban of 386/September of 996.

Ibn al-Majishun, ʿAbd al-Malik b. Abd al-ʿAziz,
a student of Malik, lived in Medina and died in 213/828.

Ibn al-Qasim, Abd al-Rahman,
a student of Malik, died in Cairo in 191/807.

Ibn al-Qattan, Abu Zayd,
contemporary of Ibn ʿAbd al-Rafiʿ and Ibn al-Rami, held the
position of the judge of Tunis before Ibn ʿAbd al-Rafiʿ.

Ibn al-Rami, Muhammad b. Ibrahim al-Lakhmi, al-Banna'
a student of the great judge, Ibn ʿAbd al-Rafiʿ of Tunis, expert on
buildings and construction, and usually assigned by the judge as a
member of a group of experts to look into the matter of Basarah;
lived and died in Tunis in 734/1334.

*Ibn al-Ukhuwwah, Diya' al-Din, Muhammad b. Muhammad b. Ahmad
al-Qurashi al-Shafiʿ,*
died 729/1329.

Ibn Bassam, Muhammad b. Ahmad, al-Muhtasib,
an Egyptian who served as a muhtasib and is believed to have died
before 844/1440.

Ibn ʿItab, Abd al-Rahman b. Muhammad,
an Andalusian from Cordova, died 520/1126.

Ibn Kinanah,
died in 186/802.

Ibn Naft^c,
died in 212/827.

Ibn Sha^cban,

Ibn Wahb, Abd Allah,
one of the early disciples of Malik, died in Cairo in 197/813.

Malik, Malik b. Anas b. Malik b. Abi ^cAmir al-'Asbahi al-Yamani,
chief of the Maliki school, born in Medina in 93/712, lived and died there in 179/795.

Mutarraf,
a student of Malik, died in Medina in 220/835.

Rabi^cah, Rabi^cah b. 'Abd al-Rahman, (his nickname, Rabi^cat al-Ra'y),
the most prominent lawyer of the Medinese in his time, a professor of Malik, lived in Medina and died in 136/753-54.

Sahnun, Abu Sa^cid, Abd al-Salam b. Sa^cid al-Tanukhi,
a student of Ibn al-Qasim, lived in North Africa and died there in 240/854.

^cUmar Ibn al-Khatab,
the second caliph, died in Medina in 23/644.

Appendix IV

Glossary

al-aghawat (sing. *agha*). An Ottoman title, chief, senior, or master; used for medium-level and some high-level officials of Janissary Corps, Sultan palace service and local officials.

ahl. Family, intimates, people, household; often used in conjunction with other words as follows:

ahl al-hadith. Advocates of the position that jurists should accept the exclusive authority of precedents from the Prophet.

ahl al-ra'y. Advocates of the position that jurists can maintain the right to reason for themselves.

ahl, arbab, ashab al-khibrah, ahl al-nazar, ahl al-basar, ahl al-maʿrifah. Experts; a group of trustworthy individuals chosen by the qadi to investigate into cases where both litigants had no evidence.

akhlat (sing. *khilt*). Component of a mixture, *akhlat* used here to refer to a group of individuals belonging to different tribes.

ʿamal. Practice.

ʿamal ahl al-Madinah. The Practice of the ancients of Medina.

amin (pl. *Umanaʿ*). Reliable, trustworthy, authorized representative; chief, master of a guild.

Amsar (sing. *misr*). Settlements newly founded or designated as centers for their regions during early Islamic period.

Ansar. Adherents, followers, partisans, sponsors; the Medinan followers of the Prophet Muhammad who supported him after the hijrah.

aqta^ca. To give away land as a grant or a fief.

arbad (sing. *rabad*). Outskirts, suburbs, quarters.

^carif (p. *^cUrafa'*). Knowing, cognizant; expert, authority; monitor.

arwa (sing. *urwiyah*). The female of the mountain goat; used by Ibn al-Rami to refer to a stable for a small animal.

^caskar (pl. *^casakir*). Army, troops; part of a building projecting into the street.

asl (pl. *usul*). Root; source; foundation.

aswaq (sing. *suq*). Markets.

aziqqah (sing. *zuqaq*). Lane.

al-balat. Pavement, tiled floor; used here to refer to the streets branching from the Prophet mosque in Medina which were paved.

banna' (pl. *banna'un*). Builder; mason.

baqi^c wasi^c. A large site.

barhah. An open space within a built-up area.

bayt (pl. *buyut*). A residence.

buyut. See *bayt*.

dakkah (pl. *dikak*). Bench.

dar (pl. *dur*). A large house.

dar al-Imarah. The governor's office and residence.

dar al-Islam. The Abode of Islam: territories in which the shari'ah prevails.

darar. Harm, damage, prejudice.

darb (pl. *durub*). Lane.

al-darrab. the Hammerer.

al-dhira'. A Cubit used for measurement. Varies according to time and place; In Baghdad al-Mansur: *al-dhira' al-Sawda'*=49.5 cm. In present day Syria=68 cm. In Egypt: *al-dhira' al-baladi*=58 cm.; *al-dhira' al-Istanbuli*=66.5 cm.; *dhira' al-hindasah*=65.6 cm.; *al-dhira' al-mi'mari*=75 cm. In Iraq: *al-dhira' al-halabi*=68 cm.; *al-dhira' al-baghdadi* or *al-baladi*=80 cm.

diwan (pl. *dawawin*). Account book of the treasury in early Islamic administration.

dur. See *dar*.

durub. See *darb*.

fada'. An open space or unbuilt area.

faqih (pl. *fuqaha'*). Legal scholar, jurist.

fasil (pl. *fawasil*). Partition.

fiqh. The science of law or jurisprudence.

fina'. (pl. *afniyah*). An open space around or along a building.

fustat. A tent, pavilion, canopy; *al-Fustat*, an early Islamic settlement south of present-day Cairo.

ghurfah. A room.

hadith. Report, or Tradition, of a precedent set by the Prophet.

hanafi. A follower of the Hanafi school, one of the four orthodox schools in Islam.

hawsh (pl. *ahwash*, or *hishan*). Enclosure, enclosed area, courtyard.

hijrah. Departure, exit; emigration; the *hijrah*, the emigration of the Prophet Muhammad from Mecca to Medina in 622 A.D.

hisbah. In its widest sense the function of ensuring that the precepts of the *shari'ah*, particularly those of a moral and religious nature, are observed.

'ibadat. Religious observances.

ijma'. Consensus of opinion.

ijtihad. The exercise of human reason to ascertain a rule of Shari'ah law.

'Ilm al-hadith. The science of the Prophet's Tradition.

istihsan. The principle of jurisprudence that in particular cases not regulated by any incontrovertible authority of the Aur'an, traditions or *ijma'*, equitable considerations may override the results of strict analogical reasoning.

jala'. The Movable cover of the *qa'ah*, which is the main room in a *qa'ah* house.

janah (p. *ajnihah*). Parts of buildings projecting into the street.

kammad (pl. *kammadin*). Appliers of hot packs.

kawshah. A lime-kiln.

khavar al-wahid. The report of a tradition by a single individual.

khayashim. Gills.

khitat. See *khittah*.

khittah (pl. *khitat*). Ground occupied for the first time, a pitch or holding. In connection with towns founded by the Arabs, it gives the sense of an area occupied by individuals among the founders of the town. The term applies equally to collective holdings.

al-Khulafa' al-Rashidun. The rightly-guided rulers reigned from 11/632 to 40/661.

kir (pl. *akyar*, or *kiran*). Bellows.

kuwwah. An opening or a window.

al-mahall (sing. *mahallah*). Quarters.

majalis (sing. *majlis*). Sitting areas.

Maliki. A follower of the Maliki school, one of the four orthodox schools in Islam.

al-manahij (sing. *manhaj*, or *minhaj*). Roads.

al-manakhah. The halting place, way station; the open market of Medina.

manazil (sing. *manzil*). Stopping place, way station, camp site; residence, house.

marbad. Halting place.

al-mashhur. The well-known; accepted established; according to the general belief.

mashrabiya (pl. *mashrabiya*). Projecting oriel window with a wooden latticework enclosure.

maslahah (pl. *masalih*). The public interest.

al-masalih al-mursalah. A theme invoked by the Maliki jurists which gives priority to the public welfare regarding matters on which the law is not specific.

matla^c (pl. *matali*^c). Leader, steps, stairs.

mawla (pl. *mawali*). A client: means by which a non-kin individual could be brought into a tribe.

mawali. See *mawla*.

mayadin (sing. *maydan*). Squares, open place; field, arena.

mu^c*allim* (pl. *mu*^c*allimun*). Teacher; master; mason.

mu^c*amalat*. Worldly affairs.

muhajirun (sing. *muhajir*). Emigrants, those Meccans who emigrated to Medina in early Islam.

muhandis (pl. *muhandisun*). Engineer.

muhandis al-baldah. The city engineer.

muhtasib. The official exercising the function of *hisbah*.

murabba^c*ah* *culwah*. An elevated platform with a square shape.

al-musalla. An open air place set aside for prayer.

al-nas. People.

qa^cah. A central room within the house with a sky window covered by the *jala'*.

qada'. Judgment given by the *qadi*; the district, circumscription of a *qadi*; payment (of a debt).

qadi. Judge.

qadim. Old, ancient; antique; existing from time immemorial.

qa'id. Leader.

qati^c. See *qati^cah*.

qati^cah (pl. *qata'ic*). Fief, feudal state, land granted by feudal tenure.

qaysariyah (pl. *qaysariyat*). Covered market.

qiblah. Direction of prayer toward mecca.

qiyas. Jurists reasoning by analogy.

rabad (pl. *arbad*). Quarter.

rahbah (pl. *rahbat*, or *rihab*). Public square surrounded by buildings; vastness, expanse.

ra'is (pl. *ru'asa'*). One in charge; leader; chief.

ra'y. Juristic speculation.

al-riba^c (sing. *rab^c*). Home, residence, quarters.

ribat (pl. *arbitah*). Military settlements; a charity residence for singles.

al-sahah. An open space or yard.

sahn (pl. *suhun*). Plate; yard, courtyard, surface.

sahra' (pl. *sahrawat*). Desert; and open area.

saqifah (pl. *saqa'if*). Roofed passage; roofed gallery.

sarir (pl. *asirrah*). Bedstead.

shar^c. The sacred, revealed Law of Islam.

shari^c (pl. *shawari^c*). Street.

shari^cah (pl. *shara'i^c*). Water hole, drinking place; approach to a water hole; Law; the revealed, or canonical, Law of Islam.

shuf^cah (Right of) pre-emption.

sikkah (pl. *sikak*). Sidestreet. lane.

sikak. See *sikkah*.

sulh. Peace, reconciliation, amicable settlement; compromise; mutual agreement.

sunnah. Lit. "trodden path". Historically, there were three principle stages in the development of the concept of *sunnah*. During the first century of Islam the term means local custom or traditional practice; for the early schools of law it signifies the generally accepted doctrine of the school; and from the time of *al-Shafi^ci* onwards it denotes the model behavior of the Prophet--the practice he endorsed and the precedents he set.

suq (pl. *aswaq*). Market.

taqlid. Imitation; the principle of strict adherence to the law as expounded in the authoritative legal manuals.

tariq (pl. *turuq* or *turuqat*). Way; road; track; path.

tariq ghayr nafidh. A non-through way.

tariq nafidh. A thorough-fare.

thaniyah (pl. *thanaya*). Narrow pass; mountain trail.

thaniyat al-wada^c. A name of a place in Medina.

^curf. Action or belief in which persons persist with the concurrence of the reasoning power and which their natural disposition agree to accept as right; custom.

urwiyah. See *arwa*.

usul. See *asl*.

waqf (pl. *awqaf*). A settlement of property under which ownership of the property is "immobilized" and the usufruct thereof is devoted to a purpose which is deemed charitable by the law.

zanqah. Narrow street, lane, alley, dead-end street.

zuqaq (pl. *aziqqah*). Lane, alley.

Appendix V

System Of Transliteration

The system of transliteration from Arabic used here is the one described in Bulletin 49. (Nov. 1958) issued by the Cataloging service of the Library of Congress.

Letters of the alphabet:

Initial	Value	Initial	Value
	omit		d
	b		t
	t		z
	th		
	j		gh
	h		f
	kh		q
	d		k
	dh		l
	r		m
	z		n
	s		h
	sh		w
	s		y

Vowels and diphthongs

a	a	aw
u	u	ay
i	i	

For further details of the rules the reader is referred to Bulletin 49. English quotations are left the way they are even if they do not follow this system. Names of contemporary cities are written the way they are conventionally known and appear in English language atlases. Names of old cities follow the above mentioned system.

Dates and Periods

The hijri date will always come first followed by the circa date. In the case of years, the hijri year is written first, followed by the circa year with the slash in between. When the exact date is not known, rather than using the two circa years within which the hijri year falls, the circa year that has more days encompassed within the hijri year is used. For example, the year 497 A.H. starting on Oct. 5, 1103 A.D. and ending on Sept. 22, 1104 A.D. is written as follows: 497/1104.

When periods are referred to by centuries, the hijri century comes first followed by the circa century in parenthesis. For example, the second (eighth) century.

When names of individuals are first mentioned, the date of their death follows in parentheses. Names of rulers are followed by the dates of their reign in parentheses.

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