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TRADITION, CONTINUITY AND CHANGE IN THE PHYSICAL
ENVIRONMENT: THE ARAB-MUSLIM CITY

by

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ABSTRACT

Issues within the context of the present cannot be
isolated from their spatial or temporal context. Neither
the past (tradition) nor the future (modern technology)
can provide solutions to the problems of the present.
Their value lies in the fact that they represent "resources"
which broaden our choices and inform us as to how similar
issues were or could be dealt with in different times and
places. However, a society's past and the way that society
conceives of its past provides modes of continuity which
give the present its authenticity. If we are to deal with
the issues of the present and hope for an authentic future,
the authority of the past or tradition cannot be blindly
accepted though its authenticity and relevance to the
present must be recognized.

The problem addressed here is that of a present phy-
sical environment in the Arab-Muslim city which is totally
different from the traditional one. As a result of this
difference, a sense of discontinuity and alienation has
developed among the inhabitants of these cities. The pur-
pose of this study is to understand how this process came
about and how a sense of continuity with the past can be
reestablished. To achieve this purpose four main issues
are addressed here: (1) the origin and process of forma-
tion of the traditional physical environment; (2) the dis-
parity between the traditional and the contemporary envi-
ronment; (3) the origins of this disparity; and (4) the
possible notions which might be suggested by way of rees-
tablishing a sense of continuity between the past and
the present.

The legal system is used as a means of analysis in
this study. This has helped us to see the physical envi-
ronment within its socio-cultural context, by informing us
about the ideological or structural level of the society
and by pointing out accepted social norms and conventions

and the mechanism of their social effectiveness. The law has helped us to point out the differences between the traditional and the contemporary process. In the traditional city, the process relied on rules of conduct or social conventions which proscribed certain actions on the part of the inhabitants. In the contemporary city, the rules are physical and prescriptive in nature. They prescribe in physical terms not only what is to be done but also how it is to be implemented. Implied within the traditional process is a reciprocal and possibilist relationship between form and use while the contemporary process advocates a determinist approach to the relationship of form and use.

Several factors are believed to have worked in favor of the shift from the traditional process to the contemporary one in the Arab-Muslim city. Important among these are: the existence of certain implied ideologies; changes in the scale of development, power and technology; and problems within the field of architecture and urbanism and their relationship to the Arab-Muslim context. Only by being aware of these processes and factors can we conceive of an appropriate approach to reestablish a sense of continuity with the past that stems from the needs of the present and aspirations for the future.

Thesis Supervisor: Stanford Anderson
Title: Professor of History and Architecture

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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
١	omit	ض	ḍ
ب	b	ط	ṭ
ت	t	ظ	ẓ
ث	th	ع	ʿ
ج	j	غ	gh
ح	ḥ	ف	f
خ	kh	ق	q
د	d	ك	k
ذ	dh	ل	l
ر	r	م	m
ز	z	ن	n
س	s	ه	h
ش	sh	و	w
ص	ṣ	ى	y

Vowels and diphthongs

ــَ	a	ـَـا ، ـَـى	ā	ـَـوْ	aw
ــُ	u	ـُـو	ū	ـَـيْ	ay
ــِ	i	ـِـى	ī		

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 cirica date. In the case of years, the hijri year is written first, followed by the cirica year with a slash inbetween. 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 feferred to by centuries, the hijri century comes first followed by the cirica century in parentheses. 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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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 predict-
ability 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 "conti-
nuity" 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 a 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.

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^cah (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."

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 reevaluate the legal practices which

had arisen during the Umayyad period; Umayyad judges faced over-
whelming problems as a result of the enormously rapid expansion
of Muslim territories and they thus tended to be somewhat prag-
matic 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 Qur'an. 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 rea-
soning, or ra'y, of individual scholars and developed into a
concensus of opinion of a given school's jurists. This subse-
quently 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 under-
stand 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 word
sunnah during the development of the shari^c^ah in the second and
third (eighth and ninth) centuries is essential.

In the early ^c^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 estab-
lish a sense of continuity with the time of the "rightly-guided"
rulers (al-Khulafa' al-Rashidūn.) 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, an
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 back-
wards 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. Pursu-
ing 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 con-
flict, 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 feature of legal development in
this period was the increasing diversity of doctrine. The oppo-
sition'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-ḥadith). 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-Shafiᶜi (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-
Shafiᶜi 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-Shafiᶜi's theory was based on the
recognition of the ḥadith and precedents of the Prophet as a
source of the divine will, complementary to the Qur'an.

To reestablish tradition and to imbue a sense of continuity

into the law, al-Shafi^{c}i's theory recognized the sunnah as a
second source of law after the Qur'an. But sunnah in al-Shafi^{c}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^{c}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^{c}i's
theory: one was ijma^c, or consensus, and the other was qiyas,
or reasoning by analogy. Both notions already existed but were
taken up by him and given new connotations designed to achieve
uniformity in the law. Regarding ijma^c, al-Shafi^{c}i 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^{c}i repudiated the un-
disciplined forms of reasoning such as ra'y or istiḥsan and
insisted on the exclusive validity of strictly regulated analo-
gical reasoning. Thus, al-Shafi^{c}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" (uṣul al-fiqh).[14]

Al-Shafi^{c}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 ḥadith or precedents of
the Prophet could no longer be rejected through the objective
criticism of their contents. Since the authority of the ḥadith

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^{c}i thesis, a new science of the Prophet's tradition, ʿIlm al-ḥadith, developed, and three more schools of law were formed: one which followed al-Shafi^{c}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^{c}i's thesis. Since a strict adherence to al-Shafi^{c}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^{c}i. Though it comprises the uṣul, or sources, laid down by al-Shafi^{c}i -- the Qur'an, sunnah, qiyas, and ijma^c -- its composite structure is fundamentally different. It aims at reasserting and preserving the Islamic legal tradition as it had developed up to that point. At that time, ijma^c 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^c therefore provides for and tolerates those variations adopted by the different schools of law which it had been al-Shafi^{c}i's aim to eliminate. But a more important difference is that ijma^c, 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^{c}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 Qur'an and the <u>sunnah</u> as records of divine
revelation, and also guarantees the validity of <u>qiyas</u>. 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 the law from that point onwards. As soon as ijma^c,
in this sense, was accepted, <u>ijtihad</u>, that is, independent
judgment, which had been restricted earlier by such principles
as the authority of <u>sunnah</u> and the strict regulation of methods
of <u>qiyas</u>, 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 <u>ijtihad</u>." The right
of <u>ijtihad</u> was replaced by the duty of <u>taqlid</u>, 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^{c}ah, the desire had
always been to reaffirm the past's validity as a guide to the
present. Thus the shari^{c}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 contro-
versial for our consideration here, it came to a halt.[18] What
<u>is</u> relevant to our concerns, however, is that when its theore-
tical development stopped, the shari^{c}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-relation-
ships has arisen and attempts to reestablish 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 reinterpret the past in a way that is useful and
suitable for the present, that is, in a way which will reestablish
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 reaffirm
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 asumption 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 presuma-
bly superior cultures.[25] Both positions, that of the tradi-
tionalists 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 impor-
tance 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 reestablish 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 reestablish 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^{c}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^{c}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 a 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 regu-
latory 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 pre-
conceived 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 neighboring
buildings; or results in others sueing 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 pre-
scriptive 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' needs
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 differ-
ent 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 envi-
ronment, 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 his 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 mate-
rial, 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 clarifications 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 environ-
ment, 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 deve-
loped, 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 environ-
men within the city has been replaced by another process which
holds to more prescriptive conventions of form. These conven-
tions 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 the 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 envi-
ronment. 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 case material 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 coun-
tries. 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 intro-
duce 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 reestabli-
shing 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 environ-
ment, we will suggest some approaches towards reestablishing
a sense of continuity with our past that stems from our needs
in the present and our aspirations for the future.

PART I. THE TRADITIONAL ENVIRONMENT:
PROCESS OF FORMATION AND CHANGE

CHAPTER I

ORIGINS 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 town, or ribat. Such cities were founded as for-
tresses 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 [C]Abbasids 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 tradi-
tional capital. Examples of these are Samarra', built
by al-Mu^{c}tasim who moved from Baghdad in the third
(ninth) century, and Raqqadah, 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 par-
ticular; 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 encompased 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 Hellinistic 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. (Fig. 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 cen-
tury 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 struc-
ture 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)
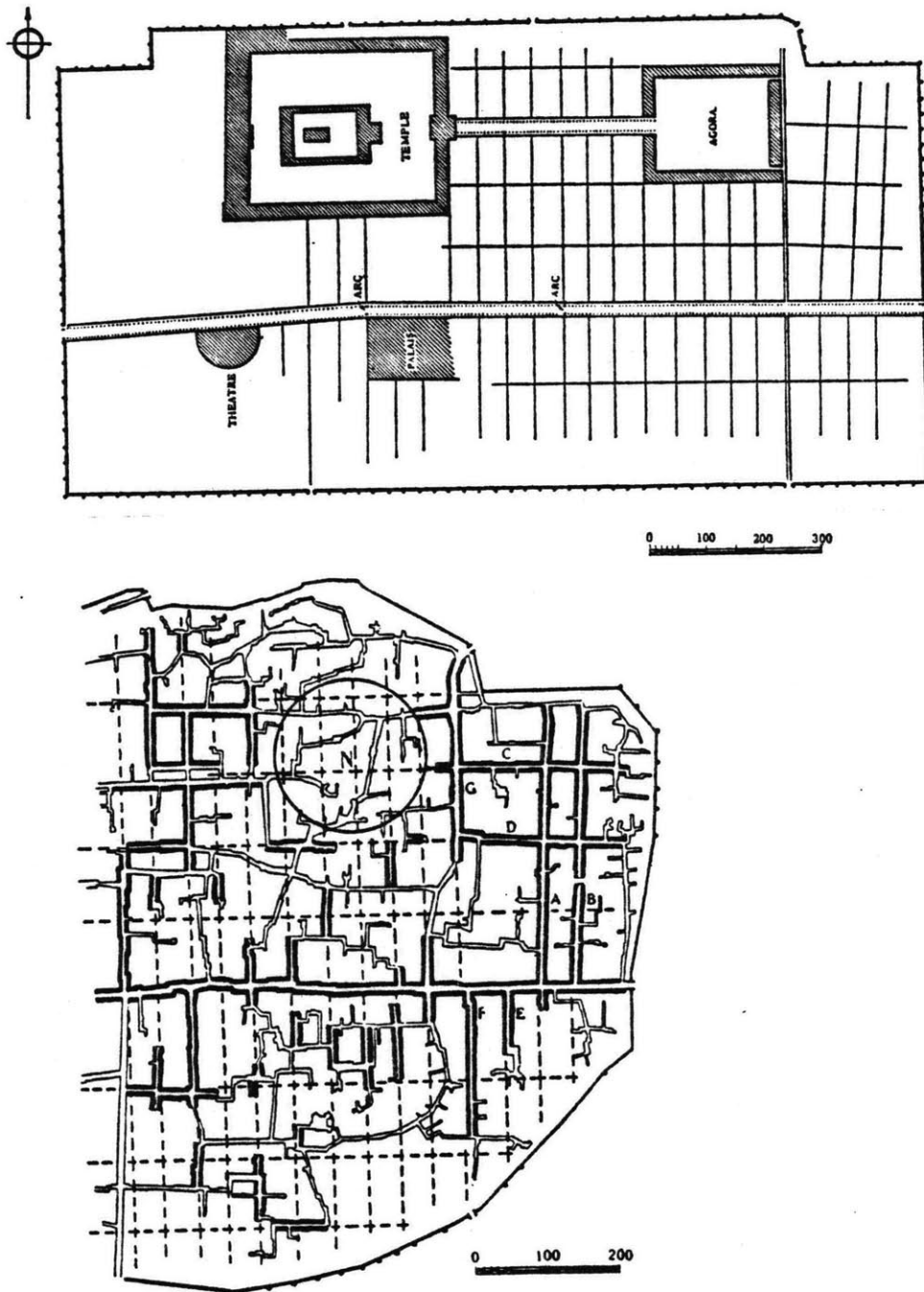
Fig. 1. Damascus.
(upper) original plan of antiquity.
(lower) part of the original plan transformed during
the Arab-Muslim era.
Source: Sauvaget, "Le plan antique de Damas", Syria,
XXVI(1949), pp. 342, 356.

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 collonaded avenue of antiquity was transformed into the suq of medieval Damascus or Aleppo. (Fig. 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, was transformed into a medieval suq. Sauvaget ascribes this transformation to the weakness in governmental authority and the continuous instability which he believes affected all aspects of urban life 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]

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, (Figs. 3, 4, 5) suggest a very difficult and important question: starting from two or more quite different urban patterns, how did Arab-Muslim society
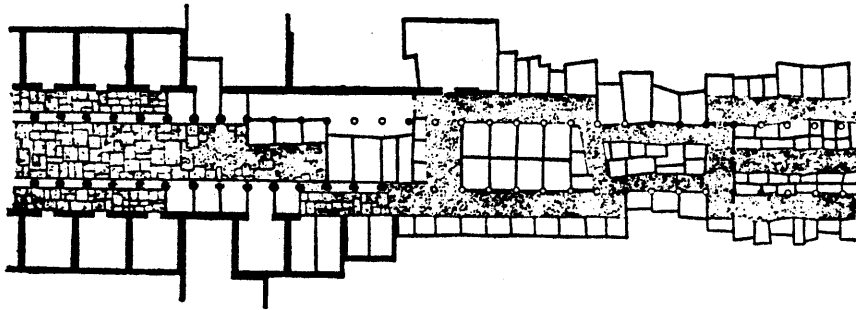
Fig. 2. Damascus and Aleppo.
    A schematic illustration of the process of transform-
    ing the colonnaded avenue of antiquity into the suq
    of medieval Islam.
    Source: Sauvaget," Le plan de'Laodicee-sur-mer,"
              Bulletin d'Etudes Orientales,(1934),p.100.

Fig. 3.   Damascus.
          Street plan of medieval Damascus.
          Source: Ibn ᶜAsàkir, Tarikh Madinat Dimashq, v.II,
          part I, edited by S. al-Munjid, (1954).
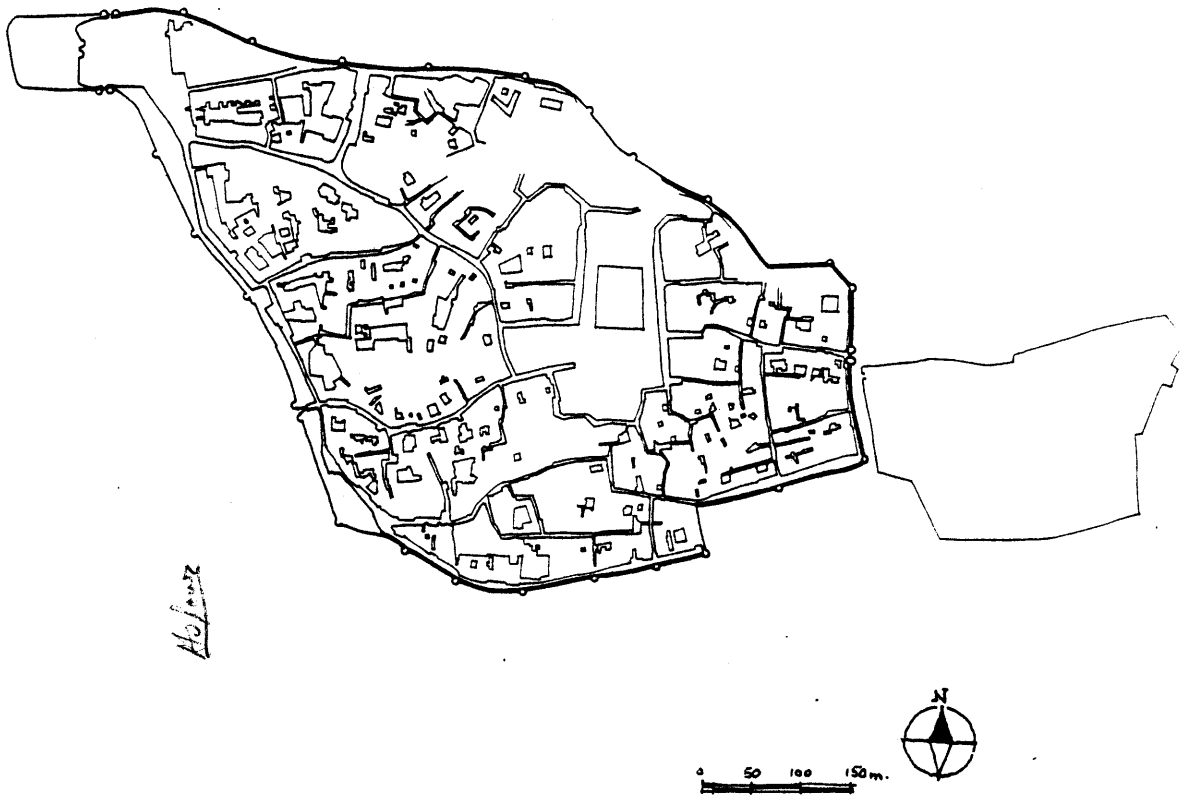
Fig. 4. Medina
        Street plan of medieval Medina.

        Source: Author's reconstruction from medieval
                accounts and contemporary areal photographs
                and plans.
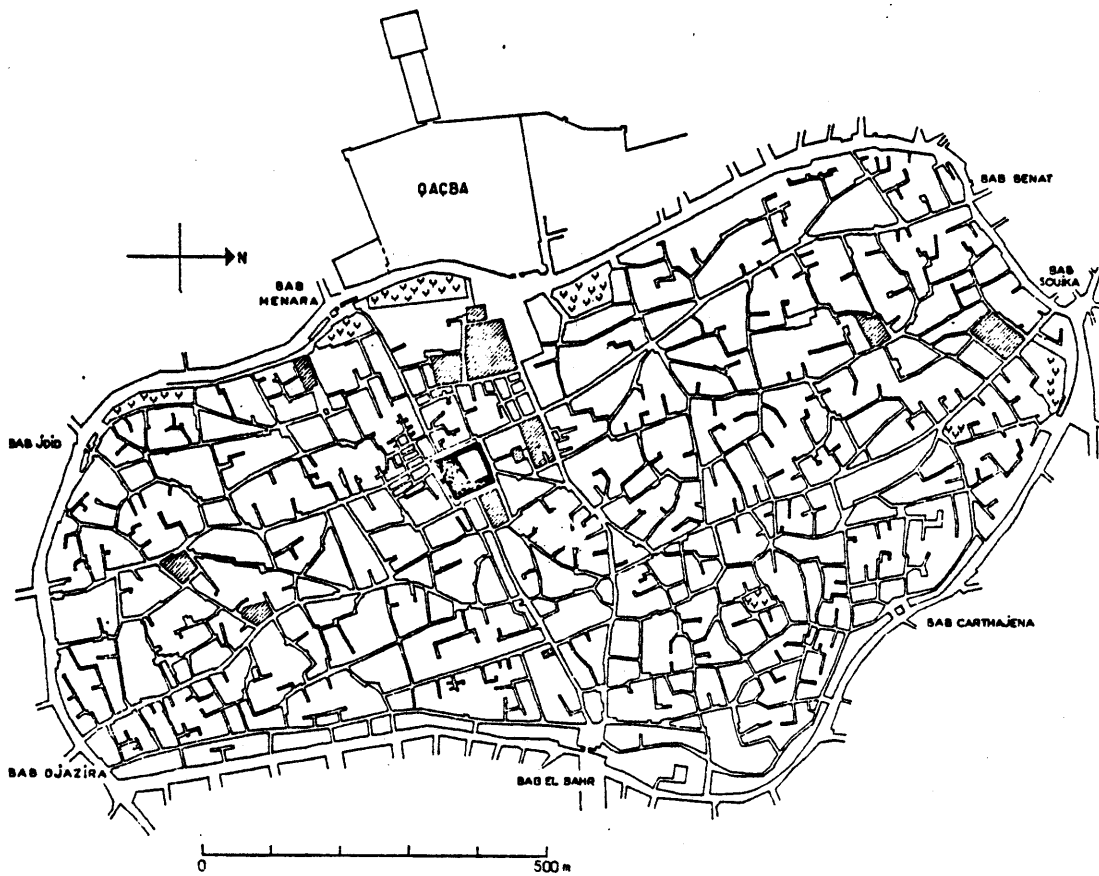
Fig. 5. Tunis.
Street plan of medieval Tunis.
Source: Lezine, Deux Villes d'Ifriqiya, Paris (1971)
p. 144.

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 beliefs held by the
inhabitants of these cities. By virtue of our evidence,
the transformation described by 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
transportation [9] 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
amṣar of Basrah, Kufah, and Fustat, camp-towns founded
during the reign of ᶜUmar 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. Medina[10]

Before 622 A.D., Medina was a group of independent
settlements, not united into one city until after the
Prophet Muhammad's <u>hijrah</u> from Mecca. The original settle-
ments, however, seem to have preserved their names as
<u>manazil</u> or <u>buyut</u> 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 <u>ansar</u>.[12] In the process
of settling, the newly arrived tribes or clans appear to
have clustered together. Even the early <u>muhajrun</u>, 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 <u>ansar</u> not to make the camel kneel down in any
of the places but to leave her until she would stop and
kneed down herself. Once she did, he decided that this
would be his dwelling place (<u>manzil</u>).[15] The area surroun-
ding 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 up to the Prophet whatever extra
land they had within their own khitat (quarter).[17]
Yaqut (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 ^{c}Utbah the sons of
> Mas^{c}ud al-Hudhali their well-known khittah near the
> mosque, and granted al-Zubayr b. al-^{c}Awwam a large
> spot [baqi^c wasi^c] and granted Talha b. ^{c}Ubayd-
> 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 ^{c}Uthman b. ^{c}Af.fan, 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
> [^{c}afa' 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 . . . "

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 [qati^{c}ah] granted to them by the
Prophet. . . " Then Ibn Shabbah goes on to describe
the locations of settlements granted to the muhajrun tribes.
He mentions, among others, Banu Layth b. Bakr, Banu
damurah b. Bakr, Banu al-Dhayl, Muzaynah, Juhaynah and
Bali, qays b. ^{c}Aylan, Banu Jashm, and Banu Ka^{c}b b. ^{c}Amr.[19]
Ibn Shabbah's account of the settlements of the muhajrun

and of those of al-anṣar 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 khiṭṭah
was left to the tribe itself. This was what al-Zubayr
did with his large khiṭṭah (baqi^c al-Zubayr). Ibn
Shabbah enumerates six dur in this khiṭṭah; all were for
al-Zubyr's heirs, while Ibn Zabalah, speaking of the suq
of Medina during the reign of Hisham b. ^{c}Abd al-Malik
(105/724-125/743), indicates that some areas at that time
were still left open in baqi^c al-Zubayr.[20] This shows
that each tribe, clan, or individual subdivided their
respective khiṭṭah according to need, and that not neces-
sarily all the khiṭaṭ in Medina were built up during the
early period. As to what each khiṭṭah 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^{c}b b. al-Ashraf (d. 3/624-25), and said: "This is your suq." When Ka^{c}b 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 ^{c}Umar 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^{c}awiyah b. Abi Sufyan (41/661-60/680). This was followed by a major construction project during the reign of Hisham b. ^{c}Abdal-Malik. According to al-Samhudi, this suq is bordered by al-musalla on the south side and reaches nearly to thaniyat al wada^c on its north 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 <u>suq</u> from the south, is about 500 m. from the Prophet's
mosque.<u></u>[26]

Very little more can be said about Medina's spatial
organization or its morphology during early Islamic times.
Information on the pattern of the city streets -- their
form and size and how they were layed out -- is lacking.
To use information from later times, there was during
Mu^cawiyah's reign what is known as <u>al-balat</u> which according
to al-Samhudi's description covers most of the city's three
major thoroughfares. At some point at the end of this
<u>balat</u> near <u>al-musalla</u>, 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 <u>suq</u>, it seems to have continued
in its original site though other specialized <u>suqs</u>
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 <u>suq</u> of date sellers, fruit sellers, bakers,
dyers, tailors, leather merchants, sellers of copper
utensils, and smiths.[27]

2. <u>Al-Amsar</u>

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 <u>amsar</u>
were designated. These served both as garrisons for the
Arab armies and as administrative centers for their pro-
vinces. Some of these <u>amsar</u>, 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^{c}awiyah. The term <u>amsar</u> was also
applied to other administrative centers such as Qazwin,
Ardabil, Ray and Marw, in which Arab garrisons were sta-
tioned permanently.[28]

<u>Al-Basrah</u>.[29] Al-Basrah was founded as a military
camp in the year 17/638 by ^{c}Utbah b. Ghazwan, on orders
from ^{c}Umar b. al-Khattab. According to al-Baladhuri, the
first <u>khittah</u> planned was the mosque, then the <u>dar al-
Imarah</u> which was originally located some distance from the
mosque. During the reign of Mu^{c}awiyah, Ziyad moved <u>dar
al-Imarah</u> to the qiblah of the mosque.[30] Regarding the
laying out of the city, Al-Mawardi relates that the settlers
divided the city into <u>khitat</u> according to tribes, assigning
a <u>khittah</u> for each tribe, and made the width of its main
street sixty cubits. The main street also served as a kind
of way station (<u>marbad</u>). The width of all other streets
was twenty cubits, and each lane seven cubits. In the
middle of each <u>khittah</u>, they provided a wide <u>rahbah</u>
where they could station their horses and bury their dead.
In addition their <u>manazil</u> abutted each other.[31] Although
al-Mawardi is less reliable as a historian, his summary
is confirmed by al-Baladhuri who, when speaking of sub-
division inside the <u>khittah</u> simply states: "The people
subdivided and built the houses."[32] This gives the impres-
sion that land-subdivision within each <u>khittah</u> was left
to members of the tribe.

<u>Al-Kufah</u>.[33] Also a military camp, al-Kufah was
founded in the year 17/638 by Sa^{c}d b. Abi Waqqas on orders
from ^{c}Umar b. al-Khattab. According to al-Tabari (d. 311/
923) ^{c}Umar wrote to Sa^{c}d 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 ^{c}Umar ". . . ordered
main roads [<u>al-manahij</u>] 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. They marked out an area surrounding it which took the shape of a square platform (murabba^{C}ah ^{C}ulwah, which he later calls sahn) with the mosque in the middle of it. Besides the sahn, the dar of Sa^{C}d, 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 ^{C}uzma). 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 a larger one, while those tribes whose number was smaller, such as Juhaynah, were forced to share their khiṭṭah with a group of people who do not seem to have belonged to one tribe (akhlaṭ).[36] As to the subdivision of the khiṭaṭ, al-Ya^{c}qubi states that "each tribe subdivided its own designated place,"[37] indicating that this was left to the discretion of the tribes' members. The khiṭaṭ, or at least most of them, seem to have had mosques of their own.[38] As to open spaces and cemeteries, al-Ya^{c}qubi 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: ṣahra' Uthayr, ṣahra' Bani Yashkur, and ṣahra' Bani ^{c}Amir.[39] This suggests the possibility that the system of having a raḥbah in each khiṭṭah, 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 ṣahn. He relates that the ṣahn preserved its form during the reign of ^{c}Umar with the mosque and the palace as the only buildings, and the suqs remaining unbuilt.[6] He also relates that ^{c}Umar 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-Ya^{c}qubi 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. ^{c}Abd 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 ^{c}Amr b. Al-^{c}As on orders from ^{c}Umar 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 orders[42] 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 amṣar 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 amṣar 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 khiṭaṭ seem to have extended from there. Near the
mosque was the khiṭṭah 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
^CAmr at the time.[44] Subsequently, other tribes seem to
have undertaken it to settle themselves in their own
khiṭaṭ. The description of these khiṭaṭ, however, shows
that some tribes by themselves formed a separate khiṭṭah
in the town; others banded together to constitute a khiṭṭah;

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 relation-
ship 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-lafif
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 them. The way
our sources describe how these khitat were settled defi-
nitely 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 khittat are referred to as having an 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-rayah, ahl al-zahir, and al-lafif,
suggests that the khittah was used as a unit of planning
and that it 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 stan-
dard number of inhabitants that seems to have been estab-
lished 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-Lafif 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 towns 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 Cuthman b. CAffan (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 loca-
tions. 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 khiṭaṭ 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, accor-
ding 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 amṣar towns   should be
raised, namely, their striking similarity to Medina.
The way their khiṭaṭ were assigned resembles that of
Medina at the time of the Prophet. The placement of the
khiṭṭat 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
muhajirun, around the Prophet's mosque. And, indeed, when
one looks at the internal organization of the khiṭṭah
in Medina and al-amṣar, 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 amṣar 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 Abbasid 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 congretational 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 arcaded street going all the way to the rahbah
and thus dividing the city into four quadrants.[55] (Fig. 7).

Writers on Baghdad have been fascinated by its cir-
cular 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
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 rabaḍ (quarter), and instructed the
engineers to make street widths fifty cubits and lane
widths sixteen cubits. Al-Ya'qubi then goes on to enu-
merate and describe the fiefs (qata'i^c) and arbaḍ (pl. of
rabaḍ, 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 neigh-
borhoods, al-Ya^{c}qubi differentiates between those located
in the outer ring inside the city, and those located out-
side 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 respec-
tive 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 rabaḍ,
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 inha-
bitants 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]

CHRONOLOGICAL MAP
OF BAGHDAD
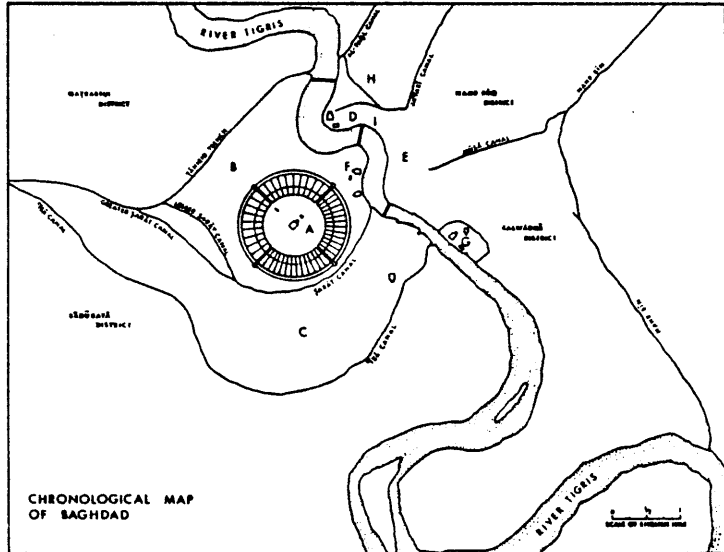
LEGEND

A. The Round City, also known as Madīnat al-Manṣūr. The first palace complex of the 'Abbāsid Capital, it contained the palace-mosque of the Caliph, the administrative agencies of the government, and the residences 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 Khurāsānī 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-Ruṣāfah. The Palace complex of the Caliph al-Mahdī, 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-Manṣūr's second residential palace, it was built in A.H. 157 and later occupied by Hārūn al-Rashid and Muḥammad al-Amīn.

G. Dār al-Khilāfah. The third palace complex, it was built by the 'Abbāsid Caliphs in stages, subsequent to their return from Sāmarrā in A.H. 279.

H. Al-Shammāsīyah. Originally a staging ground for military reviews and a camping ground, it was developed as a palace area by the Būyid amīrs in the tenth century.

I. Bāb al-Ṭāq. Contained the commercial section serving al-Ruṣāfah 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.

Fig. 6.   Baghdad.
Chronological map of Baghdad.
Source: Lassner, The Shaping of The ͨAbbasid Rule,
Princeton (1980), pp. 186-187.
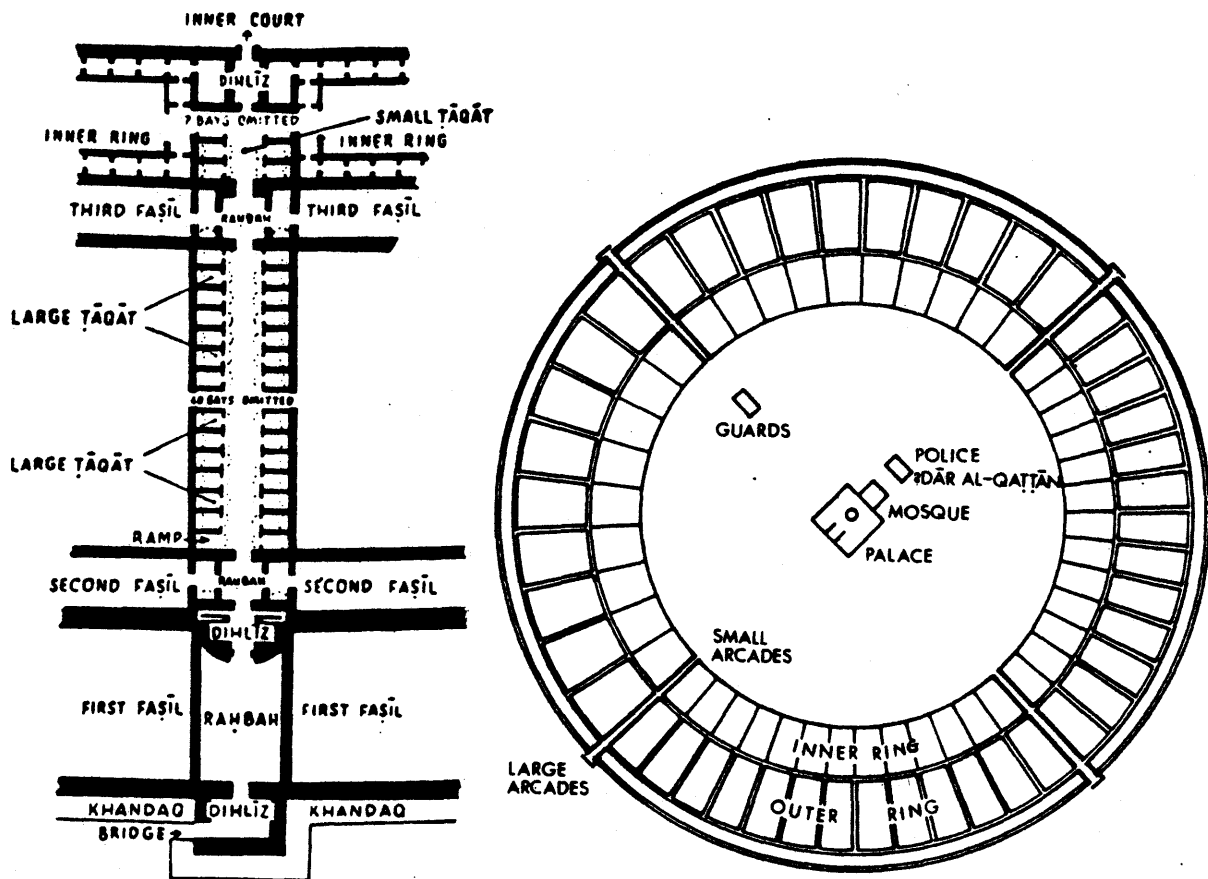
Fig. 7.   Baghdad.
(right) the round city of al-Mansur.
(left) plan of the arcades between one of the gates
and the rahbah, showing the outer and inner ring.
Source: Lassner, The Shaping of The CAbbasid Rule,
op. cit., pp. 190-191.

An indication that these orders were followed is al-Ya^{C}qubi'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^{C}qubi 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^{C}qubi 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 rahbah, 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[c]tasim
(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[c]fariyah built by al-Mutawakil), and that it followed
an orthogonal grid plan. (Fig. 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[c]qubi
relates that when al-Mu[c]tasim acquired the land he brought
the engineers together and asked them to choose the best
sites for his palaces. He then layed out the fiefs and
grants for his generals, his secretaries and the general
public. In addition, he layed out the congretational
mosque and the markets around it. After establishing
buildings on the eastern bank of the Tigris, al-Mu[c]tasim
then built a bridge to the western bank and layed out the
buildings and gardens there. Al-Ya[c]qubi goes on to des-
cribe 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] (Fig. 10).

Regarding the spatial organization of Samarra',
al-Ya[c]qubi reports that al-Mu[c]tasim designated certain
quarters for his Turkish troops, imposing very strict
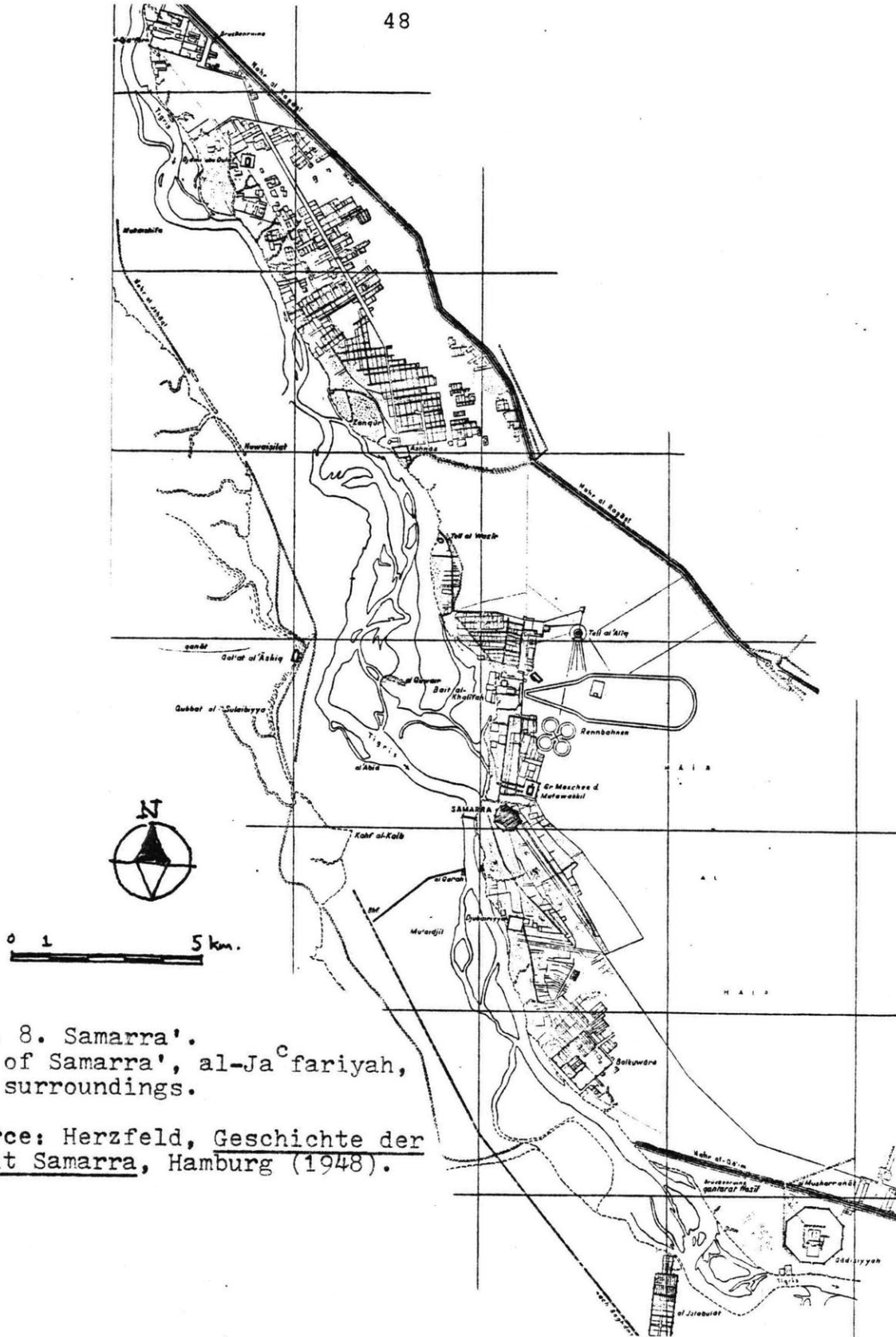
Fig. 8. Samarra'.
Map of Samarra', al-Ja^cfariyah,
and surroundings.

Source: Herzfeld, Geschichte der
Stadt Samarra, Hamburg (1948).
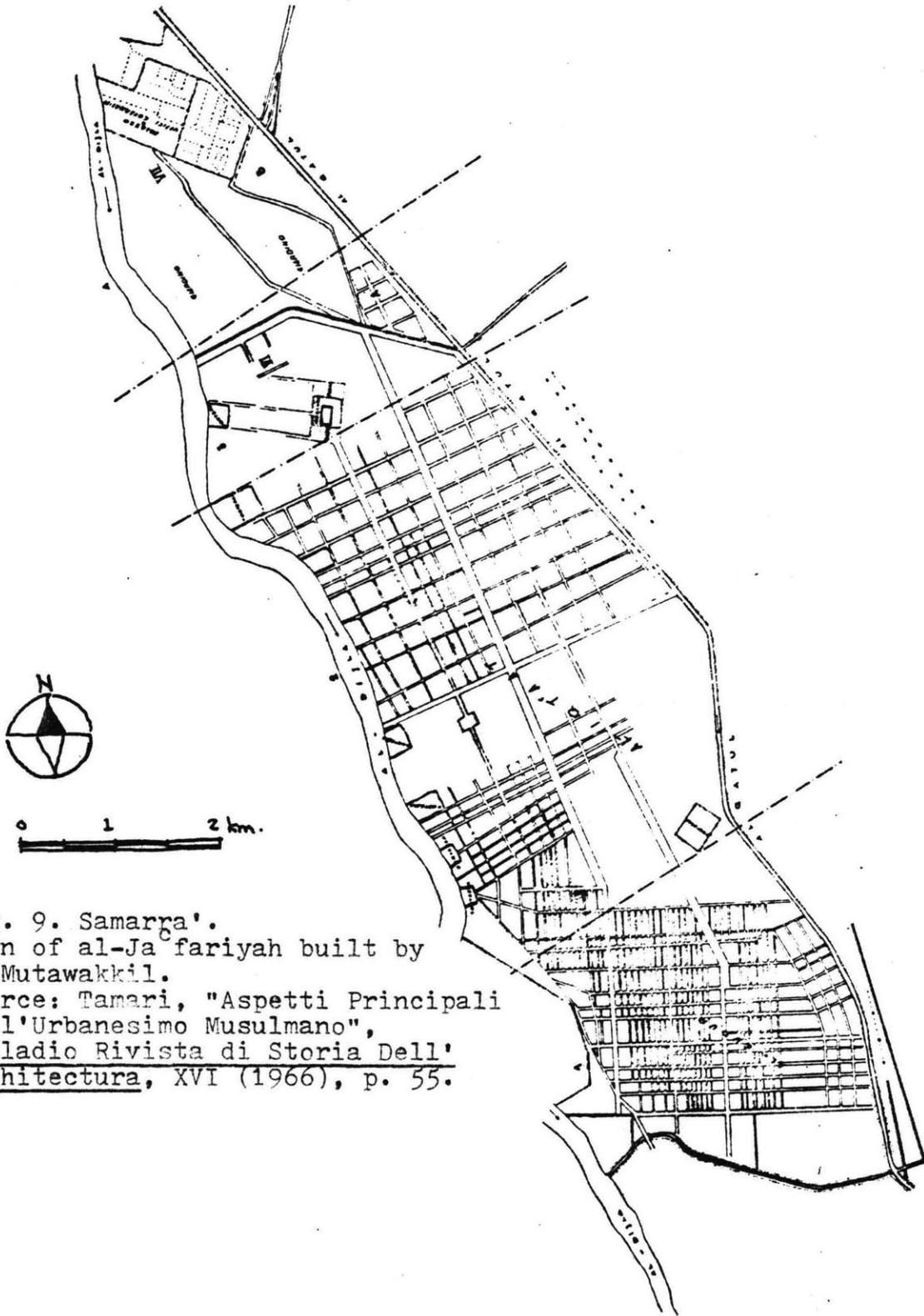
Fig. 9. Samarra'.
Plan of al-Jaꞌfariyah built by
al-Mutawakkil.
Source: Tamari, "Aspetti Principali
Dell'Urbanesimo Musulmano",
Palladio Rivista di Storia Dell'
Architectura, XVI (1966), p. 55.
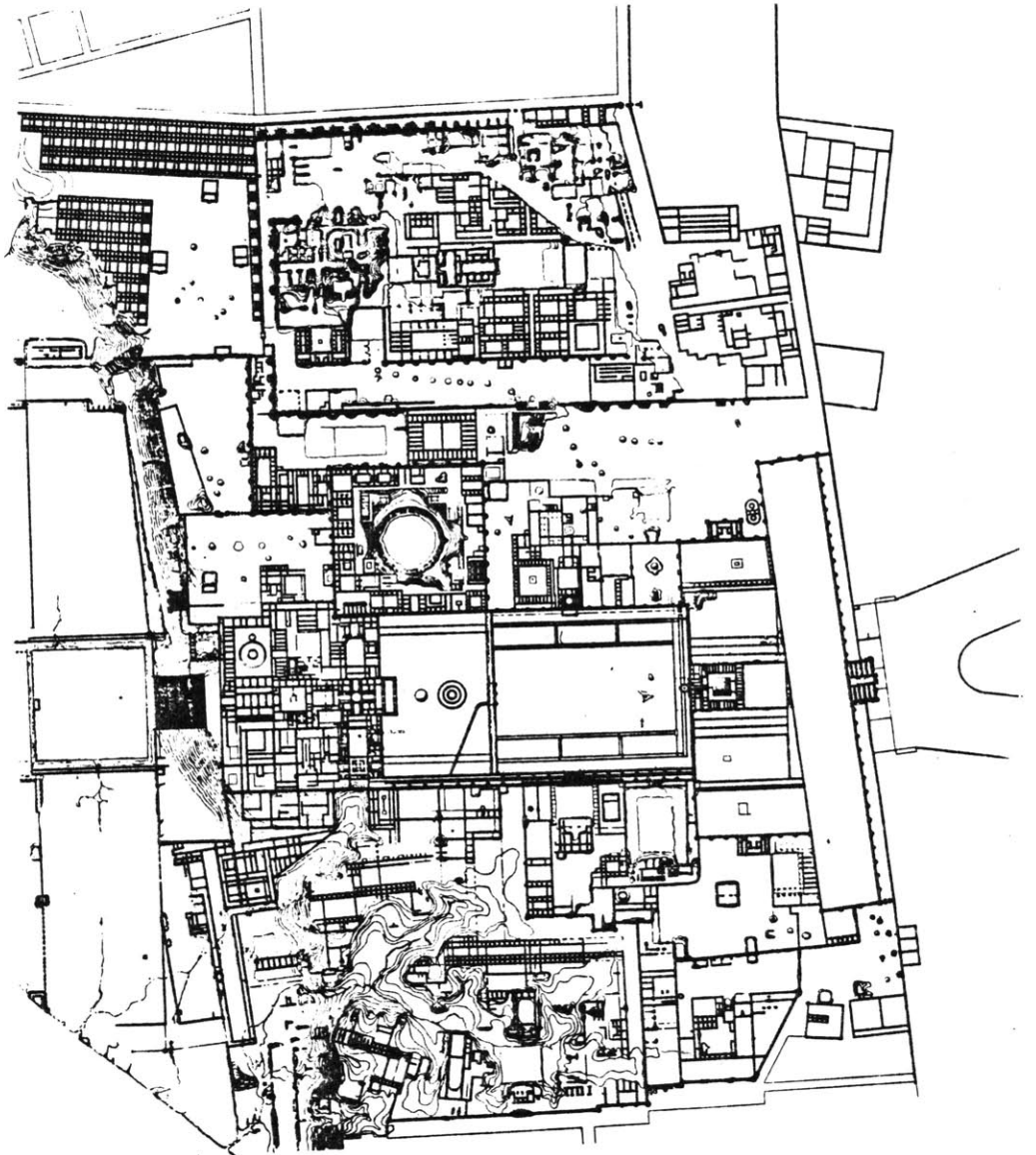
Fig. 10. Samarra'.
Plan of Jawsaq al-Khaqani palace.
Source: Creswell, Early Muslim Architecture, v.II,

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 govern-
ment agencies, they were located along the major street
(al-shari^c al-A^{c}zam), while the general public inhabited
the streets and lanes branching from this major road.[66]

The growth of Samarra' continued after al-Mu^{c}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 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 re-
ported that he redesigned the area at the end of the city's
main street near the mosque, which was layed 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 found al-Ja^{c}fariyah, which he regarded
as a new city, in the proximity of Samarra's north-
western section. Al-Ja^{c}fariyah, 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-Mutwakkil's palaces. On both sides of the street
al-Mutwakkil granted areas to his generals, secretaries,
soldiers and the general public. (Fig. 9). However,
al-Ja[c]fariyah's history is a short one. When al-Muta-
wakkil was killed in 247/861, his son al-Muntaṣir (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 mate-
rials.[68]

To recapitulate the development of Baghdad and Samarra',
one can clearly see the existence of one important phe-
nomenon, namely, the town as the "glorious garment" of
the ruler. The development of Samarra' and al-Ja[c]fariyah
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 Abassids,
the desire to emulate and excel the past had become para-
mount, 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 con-
ceived 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 amṣar 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 congre-
gational 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 amṣar, the markets were located around the congre-
gational mosque. In this respect, Baghdad is an exception.
A major difference between the amṣar towns and Baghdad
and Samarra', however, exists in the way they were planned.
Baghdad and Samarra' were layed out according to a highly
ordered city plan, while the amṣar towns seem to have been
layed 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 trans-
fromed to the point where the city pattern resembled
that of the amṣar 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 amṣar towns, and Baghdad and Samarra' shows that land
was usually given to tribes, army detachments, or indi-
viduals. These grants or khiṭaṭ formed, it seems, the
origin for city quarters. The subdivision of land within

the khiṭaṭ or grants was evidently left to the descretion
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 khiṭṭah.
This process was started by the Prophet himself in Medina,
where he granted the khiṭaṭ for the different tribes and
the dur for individuals. On instruction from ᶜUmar,
this process was also followed by the army generals in
the amṣar 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 khiṭaṭ 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 khiṭaṭ of Jizah closed
in on itself.[69] Another indication of this is the baqiᶜ
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 baqiᶜ 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 shufᶜah (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 khiṭṭah 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
any one 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 dis-

puted 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 raḥbat al-Ḥukm; from the north,
the zuqaq (a lane) leading to the dar of al-Muttalib;
and from the west the street leading to raḥbat al-Ḥukm.[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 sub-
division plan of old Medina (Fig. 11), one would get the
idea that each of these dur, of which Ibn Shabbah speaks

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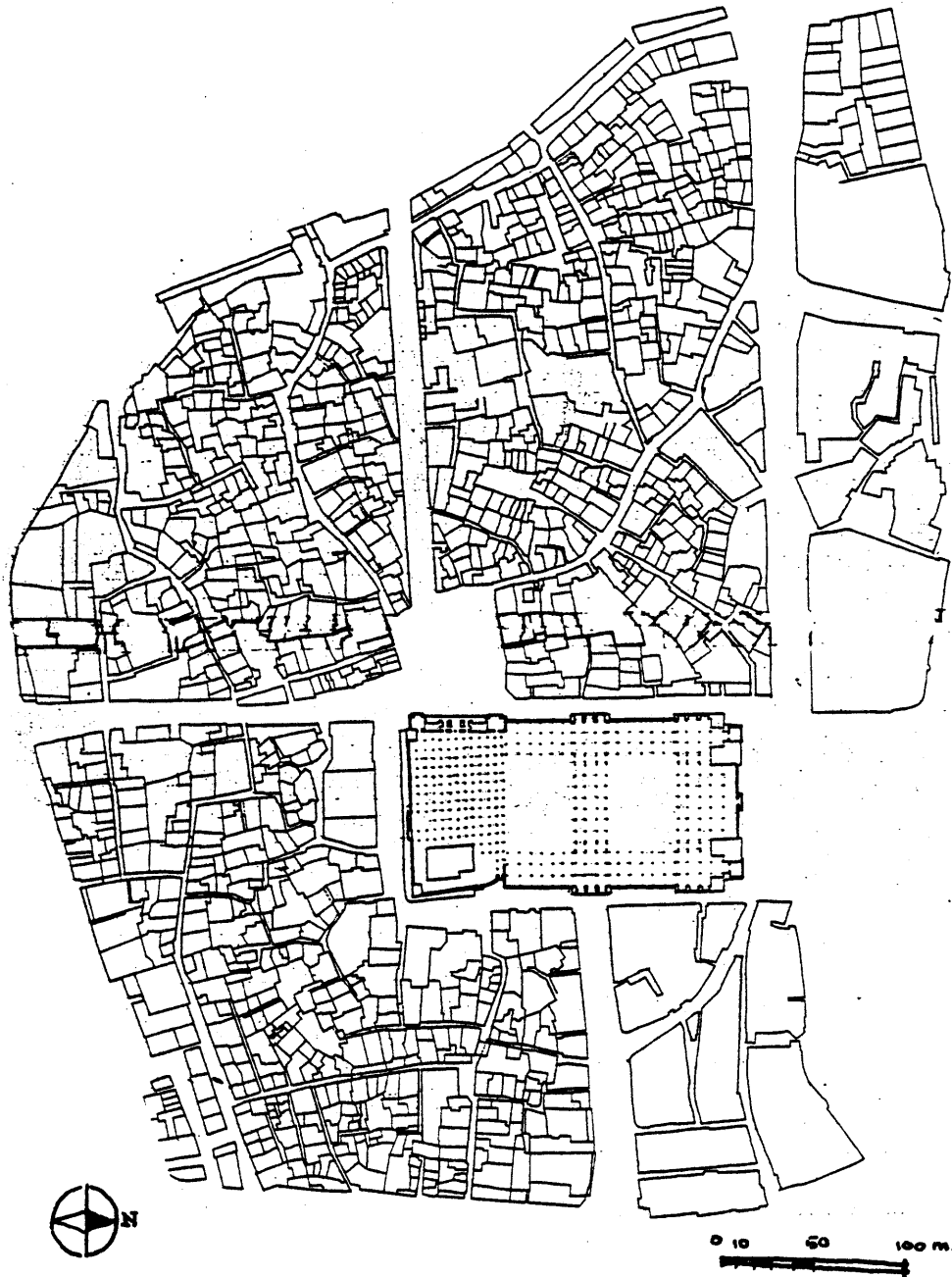
Fig. 11. Medina.
Land subdivision plan of the old city.
Source: Author's reconstruction from several land
subdivision maps of separate neighborhoods. The
maps were the result of survies carried out by the
Medina Town Planning Office, the Medina Department
of Finance, and the author.
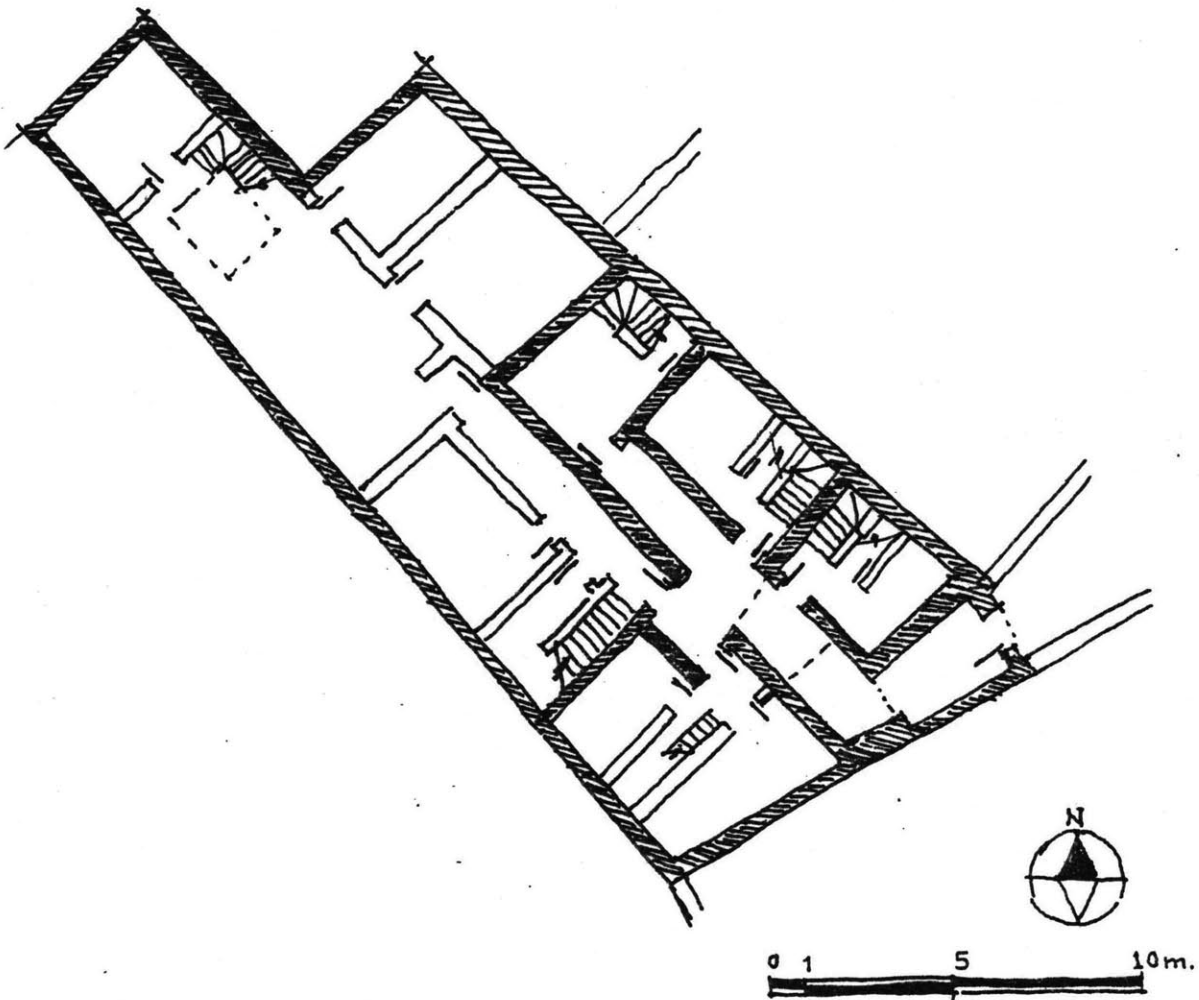
Fig. 12. Medina.
A dar divided into five houses. A cul-de-sac is in
the center to provide access with the original door
of the dar still in place at the begining of the
cul-de-sac. The dar was owned by al-Miknas family
who made it into a waqf which is still named after
the family. For the interest of the waqf the dar
was later devided and rented.
Source: Plan - a survey undertaken by the author.
Socio-economic data - Medina Department of
Endownment; and Medina Town Planning
Office," Dirasat Mantiqat al-Aghawat", a
report prepared for the Ministry of Municipal
and Rural Affairs (1977).

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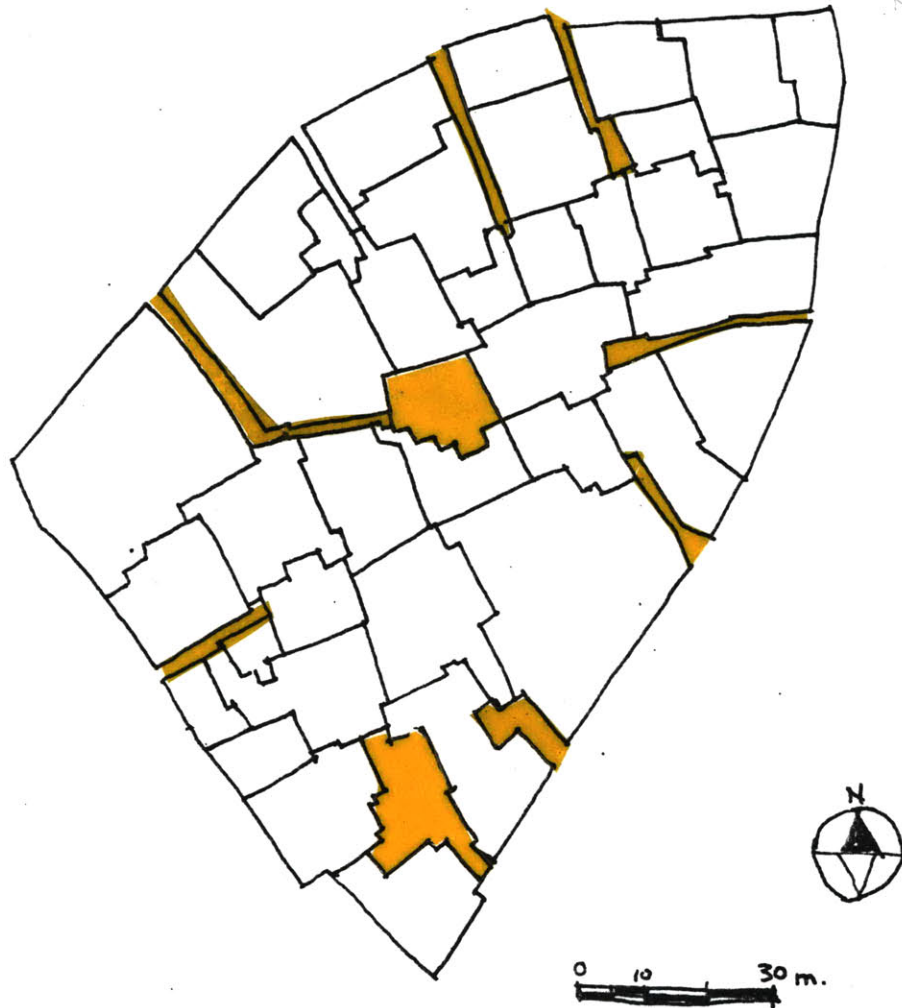
Fig.13.   Tunis.
           Example of an irregular land subdivision. The plan
           clearly indicates that lots have been subdivided
           according to needs and sometimes after being built
           where people weẹre forced to follow building lines
           and thus producing an irregular subdivision.
           Source: Lezine, Deux Villes d'Ifriqiya, op. cit.,
           p. 161.

and which according to his description of _dar_ Subh
reached the size of about half a block, must have encom-
passed 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 per-
mitted. 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^{c}d b. Abi Waqqās which was in the back of another
dar, and he states that _dar_ Sa^{c}d 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^{c}d. [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 _dur_ 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 sub-
division of land in these cities came about. (Figs. 11,
12, 13)

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 individuals 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 owners 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 (qā ͨah) within a ribāṭ, where he had the right of
access through the ribāṭ 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 used
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 towns 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 desig-
nated 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 deve-
loped during the Prophet's time was replicated in the
amṣar 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 khiṭṭah seems to
have also been affected by this conception of
tribal territories. Since the khiṭṭah 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 khiṭṭah if there was
available space. However, within the khiṭṭah, 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 khiṭṭah and to exclude
outsiders from moving in, the inhabitants usually opted
for shuf^cah (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 amṣar 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 prefered to do so explains the non-regular land subdivision in these cities.

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

A. .MARKETS: LOCATION AND ARRANGEMENTS.

"..., [T]he markets or aswaq (plural of suq),
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 suq of the candle merchants, the
dealers in incense and other perfumes. Near the mosque
as an intellectual center we will find also the suq
of the booksellers, the suq of the bookbinders, and, as
its neighbor, the suq 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 suqs which is
regularly roofed and which can be locked and where, there-
fore, 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 Sammara'.
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
suq, 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^{c}b 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 repor-
ted that he said: "This is your suq, 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^{c}awiyah. (41/661-60/680). The same
pattern was followed in the amṣar 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 amṣar 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. ^{c}Abd 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 ^{c}Abd 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^{c}awiyah 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 ^{c}Abd al-Malik b. Marwan, it is reported that his
governor of Egypt built several qaysariyat (pl. of qaysariyah).
Among them were those of al-^{c}asal (honey), of al-hibal (ropes),
of al-kibash (rams), of al-bazz (textile). Al Qayrawan, founded
during the reign of Mu^{c}awiyah 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. ^{c}Abd al-Malik ordered it
to be renovated 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. ^{c}Abd al-Malik (105/724-125/743). He undertook
a huge building program of markets in Medina and in all the
amṣar 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 ambitions
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 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-muṣalla area on the qiblah side and extended all the
way to thaniyat al-wada^C in the north. Ibn Zabalah 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 Zabalah
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 layed 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 sellers 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^{c}qubi 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 separate from each other, with each type of craft having its own lane. As to the markets of Samarra', al-Ya^{c}qubi 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 out 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 Ummayyad 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]

* * * * * * * *

A. Porte extérieure.
B. la soueiqa d'Abrak.
C. le souk aux Toiles d'emballage (s. el-Djanfaṣ).
D.   —   des Brocanteurs (s. eṣ-Ṣaqaṭiyé).
E.   —   du Khan de la Douane (s. kh. el-Goumrok).
F.   —   aux Cordes (s. el-Ḥibâl).
G.   —   vieux (s. el-'atîq).
H.   —   aux Basanes (s. el-Ḥôr).
I.   —   de Damas (s. ech-Châm).
J.   —   du Khan des Chaudronniers (s. Kh. en-Naḥḥâsin).
K.   —   des Cordonniers (s. eṣ-Ṣermâyàtiyé).
L.   —   aux Chaudrons (s. el-Bâṭiyé).
M.   —   des Droguistes (s. el-'Aṭṭârin).
N.   —   vieux de Stamboul (s. Stamboûl el-'atîq).
O.   —   aux Draps (s. el-Djoukh).
P.   —   neuf de Stamboul (s. Stamboûl el-djedid).
Q.   —   aux Foulards (s. el-Manâdil).
R.   —   des Orfèvres (eṣ-Ṣâgha).
S.   —   des Brocanteurs (s. el-Bazardjiyé).

T. le souk des Marchands de bonnets (s. el-Qâouqdjiyé).
U.   —   de la Coudée (s. ed-Drâ').
V: —   du Bain (s. el-Ḥammâm).
W.   —   aux Enchères (s. el-Ḥarâdj).
X.   —   au Savon (s. eṣ-Ṣâboûn).
Y. s. ed-Dahché.
Z. le souk aux Manteaux (s. el-'Ibâ).
A1.   —   du kh. des Pelletiers (s. kh. el-Farrâîn).
B1. s. Qara-Qoumâch.
C1. s. ed-Ḍarb.
AA. le khan aux Soies (kh. el-Ḥarir).
BB.   —   neuf (kh. el-djedid).
CC.   —   des Vénitiens (kh. el-Banâdqa).
DD.   —   des Fabricants de fil d'or (kh. el-Qaṣṣâbiyé).
EE.   —   aux Cordes (kh. el-Ḥibâl. — kh. des Français).
FF.   —   de la Douane (kh. el-Goumrok).
GG.   —   des Chaudronniers (kh. en-Naḥḥâsin).
HH.   —   des Fabricants de vases à traire (kh. el-'Olabiyé).

II. le khan au Bourghoui (kh. el-Berghol).
JJ. la qaisariya des Graveurs de cachets (q. el-Ḥakkakin).
KK. le khan au Savon (kh. eṣ-Ṣâboûn).
LL. la qaisariya des Pelletiers (q. el-Farrâîn).
MM. le khan des Pelletiers (kh. el-Farrâîn).
MM1.   —   (annexes: cour avec entrepôts et bassins pour la manipulation des peaux).
NN. le khan de Khâir-beg.
m. Mosquée dans un khan.
1. la médressé Ḥallâouiyé (ancienne cathédrale).
2. Consulat de France.
3. mosquée.
4. bain public.
5. bain en ruines.
6: latrines publiques de l'émir Ṭâz.
7. médr. Charafiyé.
8. médr. de Yachbak.
9. médr. de Châdbakht.
10. mosquée.
11. mosquée d'Ibn ach-Chiḥna.
Le pointillé indique les espaces à ciel ouvert.

Fig. 14.   Aleppo.
Plan of the central bazaar with its specialized sugs.
Source: Sauvaget, _Alep_, Paris (1941), album.
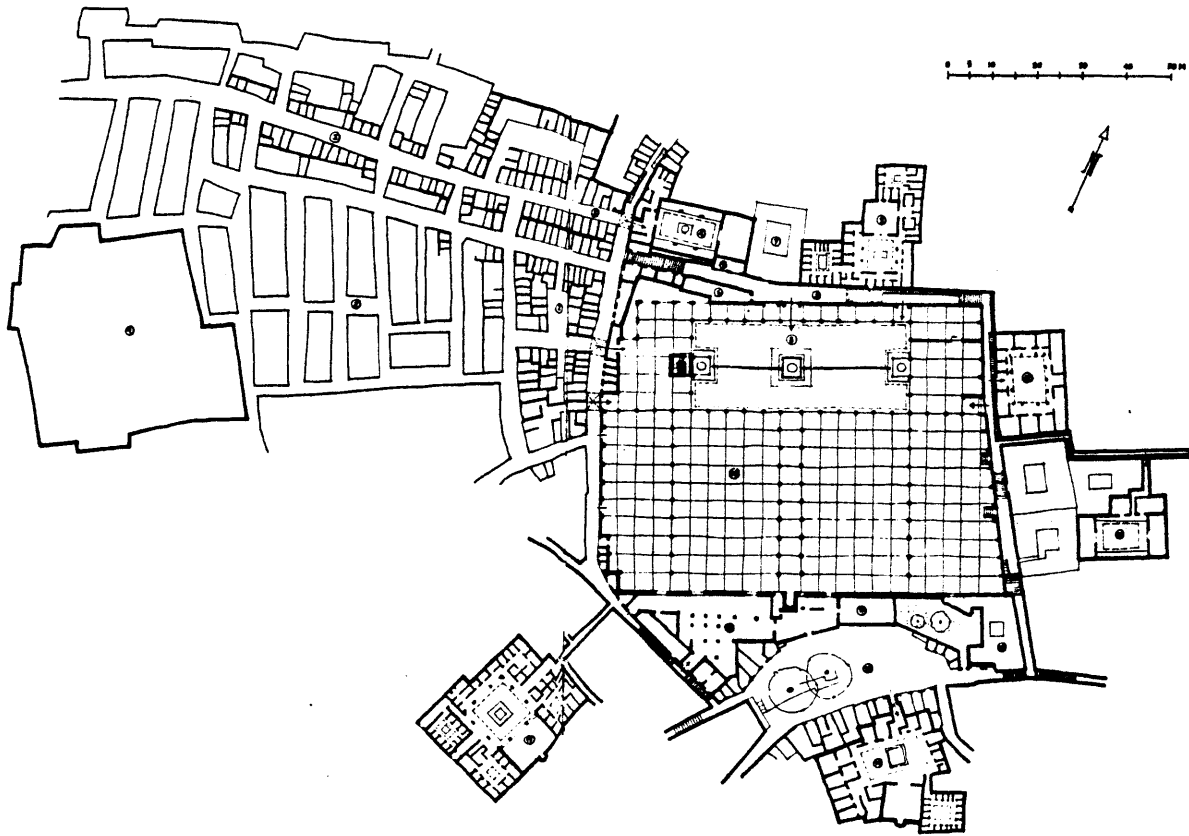
Fig. 15. Fez.
Plan of the main mosque and the various markets in
its vacinity.
Source: Bianca, Architektur und Lebensform, Zurich
(1975), pp. 108-109.
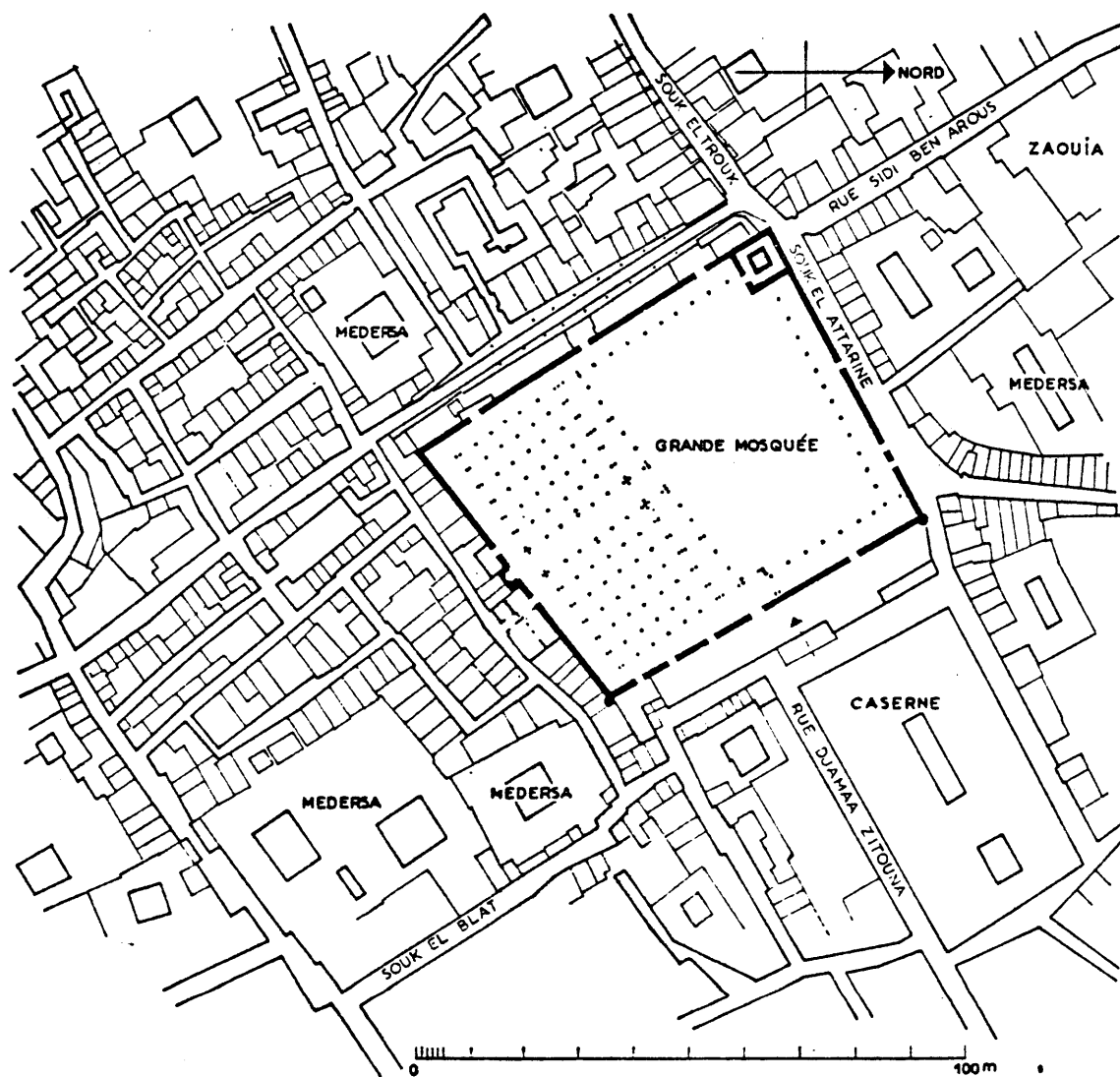
Fig. 16. Tunis.
Plan of the Zaytunah mosque and the various markets
within its vacitity.
Source: Lezine, Deux Villes d'Ifriqiya, op. cit.,
p. 156.

Once the State and the cities began to look at the
markets as a source of income, an 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 and 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
written by al-Sarkhasī (d. 286/899) who assumed the post
of hisbah in Baghdad during the reign of al-Mu^{c}tadid (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 perfumrs 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 manuals specify 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 muḥtasib 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 ser-
vices 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 deter-
mining factor in locating all businesses that were consi-
dered 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 ḍarar wa-lā
ḍirār). The Maliki jurists look upon damage as falling
into two categories: preexisting and new. All the Malikis
agree that a new source of damage has to be removed. As
for a preexisting 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
ḍararun dukhila ᶜalayh). 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 tan-
neries, then the activity does not have the right to con-
tinue. 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 hypo-
thetical 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 matters." 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 preexisting sources was
treated separately. Two types among the preexisting 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 [C]Abd al-Rafi[C] (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 [C]Abd
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 preexisting 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 or 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 fire-
> place and to connect it to the chimney of the exis-
> ting 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 through-
out 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 ^{C}Itab
and Ibn ^{C}Abd al-Ghafur "should be stopped and one should
be compelled to cover them in order not to annoy his neigh-
bors, 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 arwā was new
and so told the judge. The judge then ordered both the
arwā 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 ascer-
tain 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 demolished and the door 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 instnace, 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 ᶜAbd al-Rafiᶜ, the judge of Tunis,
states that "one should be prevented from establishing a
stable beside his neighbor's house because . . . [the ani-
mal'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 inha-
bitants' 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 jurists 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 gran-
ting those which caused harm or damage the right to con-
tinue when they originated before the surrounding proper-
ties were developed while preventing new ones from taking
place in areas where neighbors would object to them,
Muslim jurists 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, then 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 peri-
pheries within the Arab-Muslim cities whenever expansion
and physical growth takes place. This was the case in

Aleppo, where places of production moved from areas within the central bazaar to an eastern suburb, and later to the northern Christian quarter. [30]

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 (shari[c], ṭarīq nāfidh, ṭarīq al-muslimīn), the public way in which all people have the right of way, from the lane or cul-de-sac (ṭarīq ghayr nafidh, sikkah, zuqāq), which most

jurists consider a private road appertaining to its surrounding properties. A notion complementary to this is that of the finā', 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-fawaṣil, pl. of
> faṣil] and projections [al-ajniḥah, pl. of janaḥ],
> 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 te-
> thering of animals is forbidden except as required for
> 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

jurisdictions or opinions of the Muslim jurists. Even
jurists belonging to the same shcool 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[c]ah
(d. 136/753) was asked whether or not an individual who had
build a mosque in his house could encroach on the street.
Rabi[c]ah 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 en-
croached 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 thet 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-Khattab (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 ^CAbd al-Rafi^C 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 (shari^C al-Mu^Cizz). He is also reported to have asked the Shafi^Ci 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, thus turning
the lane into a cul-de-sac on two sides.[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.

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 (Figs. 1&3). The street and land subdivision plan of old Medina is another example (Fig. 11).From there one can point out many instances that were probably the result of such a practice (Figs. 18&19).

2. Width of Streets and Lanes.

among the residents of Arab-Muslim cities. 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 should leave for the width of their roads and their aziqah (pl. of zuqaq) 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]
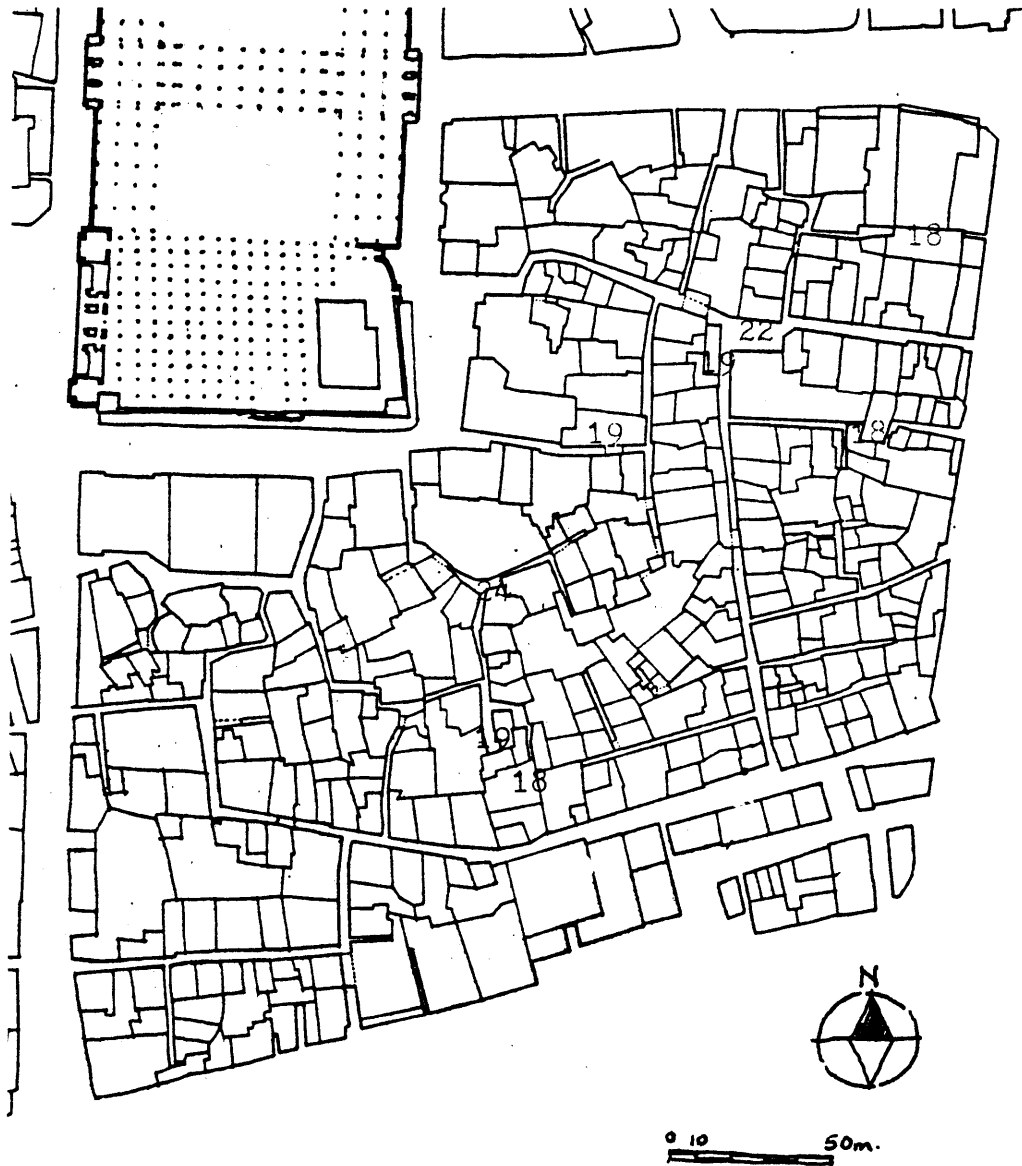
Fig. 17. Medina - <u>al-aghawat</u> neighborhood.
     22   Locations of examples illustrated in
              figures 18, 19, 22, and 24.

              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.
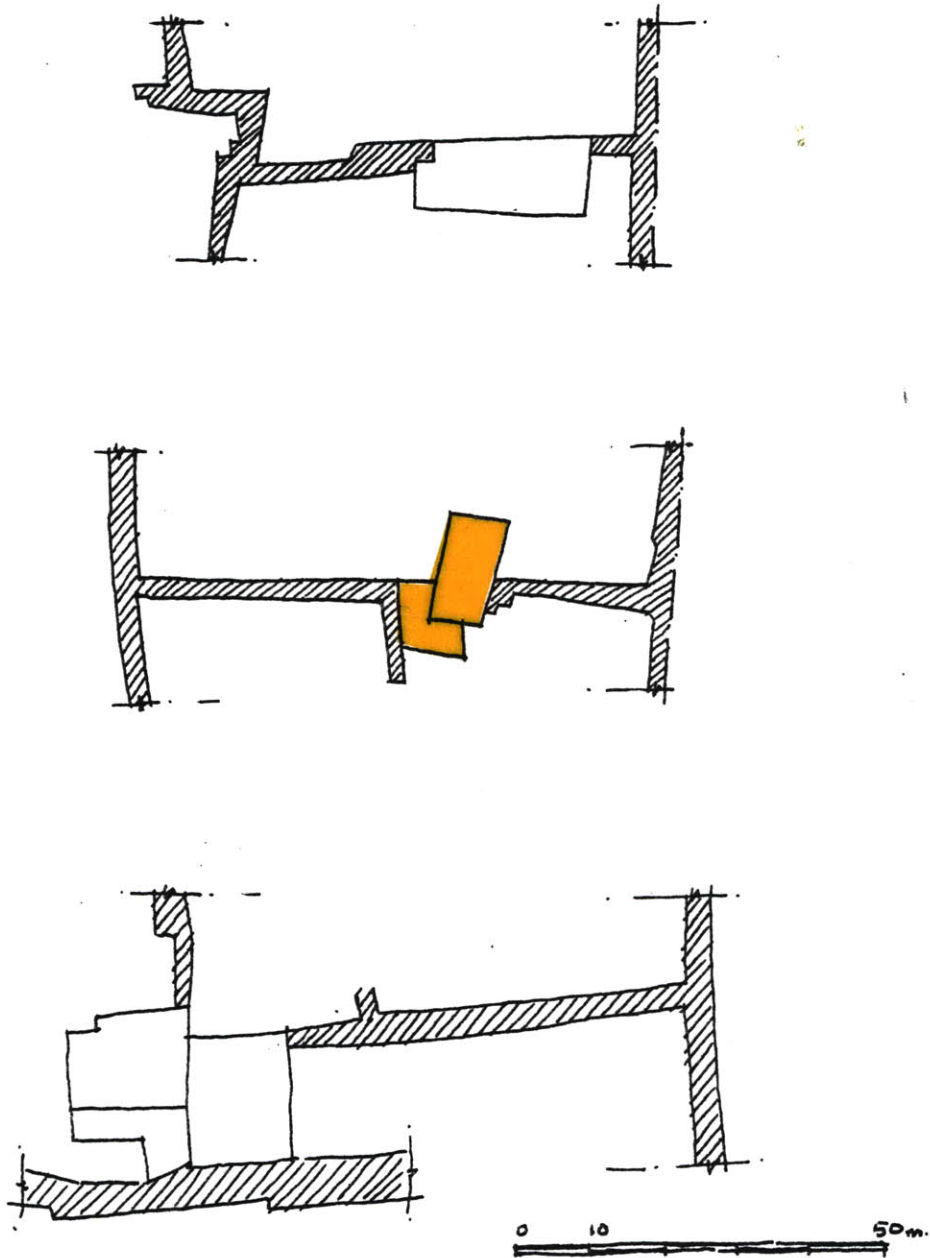
Fig. 18. Medina - street closing.
Examples of cul-de-sacs which seem to have
originally been through lanes. (For
locations on the land-subdivision plan see
Fig. 17.)

Houses believed to have encroached
on the street.

Street proper.
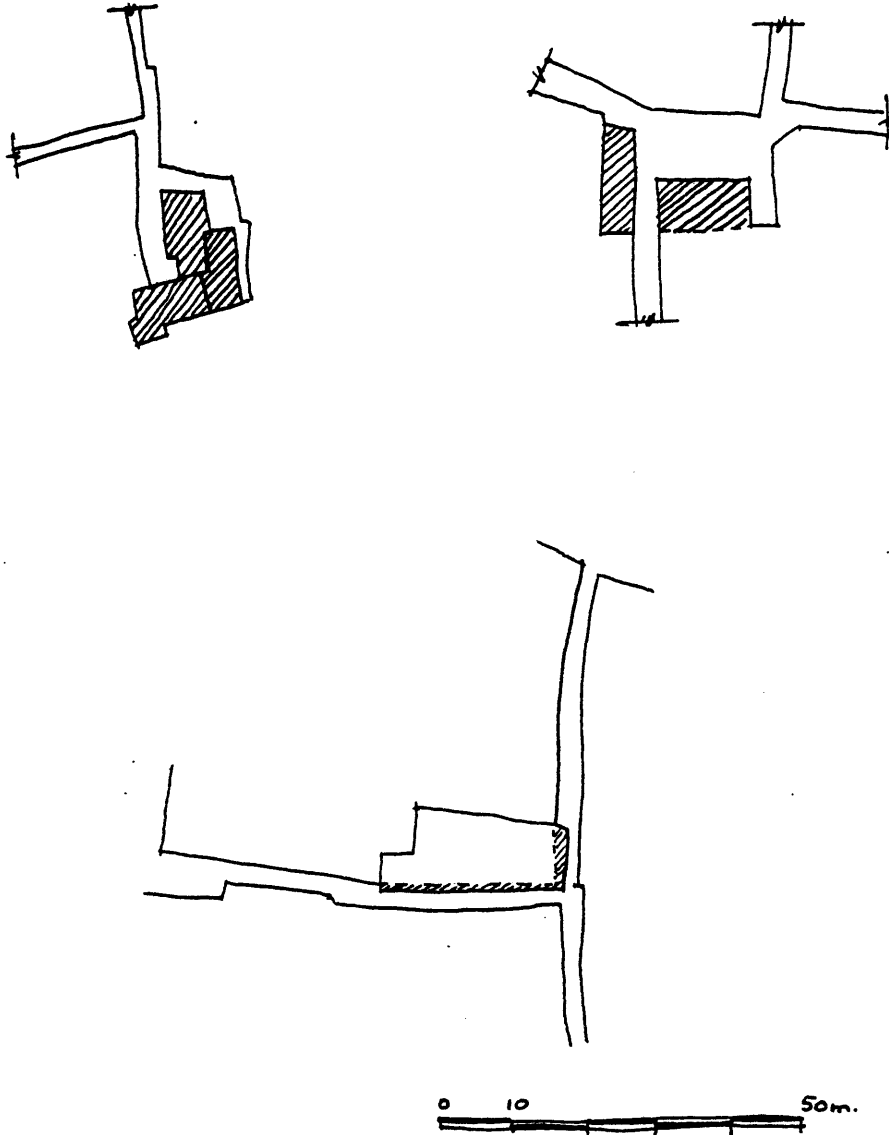
Fig. 19. Medina - encroachment on public space.
Examples of houses believed to have encroached
on the street proper or on public open spaces.
(For location within the city see Fig. 17.)

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..."

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 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 owner did not agree
to the act. However, Ibn al-Rami emphasizes that it had
been the custom (wa al-darb jara al-^{C}Urf bihi ^{C}indana fi
al-shawari^C) 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. This 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

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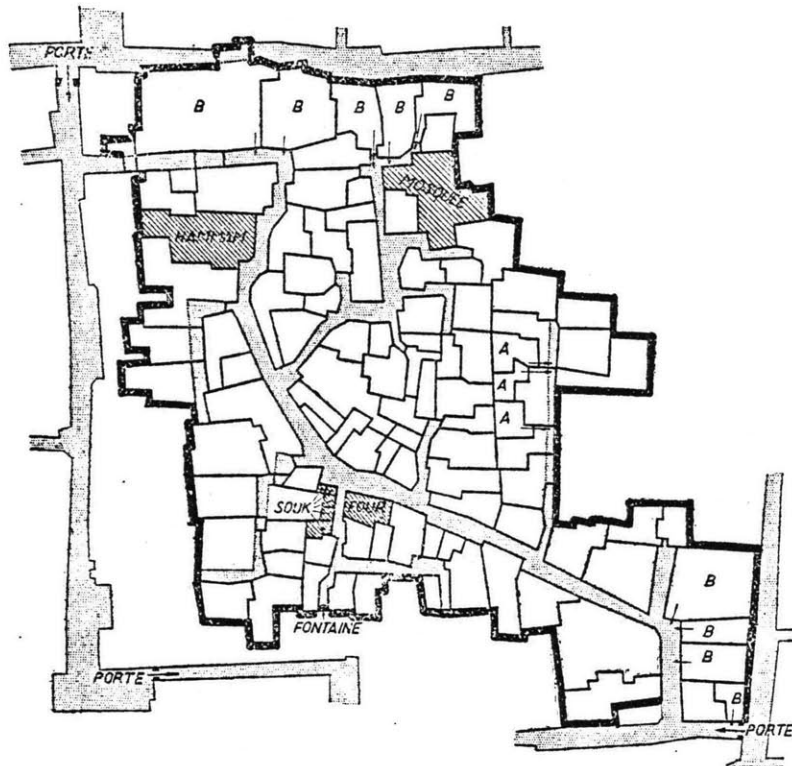
Fig. 20. Damascus - the gate system.
Plan of a quarter showing gates built in through
lanes.
Source: Sauvaget, "Esquisse d'une histoire de la
ville de Damas", Revue des Etudes
Islamiques,(1934), p.452.
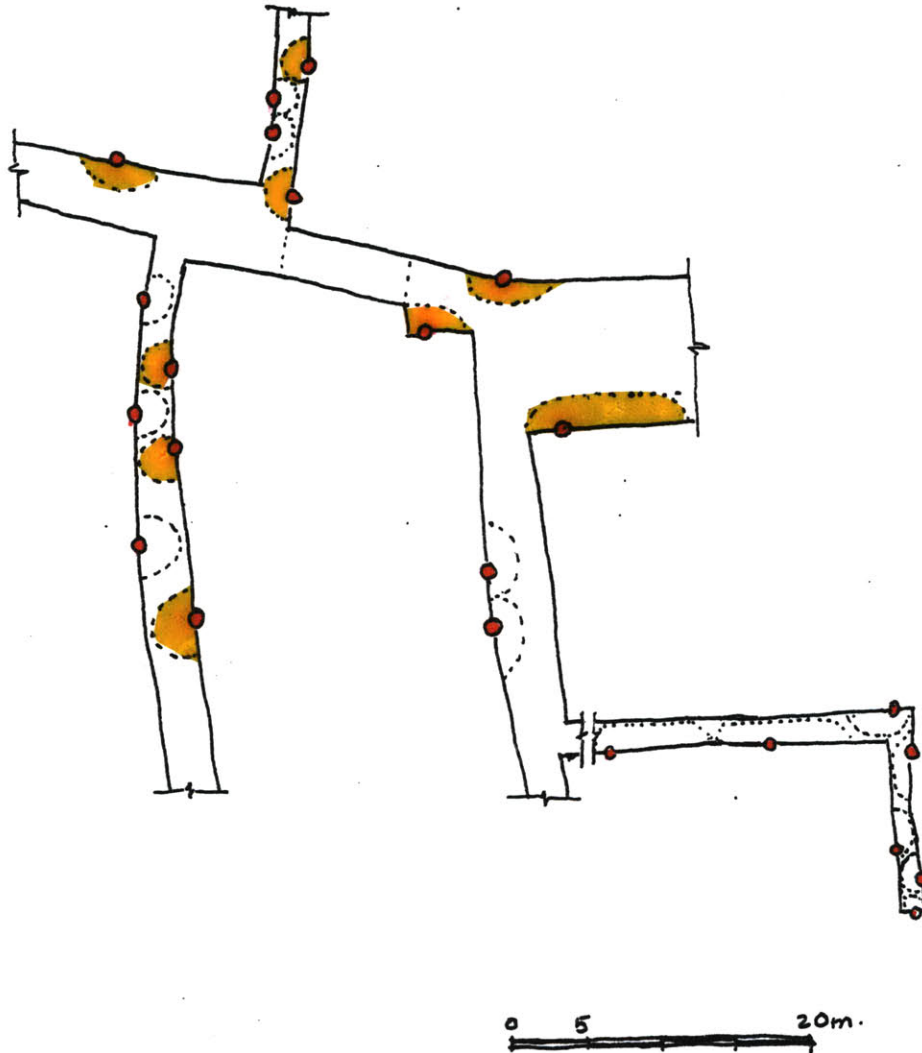
Fig. 21. The fina'.
   An illustration of the concept of the fina' as
   elaborated by the jurists. In a main thorough-
   fare the fina' is the part near the house door
   and it does not extend to more than half of the
   width of the street. In lanes and cul-de-sacs
   the fina' covers the whole area abutting the
   house and it usually extends to the whole lane's
   width.

         Areas looked upon as a fina'.

spaces (fig. 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 condi-
tions were fulfilled. Ibn Nafi[c] (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 out 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
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, Fig. 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 markets of
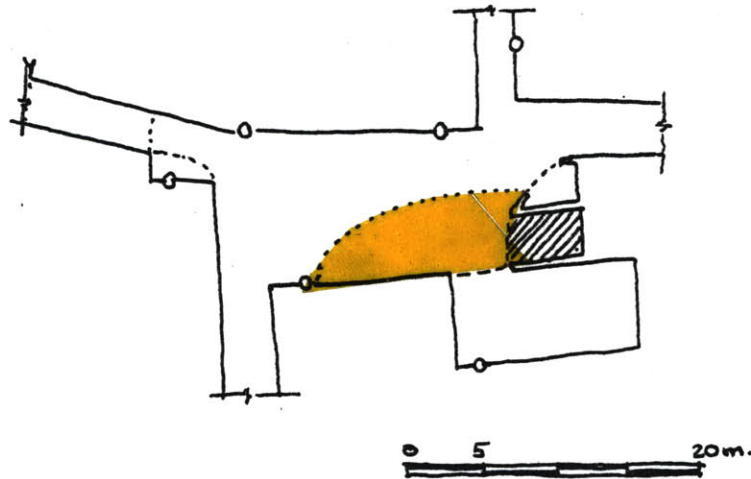
Fig. 22. Medina - barhat al-aghawat.
A small coffee shop utilizing most of the fina'
which this shop shares with two neighboring
houses. Other houses, separated by the street,
seem to have nothing to do with this fina'.
(For location within the city see Fig. 17.)
▨▨ Coffee shop proper.
⌒ Area utilized as a fina'.

Fig. 23. Medina - the bazaar.
Shops in the bazaar of the old city using their
frontage as a <u>fina'</u> to exhibit and to sell their
goods.
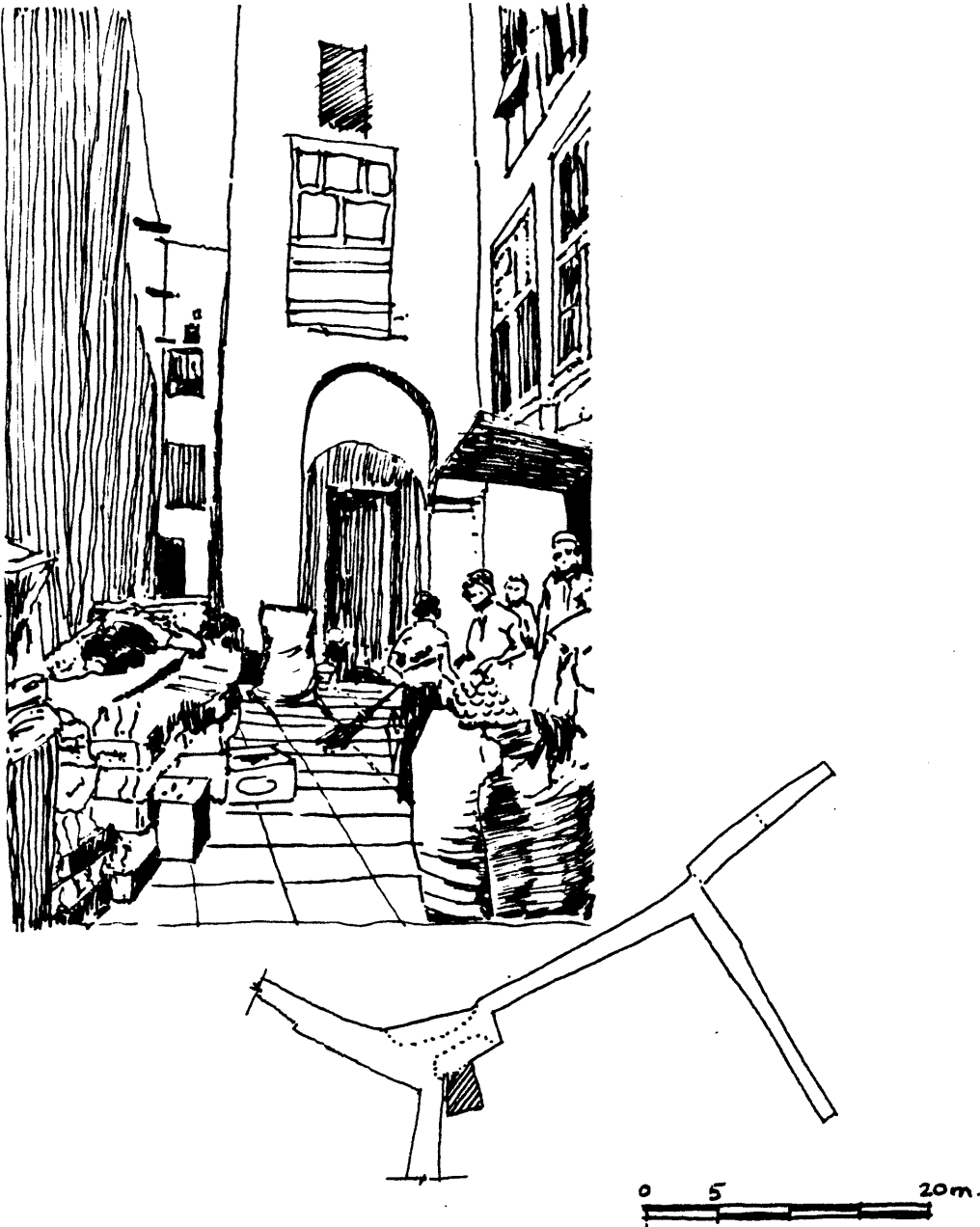
Fig. 24. Medina - shops within residential areas.
A small shop in one of the lanes in the
aghawat neighborhood. The shop utilizes
the wholewidth of the lane leaving only
a passage-way in the center of the lane.
(For location within the city see Fig. 17.)

▨▨▨ The shop proper.
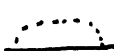
Area utlized by the shop in the
street proper.

Fig. 25. Medina - the fina' 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 ceromonial, social, and recreational
purposes. In the past, these spaces used to
have gates with doors on their entrances.
(upper) hawsh al-jimal.
(lower) hawsh al-turki.

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 (Fig.23).

As for lanes and cul-de-sacs, the case seems to be some-
what 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
(Fig, 24). As for domestic activities, these spaces are
conceptualized as semi-private areas used by all the
surrounding residents for ceremonial or recreational
purposes. (Fig. 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 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[c]is to allow the building of a bench or the

planting of a tree near the door of the house and within the fina'.[25] Also, the cases of encroachment of the afniyah and the closing of lanes in Medina are another example. (Figs 18, 19)

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

Related to the concept of the fina' is the projection on top of the street. Projections and second floor chambers built over the street are dominant features of Arab-Muslim cities. (Fig. 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 ᶜaskar (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]

The concept of the _fina'_ 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."

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.

Fig. 26. Medina - projections on the street proper.
　　　　(right) the mashrabiyat (pl. of mashrabiyah)
　　　　　　　　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 Fig. 17.)

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 accomodate 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 resi-
dents 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. cAbd 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 sus-
picion, 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 ᶜUmar b. al-Khattab
in regard to a case that took place in al-Fustat during his
reign. It is reported that he wrote to ᶜAm r b. al-ᶜAs
to demolish a ghurfah (room) that ᶜUmar 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 ᶜAmr 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 cwn 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 preexisting opening, Ibn al-Qasim had a different opinion.
He was asked whether or not an individual should be com-
pelled to seal preexisting 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 sourse as preexisting the object on which damage was being inflicted and therefore said it should be left as it was, while Mu tarrif and Asbagh looked at it as a source of damage that could not be tolerated even if it preexisted 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 preexisting 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 judgement as well as the actual practice was to prevent intruding and uncovering. This, he says, was the opinion of the judge Ibn [c]Abd al-Rafi[c], 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-Mu[c]tadid'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 in (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 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 pro-
scribed, one having no right to open it..."[45] At a
later time, however, Ibn al-Rami stated that the stairs
to the roofs [Matali^c al-Sutuh, pl. of Matla^c] are not
to be proscribed unless their doors look upon the neigh-
boring 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 ynalu 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 mushtarakah bayn jami^c 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 the exiting 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 thoroughfares. He also added that this was the
decision of Ibn ^{c}Abd al-Rafi^c 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]
(Fig. 27).

Judging by our actual cases as well as the jurists' dis-
cussions, the issue of privacy seems to have been a very
sensitive one to the residents of Arab-Muslim cities.
The necessity of preventing someone 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. (Fig. 28)

Although building heights were consistent throughout each
neighborhood in Medina, variety existed in house type and
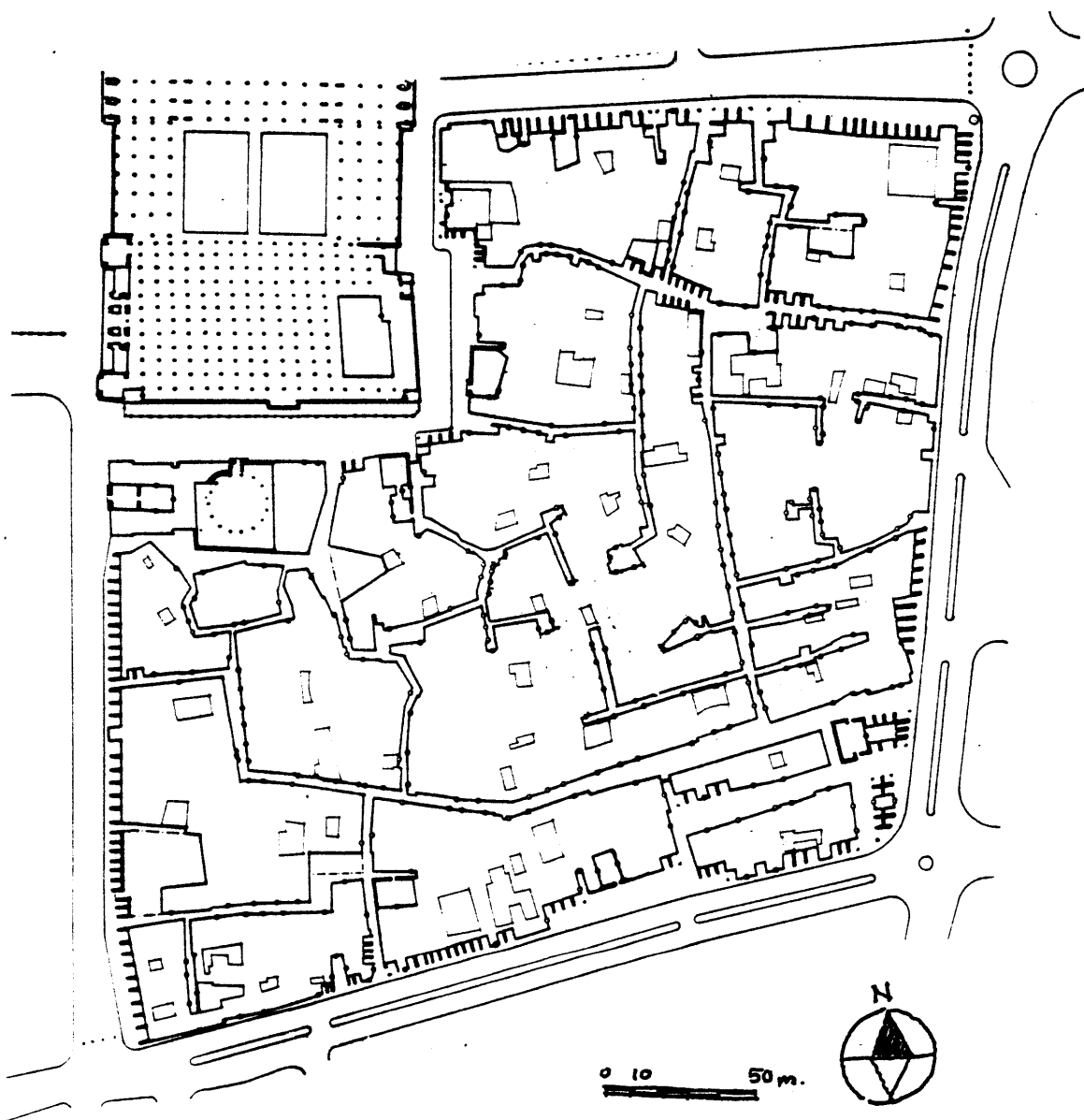
Fig. 27. Medina - al-aghawat neighborhood.
Plan showing the locations of the doors of
houses on the streets.

—o—   indicates the door's location.

Fig. 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.
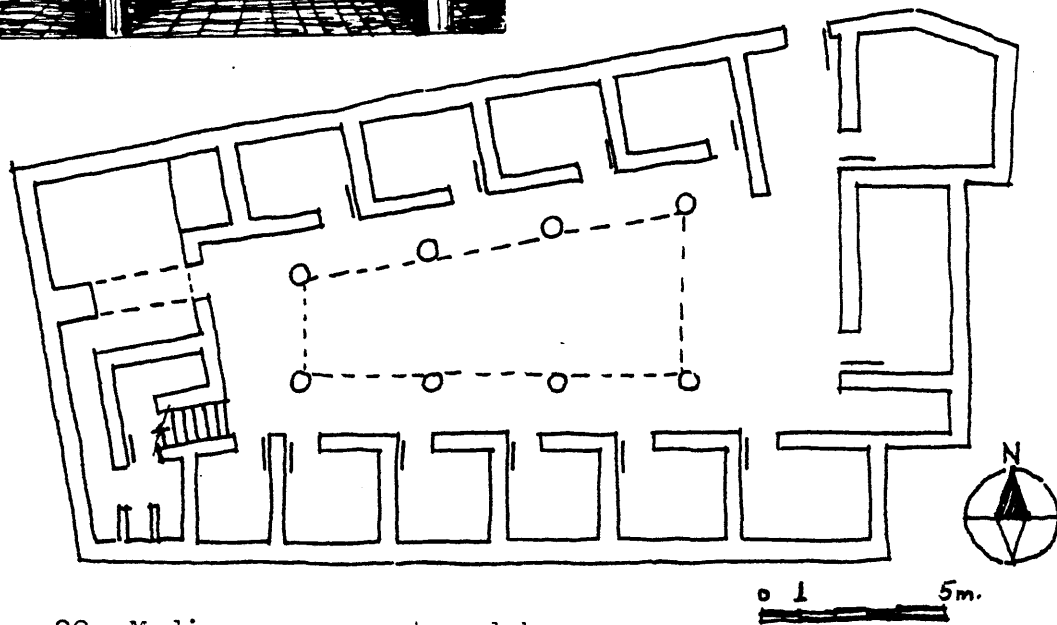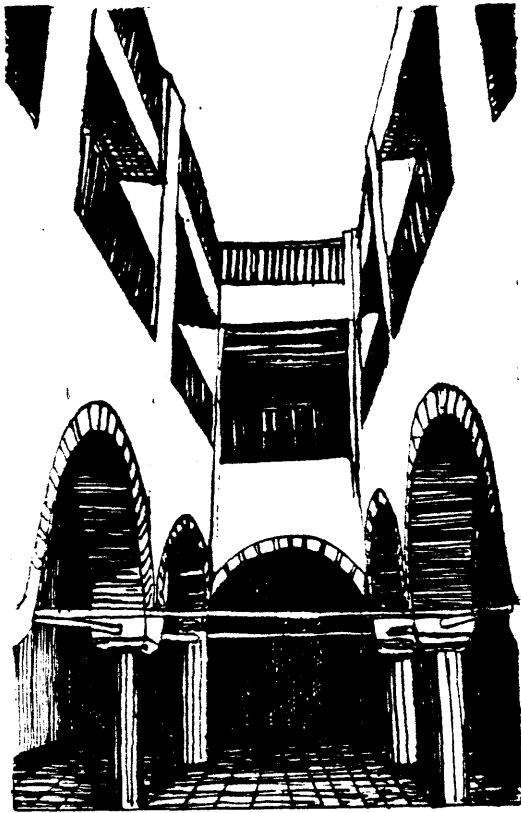
Fig. 29. Medina - a courtyard house.
        (upper) view from the courtyard.
        (lower) ground floor plan.
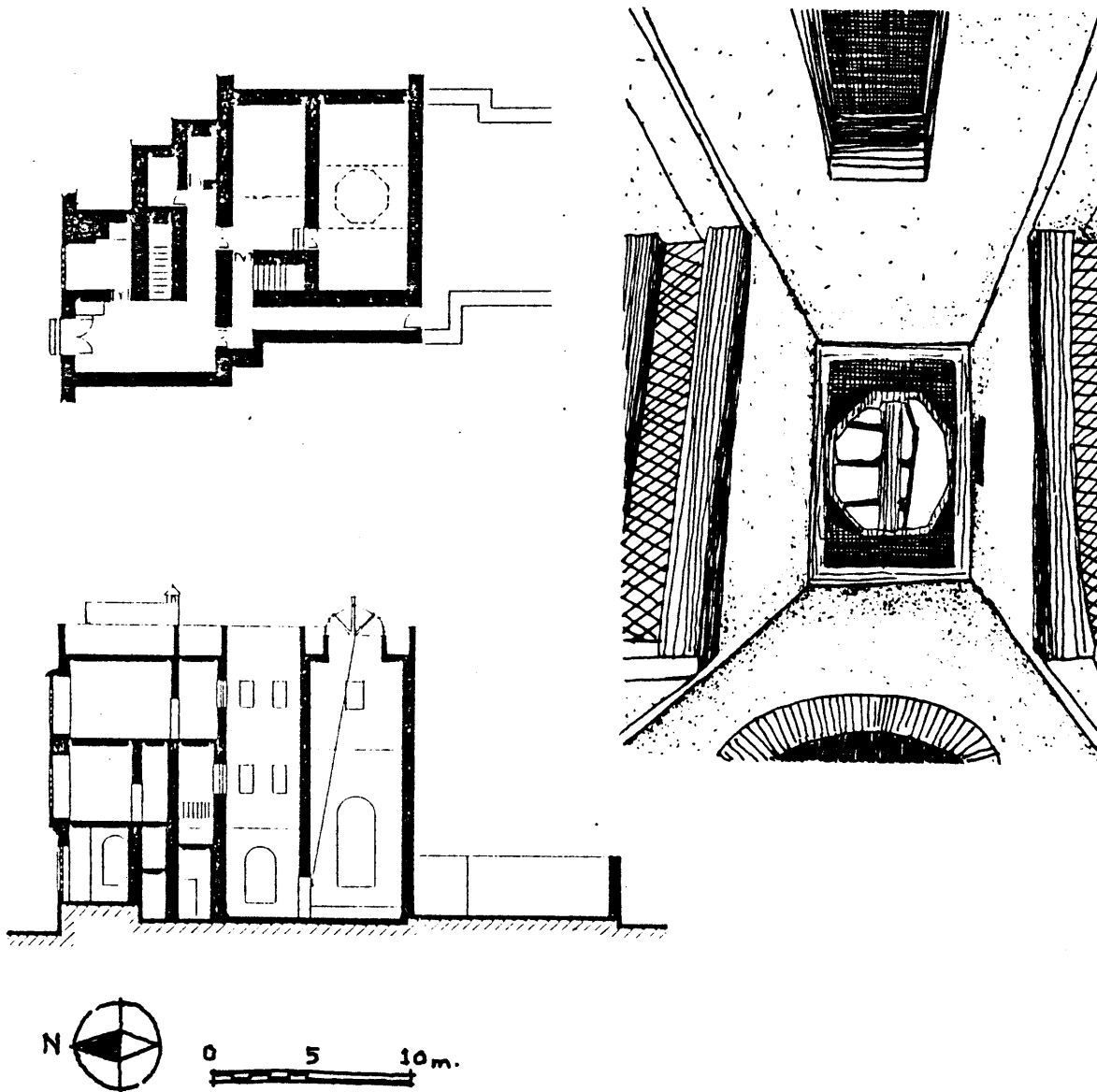
Fig. 30. Medina - a qaᶜah house.
        (upper left) ground floor plan.
        (upper right) view of the jala' looking up from
                the floor of the qaᶜah. (this veiw is
                from another house in Medina.)
        (lower) section.
        Source: (plan and section) M. Saleh, The Develop-
                ment of Energy Efficient Building Systems,
                a doctoral dissertation, Univ. of Michigan,
                (1980), p. 146
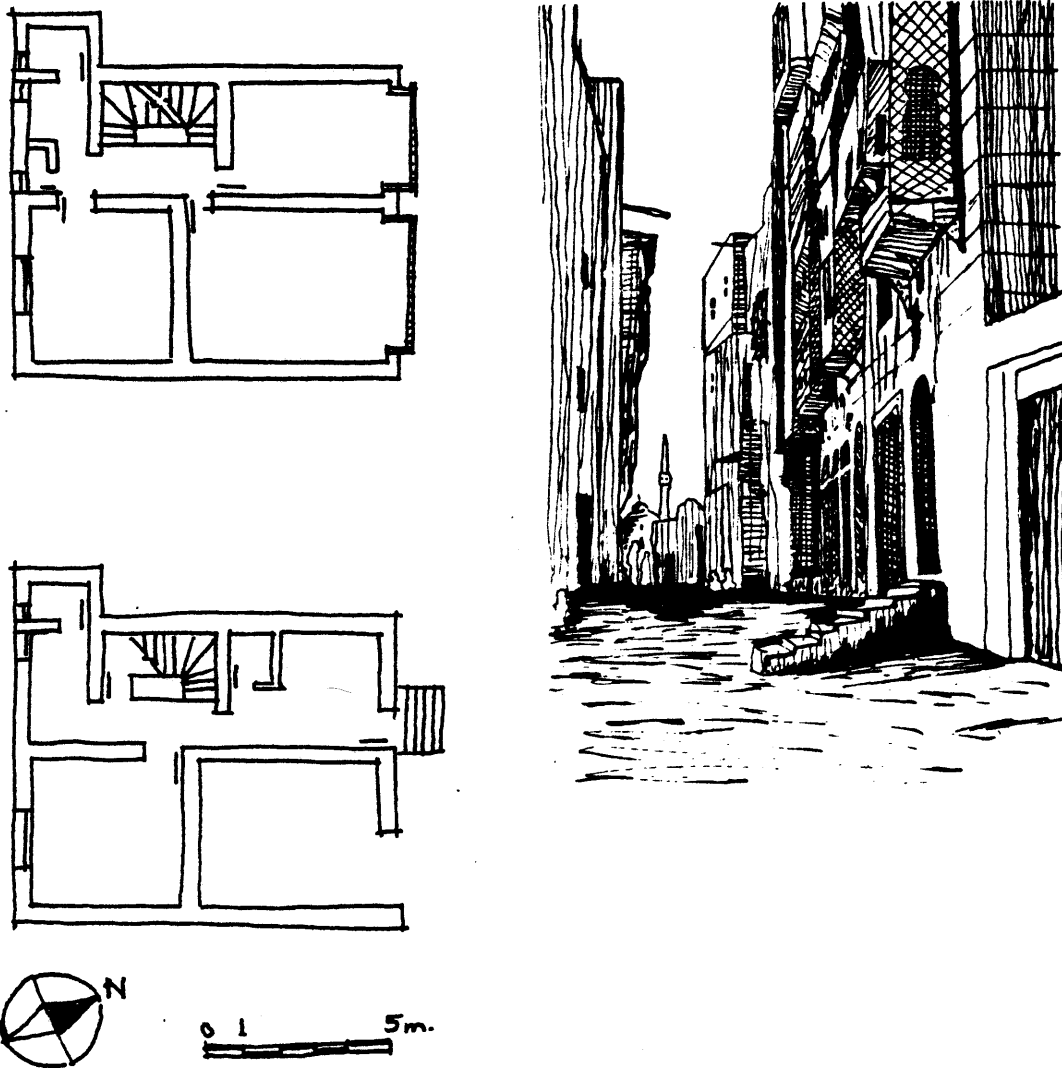
Fig. 31. Medina - a mashrabiyah house.
(lower) ground floor plan.
(upper left) third floor plan, second and fourth
floor differ slightly.
(upper right) view of al-sahah street with the
mashrabiyah house on the right side in
the foreground.

form. The dominant type in Medina seems to have originally
been the courtyard house which is typical of other Arab-
Muslim cities (Fig. 29). However, in later times, two
other types emerges: the qa^{c}ah house and the mashrabiyah
house.

The qa^{c}ah house is, in simple terms, a house with a small
covered courtyard in the center, usually known as a qa^{c}ah.
The qa^{c}ah 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.(Fig. 30)

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

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
enighbor'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 sun light 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 neighbot'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 pre-
viously stated case from al-Fustat, where [c]Umar 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 cases 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 Collpase.
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 be agreement
or by force.[60]

In practice, Ibn al-Rami related that he used to be
ordered by the judge, Ibn ^{C}Abd al-Rafi^C, 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 ^{C}Abd al-Rafi^C 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 ^{C}Abd al-Rafi^C 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 ^{C}Abd al-Rafi^C
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 share-
holders seems to have been used as an excuse not to under-
take 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 inca-
pable of rebuilding, or where the building was a 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 use. 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 for
the use of the 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 prosecuter or a 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.

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 so. However, the nu-
merous 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 dis-
cussed 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 re-

presentative of the authorities, invested with the power
of jurisdiction (qada'). His responsibilities include:

> ". . . in addition to the settling of suits,
> certain general concerns of the Muslims, such as
> supervision of the property of insane persons, or-
> phans, bankrupts, and imcompetents who are under the
> care of guardians; supervision of wills and mort-
> main donations and of the marrying of marriageable
> women without guardians to give them away, ...
> supervision of public roads and buildings; examina-
> tion of witnesses, attorneys, and court substi-
> tutes, to acquire complete knowledge and full
> acquaintance relative to their reliability or
> unreliability. . . . " (2)

Al-Mawardi (d. 350/1058) elaborates more on the qadi's
responsibility to supervise public roads and buildings.
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. . . . [T]hese 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^{c}rifah (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 ahl 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-Ghammas responded, "you are the experts 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 experts'] honesty: when you deem that damage,
vibration, and dampness cease to reach the wall."[9] Re-
garding 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 super-
vision, all actions or transactions regarding those foun-
dations 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 ahl 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^{c}allim); 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) accor-
ding 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
twofold 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 cate-
gories; those of a religious, those of a worldly, and those
of a mixed character. Within the first category, promo-
ting 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. Re-
garding 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

muḥtasib 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 repre-
hensible acts, or to commercial transactions was of a
religious nature. Matters of worldly concern are exem-
plified by such acts as encroaching on a neighbor's boun-
dary, or extending beams beyond one's outside wall. In
these matters the muḥtasib'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 muḥtasib 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 muḥtasib could intervene of his own accord and
he was at liberty to deduce principles of decision from
custom (^{c}urf) as distinct from revealed law (shar^c).
Also of worldly concern was the responsibility of the
muḥtasib to supervise the classes of professional crafts-
men, especially where their avocation required a special
regard for competency or incompetency, for honesty or dis-
honesty, or for the good or bad quality of their work.
Matters of both religious and worldly character were those
such as not overtopping other buildings. ". . . A man who
heightens 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 muḥtasib to that of the

qadi, al-Mawardi states:

> ". . . The jurisdiction of <u>hisbah</u> corresponds to
> that of the <u>Kadi's</u> court in the right to hear
> and adjucate 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 <u>Kadi</u>. 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 <u>Muhtasib</u>'s powers exceed those
> of a <u>Kadi</u>: he is entitled to examine matters within
> his jurisdiction in the absence of a complainant,
> whereas a <u>Kadi</u> must have a litigant competent to
> complain before him, otherwise he is exceeding his
> jurisdiction. And, for the purpose of repressing
> wrong, the <u>Muhtasib</u> 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 <u>Kadi's</u>
> power being based on justice, his characteristic is
> a sense of responsibility, and for him to wield the
> stern powers of the <u>Hisbah</u> would be unbefitting
> . . . ". (16)

The duties of the <u>muhtasib</u> 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
<u>qadi</u>, the only municipal officials in the Arab-Muslim
city.[17]

B. PRINCIPLES AND PROCESSES INVOLVED IN SHAPING THE
TRADITIONAL PHYSICAL ENVIRONMENT.

1. <u>Sources of the Law and Social Conventions.</u>

Most of the themes invoked in the decisions on our
cases fall within the jurisdiction of the shari^{c}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 terri-
tories, and to regulate building heights and the opening
of doors and windows. Another theme invoked was that of
having regard for the public interest (maṣlahah) 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-maṣalih al-mursalah (a theme
which gives priority to the public welfare regarding
matters on which the law is not specific) as one of the
uṣul (pl. of aṣl, source or foundation) 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 (^{c}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
judgement of actions is the ^{c}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] ^{c} urf, therefore, represents custom as distinct from revealed law (shar ^{c}). Some of the themes invoked to decide on our cases fall within the acknowledged ^{c}urf 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 ^{c}urf. 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 ^{c}ala 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 sources 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, inasmuch 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 dis-
cussed 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 neigh-
bor on the ground that he was denied his right to privacy.[20]
The judge had to decide the case on the basis of the for-
mulated 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. <u>Social Conventions vs. Physical Conventions.</u>

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 sun-

light 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 Figs. 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]

RELIGIOUS & CULTURAL
IDEALS

|

THEMES & PRINCIPLES

|

LEGAL THEORY

|

CONVENTIONS OF
USE (CU)

CONVENTIONS OF
PHYSICAL
ENVIRONMENT (CE)
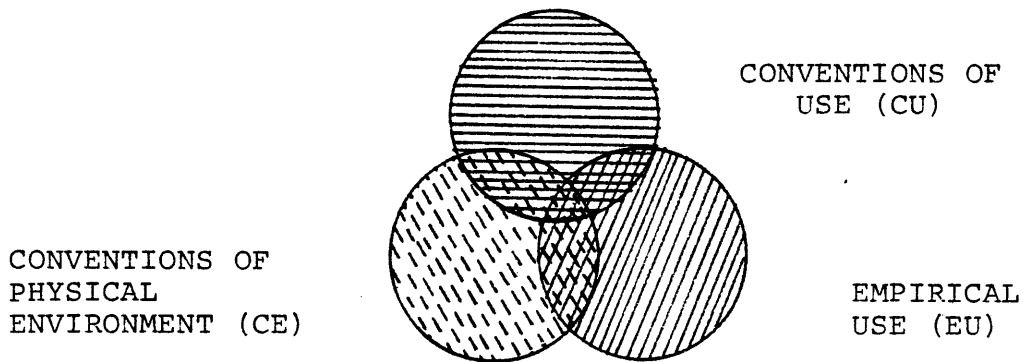
EMPIRICAL
USE (EU)

THE PROCESS IN TRADITIONAL
ARAB-MUSLIM CITIES

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

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PART II.   CONTEMPORARY PROCESSES AND REGULATIONS:
          THE CASE OF SAUDI ARABIA

Contemporary urban form in Arab-Muslim cities differ mar-
kedly 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

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,
"Background", 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 Institu-
tionalization of the System", we will show how these two develop-
ments 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
artificial 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 Bahrein.
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 prepare land subdi-
vision plans and stake 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 tradi-
tional 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.)
(Fig. 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 not originally subdivided into plots, land speculation was
oriented toward entire blocks, which were acquired either by
purchase or by grant.[8]
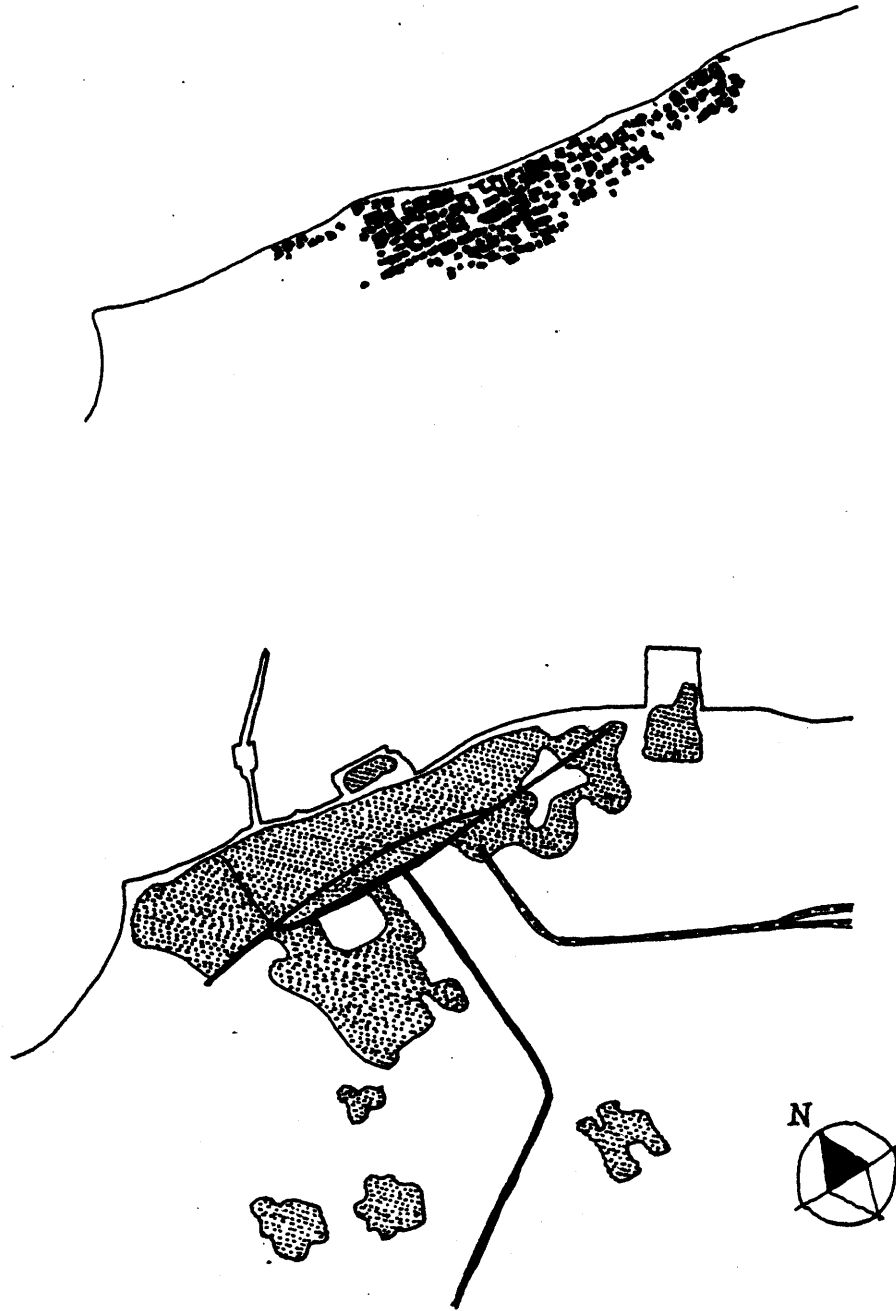
Fig. 32. Dammam.
   (upper) 1934, old Dammam.
   (lower) 1956, the grid plan of ARAMCO on the west and
           south sides of old Dammam.

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

Original block   First step   Second step
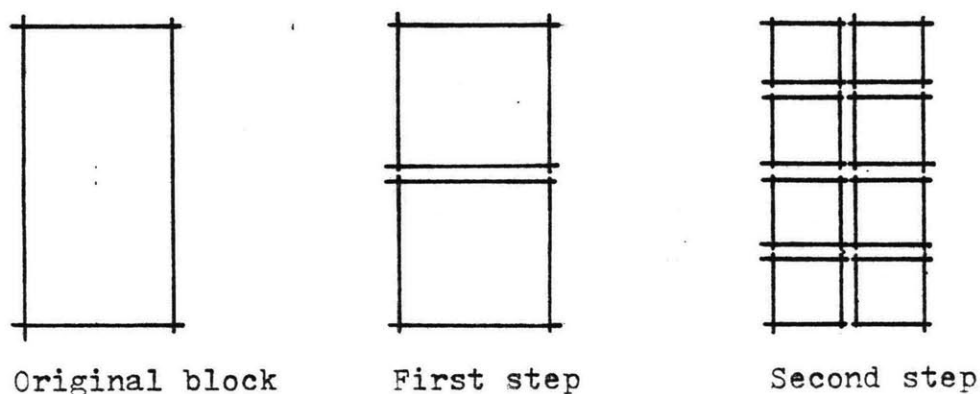
Fig. 33. Dammam-the evolution of the block in the Aramco
        grid-plan.
        (upper) Shiber's account of the evolution of the
               blocks.
        (lower) Areal photo showing original blocks that
               have been divided into six smaller ones.
        Note that there is a discrepancy between Shiber's
        account and the areal photograph above. However,
        when refering 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, Dammam,
               Existing Conditions, 1974, p. 31-41(no. 4).
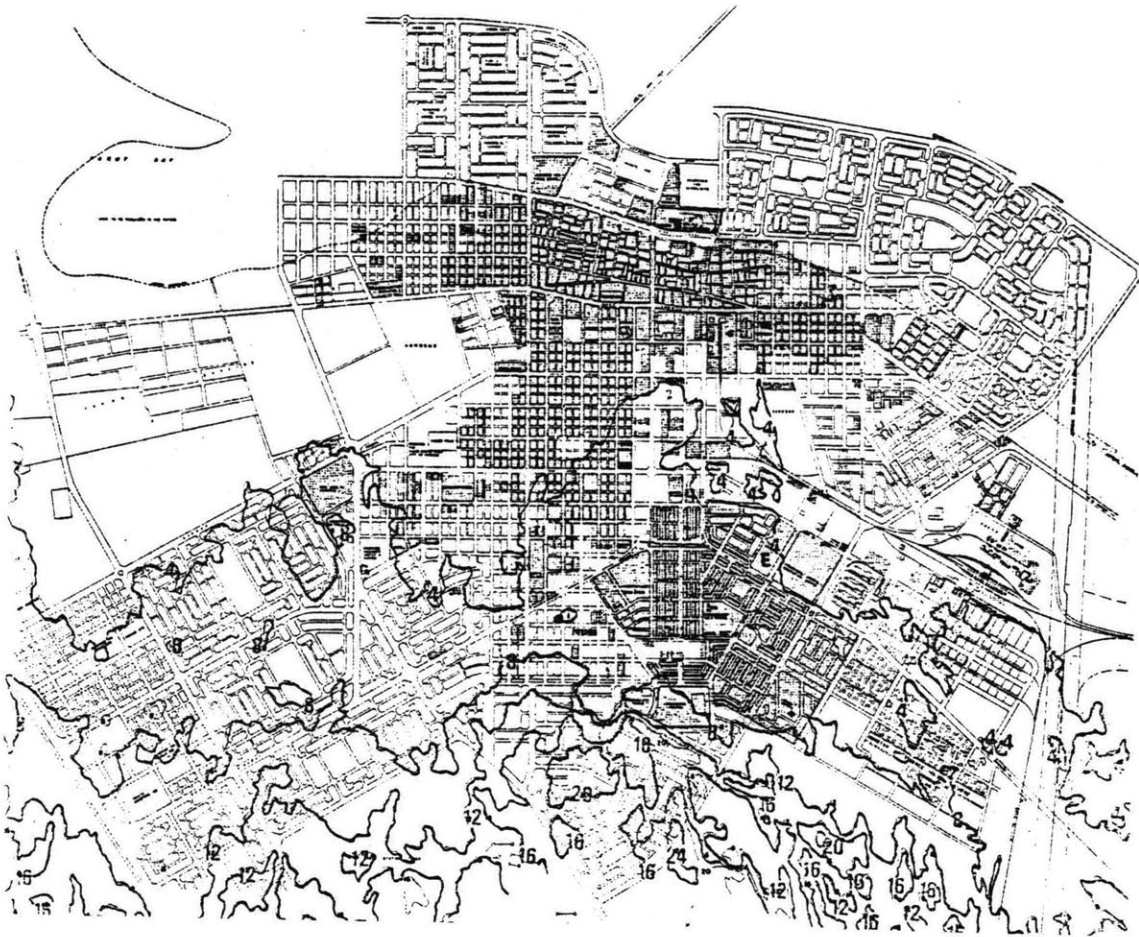
Fig.34. Dammam, 1974.
        Areas laid out by the municipality followed the earlier
        grid-iron layout. Early grid-plan is in the center of
        the map with darker lines.

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

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 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 (Fig. 33). In the sub-division containing the smallest blocks, this brought the per-centage of land given to streets to nearly 55 percent.[9]

Another government action, making Dammam the provencial 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 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 Dammam, 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 munici-pality and followed the earlier gridiron layout,[12] in some areas only roughly, but in others with precisely the same dimensions (Fig. 34).

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 poses-
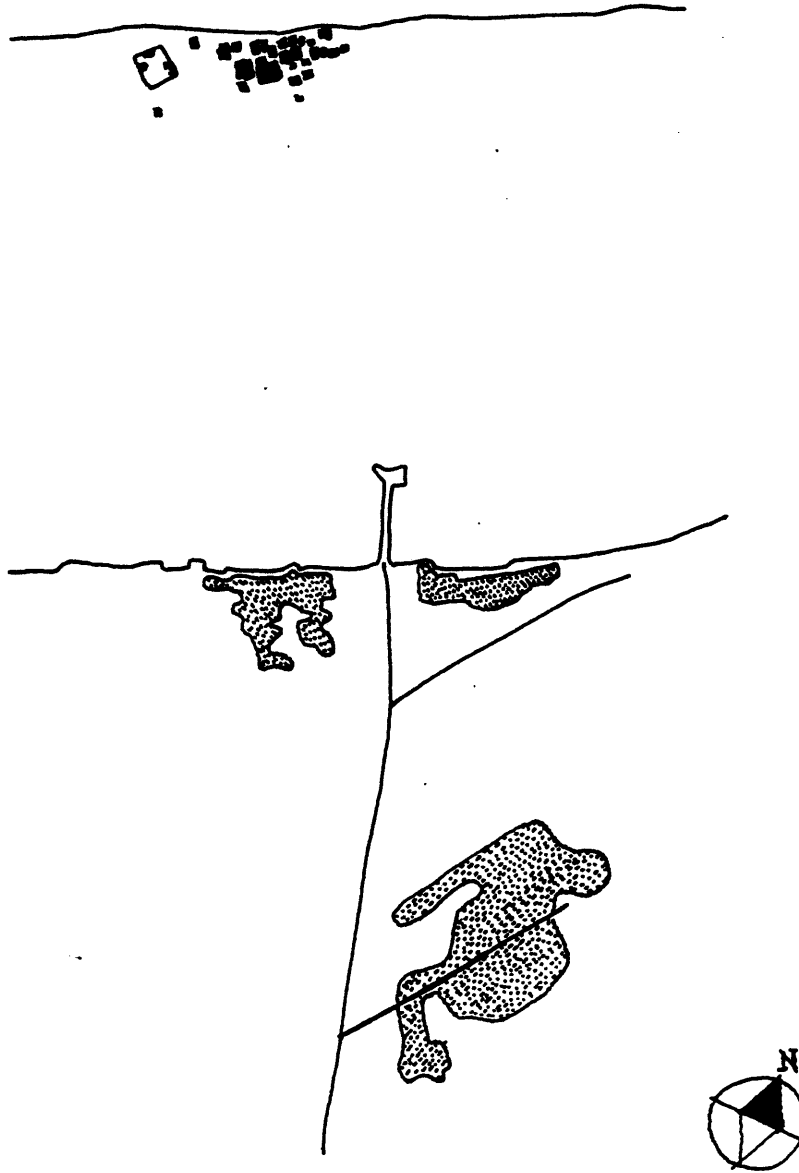
Fig. 35. Al-Khobar.
(upper) 1934.
(lower) 1956.

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

Fig.36. Al-Khobar.
Part of the ARAMCO grid-plan showing the block
and the street patern.

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

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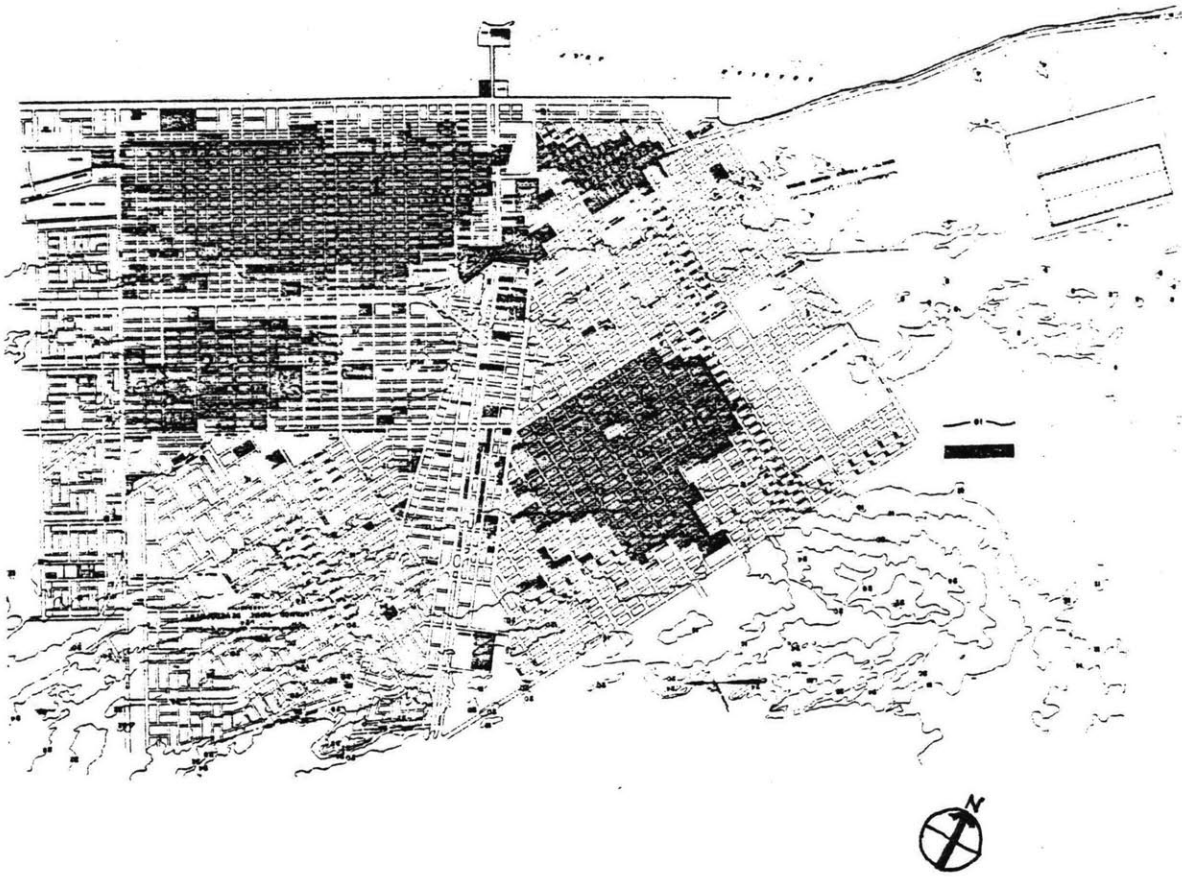
Fig.37. Al-Khobar, 1974.
    Land Subdivision with the built up area shaded.
    1. Old Khobar, 2. Madinat al-^{C}Ummal, 3. Al-Thuqbah.

    Source: Candilis, <u>Draft Master Plan, Al-Khobar,</u>
            , p. 9.

sion 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 orientation[14]
(Figs. 35,36,37).

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 unfor-
tunate 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 A.H./A.D. 1740. The city assumed little prominence,
however, until Abd al-[C]Aziz al-Sa[C]ud 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
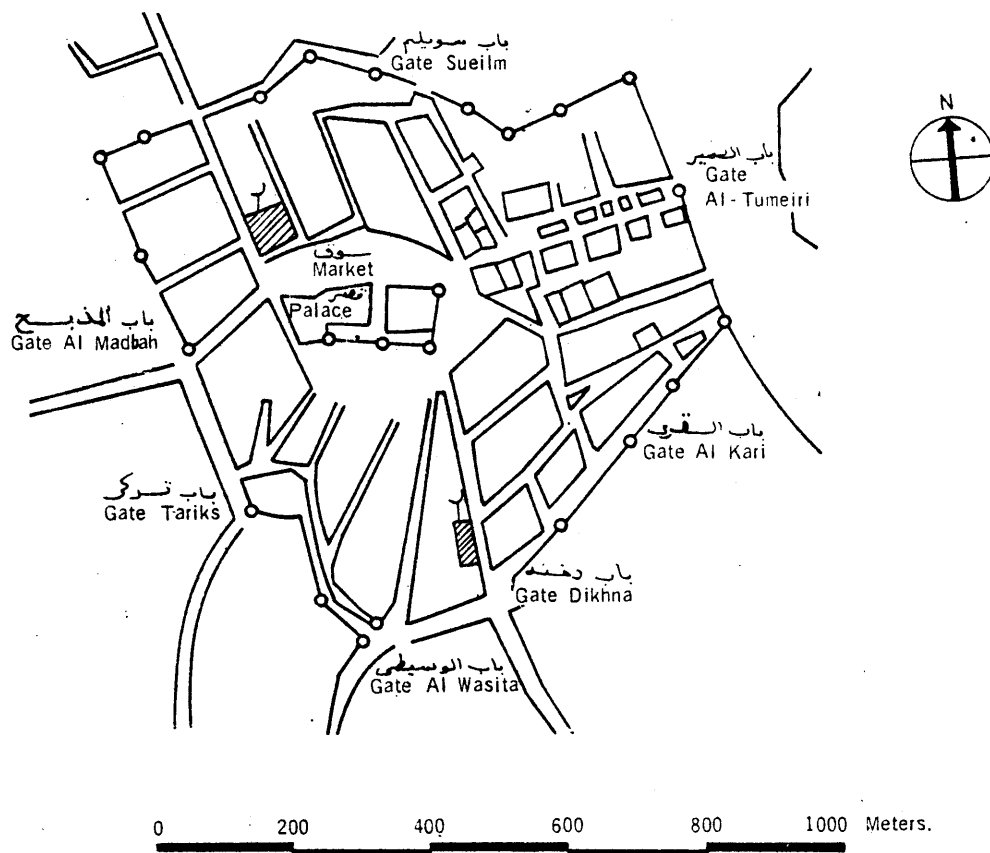
Fig.38. Riyadh, 1919.
       Philby's map.

       Source: Doxiadis, <u>Riyadh Existing Conditions</u>, 1968,
               p. 27.

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-^{C}Aziz's reign (Fig. 38). Only after the consolidation of the Kingdom and the end of the campaign did the King himself, in the 1350's/1930's, take 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 (Fig. 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-^{C}Aziz 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 (Fig. 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 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-^{C}Aziz established a precedent for Riyadh. The affluent now felt that they could build and live outside the city's walls, especially to its north.
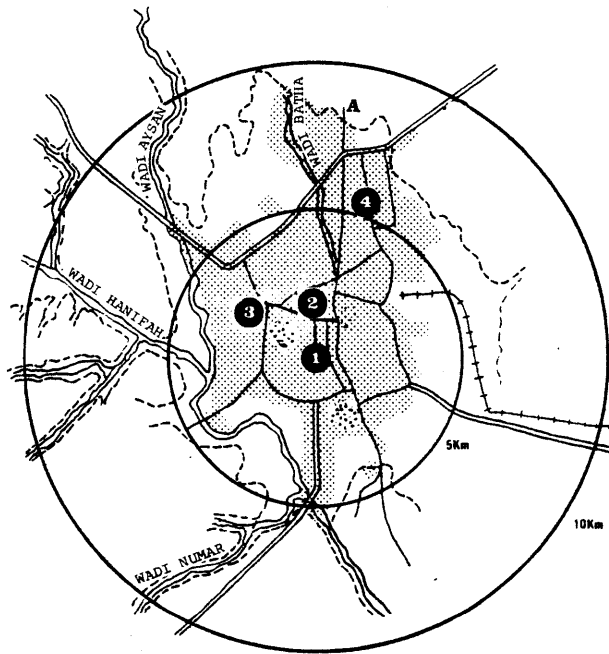
Fig. 39. Riyadh, 1970.
Sites of the three building programs and other
related areas: 1. Old Riyadh, 2. al-Murabba^c, late
1930's, 3. Nasriyah, mid 1950's, 4. al-Malaz, late
1950's.
Source: Al-Hathloul, et al., Urban Land Utilization,
p. 3.
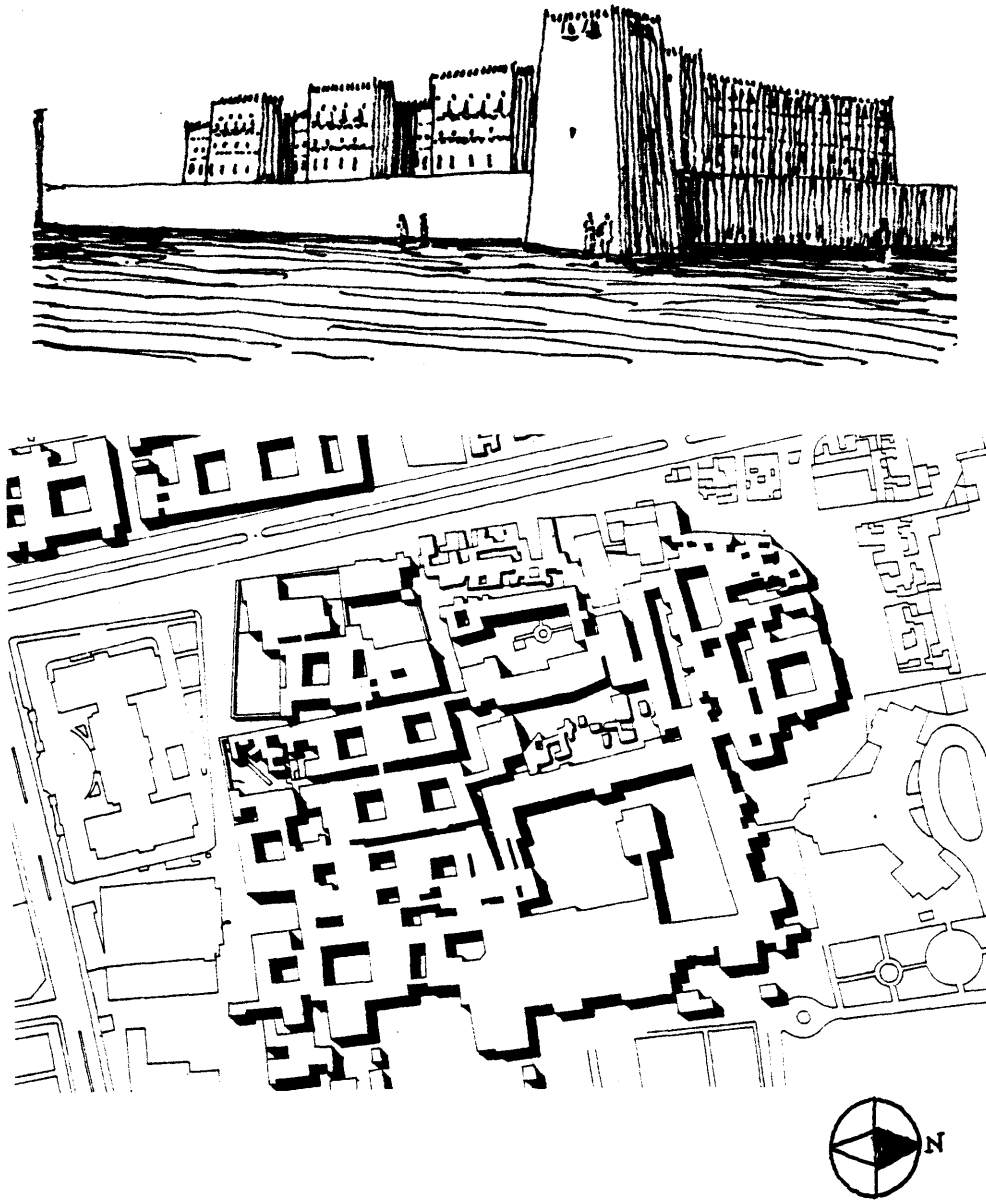
Fig. 40. Riyadh-al-Murabba[c].
(upper) View of the royal palace.
(lower) Site plan.
    Source: De Gaury, Arabia Phoenix, London, 1946, ff.p.64.
            Doxiadis, Existing Conditions,p. 291.

During the same year of 1357/1938, Crown Prince Sa^{C}ud 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 himslef, 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 direc-
tion 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 accommo-
date the demolition and widening of streets in the 1370's/
1950's; and, of course, all new developments now had to pro-
vide 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 acess, 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^{C}ud 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 town,
as his royal residence.

In the early 1360's/1940's, Nasriyah was a small estate
owned by Sa^{c}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^{c}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] (Fig. 41).

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 boule-
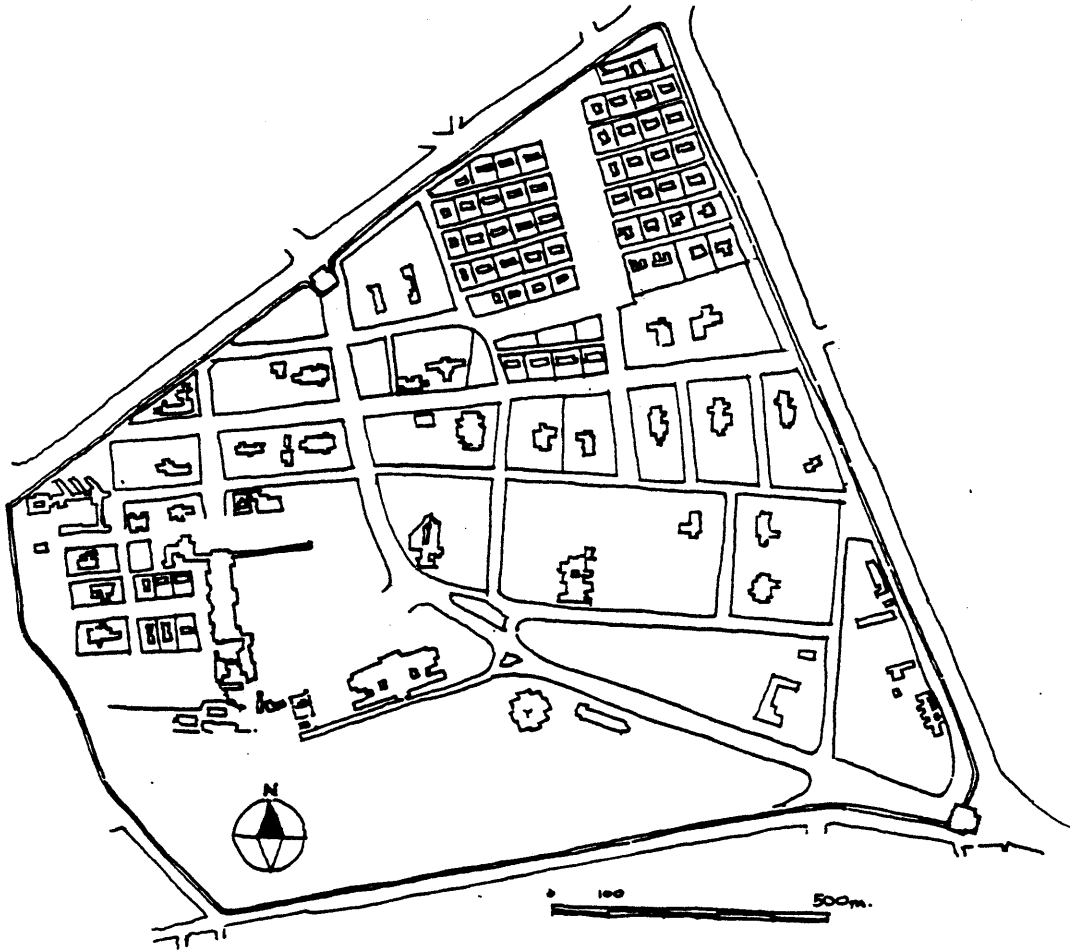
Fig. 41. Riyadh-Nasriyah.
    A new way of planning and building is being introduced.
        site plan.

    Source: Town Planning Office-Riyadh.

vards 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
137 3/1953 to move its agencies from Mecca to Riyadh and, sub-
sequently, 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. north-
east of the city center, was chosen, and a housing project
was initiated by the Ministry of Finance to satisfy this pur-
pose. 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 facili-
ties 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
(Fig. 42).

Comparing this newly introduced pattern with the traditional
pattern of al-Dirah, Riyadh's oldest neighborhood (Fig. 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 semi-
private space, an essential element in traditional environments[23]
(Table 1).
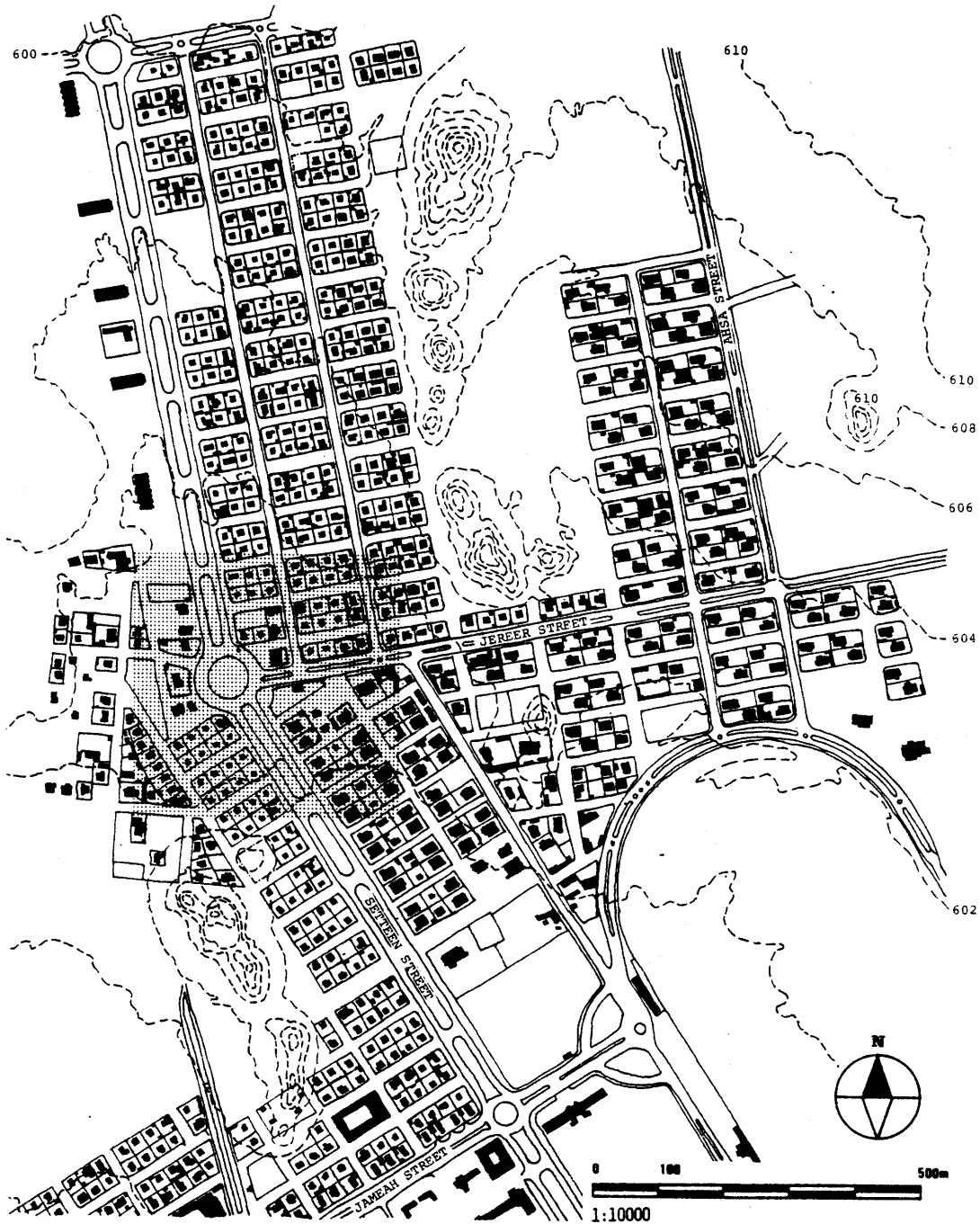
Fig. 42. Riyadh-al-Malaz.
        A new street pattern-the grid, and anew house type-
        the villa.

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

TABLE 1. Riyadh: Comparison of the
Neighborhoods of al-Malaz and al-Dirah

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

[Source: Al-Hathloul, Al-Hussayen, and
Shuaibi, Urban Land Utilization, Case
Study: Riyadh, Saudi Arabia, 1975,
pp. 12 and 42.]

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 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 New as opposed to
the Old Riyadh. Since, unfortunately, 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^c 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/h.[24] Almost all of this area follows the grid pattern
and has the villa as its dominant building type.

3. <u>Land Subdivision: the Square Lot and the Villa Type</u>.

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.

<u>ARAMCO Home Ownership Plan</u>. 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-^{C}Ummal, in Dammam,
and Madinat al-^{C}Ummal and North ^{C}Agrabiyah, in al-Khobar (Fig. 37).
Then the employee is given an interest-free loan by the company.
The company forgives 20 percent of the total amount of the loan,
which includes a 5 percent service charge, and the employee
pays 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 Mediterranian
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 effective-
ness 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 construc-
tion and their physical character by introducing the villa as
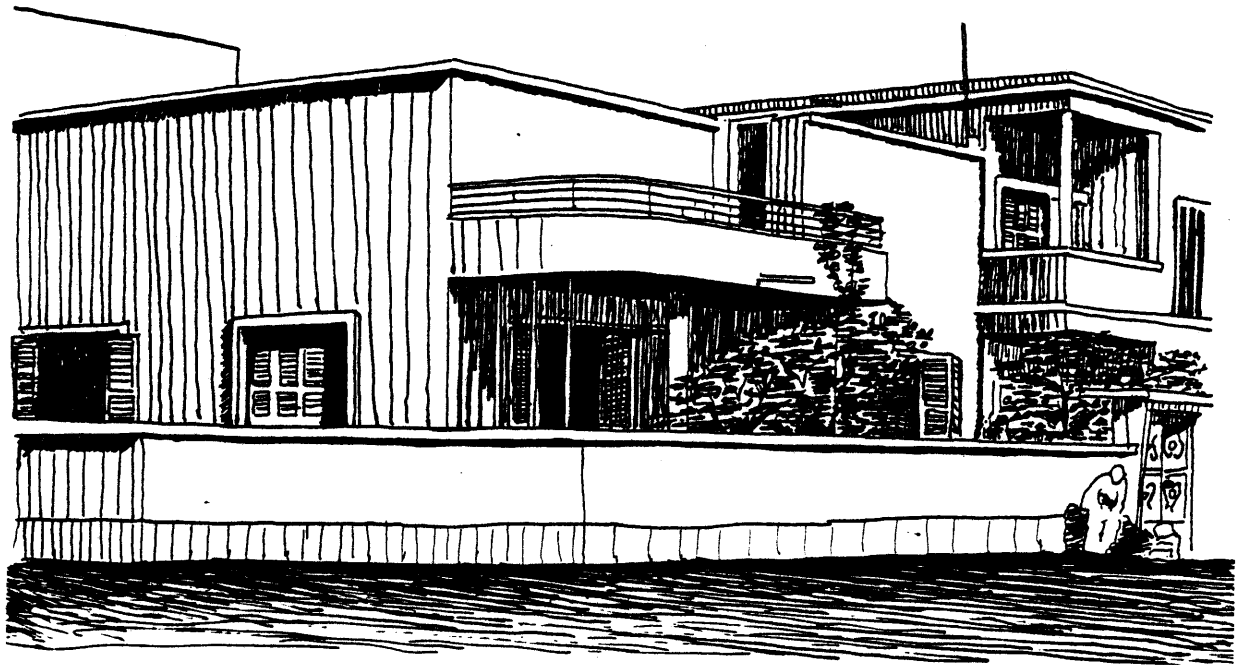
Fig. 43. Dammam.
A typical dwelling built through the ARAMCO Home
Ownership Plan.

Source: ARAMCO, Aramco Handbook,1967, p. 160.
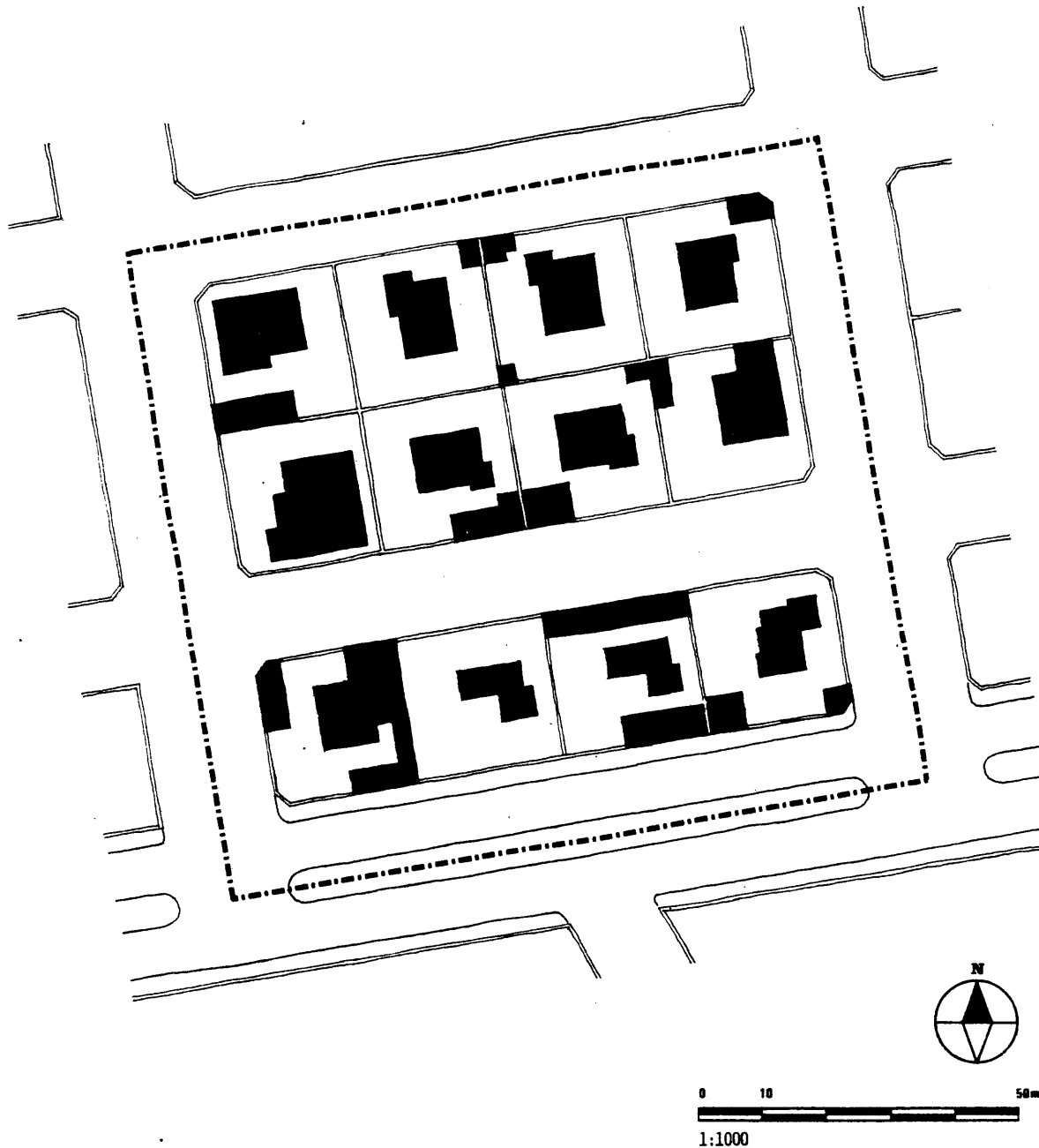
Fig. 44. Riyadh-al-Malaz.
A block with lots' subdivision.
Auxiliary buildings on corners were added later.

Source: Al-Hathloul, et al., Urban Land Utilization, 1975, p. 44.
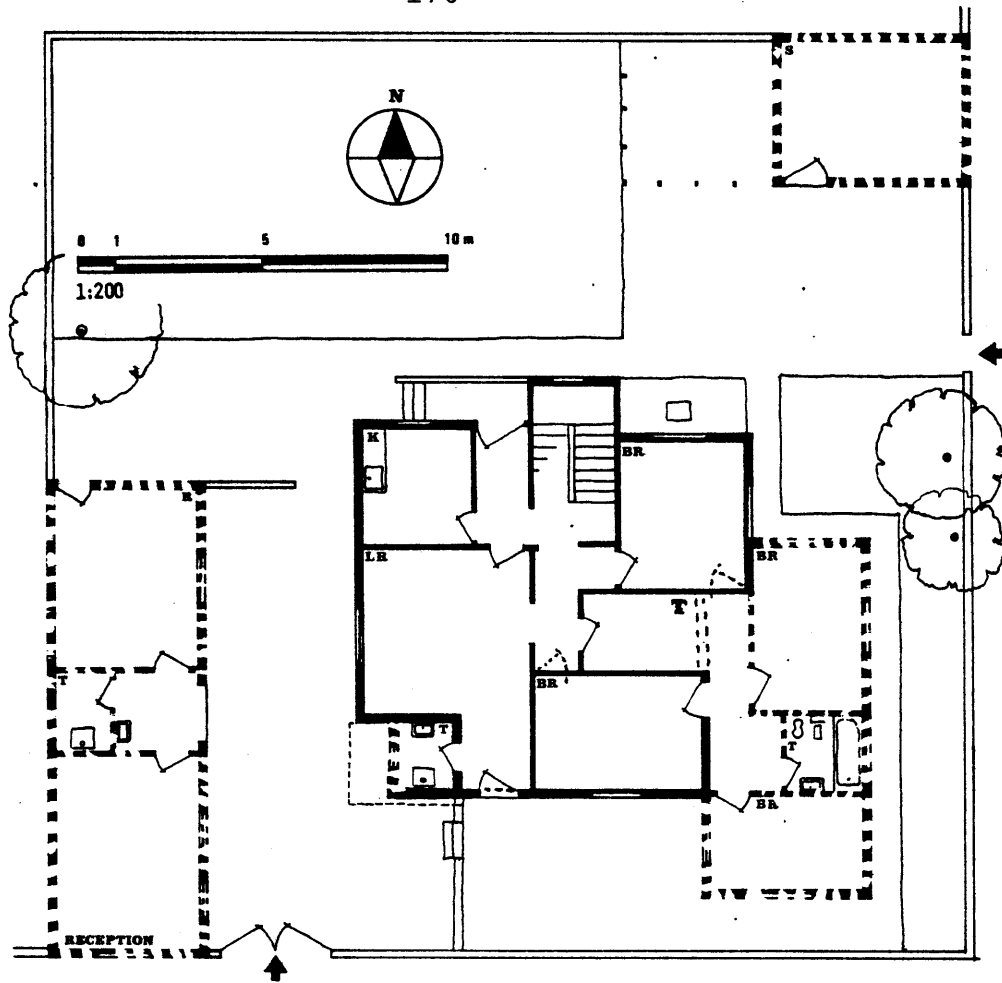
Fig. 45. Riyadh-al-Malaz.
A typical dwelling (villa).
Heavy dotted line-areas added later by the owner.
Light dotted line-walls and doors changed to suit
the addition.

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 its' 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.

the most favorable type (Fig. 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-[c]Ummal, al-Khobar, Fig. 37)

Al-Malaz. The basic lot size in al-Malaz is a square of
25 x 25 m. 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 (Fig. 44, 45).

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 envi-
ronment 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 Min-
istry of the Interior for Municipalities [35] 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)

The final Master Plan for Riyadh was submitted in 1391/1971
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, whould 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 . . . . [T]he organization of the charac-
> teristic 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 distri-
> bution 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 centre will be the
> creation of a linear city that will permit decentraliza-
> tion 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 centre.
> 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 neighbor-
> hoods 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 archi-
> tecture (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; an administrative area which is situated perpendicular
to the civic and commercial spine; and residential districts
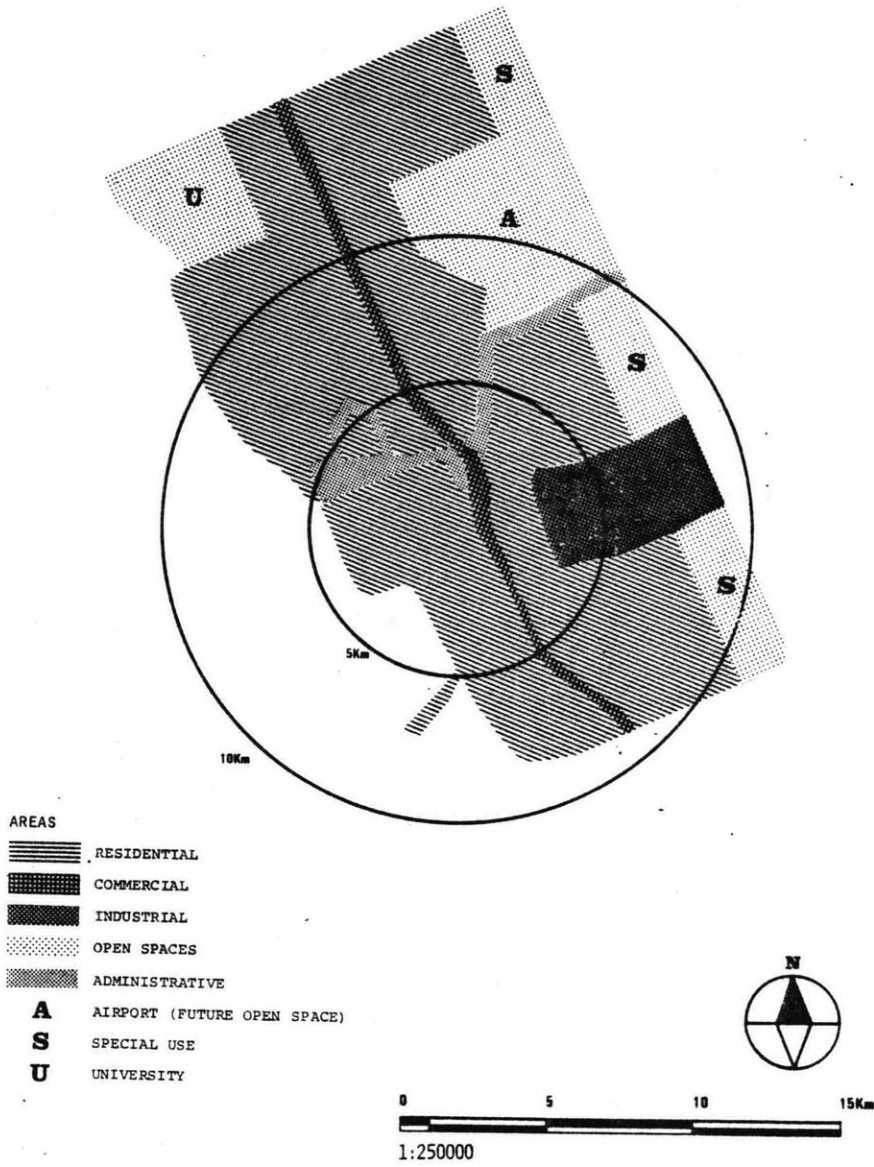
Fig. 46. Riyadh-Doxiadis Master Plan.
Land use.

Source: Al-Hathloul, et al., <u>Urban Land Utlization</u>,
1975, p.69.

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 spine[41] (Fig. 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 accomodate 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 trips[42]
(Fig. 47).

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. (Fig. 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 Muraba^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 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
> ti 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 of 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 tradi-
tional 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
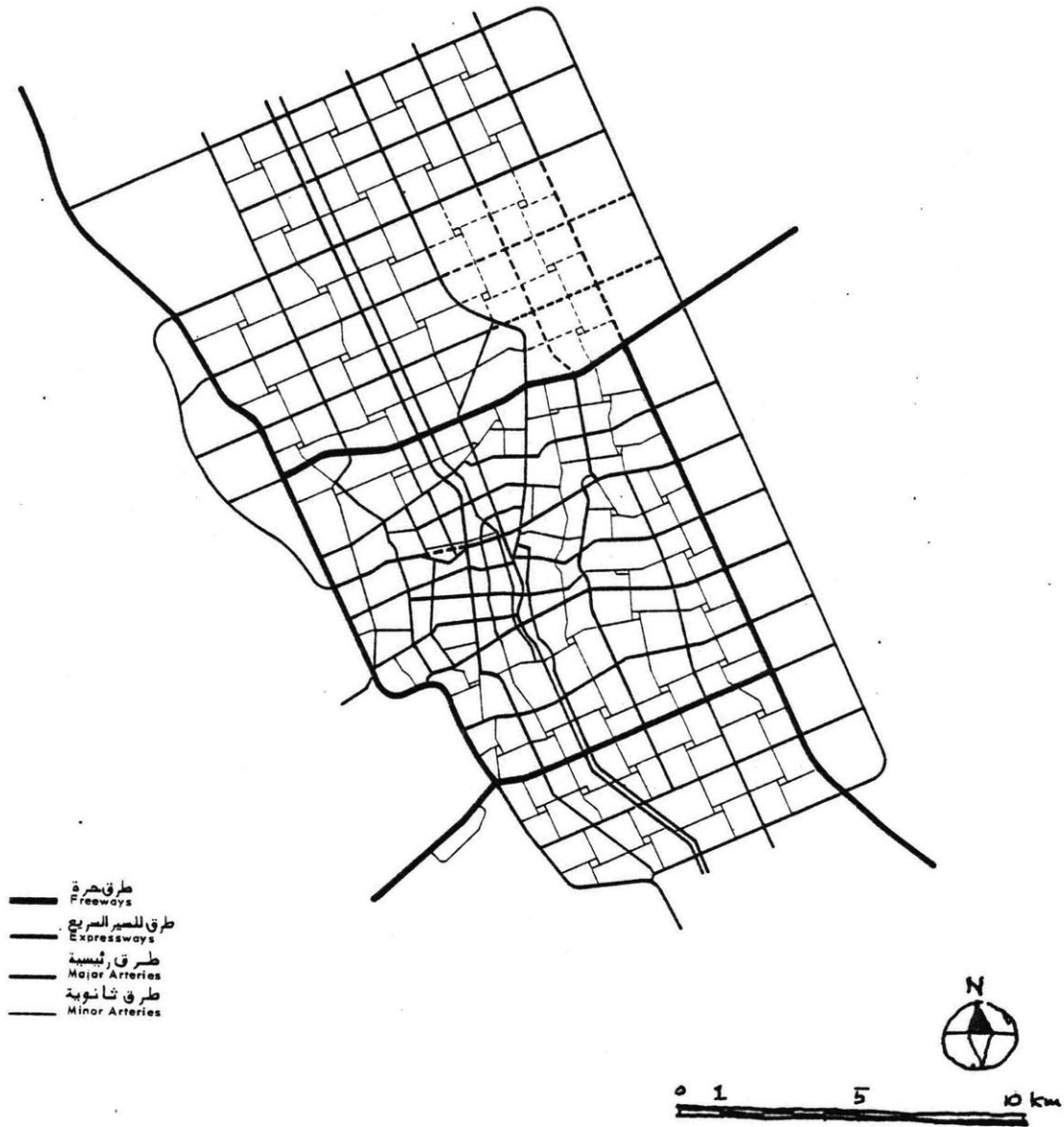
Fig. 47. Riyadh-Doxiadis Master Plan.
        Hierarchy of main road network and city structure.

    Source: Doxiadis, Riyadh Master Plan, A 19, 1971,
            p.137.

exceed 142 p/h -- namely, the minimum lot size (Fig. 48), the bulk and height regulations (Fig. 49), and the standard minimum street widths (Table 2 and Fig. 50). The most common residential district in the plan is R12. This district has a minimum lot size of 400 sq. m. (Fig. 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 Figs. 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), one 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 (Fig. 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.

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 the 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 continua-
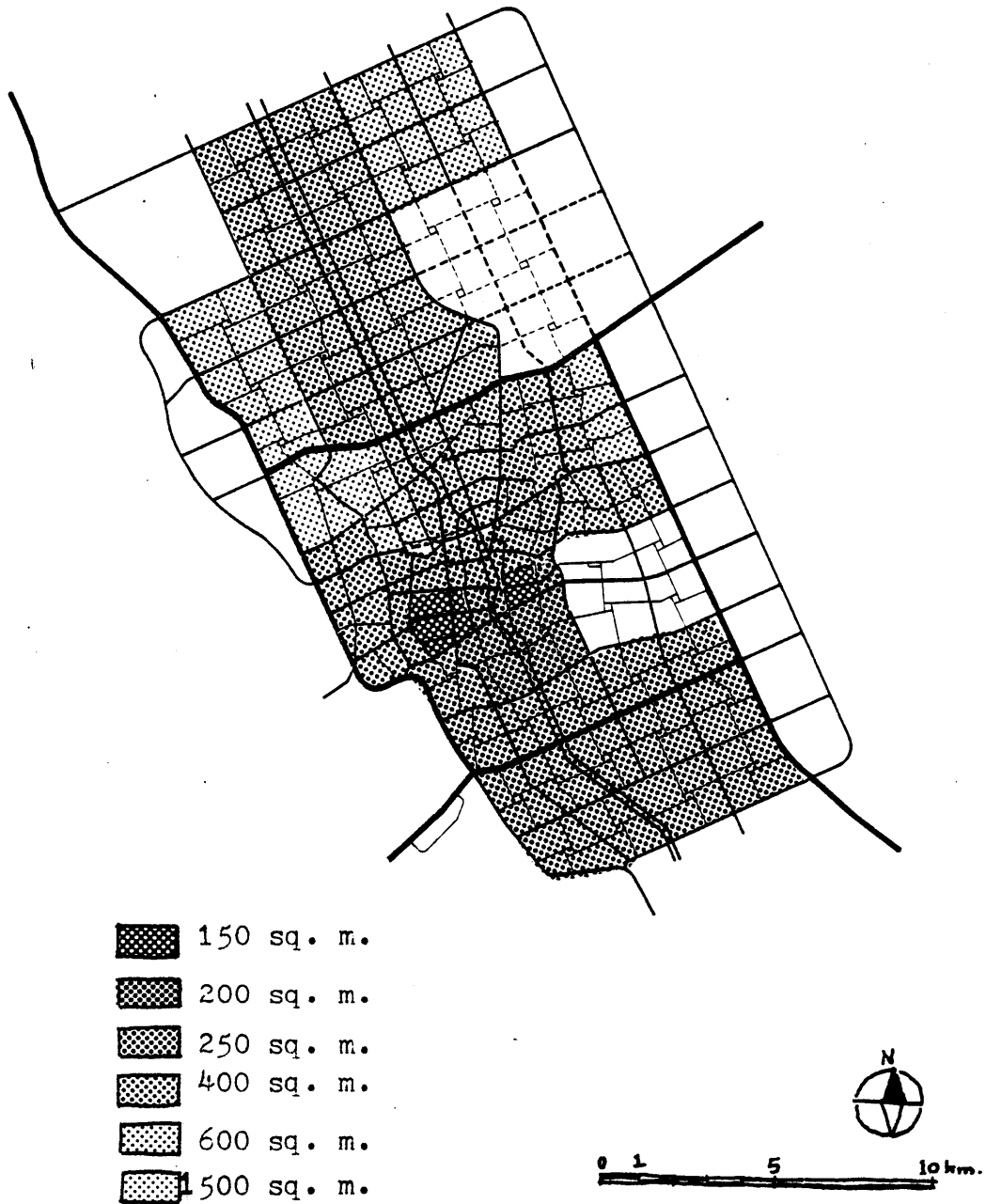
Fig. 48. Riyadh-Doxiadis Master Plan.
Average residential plot sizes.

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

ZONE	PERMITTED USES	N° OF DWELL UNITS / PLOT	MAX N° OF STOREYS	PATTERN OF DEVELOPMENT	MIN PLOT AREA in sq m	MAX PLOT COVERAGE	MIN PLOT WIDTH in m	MIN PLOT DEPTH in m	SET BACK BUILD LINE in m			FLOOR AREA RATIO INDEX	MAX TOTAL HEIGHT in m
									Front	Side	Rear		
C₁	Commercial & Business, Cultural, Administration, Institutions, Residential	—	6	Attached with 4.50 m arcades	480	60%	16	24	—		10	3.6	23.00
C₂	Administration, Cultural, Institutions, Commercial & Business, Residential	—	6	Attached with 4.50 m arcades	480	60%	16	24	—		10	3.6	23.00
C₃	Commercial, Cultural, Administration	—	—	Special design as plan	—	—	—	—	—	—	—	—	—
R₁₁	Residential - Single family, one or two storeys dwellings	1	2	Detached	800	30%	20	30	4	4	10	0.6	8.40
R₁₂	Residential - Single family, one or two storeys dwellings	1	2	Detached	400	35%	16	24	4	2	10	0.7	8.40
R₁₃	Residential - Two families, two storeys dwellings	2	2	Detached	400	40%	16	24	4	2	8	0.8	8.40
R₂₁	Residential - Apartments or maisonettes buildings	4	4	Attached	400	50%	16	24	—		8	2.0	14.80
R₂₂	Residential - Apartments or maisonettes buildings	3	3	Attached	250	50%	12	20	—		8	1.5	11.60
R₃₁	Residential Central courtyard (tradit.) Single family one or two storeys dwellings	1	2	Attached	200	50%	8	20	4		4	1.0	8.40
R₃₂	Residential - Central courtyard (tradit.) - Two families, two storeys dwellings	2	2	Attached	150	50%	8	16	4		4	1.0	8.40
R₄	Residential hotels, clubs hostels and the like	—	—	Special design as plan	—	—	—	—	—	—	—	—	—
P₁	Parks, sports, recreation, public conveniences	—	1	Special design	—	—	—	—	—	—	—	—	4.20
S₁	Schools, kindergartens	—	3	Special design	9 000	20%	60	100	as plan	as plan	as plan	0.6	11.60
I₁	Institutions	—	3	Special design	1000	40%	20	30	as plan	as plan	as plan	1.2	11.60

Fig. 49. Riyadh-Doxiadis Master Plan.
Zoning-bulk and height regulations.

Source: Taqrir al-Lajnah, 1973, p. 132.
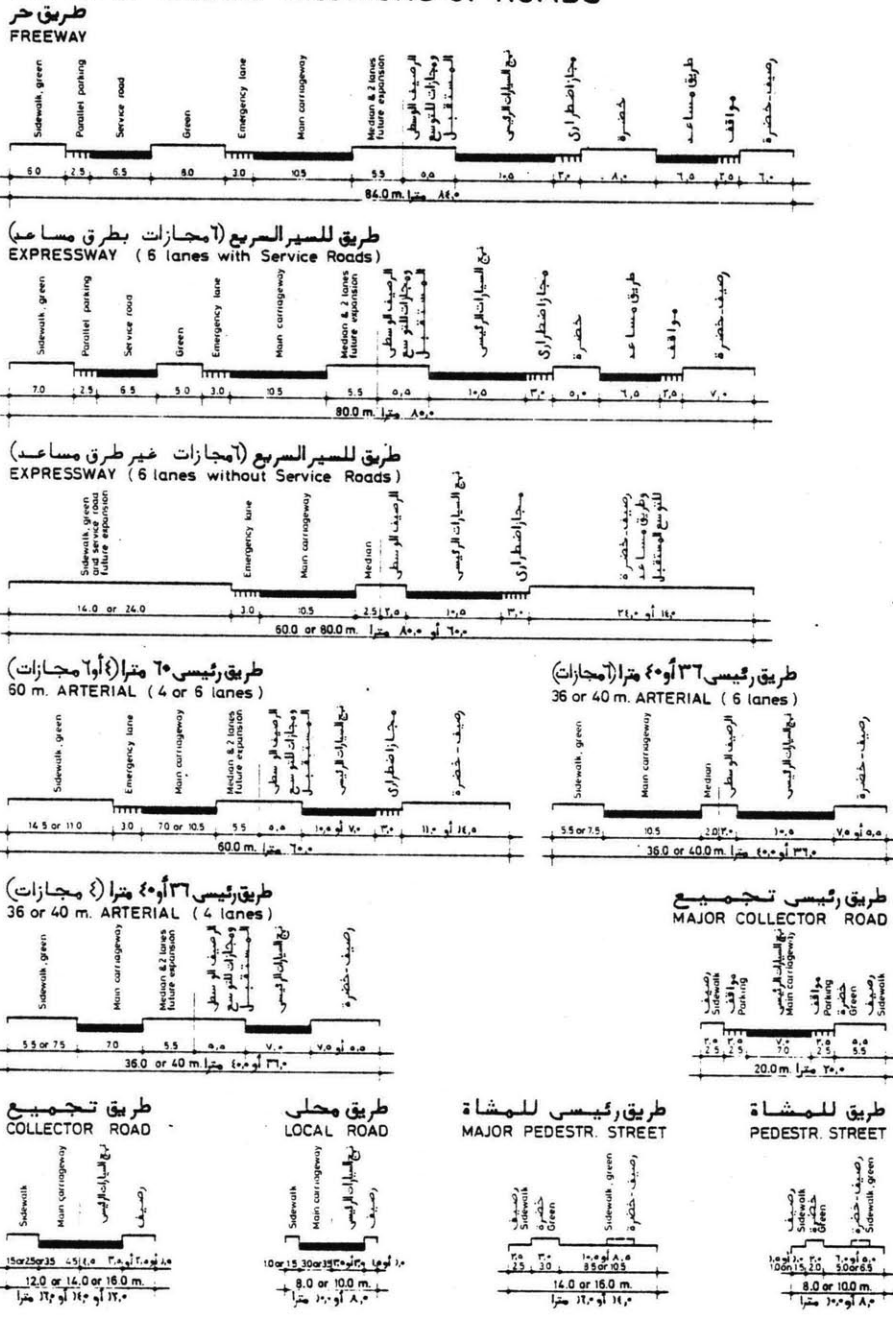
Fig. 50. Riyadh-Doxiadis Master Plan.
Standard minimum streets width.

Source: Doxiadis, Riyadh Master Plan, A 19, 1971, p. 143.

Table 2
Roads Classification and Standards

S/N	Road Characteristics and Standards	Road Classification				
		Main Road Network			Community Network	
		Freeways	Expressways	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	3	4	5	7	10
	b. Ramps Down	6	7	7	-	-
	c. Ramps Up	7	8	8	-	-
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
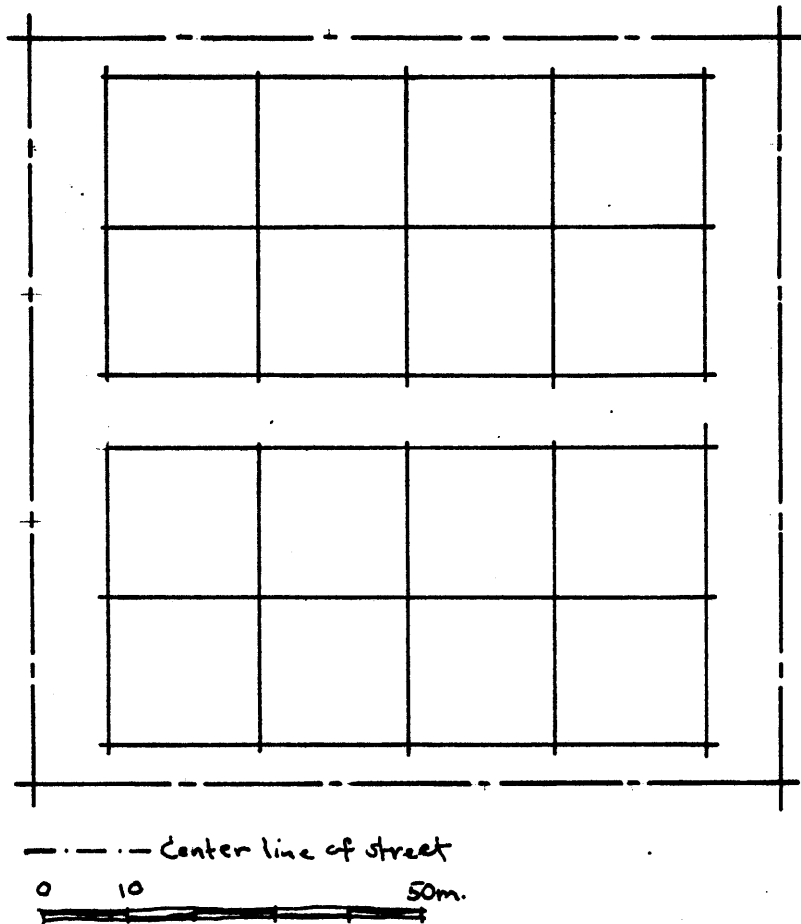
Fig.51. Riyadh-Doxiadis Master Plan.
Following a simple exercise of taking one hectare of
land, subdividing it according to minimum standards
introduced by the plan: lot size 400 sq. m., streets
width within a residential community 10m. & 20m. By
applying these standards to the land subdivision
approach practiced in Riyadh (grid with square lots)
one would have 16 dwelling units per hectare for R12.

tion 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 orienta-
tion 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 dimen-
sions, 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 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
(Fig. 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 character [49] (Fig. 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 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 subdivision [51] (Fig. 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 -- a 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 muncipalities 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 Muncipal 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 from Riyadh, we may look at the area of al-ᶜUrayja, 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 (Fig. 52).

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 re-quirements,[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.

al-^cUrayja
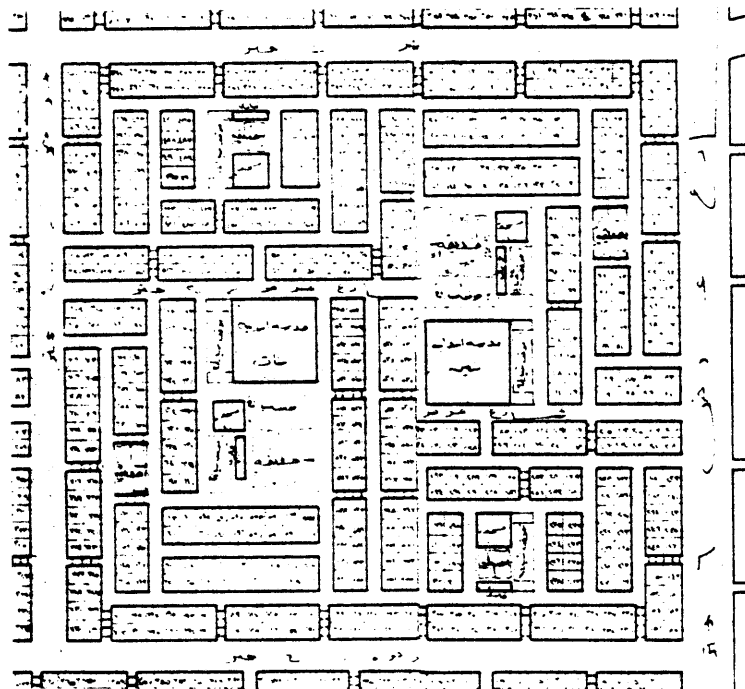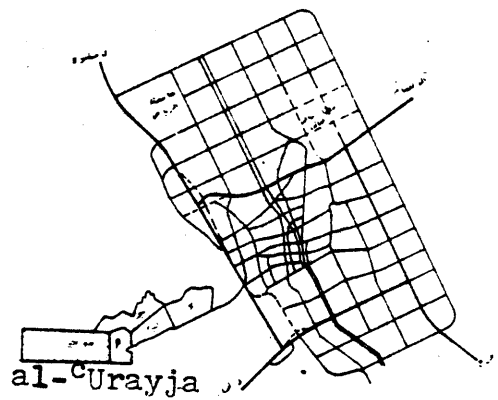
Fig. 52. Riyadh-al-^cUrayja.
    (upper) A neighborhood planned for people with limited
        income. More than 20,000 plots all measuring
        20x20 m.
    (lower) Part of plan no. 2008 with 17,000 plots.

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

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 prece-
dents 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 compre-
hensive zoning regulations.[1]

1. <u>Statute of the Mecca Muncipality and Municipalities.</u>[2]

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 responsibi-
lities 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.

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 and 1360's/1940'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 consi-
deration 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 require-
ments. 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 residen-
tial 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 concepts: 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 for taking into
consideration the planning of roads in future communities.

> The straightness of roads and their design are to be desig-
> nated 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 re-
quirements 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 neigh-
borhood. 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 Owner-
ship Plan were decisive in reinforcing conformity to such stan-
dards. The crucial point, however, is that instead of a minimum
lot size of 100 sq. m., these two projects relied on the untra-
ditional 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 establish 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

Fig. 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.

employees (Fig. 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 per se did not become a
major issue until the late 1380's/1960's, when the municipality
of Riyadh stepped in and 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 (Fig.
54).

The F.M. Building. [20] A six-story apartment building
with shops on the ground floor, the F.M. Building was con-
structed in the late 1370's/1950's on a site looking directly
on the al-^{c}Adl 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 bal-
conies 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

Fig. 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.
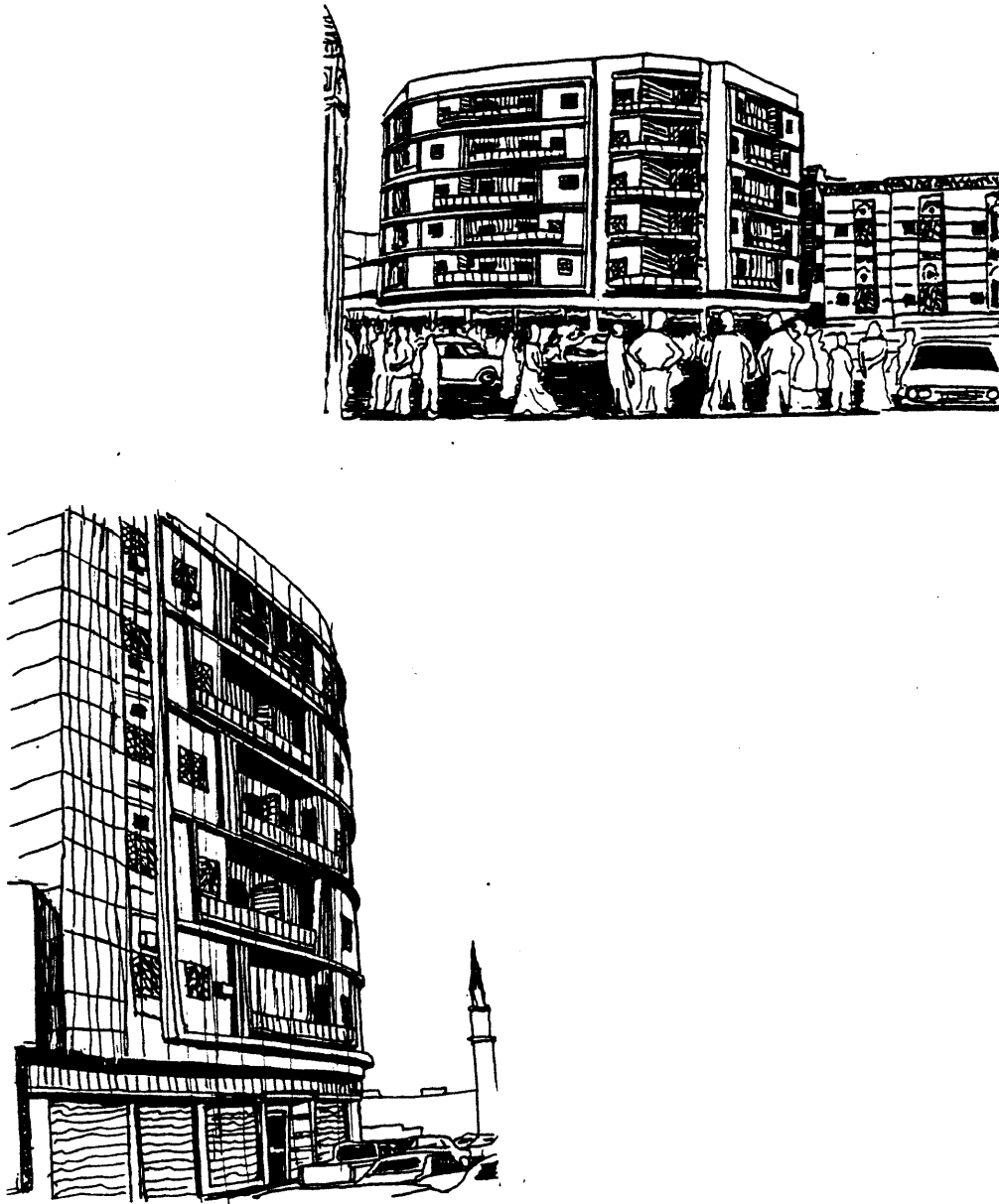
Fig. 55. Riyadh-the F.M. Building, Constructed in the late 1950's.
(upper) View from al-^{c}Adl square (north), showing Qasr al-
Hukm to the right.
(lower) View from the east and south side with the
south facade solid.

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

was no violation of privacy. On the remaining south side,
an area that used to be composed of traditional dwellings of
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
building[21] (Fig. 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, previ-
ously known as al-Wazir Street. This building is unique in 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 resi-
dential 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 having their privacy invaded.
Consequently, the west facade was built solid, except for the
inward looking light wells and a stairwell with high openings
(Fig. 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 couryards 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 (Fig. 56). Regarding the north and east facades, no
problems were encountered. The north facade looks towards
another lower apartment building (al-[c]Aziziyah) and to the
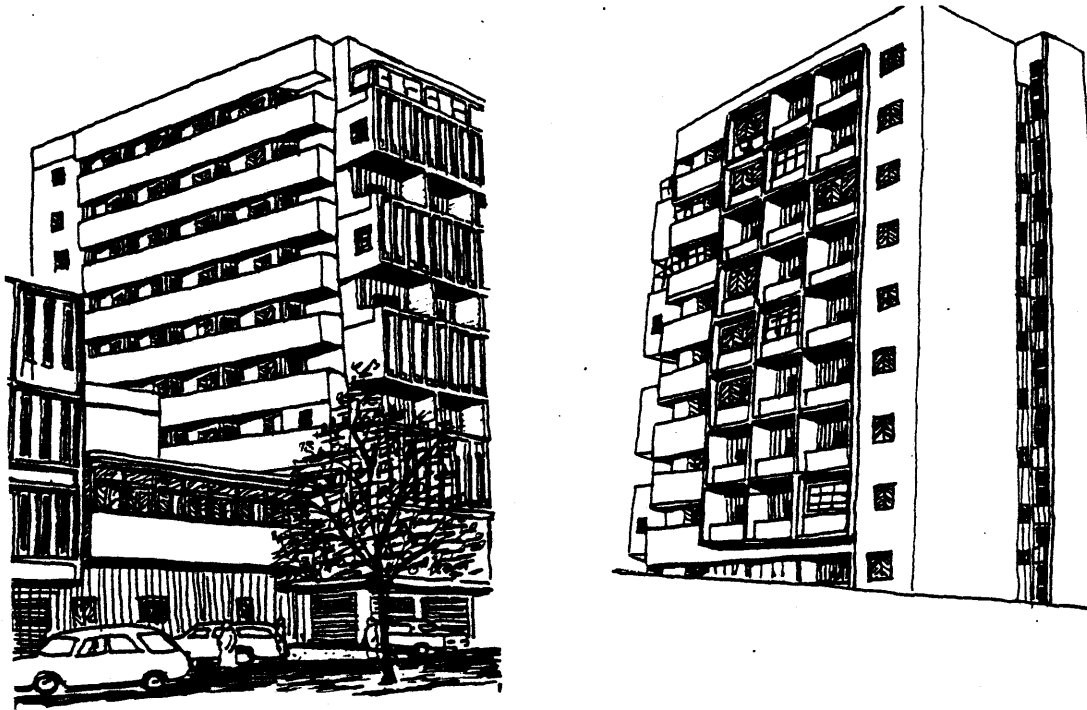
Fig. 56. Riyadh-al-Riyadh Building, constructed around
         1960/61.
         (right) The west facade built solid except for the
                 light wells and a stair well with high openings.
         (left) The south facade, precautions were made to
                 ensure that no one will be able to look west-
                 ward.

         Source: Curtesy of Mehmet Karakurt.

intersection of al-Khazzan and King Faisal Streets, while the
east facade looks out on King Faisal Street and the two huge
cemetaries 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 muni-
cipality 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 1380's/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 (Fig. 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.
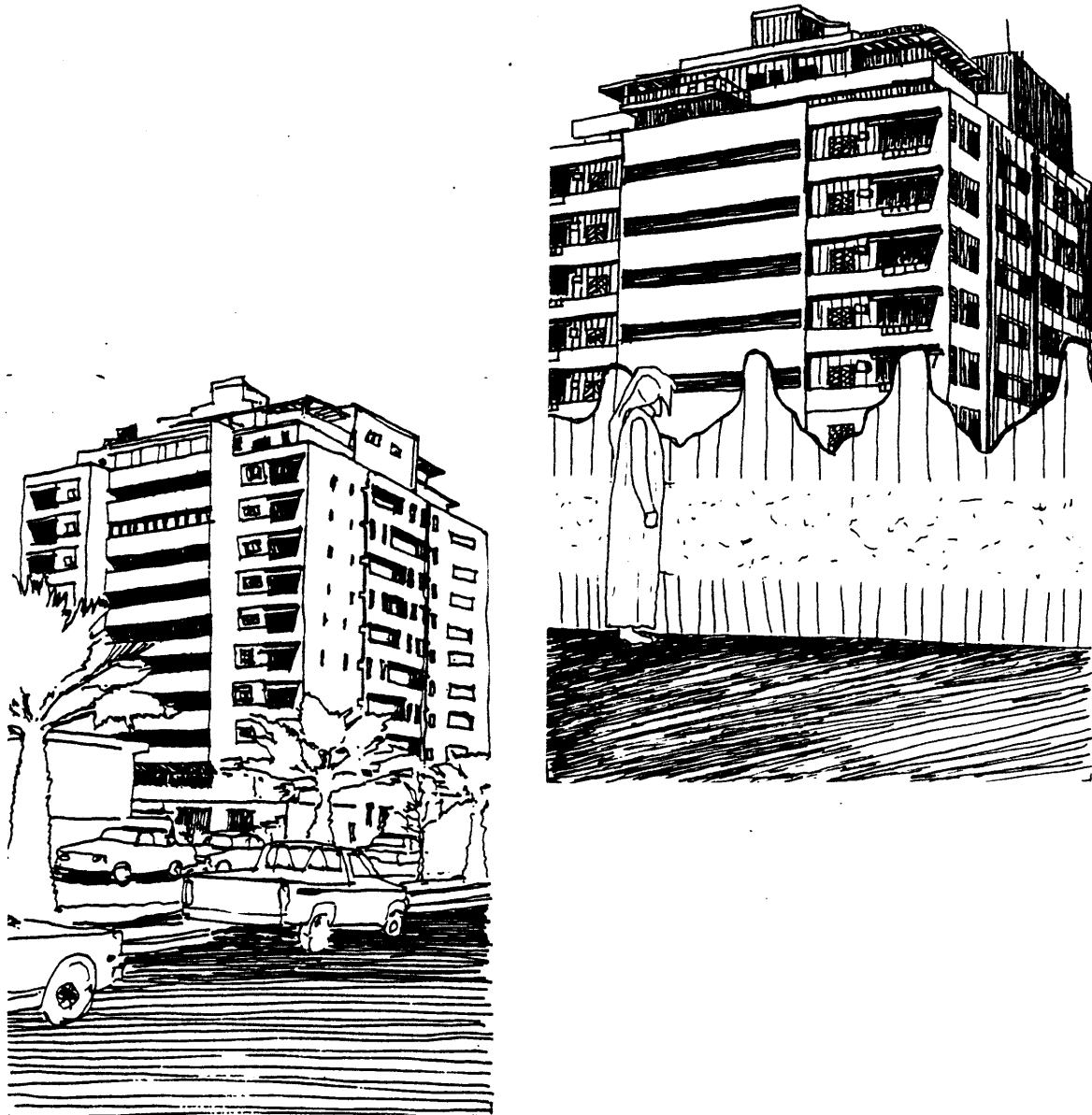
Fig. 57. Riyadh-Zahrat al-Riyadh Building, constructed in
1967/68.
(upper) View from the roof of one of the houses in the
area south of the building showing southern
and eastern facade.
(lower) View of northern and western facade.

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 a ṣulh (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?

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 developments 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. <u>Regulations in Practice Before the Master Plans.</u>

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 -- all culminated at the end of the 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-^{c}Ulaiya, al-Murabba^c, al-Futah, al- Duhayrah, and Dukhnah. Its detailed ordinances consist of zoning by-laws (Fig. 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.

R 12
Area   min.400 sq.m.   max.600 sq.m.   max.600 sq.m.
               d.   w.
Dim.fixed 24X16.64m.   min. d.24X25   min. w.16X37.5

R 13
Area   min.400 sq.m.   max.600 sq.m.   max.600 sq.m.
               d.   w.
Dim.fixed 24X16.64m.   min. d.24X25   min. w.16X37.5

▨ Built up area

0   10   50m.
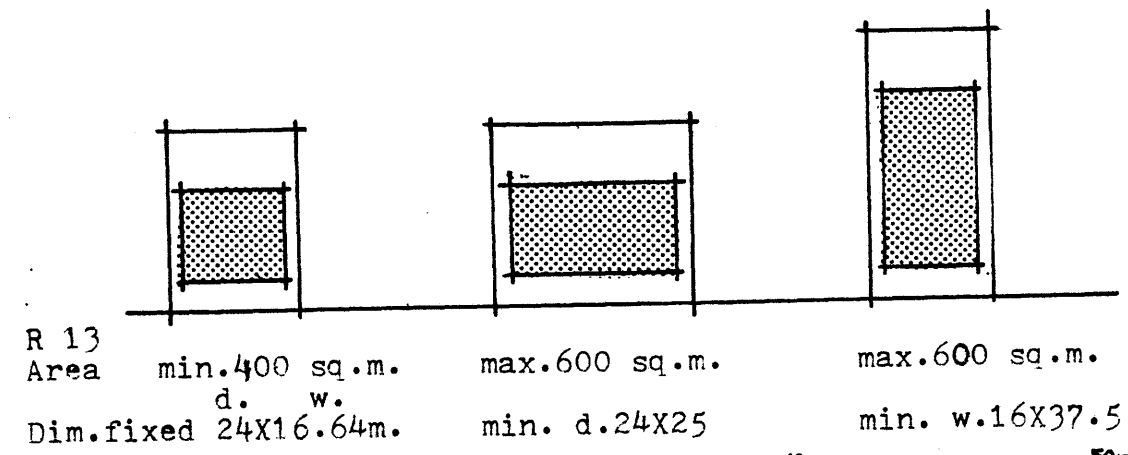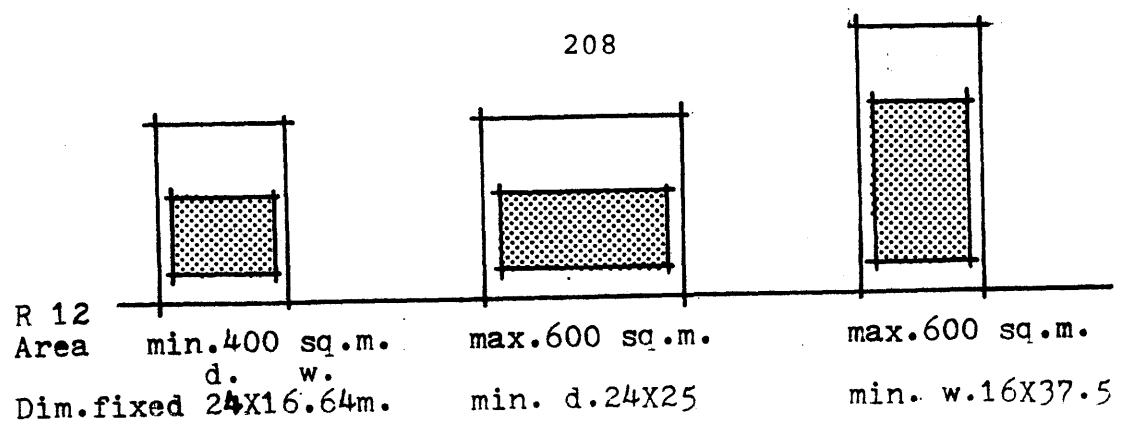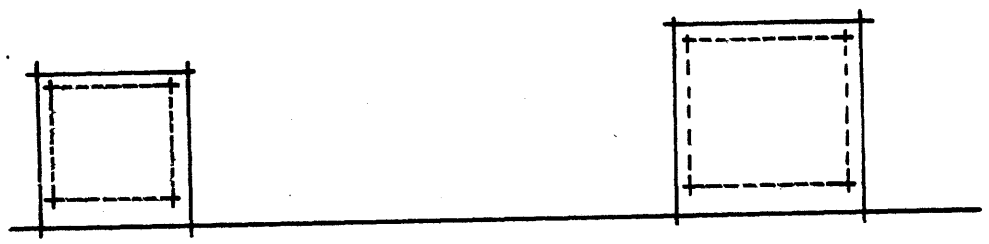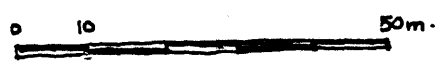
R12,R13 as implemented in Riyadh, 15m. streets width assumed.
Area   400 sq.m.   625 sq.m.

Dim.   20X20m.   25X25m.

⌐⌐⌐ Area where the building is to be located, pro-
⌐⌐⌐ vided other requirements were satisfied.

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

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 previously applied. Not only that, but it mandates these 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).

TABLE 3. Zoning: Bulk and Height Regulations.

	Min. Area	Coverage	Min. Width	Min. 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

[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 archi-
tecture, and Riyadh, indeed, became a city of no character.

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 confirma-
tion 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 neigh-
bor, 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'i^C, 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 over-
looked 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 ṣulh 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
(Fig. 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]

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. (Fig. 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 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

moveable opaque
glass

fixed opaque
glass

55 cm

50 cm

1.50m

1.20 cm

0   0.50   2.50
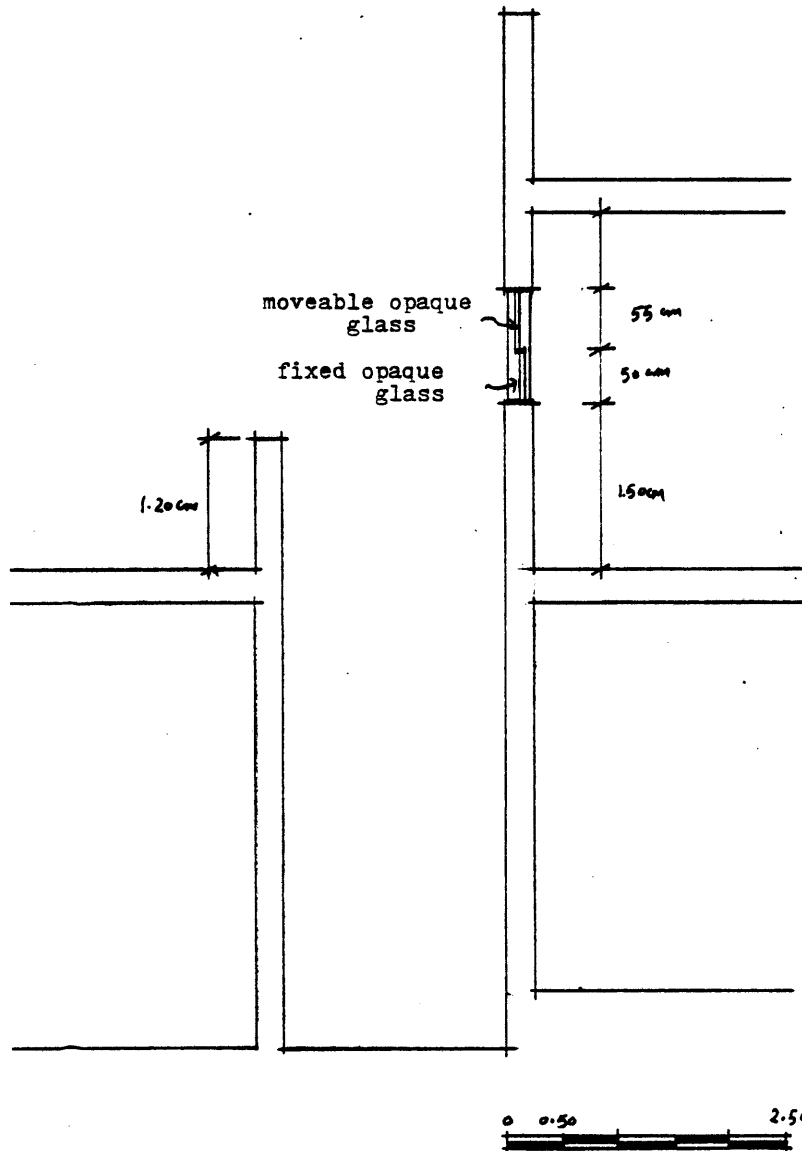
Fig. 59. Bada'i[c].
        Section showing the agreed upon treatment of windows.

        Window sill is 1.50m. from roof floor.
        Lower part of the window 0.50m. from window sill(fixed).
        Upper part 0.55(moveable).
        Both with opaque glass.
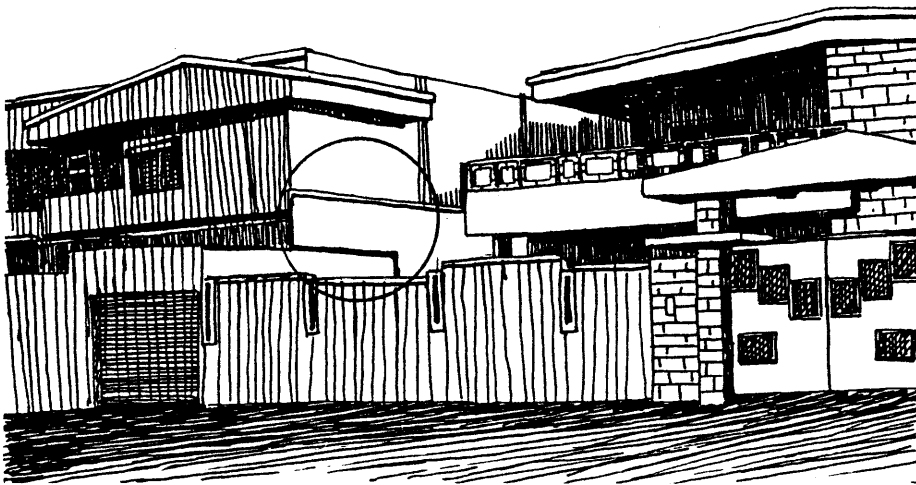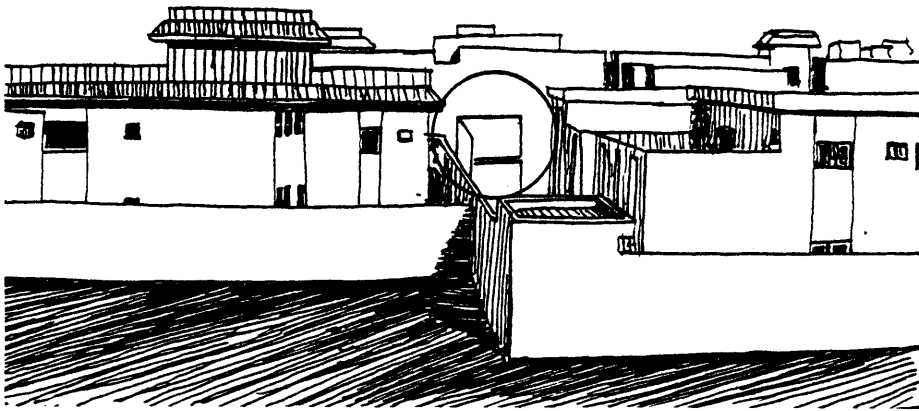
Fig. 60. Riyadh.
Use of plastic corrugated sheets to ensure privacy.
(upper) al-ʿUlaiya.
(lower) al-Malaz-southeast.

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 (Fig. 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 (Fig. 61).

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 (Fig. 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
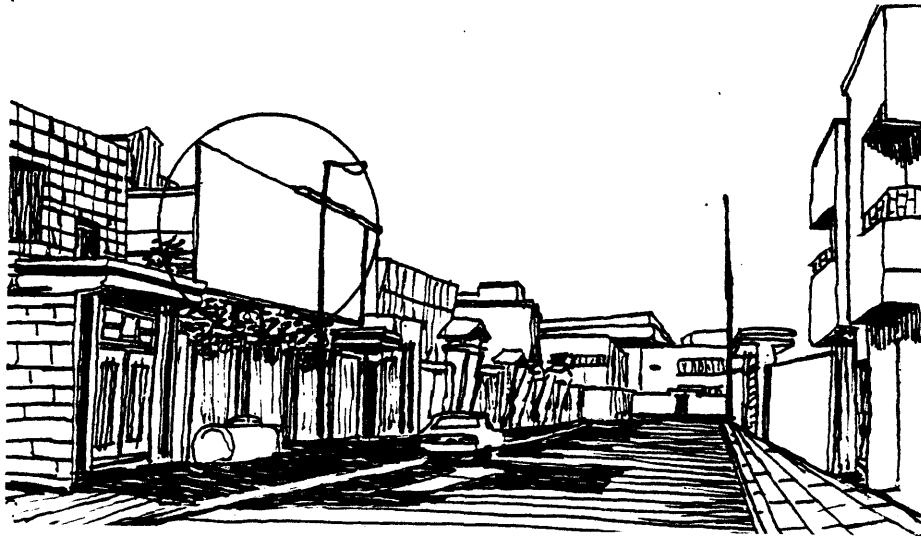
Fig. 61. Riyadh.
Use of plastic corrugated sheets to ensure privacy.
(upper) al-Malaz-southeast, the case of a house built
on the street line with a balcony which over-
looks the house on the opposite side of the
street.
(lower) al-Malaz-southeast, the case of the two houses .
abutting the street.

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 incomes 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^C 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 intro-
duced a new value system into Saudi Arabian society, that is,
segregation according to income.[35] 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-^{C}Urayja in Riyadh with
more than 20,000 plots, all allocated for people with limited
income [35] (Fig. 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, pre-
vented 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 of 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,"[34] 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 Regu-
lations 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 aims and objectives of the proposed regulations as
stated by the new Plan are as follows:[38]

> 1. To give effect to the policies and proposals of

the Master Plan.

2. To protect the privacy of individual homes and private grounds.

3. To preserve the value of land and buildings.

4. To define the intensity of land use and net residential density.

5. To safeguard and provide proper light and air, a healthy environment, privacy, access, and aesthetics.

6. To ensure a smooth transition between existing and proposed regulations.

7. 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 break-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 define their mode of application in specific instances. [42]

2. The Rise of Consciousness: Abandonment of Setback Require-
    ments, 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 regulations state:

> . . . In most R & C districts the owner can elect to
> build to the side property line . . . . The elimi-
> nation 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 $d \; \frac{5-L}{L-2}$, the owner of house B
[Fig. 62] must eigher 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 . . . . (45)

Section 9.2 Calculation of distance d (width of zone
to be visually protected) [Fig. 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 Fig. 63].

In the event of a dispute between neighbors, the inter-
pretation 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 [Fig. 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 home-
owners 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
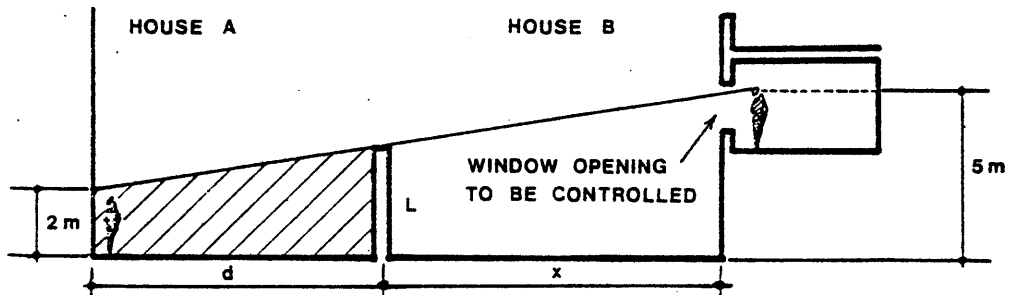
Fig. 62. Riyadh-Proposed Zoning Regulation.
Article 9:1 minimum distance for unobstructed
window openings.

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

LOT 1   LOT 2

d_1
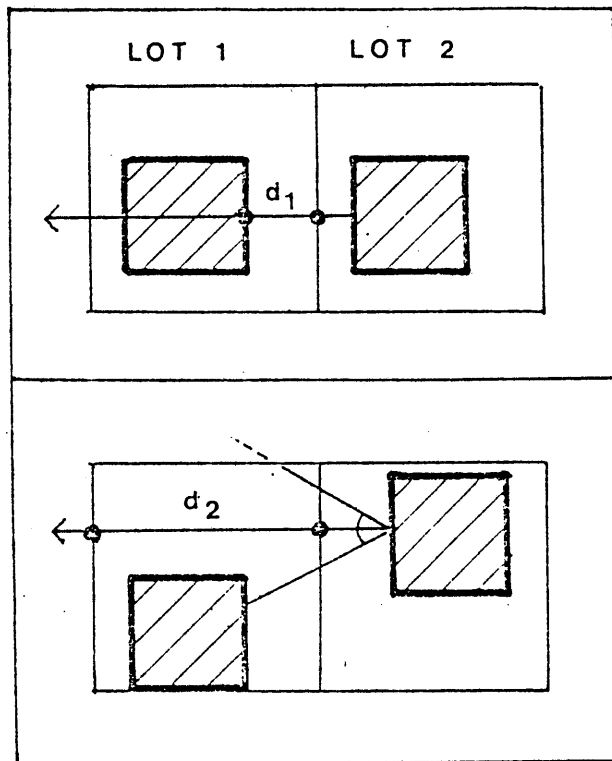
d_1 is the width of
the side setback

d_2

d_2 is the width of
the back yard.

Fig. 63. Riyadh-Proposed Zoning Regulation.
Article 9:2 distance to be protected in the neigh-
boring house.

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

INTERIOR BALCONY

TYPE 1

1:7 m

1.7 m

TYPE 2

OPAQUE GLASS

SCREEN (MASHRABIYAH)

TYPE 3

TERRACE

TYPE 4

1·7 m

LOUVERS (IN SECTION)   (IN PLAN)
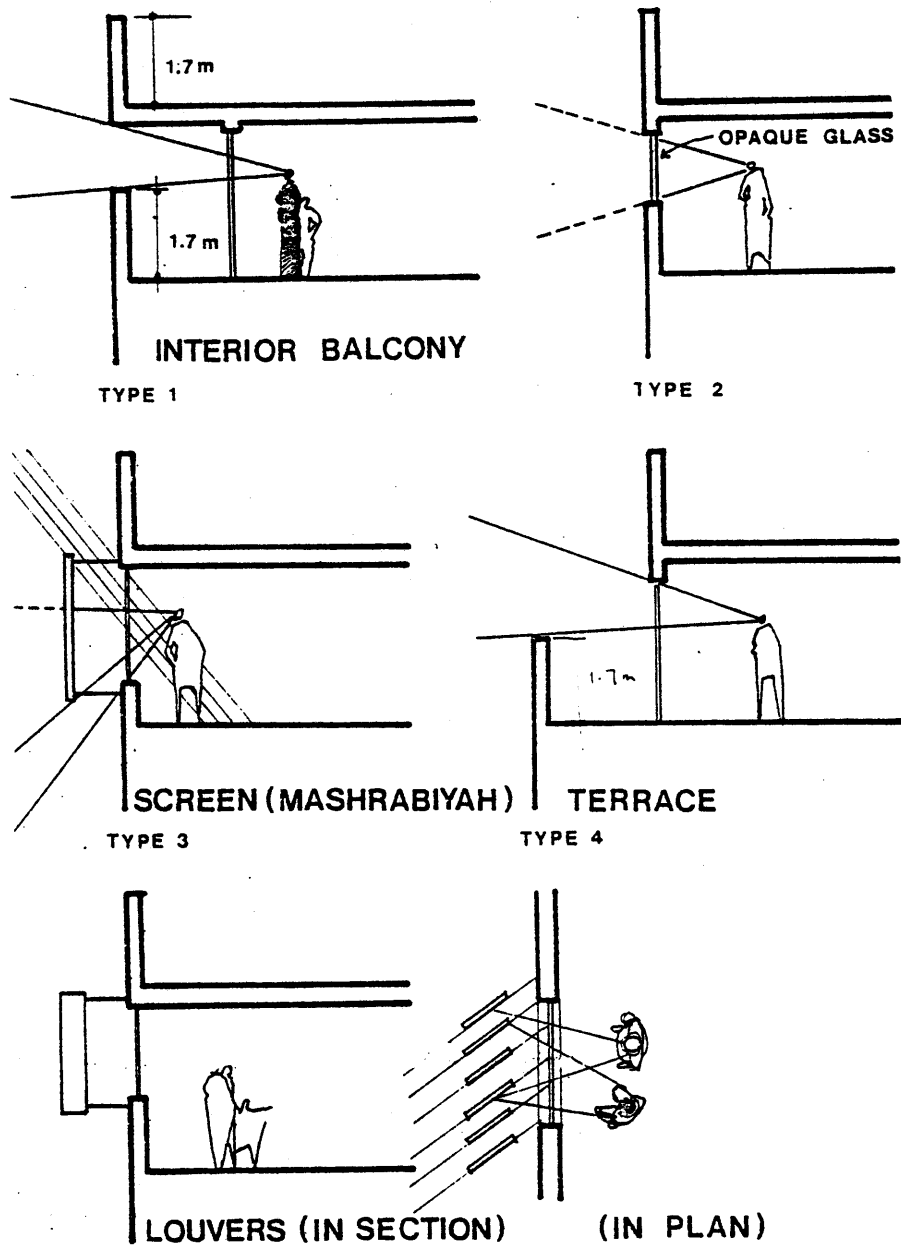
Fig. 64. Riyadh-Proposed Zoning Regulation.
Article 9:3 authorized window openings for blind
facades.

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

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) [Fig. 65]

Another issue for which the regulations deserve credit

is their concern for preservation. The new regulations recog-

nize the need for preserving certain traditional areas, and

suggest the creation of a public agency to control architec-

tural 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 regu-
> lation[s] on construction activities in terms of scale,
> functions, styles, and materials according to specifi-
> cations 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 imple-

mented 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 cul-

tural context and some of the problems encountered in Riyadh
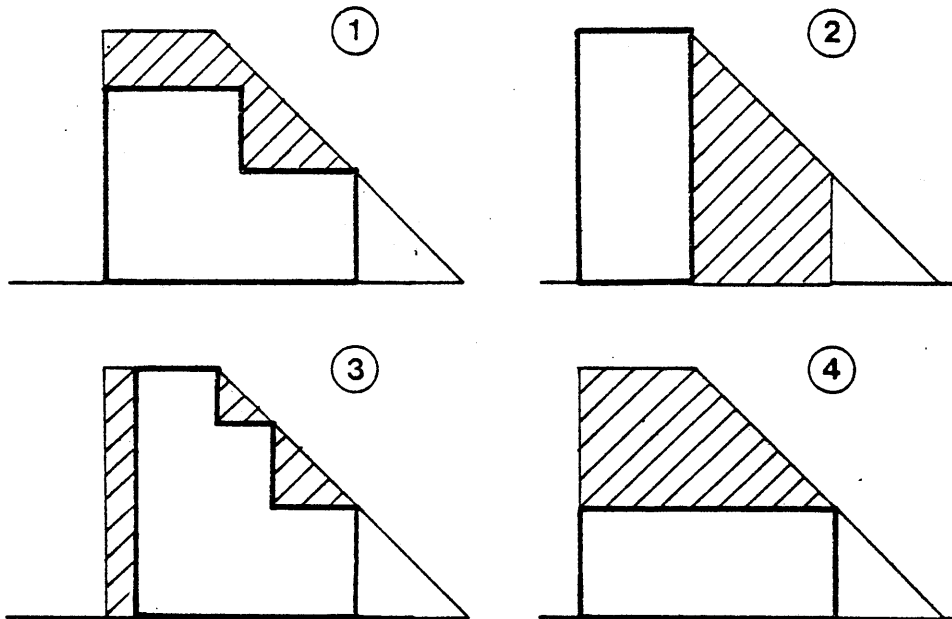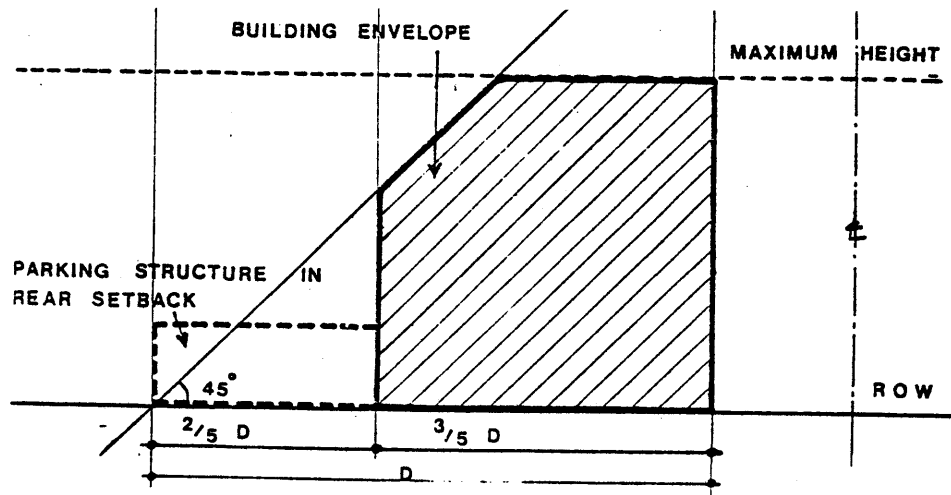
Fig. 65. Riyadh-Proposed Zoning Regulation.
(upper) Article 10:2 the sky exposure plane.
(middle & lower) Illustrative examples. 1-4.

Source: SCET, Riyadh Action Master Plan, T.R.No. 9,
v. 2, pp. 74,75.

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 (Fig. 49).[51] Doxiadis' proposal, however,
was never implemented and the trend to a square shape con-
tinued unabated.

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).

TABLE 4.   Minimum Lot Size and Minimum Dimensions.

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

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 infrastructures 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 demolish 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]

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 con-
ditions 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 require-
ments 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.

A. 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 maxi-
mizing the value of the property; therefore, it is envi-
sioned as an adjunct to the market mechanism. This ap-
proach 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 acti-
vities and people in the municipality or in the surrounding
communities.[1]

The first case of zoning in the United States occur-
red 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. None-
theless, 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 es-
tablish 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 pat-
terns and, as a result, tended only to minimize gross dis-
order, 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 eco-
nomic 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 popula-
> tion 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 neigh-

borhoods 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 main-
taining 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 preser-
vation 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 de-
veloped 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 con-
stitutionality 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 sizes 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:

> . . . [A]s 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 mini-
> mum 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 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 predo-
minantly 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 muni-
cipal 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 road-
> block 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 ". . .pro-
cedure 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
judgements inherent in any given set of such processes
have to be made explicit and taken into account. Thus
far, such judgements 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 ap-
peared 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 set-
back 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 buil-
ding 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 condi-
tions. 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 Statute[25] first intro-
duced 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 insure 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 regu-
lations. 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 life-style,
based on the conception of outdoor living as opposed to
the notion of the family as an inwardlooking 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 expro-
priations 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 urban renewal and slum clearance, and those in-
volving the implementation of zoning regulations, especi-
ally 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 chal-
lenged 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
> decide that the Nation's capital should be beautiful
> as well as sanitary, there is nothing in the 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. Appelants
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 Con-
gress and Congress alone to determine, once the pub-
lic 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-
Mu^{C}ayqliyah, are to be developed as a commercial zone.
The issue of who is to develop this area (al-Mu^{C}ayqliyah)
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 deve-
lopment 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 Inte-
rest 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 ^{C}Umar b. al-Khattab (d. 23/644) and al-^{C}Abbas
b. ^{C}Abd al-Muttalib.[32] In this case, ^{C}Umar, 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 direc-
tion of the extension, except for the home of al-^{C}Abbas
who refused to sell. ^{C}Umar 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-^{C}Abbas and the
two sides agreed to an arbitration, which ultimately fa-
vored al-^{C}Abbas' position. Consequently, ^{C}Umar gave up
his attempt to seize al-^{C}Abbas' property. Only after
this did al-^{C}Abbas decide to give his house to the com-
munity as a gift. Subsequently, ^{C}Umar planned and built
a house for al-^{C}Abbas, 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 prac-
tices 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 prove
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 prove to be harmful to the community if
left the way they are. In this case, the jurists tended
to compell owners to rebuild. In certain cases, where the
owner was financially incapable of rebuilding, or where
the building was a waqf (pious foundtion), 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 ^{C}Umar and al-^{C}Abbas, and the

opinion of the Muslim jurists with respect to urban renewal
-- s how 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 satis-
fied, 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 commu-
nity; 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 CONVEN-
    TIONS

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 physi-
cal 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 insured 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.

RELIGIOUS & CULTURAL
IDEALS

THEMES & PRINCIPLES

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

LEGAL THEORY

CONVENTIONS OF
USE (CU)

CONVENTIONS OF
PHYSICAL
ENVIRONMENT (CE)

EMPIRICAL
USE (EU)

THE PROCESS IN TRADITIONAL
ARAB-MUSLIM CITIES
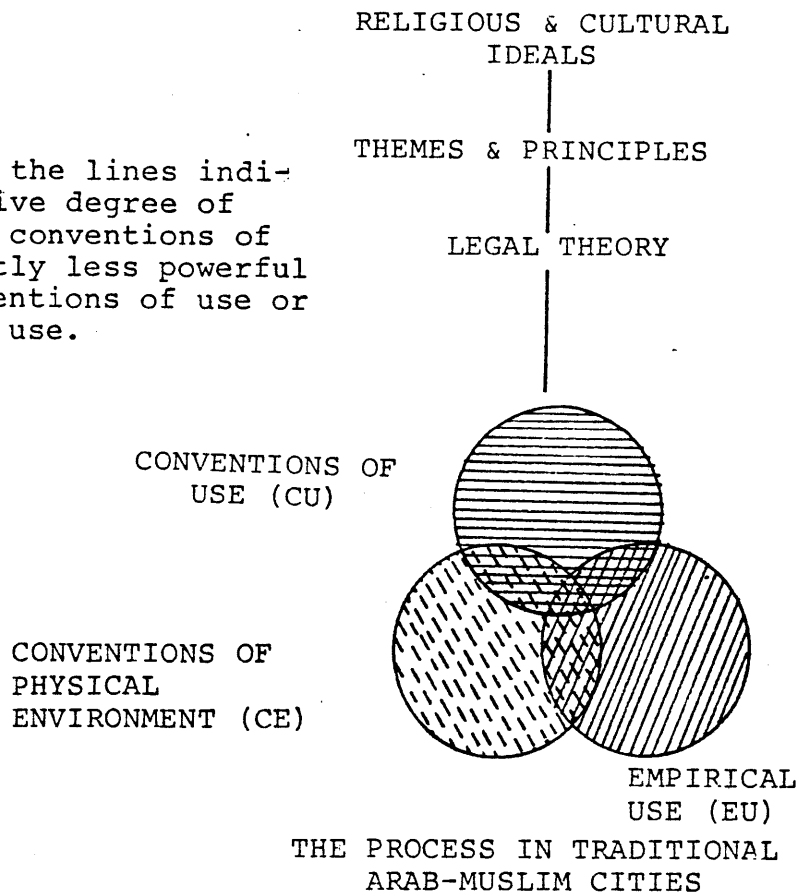
In the contemporary Arab-Muslim city, the process of
relying on customs of use for the generation and control
of change has been replaced by another process which
relies on preconceived, prescriptive conventions of form.
In the present city we have a master plan accompanied
by a package of zoning regulations. 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 proscribe 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
a 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 atti-
tude toward the relationship of form and use.

Let us examine this difference in physical terms by
looking at the house types within traditional and contem-
porary cities. Within the traditional 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 set-
back 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.

CONVENTIONS OF FORM
DEVELOPED ELSEWHERE

(CE)   (CU)

(EU)
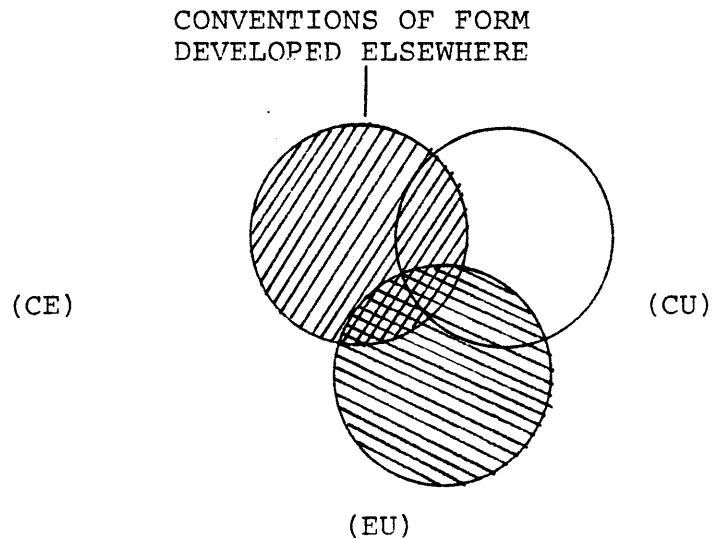
*   THE PROCESS IN THE
CONTEMPORARY ARAB-MUSLIM CITY.
Lack of lines in the convention
of use indicates that they play
no role in the new system.

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 regula-
tory 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 windows 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 par-
ties 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 (Fig. 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 "tech-
nical" and therefore devoid of any cultural connotation.
This, in turn, implies that any group of technocrats
(planners) can be asked to write the regulations and that
these regulations can be changed at any time. Such has
been the case with the city of Riyadh where Doxiadis Asso-
ciates 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.

CONCLUSION

CONCLUSION

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 tradi-
tional 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 exem-
plified in Damascus and Aleppo, and the Arab model based
on the tribe as an institution and on the khittah sys-
tem. 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, materi-
alized 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 basi-
cally 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 con-
ceptions 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 de-

velopment 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 continu-
ously 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 trans-
formation 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 impli-
cations 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 contem-
porary, 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 inhabi-
tants of proscribed actions; such rules accord with Islam
as a way of life. The shari^{c}ah concerns itself with both
the ^{c}ibadat (religious observances, or worship), and
the mu^{c}amalat (worldly affairs). Regarding the ^{c}ibadat,
the individual is told what to do and how it is to be
done, while under the mu^{c}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^{c}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 within
the traditional process is a reciprocal and possibilist
relationship between form and use without any precon-
ceived 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 contem-
porary process implies a determinist approach to the rela-
tionship 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 neces-
sarily 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 physi-
cal environment. On the regulatory level there is, on
the one hand, the building authority which bases its de-
cisions 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 contra-
dictory. 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 reestablishing 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. <u>Ideology</u>.

    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 <u>taqlid</u> (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 wester-
nization, 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 envi-
ronment, 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 tradi-
tional 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 under-
take the huge building programs of al-Nasiriyah, al-Malaz,
and the government complexes on al-Matar street in Riyadh,
and to employ modern technology in implementing these pro-
grams, 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 recog-
nized and considered at the time; once introduced, they

were there 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 con-
ceived of and carried out within the context of modern
technology.

With the growth of industrial society and the deve-
lopment of modern technology, their organizations and net-
works, came 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, the bureau-
crat or the technocrat. This 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 deve-
lopment 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 rein-
forced 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 reestablishing 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 alter-
native 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 provid 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 taglid (imitation) and the consequent use of two ap-
proaches 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 judgement) 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 one 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 conerning
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 impor-
tant 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 mashrabiyah, 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 at-
tempting 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 $qa^c ah$,

and the <u>mashrabiyah</u> 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 <u>mashrabiyah</u> in order to preserve continuity with the
past. The concludion here would be that since a defi-
nition 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 relation-
ships 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

Introduction

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 rephrasings 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, Falsaft al-Tashri^c 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 Univ. 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[c]i's concept of ijma[c] 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 his concept of sunnah.

13. Coulson, op. cit., p. 61.

14. For the matured essence of al-Shafi[c]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, [c]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 (khabar al-wahid) when it contradicted their established doctrine. And both pre-served 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[c] ahl al-Madinah (the con-census 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[c] 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 peerles ability, and he links this to the spread of ijma^c. 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^cah, Mu^ctazilah, 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 Gourna" 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 Symbol and Self-Identity, Oct. 1979; Seminar Four, 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, <u>Nahn wa al-Tarikh</u>, Beirut, 1959, ch. 2, pp. 25-45.

22. A representative example of the traditionalist way of thinking can be found in M. Bahi, <u>Al-Fikr al-Islami al-Hadith wa-Silatuh bi-al-Isti^cmar al-Gharbi</u>, 2nd ed., Cairo, 1959.

23. A Laroui, <u>The Crisis of the Arab Intellectual, Traditionalism or Historicism?</u> Berkeley: Univ. of California Press, 1976, p. 42.

24. Popper, <u>op. cit.</u>, p. 131.

25. A representative example of the liberals way of thinking is to be found in H. Sa^cb, <u>Tahdith al-Fikr al-^cArabi</u>, Beirut, 1970.

26. Popper, <u>op. cit.</u>, p. 132.

27. S. Anderson, <u>op. cit.</u>, pp. 81-82.

Chapter 1

1. For the classification of these cities and the process of urbanism in Islam, see, A. Ismail, <u>Origin, Ideology, and Physical Pattern of Arab Urbanization</u>, a Ph.D. dissertation, Univ. of Karlsruhe, 1969, Ch.6; E. Pauty "Villes spontanees et villes crees en Islam", <u>Annales de l'Institut d'Etudes Orientales</u>, Universite d'Alger, IX (1951), pp. 52-57; G. Marcais, "La conception des villes dans l'Islam", <u>Revue d'Alger</u>, II (1945), pp. 517-533; F. Bent, "The Ideology of Islamic Urbanization," <u>Int. J. of Comparative Sociology</u>, IV, No. 2, (1963), pp. 211-226; G. von Grunebaum, "The Structure of the Muslim Town", in his <u>Islam: Essays in the Nature and Growth of a Cultural Tradition</u>, London, (1955), pp. 141-158.

2. Von Grunebaum, <u>op. cit.</u>, pp. 146-148. Von Grunebaum is taken here as the best example of these descriptions of the Muslim town. See also, R. LeTourneau, <u>Les villes musulmanes de l'Afrique du nord</u>, Alger (1957); X. dePlanhol, <u>The World of Islam</u>, Ithaca, (1959).

3. R. Brunschvig, "Urbanisme medieval et droit musulman," <u>Revue des Etudes Islamiques</u>, 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
streets and 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. 75-88.

4. von Grunebaum, op. cit., p. 153.

5. J. Sauvaget, 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.
    Shaltūt, the reference hereafter is to the type-script
    of Dr. F. Shaltūt. 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."
    J. of the Economic and Social History of the Orient,
    V.II, Part 3, (Dec. 1959), pp. 247-261; H. al-Jasir,
    Qata'iC al-Nabi, Riyadh, Dar al-Yamamah, (forthcoming).
    For a brief historical account, see, Fr. Buhl, "Al-
    Madina," Encyclopaedia of Islam, 1st ed., Leiden, (1936),
    v.III, pp. 83-92.

11. al-Samhudi, op. cit., v.I, pp. 156-166 for the settle-
    ments of the Jews; and v.I, pp. 190-215 for the
    settlements of the Anṣar tribes.

12. The anṣar is a term ascribed to the settlers of Medina
    from the tribes of al- Aws and al-Khazraj who accommoda-
    ted 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^cd b. ^cUbadah. Ibid., v.I, p. 259. Also, the settling of al-muhajirun in the 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 of 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. Yaqut (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, p. 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-Najar, 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 ᶜUmar's time can be induced from two reports by Ibn Shabbah and Ibn Zabalah. The former relates that ᶜUmar saw a bellows owned by an ironsmith (kīr) in the market, and that he kept kicking it with his foot until it was demolished. Then ᶜUmar shouted to the blacksmith: "Do you disparage the market of the Prophet?" The latter also relates that ᶜUmar passed by the door of some Mu ᶜammar in the market where he had a jar located besides his door. ᶜUmar ordered the jar to be removed, but Mu ᶜammar told him that it was a water jar from which the passersby drink. Therefore ᶜUmar conceded. However, some time later, ᶜUmar 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 Baqiᶜ al-Zubayr was located within what we know today as the al- Aghawat neighborhood, and that the raḥbah known as raḥbat al-Khudam or al- Aghawat on the street between the mosque and al-Baqiᶜ was part of Baqiᶜ al-Zabayr. 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. S. El- Ali, "The Foundation of Baghdad," in A.H. Hourani, S.M. Stern (eds.), The Islamic City, Oxford, (1970), pp. 88-89.

29. A.Y. 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-Ijtim aᶜiyah wa-al- Iqtisadiyah fi al-Basrah, Baghdad, (1953); S.H. Longrigg, "Al-Basra", Encyclopaedia 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. A.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 Exercises, (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 ^{C}qubi, op. cit., pp. 4-28; al-Khatib (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 Bagdad," in Hourani, Stern (eds.), op. cit., pp. 88-101; M. Jawad, A. Susah, "Madinat al-Mansur wa-Jami ^{C}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-dhira^C 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-Ya ^{C}qubi, 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-Ya ^{C}qubi, 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 ^{C}qubi, op. cit., pp. 28-44; E. Herzfeld, Geschichte der Stadt Samarra, Hamburg (1948); A. Sousa, Rayy Samarra' fi ^{C}Ahd al-Khilafah al-^{C}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 ^{C}qubi, 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 here-after 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-^CAmmah, 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., p. 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.22, No. 859; see Appendix I.

Chapter II

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.

3. For al-Fustat, Ibn ^CAbd al-Hakam, op. cit., p. 136. For al-Kufah, al-Ya ^Cqubi, op. cit., p. 96. For Medina, al-Samhudi, op. cit., vi.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-Khatib, 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 <u>muhtasib</u> is the traditional inspector of the market in Arab-Muslim cities. He derived his authority from the religious injunction <u>hisbah</u>; "to promote good and forbid evil." The post of hisbah existed at the Prophet's time. It is reported that he assigned ⁽Umar b. al-Khattab to the market of Medina, and Sa⁽id b. al-⁽As to the market of Mecca. Al-Kittani, <u>op. cit.</u>, V.I, pp. 284-290. For the duties and responsibilities of the <u>Muhtasib</u>, see Chapter IV, "the <u>Muhtasib</u>."

8. al-Sarkhasi, Abu al-⁽Abbas, Ahmad b. Muhammad b. Marwan (d. 286/899), <u>K. Ghish al-Sina ⁽at wa-al-Hisbah al-Saghir</u>, and <u>K. al- Aghshash wa Sina ⁽at al-Hisbah al-Kabir</u>. See, K. ⁽Awwad, "al-Hisbah fi Khizanat al-Kutub al-⁽Arabiyah" <u>Majallat al-Majma⁽ al-⁽Ilmi al-⁽Arabi</u>, V. XVIII, No. 9 and 10; (1943) pp. 417-428, p. 420. A bibliographical account of the manuals and treatises written on the <u>hisbah</u>.

9. al-Shayzari (d. 589/1193), <u>Nihayat al-Rutbah fi Talab al-Hisbah</u>, 2nd ed., Beirut (1969), pp. 11-12.

10. Ibn ⁽Abdun (d. first half of 6th/12th century). "Risalat Ibn ⁽Abdun fi al-Qada' wa-al-Hisbah," E. Levi-Provencal (ed.), <u>Thalath Rasa'il Andalusiyah fi Adab al-Hisbah wa-al-Muhtasib</u>, Cairo (1955), p. 38.

11. al-Sharyzari, <u>op. cit.</u>, p. 24.

12. Ibn al-Ukhuwwah (d. 729/1329), <u>Ma⁽alim al-Qurbah fi Ahkam al-Hisbah</u>, R. Levy (ed.) with an English abstract, Cambridge, Cambr. Univ. Press (1938), p. 99.

13. Ibn ⁽Abd al-Ra'uf (d. 6th/12th century), "Risalat Ibn ⁽Abd al-Ra'uf fi Adab al-Hisbah," in Levi-Provencal, <u>op. cit.</u>, pp. 97-111.

14. Ibn al-Rami, <u>op. cit.</u>, 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, <u>The Holy Quran</u>, Cambridge, Mass., 1946, II, p. 1345, ft.n. 4696.

18. Ibn al-Rami, p. 20.

19. <u>Ibid.</u>, 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. <u>Ibid</u>., p. 21.

21. <u>Ibid</u>., p. 22.

22. <u>Ibid</u>., p. 22. Ibn al-Rami uses the term <u>khayāshim</u>, literally translates as gills, to mean nostrils.

23. <u>Arwā</u> as used here by Ibn al-Rami refers to a sort of a stable. However, <u>arwa</u>, pl. of <u>urwiyah</u> is the female of the mountain goat. See: Ibn Manzur, <u>Lisān al-^cArab</u>, 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. <u>Ibid</u>., pp. 22, 45.

26. <u>Ibid</u>., pp. 22, 23.

27. <u>Ibid</u>., p. 22. <u>Kammadin</u>, pl. of <u>kammad</u> from the verb <u>kamada</u>, that is, to apply a hot compress or a hot pack to a limb.

28. <u>Ibid</u>., 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), <u>Rasa'il fi Tarikh al-Madinah</u>, Riyadh (1972), pp. 45, 48.

30. E. 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, <u>Alep</u>, <u>op</u>. <u>cit</u>., pp. 221-231. Within the same city, Sibt b, al-^cAjmi (d. 884/1479) records an instance of a <u>qadi</u> removing a slaughter house from a location where it inconvenienced the residents of that area. Sauvaget, <u>Materiaux pour servir a l'histoir de la ville d'Alep</u>, Beirut (1933-50), v.II, p. 54; referred to in von Grunebaum, <u>op</u>. <u>cit</u>., p. 156, ft. n. 17.

Chapter III

1. In the books of <u>fiqh</u>, 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; Ibn ^CAbdun, p. 37; and Ibn Bassam, Muhammad b. Ahmad, Nihayat al-Rutbah fi Talab al-Hishah, Baghdad (1968), p. 17.

4. Ibn al-Iman, (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 Algérienne 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., pp. 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^Ciyh Turky, 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 aqlaᶜa al-bab wa ahdim al-darb." Note also that he uses the terms 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. Ajnihah pl of janah defined by Ibn al-Rami as "al-Khawarij allati tuᶜmal ala al-hitan fi al-Shawariᶜ." He uses janah and ᶜaskar 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 Shaᶜban 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 CUmar b. CAbd al-CAziz 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 whom 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, Jal al 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

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 require-
   ment and the qadi's responsibilities in theory and prac-
   tice 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 [c]Abd al-Radi[c], the judge of
   Tunis, which are not initiated by complaints and there-
   fore 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 <u>hisbah</u> and the office of the <u>muh-tasib</u> see R. Levy, "Muhtasib" art, <u>Encyclopedia of Islam</u> (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., <u>Encyclopedia of Islam</u>, (2nd ed.), Vol. 3, pp. 485-493. For the office's requirements and the <u>muhtasib</u>'s responsibilities in theory and practice see, in addition to the <u>muhtasib</u>'s manuals referred to earlier, H.F. Amedroz, "The Hisba jurisdiction in the Ahkam Sultaniyya of Mawardi," The <u>Journal of the Royal Asiatic Society</u>, (January 1916), pp. 77-101; (April 1916), pp. 287-314.

14. Amedroz, 1916, pp. 80-85.

15. <u>Ibid</u>., pp. 77, 95-98.

16. <u>Ibid</u>., pp. 78-80.

17. It should be pointed out that the <u>muhtasib</u> 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," <u>Hay'at al- Amr bi al-Ma^Cruf wa al-Nahy ^Can al-Munkar</u>. Before the development of municipal authorities in Saudi Arabia, these organizations shouldered most of the <u>muhtasib</u>'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 <u>al-masalih al-mursalah</u>. It is invoked by the Malikis and the Hanbalis who consider it one of the <u>usul</u> (pl. of <u>asl</u>; source or foundation) of <u>fiqh</u>. The Hanafis allow for the public welfare in what is called <u>istihsan</u>, while the Shafis oppose it on the grounds that <u>the mujtahid</u> does not know what is good for the public and therefore he has to have a quotation from the <u>shari^Cah</u> to serve as a textual evidence. Abu Zahrah, <u>Malik</u>, Cairo, (1952), pp. 365-370.

19. R. Levy, "^CUrf" art, <u>Encyclopedia of Islam</u>, (1st ed.), Vol. 4, p. 1031. For more on ^Curf see also Abu Zahrah, <u>op. cit</u>., pp. 420-427 and <u>Usul al-Fiqh</u>, Cairo, (1957), pp. 261-264. Also, Ibn ^CAbidin, <u>Majmu^Cat Rasa'il Ibn ^CAbidin</u>, Vol. 2, "Risalat al^CUrf."

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).

Chapter V

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's 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^{C}a Street in Mecca and the opening of the new street of al-^{C}Ayniyah 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 ^{C}Abr 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 relaid 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 section 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 Yanbuᶜ--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, pp. 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 Muni-
     cipalities' 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:

Number	Date	Page
250/5	15/8/1394	72
291/5	17/9/1394	76
300/5	23/9/1394	77
331/5	6/11/1394	77
50/5	1/02/1395	80

     In vol. 4:

71/5	21/2/1396	17-18
81/5	7/3/1396	19
218/5	17/6/1396	21

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

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 incon-
    venience produced by the premises. [Nizam al-Mahillat
    al-Muqliqah li-al-Rahah wa al-Mud irrah bi-al-Sihhah
    wa-al-khatirah, Royal Decrees No. 17, on 18/3/1382/1962,
    2nd ed., (Mecca: Government Printing Press, 1387/1967).]
    The statutes 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, establish-
    ments 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 inhabi-
tants. ["la'ihat al-Mu'assasat wa al-Hiraf allati
yantabiq Calyha Nizam al-Mahillat 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 pro-
cedures for the compulsory acquisition of land needed
for public interest projects. It also prescribes pro-
cedures for estimating compensations, the method for
their payment, and the procedure for appeals. [Nizam
NazC Milkiyat al-CAqarat li-al-ManfaCah al-CAmmah, Royal
Decree No. 65/m, on 16/11/1392/1972, (Mecca: Government
Printing Press, 1393/1973.).] The statute is supple-
mented 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.
An important part of the proposed revision is a new sec-
tion 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 the new section regards the use of eminent domain in
old areas. The Department argues that, if the expropri-
ation 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-Azimah, 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 de-
signed 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 require-
ments 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 responsi-
bility 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 sub-
mitted 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-Hussayen, 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 [C]Ahd Jalalat al-Malik Sa[C]ud_, 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 latter 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. [C]Abd 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. <u>See</u> section B.1 of Chapter V, <u>The Super-Grid</u>, above.

28. Doxiadis, <u>Riyadh Master Plan</u>, A-19, p. 11.

29. <u>See</u> section B.3 of Chapter V, <u>The Square Lot</u>, above,
    and footnote 50. Also, see section B.3 of this chapter,
    <u>The Confirmation of the Square Lot</u>, below.

30. See section A.5 of this chapter, <u>Regulations in Practice</u>
    <u>Before the Master Plans</u>, 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. <u>See</u> section A.2 of this chapter, <u>Roads and Buildings</u>
    <u>Statute</u>, above.

34. Doxiadis, <u>Riyadh Master Plan</u>, 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. <u>See</u> section B.2 of Chapter V, <u>The Square Lot</u>, above.

37. SCET International/SEDES, <u>op. cit.</u>, 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. <u>Ibid.</u>, p. 4.

39. <u>Ibid.</u>, 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 setbakcs, section 7:1: minimum requirement. Ibid., p. 69.

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

46. Ibid., pp. 70-71.

47. Ibid., pp. 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 judgement based on one's own values.

59. Establishing these limits is again a subjective matter, depending on value judgements; however, such judgements 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.

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, an 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 Gruber 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. Delafons, op. cit., pp. 21-23.

24. Russell Van Nest Black, Building Lines and Reservations for Future Streets, (Cambridge: Harvard University Press, 1935), pp. 22-23.

25. See section A of Chapter VI, above.

26. Either sueing 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 Bulldoser, 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. <u>Medina Court Records</u>, R 144, p. 12, Case No. 86, dated 7/11/1251/1836.

37. <u>See</u> section B of Chapter IV, above.

38. <u>See</u> section C of Chapter III, above.

Conclusion

1. See chapter four of this study and al-Mawardi, <u>op. cit</u>. Chapters V, VI, and XX. See also Amedroz' translation of Chapter VI, and XX on the office of the <u>Qadi</u> and of the <u>muhtasib</u>. Amedroz, <u>op. cit.</u>, 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, <u>op. cit.</u>, pp. 114-116.

3. L. Winner, <u>Autonomous Technology</u>, Cambridge, (1977) pp. 11-12.

4. A. Toffler, <u>The Third Wave</u>, 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", <u>Architecture and Urbanism</u>, 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," <u>Architecture, Mouvement, Continuite</u>, No. 49 (1979), pp. 85-90. See also J. Dunnett, "City of the Tiger", <u>Architectural Review</u>, 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.) <u>Architecture of the Islamic World</u>, 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. However, after that each number applies to only 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 caligraphic 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.

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سجل ٣ (المجلد الثانى)

صفحه ٥٠١

حجه رقم ١٦٧٦

تاريخ ٩٧٨/١/٢٠هـ

موجب تحريره أن الحاج ابراهيم بن خير الشامى النحاس المجاور بالمدينه النبويه المالك الحايز لجميع الدار الكائنه بخط سوقه بباطن المدينه النبويه الملاصقة للشارع الأعظم بطريق الشراء الشرعى لما عزم على هدم الجدار المتصل بالشارع الأعظم المشتمل على بابين أحدهما يدخل ضه الى حاصل جار فى ملك ابراهيم المذكور و من جملةالدار المذكوره ٠ والثانى يدخل ضه الى دار إبراهيم المذكوره (وغيرها؟) ٠ سأل (فضل؟) مولاى (وسندى؟) الحاكم الحنفى صطفى بن خليفه الحكم الشرعى بالمدينه النبويه أن يكشف على الشارع المذكور ويحيط به علما وخبرةحتى يخلص من تبعته وحرجه ويعيد الجدار المذكور على حكمه من غير ان يخرج فى الشارع المذكور٠ فأجاب الى سؤاله وكشف على الجدار المذكور بحضر جماعةمن اهل الخبرةو العداله والمعرفه بالعقارات و الأراضى وأحاطوا بجميع ما شرح نيه ٠ فكان ذرع الشارع المذكور من آخر الجدار المذكور المتصل بجدار دار مولانا الشيخ محمد عبد المعين المالكى الى الجدار القابل له الجارى فى وقف الزينى قاسم أفا عسكر المدينه النبويه أربعةاذرع بذراع العمل ٠ وكذلك ذرعه من آخر الجدار المتصل بجدار الدار التى جددها ابراهيم المذكور الى الجدار القابل المذكور أربعةاذرع بالذراع المذكور ٠ والمراد بالجدار القابل ثانيا هو دكةالدكاكين الجارية فى الوقف المذكور ٠ وذرع وجه الأسطوان الملاصق لدار محمد المالكى المذكور نصف ذراع بالذراع المذكور ٠ وذرع الجدار المذكور أعلاه من الشرق الى الغرب ثمانيةعشر ذراعا و ثلثا ذراع بالذراع المذكور ٠ وذرع الزقاق المتصل ضه الى دار إبراهيم المذكور وغيرها ذراعان كاملان ٠ كل ذلك بمحضره (أجله الله؟) وسجل ذلك بامره الكريم بعد طلب إبراهيم المذكور لذلك ليوجد عند الحاجة اليه فى عشرين محرم من عام ثمان و سبعين و تسعمائه ٠

(صبيصر؟)   احمد (رولى؟)   عبد الكريم بن   ابراهيم محمد   محى الدين بن

(سورقند؟)   النعمان   (صلاح اكلوس؟)   الشرتى   ناصر الدين (المهندس)

(تعليق بالهامش)

استوى حكم الجدار المشروح امامه على أصله القديم وحدد ذلك وانشأ كذلك ورقم بأمر مولاى الحاكم خلال يوم تاريخه بعد تحديده، وكشف عليه ٠ ليوجد ذلك عند الحاجةاليه ٠ كذا فى ثانى من ربيع الثانى فى عام ثمان و سبعين و تسعمائه ٠

مولانا محمد الزينى موسى   جمال الدين   عبد القادر   محمد (صه؟)   احمد بن صطفى   محمد   اغا حد

عبد المعين   ولى   محمد   (نخب؟)   (نخ؟)   (الينام؟)   محمد   الترجمان   (الدين؟)   مسلم

المذكور   حمزه   (الخير؟)   الترجمان   الجابى   الحرم   النبوى

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ضمنها أنه حضر المجلس الشرعى جماعة منهم الحاج محمد الطويل الدلال و المعلم عزمين و الحاج يوسف أبو شاهين · المعلوبين بأعيانهم و المستغنين بذلك عن رفع نسبهم الى أجدادهم و آبائهم و حضر لحضورهم المعلم على مراد البناء بن على (وف ؟) حضورهم إدعوا على المعلم على المذكور بدعوى قالوا فى تقريرها انه واضع يده، على زقاق بلزق الدويره التى اشتراها فى خلف رباط النايب، فاصل بين الدويره و بين حديقة الجوزى نافذ الى رأس زقاق الحبس منه الزقاق الذى هو على يسار الداخل من زقاق الحبس وقد ادخله فى داره وهى الدويره المزبوره · و انه كان يمر سابقا الى السنه الثامنه عشر بعد المائتين و الالف وقد خرب الزقاق عذ ذلك العام و انسد بالدمار و لم يستعمل الى هذا التاريخ و انهم يطلبون فتحه · و لم ينهدوا على هذا فى تقرير دعواهم · فسئل واضع اليد الذى هو المعلم على المذكور فأجاب بإنكار ما ادعوا به، و انه إنما كان فى السابق زقاق غير نافذ مخصوص بالدويره التى اشتراها بحقوقها و مرافقها و توابعها و كل ما ينسب إليها و هو فى يده، و تحت تصرفه وقد كان كذلك تحت ايدى الذين اشترى منهم الدار المزبوره عذ مدد طويله و ازمنه عديده دون منازع و لا معارض· و ان المدعين المذكورين انما ادعوا بهذه، الدعوى مجرد نفسانيه و طال بينهم النزاع و التشاجر فى ذلك فسئل مولينا (فسأل مولانا) الحاكم الشرعى من يكشف عن حقيقة الحال من له المعرفة و الخبرة بهذا الشان صحبة نائبه جناب الحاج حسين حلمى أفندى · بعد التربص و الامعان و تصفح كتب الاعلام من مذهب الامام أبى حنيفة النعمان · فكشفوا عن الوضع المذكور فوجدوه طبقا لما قرره المدعى عليه الذى هو المعلم على و المعالم و الآثار شاهدته مكذبة للمدعين و رادة لعليهم فيما ادعوا به، حيث وجد عند رأس جدار حديقة الجوزى أساس جدار دويره المعلم قاطع للزقاق مانع له الى الاتصال الى رأس زقاق الحبس و ايضا قد ورد النهى السلطانى و الأمر الخاقانى بالنهى عن سماع الدعوى اذا مضى عليها خمس عشرة سنة الا فى (مستى ؟) ليمر هذا منه · و به أفتى المرحوم العلامه أبو السعود أفندى مفتى الديار الروميه قطعا للحيل و التزوير· و ايضا هناك مانع يمنع من حواشة الدرر و الغرر و حواشة الدر المختار· و ايضا لم يبينوا فى دعواهم قدار عرض ذرعا · و المدعى به اذا كان مجهولا لا تستمع الدعوى، فإن من شرائط سماعها ان يكون معلوما كما فى متون المذهب· ممكون الدعوى غير منتظمه على ما هو ظاهر لمن تأمله · و حيث كان الحال كذلك و المدعى عليه قد تصرف و أسرعنيانه و لم يكن هناك ضرورة الى تغيير ما صنعه المدعى عليه و إضاعة ماله وتعبه، بل قد يترتب ضرر فاحش على فتحه لو ثبت· وقد تحقق الطريق الموسغ للحكم قد حكم مولينا (مولانا) الحاكم الشرعى بعد م سماع الدعوى المذكوره بهذا الخصوص و ان لا يعارض المدعى عليه فى هذا بوجه من الوجوه · و لا ينازعه منازع بسبب من الأسباب، حكما باتا تاطعا للخاصة و المنازعه و الأهواء و الشهوات النفسانيه حكما صحيحا شرعيا لازما مرعيا لا يسوغ لأحد العدول عنه جاريا على أصح الاقوال و اشهرها من مذهب الامام الأعظم أبو حنيفة النعمان· نفذه، و أضاء ، ١٧ صفر الخير سنة ١٢٦٨·

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سبب تحريره والباعث لرقمه وتحبيره هو أن الحكم مولانا السيد أحمد والحكم السيد زين العابدين ابني
المرحوم السيد علوى باحسن جمل الليل لما كان لهما أمام دارهما خط المعلومة بخط سويقة الكاينة بالمحل الشهير
بزقاق السادة بن حسين دكاتحت جدار بيت الشيخ ياسين الخليلي الموقف لطى ائمة السادة الشافعيه
ابتداوها من رأس الزقاق المذكور بجانب باب بيت الشيخ ياسين وانتهاؤها آخر جدار بيت الشيخ ياسين
القابل لباب دارهما، وأرادا احداث بناء على الدكه لا يضر بالماره ، عارضهما فى ذلك بعض ابناء السادة بنى
حسين زاعمين ان لهم حقا فى الدكه المذكور نسأل مولانا الحاكم الشرعى الواضع إسمه وختمه الشريفين
اعلاه السيدين المذكورين من سندهما فى استحقاق الدكة المذكوره ، فأجاباه بأنها آلت الينا من والدنا
وكان واضعا يده عليها بالتصرف بناء، وانتفاعا مدتو شاهد التصرف بناء والدنا القايم عليها ولم نزل بعده
واضعين أيدنا عليها الى الآن وجميع بنى حسين وابنائهم من بعضهم يشاهدون تصرف والدنا قبلنا وتصرفنا
من بعده من غير انكار مدة تتوف على ثلاثين عاما فاجابهما مولانا الحاكم الشرعى بعد تحقق ما أبدياه، لديه
بأنه ليس لأحد الضم من ذلك الا إذا كان فيه ضر بالماره لأن دعوى الإستحقاق من المعارضين لا تسمع
بعد التصرف المذكور ومشاهدة المدة المذكوره من غير إنكار كما صرح به غير واحد من ائمة السادة الحنفيه كمولانا
نخر الدين قاضى خان والإمام الزيلعى والعلامه الدلوالجى وغيرهم من تأخرى الحنفيه وبه أفتى العلامه
خير الدين الرملى وصاحب الاسعديه فعند ذلك طلبا من مولانا الحاكم الشرعى الكشف عن ما يتوهم ضه ضر
الماره فأجاب لذلك حيث كان له النظر العام فتوجه بنفسه وأمعن نظره فى الوضع المذكور وتحقق لديه
عدم حصول ضرر من ذلك بالماره اصلا بوجه من الوجوه فأذن لهما بالوضع والانتفاع بالدكه المذكوره كيف
شاؤا اذنا عاما صحيحا شرعيا فى ٢٥ رمضان سنة ١٢٠٨ .

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الحمد لله

ضمنها أنه حضر السيد شاهين الحسينى الشدقى أمير المدينه حالا وكيلا من الحرة الشريفه حزيمه بنت
المرحوم السيد سليمان الحسينى الخيارى الناظره يوبث على وقف جدها المرحوم السيد عامر بن السيد على
الخيارى الثابته وكالته عنها بشهادة العارفين بها المعرفة الشرعيةو هم السيد على بن عبد العزيز الحسينى
والشيخ على الفقيه الزبيدى وجابى الوقف المذكور السيد حسن بن السيد رضى و خادما الناظره و هما
الأسطى درويش الحضا و الأسطى محسن بن حسن النحاس(غ؟) أداء شهادتهم بأن الشريفة المذكورة
وكلت السيد شاهين المذكور فى دعواها على ابناء المرحوم السيد علوى باحسن جمل الليل · ادعى السيد
شاهين على المكرم السيد احمد بن السيد علوى باحسن جمل الليل بأن موكلته تدعى بأن أخاها المرحوم
السيد سليمان الحسينى الخيارى الناظر قبلها على وقف جدها المذكور أجر المرحوم السيد علوى باحسن ارض
داره التى أنشاها معطوى السبعه الدكاكين الملاصقه لهما من جهة الشام و الدكين التى احدهما غربا على
يمين الداخل الى قعد السادقبنى حسين القابلقللدار المذكورة والدكةالاخرى الشرقيه التى على يسار الداخل
الى القعد المذكور الملاصقللدار ويحد الدكين ابتداء و انتهاء قعد بنى حسين من أوله الى آخره ،
والدار المذكورة هى الكائنه بخط سوقه بحاره الصغ قرب باب الصرى التى هى سكن ابناء المرحوم السيد
علوى حال تاريخه و شهرتها تغنى من تحديدها باجرقدرها فى كل عام خمسعشر قرشا و انها دون اجر المثل
فعند ذلك سئل (سال) مولانا الحاكم الشرعى المدعى عليه و هو مولانا السيد احمد باحسن عن ما ادعى به
عليه فاجاب بأن الخمسعشر قرشا معالمتاريخه هى اجر المثل و زيادةقطلب مولانا الحاكم الشرعى جمعا من
أرباب الخبره الثقات ونظار الاوقاف و الحكورات لينظروا فى ارض الدار و ما أضيف اليها من علو السبعدكاكين
و الدكين المذكورتين و هل ما استؤجرت به من القدر المذكور اجر المثل او دونه · فحضر المكرم الخطيب
محمد افندى البرى و الخطيب محمد صالح حماد و الخطيب حسين أفندى الأنصارى و الخواجه عبد الله عبد
السلام و الخواجه عبد الله حمود و الجوربجى مصطنى تقجى و المكرم احمد ظافر و الحاج بركه شيخ المغاربه
و تاملوا فى عرصة الدار و علو السبعة دكاكين و الدكين المذكورتين نظهر لهم ان الخمسعشر قرشا معالمتاريخه
التى هى عبارةعن ريالين و ربعو أربعةديوانيه تزيد على اجر المثل لكون ارض البيوت المماثله للأرض المذكورة
بل و الزائدقطيعها سمعو صفقا اجر مثلها دون ذلك· و شهدوا لله بذلك (غنه ؟) ما ذكر تحقق لدى مولانا
الحاكم الشرعى ان الخمسعشر قرشا معالمتاريخه هى اجر المثل و زيادةو حكم بذلك و قابله المدعى و هو مولانا
السيد شاهين بقبول ما حكم به و رضى به · ثم ان المكرم السيد احمد باحسن ابرز حجةمؤرخةبعام خمسة
و سبعين و مائةو الف ضمنها ان المرحوم السيد صقر بن سليمان الحسينى الناظر يوم تاريخها على وقف اجداده
الساده آل خيار استاذن حاكم الشريعه المطهره فى العام المذكور فى بيحنقض الوقف الخرب الكائن على عرصة
الدار المتقدم ذكرها و صرف ثمنه فى تعمير بعض الوقف التى المرصةالمذكوره و ما اضيف اليها من جلةوقفه
لقصور الغلقعن التعمير· فاذن له الحاكم الشرعى بعد ان امر اهل الخبره من بنى حسين و غيرهم بالكشف
على ذلك و اخبروه بانهدام ما على عرصةالدار من بناء الوقف فباعه على المرحوم السيد علوى باحسن بتثمين
أهل الخبره بثمن قبوضقدره مائةو ثلاثون قرشا معالمةذلك العام ثم اجره أرض الدار المذكور و علو السبع

دكاكين و الدكتين المتقدم ذكرهم بخمستعشر قرشا و انها أضعاف اجر المثل واذن له على أن يبنى على ما
استأجر بماله و يكون ما يبنيه ملكا له و لاولاده و لاولاد هم يتصرفون فيه تصرف الملاك فى املاكهم و ذوى
الحقوق فى حقوقهم كيف شاوا ليس لجانب الوقف مشاركة ولا تعلق بما يبنيه بوجه من الوجوه اصلا وقد قرئت
الحجه المذكوره بتمامها على الناظر المذكور بحضرة شهود الوكاله المتقدم ذكرهم و هم السيد على بن عبد
العزيز و الشيخ على فقيه و جابى الوقف السيد حسن و الأسطى درويش الحضا و الاسطى محمد النحاس والمكرم
حمزه بن عبد الله و سواسى و صادقت على جميع ما تضمنته الحجة مما ذكر و شهد عليها المذكورون بذلك واذنت
لوكيلها أن يقر عنها لدى الحاكم الشرعى بان جميع ما تضمنته تلك الحجه من بيع نقض الوقف و قبض قيمته واجرة
الارض و علو السبع دكاكين و الدكتين و اذن الناظر للمستأجر بالبنا عليها على الوجه المشروح صحيح واقع
من اخيها الناظر قبلها و انها صادقت على جميع ذلك (نغب؟) اقرار مولانا السيد شاهين عن موكلته بما
ذكرت لدى مولانا الحاكم الشرعى و شهود الشهود عليها بالصادقة المذكور طلب مولانا السيد على بن عبد
العزيز من ابناء المرحوم السيد علوى باحسن السيد علوى باحسن أن يزيدوا على الريالين و الربع اللتى (التى) اخبر أرباب الخبرة
انها اجر المثل و زيادة قرياله و ربما فى الأجرتيكون مجموعها ثلاثة ريالات و نصف ريال يدفع (تدفع) كل عام بعد
تمامه لجانب الوقف و تكون الزيادة المذكورة ايضا تبرعا و صله لحق الجوار و الرحم و مشاركة للاوقاف فى الثواب.
و طلب منهم ايضا ان يدفعوا ثلاثين ريالا فرانسه للناظر المذكوره تستعمين بها على تعمير الوقف تبرعا منهم
ايضا. فأجابوه لذلك، دفعوا للناظرة اثنين و أربعين ريالا و نصف منها اثنى عشر ريالا و نصف من أجرة خمس
سنين كانت بذمتهم و ثلاثون ريالا ما تبرعوا به لجانب الوقف رفيقتى حصول الثواب و صلتلحق ا لرحم و الجوار
(نغب؟) جميع ما حرر و شرح اجر مولانا السيد شاهين الوكيل الشرعى عن الناظرة المذكورة الشريفة حنزية
ارض الدار المتقدم ذكرها و علو السبعة الدكاكين الملاصقتلها من جهة الشام و الدكة الغربيه القابلةللدار تحت
بيت الشيخ يسن (ياسمن) و الدكة الشرقيه القابلةلها الملاصقةلجدار الدار المحدودة وأولاها ابتدا باول
القعد على يمن الداخل و انتها بآخره المحاذى لجدار بيت عبد الله قصاره و أخريها باول القعد على
يسار الداخل و تنتهى الى جدار بيت عبد الله قصاره ملاصقه له عاما كاملا ابتداء. عاشر محرم الحرام
انتاح الف و مائتين و تسعه و آخره تاسع محرم الحرام غايةتسعه (عشره) بعد المائتين و الألف باجرة قدرها
ثلاثةريالات و نصف تدفع عند انتها الحول للناظرة المذكوره. فاستأجر مولانا السيد أحمد باحسن المذكور
اصالةعن نفسه ووكالةعن اخيه المكرم السيد زين العابدين باحسن و اخت الصنه الشريفه عليه ابناء المرحوم
السيد علوى باحسن من مولانا السيد شاهين على الوجه المشروح بالاجرة المذكورة اجرةصحيحة حقو على هذا العمل
فى كل عام يمضى ثم ان مولانا السيد شاهين اقر عن موكلته ايضا انها قد اذنت للمستاجرين بشهادةمن تقدم
ذكرهم بوضع غام على طرف الدكة الغربيه امام باب الدار ليضعوا عليها عبارا و يزيدوا فى قدار السقيفةالتى
احدثها والدهم على القعد بحيث تكون مساويةللسقيفة المتقدمه فى الارتفاع حتى لا يحصل للمارتضرر بها
وان ما يحدثوه من البنا. يكون كما احدثه والدهم ملكا لهم و لأولاد هم يتصرفون فيه تصرف الملاك فى املاكهم
و ذوى الحقوق فى حقوقهم لا تعلق للوقف به اصلا بوجه من الوجوه. فعند ذلك حكم مولانا الحاكم الشرعى
بصحةالاجرةو الاذن المذكورين حكما صحيحا شرعيا محررا مرعيا. و بمقتضى ما حرر و سطر لم يبق للناظرةمع
السادة المستاجرين فى شئ. ما صدر من اخيها الناظر قبلها مع والدهم المرحوم السيد علوى من جميع ما تقدم
شرحه و مع اولاده. من بعده، حق و لا بعض حق و لا شبهةحق و لا مطالبةبقى اجرةو لا فى شئ من الآشياء.
لجانب الوقف و غيره. من الوجوه. و سبب من الاسباب. و ما هو الواقعحرر فى تاسع عشر ذى القعده. الحرام سنة ١٢٠٨

Record 6 (1)   سجل ٦ (المجلد الاول)
Page   229   صفحه ٢٢٩
Case   418   حجه رقم ٤١٨
Date   5/5/981 A.H./1573 A.D.   تاريخ ١٨١/٥/٥هـ

موجب تحريره أنه بين يدى مولانا الحاكم الحنفى عبد القادر بن ابراهيم دام مجده، حضر محمد بن يوسف متولى وقف مولانا جمعة تغمده، الله برحمته وحضر معه خميس بن جمال الدين خادم الفقراء ثم ادعى خميس المذكور على متولى الوقف المذكور بان الطاقتين التى بالحوش المذكور النافذين الى دار خميس المذكور ان عليه فى فتحهما ضرر بين و طلب من مولانا (ادامه الله؟) سدهما فانكر المتولى المذكور ذلك، نكشف مولانا المشار اليه بحضر جماعة من المسلمين ومن جملتهم المعلم محى الدين بن ناصر الدين مهند سم العمائر السلطانيه بالمدينه النبويه والمعلم عبد الباسط بن حسام الدين المهندس من سال مولانا بعد الاطلاع على الحوش المذكور و الدار المذكوره والطاقتين المذكورتين المعلمين المذكورين عن الطاقتين المذكورتين هل فيهما ضرر على صاحب الدار المذكور وهل يمكن فتح طاقتين غيرهما الى جانب كل واحدة منهما لاجل الضوء للطبقتين التى فيهما الطاقتين المذكورتين فشهدا لدى مولانا المشار اليه ان الطاقتين المذكورتين فيهما الضرر المذكور من الاطلاع وغيره وانه يكفى فتح غيرهما و انه يحصل المقصود منهما بعد سدهما وفتح غيرهما و يرتفع الضرر عن اهل الدار المذكوره والحوش المذكور شهادة شرعية قبوله مرعيه وثبت ضمون ما ذكر لدى مولانا ومحضره، فحكم بسدهما دفعا للضرر عن اهل الدار المذكوره و ما يتعلق بذلك من ميزاب وغيره و اصلاح الميزاب الثانى، حكما صحيحا شرعيا تحريرا فى خامس جمادى الاولى عام احدى و ثمانين وتسعمائه.

Record 140
Page 42
Case 252
Date 10/4/1242 A.H./1826 A.D.

سجل ١٤٠
صفحه ٤٢
حجه رقم ٢٥٢
تاريخ ١٠/٤/١٢٤٢هـ

مضمنها أنه لما اشتكى جماعة من اهل الدكاكين التى تحت بيت البرزنجى و من حوله الى المكرم مصطفى ازمرلى زاده خراب البيت المذكور يطلبونه هدمه خوفا من وقوعه عليهم و الافندى مصطفى له شريك فيه غايب هو السيد اسماعيل بن المرحوم السيد زين البرزنجى حضر الى المجلس الشرعى يستأذن حاكم (الحاكم) الشرعى فى نقض خرابه و تعميره فعند ذلك أرسل الحاكم الشرعى جماعة من اهل الخبرة ينظرون هل ما اشتكته الجماعة تحقيقة هذا هبوا اليه و هم مولانا عبد الرحمن السمهودى و المكرم عبد الله حمود، و الافندى احمد خادم والمكرم الجربجى أحمد شقليها ومولانا عبد الله بافقيه و حضر تمام الجاوش حسين ازبك و الشيخ عبد الكريم شيخ المغاربه و المهندس محمد قرماش و المعلم اسماعيل و المعلم حسن والمعلم على وزير والمعلم سعود وأخبروا مولانا الحاكم الشرعى ان واجهة السوق و هو العلو التى (الذى) فوق الدكاكين سفله و جدار الدك الصغيره دكا القائمة والبادهنج و جناح الدرجه التى على يمين الداخل و بعض ترميم واخشاب انه خراب· فبعد اخبارهم لمولانا الحاكم الشرعى سئلهم (سألهم) جميعا هل لا يمكث وجه هذه السنه فقالوا لا يمكث وفيه ضرر على الماره و ربما يموت منهم ان وقع ليلا او نهارا لان بعض الفقراء يبيتون على مصاطب الدكاكين· فعند ذلك اذن مولانا الحاكم الشرعى للافندى (للافندى) مصطفى المذكور بهدمه و تعميره و رجوعه على شريكه بقدر حصته فيما أصرفه (صرفه) و ذلك بموجب فتوى شريفه نصها ما قولكم دام فضلكم و نفع المسلمين بعلومكم فى دار مشتركة بين اثنين احدهما غائب، احتاج بعضها الى تعمير و ليس للغائب وكيل يقوم بعمارة هل للحاضر ضمها ان يعمر و يرجع على صاحبه بدون اذن القاضى ام لا بد من اذن القاضى و يكون اذنه قائما قامه ام لا ؟ سبحانك لا علم لنا الا ما علمتنا، نعم للحاضر ضمها ان يعمر و يرجع على صاحبه ان أذن له القاضى فى التعمير لما فى القبض فيه قوله و فى البناء المشترك اذا كان احدهما غائبا و هدم باذن القاضى أو هدم بغير اذنه لكن بنى باذن القاضى فبهذا بمنزلة اذن الشريك لو كان حاضرا و يرجع عليه بما انفق اذا حضر و الله سبحانه وتعالى أعلم· كتبه الفقير الى الله عز شأنه داغستانى زاده السيد ابى بكر الحنفى الخطى بالمدينه المنوره حالا اذنا صحيحا شرعيا (و ما فع؟) الواقع ١٠ فى ربيع الآخر سنة ١٢٤٢·

Record 33   سجل ٣٣

Page 74   صفحه ٧٤

Case 859   حجه رقم ٨٥٩

Date 28/4/1080 A.H./1669 A.D.   تاريخ ١٠٨٠/٤/٢٨

بعد أن كشف بالاذن الشرعى على الرباط المسمى برباط فاضله الكائن بزقاق خرق الجمل المشتمل على ثمان حجرات (من نجه و ى ؟) وعلى قاعتى قبلى ا الرباط المزبور جاريقى استحقاق الشيخ عبد الواحد يوسف الحمدى المغربى بخاففعها التى من جملتها الاستطراق من باب الرباط الموجود يوم تاريخه و الانتفاع بالـ ئر و المرحاض الكائنين بالرباط المزبور · ووقع التنازع والجدال بين عبد الواحد المزبور و محمد زمايه النوبتجى قديمه فى الاستطراق و ادعى عبد الواحد ان استطراق الرباط من الجهة القبلى لشايه · و طال بينهما التخاصم · أصلح بينهما جماقمن المسلمين سذكرون بآخره على ان محمد زمايه شيخ الرباط المرقوم يفتح بابا ثانيا ملاصقا للباب الموجود الآن ما يلى الجهة الشايه ويكون مؤنةالباب الخشب من عند عبد الواحد المرقوم قابل انه يختص بالاستطراق لقاعته من الباب الموجود يوم تاريخه · و أن يبنيا جدارا ساترا قائما على يسار الداخل من الباب الذى سيفتح ويكون خاصة بينهما ويكون عرض الطريق الموصل لباب الرباط الداخلى قدار ذراع و اربع قراريط ويكون الباب الذى سيفتح مختصا بسكان الرباط و الباب الموجود الآن مختصا بقاعتعبد الواحد · فقبل كل من عبد الواحد و محمد زمايه شيخ الرباط الصلح المزبور قبولا شرعيا و الاشتراك فى البئر و المرحاض اللذين فى الرباط بين ساكنى الرباط و ساكن القاعه حسبما تصادق على ذلك هم و تراضيا عليه · فى الثامن و العشرين من شهر ربيع الثانى سنة ثمانين و ألف.

حسن برمى	على حلبى	سعيد	محمد صطفى	أبو الغيث
القسام	محمد أفندى	حسين	(او الله ؟)	مغلباى
	(ماضى زاتو ؟)	الطوبجى		

Record	127	سجل ١٢٧
Page	18	صفحه ١٨
CAse	162	حجه رقم ١٦٢
Date	1/9/1211 A.H./1797 A.D.	تاريخ ١٢١١/٩/١هـ

يعرب ضمنها ويوضح مكنونها هو أنه حضر الى المجلس الشرعى المكرم احمد بن المرحوم أمين مكائيل أصالة عن نفسه وادعى على المحترم الشيخ سالم بن المرحوم الشيخ ابى بكر الأنصارى الكرانى بانه له باب يستطرق به فى بيت الشيخ سالم المزبور والذى عمره بجداره الشامى وهو قبلى بيت احمد المذكور سمكا برسم قديم فى جداره وايضا رسم بالوقطلويقى الجدار المذكور وان هذا الجدار من أسفله الى أعلاه منه الدرجه الصاعده الى المجلس خاصا بدار احمد فانكر الشيخ سالم ذلك وقال ان هذا الباب ليس بباب شرعى لك لانه بدهليز بيتى والبالوعه مهجورةليس لها اثر ولا صحى ولا يجرى فيه الماء من داركم ومذلك هى مسدودة سدا قديما يتعدى فتحه وليس اليوم من يعرف انكم كتم تستعملونها معان الاستعمال فيما اليوم تعدى واما الجدار فاخشابى القديم مركه عليه فلو كان خاصا بكم ما وجد ذلك معان جدارى تكلبنفيه وصعد مجلس مرسومتيه قديما وهو ايضا ملاصق جدارى الممتد من آخر الحوش لباب دارى فبهذا دليل تخصيه اذا لم يكن مشتركا فكيف تدعى خصوصيته بك فطلب مولانا الحاكم الشرعى من احمد حجة داره ليهتدى بها لما ينور دعواه فاحضر حجة تاريخها سنة ثلاث وستين ومائتو الف وتامل الف وتامل فيما فيها يجد ما ينور دعواه من الاستطراق وغيره فعند ذلك أحضر مولانا الحاكم الشرعى وفقه الله تعالى جماعة نفاء ثقات من أهل الخبرة والنظر للبيتين يكشفون عليهما ويتأملون فيما ادعاه أحمد المزبور فكشفوا وتأملوا وهم المكرم مولانا الخطيب محمد صالح حماد ومولانا السيد حسين هاشم الكاتب والجورجى عمر حيدر والشيخ عربى المشاطو والشيخ حامد سمان والشيخ برك شيخ اوقاف المغاربه ومهندس البلده حسن نعمه وشيخ البنائين صالح فتى ثم بعد كمال تاملهم لم يجدوا فى بيت الشيخ سالم استطراق لبيت احمد المذكور لان المحل الذى يدعى الاستطراق فيه غير صالح لأن يكون بابا مطرقا لان جدار صدر قاعة احمد ساد المحل الرسم الذى ادعى الاستطراق فيه فيتعذر الدخول فيه الآن لو ثبت والبالوعه مهجوره بحيث يتعذر استعمالها لأنها فى بادهنى قاعة احمد والجدار كما ذكر الشيخ سالم من وضع الخشب القديم والتكليب وانهوا الى مولانا الحاكم الشرعى جميع ما راوه وتاملوه وشهدوا به لديه بحضرة احمد المذكور وان جميع ما ذكره احمد لا وجد له وليسله استطراق ولا خصوصية جدار ولا غير فيما ادعاه أحمد فحكم مولانا الحاكم الشرعى سدد الله أحكامه للشيخ سالم بالبناء فى الجدار الذى ادعى احمد خصوصيته بما يسوغ للشريك فعله فى الجدار المشترك من وضع الاخشاب وغيرها وان يتم جداره الخاصه الذى انشاء من ماله تقوية للجدار المشترك وهو من المرحاض الذى فى درجة الشيخ سالم الى باب البيت الصاعد وجه البالوعه المهجورة المذكورة ومنع احمد من تعرضه للباب الرسمى ودعواه الاختصاص بالجدار بل الجدار المشترك بينه وبين جاره الشيخ سالم والباب لا يصلح استطراقا والبالوعه لا تستعمل وحكم بجميع ذلك على احمد مكائيل المزبور حكما صحيحا شرعيا محررا مرعيا ايده واضاه واجب العمل بمقتضاه كما هو الواقع فى يوم الثلاثاء عزقرمضان المعظم من شهور سنه ١٢١١ من هجرتين له العزه والشرف وصلى الله على سيدنا محمد وصحبه.

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 Muhammad 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^c 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.

محافظ ابحاث الحجاز محفظه رقم ٢

دفتر رقم ١٠ معیه ترکی

· وثیقه ١٣٣ ــ ١٣٤

موجهةالی ناظر خزینةالمدینه

فی ١٧ جمادی الاولی ١٢٣٧ هـ

تشیر الوثیقه الی

* طبق بین حائط دار محمد البرزنجی زاد، التی فی اتصال المدرسه المحمودیه و بین حائط رباط البساطیه فتوحا بقدر ذراعین· *

* شرع المذكور بنا* مشی فی هذه الفتحه ، و اجترأ علی ادخال أخشابه فی حائط المدرسه ، وقد هدم كل ذلك بنا* علی دعوی تد مت للمحكمه من الاهالی ضد، ٠٠ *

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^Ci,
     lived part of his life in Syria and died in 589/1193.

Asbagh, Asbagh b. al-Faraj b. Sa^Cid b. Nafi^C,
     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^C, 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^Ci,
     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 ^CAbd Allah,
     a Maliki faqih, lived in Tunis, contemporary of Ibn
     al-Rami.

Ibn al-Imam, ^CIsa 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 Sha^Cban of 386/September of 996.

Ibn al-Majishun, ^CAbd al-Malik b. Abd al-^CAziz,
        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 ^CAbd al-Rafi^C and Ibn al-Rami,
        held the position of the judge of Tunis before
        Ibn ^CAbd al-Rafi^C.

Ibn al-Rami, Muhammad b. Ibrahim al-Lakhmi, al-Banna',
        a student of the great judge, Ibn ^CAbd al-Rafi^C 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-Shafi^C,
        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 ^CItab, Abd al-Rahman b. Muhammad,
        an Andalusian from Cordova, died 520/1126.

Ibn Kinanah,
        died in 186/802.

Ibn Nafi^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.

Mutarrif,
     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-Qassim, 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-maᶜrifah. 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.

ᶜamal Practice.

ᶜamal ahl al-Madinah. The Practice of the ancients of Medina.

amin (pl. Umana'). 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.

aqtaᶜa. 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.

^{c}askar (pl. ^{c}asakir). 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^{c}ah prevails.

darar. Harm, damage, prejudice.

darb (pl. durub) Lane.

al-darrab. The Hammerer.

al-dhira^c. A Cubit used for measurement. Varies according
to time and place; In Baghdad al-Mansur: al-dhira^c
al-Sawda'=49.5 Cm. In present day Syria=68 Cm.
In Egypt: al-dhira^c al-baladi=58 Cm.; al-dhira^c
al-Istanbuli=66.5 Cm.; dhira^c al-hindasah=65.6 Cm.;
al-dhirac al-mi^{c}mari=75 Cm. In Iraq: al-dhira^c
al-halabi=68 Cm.; al-dhira^c 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, exist; 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^{c}ah, particularly those of
        a moral and religious nature, are observed.

^{c}ibadat. Religious observances.

ijma^c. Consensus of opinion.

ijtihad. The exercise of human reason to ascertain a rule
        of Shari^{c}ah law.

^{c}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^c, equitable con-
        siderations 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 (pl. ajnihah). Parts of buildings projecting into
        the street.

kammad (pl. kammadin). Appliers of hot packs.

kawshah. A lime-kiln.

khabar 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; accord-
        ing to the general belief.

mashrabiyah (pl. mashrabiyat). 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 ^{c}ulwah. An elevated platform with a square
        shape.

al-musalla. An open air place set aside for prayer.

al-nas. People.

qa^{c}ah. A central room within the house with a sky window
        covered by the jala'.

qada'. Judgment given by the qadi; the district, circum-
        scription 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'i^c). 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; an 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.