

# The Market Street at Apollonia-Arsuf

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*In excavations at Apollonia-Arsuf in 1977 a complex of structures on both sides of a narrow (2.5 m wide) and long (at least 65 m) street was exposed. The street had served as a market street (sûq) during the entire Early Arab period, from the 7th to the 11th century A.D. During this time the structures were renovated and partly rebuilt, while the street itself was repaved eight times. The article deals with Strata VII-V only.*

*Stratum VII demonstrates overall urban planning attributed to the time of Abd al-Malik, involving the construction, on both sides of the street, of typical shoplike structures which were apparently used as food stalls and shops. In Strata VI and V the structures were subdivided into smaller units.*

*Market streets of this type, dating from the Roman Crusader and Ottoman periods, have been excavated and surveyed at a number of sites in Israel. This is the first example of a market street (sûq) of the Early Arab period to be accurately published.*

## INTRODUCTION

The ancient site of Apollonia-Arsuf is located on the coast of Israel between Jaffa and Caesarea (Conder and Kitchener 1882: 137-40). The city existed from the Persian period—5th century B.C.—to the end of the Crusader period—13th century A.D. (Roll and Ayalon 1982: 16-22). From the Late Roman period on (Kaplan and Kaplan 1975: 150-56; Sussman 1983: 71-96) Apollonia was a major city and only port of the southern Sharon region, linked by roads to the main cities of Samaria, as attested by the remnants of the Roman-Byzantine road network discovered in the region (Roll and Ayalon, in press). The archaeological finds uncovered at Apollonia indicate that in addition to being a commercial city and port it was also a center of industry and processing for agricultural products.

### *The Market Street (Sûq)*

During the excavations conducted by the authors in 1977<sup>1</sup> in the eastern area of the fortified site and northwest of the city gate (Area B), a complex of buildings on either side of a street was discovered.

The continuation of this street was found in Area C, north of Area B (fig. 1). The entire street runs in a straight line from south to north and is at least 65 m long. The evidence of the excavations clearly indicates that the street and its adjacent buildings were part of a market street (*sûq*), which had been in use throughout the entire Early Arab period, from the mid-7th century to the end of the 11th century A.D. During this long period the street was repaved a total of eight times (Strata VIII-I, from the bottom), and the buildings on both sides of it were either rebuilt or renovated. The sequence of strata of the street and its adjacent structures, along with the strata prior to and subsequent to its existence, can be seen in section in Area B (fig. 2). This article deals with the complex of street and structures of Strata VII-V, which range in date from the end of the seventh century through the eighth and ninth centuries A.D.

## STRATUM VII

While in Stratum VIII there were only scattered structures and installations, Stratum VII shows impressive evidence of urban planning over a large area. The stratum's principal features are a street

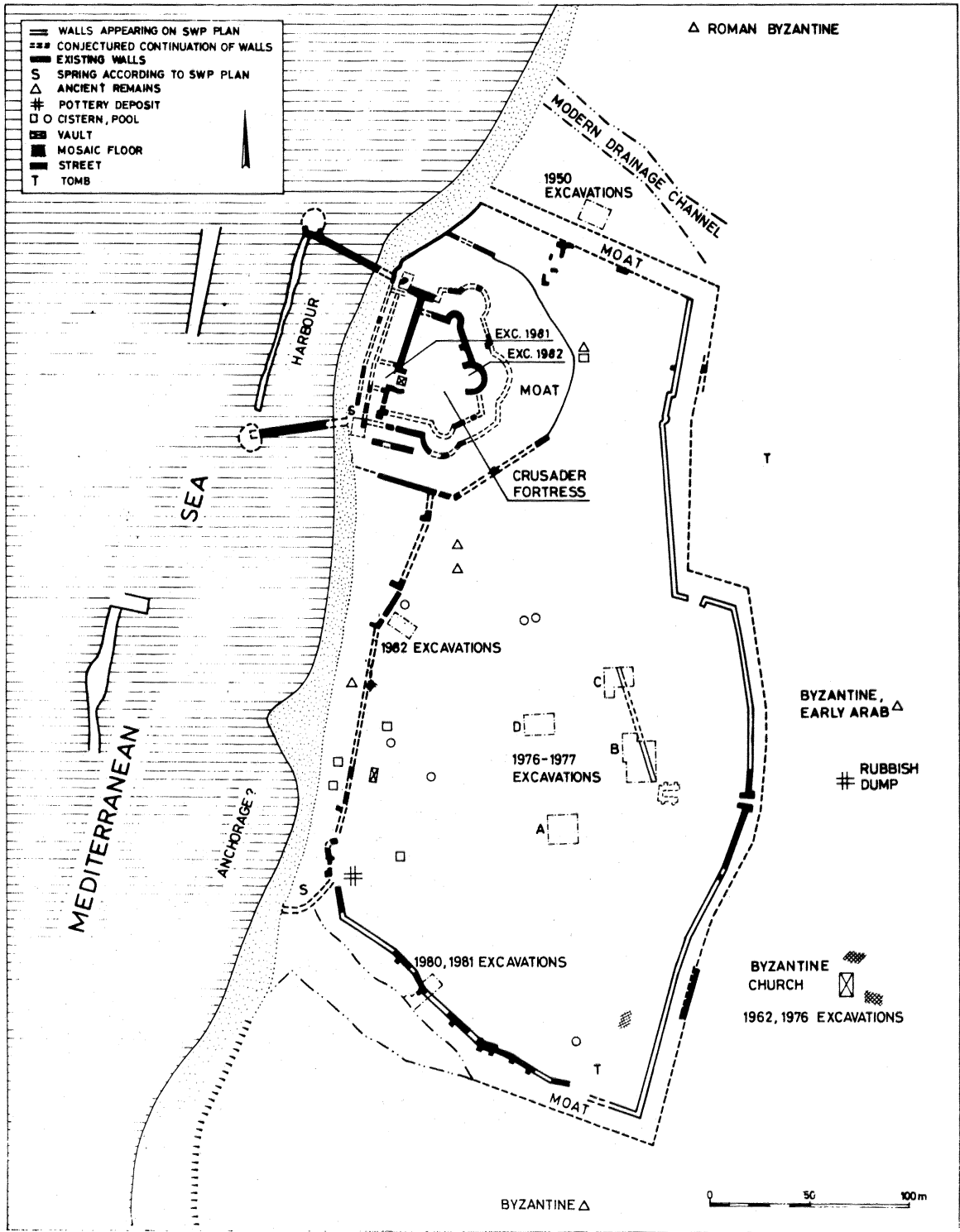


Fig. 1. Apollonia-Arsuf, general map.

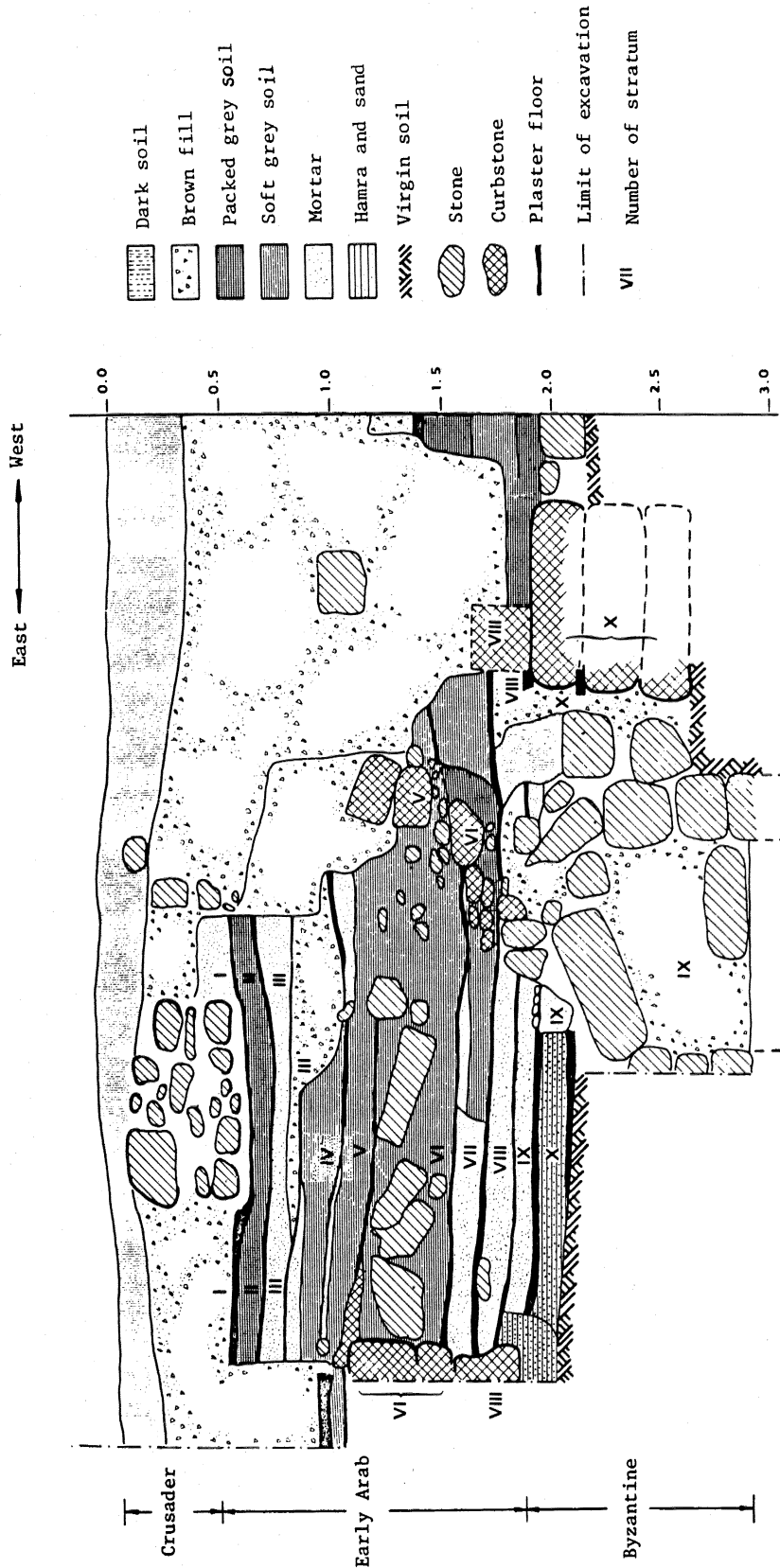


Fig. 2. South section of the street.

oriented north-south, veering slightly at an angle  $14^\circ$  to the west, and a complex of rooms and courtyards on either side of the street (figs. 3, 6). The street, 2.50 m wide, has a paving of plaster and stones. It is bordered on both sides by a raised margin of small-stone paving and low supporting walls which also function as curbstones.

East of the street, sections of a supporting wall were discovered; and further north, a plaster-lined cistern built in line with the street was exposed. The entirely preserved cistern ( $0.95 \times 2.10$  m, height 1.60 m) has an opening in its vaulted roof for drawing water. No structural remains of any kind were exposed in the remaining area east of the street, as this area was badly damaged in its northern part by later building, while its southern part has not been excavated in this stratum.

West of the street the picture is clearer. Here a series of rectangular piers ( $0.35 \times 1.10$  m each) were erected, perpendicular to the street and at more or less regular intervals along it, the spaces between the piers forming open bays, measuring from 2.10 to 2.40 m across. We can be certain that four of the piers belong to the present stratum, while another four could be reconstructed on the basis of the wall layout. From the piers ran the walls of buildings that extended westward. Some of these walls are preserved, and some could be retraced on the basis of their robber trenches, or could be logically inferred from the plans of complete buildings. The walls in the north of the area were built on earlier foundations, which did not strictly correspond to the layout of the walls in Stratum VII. This led to slight deviations in their alignments in relation to the street and the piers. However, all the walls in the south of the area were built in this stratum, and therefore correspond strictly to the alignments of the street.

The ground of Area B originally sloped down in a northwest-southeast direction, which caused some of the walls to be built as supporting walls in stepped levels. These walls are generally more solid than the other walls.

The area west of the street offers a combination of rooms and courtyards. At the north can be traced a large room with a small room at its back, while south of these is a complex consisting of a paved open area with ovens—probably a courtyard—from which one enters, westward, into a well-built inner room. All the central area is taken by a spacious courtyard paved with plaster and stones and flanked by rooms and installations. A

series of rooms, at the southern limit of the excavated area, had existed there since the time of this stratum.

From the street the rooms and courtyards were entered by way of small entrance bays formed by sets of two piers. As with the later strata, it seems that the doors of the rooms were located on the west (i.e., inner) side of the piers. The thresholds of the doors had been removed by robbers, as indicated by the robber trench plainly visible in the sections of the excavation.

The finds from the rooms in this stratum include ribbed pottery vessels, continuing the Byzantine tradition of this ware; alongside these were brown glazed pottery and Majfar ware, as well as coins from the Umayyad period. In light of this evidence, we may date the beginning of this stratum to the end of the seventh or the beginning of the eighth century, most probably the period of the Khalif <sup>c</sup>Abd al-Malik (685–705 A.D.), who is noted for largescale building operations throughout his kingdom, and especially along the Syro-Palestinian coast (El<sup>c</sup>ad 1982b: 150–51).

Combining the data from Areas B and C provides a picture of a long, straight, and narrow street bordered by different-sized rooms but constructed according to uniform design concept. This area of the city accordingly reflects overall urban planning, typical of the style of the Early Islamic world<sup>2</sup> (von Grunebaum 1955: 141–58; Hourani 1970: 9–24; Hassan 1972: 108–12; Ismail 1972: 113–23; Kennedy 1985: 3–27).

#### STRATUM VI

The transition from Stratum VII to Stratum VI occurred sometime during the middle of the eighth century. The overall layout and planning of the street and its adjacent buildings continues also in Stratum VI (fig. 4), except for minor structural alterations and raised floor levels; there is no indication of any destruction. The street kept its direction and also its system of paving, but lacked the raised margins. On its east side was a complex of piers, supporting walls, and entrance bays, similar to the one on the west side. Three piers and the base of the entrance threshold were preserved, while two other piers and the walls of rooms extending eastward from them could be reconstructed on the basis of the layout disclosed on the opposite side. The water cistern continued also in this stratum, but went out of use during its time

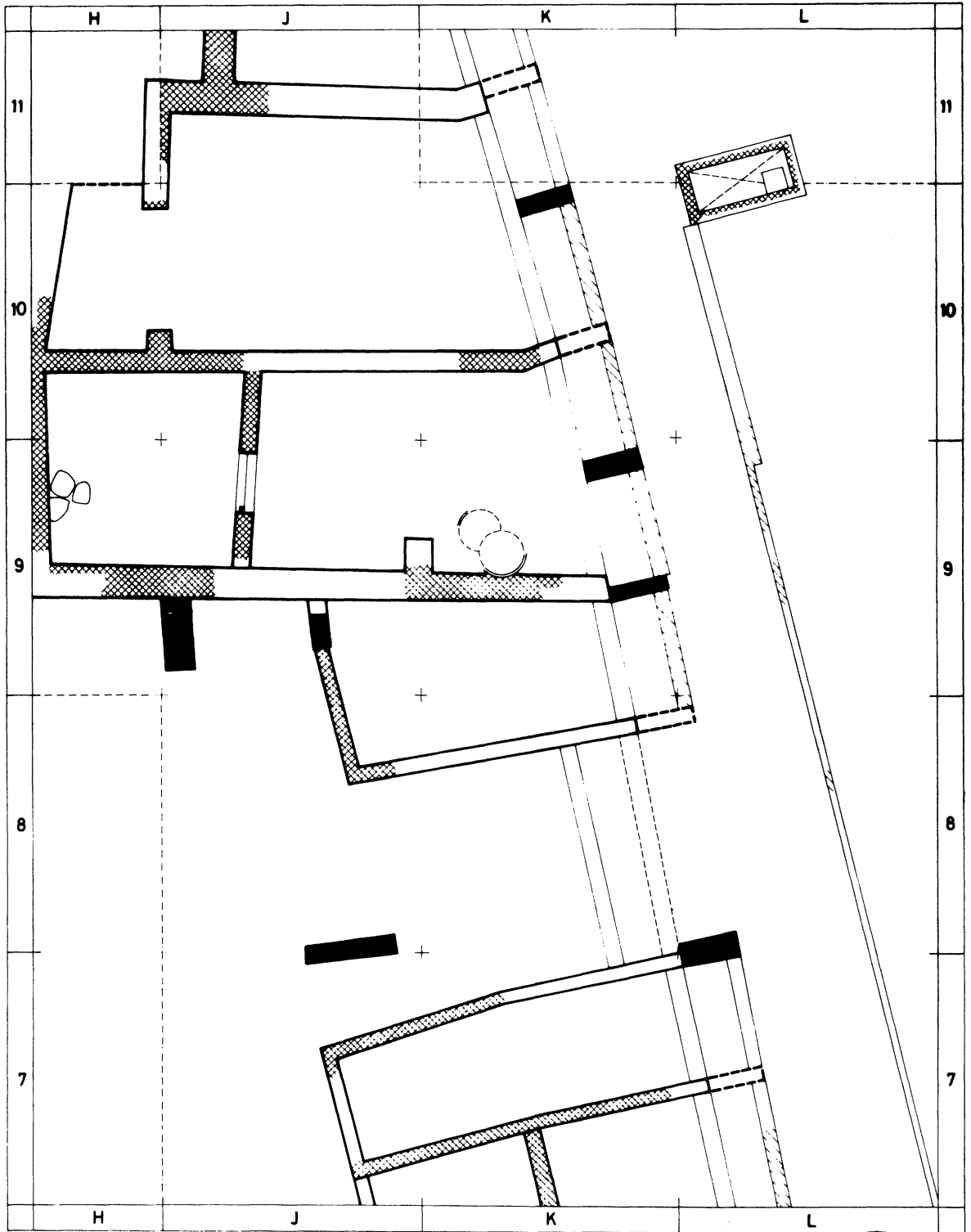


Fig. 3. Schematic plan of Stratum VII.

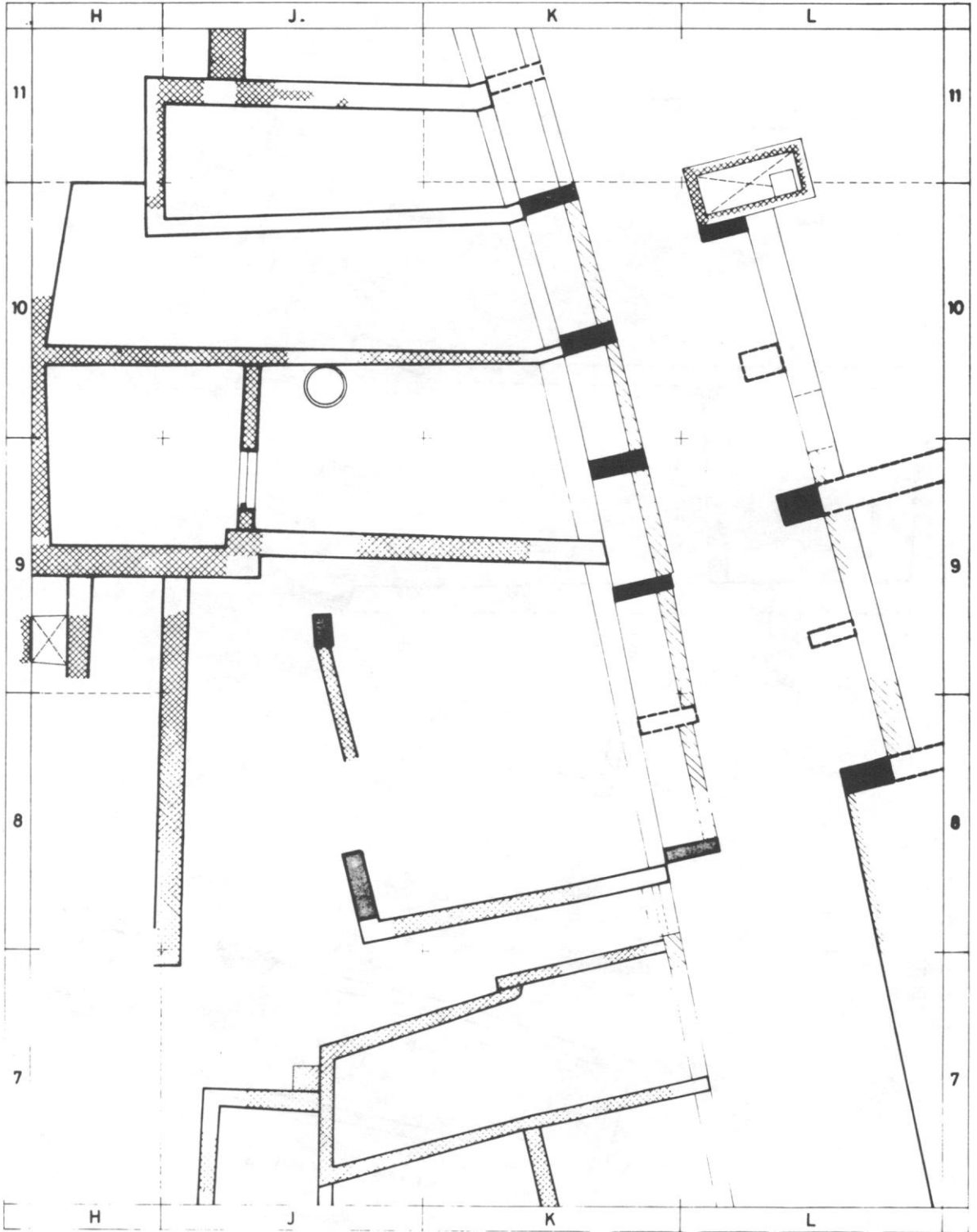


Fig. 4. Schematic plan of Stratum VI.

span. A rich assemblage of pottery was recovered from the cistern, which forms an important basis for dating this stratum.

In the area west of the street, minor changes were made to the complex of piers and rooms. The large room in its north section was partitioned into two long narrow rooms; the central courtyard was extended and parts of its margins were probably provided with a roof supported by walls and pillars. Beyond the courtyard, to the west, a solid structure had been built, most of which extended beyond the area of excavation. A narrow vault at the northern limit of this structure seems to have been an underpinning for a staircase. This, along with the thickness of the walls, would indicate that the building originally rose to two stories. A passage led to the building from the courtyard, in a south-westerly direction.

The end of Stratum VI is indicated by destruction evidence consisting of fallen walls and ashes, visible in both the street and some of the rooms. The ceramic finds, which include Mafjar ware from its most elaborate phase, glazed ware of various colors and a few sherds of ribbed ware, permit a dating of this stratum to the second half of the eighth century A.D. Apparently the destruction in this stratum was connected to the disturbances, reported by the Samaritan chronicler Abulfathi (1865: 80), that swept this entire region, including Arsuf, in the wake of the death of the Khalif Haroun al-Rashid in 809 A.D.

#### STRATUM V

The street and the rooms bordering it, with certain modifications, continued in use through the period of this stratum (fig. 5). Since the building assemblages in this stratum are better preserved than those of the previous strata, they are presented here in greater detail; the locus number of each unit is included (fig. 7). The street was repaved with a layer of plaster spread over the fallen stones of the destruction of Stratum VI; it was lined on both sides with two rows of curbstones and supporting walls built between it and the rooms. The street varies in width from 1.90 m (northern part) to 2.50 m (southern part) and slopes down in a north-south direction in a fairly uniform gradient (0.70 per 20 m). Due to the destruction of Stratum VI, thick layers of fallen debris accumulated in the street, which resulted in differences of levels between it and the buildings to

its west. Although the street is fairly narrow, it probably was not covered by a roof, since the piers at its sides are aligned at right angles and therefore could not have been designed to support a street-covering roof.

To the east of the street is a complex similar to the one to its west. It includes entrance bays between sets of piers, the thresholds and jambstones of the doors between the bays and the rooms; and narrow, fairly uniform-shaped rooms extending eastward. The northern part of this area was badly damaged by robbers stealing the stones of the walls.

West of the street, earlier structures continued in use but were divided into smaller units. The northern complex consists of two units of similar plan, one at the north of the complex, one at the south: each unit has a small entrance room (Room 248, north; Room 274, south) and a larger and wider back room (Room 548, north; Room 557, south) (fig. 8). The space at the side of the entrance room is taken by a narrow room opening only onto the street (Room 534, north; Room 237, south).

The two rooms built in the northern part of the central courtyard (611) reduced its size. Room 612 gave access only onto the street; however, Room 503 had access both to the courtyard and, by way of a door built during this stratum, also to the large structure west of the courtyard. The southern part of the courtyard was probably covered by a roof, as attested by the three piers unearthed there. The passageway, leading southwest from the courtyard, is preserved. Except for the laying of new floors, the southern complex of rooms remained unchanged. One of its rooms (247) is long and narrow, and its entrance is set further back. The three rooms south of it have only been partially exposed.

The method of building in Stratum V is similar to that of the earlier strata, but less solid. The walls are generally built of sandstone (*kurkar*). They are usually fairly narrow (0.35–0.40 m) and constructed of roughly dressed *kurkar* stones, with consolidating cement. In a few cases, a bedding of beach sand (*zifzif*) underlying the walls could be seen. This bedding had a dual purpose: to dampen and absorb shock from earthquakes; and to allow for efficient drainage of rainwater, to guard against undermining of the walls. The walls are coated with well-applied gray or white plaster, which sometimes is scored on its surface. The tops of the walls were leveled and plastered, to provide the

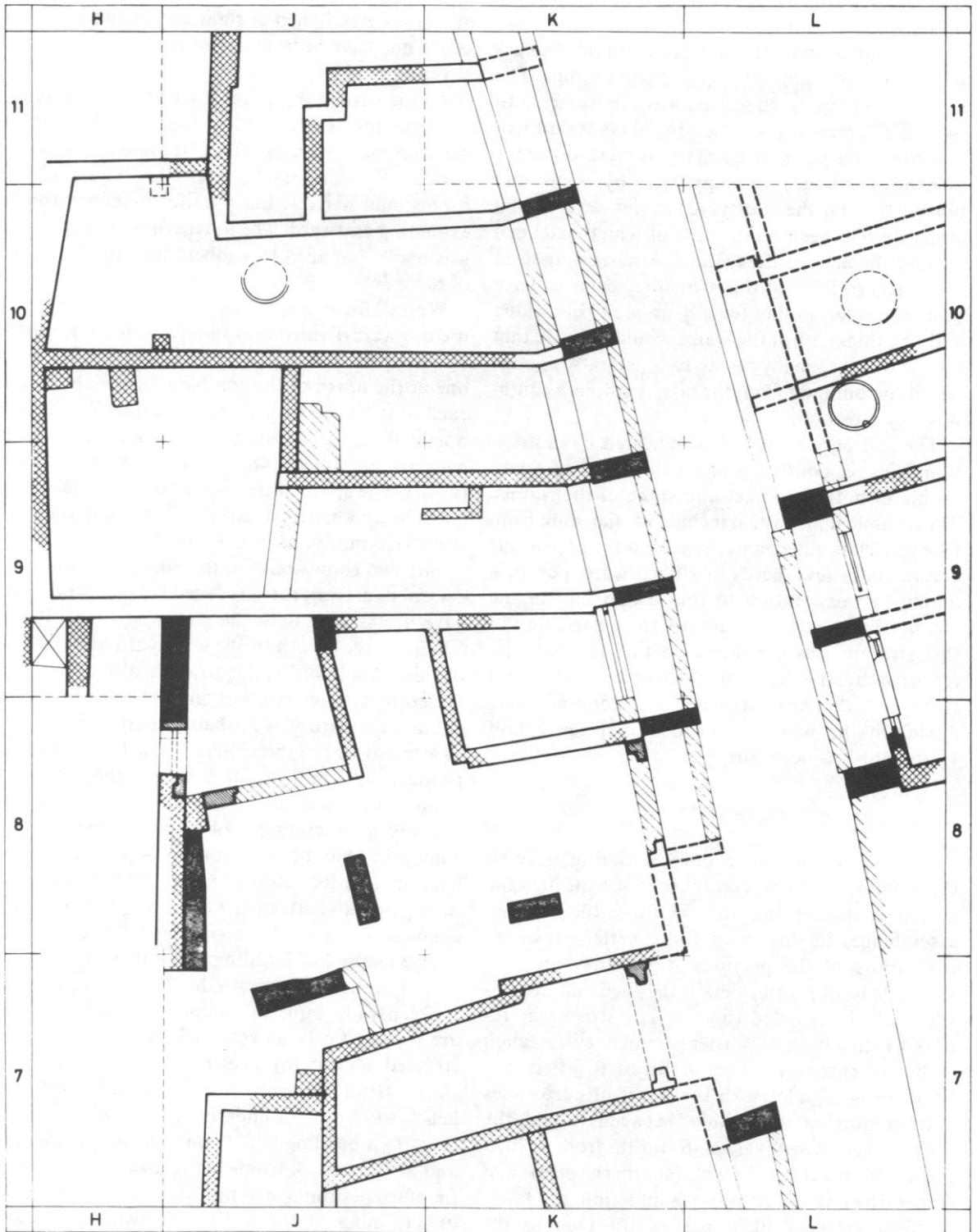


Fig. 5. Schematic plan of Stratum V.





Fig. 6. Photo of the street, looking south.

base for added construction of sundried bricks, which also were plaster coated. The thickness of the walls and the width of the rooms indicate that most of the structures were probably single storied and flat roofed (Neuburger 1919: 395). In one place only (Room 534) were found the collapsed remains of a vaulted roof. The floors of the rooms were either of plaster or beaten earth, while the paving of the courtyards and of the street consisted of plaster or of flat stone slabs fitted close together. The stone thresholds of the entrances were partly of limestone, laid on a bedding of *kurkar* fieldstones.

The methods of building discussed above are typical of Early Islamic architecture (Lewcock 1978: 129-43). Also typical is the transition from Stratum VII to Stratum V, from solid, spacious and planned structures to small, tight rooms and structures, with haphazardly and randomly-built additions. This was a common spontaneous development at this time in many cities of the Islamic world (von Grunebaum 1955: 149, n. 23; Hourani 1970: 10, 13; Kennedy 1985: 12). Clay ovens were found in some of the rooms east and west of the street in hollows in the ground. On one of these ovens, in Room 623, was found the opening for a bellows tuyere.

The ceramic finds from Stratum V include a richly varied assemblage of glazed vessels with dominant colors green, yellow, and brown, along with "black-on-white" vessels decorated with vegetal and geometric motifs. Ribbed vessels were almost completely absent, and there were only a few vessels of rather inferior Mafjar ware. These ceramic finds permit a dating of Stratum V to the ninth century A.D.

#### DISCUSSION

Three main types of markets are known in the Islamic world (Sims 1978: 99-100; Kennedy 1985: 13):

1. A market street with shops on both sides of the street (*sûq*);
2. A closed, protected market structure, usually for trading the more expensive wares (*qaysârîyya*);
3. A structure within a walled enclosure, designed for the storing and trading of wares (*khân*).

The remains exposed in Areas B and C at Arsuf indicate a typical Islamic market street (*sûq*),

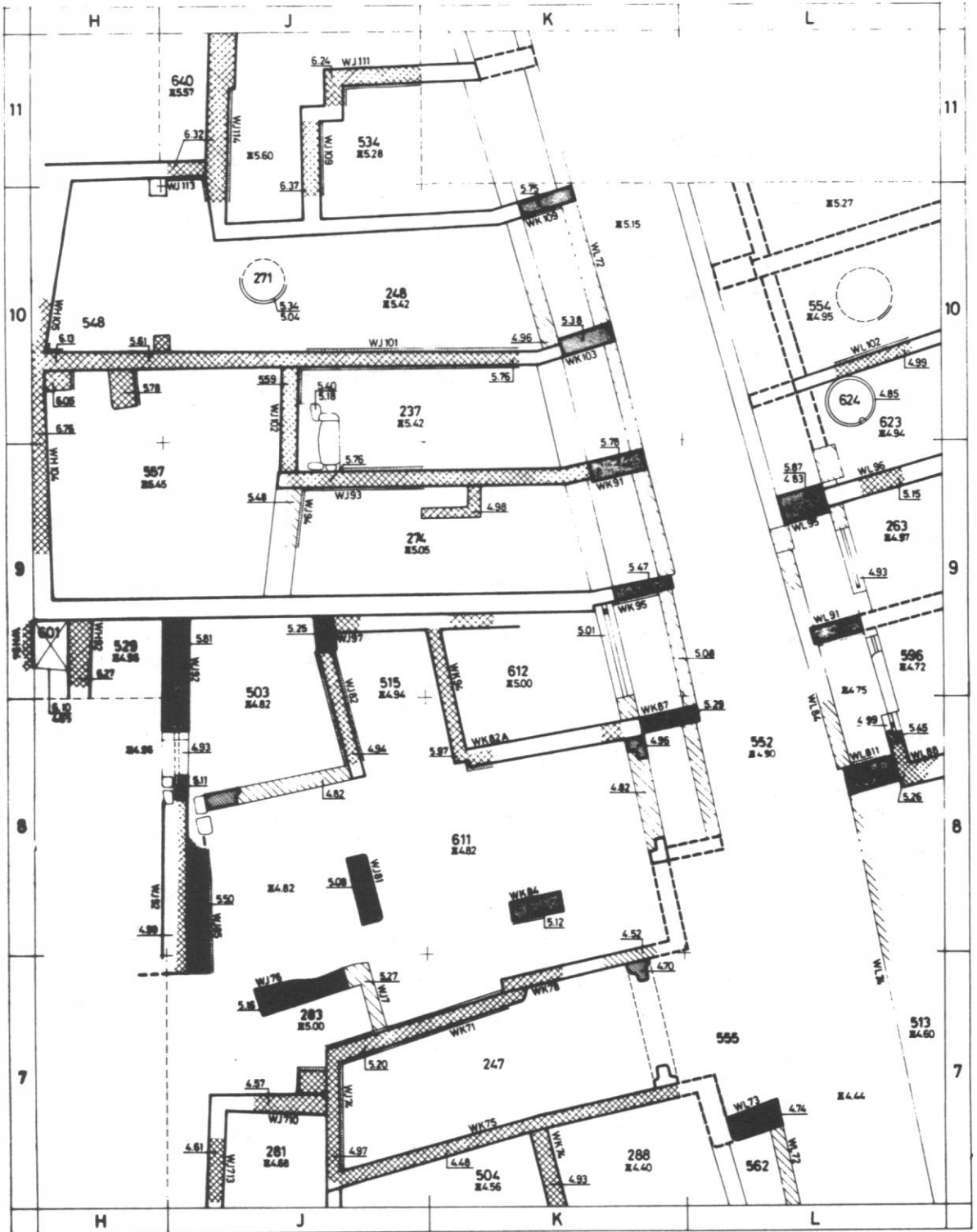


Fig. 7. Detailed plan of Stratum V.



**Fig. 8.** The northern complex of rooms, looking east.

typified by its length (at least 65 m) and narrowness (up to 2.5 m) and the clearly shoplike rooms at its sides. The outstanding feature of the shops in an oriental market is the front space, which served as a vestibule-cum-display area. Surviving examples of such oriental market streets in Palestine include the *sûq* in the Old City of Jerusalem (fig. 9), as well as the *sûq* in the old cities of Jaffa, Acre, and elsewhere. At Arsuf, the entrance bays between the piers that divide the street from the shops served as vestibules. The rooms excavated in the three strata, and especially in Stratum V, are of two types:

1. A one-room unit that opens only onto the street. This is generally a long and narrow room (237), but sometimes it is quite small (612).
2. A unit with a long narrow room in front and a larger room in back (Rooms 274 and 557). The room in back apparently served as a store- or workroom.

Such structures are generally considered to be shops; they differ fundamentally from regular dwelling structures in towns, which are blank walled outside and have irregularly shaped rooms

opening inwards, arranged around an inner courtyard (Petherbridge 1978: 197, 199; Canaan 1933: 40–41, 51–52). In origin, the concept of the market street goes back to the Hellenistic–Roman world (Wirth 1975: 6–46). In Palestine, market streets have been found in several ancient cities. Among examples from the Roman period are the streets exposed in Samaria–Sebaste (Crowfoot, Kenyon, and Sukenik 1942: 50–52) and in Antipatris (Kochavi 1981: 83–84; Neidinger 1982: 157–58); and dating from the Byzantine period is the street excavated in Jerusalem (Avigad and Geva 1982: 158–59).

No complete report of an excavation of a market street from the Early Arab period in Palestine has yet been published.<sup>3</sup> Moreover, because of the destruction or demolition of early market structures and their later rebuilding during the Middle Ages and in modern times (Sims 1978: 106), archaeological data on market streets from the Early Arab period elsewhere in the Islamic world are almost entirely lacking. A typical urban street from the Crusader period is preserved in the Old City of Acre (Dichter 1973: 78; map no. 4); and another, more modest market street from this period survives in the small town of Qubeibeh (Bagatti 1947: 69–86). Traditional market streets of this type



Fig. 9. Shop in a market street, Old City of Jerusalem (from Wilson 1880: 32).

continue to exist today in most of the large cities of the Middle East (Wirth 1974; 1975; Scharabi 1983: 285–96), including in Palestine (fig. 10), which in their architectural elements parallel those disclosed at Apollonia–Arsuf.

It can be seen, therefore, that the traditional form of the market street did not basically change over a very long period of time. In light of this, the market street from the Early Arab period at Arsuf

can be considered as a connecting link between the market streets known from several sites of the Roman–Byzantine period and the traditional market street (*sûq*) still common in the Middle East today.<sup>4</sup>

In many markets of the Orient specific trades and crafts were concentrated within separate streets, often according to a definite order and pattern (von Grunebaum 1955: 146–47; Sharon



**Fig. 10.** Recent market street, Old City of Jerusalem (from Landauer 1925: 10).

1973: 96, 167; Sims 1978: 100). The nature of the finds from the excavations of the market street at Arsuf, especially from Stratum V, permits one to assume that within this street also a specific branch of the city's economic activity was concentrated.

Since no metal work tools of any description were found in the rooms on either side of the street one can rule out such professions and crafts as iron smithing, wood working, leather working, and shoemaking, which cannot be carried on without such tools.<sup>5</sup> The absence of large furnaces indicates that crafts like pottery making and glassmaking were not represented in the street; moreover these smoke-producing crafts were generally carried on outside the city. There is the possibility that the rooms were occupied by craftsmen working with perishable materials, such as mat makers, basket makers, or perhaps weavers, though all these use metal implements such as knives, needles, etc. However, the fact that cooking stoves were found in several of the rooms, combined with the numerous animal bones found in almost all of the rooms, as well as in the courtyard and in the street, supports the view that in this street were concentrated food stalls and eating places. The ovens could be used for cooking food or for baking

bread, either on the oven's heated surfaces or on the hot cinders at its bottom (Dalman 1942: 200–204). Ovens of this type and the way they were used are described by Muqaddasi (Le-Strange 1890: 22–23). A market street of similar character was still in use in the 20th century at King David Street, Jerusalem, where some 20 shops, similar in shape to those excavated at Arsuf, were part of the “vegetable market” (Ashbee 1921: 26–28, fig. 54:e).

The nature of the bone finds is best illustrated from the example of Room 557, which contained the bones of cows, goats, sheep, pigs, and also of chicken, duck or goose, horse, gazelle, and dolphin. Along with the bones of domestic animals, of fish and of hunted animals, large quantities of pig bones were found in almost every room. The presence of so many pig bones leads one to assume that either this street was designed for the use of a Christian population (in the ninth century A.D.!), or that the Muslim prohibition concerning the eating of pig meat was less strictly enforced in this period. If so, this obviously poses a problem that needs to be investigated thoroughly. We know that certain crafts were traditionally practiced by one or another ethnic community or religious minority in a city, who moreover generally occupied their own



Fig. 11. The harbor and Crusader port of Apollonia-Arsuf, looking north.

special quarter (von Grunebaum 1955: 148; El<sup>c</sup>ad 1982a).

#### SUMMARY AND CONCLUSION

During the Early Arab period Apollonia-Arsuf served as urban center and the only port (fig. 11) for a large hinterland on the southern Sharon and beyond, for which it provided services in agricultural processing, commerce, and industry. A city of this type naturally had a system of markets in which most of its economic and social life was carried on.<sup>6</sup> The street exposed in the excavations evidently formed part of such a system of urban markets, being primarily devoted to stalls for the preparation and sale of food. The street, as a uniformly planned unit, began in Stratum VII,

which dates to the end of the seventh century or the beginning of the eighth century A.D.; its building should be assigned to the time of <sup>c</sup>Abd al-Malik. Although endless structural alterations were made during the period of their existence both to the street and its adjacent buildings, the essential character of the original planning was preserved throughout. Nor was this changed in any basic way by the destruction in Stratum VI, which seems to have been caused by the events of 809 A.D.

Finally, from the archaeological viewpoint, the market street exposed at Arsuf can be seen as a connecting link between the market streets of the Roman-Byzantine period and those of the Middle Ages and modern times. The concept of the market street remained basically unchanged throughout this long period of time.

#### NOTES

<sup>1</sup>The excavation was undertaken as a rescue dig on behalf of the Department of Antiquities and Museums of the State of Israel, and the Institute of Archaeology and the Department of Classics, Tel Aviv University. The authors wish to thank A. Eitan, director of the

Department of Antiquities, for his permission to publish the relevant finds from the excavation. The plans were drawn by Shmuel Moshkovitz, Judith Dekel, and Ora Paran, of the Institute of Archeology, Tel Aviv University. The section was drawn by Dalya Egozi. The



photographs were prepared by Avraham Hay and Moshe Weinberg, also of the Institute of Archaeology. The article appeared originally in *Israel—People and Land* (Haaretz Museum Yearbook 2–3, 1985–1986), and was translated by E. Heinemann. The authors wish to thank them all.

<sup>2</sup>During excavations conducted in 1980–1984 in the south and west of the city it was established that the city wall and its adjoining structures were also built during this period. The gate of the city was preserved, southeast of Area B, in the eastern wall (fig. 1); from there the main street continued most probably westward to the port. The market street discussed here branched off, at some point, northward, from the main street. All the archaeological evidence points to renewed planning and rebuilding of extensive parts of the city in this period.

<sup>3</sup>In Tiberias, along the ancient main street, several shops from this period were exposed, very similar to the shops discussed here (Foerster 1978: 1172–73).

<sup>4</sup>A good example of continuity in the form and character of a market street exists in Jerusalem. We learn from an Early Arab tradition, approximately contemporary with the time of the site under discussion,

that after the Arab conquest the streets of the market in Jerusalem were divided between Muslim and Christian craftsmen and traders (El<sup>c</sup>ad 1982a: 31–40). The same functional division obtains to this day in the Jerusalem Old City street markets.

<sup>5</sup>Many nails were discovered in the excavation, mostly near the doors and openings; it may be assumed, therefore, that they originated from the woodwork connected with these fixtures and are unrelated to any crafts carried on inside the rooms.

<sup>6</sup>From Islamic sources, dating to the tenth century and after, we learn that Arsuf was one of the most important cities in Palestine during that period. We also learn that it was a fortified city with a tightly crowded population, and was a seat of Muslim religious scholarship, as well as a center for ransoming prisoners. Abul-fida mentions that it had a market (Le-Strange 1890: 399). Although a late source from the 14th century, the statements of Abul-fida are based on earlier information. It may be supposed, therefore, that the market at Arsuf originated in an earlier period, the seventh to ninth centuries A.D. at least, that is, contemporary with the market street discussed here.

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## ANNUAL MEETING:

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