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## Crusader Acre in the Thirteenth Century: Urban Layout and Topography

Of all the coastal cities of the Levant, Acre is certainly the most exciting for the historian of the middle ages. It still retains the imprint of two centuries of Latin rule and typical features of a medieval emporium, with its maze of narrow and tortuous streets leading to now abandoned market-places and the impressive remnants of a once prosperous and populous city.

Acre was conquered by the Crusaders in 1104. It soon became the main harbour of the Latin Levant and witnessed the creation of important merchant colonies. Royal authority within the city was curtailed by grants of territory, as well as commercial and judicial exemptions to Genoa, Venice and Pisa. The defeat of the Latins at the hands of Saladin in 1187 resulted also in the loss of Acre. Recovered after four years of Muslim occupation, the city replaced Jerusalem as the main political center of the Crusader kingdom during the last century of Latin rule, down to the Muslim conquest of 1291. The conflicting interests of the commercial cities, the military Orders of the Hospitallers, Templars and Teutonic knights as well as the barons came to the fore in the tumultuous history of Acre in the thirteenth century. This history has still to be written. Yet, in order to do so, a proper knowledge and understanding of the urban setting is essential.

The reconstruction of the urban layout and topography of medieval cities is by all means a difficult task. Crusader Acre presents a unique opportunity in this respect, especially for the thirteenth century. Contemporary sources relating to the city, its quarters, as well as many ecclesiastical and lay buildings, are abundant. Besides, two fourteenth century maps of the city have

survived; by depicting quarters, main streets and landmarks, they provide us with important clues to its topography (1).

Finally, it has been possible to identify material remnants dating from the twelfth and thirteenth centuries. Archaeological investigation and especially an extensive survey of the Old City of Acre have revealed that many buildings erected in the Crusader period have been partly preserved, some above, others below the present-day ground level (2); several underwater surveys have attempted to solve the vexing problems connected with the Crusader harbour of Acre (3). The combination and confrontation of these various types of evidence may yield important results, and several attempts have been made in recent years to describe Crusader Acre, as well as to delineate the boundaries of the various quarters within the city. Yet none of the results attained seems to be entirely convincing. Scholars have relied too heavily on the medieval maps of Acre without checking their accuracy, and too little on written sources. The purpose of this study is to make use of hitherto neglected evidence, present a new approach to various sources and arrive at new solutions.

The reconstruction of Acre's topography in the Crusader period rests primarily on the proper use of two maps drawn in 1320 or shortly thereafter. One of them is undoubtedly the work of the Genoese cartographer Pietro Vesconte, who spent several years in Venice, or that of drawers working under his close supervision (fig. 1). Eight copies of this map survive, six of them in fourteenth century manuscripts of the *Liber secretorum fidelium crucis*, the famous treatise in which Marino Sanudo Torsello outlined a plan for a crusade against the Muslims (4). It is obvious that these copies

(1) See J. PRÄWER, *Historical Maps of Akko*, in *Eretz Israel*, 2 (1953), pp. 175-184 [Hebrew]; our conclusions differ from those of the author. B. DICHTER, *The Maps of Acre, An Historical Cartography*, Acre, 1973, is a compilation.

(2) A. KESTEN, *Acre, The Old City. Survey and Planning*, (Jerusalem), 1962; the author, an architect, conducted the team-work. On excavations, see below.

(3) E. LINDER and A. RABAN, *Underwater Survey in the Harbour of Acre (1964)*, in *Western Galilee and the Coast of Galilee*, Jerusalem, 1965, pp. 180-194 (however, with erroneous historical data), and E. LINDER, *Underwater Archaeology - A New Dimension in the Study of the Antiquities in the Country*, in *Qadmoniot (Quarterly for the Antiquities of Eretz-Israel and Bible Lands)*, 4 (1971), pp. 44-54, esp. 49-52 [both in Hebrew]. A full updated report is still wanting. I wish to thank both authors for the additional information they supplied, which proved most valuable.

(4) Text of Sanudo in J. BONGARS, *Gesta Dei per Francos, sive orientaliū expeditionum, 1095-1420*, II, Hanoviae, 1611; anastatic reproduction, with maps from the British Library

were commissioned by Sanudo in order to serve as cartographic appendices illustrating his work <sup>(5)</sup>. An additional contemporary copy, the best of all, is included in an atlas at present in the Vatican Library <sup>(6)</sup>. The second map of Acre appears in three versions of a universal chronicle written by Paolino Veneto, friend and correspondent of Sanudo, who became bishop of Pozzuoli (fig. 2) <sup>(7)</sup>. None of the maps reproduces the city on a exact scale,

manuscript (on which see n. 5) and foreword by J. PRAWER, Jerusalem, 1972. To the bibliography compiled by the latter on Sanudo add D. JACOBY, *Catalans, Turcs et Vénitiens en Romanie (1305-1322): un nouveau témoignage de Marino Sanudo Torsello*, in *Studi medievali*, ser. 3<sup>a</sup>, XV (1974), pp. 217-261; to the bibliography on the maps, add R. ALMAGIA, *Planisferi, carte nautiche e affini dal secolo XIV al XVII esistenti nella Biblioteca Apostolica Vaticana*, in *Monumenta cartographica vaticana*, I, Città del Vaticano, 1944, pp. 3-23; G. CARACI, *Viaggi fra Venezia ed il Levante fino al XIV secolo e relativa produzione cartografica*, in A. PERTUSI, (ed.), *Venezia e il Levante fino al secolo XV. Atti del I Convegno internazionale di storia della civiltà veneziana (Venezia, 1-5 giugno 1968)*, I, 1, Firenze, 1973, pp. 175-177; B. DEGENHART und A. SCHMITT, *Marino Sanudo und Paolino Veneto. Zwei Literaten des 14. Jahrhunderts in ihrer Wirkung auf Buchillustrierung und Kartographie in Venedig, Avignon und Neapel*, in *Römisches Jahrbuch für Kunstgeschichte*, 14 (1973), pp. 1-137.

(5) Together with other maps: see DEGENHART, loc. cit., pp. 60 and 66; in several manuscripts, these maps are drawn on separate quires. Maps of Acre appear in the following copies of Sanudo's *Liber*: Rome, Vaticana, Ms. Reg. lat. 548, f. 143r; Florence, Riccardiana, Ms. 237 (olim K. III. 33), f. 144r; Oxford, Bodleiana, Ms. 10,016 (Tanner 190), f. 207r; London, Brit. Library, Ms. Add. 27, 376, f. 190r; Brussels, Bibl. Royale, Mss. 9347-9348, f. 164r, and 9404-9405, f. 175r. The proportions between width and height are not the same on all maps, yet the basic street pattern is identical: there are insignificant variations in the script and spelling of the legends, yet all copies may be ascribed to the same workshop. The Oxford ms. presents also some variations in the drawing: the banner on the building of the Venetian quarter is oriented to the west, not to the east; the tower of the church of St. Michael is to the left of the building, not to the right; an incomplete drawing of a church, not found in other copies, appears in the Montmusard quarter and circles, instead of rectangles, are to be seen along the shore of the same quarter; finally, a legend not found elsewhere is inscribed between the two north-eastern walls of this quarter. Florence, Medicea-Laurenziana, Ms. Plut. XXI, 23, f. 149r, on paper, is a late copy of the first half or mid-fifteenth century, on which the legends identifying the quarters and buildings are missing.

(6) Rome, Vaticana, Ms. Palat. lat. 1362, f. 9r. The name of Vesconte appears on f. 3v, and his authorship of the maps is therefore certain: see K. KRETSCHMER, *Marino Sanudo der Ältere und die Karten des Petrus Vesconte*, in *Zeitschrift der Gesellschaft für Erdkunde zu Berlin*, 26 (1891), pp. 358-362, 365-366; A. MAGNOCAVALLO, *La carta « de mari mediterraneo » di Marin Sanudo « il Vecchio »*, in *Bollettino della società geografica italiana*, ser. 4<sup>a</sup>, 3 (1902), pp. 444-447. The map of Acre may have been drawn by another hand: see ALMAGIA, *Planisferi*, pp. 14-15, and also 23, about Ms. Reg. lat. 548. Basing himself on Sanudo, DEGENHART, loc. cit., I p. 16, 61, 66, and esp. 68, claims that the atlas was offered to pope Gregory XXII in 1321, together with a lost ms. of the *Liber*. It seems unlikely, however, that Sanudo should have omitted the maps of Jerusalem and Acre in the enumeration of those he presented to the pope (as assumed by Degenhart, loc. cit., p. 68, n. 92), in view of the importance of both cities in his book. Besides, the date on f. 3v (MCCCXX) is truncated and the last cipher missing; it is therefore not necessarily 1320, as generally assumed, but nevertheless within the same decade.

(7) Venice, Marciana, Ms. Z. lat. 399 (colloc. 1610), f. 84v; Paris, Bibl. Nationale, Ms. lat. 4939, f. 113v, col. 1; Rome, Vaticana, Ms. lat. 1960, f. 268v. For the respective dating of these maps in 1323, 1328 and between 1334 and 1339, see DEGENHART, loc. cit., pp. 25-26. All three are reproduced in PRAWER, *Historical Maps*, on p. 181, plate XXI, fig. 2, and plate XXII, fig. 1. The Vatican map also appears in J. PRAWER, *Histoire du royaume latin de Jérusalem*, Paris, 1969-1970, II, p. 545, but is wrongly ascribed to Sanudo.

and the marked differences between them can be easily perceived (8). The relative accuracy of the two maps, of great importance in the framework of this study, may be tested by examining basic features of the city's layout and some of its landmarks.

The Kesten survey, which has uncovered remnants of structures and the pattern of streets going back to the Crusader period, points to the Vesconte map as more accurate when depicting the relative size of the various quarters and their respective location in relation one to the other. As proven by archaeological evidence, the distortions on the Paolino maps are especially obvious in two cases: the Genoese quarter was in fact much smaller than depicted and lacked any access to the western sea front; as for the Venetian quarter, it was oriented toward the north-east, not toward the north, and had a larger front facing the bay of Acre (9). It is therefore obvious that the street pattern is on the whole more accurate on the Vesconte map, yet the latter is not devoid of important distortions. It depicts a main thoroughfare leading in a straight line from the harbour area to the northern city wall. Such a straight line did not exist, however, because of the location of three huge buildings within the Hospitaller quarter (10). On the other hand, the representation of the same thoroughfare on the Paolino map concurs with archaeological evidence: the street proceeds from the harbour to the north, partly along the present Market street (fig. 4, no. 19), which is probably at the same level as in the Crusader period (11), then to the east when reaching the southern border of the Hospitaller quarter, and finally follows the outline of the latter to the city wall. Besides, two copies of the Paolino map, one in Venice and especially that of the Vatican (fig. 2), provide accurate drawings and indications about the three main buildings of this quarter, whereas the Vesconte map depicts only two, without specifying their use (12).

Another case in which the Paolino map proves more accurate is of special significance. A small bay or inner basin, in most cases with the same colouring as the sea, is depicted within the Pisan quarter on the copies of the Vesconte map: close to it appears the legend *Porta ferrea* or

(8) Some indications in R. RÖHRICHT, *Marino Sanudo sen. als Kartograph Palästinas*, in *Zeitschrift des deutschen Palästina-Vereins*, 21 (1898), pp. 125-126. The drawing based on the Oxford copy of Vesconte (Tafel 5) has been often reprinted since; it is incomplete, as it does not reproduce the southern breakwater. DEGENHART, loc. cit., is a thorough study on the illuminations and maps appearing in Sanudo's and Paolino's works, but hardly any attention is paid to the maps of Acre (pp. 60-61, 78 and 80).

(9) KESTEN, *Acre*, Maps 4 and 17, and here, fig. 4.

(10) On which see Z. GOLDMANN, *Le couvent des Hospitaliers à Saint Jean d'Acre*, in *Bible et Terre Sainte*, 160 (avril 1974), pp. 8-18.

(11) KESTEN, *Acre*, p. 18.

(12) GOLDMANN, loc. cit., pp. 14-15, considers that the depiction of the main building points to the existence of four corner towers; this has been confirmed by archaeological evidence. The author is wrong, however, in asserting that Vesconte's drawing is that of a ruined building: it is simply less accurate.

« Iron Gate » (fig. 1) <sup>(13)</sup>. The very existence of the bay or basin is to be discarded. Its depiction is unmistakably the corruption of a drawing, correctly represented on the Paolino map as a structure on the sea shore. This structure was a fortified gate: its shape on the Paris manuscript, the most accurate in this respect, is similar to that of the gates appearing along the northern wall of Acre, such as the *Porta nova*, the *Porta Hospitalis*, and others <sup>(14)</sup>. The fortified structure may be safely identified with the *Porta ferrea*, the only city gate facing the sea <sup>(15)</sup>. The distortion of the rectangle depicting it into a bay or basin is not the only instance in which Vesconte misinterpreted the symbols appearing on the model or models he used while working for Sanudo.

The relative accuracy of the Paolino map in the cases illustrated above implies that their author relied on independent sources, and not on the Vesconte map, as assumed by several scholars <sup>(16)</sup>. It is also obvious that Vesconte has not been influenced by Paolino <sup>(17)</sup>. A further illustration to the nature of Vesconte's work, or that of the cartographers whose maps he used, is provided by their selective approach to buildings. The Templar quarter is depicted by a large structure on the shore and a tower on its northern flank <sup>(18)</sup>. A fortified gate has been discovered at the north-eastern corner of the quarter, opposite the site where Vesconte locates a Pisan tower (fig. 4, nos. 16-17). Although it is

(13) All Vesconte maps bear the legend *Porte ferree* (plural), save for the Oxford copy's *Porta ferrea* (singular) which also appears on the three copies of the Paolino map and is no doubt the correct reading.

(14) The Venice manuscript has only a rectangle, the Vatican map (fig. 2) a more elaborate drawing, interpreted erroneously as the ground-plan of a square khan in KESTEN, *Acre*, p. 21. This is impossible, however, as all buildings and gates are depicted frontally, save for the *domus infirmorum* of the Hospitallers on the Vatican map, where the drawer had to insert two doorways at the opposite ends of the building. He therefore combined the ground-plan of the latter with the frontal representation of the doors. Only one Vesconte map, in Riccardiana, Ms. 237, has a drawing reminiscent of a gate; it is painted blue, while the sea is green.

(15) J. RICHARD, *Colonies marchandes privilégiées et marché seigneurial. La fonde d'Acre et ses « droitures »*, in *Le Moyen Age*, 59 (= sér. 4<sup>e</sup>, 8) (1953), p. 336, n. 20, claims that the *porta balnei* mentioned in a charter of 1187 was a sea-gate, but this location is not warranted: see below, n. 103.

(16) E. g. KRETSCHMER, loc. cit., p. 357; RÖHRICHT, loc. cit., pp. 91, 125; MAGNOCAVALLO, loc. cit., p. 448; PRAWER, *Historical Maps*, p. 180. It is obvious that the fortified gate of Paolino could become a bay on Vesconte's map, but not the contrary. In the Vatican manuscript, f. 13r, col. 1 (DEGENHART, loc. cit., pp. 61-62), Paolino refers to his various sources and models without mentioning either Vesconte or Sanudo: *Pictura autem hic posita ex mapis variis est composita, sumptis de exemplaribus que scripturis actorum concordant illustrium quos imitamur.*

(17) As assumed by CARACI, loc. cit. (above, n. 4), p. 176. DEGENHART, loc. cit., pp. 60-61, supposes that Vesconte and Paolino influenced each other in all « historical » maps. This is however excluded for the map of Acre, as that of Vesconte is far superior to Paolino's in the location of the quarters.

(18) On which see KESTEN, *Acre*, pp. 19-21.

also attested by a contemporary source (19), the Templar gate has not been represented. For Vesconte, the depiction of two buildings at most for each quarter was considered sufficient (20).

It is already obvious by now that too great reliance has been placed in the past on the early fourteenth century maps of Acre; additional examples of distortions will soon prove this point beyond doubt. Therefore, where the maps do not concur with written sources or with archaeological finds, these two types of evidence are to be preferred.

Yet, in spite of its defects, the Vesconte map provides vital information about the boundaries of the various quarters of the city, partly confirmed by archaeological evidence. It has been implicitly assumed by scholars that these boundaries, especially those of the main commercial cities, such as Venice, Genoa and Pisa, have remained constant in the course of the Crusader period (21). A close examination of the Vesconte map proves, however, that this assumption is not warranted, and it is therefore essential to determine, as accurately as possible, which period this map reflects.

The Venetian bias of the Vesconte map is not surprising, in view of the close association of Pietro Vesconte with Marino Sanudo (22). It is clearly illustrated by the depiction of a large building within the Venetian quarter, recently identified as the *palatium magnum fontici* or main structure of this area (23). This is the only building on the map flying a standard, evidently that of Venice. The Venetian bias does not explain, however, another feature of the map, to which no attention has yet been paid. Public buildings and defense towers, expressing special prerogatives and military power, appear in the quarters of the military Orders of the Hospitallers, the Templars and the Teutonic knights, as well as those of Pisa and Venice.

Surprisingly, such is not the case with the Genoese quarter:

(19) G. RAYNAUD (ed.), *Les gestes des Chiprois*, Genève, 1887, p. 253, § 501 (hereafter: *Gestes*).

(20) The Genoese quarter is an exception, with one building only; this will be explained soon.

(21) See for instance J. PRAWER, *I Veneziani e le colonie veneziane nel Regno Latino di Gerusalemme*, in *Venezia e il Levante* (above, n. 4), 1, 2, pp. 642-643, and especially 645, who considers the boundaries outlined in a document of 1260 as identical with those of the Vesconte map.

(22) See above, pp. 2-3.

(23) PRAWER, *I Veneziani*, pp. 647-648.

its location is illustrated solely by a church, although the existence of a huge tower within its boundaries is attested by contemporary sources<sup>(24)</sup>. Moreover, this tower appears on a map executed in 1252 or shortly after that year and included in the *Chronica majora* of the English chronicler Matthew Paris (fig. 3)<sup>(25)</sup>. Its deletion from the Vesconte map is undoubtedly related to the outcome of the bloody war of St. Sabas, which opposed Genoa to Venice from 1256 to 1258. Together with their Pisan allies, the Venetians overran the quarter of the Genoese and rased to the ground their huge tower named Lamouçoa. The Vesconte map indicates its site within the Genoese quarter by a circle and an appropriate legend (fig. 1). The church of San Lorenzo, patron of Genoa, escaped the fate of many houses that were destroyed and is attested in 1260: it is precisely by this structure that Vesconte locates the Genoese quarter<sup>(26)</sup>. It follows that the conditions resulting from the St. Sabas war are reflected on Vesconte's map and were probably visible on the model or models he used. Additional evidence, which will be examined below, illustrates the continuous territorial expansion of Venice in Acre after this date, down to the Muslim conquest of 1291. It is therefore most likely that the Vesconte map reflects the extension of the Venetian quarter close to the end of the Crusader period<sup>(27)</sup>. It is known that Marino Sanudo visited Acre in 1285 or 1286<sup>(28)</sup>. When he commissioned Vesconte to draw maps for his treatise, he may have provided him with instructions on the basis of his own recollections, drawings or notes<sup>(29)</sup>. However, to judge by the numerous distortions appearing on the Vesconte map, these were not particularly accurate from a topographical point of view; the same applies to Sanudo's sailing instructions, as we shall see later.

(24) See below, pp. 27-29.

(25) Cambridge, Corpus Christi College, Ms. 26, ff. 3v-4r, and Ms. 16, f. 2v (badly damaged); Brit. Library, Ms. Royal 14 C vii, f. 4v-5r; Ms. Cotton Tiberius E vi, ff. 3v-4r (badly damaged), and Ms. Lansdowne 253, f. 228r. For the date of the first three maps, see R. VAUGHAN, *Matthew Paris*, Cambridge, 1958, pp. 238-239 and 244-245; the fourth also belongs to the thirteenth century and the last one is a late sixteenth or early seventeenth century copy of Ms. Royal 14 C vii.

(26) D. JACOBY, *L'expansion occidentale dans le Levant: les Vénitiens à Acre dans la seconde moitié du treizième siècle*, in *Journal of Medieval History*, 3 (1977), pp. 227-228 and 254, n. 7. For additional information on the Genoese tower, see below, p. 28.

(27) Further evidence examined below will corroborate this dating.

(28) A. MAGNOCAVALLO, *Marino Sanudo il Vecchio e il suo progetto di crociata*, Bergamo, 1901, pp. 25-26.

(29) As suggested by RÖHRICHT, loc. cit., pp. 89, 126, and MAGNOCAVALLO, *La carta*, pp. 447-449.



The exact location and configuration of Acre's harbour in the Crusader period raise serious problems. In view of their crucial importance for the topography of the city, it is imperative to dwell upon them extensively.

The breakwater extending from the southern shore of the city to the east (fig. 4, no. 3) has been built upon the sand bed in the Hellenistic era, then repaired and reinforced at various occasions; some of its present masonry dates from the Crusader period<sup>(30)</sup>. When referring to this breakwater, a mid-thirteenth century naval guide mentions a « reef », an indication that the structure showed then irregular features and was in poor condition<sup>(31)</sup>. This seems to be confirmed by the Vesconte map (fig. 1), where it appears as two sections of masonry situated on the same axis, and not as a continuous structure as one would expect<sup>(32)</sup>; the breakwater is not depicted on the versions of the Paolino map. The foundations of a tower situated at its eastern tip, as well as a structure extending from there northward have been discovered below sea-level. Although not depicted on the medieval maps, they were in all likelihood to be seen in the Crusader period (fig. 4, no. 4). According to the Arab historian al-Muqaddasī, extensive work carried out under the reign of Aḥmad ibn Ṭūlūn, the ruler of Egypt (868-883), added a new breakwater joining the line of the eastern city wall<sup>(33)</sup>. On the Vesconte and Paolino maps this structure appears as an extension of the outer city wall, which is of course utterly wrong, as the latter was built only in the Crusader period. The orientation of the eastern breakwater is also wrongly depicted. This structure is no doubt identical with the one, uncovered about one or two metres below sea-level, that extends from the vicinity of the Tower of the Flies in a north-north-eastern direction and reaches the shore between the Turkish wall and Yehoshafat street, close to the Acre Nautical

(30) On this structure and its northern extension, see LINDER and RABAN, loc. cit. (above, n. 3), pp. 187-188, and LINDER, *Underwater Archeology*, p. 51. The northern extension is visible on an aerial photograph of Acre taken by the Israel Air Force, which appears in J. PRATER, *The Latin Kingdom of Jerusalem. European Colonialism in the Middle Ages*, London, 1972, between pp. 308 and 309.

(31) See below, p. 10.

(32) This is perhaps a clumsy depiction of an opening in the wall enabling the flow of water out of the harbour and thereby preventing its silting; such an opening exists in a Crusader wall protruding into the sea close to the Abu Christo coffee-house (see fig. 4, no. 10).

(33) M. J. DE GOEJE (ed.), *Descriptio imperii moslemici, auctore Shams ad-Din (...)* *al-Muqaddasi (Bibliotheca geographorum arabicorum, 3)* (Second. ed.), Leiden, 1906, p. 163; see also below, n. 63.

School (fig. 4, no. 7). The last section of this breakwater is missing, possibly because it has been washed away by sea currents or, more likely, dismantled by later builders who used its stones <sup>(34)</sup>. It may already have been in poor condition in the Crusader period, as it is then mentioned as « reefs » <sup>(35)</sup>. From the data examined above it is clear that the harbour was divided into two sections, like that of Tyre, a fact mentioned by the pilgrim Theodoric around 1172 <sup>(36)</sup>.

The access to the harbour was to the west of the Tower of the Flies (fig. 4, no. 6), as the latter was linked to the eastern breakwater <sup>(37)</sup>. The approximately 85 metres wide entrance, where the sea reaches even nowadays seven to nine meters depth, was protected by the tower. Orientated on a south-western north-eastern axis, this structure commanded a wide range of visibility over the bay. First built in the Hellenistic period, once much larger than it appears nowadays, it has several layers of Crusader masonry at sea level <sup>(38)</sup>. On the Vesconte map it is domed, as if it were a lighthouse. No source ever mentions that it served as such as in the Crusader era <sup>(39)</sup>, yet this may have been the case in later periods, as hinted by its present Arabic name al-Manāra. Contemporary evidence, more reliable than Vesconte's map, proves that it had then a flat roof, upon which the Latins attempted in 1190 to throw a burning wooden turret from one of their ships in order to set it on fire <sup>(40)</sup>. The tower was manned by a guard and a

(34) For a similar case elsewhere in Acre, see below, n. 58. On the archaeological data, see LINDER and RABAN, loc. cit., pp. 182-184, 188-191. The eastern breakwater appears as a dark strip on an aerial photograph taken in 1946 by the British Royal Air Force on behalf of the Department of Survey of Palestine and on the one mentioned above, n. 30. The orientation of the structure was of course aimed at extending the defensive system of the city into the sea.

(35) *Gestes*, p. 227, § 454, mentions « the reefs (*esquelles*) of the Tower of the Flies », which seems to indicate that it showed irregular features, like the remnants of the southern breakwater visible until the new fisher-warf was built.

(36) T. TOBLER (ed.), *Theuderic libellus de locis sanctis editus circa A. D. 1172*, St. Gallen - Paris, 1865, p. 111.

(37) See also the navigation instructions below, pp. 11-12.

(38) LINDER, *Underwater Archaeology*, p. 51, and the report in *Revue biblique*, 75 (1968), p. 422.

(39) None of the Crusader harbours seems to have had a lighthouse: see the work mentioned below, n. 45, pp. 60-63. In spite of its erroneous location on the Vesconte map, the identification of the Tower of the Flies is certain, as written sources also emphasize that it was the only structure existing in the bay of Acre.

(40) ABŪ SHĀMA, *Livre des deux jardins*, in *Recueil des historiens des Croisades* (= RHC), *Historiens orientaux* (= Hist. or.), IV, p. 483. A somewhat different version, which reveals that the tower had a battlement, in IMĀD AD-DĪN AL-ĪṢFAHĀNĪ (519-597/1125-1201), *Conquête de la Syrie et de la Palestine par Saladin*, transl. by H. MASSÉ, Paris, 1972, p. 107.

small boat, most likely moored to its flank, met approaching foreign ships to check their identity and perhaps lead them into the harbour. The arrival of these ships was also signalled by the tolling of a bell, possibly located on the tower (41). The crucial situation of the latter is illustrated on several occasions. In 1258, the Genoese took hold of it for some time and built a floating chain of thick wooden beams at the entrance of the harbour, so as to prevent the Venetians from bringing in reinforcements and supplies to their quarter in the city. Duly protected by the chain, the Genoese ships meanwhile anchored inside the harbour (42). Nine years later, the Genoese managed again to capture the Tower of the Flies and blocked the entrance to the harbour for twelve days (43).

Marino Sanudo, for whom Vesconte worked, provides comprehensive directions for the sailing along the coast of the Levant in his *Liber secretorum fidelium crucis* (44). These were evidently drawn from the *Compasso da navigare*, a book compiled in Italian in the thirteenth century, prior to the fall of Acre (45). Sanudo's Latin text differs on many points from that of the oldest, extant copy of this book made in 1296 (46). His numerous errors illustrate his surprisingly poor understanding of navigation in the bay of Acre and his clumsy handling of the Italian original (47).

It is therefore more useful to follow the text of the *Compasso*: « Acre is a gulf and is a good port, and there is there a reef [= the southern breakwater] that makes the port. [Next] to these reefs you can stay with the

(41) *L'Estoire de Eraclès*, in *RHC, Historiens occidentaux* (= *Hist. occ.*), 11, p. 75 and p. 76, var. D. The latter version mentions a *gainele* meeting the ships, but the correct reading is *gamelé*, as *ibid.*, p. 433, about ships sailing from Acre to Ascalon.

(42) A. LIMENTANI (ed.), MARTIN DA CANAL, *Les estoires de Venise. Cronaca veneziana in lingua francese dalle origini al 1275*, Firenze, 1972, pp. 158, 160. The location of the chain is confirmed by ANDREAS DANDOLO, *Chronicon venetum*, in *R.I.S.*, XII, pars I, ed. E. PASTORELLO, Bologna, 1937, p. 308; that of the permanent iron chain shall be discussed below.

(43) *Gestes*, p. 186, § 354.

(44) BONGARS, *op. cit.*, pp. 85-90, partially reproduced with a commentary by E. G. REY, *Les périples des côtes de Syrie et de la Petite Arménie*, in *Archives de l'Orient latin*, 2 (1884), pp. 329-353 (hereafter: *AOL*).

(45) B. R. MOTZO, *Il Compasso da Navigare. Opera italiana della metà del secolo XIII*, Cagliari, 1947; the dating by the author on pp. XXVI-XXXIII is not convincing, but it is nevertheless certain that this work was written before 1291: see below, n. 50.

(46) For this date, see MOTZO, *op. cit.*, pp. VIII-IX.

(47) For Sanudo's version, see BONGARS, *op. cit.*, p. 86; MOTZO, *op. cit.*, has compared both texts, which use the «little sea-mile» or geometric mile containing approximately 1230 metres: see H. WAGNER, *Der Ursprung der «kleinen Seemeile» auf den mittelalterlichen Seekarten der Italiener*, in *Nachrichten der königl. Gesellschaft der Wissenschaften zu Göttingen, Philologisch-historische Klasse*, 1900, pp. 271-285.

cables of the prow moored to a depth of four steps <sup>(48)</sup>. And in the direction of the firm land [there] is the Tower of the Flies. The entry to the port is between the said tower and the reefs ». The *Compasso* then describes the course into the harbour of Acre: « When you approach the said port, go at a distance from the city, that is to say from the house of the Temple and from the church of St. Andrew <sup>(49)</sup> four *prodese* [= cables], because of the sand bank that is above [= close to] St. Andrew. And when you have the house that was that of the constable to the right of the Tower of the Flies <sup>(50)</sup>, you can make your way straight to the port. And when you enter the port, go into it so that you have the city of Haifa on mid-poop to the east <sup>(51)</sup> and the Tower of the Flies on mid-prow, and so you turn [in]to the port clear of the said sand-bank ».

Sailing proceeded thus from the vicinity of the church of St. Andrew, situated close to the south-eastern tip of Acre (fig. 4, no. 2), in an eastern-south-eastern direction for about 650 metres, then the ship changed course. The house of the constable (*la maisun le cunestable*) appears on Matthew Paris' map on the city shore, close to the harbour (fig. 3); unfortunately, this map is unreliable from a topographical point of view <sup>(52)</sup>. Considering the course of sailing into the harbour with Haifa on mid-poop, the royal officer's mansion must have been somewhere to the north of the Tower of the Flies, in all likelihood to the north-east of the Venetian quarter and close to the royal Arsenal (fig. 4, no. 37) <sup>(53)</sup>. Ships therefore approached the entrance of the harbour on a north-eastern course, taking advantage of the north-western and western light winds prevailing in daytime during the fair season <sup>(54)</sup>, then made a sharp turn to the north-west close to the Tower of the Flies

(48) For *prodenses*, see A. JAL, *Glossaire nautique*, II, Paris, 1848, p. 12, s. v. *prodexe*, which also appears as a length measure. Four *passi* or steps were about seven metres.

(49) Both are depicted on the Vesconte map (fig. 1).

(50) Version A of the *Compasso* reads *la mazonne che fo de lo Conestavele*, the others omit *che fo*, « that was » (see MOTZO, op. cit., p. XXXIII). The text of A has evidently been updated after the loss of Acre in 1291.

(51) *Da levante*, « to the east », is obviously a mistake, as Haifa is to the west or rather to the south-west of the ship.

(52) E. g., the tower of the Pisans appears in the northern section of the city in a copy (see below, n. 124), while lacking on the Cambridge version reproduced here, fig. 3, although it was situated in the south of the city: see below, pp. 25-26. The constable was the chief royal officer of the Crusader kingdom: see J. L. LA MONTE, *Feudal Monarchy in the Latin Kingdom of Jerusalem, 1100 to 1291*, Cambridge (Mass.), 1932, pp. 117-119.

(53) Which is depicted on the Vesconte map (fig. 1); see also fig. 4. MOTZO, op. cit., p. XXXIII, is evidently wrong in identifying the house of the constable with the royal *castellum* of Acre.

(54) See *Climatological Normals*, II, *Winds* (Israel Meteorological Service, Series A, Meteorological Notes, No. 15), Jerusalem, 1956, pp. 10-11 (station Acre).

while entering the harbour. Yet at times, gusts as well strong south-western winds endangered their access <sup>(55)</sup>.

It seems that the harbour could not accommodate large vessels, and these were anchored during the good season in the bay, either close to the southern breakwater, according to the *Compasso*, or between the outlet of the river Naaman, south-east of Acre, and the harbour <sup>(56)</sup>. Their cargo was ferried to the quay by smaller ships. The western section of the harbour afforded the safest anchorage, as it was protected by the southern breakwater and its northward extension. The foundations of a round tower on the shore and of an adjoining wall of *khan al - 'Umdān*, both situated to the north of the new fisher-wharf, belong to the same period. The western part of this area was then presumably covered with buildings, foundations and remnants of which have been found in the shallow water <sup>(57)</sup>. The shore line was thus different from the present one (fig. 4) <sup>(58)</sup>, and the surface covered by the wes-

(55) Theodorik mentions erroneously southern winds: TOBLER, *op. cit.*, p. 90; H. E. MAYER (ed.), *Das Itinerarium peregrinorum. Eine zeitgenössische englische Chronik zum dritten Kreuzzug in ursprünglicher Gestalt* (Schriften der Monumenta Germaniae historica, 18), Stuttgart, 1962, pp. 317-318, on winds and rough conditions in the winter, and see also next note.

(56) See above, pp. 10-11, and IBN JUDAYR in *RHC, Hist. or.*, III, p. 452; a Byzantine fleet was anchored in the bay in 1169 at the end of September, but when the bad season started, this was no longer possible; in 1190 the Christian fleet besieging Acre was compelled to take shelter in the harbour of Tyre: WILLIAM OF TYRE, in *RHC, Hist. occ.*, I, p. 962, and ABŪ'L-FIDĀ' in *Hist. or.*, I, p. 63; see also WILLIAM OF TYRE, p. 440: *portum habens infra moenia, et exterius ubi tranquillam possit navibus praebere stationem*. This has been erroneously interpreted as referring to an 'inner' and an 'outer' harbour (see M. BENVENISTI, *The Crusaders in the Holy Land*, Jerusalem, 1970, p. 95), whereas the distinction is between the harbour protected by walls, i. e., breakwaters, and the anchorage in the bay, outside the harbour; the same meaning is conveyed by the medieval French translation of the text, *ibid.* See also H. HAGENMEYER, *Fulcheri Carnotensis historia hierosolymitana (1095-1127)*, Heidelberg, 1913, p. 463: *inter moenia securo naves quamplurimos sane concipiat*.

(57) To the south and west of the Abu Christo coffee-house (fig. 4, no. 10): LINDER and RABAN, *loc. cit.*, p. 193, and LINDER, *Underwater Archaeology*, p. 50, map of the harbour.

(58) This was also the case on the western shore of the city, where what seem to be the foundations of the Templars' fortress are now under sea-level: LINDER and RABAN, *loc. cit.*, p. 184; see here, fig. 4, no. 1. The stones have evidently been removed in the eighteenth century to reinforce the walls in this area: see F.-M. ABEL, *Le couvent des Frères Prêcheurs à Saint-Jean d'Acre*, in *Revue biblique*, 43 (1934), p. 271. The approximate date may be gathered from a legend appearing on a German drawing of that century, stating that the Templar building *anno 1748 noch stehend zusehen war, anno 1752 wurde diss zimlich abgetragen*: LADISLAUS MAYR, *Reisbeschreibung (sic!) nach Jerusalem in Palästina (sic!)*, Landshut, 1782 in München, Staatsbibliothek, Ms. CGM 2967, p. 56, reproduced in BENVENISTI, *op. cit.*, p. 105. The dates hint at the first years of the rule of Dahir al-'Umar in Acre (1747?-1775); this is also confirmed by Mayr who mentions him as *Capo d'aier* (*ibid.*). The date at which Dahir al-'Umar refortified Acre is 1750-1751; it can be deduced from F. Hasselquist, *Voyages and Travels in the Levant in the Years 1747-1752*, London, 1766, pp. 151-152. The dismantling of the eastern breakwater (discussed above, p. 9), has most likely taken place in the same years.

tern section of the harbour smaller than it would seem today: it amounted to some 9400 sq.m. Merchandise and passengers were unloaded in this section of the harbour, as indicated by the vicinity of the sea gate (59). Ships were moored there or else in the eastern section of the harbour (60); this explains the need for additional anchors in order to ensure their safety by bad weather. In 1288, the Venetian authorities decided to send some thirty or forty metal anchors from Venice to Acre: they were to be leased to Venetian captains in return for a payment (61). Some of these anchors may one day be retrieved from the sea by underwater exploration teams.

The small bay appearing within the harbour area on the Paolino and especially the Vesconte map is doubtless a clumsy depiction of the western harbour. For centuries, it has led travellers and scholars to assume the existence, in the Crusader period, of a square interior basin on the location of the present square khan al-'Umdān, but a recent survey has proven beyond doubt that such was never the case (62). Medieval sources speak of a chain protecting the harbour from the intrusion of enemy ships. Al-Muqaddasī seems to connect it with the western section of the harbour (63). A decisive indication as to the location of the chain is provided by a contemporary chronicle relating that in 1287, ships from the Italian city of Piombino were pursued by Genoese vessels within the harbour, thus past the Tower of the Flies, « as far as the entrance of the port of the chain » (64). The latter was therefore within the harbour and may be safely identified with the main anchorage in its western section. The chain used in Acre in the thirteenth century came from Constantinople: it was a section of the one preventing access to the Golden Horn, sent to Acre

(59) On which see below.

(60) Such is certainly the case with the eighty ships which Theodorik saw in Acre in 1172, at Easter, the seventy galleys and other Byzantine ships in 1177, and the fleet of emperor Frederick II in 1232: TOBLER, *op. cit.*, p. 91; *RHC, Hist. occ.*, I, p. 1033, and II, p. 395. The distinction by Theodorik (TOBLER, *op. cit.*, p. 111) between ships of the city moored in the « inner » harbour and those of foreigners in the « outer » refers to Tyre, and not to Acre as understood by BENVENISTI, *op. cit.*, p. 97; see also above, n. 56.

(61) See JACOBY, *L'expansion*, pp. 233-234.

(62) LINDER and RABAN, *loc. cit.*, p. 193.

(63) DE GOEJE, *op. cit.*, p. 163: « Then he [= Aḥmad ibn Ṭūlūn] made a large gate for it [i. e., the harbour] in the west (...) and (...) over the gate a large building, and the vessels enter every night into the harbour and the chain is pulled behind them as it is in Tyre ».

(64) *Gestes*, p. 227, § 454.

by the Crusaders who captured the Byzantine capital in 1203<sup>(65)</sup>. The land tower to which the chain was attached in Acre appears on a Cambridge version of the Matthew Paris map in the south-western part of the city, with the legend *la chaene* (fig. 3)<sup>(66)</sup>. The general configuration of the western section of the harbour, as outlined above, points to a tower with Crusader foundations situated at the eastern end of the present fisher-warf<sup>(67)</sup>. The other end of the chain was evidently attached to the northern tip of the inner breakwater, but no tower has yet been discovered in this area. The Persian traveller Nāsir-i Khusrow, who visited Acre in 1047, refers no doubt to this area of the harbour when he mentions an opening in the city wall said to be 50 ells or about 32 meters wide, although it was in fact larger. This opening was closed by a chain (fig. 4, no. 5)<sup>(68)</sup>.

The preceding conclusions emphasize again that the medieval maps of Acre are totally unreliable in their depiction of the harbour, as they do not concur with contemporary sources nor with archaeological evidence. On these maps, the eastern breakwater is too short, it is not linked to the Tower of the Flies and its orientation is mistaken; the inner breakwater is missing, and the southern one made out of two sections, instead of being continuous. The Vatican version of the Paolino map (fig. 2) even depicts a chain instead, which would of course have been useless there; finally, the location of the chain at the entrance of the small bay on the Vesconte map is also wrong. It is thus obvious that these maps should be used with extreme caution in the reconstruction of Acre's urban layout.

The term *ruga* is widely used in the sources of the Crusader period referring to the cities of the Latin East. Its correct in-

(65) ALBÉRIC DES TROIS-FONTAINES, *Chronica*, in M. G. H., SS. XXIII, p. 881; NIKETAS CHONIATES, *Historia*, Bonn, p. 788 (new ed. by I. A. VAN DIETEN, I, Berlin, 1975, p. 595), specifies that a section of the chain was sent by the Crusaders to Syria. The chain was supposedly as thick as a man's arm: *RHC, Hist. occ.*, II, p. 266. At Constantinople, it may have been approximately 750 metres long: see R. GUILLAND, *La chaîne de la Corne d'Or*, in *Études byzantines*, Paris, 1959, pp. 263-297.

(66) Corpus Christi College, Ms. 26.

(67) LINDER and RABAN, loc. cit., map on p. 183 (no. 18) and p. 184; see also here, fig. 4.

(68) M. DABĪR SIYĀQĪ (ed.), NĀSIR-I KUSROW, *Safarnāmah*, Tehrān, 1335/1956, p. 18; transl. in CH. SCHEFER, *Sefer Nameh. Relation du voyage de Nassiri Khosrau en Syrie, en Palestine, en Arabie et en Perse pendant les années de l'hégire 437-444 (1035-1042)*, Paris, 1881, pp. 49-50. For the ell, see W. HINZ, *Islamische Masse und Gewichte* (Handbuch der Orientalistik, Ergänzungsband 1, Heft 1), Leiden, 1955, p. 54, s. v. araš, and p. 62, s. v. göz.

terpretation is crucial for a proper understanding of Acre's topography. It is generally assumed that *ruga* stands for « street »<sup>(69)</sup>, yet in many cases it means « quarter ».

A document of 1176 mentions the income of the Venetian *ruga* of Acre, to be delivered to a former official: it refers obviously to that of the whole quarter, and not just of one street<sup>(70)</sup>. Two charters delivered in favour of Genoa, in 1192 and 1195, deal with prerogatives within its *ruga*, evidently the quarter, and a report compiled in 1249 mentions houses situated in the Genoese quarter, in *burgensia et ruga comunis Ianuae*<sup>(71)</sup>. A chronicler writing in French speaks of the armed forces present in the *rue de Jene* or coming to its rescue, and the fear of Venice and Pisa of loosing their own respective *ruga*<sup>(72)</sup>. In the first half of the fourteenth century, Francesco Balducci Pegolotti refers to the use of weights and measures in the *ruga* of Venice and that of Pisa, evidently the entire quarters<sup>(73)</sup>. Furthermore, the Vesconte map (fig. 1) supplies indications about the subdivisions of the Montmusard suburb, the northern part of thirteenth century Acre. The *ruga de Saforia* and *ruga belleemitana* appear there along the *burgus Templi* and the *contrata de Mumusart*, the latter being perhaps the oldest section of this suburb and the one that gave its name to the whole of it: in this context, the meaning of *ruga* is evidently the same as that of *burgus* and *contrata*, or quarter. It should be noted that *vicus* is also used at times for quarter<sup>(74)</sup>.

The existence of a quarter of the Chain, in the vicinity of the *cathena* or chain protecting the inner harbour, has remained on the whole unnoticed, and no attempt has yet been made to describe its boundaries. This may be due to the fact that the name of this quarter is not marked on the medieval maps of Acre. A hitherto neglected document of 1277 describes the location of several houses in the *ruga cathene*. All of them adjoin the mari-

(69) By all authors dealing with the Crusaders in the Levant and P. AEBISCHER, *Ruga « rue » dans les langues romanes*, in *Revista portuguesa de filologia*, 6 (1951), pp. 170-185; however, see below, n. 77.

(70) R. MOROZZO DELLA ROCCA - A. LOMBARDO (ed.), *Documenti del commercio veneziano nei secoli XI-XIII*, I, Torino, 1940, pp. 266-267, no. 272.

(71) C. IMPERIALE DI SANT'ANGELO, *Codice diplomatico della repubblica di Genova*, Roma, 1936-1942, III, pp. 49 and 114 (hereafter: *CDG*); C. DESIMONI, *Quatre titres de propriétés des Génois à Acre et à Tyr*, *AOL*, 2 (1884), Documents, pp. 219 and 221. Both uses appear in the peace treaty of 1288 between Pisa and Genoa: *Liber iurium rei publicae Ianuensis historiae patriae monumenta*, Torino, 1854-1857, II, p. 136: *vias et rugas (...)* in dicta *ruga Ianuensium in Acchan*.

(72) *Gestes*, pp. 152-154, §§ 276, 279-282.

(73) A. EVANS (ed.), FRANCESCO BALDUCCI PEGOLOTTI, *La pratica della mercatura*, Cambridge (Mass.), 1936, p. 64.

(74) *CDG*, II, pp. 299-300, 302, nos. 155-156, 158; the Genoese *vicus coopertus*, identical to the *ruga cooperta*, is a street: see below, n. 161.



time wall of the city and are bordered on three other sides by houses, streets or *rugae*. From two cases at least it is quite obvious that the *ruga* in which they are situated is indeed a quarter (75). The same holds true of the *vicus catenae* mentioned at earlier dates (76). It is therefore essential to locate this quarter on the map of Crusader Acre (77).

The main building in the quarter of the Chain was the royal Court of the Chain, which combined the functions of custom-house, warehouse and market, as well as seat of the fiscal and judicial administration dealing with maritime matters (78). This building may be safely located on the site of the present khan al-'Umdān, built on Crusader foundations in the vicinity of the inner harbour (fig. 4, no. 8) (79). All wares entering or leaving Acre by sea had to pass through the Court of the Chain, where they were checked and registered for taxation, or else exempted, before being cleared by custom officials. A similar procedure applying at the land gates of Acre has been described by the Arab traveller Ibn Jubayr, who visited Acre in 1184 (80). Although not documented for the *cathena*, the employment of Christian scribes who made out their accounts in Arabic at these gates seems to imply that the customs system was inherited on the whole from the Arab

(75) G. BIGONI (ed.), *Quattro documenti genovesi sulle contese d'Oltremare nel secolo XIII*, in *Archivio storico italiano*, ser. 5\*, 24 (1899), pp. 64-65. From the first case (p. 65, ll. 1-6), it seems that there was also a street of the Chain in this quarter; it should be noted, however, that the street is mentioned as *rua*, and not as *ruga*. For the use of the latter as quarter, see also below, n. 149, and for both uses, see also above n. 71.

(76) J. DELAVILLE LE ROULX (ed.), *Cartulaire général de l'Ordre des Hospitaliers de Saint-Jean de Jérusalem (1100-1310)*, Paris, 1894-1906, II, pp. 78-79, no. 1276 (in 1207); C. BOUREL DE LA RONCIÈRE (ed.), *Les registres d'Alexandre IV*, Paris, 1902-1931, I, p. 116, no. 390 (in 1255).

(77) PRAWER, *Histoire*, II, p. 364, mentions the quarter and pp. 530, 546, the street of the Chain; in *The Latin Kingdom*, p. 403, he speaks of the *cathena* as port quarter and as street of the chain. BENVENISTI, *op. cit.*, pp. 98 and 100, mentions the chain quarter and the harbour quarter, but nevertheless considers erroneously the *ruga* as a street extending from the inner harbour to the Arsenal along the shore and separating the Venetian quarter from the sea: see pp. 98, 104 and map on p. 88. His conjecture rests partly on an erroneous location of the church of St. Demetrius, on which see below, p. 30 and n. 151. Basing himself on this author, J. RILEY-SMITH, *Government in Latin Syria and the Commercial Privileges of Foreign Merchants*, in D. BAKER (ed.), *Relations between East and West in the Middle Ages*, Edinburgh, 1973, p. 118, hints at the existence of a quarter without specifying.

(78) See RILEY-SMITH, *loc. cit.*, pp. 112-114. It was a market in the same way as the royal *funda* and the markets of the communes: in 1192, the Genoese were granted the right to buy and sell in *fundico et cathena*: CDG, III, p. 49. See also PRAWER, *The Latin Kingdom*, pp. 412-413, and RILEY-SMITH, *loc. cit.*, p. 115, specifically on the *funda*.

(79) BENVENISTI, *op. cit.*, p. 98, and map on p. 88, but without reference to the quarter. KESTEN, *Acre*, map 4 and p. 54, no. 25, erroneously considers the structure as the Genoese khan, on which see below.

(80) RHC, *Hist. or.*, III, p. 452.

period preceding the conquest <sup>(81)</sup>. This may also hint at the functional continuity of the buildings adjoining the inner harbour, to which we shall soon return.

The exercise of royal jurisdiction was not restricted to the Court of the Chain. The function of the *Porta ferrea* or Iron Gate, the only maritime gate of Acre, was clearly related to that of the Court <sup>(82)</sup>. It was doubtless through this gate that arriving travellers and merchandise passed before reaching the customs. The representation of the gate on the various Paolino maps (fig. 2) and its mention on the Vesconte maps (fig. 1) seem at first glance to contradict this assumption, as it is situated outside the harbour area. We have noticed, however, that the depiction of the breakwaters of the harbour and especially their orientation do not concur with archaeological evidence. The removal of the gate outside the western section of the harbour is therefore to be considered as one of the numerous topographical distortions proper to these maps: this will be further discussed below.

Several structures dating from the twelfth or thirteenth century situated to the south-west of khan al- 'Umdān were presumably also included in the royal *ruga cathene*. To these structures belong the foundations of a round guard-tower adjoining the khan, a wall to the west with stone blocks linked together by C-shaped iron clamps in true Frankish fashion, the gate to Abu Christo's coffee-house (fig. 4, no. 10), as well as another wall projecting into the sea and remnants found in the shallow water nearby <sup>(83)</sup>. It is within the latter area that we must locate the Iron Gate, although its exact site has not been discovered (fig. 4, no. 11). It should be remembered that in the late ninth century Ahmad ibn Tūlūn built « a large gate for it [= the harbour] in the west (...) and over the gate a large building », thus most likely in the same

(81) See J. RILEY-SMITH, *The Survival in Latin Palestine of Muslim Administration*, in P. M. HOLT (ed.), *The Eastern Mediterranean Lands in the Period of the Crusades*, Warminster, 1977, pp. 9-10, 12-15.

(82) A fourteenth century idealized description of Acre mentions « iron gates » in the city, but this may be an exaggeration; text reproduced in G. MÜLLER (ed.), *Documenti sulle relazioni delle città toscane coll'Oriente cristiano e coi Turchi fino all'anno MDXXXI*, Firenze, 1879, p. 392. The *Porta ferrea* may have owed its name to the iron plates reinforcing it, similar to those found on the postern gates at Belvoir, on which see M. BEN-DOV, *Crusader Castles in Israel*, in *Christian News from Israel*, 25 (1976), p. 216 and photograph on p. 215.

(83) See KESTEN, *Acre*, map 4 and p. 54, nos. 26-27, and above n. 57. On the iron clamps, see the finds at Belvoir in BEN-DOV, loc. cit., p. 216, and the photograph in the Hebrew version of this study in *Qadmoniot*, 8 (1975), p. 110.

region <sup>(84)</sup>. The functional continuity of some of the structures enumerated above may therefore be safely assumed; it did not exclude building activity aimed at the repair, reinforcement or change of existing buildings in the Crusader period, as well as the addition of new ones. Some of these buildings have been attributed to the Pisan quarter on the basis of the Vesconte and Paolino maps, which depict the latter as having direct access to the western harbour <sup>(85)</sup>. This is unlikely, however, for various reasons: first, documentary sources do not support the evidence supplied by the maps, which anyhow are far from reliable; second, in view of the fiscal policy implemented by the rulers of the Latin kingdom of Jerusalem, it stands to reason that the latter should have retained in their own hands the area linking the Iron Gate to the Court of the Chain <sup>(86)</sup>.

The quarter of the Chain also included a residential area to the north and the east of khan al-'Umdān. In the latter section it reached the maritime wall, as illustrated by the document of 1277 examined above and another one dated 1290. Prior to the outbreak of the Venetian-Genoese war in 1256, the monastery of St. Sabas and the Templars owned some houses on the shore, others within the quarter, and so did the Hospitallers, Genoese individuals and the commune of Genoa. The ownership of buildings by the bishopric of Acre, the Hospitallers, the commune of Venice, individual Venetians and Pisans is attested since 1260 <sup>(87)</sup>. The quarter was not inhabited exclusively by Latins: in 1207, a Syrian or oriental Christian owned a house in the *vicus catenae* <sup>(88)</sup>. A royal *loggia* or portico was also situated in this area <sup>(89)</sup>.

The possession of houses by the communes and ecclesiastical bodies and their rivalry within the area testify to the fact that the quarter of the Chain did not belong to either of them: it was under royal jurisdiction, a fact of vital importance in the history of Acre in the second half of the thirteenth century. The quarter was bordered on its eastern flank by that of Pisa; its exact boundaries

(84) See above, p. 13, n. 63.

(85) KESTEN, *Acre*, p. 21 and map 4, nos. 26-27.

(86) For a detailed discussion, see below.

(87) See above, pp. 15-16, and JACOBY, loc. cit., pp. 227-230, 254-255, nn. 4-6 and 9.

(88) DELAVILLE, op. cit., III, pp. 78-79, no. 1276, and JACOBY, loc. cit., p. 261, n. 107; this reinforces the argument against the existence in Acre of a residential zone barred to non-Latins, as claimed by PRAWER, *The Latin Kingdom*, p. 413, and n. 145.

(89) G. L. FR. TAFEL und G. M. THOMAS (ed.), *Urkunden zur älteren Handels- und Staatsgeschichte der Republik Venedig*, Wien, 1856-1857, III, p. 32 (hereafter: TTh).

to the north and north-east of khan al-Umdān cannot be ascertained, because the network of Crusader buildings and streets in this area has been blurred <sup>(90)</sup>. Yet it is clear that the quarter of the Chain was contiguous to those of Genoa, Marseilles and Venice, none of which had direct access to the inner harbour prior to 1256. It is precisely for this reason that these cities competed so fiercely in Acre: Genoa endeavored to expand her hold within the quarter, while Venice attempted to prevent her from doing so <sup>(91)</sup>. The war which ensued ended in 1258 with the overwhelming victory of Venice and Pisa, and opened the way for their expansion and that of their nationals within the quarter of the Chain. The Venetian annexations that followed gradually diminished the size of the royal quarter <sup>(92)</sup>, which was eventually reduced to the Court of the Chain, adjoining public buildings to the south-west and the Iron Gate. All these structures were situated within a small triangular area which is clearly marked on the Vesconte map to the south-east of the Pisan quarter (fig. 1), although it was actually located on its eastern flank (fig. 4). The Court of the Chain is not depicted within this triangle, yet the presence of the *Porta ferrea* points unmistakably to the identification of this area as the last remnant of the royal *ruga cathene*, perhaps at the time of Sanudo's visit in Acre in 1285 or 1286 <sup>(93)</sup>, at any rate in the last years of Crusader rule in the city. Of all the quarters of Acre, this was certainly the one in which the most significant territorial changes occurred in the thirteenth century.

The Pisans founded their quarter after receiving a charter in 1168 from king Amalric I. This quarter was situated in the southern part of the city, bordering the Templar quarter on the west and the Genoese on the north. To the south, it extended further than the actual sea shore: foundations of Crusader buildings have been found underwater in what is now a small bay <sup>(94)</sup>. The eastern border of the quarter, as well as its exact extension raise serious problems. Several charters seem to indicate that the Pisans had a direct outlet to the western harbour. In 1168 they were granted a piece of land « close to the church of St. Anne in the

(90) See KESTEN, *Acre*, map 4.

(91) JACOBY, *loc. cit.*, pp. 227-228.

(92) *Ibid.*, pp. 228-231, and see below.

(93) See above, p. 7.

(94) According to LINDER, *Underwater Archaeology*, p. 50, map of Acre's harbour.

vicinity of the harbour », about 32 meters long and somewhat wider « than the other houses of the harbour » in the latter's direction. They intended to build there a church and a house, presumably a public building (95). It is known that the church of St. Anne was situated in the Templar quarter, to the west of what became the Pisan area (96). The plot of land granted to Pisa could not have been, therefore, at the same time close to the church, which was far removed from the harbour, and in the vicinity of the latter, and by that only about 32 meters long. All this casts heavy doubts on the reliability of the topographical data mentioned in the grant of 1168. A second grant, issued by king Baldwin IV in 1182, extended the area of the Pisan quarter. The *platea* or square they received was close to the harbour (*ad portum*) and faced on one side a public street, evidently the one separating later the Pisan from the Genoese quarter, as well as the harbour on another side (97). The somewhat ambiguous language does not clarify whether the Pisan area reached the shore, as it did in Laodicea, where expressions such as *usque ad mare* and *per littus maris* are used (98). The evidence about the eastern boundary of the Pisan quarter remains inconclusive: all the more so, as the area of the square granted in 1182 is doubtless identical with the one in which the present khan ash-Shūna stands (99), and the latter does not reach the harbour (fig. 4, no. 14).

Two further charters, one issued by Conrad of Montferrat in 1187 and the other by Guy de Lusignan two years later, grant the Pisans a considerable extension of their quarter (100). It should be remembered that Acre was then occupied by the troops of Saladin, and there is no indication whatsoever that the territorial clauses of these grants were ever implemented after the Christians

(95) MÜLLER, *op. cit.*, p. 14, no. XI: *unam petiam terre iuxta ecclesiam Sancte Anne supra portum Acconis (...) que habet (...) plus una canna quam relique domus portus*. This formulation is quite clumsy and somewhat suspicious. On the *canna* of Acre, identical with that of Cyprus, see Pegolotti's comparisons with the *canna* of Genoa in EVANS, *op. cit.*, pp. 68 and 98, and C. DESIMONI, *Observations sur les monnaies, les poids et les mesures (...) du notaire génois Lamberto di Sambuceto*, in *Revue de l'Orient latin*, 3 (1895), p. 23; also, R. B. C. HUYGENS, *Un nouveau traité «De constructione castris Saphet»*, in *Studi medievali*, ser. 3<sup>a</sup>, VI (1965), pp. 372-373, who confirms that the *canna* was ca. 2.20 m. long.

(96) *Gestes*, p. 253, § 501. For its location, see ABEL, *loc. cit.*, pp. 271-272.

(97) MÜLLER, *op. cit.*, p. 23, no. XIX.

(98) In a grant issued in 1154: *ibid.*, p. 6, no. IV. The different wording may be due to the notaries who drafted the charters, yet it should be considered in conjunction with other charters examined below.

(99) KESTEN, *Acre*, p. 21.

(100) MÜLLER, *op. cit.*, pp. 30-31, no. XXV, and pp. 38-39, no. XXXII.

recovered the city in 1191<sup>(101)</sup>. Nevertheless, their terms are interesting in another respect. The extended Pisan area would have included about three quarters of the walled city of Acre at that time, from the Cape of Furor, the south-western tip of Acre, to the royal Arsenal at the north-eastern tip, and from the Cape and the « sea of the harbour », situated to the south and south-east, as far as the shore of Montmusard to the north-west<sup>(102)</sup>. Although the charter of 1189 excludes from the grant the rights of the Templars, the Hospitallers and the church of St. Anne within the allotted area, it is unlikely that Guy de Lusignan, who certainly had a good knowledge of Acre, should have granted such far reaching territorial concessions to Pisa<sup>(103)</sup>. It seems rather suspicious that the four documents examined above, all of which deal with territorial matters, have come down to us not as original parchments, but solely as later copies. This may of course be due

(101) RICHARD, loc. cit. p. 336, n. 20, considers mistakenly that the grants describe the actual boundaries of the Pisan quarter, having misplaced the Arsenal (see also his map on p. 335) and the « gate of the bath », on which see below, n. 103.

(102) These charters reveal the existence of the *burgus novus*, a new suburb appearing later as Montmusard to the north of the city wall; for its identification, see J. PRAWER, *L'établissement des coutumes du marché à Saint-Jean d'Acre et la date de composition du Livre des Assises des Bourgeois*, in *Revue historique de droit français et étranger*, sér. 4<sup>e</sup>, 29 (1951), pp. 335-337; for its existence as early as 1120, see H. E. MAYER, *Bistümer, Klöster und Stifte im Königreich Jerusalem* (Schriften der Monumenta Germaniae Historica, Band 26), Stuttgart, 1977, pp. 360-361.

(103) There are some small variations in the description of the promised boundaries (MÜLLER, op. cit., pp. 30 and 38), but both versions amount to the same. The charter of 1187 speaks of a straight line along a street, depicted on the Paolino map (fig. 2), from the Cape of Furor to the sea of Montmusard, thus along the western shore (see fig. 4), as well as along another street from an unknown spot to the « gate of the Bathhouse » (*ad portam balnei*), and from there to the shore of Montmusard. This gate did not face the sea, as asserted by RICHARD, loc. cit., p. 336, n. 20. No doubt it owed its name to a nearby royal bathhouse, also mentioned in the charter of 1187. In 1192, a grant enlarging the Hospitaller quarter speaks of bathhouses in the area, which seem to have been transferred to the Order at a later date, as they appear as the « bathhouses (...) of St. John » in 1252 and a *vicus balnei S. Johannis* is mentioned in 1257: DELAVILLE, op. cit. I, p. 582, no. 917; II, pp. 731-732 and 844-845, nos. 2612 and 2865. A bathhouse of the Hospitallers has been located within their quarter on the site of the present municipal museum: see GOLDMANN, loc. cit., pp. 15-16. This site, at about 120 metres of the Crusader city wall (fig. 4, no. 30), and the existence of other bathhouses nearby warrant the assumption that the « gate of the bathhouse » was in the vicinity, probably the one appearing as « porta nova » on the Paolino map (fig. 2), but correctly located on the Vesconte map (fig. 1) at the point where the street bordering the Hospitaller quarter on the west reaches the city wall (fig. 4, no. 25). This assumption is strengthened by the charter issued in 1189 (MÜLLER, op. cit., p. 38), which cites the *cathena* in connection with the « sea of the harbour » and states that the granted territory extended to the north as far as the shore of Montmusard and « the house of the Temple », obviously situated in the quarter of Montmusard called *burgus Templi* on the Vesconte map and *bovaria Templi* on the Paolino map. This quarter faced the *porta nova*: the latter's name, which appears in 1235 (DELAVILLE, op. cit., II, pp. 493-494, no. 2126), may be due to extensive repairs and changes made before that year.

to the fact that the original charters were kept in Acre and therefore lost when the city was captured by the Muslims in 1291, yet several elements point in a different direction. The notary Bonaccursus, who copied the charters of 1168, 1187 and 1189, must have been in Acre at least since May 1192 till October 1200<sup>(104)</sup>. The Pisan notary Benencasa di Leonardo da Cascina<sup>(105)</sup> made copies of all four documents discussed above, those of 1168 and 1189 in March 1248 and those of 1182 and 1187 in March 1249, at the specific request of the Pisan consul in Acre<sup>(106)</sup>. This initiative was certainly related to the expected arrival of the French king Louis IX in 1248 and the presence of his delegates in Acre in 1249; its purpose was to strengthen thereby Pisan claims to some of the city's territory<sup>(107)</sup>.

It should be noted that precisely around the same time, in the first months of 1248, the commune of Marseilles bought several spurious charters from a forger in order to sustain her claims to custom exemptions, and one more in 1249 in order to maintain her territorial claims in Acre<sup>(108)</sup>. Forgery by Pisa cannot be ruled out and seems all the more likely if we take into account the combination of the following factors: the totally unrealistic extension of the Pisan quarter, supposedly promised in 1187 and 1189, the lack of original charters, the action taken by the Pisan official and, finally, the fact that in 1248 and 1249 the latter prompt-

(104) MÜLLER, *op. cit.*, pp. 14, 31, 39. Bonaccursus holds the title of *domini Henrici Romanorum imperatoris iudex et notarius*, and has therefore received his commission as notary between April 1191, when Henry VI was crowned emperor, and September 1197, when the latter died. Bonaccursus copied and authenticated several charters, the last of which was issued in October 1200 by Theobald, bishop of Acre: MÜLLER, *op. cit.*, pp. 82-83, no. LII. The earliest one, *ibid.*, p. 60, no. XXXVII, has been convincingly redated in May 1192 by M.-L. FAVREAU, *Graf Heinrich von Champagne und die Pisaner im Königreich Jerusalem*, in *Bollettino storico pisano*, 47 (1978) [in the press].

(105) Cascina was included in the Pisan *contado*: cf. D. HERLIHY, *Pisa in the Early Renaissance*, New Haven, 1958, pp. 45, 92, 181, and map facing p. 2.

(106) MÜLLER, *op. cit.*, pp. 14, 23, 31, 39.

(107) Louis IX left France at the end of August 1248, and in March 1249 a delegation sent by him from Cyprus was in Acre: see PRAWER, *Histoire*, II, pp. 326-327. Bertencasa made a copy of a charter in March 1249, although pope Innocent IV had abolished in June 1247 the rights granted in 1200 to the Pisan church of San Pietro by Theobald, bishop of Acre: E. BERGER, *Les registres d'Innocent IV*, Paris, 1884-1921, I, pp. 417-418, no. 2081, and MÜLLER, *op. cit.*, p. 83, no. LII. This copy further strengthens the assumption that forgeries were made.

(108) H. E. MAYER, *Marseilles Levantehandel und ein akkonensisches Fälscheratelier des 13. Jahrhunderts*, Tübingen, 1972, esp. pp. 97-130. Genoa in 1155 and presumably in 1268-1270, as well as the Teutonic knights in 1253-1254 resorted to similar measures: *ibid.*, pp. 131-174, and H. E. MAYER und M.-L. FAVREAU, *Das Diplom Baldwins I. für Genua und Genuas goldene Inschrift in der Grabeskirche*, in *Quellen und Forschungen aus italienischen Archiven und Bibliotheken*, 55-56 (1976), pp. 22-95.

ed a Pisan notary to lend public faith to copies of charters defining the rights of the commune and those of the Pisan church in Acre <sup>(109)</sup>. There was, however, a previous occasion on which Pisan officials had taken a similar step, when the notary Bonaccursus was active in Acre in 1200 or later, although we do not know exactly for what purpose. It is anyhow obvious that the charters were presented to emperor Frederick II, from whom Pisa received several privileges in April 1229. One of these alludes in general terms to the possessions formerly held by the Pisans, another to their exemption from commercial dues at the *cathena* <sup>(110)</sup>.

The assumption that Pisan forgeries were made in 1200 or somewhat later, as well as in 1248-1249, does not imply that the documents dated 1168, 1182, 1187 and 1189 have been entirely forged. Those of 1168 and 1182 are explicitly mentioned in a charter issued in May 1192, with a specific reference to the *platea* or square included in the grant of Baldwin IV in 1182 <sup>(111)</sup>. Yet it is most likely that the boundaries of the Pisan quarter as delineated in the original charters did not coincide with those appearing in the copies that have come down to us. It may be assumed that the forgeries were aimed at altering the territorial clauses in these, as well as in other documents <sup>(112)</sup>. The outlet of the Pisan quarter to the western harbour was a major issue in this respect.

Our hypothesis that alterations were made is further enhanced by a clause appearing in the charters of 1187 and 1189. As this clause maintains serious restrictions on the Pisans in Acre, it may be safely considered as authentic. According to these charters, the commune was allowed to station its officials at the *cathena*, so as to ensure to all Pisans, citizens as well as others enjoying the status of Pisans, the full benefit of the exemptions they were entitled to. This procedure, attested again in 1245, is expressly

(109) This is practically the case with all the charters dealing with Acre, Tyre und Tripoli, and one about Antioch: a convenient list of charters appears in LA MONTE, *Feudal Monarchy*, pp. 269-271. The authenticity of these charters should be examined anew.

(110) MÖLLER, *op. cit.*, pp. 95-98, nos. LXIV-LXVI, esp. pp. 96 und 97.

(111) *Ibid.*, p. 60, no. XXXVII; for the dating of this document in 1192, see above, n. 104.

(112) E. g., in the charter of 1188 to the Pisan *societas Vermilliorum*, where the area cannot be delineated, but seems nevertheless very large, and in the charter of 1200, where the boundaries are described in a way similar to those of 1187 and 1189: *ibid.*, pp. 33 and 82-83, nos. XXVII and LII, the last to have been copied by Bonaccursus.



mentioned in the *Statuti pisani* of 1286<sup>(113)</sup>. It is therefore evident that down to the Muslim conquest of 1291, the Pisans were compelled to pass through the *cathena*, as were members of the other communes. These restrictions to the freedom of trade, which were part of a consistent royal policy in fiscal matters, had no doubt important territorial implications: neither Amalric I nor his successors would have granted the Pisans an outlet to the western harbour, enabling them thereby to evade the custom control exercised in the Court of the Chain. Moreover, we have already noted that this Court, adjoining buildings to the south-west and the Iron gate were under royal jurisdiction, and this prevented the Pisan quarter from reaching the western harbour<sup>(114)</sup>. This situation no doubt prompted Pisa to use all possible means, including forged charters, to enlarge her territory, but to no avail. The depiction of the Pisan quarter on the Vesconte and Paolino maps therefore does not reflect accurately the extent of the Pisan quarter, even if the settlement of some Pisans in the quarter of the Chain since 1260 is taken into account<sup>(115)</sup>. It is to be considered, as for the harbour, one of the numerous distortions due to the drawers of these maps and based on incomplete or faulty information.

There is only little knowledge about structures within the Pisan quarter<sup>(116)</sup>. Khan ash-Shūna stands no doubt on the square granted in 1182 and represents the Pisan khan in its original dimensions: according to the Kesten survey, large parts of the building belong to the Crusader period. The inner courtyard has been reduced in size by the addition of storehouses on its northern side. This should be related to the permission granted to the Pisans in 1182 to erect vaulted buildings on the square and build upon them, while keeping the ground space free<sup>(117)</sup>. It seems that the Pisans did not abide by this rule and closed the vaults with walls. Large, probably administrative buildings and another square have been identified to the south, where the Pisan church

(113) R. DAVIDSOHN, *Forschungen zur Geschichte von Florenz*, II, Berlin, 1900, p. 298: deposition of several witnesses in 1245; for 1286, see F. BONAINI (ed.), *Statuti inediti della città di Pisa dal secolo XII al secolo XIV*, Firenze, 1854-1870, I, p. 334, reprinted in MÜLLER, op. cit., p. 380.

(114) Above, pp. 16-18.

(115) See JACOBY, loc. cit., p. 230.

(116) See KESTEN, *Acre*, p. 21, and above p. 18, for our reservations.

(117) MÜLLER, op. cit., p. 23, no. XIX.

of San Pietro must have stood. Only little space remained available for residential purposes outside the khan, which covered a large section of the quarter. Access to the neighbouring Templar quarter could be gained through a gate to the west (fig. 4, no. 15). A narrow lane joined the eastern gate (fig. 4, no. 13) to the thoroughfare extending from the Court of the Chain to the northern city wall (fig. 4, no. 19) <sup>(118)</sup>, and in order to reach the harbour, one had to pass through the *ruga cathene*.

Towers of Genoa and Pisa are mentioned in general terms in 1222 <sup>(119)</sup>, yet it is impossible to know how many the latter then had. In 1242 or 1243 there were two Pisan towers, which were then handed over by the Pisan consul to the *dominus* « who stands above all the consuls of the communes » in Acre, obviously Balian d'Ibelin, lord of Beirut <sup>(120)</sup>. The Pisan khan marked the boundary of the quarter on three sides and its walls provided an excellent defence. The Vesconte map locates a tower at the north-western corner of the khan, in an area where the Pisan, Genoese and Hospitaller quarters met (fig. 1). This location may be considered as reliable, and the lack of archaeological evidence explained by the fact that the tower had probably been elevated upon an existing building, of which only the lower part has been discovered <sup>(121)</sup>. This tower faced thus a tower of the Templars <sup>(122)</sup> as well as the Genoese quarter. It may be identified with the « new » Pisan tower mentioned in a Genoese report of 1249 as being close to a Genoese house (fig. 4, no. 16) <sup>(123)</sup>. Being better and higher than the other tower of the quarter and therefore called « the Pisan tower », it served to depict the Pisan quarter on a

(118) Kesten's assumption that the lane linked the quarter to the Pisan port is not warranted, as no such port existed.

(119) BIGONI, loc. cit., p. 58.

(120) This consul preceded the one in office in 1245, when a witness mentioned this fact: DAVIDSOHN, op. cit., p. 296. Balian d'Ibelin, lord of Beirut, took a firm hold of Acre late in 1242, while the Pisans were siding with his enemy, the representative of emperor Frederick II: *Gestes*, p. 126, § 222. This may explain why the Pisans were required to hand over their tower and why the year thereafter they joined Balian in having Alix of Cyprus proclaimed regent of the kingdom of Jerusalem: *Gestes*, p. 129, § 226.

(121) On the khan, see KESTEN, *Acre*, p. 21. A similar problem confronts the archaeologists in their search for the « old » tower of the Genoese: see below. In Acre, many towers of the quarters were elevated above gates: see KESTEN, *Acre*, p. 16.

(122) See above, n. 19.

(123) Yet this house may have been situated outside the Genoese quarter, like another one mentioned soon after and located on the *ordamer* or western shore of Acre, which the quarter did not reach: *AOL*, 2 (1884), p. 219; see also below, on the Genoese quarter.

version of the Matthew Paris map <sup>(124)</sup>. The Genoese claimed in 1288 that it had been built, presumably a short time before 1242, in order to compete with their main tower, a further indication of its location <sup>(125)</sup>. In 1257, John d'Ibelin, lord of Jaffa, could have been easily hit by an arrow shot with a crossbow from the main Genoese tower, which was « very close nearby » <sup>(126)</sup>. The same year, the Genoese completely destroyed the « old » tower of the Pisans, « who were not willing to defend it » <sup>(127)</sup>; this tower may have protected the eastern gate of the Pisan quarter (fig. 4, no. 13). One of the clauses of the peace treaty forced by Genoa upon Pisa in 1288 stipulated the destruction of the « new » tower, yet it is not known whether this was carried out. After the defeat of the Genoese in 1258, the Pisans annexed a large section of their quarter and built a new wall enclosing their own extended area, in order to separate it from the rest of the Genoese quarter. In the peace treaty of 1288 they agreed to destroy the wall, as well as other fortified structures erected on former Genoese territory, and to return the latter to Genoa <sup>(128)</sup>.

The Genoese quarter in Acre was the oldest among those allotted to the European commercial cities. Its area was granted to the Genoese in 1104 in return for their decisive participation in the conquest of the city <sup>(129)</sup>. King Baldwin I was careful enough, however, to prevent them from gaining a direct outlet to the western harbour, and retained in his own hands the quarter of the Chain in the latter's vicinity <sup>(130)</sup>. This important topographical feature has been decisively demonstrated by the Kesten survey <sup>(131)</sup>, the results of which concur with the Vesconte drawing in the Ox-

(124) *Liber iurium*, II, p. 135. For its depiction, see Brit. Library, Ms. Royal 14 C vii, ff. 4v-5r; the location in the north of Acre is evidently wrong. Similarly, sources speak of « the Genoese tower », although more than one existed: see below.

(125) *Liber iurium*, II, p. 135.

(126) *Gestes*, p. 149, § 269; see also below, for the Genoese tower.

(127) C. IMPERIALE DE SANT'ANGELO (ed.), *Annali genovesi di Caffaro e de' suoi continuatori*, Roma, 1890-1929, IV, p. 32 (hereafter: *Annali*): the Pisans and Genoese still were allies in the preceding year, hence the dating of the event in 1257. MARTIN DA CANAL, *op. cit.* p. 164, claims that treason helped the Genoese; SANUDO in BONGARS, *op. cit.*, p. 220, speaks of two Pisan towers captured.

(128) *Liber iurium*, II, pp. 135-138.

(129) *CDG*, I, pp. 20-22. The known text of this charter has been forged on the basis of an authentic document, as proven by Mayer and Favreau, above, n. 108. There is no detailed documentary evidence on the boundaries of the Genoese quarter.

(130) See above, pp. 15-19.

(131) See KESTEN, *Acre*, map 4, yet on pp. 24-25, and p. 54, no. 25, he identifies khan al-'Umdân as the site of the Genoese khan, obviously a mistake; see also above, p. 4.

ford copy, although the distance to the harbour was definitely larger than hinted by this map (fig. 1 and 4) <sup>(122)</sup>. The Kesten survey has also confirmed the general shape of the Genoese quarter and its position in relation to other quarters, as marked on the Vesconte map. To the west, it faced the so-called rectangular quarter and that of the Templars, and to the south the Pisan quarter. The main thoroughfare running from the western part of the harbour to the north, a section of which serves today as the Market street, formed its border to the east and south-east and separated it from the Venetian quarter, that of Marseilles, and the quarter of the Chain. To the north, the Genoese quarter was partly contiguous to that of the Hospitallers, but its exact boundary in this area cannot be ascertained.

The division of the Genoese quarter into two districts by a street is clumsily reproduced on the Vesconte and Paolino maps. Although depicted as a small triangle, the southern district was in fact fairly large and had rather a rhomboid shape (fig. 4) <sup>(123)</sup>. The street dividing the quarter, the many winding lanes and other architectural features uncovered by the Kesten survey were inherited from the Arab period preceding the Crusader conquest. Certain changes were nevertheless introduced for military reasons by the Genoese, who joined their two districts and protected their quarter by thick walls, gates and impressive towers. A fortified gate (fig. 4, no. 18) guarded the entrance from the present Market street into the southern district, the central square of which has been located.

The main public buildings of the Genoese quarter were situated in the northern district, the largest of the two. One of its main landmarks was San Lorenzo, the church of the patron saint of Genoa, which stood on the site of the present Greek Orthodox church of St. George (fig. 4, no. 22); it is depicted on the Vesconte map. With the contiguous old tower of the commune (*turris vetera comunis*) and the old palace (*palacium vetus*), the arcades of which housed the meetings of the Genoese court, it faced the main square of the quarter <sup>(124)</sup>. The second landmark appearing

(122) On all other copies of the Vesconte map, the Genoese quarter reaches the inner harbour. As we have noted above, p. 4, the Paolino map is totally unreliable in its depiction of this quarter.

(123) For a detailed survey of the quarter, see KESTEN, *Acre*, pp. 16-18.

(124) *AOL*, 2 (1884), pp. 215, 217, 218.

on the Vesconte map, Lamonçoa, is depicted by a circle (135). Basing themselves on the name, twentieth-century historians of the Crusades have contended that Lamonçoa was a hill, that it separated the Genoese quarter from the neighbouring Venetian quarter, and that the monastery of St. Sabas or a house belonging to the latter stood on its summit (136). All these assertions have to be dismissed. It may be safely assumed that the ground of the city was more or less level in the Crusader period (137). There is no trace of a hill in the Genoese quarter, nor have the remnants of a monastery been discovered in the area within its northern district where the Vesconte map locates Lamonçoa. As for the house coveted by Genoa and Venice prior to 1256, it has been shown elsewhere that it was situated in the quarter of the Chain and on the sea shore, thus far removed from that same area (138). Lamonçoa was in fact a huge tower, the main military structure of the Genoese quarter; as such, it is depicted on the Matthew Paris map (fig. 3), drawn in 1252 or shortly after. This tower was utterly destroyed in 1258 by the victorious Venetians and Pisans, to the extent that even its foundations were dismantled. When groundwater flooded the site, the victors mocked the Genoese by claiming that their tower was floating (139). It is therefore not surprising that the Kesten survey has not found any remnants of this imposing structure. Vesconte or his model saw fit to mark its location by a small circle.

Lamonçoa seems to have been identical with the « new »

(135) For the reason, see below.

(136) R. GROUSSET, *Histoire des Croisades et du royaume franc de Jérusalem*, Paris, 1934-1936, III, p. 537; S. RUNCIMAN, *A History of the Crusades*, Cambridge, 1952-1954, III, p. 282; H. E. MAYER, *The Crusades*, Oxford, 1972, p. 263, and *Marseilles Levantehandel*, p. 121; J. PRAWER, *Histoire*, II, pp. 363-364, 367. J. RICHARD, *Le royaume latin de Jérusalem*, Paris, 1953, p. 286, mentions a hill, with the monastery and a Genoese tower on its summit,

(137) KESTEN, *Acre*, p. 15.

(138) See JACOBY, *L'expansion*, pp. 227-228 and particularly 254, nn. 4 and 6.

(139) ANDREAS DANDOLO, *Chronicon Venetum*, ed. MURATORI, p. 367: *Locum Ianuensium et turrim munitissimam Muzojam destruxerunt*; doge of Venice since 1343, the author had access to chronicles and to the archives of the State. The name of the tower does not appear in the version of the text edited by E. PASTORELLO (above, n. 42), p. 309. Martin da Canal, a contemporary chronicler (see above, n. 42, p. 170, § XIII), hints at the name when he relates that the Genoese *sor cele tor feisoient (...)* *si grant joie et si grant feste*: it must therefore have had a flat roof; on this tower, see also p. 164, and *Gestes*, pp. 150 and 155-156, §§ 270 and 286. On its destruction, see *Annali*, IV, p. 36: *Turris Ianuensium navigat!* Martin da Canal (p. 172, § XIX, by mistake for p. 174) even claims that the Pisans caught fish on the site where its foundations had stood; the word <as> added by the editor on l. 4 should be deleted and his translation corrected accordingly, the present one being out of context. The Pisans indeed took hold of the area: see below, p. 29.

tower mentioned in 1249<sup>(140)</sup>. The latter name derived probably from the fact that it had been rebuilt after 1222, when the Pisans overran the Genoese quarter and set a huge tower on fire<sup>(141)</sup>. It stands to reason that it was also identical with the tower existing in 1257, from which one could easily aim with a crossbow at a tower situated on the northern flank of the Pisan quarter: the latter would have been at a distance of about 150 metres<sup>(142)</sup>. On the Vesconte map, it appears to the north-west of the point where the street separating the two Genoese districts reaches the present Market street, close to the Venetian quarter. This would be an appropriate location for a tower guarding one of the weakest strategic spots in the Genoese defensive system (fig. 4, no. 20)<sup>(143)</sup>. San Lorenzo was the only building standing around the public square of the northern district after the Venetians and Pisans overran it in 1258. Many houses in the quarter were not rebuilt nor resettled, save for a few, and the severe damage they suffered was still visible in 1291, at the time of the Muslim conquest<sup>(144)</sup>. Moreover, Pisa annexed a large section of the Genoese quarter, including the site where Lamongoia had stood, perhaps in order to prevent its reconstruction. By the peace treaty of 1288, Genoa compelled Pisa to destroy the wall and other military structures she had built on Genoese territory and to return the latter to its previous owner<sup>(145)</sup>. As the Genoese did not establish themselves again in Acre on a permanent basis<sup>(146)</sup>, it is not clear whether this obligation was indeed carried out. At any rate, it is rather strange that the expansion of Pisa is not reflected on the Vesconte map, especially as this seems to be the case with

(140) *AOL*, 2 (1884), pp. 215, 217, 218.

(141) *Annali*, II, p. 182. It may have been first erected after 1195, when the Genoese were granted permission to build a tower on the site of their choice and as high as they wished: *CDG*, III, p. 114.

(142) See above, p. 26. *Gestes*, p. 149, § 269, describes the Pisan tower as being «close nearby», which does not seem to fit such a distance. Yet one has to rely on the location provided by the Vesconte map, which is on the whole accurate in regard to buildings.

(143) The first three items in the list of 1249 (*AOL*, 2, p. 215) seem to imply that the new tower and a nearby house were in the vicinity of San Lorenzo and the «old» tower, yet it is unlikely that two towers defending the Genoese quarter should have been built so close to each other, with just one house between them. The latter's mention in relation to the «old» tower and the church may be due to a mistake, as it does not appear in the second list (*ibid.*, p. 217). A private tower is also mentioned in the same list as *turris vetera*: *ibid.*, p. 220.

(144) See *Gestes*, pp. 155-156, 255, §§ 286, 505; *JACOBY*, loc. cit., p. 228.

(145) *Liber iurium*, II, pp. 135-138: *restituēt (...) totam terram in qua consuevit esse turris Communis Ianue et totam aliam terram*.

(146) See *JACOBY*, loc. cit., p. 228.

Venice (147). The fact that Sanudo stayed in Acre in 1285 or 1286, while Pisa was in full possession of the annexed Genoese territory, had no bearing on the drawing of the map. This may be a further illustration of the fact that Sanudo did not supply Vesconte with accurate information (148).

The quarter of Venice came into being shortly after 1110, when king Baldwin I granted her two parts of a *ruga* or quarter; this area was enlarged by a further grant in 1123 (149). It is impossible, however, to ascertain whether the Venetian area reached then the boundaries existing in 1244 when Marsilio Zorzi, the Venetian representative in the Levant, compiled an inventory of communal properties and income of the quarter. At any rate, it is clear that the borderline of 1244 did not coincide with the limits described in 1259 and 1260 (150): these were the result of annexations of new territory by Venice after her victory in the St. Sabas war.

The location of the church of St. Demetrius is of major importance for the reconstruction of the southern borderline of the Venetian quarter. This church was situated on the shore, between the *cathena* or harbour of the Chain to the south and the Venetian quarter to the north (fig. 4, no. 35), as clearly attested in 1244 (151). It is thus obvious that this quarter did not reach the *cathena*. Its original nucleus included a *campus* or public square (152), surround-

(147) See below.

(148) See above, pp. 4-5, 14, 24, and below, p. 31, for other cases.

(149) TTh (above, n. 89), I, pp. 84-89, and PRAWER, *I Veneziani*, pp. 632-633, for the first date. From the second grant it is obvious that *ruga* is a quarter, and not a street: the added area was situated between two houses, «proceeding along a straight way» (*recto tramite procedente*): this specification would have been needless if both houses were in the same street, but was essential to describe an area between two constructions joined by an imaginary straight line: a similar use, *recta linea*, appears in the grant of 1188 to the Pisan *societas Vermillorum*: MÜLLER, *op. cit.*, p. 33, no. XXVII.

(150) Contrary to the assumption of PRAWER, *I Veneziani*, p. 645. The documents of 1244, 1259 and 1260 are examined below. The topographical description that follows differs considerably from all those suggested previously.

(151) A Venetian tower on the shore marked then the southern borderline of the Venetian quarter: see below, n. 156. St. Demetrius was destroyed by the sea in 1290: E. LANGLOIS (ed.), *Les registres de Nicolas IV*, I, Paris, 1886, p. 480, no. 2919. An important topographical clue is provided in TTh, III, p. 32: *circha cathenam versus sanctum Dimitrium et sanctum Marcum*. The vicinity of the western section of the harbour is thus obvious, and BENVENISTI, *op. cit.*, pp. 88 (map) and 104, therefore wrong in placing the church on the eastern flank of the Venetian quarter, instead of the south-eastern; besides, there is no justification whatsoever to assume that the *ruga cathene* was a street and that it separated the Venetian quarter from the sea; the text mentioned above speaks anyhow of the *cathena*, and not of the *ruga*. The church of St. Demetrius was included in the Venetian quarter in 1260: see below.

(152) Houses *supra capum nostrum* are mentioned in 1244: TTh, II, p. 396. PRAWER,

ed by houses and a former mosque, as well as the territory on the shore on which a tower mentioned in 1244 was built<sup>(153)</sup>. This tower is depicted on the Vesconte map at the south-eastern tip of the Venetian quarter, on the shore of the harbour of the Chain (fig. 1). However, the topographical data used till now proves beyond doubt that this is a distortion, perhaps intentional, on the part of Vesconte working for Sanudo or of the model he used. Moreover, it is inconceivable that the rulers of the Latin kingdom of Jerusalem should have relinquished their control of the chain and of the tower situated on the shore of the harbour to which it was attached<sup>(154)</sup>. Nor would they have granted to the Venetians direct access to the harbour, while refusing it consistently to all other communes<sup>(155)</sup>. Besides, the tower was close to St. Demetrius and the latter in turn close to the *fondaco* of the Venetian quarter<sup>(156)</sup>. As the *fondaco* stood in the area of the present khan al-Ifranġ, it follows that the Venetian tower was located more to the north-east than would appear from the Vesconte map<sup>(157)</sup>. The Venetian quarter created shortly after 1110 no doubt also included the area in which we later find the church of San Marco, patron of Venice: the grant of a church was a major requirement of all the communes<sup>(158)</sup>. The location of San Marco is anyhow confirmed by the vicinity of St. Demetrius, the *cathena*

*I Veneziani*, p. 650 and n. 4, considers this as a 'Venetian cape' advancing toward the harbour area; *campum* or square, as in TTh, II, p. 391, is however the proper reading, confirmed anyhow by another copy of the same document: Venice, Bibl. Querini - Stampalia, cl. IV, cod. 3, f. 39v.

(153) On the houses, see TTh, II, pp. 396-397; the *machomaria* or mosque is mentioned in 1123 and 1244: TTh, I, p. 86, and II, p. 396; on the tower, see below n. 156.

(154) See above, pp. 13-14. In 1286 Pisan sailors fled to the *port* or bridge of Venice according to *Gestes*, p. 228, § 456. As no such bridge existed, the proper reading is presumably *port* or harbour. This term does not imply, however, the existence of a Venetian harbour in the late Crusader period, but applies to the section of the harbour or shore of the Venetian quarter.

(155) On Pisa and Genoa, see above; on Marseilles, see below.

(156) The tower was *iusta ecclesiam super mare*, the name of the church of St. Demetrius appearing before: TTh, II, pp. 385 and 394. Note also *in capite fontici iuxta sanctum Dimitrium*, four flats in the *palacium* of the *fondaco* facing the church and, finally, the position of a house between the *fundus* or *fondaco* and St. Demetrius: *ibid.*, II, pp. 394 and 393, and III, p. 34.

(157) There is no conclusive archaeological evidence enabling us to locate it: KESTEN, *Acre*, p. 26; for its probable site, see here fig. 4, no. 34. On the khan, see below. In his description of the Venetian boundary, KESTEN, *Acre*, pp. 24-25, has relied entirely on the Vesconte map and has consequently been led astray, assuming e. g. that the area between khan al-Ifranġ and khan al-Umdān was an empty square used for loading and unloading ships in the port, whereas it included a section of the Venetian quarter and the residential area of the quarter of the Chain, on which see above, pp. 18-19.

(158) It appears in 1123: TTh, I, p. 83.



and the original *campus* <sup>(159)</sup>: it was thus to the south-east of khan al-Ifranĵ (fig. 4, no. 33). In 1244, the official residence of the *baילו* or official representative of Venice was situated at a short distance from the shore and from San Marco <sup>(160)</sup>, somewhere between this church and the Genoese quarter and southward of khan al-Ifranĵ: this appears from a description of the new boundary of the Venetian quarter in 1260 and the vicinity of the Provençal quarter <sup>(161)</sup>. It may be conjectured that the same residence was already used at an earlier date.

The structures identified till now were all situated in the same area, to the south and south-east of khan al-Ifranĵ. It follows that the southern boundary of the original Venetian quarter started on the shore, to the north of St. Demetrius, and proceeded toward the main thoroughfare linking the harbour to the northern city wall, partly the present Market street, yet it is doubtful whether the latter was reached. As the Crusader topography of this area has been blurred, it is impossible to follow the Venetian borderline: it is evident, however, that it was quite close to khan al-Ifranĵ. This boundary, revealed by the report of 1244, did not change till 1258 to the south and south-east of the khan: it is therefore apparent that the territory granted to Venice in 1123 or later was situated to the west and north of her original quarter.

It should be noted that no *fondaco* was included in the grant of 1110, nor was it mentioned specifically in that of 1123. It is thus not clear when the *fondaco* became part of the Venetian quarter. This complex of buildings serving as dwellings, storehouses and shops surrounded a *campus* or square, not to be mistaken with the one included in the grant of 1110 <sup>(162)</sup>. The *fondaco* may be safe-

(159) See above, n. 151. A house on the *campus* is situated *ex opposito logie nostre sancti Marci*: TTh, II, p. 397; the *logia Venetorum (...)* *iuxta ecclesiam sancti Marchi* also appears in the charter of 1277 mentioned above, n. 75 (reading corrected according to the original manuscript).

(160) Description of the area in TTh, II, pp. 390-391, some *stationes* being *inter dictum palatium et ecclesiam sancti Marci* and *tabule (...)* *iuxta portam ecclesie versus domum ubi habitat baiulus*.

(161) TTh, III, p. 32: *extra portam (...)* *novam quam erexerunt ad capud palacij baiuli, procedendo de sancto Marco versus vicum coopertum*; the *ruga cooperta* appears in the description of the Genoese quarter: AOL, 2, p. 216. For the identity of *vicus* and *ruga*, see above, pp. 15-18. It follows that the residence was not to the north of the *fondaco*, as suggested by PRAWER, *I Veneziani*, p. 647. On the quarter of Marseilles or the Provençaux, see below.

(162) TTh, II, p. 391: *stationes sub magno palatio fontici super viam et campum existentes*, thus some facing the street and others the square; the other *campus* appears on p. 396. For the meaning of *fonticum* in this context, see PRAWER, *I Veneziani*, pp. 646-647; its description appears in TTh, II, pp. 391-395.

ly identified with khan al-Ifranĵ, as it was close to St. Demetrius, yet not on the shore; its main building is depicted on the Vesconte map with a flying banner (fig. 1) <sup>(163)</sup>. Khan al-Ifranĵ stands on the original Crusader level and shows extensive remains of that period (fig. 4, no. 31) <sup>(164)</sup>. Unfortunately, it is impossible for the time being to date these remains more precisely <sup>(165)</sup>. This would be especially valuable, as it appears from documentary evidence that a major change occurred in the configuration of the Venetian quarter in 1258. From the position of the Provençal quarter to the west and south of the Venetian area before this date, it follows that the *fondaco* could not have reached then the western line of khan al-Ifranĵ, nor the Market street to the west and north-west of that khan. This was made possible only after Venice enlarged her territory by annexation, when she took advantage of her victory in the St. Sabas war <sup>(166)</sup>. The plan of the present khan may therefore reflect that of the *fondaco* in the late Crusader era, after it was expanded, but not that of the period preceding 1258. Building activity in the *fondaco* is indirectly attested in 1286 <sup>(167)</sup>. Some houses belonging to the commune, others probably to the church of San Marco were located to the north of the *fondaco*: their position can be deduced from the fact that in 1259, « a small gate of San Marco » faced the Hospitaller quarter to the north <sup>(168)</sup>.

Of the areas described in the report of 1244, only the *ruga Firmi* cannot be located; communal property there was of little value <sup>(169)</sup>. It is rather strange that no such property is enumerated

(163) According to PRAWER, *I Veneziani*, pp. 647 and 648, n. 3, the Venetian structure on the Vesconte map stands on the shore, and therefore he identifies the *fondaco* with khan ash-Shawārda, situated on the sea-front. This location is not warranted for several reasons: the khan is far removed from the presumed site of St. Demetrius, on which see above, p. 31 and n. 156; moreover, buildings on the sea-shore or integrated in the walls of Acre, such as the main Templar building (on which see TOBLER, *op. cit.*, pp. 90-91, and *Gestes*, pp. 252-253, § 501), the royal *castellum* and towers above gates always appear on the Vesconte map with their base on the shore or the walls, which is not the case with the Venetian building. This structure is therefore to be sought at some distance of the shore, which excludes its identification with Burĵ as-Sulĵān, as suggested by KESTEN, *Acre*, p. 25.

(164) *Ibid.*, p. 24.

(165) For present attempts to date Crusader buildings, see B. Z. KEDAR and A. KAUFMAN, *Radiocarbon Measurements of Medieval Mortars: A Preliminary Report*, in *Israel Exploration Journal*, 25 (1975), pp. 36-37.

(166) See details below.

(167) See below, p. 36.

(168) The houses of the commune were to the east of the others: TTh, II, p. 395. The ownership by San Marco of the houses *de helemosina* is suggested by PRAWER, *I Veneziani*, p. 650 and n. 2. The gate is mentioned in DELAVILLE, *op. cit.*, II, pp. 869-870, no. 2919.

(169) TTh, II, p. 390.

for a large area, the north-eastern section of the Venetian quarter which reaches the royal Arsenal on the Vesconte map (fig. 1). As the whole of khan ash-Shawārda and the region to the north stand on an archaeological tell, about 4-5 metres above the Crusader level, it has not yet been possible to investigate the area. Yet Burj as-Sultān, where Crusader remnants are visible, was no doubt included in the Venetian quarter (fig. 4, no. 36) <sup>(170)</sup>. The location of this massive structure, which may have been part of a larger fortified complex, in the middle of the quarter is rather puzzling if the latter extended originally as far as the Arsenal (fig. 4, no. 38). On the other hand, it is self-evident if we assume that the Burj was at some time part of the northern defense line of the quarter. If so, the expansion of Venice in this area toward the Arsenal is to be related to conditions prevailing in Acre after 1258 <sup>(171)</sup>.

Venice made then a significant advance to the south in the quarter of the Chain: she took possession of Genoese property there and annexed an area around the church of St. Demetrius; in 1260, the parish of this church was submitted to the authority of the Venetian church of San Marco <sup>(172)</sup>. Venice also took hold of a territory between her own quarter and that of the Hospitalers, to the north and north-west of khan al-Ifranj; it included a former onion market, a storehouse and a square that had belonged to the Lombards, presumably allies of the Genoese till 1258. Moreover, new walls and new gates erected with building material taken from the Genoese quarter were completed by 1260: they enclosed newly annexed territory. It is significant that they faced not only the quarter of the Hospitalers, but also that of the defeated Genoese, although no danger was to be expected from this last area <sup>(173)</sup>. Beyond their military function, the new walls were evidently to serve another purpose: that of ensuring a lasting possession of the newly won territory. The construction of the wall opposite the Genoese quarter indicates that Venice advanced

(170) KESTEN, *Acre*, pp. 24-25 and 25-26.

(171) Of the Paolino maps, only the Vatican version locates the Arsenal, which does not appear to be adjacent to the Venetian quarter (fig. 2). However, no conclusions can be derived from this map as it is not reliable for the position of the various quarters.

(172) See JACOBY, *loc. cit.*, pp. 228-229, where the political implications of ecclesiastical policy are examined, and TTh, III, pp. 32-34.

(173) DELAVILLE, *op. cit.*, II, pp. 869-870, no. 2919; TTh, III, p. 32; see also JACOBY, *loc. cit.*, p. 228.

in this area to the west (174) and it is probably only then that she reached the present Market street (fig. 4, no. 19), enabling thereby the enlargement of the Venetian *fondaco*. Venice had now a common border with Pisa along a section of that street, as the latter had annexed a part of the Genoese quarter. Yet to the south, no such common border existed: the larger part of the quarter of the Chain remained under royal jurisdiction (175). The new configuration of the Venetian quarter on various fronts, except the north-eastern one, is emphasized by the walls and gates erected between 1258 and 1260. One of the gates was on the southern border close to the residence of the *bailo* and faced the Provençal quarter. A gate to the north gave access to a large public street (*magna via communis*), no doubt the present Market street. The small gate belonging to the church of San Marco may not have been new, as property presumably belonging to this church is already recorded in 1244, prior to the St. Sabas war (176).

Not content with her new borderline, Venice pursued till 1291 an expansionist policy in Acre: by buying houses situated outside her quarter, she extended her authority over further territories and brought about additional changes in her boundaries (177). One such case is worthwhile recounting, as it provides a convincing illustration of the methods used. In 1274 Venice sold a house which she had just bought to Marco Marmora, a Venetian citizen living in Acre. The buyer agreed to build at his own expense a wall connecting the house with the walls enclosing the Venetian quarter, in accordance with the instructions provided by the officers of the commune. The sum payed by Marmora was to be used by the Venetian officers to buy another house outside the Venetian area (178). For lack of topographical evidence, it is impossible to determine in which areas the acquisition of houses affected the Venetian boundaries. It is nevertheless evident that

(174) See above, p. 32 and n. 161.

(175) See above, pp. 18-19, 29-30. This is also confirmed by the data concerning the street named *Palearia* or *Paleacia*, where the Amalfitan church had a plot of land close to the Pisan quarter around 1260. A royal bakery was situated at the end of the street facing the Venetian quarter; it remained outside that quarter and within the quarter of the Chain. Its position between the Venetian and Pisan quarters is therefore obvious: CH. KOHLER, *Documents inédits concernant l'Orient latin et les Croisades (XII<sup>e</sup>-XIV<sup>e</sup> siècle)*, in *Revue de l'Orient latin*, 7 (1899), p. 28, and TTh, III, p. 32.

(176) TTh, III, p. 32, and above, n. 168.

(177) See JACOBY, loc. cit., pp. 229-231.

(178) R. CESSI (ed.), *Deliberazioni del Maggior Consiglio di Venezia*, Bologna, 1934-1950, II, p. 160, § 98.

changes after 1258 are reflected on the Vesconte map, especially toward the royal Arsenal to the north-east, the Market street to the west and somewhat toward the *cathena* to the south, although a distortion of the borderline in this area is beyond doubt<sup>(179)</sup>.

Further information on the Venetian boundaries, especially in connection with the size of the *fondaco* in the late Crusader period, may be gathered from a source overlooked till now. In 1286, the Venetian Senate decided to ship to Acre about 72 tons of ashlar and corbels, as well as pitch, needed for repairs in the *fondaco* and other public buildings<sup>(180)</sup>. The vicinity of the Muslim border to Acre at that time may have created some difficulty to obtain the necessary stone from nearby. It seems more likely, however, that the Venetian officers in Acre were eager to embellish public buildings in the quarter. A meticulous survey of structures may reveal the use of stone with a grain size and a lithological composition different from those proper to the local stone, and therefore indicative of Venetian import.

The quarter of Marseilles or the Provençaux is not marked on the medieval maps of Acre<sup>(181)</sup>. Its location must therefore be based exclusively on written sources. It has been suggested that the quarter was situated at the *cathena* or western harbour<sup>(182)</sup>, to the east of the Venetian quarter<sup>(183)</sup> or on its north-eastern flank<sup>(184)</sup>. None of these localizations seems plausible. The quarter of Marseilles was established after the reconquest of Acre in 1191, on the basis of a grant made by king Guy de Lusignan the year

(179) See above, pp. 30-32, 34-35, for the southern borderline.

(180) CESSI, *op. cit.*, III, p. 151, § 82. The Venetian *migliario* was equivalent to 477 kg., and 150 such measures to about 71,550 kg.

(181) On the struggle of Marseilles and Montpellier till 1256, see MAYER, *Marseilles Levantehandel*, pp. 104-111, 117-119. Our main concern here is with topography.

(182) MAYER, *op. cit.*, p. 114.

(183) PRAWER, *Histoire*, II, p. 365, n. 13, and *I Veneziani*, pp. 645-646.

(184) BENVENISTI, *op. cit.*, p. 88 (map) and 104. This last suggestion has been seemingly supported by an inscription appearing on the window of a Crusader church, the present ar-Raml mosque, facing the Market street. The name of master Ebule Fazle « who built this church » has been considered as southern French and the church identified with St. Mary of the Provençaux by C. ENLART, *Les monuments des Croisés dans le royaume de Jérusalem. Architecture religieuse et civile*, Paris, 1925-1928, II, pp. 32-33. The inscription is published anew in S. DE SANDOLI, *Corpus inscriptionum Crucesignatorum Terrae Sanctae*, Jerusalem, 1974, pp. 301-302. However, a recent study assumes, much more convincingly, that the name is a latinized version of the Arabic Abu'l Faql and the builder an Oriental Christian who may have joined the Latin church: C. CAHEN, *Une inscription mal comprise concernant le rapprochement entre Maronites et Croisés*, in S. A. HANNA (ed.), *Medieval and Middle Eastern Studies in honor of Aziz Suryal Atiya*, Leiden, 1972, pp. 62-63.

before <sup>(185)</sup>. The earliest document providing topographical data is a privilege delivered by king John de Brienne in 1212 <sup>(186)</sup>. However, as this is a forgery made in 1249 with the purpose to ensure or recover territorial rights <sup>(187)</sup>, it must be used with extreme caution and only in conjunction with genuine documents.

Most valuable information is provided by the description of the southern boundary of the Venetian quarter in 1260. We have seen that this boundary proceeded from the vicinity of San Marco toward the « covered street » referred to in the report of 1249 on the Genoese quarter <sup>(188)</sup>. Advancing westward from San Marco along this line, the first street to the south led to the church of St. Mary of the Provençaux <sup>(189)</sup>. The church was fairly close to the southern flank of the Venetian quarter and San Marco (fig. 4, no. 32), as well as to a royal bakery in the quarter of the Chain and a plot of land belonging to the Amalfitan church in the vicinity of the Pisan quarter <sup>(190)</sup>. The *vicus Provincialium* or quarter of the Provençaux was evidently also situated in the same area, on the southern flank of the Venetian quarter, but we still have to determine how far it extended to the west and to the east.

Reliable evidence in this respect is to be found in a charter delivered in 1252 to the Hospitallers, by which they were granted the right to build two gates, one of them leading to the Genoese quarter and the other to the Provençal quarter <sup>(191)</sup>. From the topographical data included in this document, it appears that the second gate was situated close to the bathhouses of the Order, one of which was on the site of the present Municipal museum (fig. 4, no. 30) <sup>(192)</sup>. It is most significant that no mention is made in this connection of a street leading to the Venetian quarter. This implies that in 1252, prior to the St. Sabas war, the northern section of the Provençal quarter was located to the south of the Hospitallers' area on the main thoroughfare of the city, while the Venetian quarter was not. The latter's borderline was thus

(185) MAYER, *op. cit.*, pp. 183-186, no. 5, and 73-76; two other grants referring to Acre are forgeries: *ibid.*, pp. 177-181, nos. 2-3.

(186) *Ibid.*, pp. 189-191, no. 7.

(187) *Ibid.*, pp. 50-55, 112-116, 129-130.

(188) TTh, III, p. 32; also above, p. 32 and n. 161.

(189) The southern direction is evident, as it is related to houses to the south of the Venetian quarter.

(190) See above, n. 175.

(191) DELAVILLE, *op. cit.*, II, pp. 731-732, no. 2612.

(192) See above, n. 103.

further removed to the east than would appear from the Vesconte map. It may therefore be conjectured that the northern section of the Provençal quarter was identical with what became later the western part of khan al-Ifranj. The expansion of Venice to the west and the south after the St. Sabas war, illustrated by the construction of the new Venetian wall between 1258 and 1260 (193), reduced no doubt the size of the Provençal quarter. It may be objected that this does not seem plausible, because Marseilles and other Provençal cities sided with Venice in the St. Sabas war (194). We must nevertheless assume that the Venetians encroached upon the Provençal quarter in their endeavour to reach the present Market street (fig. 4, no. 19): the conclusions drawn from the topographical data appear unavoidable.

A clue to the extension of the Provençal quarter in an eastern direction is seemingly to be found in the grant of 1212. Forged in 1249, thus prior to the St. Sabas war, it describes the Provençal quarter as extending between the church of St. Demetrius (fig. 4, no. 35) and a large covered storehouse close to the *cathena* or harbour of the Chain (195). Apparently the quarter lay thus in the vicinity of the sea shore on a north-east south-west axis, whereas the charter of 1260 implies that it was not in this area and on an east-west axis. The topographical data of these charters differ considerably, especially as the forged grant does not allude to the area of khan al-Ifranj. The only explanation of this puzzling fact is that in 1249, when the forgery was made, the Marseillais attempted to get hold of an area situated to the east of their church St. Mary of the Provençaux and closer to the harbour of the Chain, either because they had lost by then part of their original quarter or because they planned to expand into a new area (196). This possibility will not seem unlikely if we bear

(193) See above, pp. 32, 34-35.

(194) *Annali*, IV, p. 32.

(195) MAYER, op. cit., p. 190: *de ecclesie sancti Demetrii usque ad voltam scuram (...) et extendit se dicta volta usque propo katena*, and further, *confirmavi eis (...) totam rugam de Sancti Demetrii usque ad dictam voltam*. The formulation is rather clumsy and the spelling mistakes numerous.

(196) In the forged charter, the king supposedly grants the right to the people of Marseilles to buy back houses previously sold. This may hint at some pressure exerted in the past, which compelled them to sell these houses. Genoa used such methods before 1256 in the quarter of the Chain: JACOBY, loc. cit., pp. 227-228. On the other hand, it may well be that this clause rests on no foundation whatsoever and has been introduced to support an expansionist policy.

in mind that the Pisan forgeries similarly made claims to alien territory <sup>(197)</sup>. The forged charter supposedly delivered by John de Brienne was used at the papal court in 1250 <sup>(198)</sup>, while other forged documents dealing with fiscal matters were produced also subsequently <sup>(199)</sup>.

There can be no doubt that the Provençal quarter was in existence in 1249, when the charter of John de Brienne was forged. In 1252, it was located close to a Hospitallers' gate and on the main thoroughfare, to the west of the Venetian area, as well as to the south of that same area (fig. 4). It was to be found in this last region in 1260, but must have been considerably reduced in size by then: the advance of Venice toward the Market street in 1258 led to the loss of its western section, and the annexation of the parish of St. Demetrius by Venice in 1260 <sup>(200)</sup> dealt a deadly blow to the endeavour of Marseilles to expand eastward. The quarter is still attested in 1269 <sup>(201)</sup>, but no later evidence is available. It does not appear on the Vesconte and Paolino maps, which reflect conditions in Acre in the last years of Crusader rule. This may be due either to its minor importance at that time, or possibly to its total disappearance after having been swallowed up by Venice.

\* \* \*

Only scant evidence about Acre has come down to us from the Arab period preceding the Crusaders' arrival <sup>(202)</sup>. It may nevertheless be safely assumed that the urban layout and topography of Crusader Acre have been basically determined in this period. Three major factors shaped then the spatial structure of the city: the outline of the walls, the harbour and the decentralization of economic and social life. Continuity in the Crusader era did not rule out some significant changes, which became even more pronounced after the recovery of the city from the hands of Saladin in 1191.

Contemporary sources imply that Crusader Acre inherited its rhomboid shape from the Arab period and retained it unchanged

(197) See above, pp. 21-24.

(198) MAYER, *op. cit.*, pp. 111-112 and 203-204, no. 19.

(199) *Ibid.*, pp. 122-128.

(200) See above, p. 34.

(201) DELAVILLE, *op. cit.*, III, pp. 195-196, no. 3334.

(202) There is yet no study on Arab Acre prior to the Crusades.



till the middle of the thirteenth century (203). The city surrendered in 1104 without being stormed, and the same happened on two other occasions, in 1187 when it fell to Saladin, and again in 1191 when it was recaptured by the Latins. Although the walls were repaired and reinforced on various occasions (204), no contemporary source ever mentions that their outline was altered. We may therefore assume that no change occurred in the position of the main gates providing access to the city, as they were also closely related to the street network within the walls and especially to the course of the main streets. Several of the latter no doubt go back to the Arab period. Such is the case with the main thoroughfare leading from the western section of the harbour to the northern city wall (205), the street following the western sea shore from the Cape of Furor to that same wall (206), and the street dividing the Genoese quarter into two districts (207): all of them are depicted on the Paolino map (fig. 2). The line of the northern city wall can be traced on the basis of archaeological evidence, as remains of original Crusader walls, towers and fortified gates have been discovered (208). It follows that this line is to a large extent identical with that of the inner wall of the Old City attributed to the Beduin chieftain Dahir al- 'Umar, who ruled in Acre between 1747 (?) and 1775, and slightly to the south of the outer rampart built by Aḥmad al -Jazzār Bāshā in the late eighteenth century. The extent of the northern city wall can be fairly well assessed by taking the following factors into account: the existence of two towers eastward of the royal *Castellum* and of the connection of this wall with the inner wall of Montmusard (fig. 1, 2, and 4, no. 28); besides, the location of the *Porta Domine nostre* (fig. 4, no. 27), which seems to have been at about half the distance

(203) See below, n. 208.

(204) E. g. by Saladin after the severe damage incurred during the siege of 1187: IMĀD AD-DĪN AL-ISPAHĀNĪ, *op. cit.*, p. 107; see also H. E. MAYER, *Two Unpublished Letters on the Syrian Earthquake of 1202*, in HANNA, *op. cit.*, pp. 295-310.

(205) On the harbour in the Arab period, see above, pp. 8, 13, 17-18.

(206) See above, n. 103.

(207) See above, p. 27.

(208) See GOLDMANN, *loc. cit.*, pp. 14-15 and plan on p. 12; KESTEN, *Acre*, pp. 23, 26; also here, fig. 4. Wilbrand of Oldenburg mentions in 1212 that Acre had a quadrangular shape and a double wall toward the east and the north: J. C. M. LAURENT (ed.), *Peregrinatores medii aevi quatuor*, Leipzig, 1864, p. 163. There is however no trace on the Paolino or Vesconte maps of an outer wall on the northern flank of the twelfth century city, nor have any remnants been found; this may be due to the construction of the outer wall in the early nineteenth century.

between the shore and the north-eastern corner of the city (fig. 1). As the eastern breakwater joined the eastern city wall of the Arab period, the approximate course of the latter toward the north-north-east can also be reconstructed eastward of the present Turkish rampart; this Arab wall was identical with the Crusader inner wall of the thirteenth century<sup>(209)</sup>. The Crusader outer wall must have been at some 50 metres to the east, while remains discovered somewhat further, in Yehoshafat street, were in all likelihood situated outside the city<sup>(210)</sup>. The northern and eastern Crusader walls of the twelfth century seem therefore to have been respectively about 700 and 325 metres long, and the area enclosed by them around 33 hectares, or somewhat less than that of the Old city within its Turkish ramparts nowadays<sup>(211)</sup>.

A new suburb came into being to the north of the city wall prior to 1187, presumably starting in the *contrata de Mumusart* (fig. 1). From this area, situated opposite the Hospitaller quarter and the *Porta Hospitalis* or « gate of the Hospital » (fig. 4, no. 26), where the main thoroughfare reached the northern wall, it expanded considerably in the first half of the thirteenth century<sup>(212)</sup>. During his stay in the Holy Land, which lasted from 1250 to 1254, the French king Louis IX fortified the north-eastern flank of Montmusard with two lines of walls<sup>(213)</sup>. The junction of the inner wall of Montmusard and the northern city wall was probably to the west of the present entrance to the Old City of Acre

(209) See above, p. 40.

(210) On these remains, see the reports in the Israel Department of Antiquities and Museums, file Akko C/2. I wish to thank hereby the Director of the Department, Mr. A. Eitan, for permission to quote these reports and another one below, n. 214. Considering the orientation of the Crusader double wall, it is evident that the large public building of that period, possibly a church, uncovered to the east of the Israel Nautical School must have been outside the city; on this building and its location, see M. DOTAN, *Akko Excavation Report. First season, 1973/4*, in *Bulletin of the American Schools of Oriental Research*, 224 (1976), pp. 34, 36.

(211) The measurements provided by the Persian traveller Nāsir-i Klusrow are on the whole unreliable, and the same holds true of those of Acre, which he visited in 1047: see above, n. 68.

(212) The *Porta Hospitalis* appears as the third gate along the northern city wall from west to east on the Paolino map (fig. 2), but its correct location is provided by the Vesconte map (fig. 1), on which the three first gates are related to main streets leading northward. GOLDMANN, loc. cit., p. 14 and plan on p. 12, considers it erroneously as the *Porta Domine nostre*. On Montmusard, see above, p. 15 and p. 21, n. 102. J. PRAWER, *Crusader Cities*, in H. A. MISKIMIN, D. HERLIHY, A. L. UDOVITCH (eds.), *The Medieval City*, New Haven and London, 1977, p. 182, claims that the suburb « mushroomed beneath the citadel », but this location would not have been very propitious: see fig. 1.

(213) *RHC, Hist. occ.*, II, p. 438; the exact year is not known.

(fig. 4) <sup>(214)</sup>. The creation and expansion of Montmusard was obviously due to an overflow of population. The accrued importance of Acre as a center of transit commerce <sup>(215)</sup> and the catering for numerous pilgrims attracted new settlers in the twelfth century. From 1191 onward, two other factors contributed to the growth of the city's population and the settling of Montmusard. Acre became the political center of the Latin kingdom of Jerusalem and absorbed the Latins and Oriental Christians who fled the cities captured by the Muslims since 1187. This migration apparently continued during the whole of the thirteenth century, and was reinforced by an influx of new settlers coming from the West <sup>(216)</sup>. By then, the area of the city was definitely larger than in the Arab period.

In view of the intensification of commercial activity in Acre, it is rather surprising that the harbour inherited from the Arab period provided the needs of the Latins. For about two centuries, they were content to repair the breakwaters and the Tower of the Flies whenever necessary and refrained from carrying out any major work to improve the harbour facilities. This may be due to the fact that the number of ships arriving from the West increased mainly during the fair season, when anchoring in the bay was possible. In the winter, the harbour provided sufficient shelter for ships of small tonnage <sup>(217)</sup>. The absence of a continuous royal rule in Acre and the opposing interests of the various communes in the thirteenth century may also account for the lack of any major building project, as well as for the poor quality of the Crusader repairs. As in the harbour, it is most likely that no substantial changes occurred in the layout and functions of the structures; streets and quarter adjacent to its western section: the

(214) See KESTEN, *Acre*, p. 26. According to E. REV, *Les colonies franques de Syrie aux XII<sup>me</sup> et XIII<sup>me</sup> siècles*, Paris, 1883, pp. 453-454, the point on the shore where the ramparts started (B on his plan of Acre between pp. 462 and 463) would have been at about 750 metres to the north of the twelfth century Crusader city. A report of 1953 in the Israel Department of Antiquities and Museums (Akko B/1) mentions the discovery in this area of about 50 mangonel stones that may have been hurled at the wall. If so, Montmusard would have been larger than twelfth century Acre, which seems unlikely and contradicts the indications provided by the Vesconte and Paolino maps. The stones may be, however, on the spot from where they were to be thrown by the attackers; this would imply that the wall was located further to the south, which seems more plausible.

(215) See PRAWER, *The Latin Kingdom*, pp. 391-415.

(216) See JACOBY, *loc. cit.*, pp. 246-248.

(217) On the harbour, see above, pp. 8-14.

Court of the Chain, the *Porta ferrea* and the thoroughfare leading to the northern city wall, as well as the quarter of the Chain <sup>(218)</sup>.

The absence of a civic center comparable to that of contemporary western cities is one of the most conspicuous features of Crusader Acre. The Latins inherited the decentralized pattern of economic and social life of the preceding period. The fragmentation of the urban space into relatively self-sufficient quarters was a typical feature of cities in the Muslim East prior to the Crusades. It was partly due to the concentration of homogeneous ethnic and religious groups, as well as to the existence of neighbourhood solidarities and clan ties <sup>(219)</sup>. Under Crusader rule, market places, such as those of the northern district of the Genoese quarter and the original Venetian quarter, as well as *khan al-'Umdān*, which became the Court of the Chain, retained their previous functions as centers of commercial activity and social intercourse <sup>(220)</sup>. Functional continuity also prevailed in buildings or installations of public use, such as bathhouses, bakeries, and even structures serving religious purposes <sup>(221)</sup>. The decentralization of religious life in the Arab period was reflected in the existence of mosques flanked by minarets in the various quarters <sup>(222)</sup>. After the Crusader conquest, mosques were converted into churches and minarets into bell-towers <sup>(223)</sup>. These could easily serve the needs of the Latin ecclesiastical organization, whether based upon parish churches such as St. Demetrius, or upon those of the commercial cities and the military Orders. Finally, architectural and functional continuity prevailed in private dwellings after the Latin conquest, in spite of the partial change in population: Latin settlers adopted to a large extent the life-style of their predecessors, and new houses were presumably built

(218) See above, pp. 16-18.

(219) See A. H. HOURANI and S. M. STERN (eds.), *The Islamic City. A Colloquium*, Oxford, 1970, esp. the studies by S. M. Stern (pp. 25-36) and N. Elisséeff (pp. 157-177), where previous works on the subject are cited.

(220) For the Genoese quarter, the Venetian *campus* of 1110 and the Court of the Chain, see above, pp. 27, 30-31 and 16-17 respectively.

(221) For the phenomenon in general, see PRAWER, *Crusader Cities*, pp. 184-187; a bathhouse of the Hospitallers goes back to the preceding Arab period: see GOLDMANN, loc. cit., pp. 15-16.

(222) See O. GRABAR, *The Architecture of the Middle Eastern City*, in I. M. LAPIDUS (ed.), *Middle Eastern Cities*, Berkeley and Los Angeles, 1969, pp. 37-40.

(223) See Ibn Jubayr in his description of Acre (above, n. 56), p. 450. This was however not always the case, e. g., in the Venetian quarter, where a former mosque served residential purposes: see above, n. 153.

according to the common, local pattern, often combining residential and economic functions <sup>(224)</sup>.

It is obvious, however, that the Latins left their imprint upon Acre. Existing buildings were at times adapted to new uses: such was the case with an eleventh century khan converted into the *domus infirmorum* of the Hospitallers in the first half of the twelfth century <sup>(225)</sup>. The erection of new ecclesiastical and lay structures, such as the impressive Templar and Hospitaller buildings mentioned by the pilgrim Theodoric around 1172 <sup>(226)</sup>, altered the urban landscape to some extent, especially as the rules of Romanesque, and later Gothic art determined their shaping. Building activity obviously increased after the loss of Jerusalem in 1187 and the recovery of Acre four years later: the royal court and administration, the seat of the Latin patriarch and his household, as well as the headquarters of the Hospitallers and Templars, the two main military Orders, were then transferred to Acre. Numerous structures were enlarged and reinforced, others erected, so as to offer them adequate housing and protection. The emergence of the new Teutonic Order after 1191 added new buildings in Acre <sup>(227)</sup>. Construction activity in the quarters of the communes, as well as in the so-called rectangular quarter, partly for military purposes, is well attested <sup>(228)</sup>.

The Latin settlement was on the whole grafted upon the decentralized pattern of the city, a feature especially obvious in the case of the communes: each of them was granted one or several blocks of houses, Genoa and Venice also a market place and Pisa an area where to build one, as well as a church <sup>(229)</sup>. Decentra-

(224) This is hinted by a fourteenth century description of Acre: see above, n. 82; see also PRAWER, *The Latin Kingdom*, p. 515.

(225) See GOLDMANN, loc. cit., p. 15.

(226) TOBLER, loc. cit., pp. 90-91.

(227) In general PRAWER, op. cit., pp. 515-516. For the Hospitaller buildings, see the study by GOLDMANN, loc. cit., and the drawing of 1686 by Gravier d'Orcières showing the Gothic church of St. John in the Order's quarter, *ibid.*, p. 16, also reproduced in BENVENISTI, op. cit., p. 96, from ENLART, *Les monuments*, pl. 51, fig. 162. On the Templar castle, see the description in *Gestes*, pp. 252-253, § 501, and the drawing mentioned above, n. 58. On the Teutonic Order and its buildings, see M.-L. FAVREAU *Studien zur Frühgeschichte des Deutschen Ordens (Kieler Historische Studien, 21)*, Stuttgart, n. d., pp. 35-63, esp. pp. 44-46, 57. A drawing of the church of St. Andrew in 1681 appears in C. LE BRUN, *Voyage au Levant*, Delft, 1700, between pp. 312 and 313, and is reproduced in BENVENISTI, op. cit., p. 112.

(228) See above, pp. 25-26, 28-29 and 34-36, on Pisa, Genoa and Venice respectively, and KESTEN, *Acre*, pp. 18-19, on the rectangular quarter.

(229) Bathhouses and bakeries are not attested for all quarters, yet it may be safely assumed that they were included in each of them. See the important remarks about the change in the commercial function of the markets in PRAWER, *Crusader Cities*, pp. 190-191.

lization was furthered by the extensive economic and judicial privileges they enjoyed or by the special status of the military Orders. The various nuclei were gradually reinforced and even reflected in the architectural texture of Acre, particularly in the thirteenth century: the Italian commercial cities and the military Orders surrounded their respective quarters with thick walls and fortified gates, flanked by impressive towers facing those of their neighbours. A few examples will suffice. The Genoese may have built a tower shortly after 1195, and they and the Pisans had several towers in 1222. Thirty years later, the Hospitallers were granted by king Henry I de Lusignan the right to build two gates: by then their quarter was already fortified. After the annexation of foreign territory, the Pisans and the Venetians surrounded their respective quarters with new walls; it may be safely assumed that these replaced previous ones <sup>(230)</sup>. Changes in the boundaries of the walled quarters affected no doubt the street pattern: the course of some main streets was redrawn, so as to provide both a dividing line between, and access to these quarters. To wit, a former onion market disappeared when the new Venetian wall was built, and the Vesconte map seems to reflect the expansion of Venice after the St. Sabas war <sup>(231)</sup>.

It may be safely assumed that in the Arab period, geographical and environmental conditions basically determined the course of streets and the boundaries of quarters, although economic and social factors altered them to some extent. In the Crusader period, especially in the thirteenth century, political and military factors were decisive in bringing about significant changes in the layout and topography of Acre.

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(230) See above, n. 228.

(231) See above, pp. 34-36.



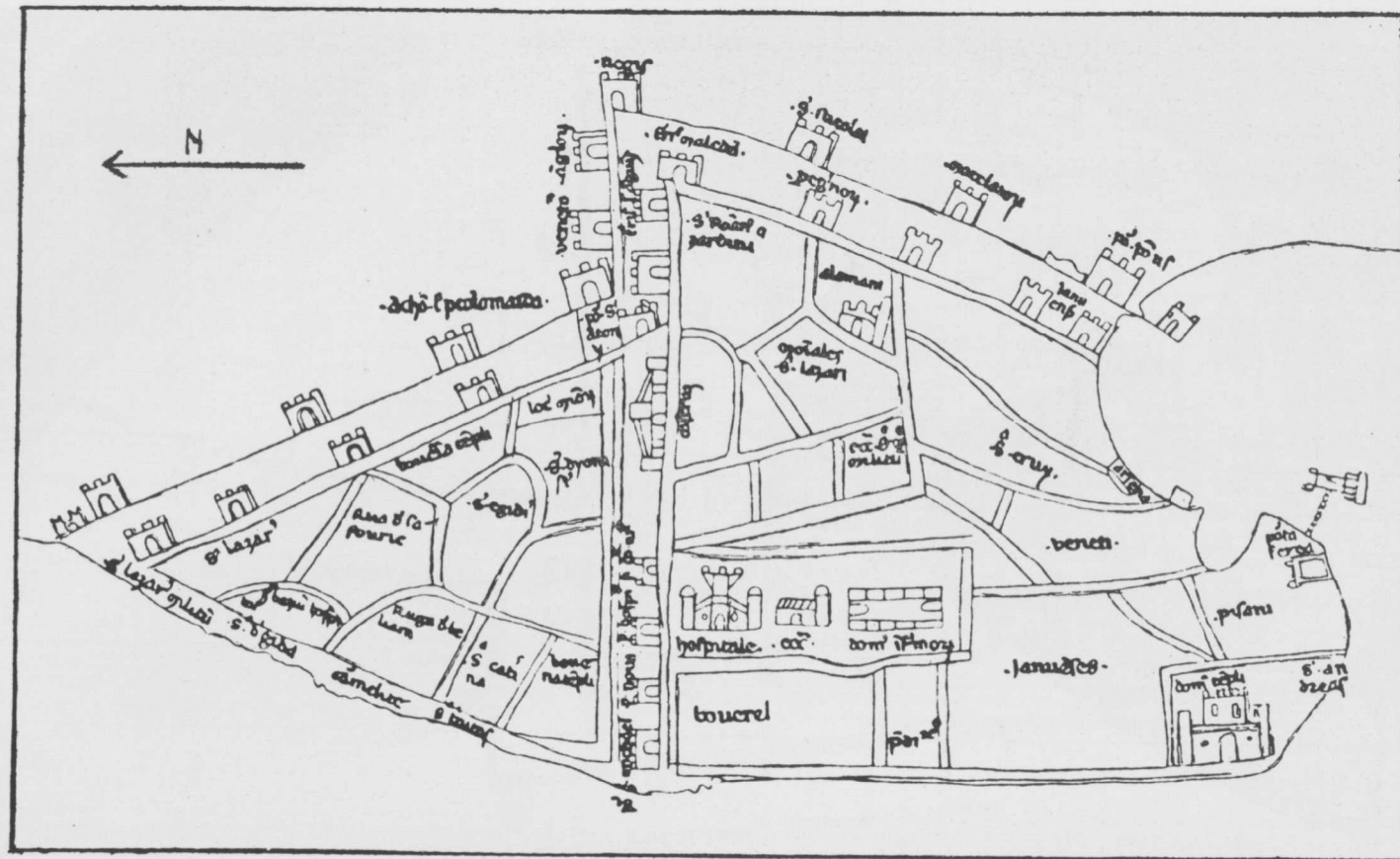


FIG. 2 – Map of Acre in the chronicle of Paolino Veneto (original in 1323?). Rome, Vaticana, Ms. lat. 1960, fol. 268v.



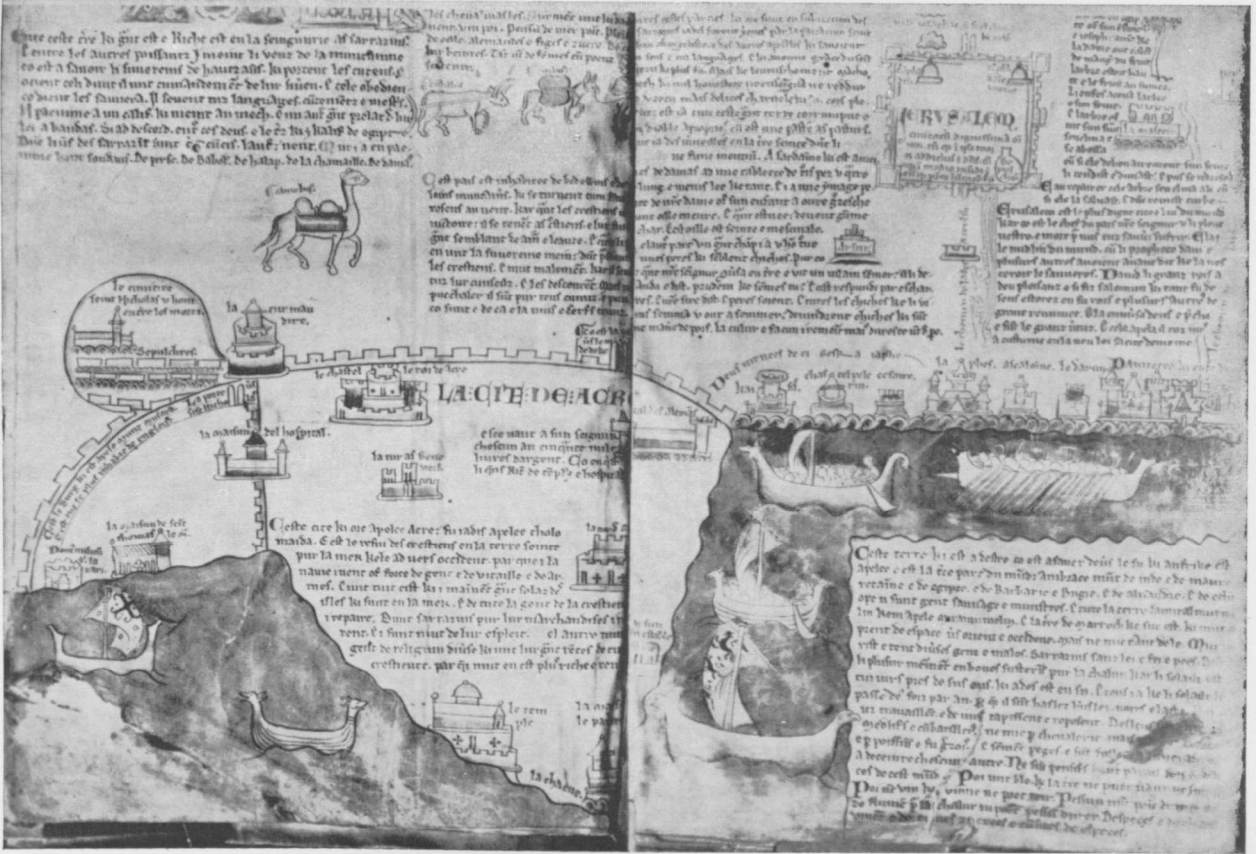


FIG. 3 – Map of Acre by Matthew Paris (1252 or shortly after). Cambridge, Corpus Christi College, Ms. 26, fol. 3v.-4r. (Reproduced by kind permission of the Master and Fellows of Corpus Christi College, Cambridge).



FIG. 4 - Map of Crusader Acre reflecting quarters before the St. Sabas war (1256-1258) and the expansion of Venice after its conclusion (conjectural reconstruction).