

IV

MILITARY ARCHITECTURE IN THE CRUSADER STATES IN PALESTINE AND SYRIA

In the extent of its remains and the scale of its building, crusader fortification is more immediately impressive than crusader church building. Guillaume Rey in 1871 published his *Étude sur les monuments de l'architecture militaire des croisés en Syrie et dans l'île de Chypre* with numerous plans and drawings. It was a revelation to western archaeologists. Sauvageot's drawing for it of a "vue restaurée" (something in the manner of Viollet-le-Duc) of Krak des Chevaliers kindled the imagination. With the development of photography and eventually the interest taken in them under the French mandate in Syria, the castles became well known. It was generally held that in these vast and massive buildings medieval military science of the west had found its greatest stimulus and fullest development.

In addition to E. G. Rey, *Étude sur les monuments de l'architecture militaire des croisés en Syrie et dans l'île de Chypre* (Collection de documents inédits sur l'histoire de France; Paris, 1871), and *Les Colonies franques de Syrie au XII^{me} et XIII^{me} siècles* (Paris and Geneva, 1883), both of which are still valuable, the main authority is P. Deschamps, *Les Châteaux des croisés en Terre Sainte*; I. *Le Crac des Chevaliers: Étude historique et archéologique, précédée d'une introduction générale sur la Syrie franque* (Haut Commissariat de la République française en Syrie et au Liban, Service des antiquités, Bibliothèque archéologique et historique, vol. XIX, 2 parts, text and album; Paris, 1934); II. *La Défense du royaume de Jérusalem: Étude historique, géographique et monumentale* (*idem*, Bibliothèque archéologique et historique, vol. XXXIV, 2 parts, text and album; Paris, 1939); III. *La Défense du Comté de Tripoli et de la Principauté d'Antioche* (*idem*, Bibliothèque archéologique et historique, vol. XC, 2 parts, text and album; Paris, in press) [J. F.]. See also the bibliographical note of chapter III for general works on Syrian archaeology. R. C. Smail, "Crusaders' Castles of the Twelfth Century," *Cambridge Historical Journal*, X (1951), 133-149, and *Crusading Warfare, 1097-1193* (Cambridge Studies in Medieval Life and Thought, n.s., vol. III; Cambridge, 1956) are important contributions to the subject, and R. Fedden and J. Thomson, *Crusader Castles* (London, 1957) is a sound and well-illustrated summary, particularly valuable for Armenian castles. T. E. Lawrence, *Crusader Castles* (2 vols., London, 1936) is a provocative study, which owes much of its interest to the personality of the author. See also W. Müller-Wiener, *Castles of the Crusaders*,

Camille Enlart did not live to write his account of crusader military architecture, which with his wide knowledge of western castles and his incredible memory for detail would certainly have added much to our knowledge of interrelationships between east and west. His work was carried on by Paul Deschamps, under whom Krak des Chevaliers was cleared of its villagers and excavated. The result was published in 1934 in an exhaustive work, the most important study any medieval castle has received. C. N. Johns meanwhile was carrying out a survey of Château Pèlerin ('Atlīt), and hoping there also to free the site of its encumbering inhabitants, a hope defeated by the unhappy history of Palestine; but much had been achieved before the end of the mandate brought an end also to this enterprise.

Certain questions have recurrently been raised. How far did the crusaders choose the site of their castles as a strategic and coherent scheme? What was their debt in building them to Byzantine and Moslem example? Did innovations in the east precede similar stages in the west? The answers are not easy, for the evidence is often insecure. The castles as a whole are little documented, and dating is often speculative. Many of them incorporated earlier works; most have undergone some form of rebuilding; only Krak, Château Pèlerin, Montfort, and Belvoir have had any serious excavation, and for some of them we are still dependent on Rey's hundred-year-old plans. But any account of crusading castles must attempt to deal with these central disputes.

The sites chosen for the castles vary widely: some, such as Krak des Chevaliers, Margat (al-Marqab), Subaibah, Belfort, Toron, and Belvoir, placed on isolated hilltops difficult of access, surveyed a

tr. J. M. Brownjohn (London, 1966) and T. S. R. Boase, *Castles and Churches of the Crusading Kingdom* (London, 1967). The articles of G. Beyer in *Zeitschrift des deutschen Palästina-Vereins*: "Das Gebiet der Kreuzfahrerherrschaft Caesarea in Palästina siedlungs- und territorialgeschichtlich untersucht," LIX (1936), 1-91; "Neapolis (*nāblus*) und sein Gebiet in der Kreuzfahrerzeit: Eine topographische und historisch-geographische Studie," LXIII (1940), 155-209; "Die Kreuzfahrergebiete von Jerusalem und S. Abraham (Hebron)," LXV (1942), 165-211; "Die Kreuzfahrergebiete Akko und Galilaea," LXVII (1944-1945), 183-260; and "Die Kreuzfahrergebiete Südwestpalästinas," *Beiträge zur biblischen Landes- und Altertumskunde*, LXVIII (1946-1951), 148-192, 249-281, and those of J. Prawer, "Colonization Activities in the Latin Kingdom of Jerusalem," *Revue belge de philologie et d'histoire*, XXIX (1951), 1063-1118; "The Settlement of the Latins in Jerusalem," *Speculum*, XXVII (1952), 490-503; "Étude de quelques problèmes agraires et sociaux d'une seigneurie croisée au XIII^e siècle," *Byzantion*, XXII (1952), 5-61, and XXIII (1953), 143-170; and *Israel Argosy*, ed. by I. Halevy-Levin (Jerusalem, 1956), pp. 178-191, are essential for the economic background of the settlement and its effect on the siting of castles. An article by R. B. C. Huygens, "Monuments de l'époque des croisades: Réflexions à propos de quelques livres récentes," *Bibliotheca orientalis*, XXV (Leyden, 1968), 9-14, is valuable for information about the present state and nomenclature of the castles.

wide extent of territory; some, such as Tripoli, Tortosa, Jubail, Tyre, Beirut, Acre, and the citadel of Jerusalem, were part of a system of town defenses, either incorporated in them or, as in the case of Tripoli, controlling the approaches. This last, now mainly rebuilt, was originally established by Raymond of Toulouse to blockade the town, which then lay mainly around the port of al-Minā'. The new town grew around the castle, until Tripoli became the terminus of the pipeline from Iraq and developed into a large and flourishing modern town. Within the castle, the vaulted apse of the chapel survives among much rebuilding. Château Pèlerin has a unique position among the major castles, built as it is on a low, rocky peninsula jutting out into the sea; the sea castle at Sidon, an island fortress attached by a causeway, is too small to be compared with it. Saone (Ṣahyūn) is situated in a steep and narrow defile, as are some of the castles near Antioch, such as Gaston (Baghrās). A few smaller castles were built in the plain (or rather on small hillocks in comparatively flat country), such as Coliat (al-Qulai'ah), Chastel-Rouge, Ibelin, Blanche Garde, and Darum. Some were outposts perched on inaccessible crags. Belhacem (Qal'at abū-l-Ḥasan) crowns a mountain top in the valley of the al-Auwālī river, which forms a defile from the mountains to the coast above Sidon, and which in its upper reaches was guarded by a cave fortress, cut in the rock at Tyron (Shaḡīf Tīrūn). Farther up the coast, beyond Botron (al-Batrūn), a similar valley has the small fortress of Msailha, built on a pinnacle of rock with a picturesqueness much admired by nineteenth-century travelers, who took this route to avoid the precipitous coastal paths.¹

Viewed as a whole, the distribution of castles cannot be said to reflect any strategic scheme, nor is it probable that in any conscious sense it did so. The sites were largely determined by preëxisting remains: William of Tyre enunciates the principle that a castle destroyed is a castle half made. In his account of the castle building of Baldwin II and Fulk, he constantly refers to the previous buildings and the material they provided, the ruins of Beersheba for Beth Gibelin (Bait Jibrīn) and those of Gath for Ibelin (Yabnā').² These same passages describe those castles as built rather as a base for attack against Ascalon than for defense, though the watch they kept

1. For Belhacem see Deschamps, *Défense du royaume*, pp. 222-224; for Msailha, J. Carne, *Syria, the Holy Land, Asia Minor, & c. Illustrated, in a Series of Views Drawn from Nature . . . with Descriptions of Plates*, I (London, Paris, and America, 1836), 45.

2. William of Tyre, *Historia rerum in partibus transmarinis gestarum*, XIV, 22, and XV, 24 (*RHC, Occ.*, I, 638-639, 696-698). For Beth Gibelin see C. R. Conder and H. H. Kitchener, *The Survey of Western Palestine*, III (London, 1883), 268.

on that town partook of both functions. Later, when Saladin was attacking from Egypt, they became defensive points, inasmuch as they were the nearest garrison posts. To the crusaders themselves the castles had an economic function, to protect the cultivation round them and to provide a shelter for livestock in times of raids. Such needs could run directly counter to strategic requirements, and economically the critical frontier positions were less desirable sites for exploitation. The Hospitallers in 1170 complained of their master, Gilbert of Assailly, that he prejudiced their finances by undertaking the charge of frontier posts.³

In estimating the development of crusading fortification and its debt to Byzantine and Arab models, much depends on accurate dating. Here, the loss of Jerusalem in 1187 forms a dividing line; in and after that year certain castles passed into Saladin's hands and were never recovered. The castles captured by the Moslems were often rebuilt by them, at least in part; those remaining in crusading hands throughout the thirteenth century were enlarged and remodeled; in neither case is the original twelfth-century work clearly apparent, nor is masonry a sure guide either to date or to builder. The crusaders dressed their stones with rusticated bosses, then with smooth, flat surfaces, then returned to bosses. Bosses were popular also with the Arabs and Armenians. Clermont-Ganneau took a particular form of stone tooling, made with a toothed hammer, as a test of crusader work, but the Arabs also used a toothed instrument, though generally one giving a narrower ridge.⁴

William of Tyre gives some indication of the types of building erected. Of the castles of the south of the kingdom, Ibelin, Blanche Garde built by Fulk, and Darum built by Amalric are all described as quadrilateral buildings with corner towers: at Darum, William tells us, one of the towers was larger and stronger than the others, and he refers to it as the arx or citadel in which the besieged took refuge when attacked by Saladin, holding out in its upper story even when the Saracens had broken in below. At Blanche Garde he specifically states that the towers were of equal size.⁵ The meager vestiges of these castles are now insufficient to establish the ground plan,

3. *Regesta regni Hierosolymitani (MXCVII-MCCXCI)*, ed. R. Röhricht (Innsbruck, 1893), no. 480.

4. C. Clermont-Ganneau, *Archaeological Researches in Palestine . . .*, tr. A. Stewart and J. Macfarlane (2 vols., London, 1896-1899), I, 1-47; Deschamps, *Crac des Chevaliers*, pp. 229-233.

5. William of Tyre, XV, 24, 25, and XX, 19 (*RHC, Occ.*, I, 696 ff., 975), and note 3 above. For Blanche Garde see F. J. Bliss, *Excavations in Palestine during the Years 1898-1900* (London, 1902), pp. 36-38.

though in Rey's time two towers were still visible at Blanche Garde, and some signs of an interior keep. Farther north, however, castles of this type are still standing. Aryma (al-'Arīmah) is a rectangle with four corner towers and a larger tower in the west wall; Coliat has central towers, of slight projection, in the middle of each wall, as well as more developed angle towers; Belvoir (Kaukab), a castle on a larger scale (rectangular enclosure of 512 feet by 400), follows the same system. On the slopes of the Taurus, Marash, and in southern Cilicia, Corycus, have similar plans but are basically Byzantine constructions. This is in fact the normal type of small advanced Byzantine fortress; earlier it was a common form of Roman fortification, familiar as such to western feudalism.

Much play has been made with the similarity between crusading plans and those of Byzantine castles in North Africa, largely because these latter have been described and planned in some detail,⁶ but there is no need thus to elaborate the thesis: rectangular fortifications with corner towers are an obvious and convenient form of protection, known from Roman examples in the west, and much used in Byzantium. The crusaders doubtless saw many such castles and in some cases actually occupied Byzantine buildings or rebuilt on their sites, and even without such stimulus could have arrived at this solution of the problem. Their early elaboration of the type was to strengthen it with a central keep, though here too, as at Saone, there were possible Byzantine models.

Jubail, taken by Raymond of St. Gilles in 1104, has a castle which from its plan and its type of archère (square-headed, with broad recesses with segmental vaults) must belong to an early, though not the earliest, stage of the settlement. Its first form appears to have been a rough quadrilateral with corner towers, one, the northwest, being larger than the others; the original scheme possibly included a central tower on the north wall. At some later date, probably not much later for it still has a simple though distinct type of archère, a central keep was built, 58 feet by 72 (pl. La). Some old masonry was employed—the site was that of Phœnician Byblos—and some large blocks, one measuring 16 feet 9 inches by 4 feet; so strong was it that when Saladin ordered its destruction, his workmen had to abandon the attempt.⁷ Though retaken by the Franks in 1197 and in their hands till 1291, no new defensive scheme seems to have been

6. Ch. Diehl, *L'Afrique byzantine: Histoire de la domination byzantine en Afrique, 533-709* (Paris, 1896).

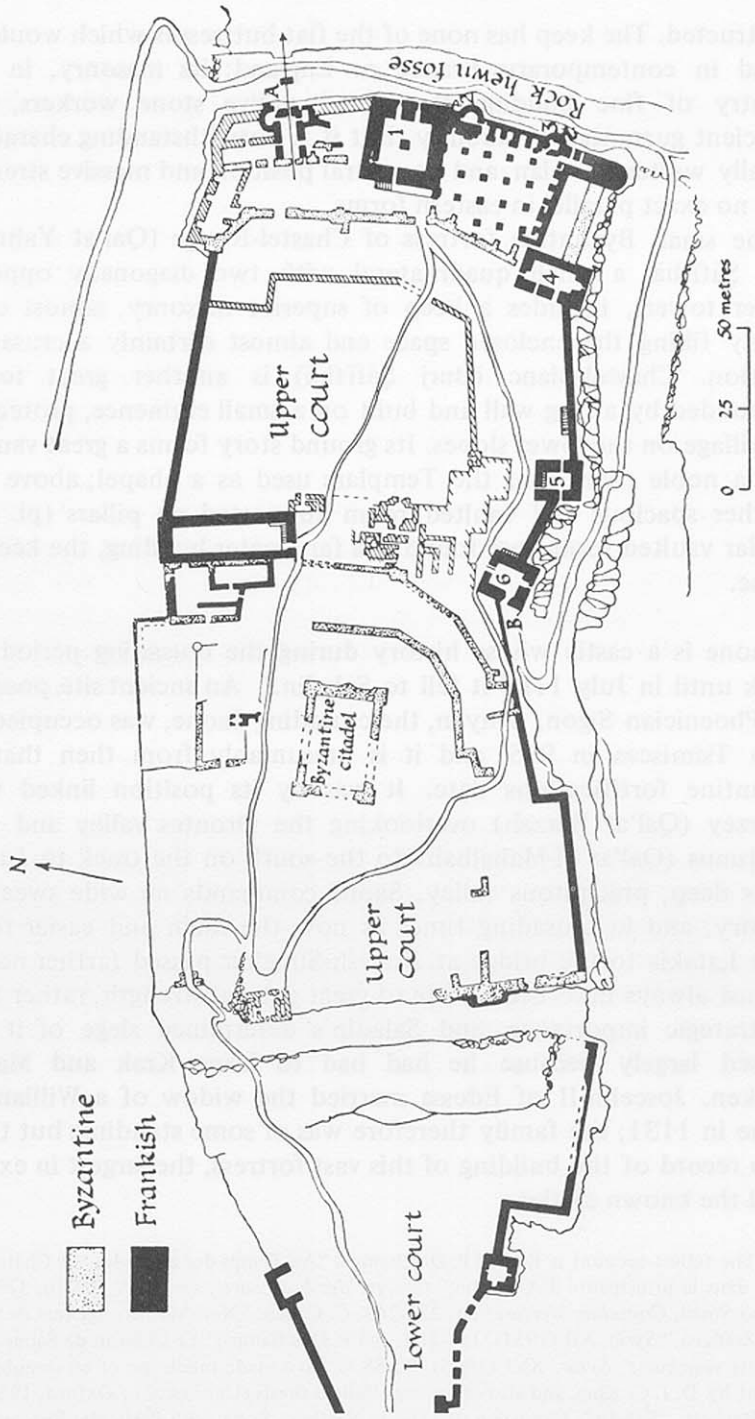
7. Wilbrand of Oldenburg in J. C. M. Laurent, ed., *Peregrinatores mediæ ævi quatuor* (Leipzig, 1864), p. 167.

constructed. The keep has none of the flat buttresses which would be found in contemporary France or England; its masonry, in this country of fine building stone and native stone workers, was sufficient guarantee of stability. But it is notwithstanding characteristically western in plan, and its central position and massive strength have no exact parallel in eastern forms.

The small Byzantine fortress of Chastel-Rouge (Qal'at Yaḥmur) near Ṣāfīthā, a small quadrilateral with two diagonally opposed corner towers, includes a keep of superior masonry, almost completely filling the enclosed space and almost certainly a crusading addition. Chastel-Blanc (Burj Ṣāfīthā) is another great tower, surrounded by a ring wall and built on a small eminence, protecting the village on the lower slopes. Its ground story forms a great vaulted hall, a noble room that the Templars used as a chapel; above it is another spacious and vaulted room supported on pillars (pl. Lb). Similar vaulted rooms are found in a far greater building, the keep of Saone.

Saone is a castle whose history during the crusading period is a blank until in July 1188 it fell to Saladin.⁸ An ancient site, possibly the Phoenician Sigon, Ṣahyūn, the crusading Saone, was occupied by John Tsimisce in 975, and it is presumably from then that its Byzantine fortifications date. It was by its position linked with Bourzey (Qal'at Barzah) overlooking the Orontes valley and with Balāṭunus (Qal'at al-Mahalbah) to the south on the track to Jubail. In its deep, precipitous valley, Saone commands no wide sweep of country, and in crusading times as now the main and easier route from Latakia to the bridge at Jisr aṣh-Shughūr passed farther north. It must always have been a site of great natural strength, rather than of strategic importance, and Saladin's determined siege of it was pressed largely because he had had to leave Krak and Margat untaken. Joscelin II of Edessa married the widow of a William of Saone in 1131; the family therefore was of some standing; but there is no record of the building of this vast fortress, the largest in extent of all the known castles.

8. The fullest account is that of P. Deschamps, "Au Temps des croisades: Le Château de Saone dans la principauté d'Antioche," *Gazette des beaux-arts*, ser. 6, IV (1930), 329-364; see also Smail, *Crusading Warfare*, pp. 236-243; C. Cahen, "Note sur les seigneurs de Saone et de Zerdana," *Syria*, XII (1931), 154-159; and P. Deschamps, "Le Château de Saone et ses premiers seigneurs," *Syria*, XVI (1935), 73-88. I have made much use of an unpublished account by D. J. C. King, and also of an unpublished thesis (University of Oxford, 1937) by J. W. Hackett, "Saladin's Campaign of 1188 in Northern Syria, with Particular Reference to the Northern Defenses of the Principality of Antioch."



6. Plan of Saone. After F. Anus

Approaching from the north, from Latakia, one comes to a deep gully with a stream flowing through it; the southern face of the gully is formed by a long spur of land, rising in sheer cliffs; on the east where it joins the main hillside, this spur has been cut by a ditch 450 feet long and 64 feet wide; rising in the ditch at the north end is a great needle, 90 feet high, capped with a small masonry tower; along the whole crest of the western side of the ditch are massive fortifications, with a postern protected by two round towers facing the needle, in the center a huge keep 80 feet square (no. 1 on plan, fig. 6) and three more round towers, whose bases fit buttresses left in the cutting of the rock (pl. LI). The masonry, mainly in large bossed stones, is, as later discussion will show, certainly crusading; the ditch with its needle and buttresses is a vast artificial creation, but who its makers were is less certain. The main entrance is in the third of the three rectangular towers which defend the south front; here too the rock has been cut away leaving an artificial escarpment. The gate was reached by a path running across the slope of the hill and therefore fully exposed to defenders on the wall, and was set in the angle between the tower and the wall, at right angles to the line of approach. It was defended by a machicolation formed by an arch, slightly advanced from the main wall. As one passes through it, another right-angle turn leads by a second gateway into the interior; immediately in front are Arab buildings, a square minaret and the remains of a hall, which appear to be thirteenth-century work. But Saone has been little rebuilt; there was a village in the lower court, besieged and evicted by Ibrahim Pasha in the mid-nineteenth century; the castle proper seems to have been held by the Arabs until the Ottoman conquest; it then disappears from history and the inner buildings have slowly been overgrown or have crumbled away. The original village, east of the castle on the plateau beyond the ditch, has left only a few vague remains.

Much of the building has defied time. From the entrance, beyond the minaret, rise the massive towers and the great keep of the ditch face; westward on the highest point of the ground stand the remains of the original Byzantine citadel, a quadrilateral with square angle towers and a polygonal tower on the eastern face. Round it was an elaborate system of defenses, of which there are still remains: first two parallel walls at a short distance from the Byzantine keep; then shortly behind the crusading front on the ditch another wall, defended by rectangular salients and small polygonal towers; all these are constructed in masonry of small stones embedded in thick mortar. Was this the outer Byzantine wall, leaving a space between

the curtain and the ditch, or did the crusaders rebuild their line on Byzantine foundations? The needle tower is in Byzantine masonry, which suggests strongly that the ditch existed in Byzantine times; underneath the curtain by the two gate towers opposite the pinnacle, at the base of the most easterly of the rectangular towers on the south front, and in the south curtain there are traces of this earlier masonry. It seems tolerably certain that the Byzantine scheme came right up to the ditch and that the latter is mainly their work. The crusading addition was the great keep with its massive stone work and the eight towers, five round and three rectangular; they may have quarried the stone from the ditch, deepening and widening it, and at the same time carving out the rock buttresses on which some of their towers stand.

Such were the eastward defenses; westward from the Byzantine fortress the ground fell to another ditch cut across the spit of land from north to south. The sides have fallen away, but it can never have rivaled the other, though it included a similar type of pillar supporting a bridge between the two courts. The upper bank of the ditch was fortified by a wall with rectangular towers, and a similar wall surrounded the whole of the irregular tongue of land which formed the lower court. Some of this is crusader work of bossed masonry.

Two points of detail are worth noting. The archères in the crusading work at Saone are straight slits formed by leaving an aperture between the blocks equal in height to two or three courses of masonry. A similar method is used at Kerak. The normal method as employed in most crusader castles and in the west was to cut the archères in the masonry, with an arched head. In this respect the archères of the keep at Saone are more primitive than those at Jubail; they are also of a form used in some Byzantine buildings. The doorway to one of the towers of the base court is formed by a straight stone lintel with a relieving arch of seven voussoirs or splayed stones set vertically to the arch. This type is also used in the southeast rectangular tower, where it seems to be part of the original Byzantine work. It is found again in the keep at Jubail. This is a common Byzantine feature, and one rarely used in the west.

Here then we have a thoroughly composite work: an important Byzantine site taken over by a Frankish noble, who added to it a western keep built by Syrian masons. Inside both the ground and upper floors of the keep are groined vaults resting on a central pillar. A curious feature is the use of round towers on the ditch front, one (no. 2 on plan, fig. 6) being in close proximity to the keep, as though

to supplement its field of fire; it has in fact seven archères opening from its ground chamber. Its lower masonry is in smooth ashlar, the upper in bossed, as in the other towers, and two stages of work are probably represented. Similar smooth ashlar is used in the building of a vaulted hall which abuts on the wall south of the citadel and which is usually explained as a stable.

Two other castles must serve as examples of those built before 1187: Kerak, whose role in the struggle against Saladin was so disastrous and significant, and Subaibah, the vast ruin above Banyas. The "Terre outre le Jourdain" was controlled by three castles: Krak de Montréal (ash-Shaubak) built by Baldwin I in 1115, about eighteen miles from Petra, notable for its internal staircase of three hundred and sixty-five steps down to a spring in the rocks; the castle of "Li Vaux Moysi" (al-Wu'airah); and to the east of the Dead Sea Kerak, founded in 1142 by Pagan le Bouteiller and enlarged by his immediate successors.⁹ Under Reginald of Châtillon the castle endured two sieges by Saladin, October to December 1183 and July to August 1184; even after Hattin it withstood a seven months' siege in 1188 before it finally passed into Moslem hands. Al-'Ādil ordered its refortification in 1192, and the great semi-octagonal tower, which protects the most accessible approach and is built in fine rusticated masonry, may date from his reign, though it could also be the work of Baybars (pl. LIIB). The crusading ground plan has, however, been maintained, and some of the walls are crusading work. In this outpost the Frankish masonry is poor, a hard lava stone roughly shaped. The castle lies along a narrow spur cut at each end by an artificial ditch, with the main tower, as at Saone, fronting the junction with the hillside. Down below, as at Krak des Chevaliers, a great water tank had been formed, though here it was outside the main defenses, not within the walls. The east side originally had a single wall from which the apse of the small chapel projected slightly, but the crusaders at some stage strengthened it with a second wall. On the west a lower bailey ran all the length of the castle. The towers everywhere are square or rectangular, with no great projection or skillful placing. The Frankish castle cannot have been a very

9. Deschamps, *Défense du royaume*, pp. 39-98; Smail, *Crusading Warfare*, pp. 218-221. For Krak de Montréal see Deschamps, *op. cit.*, pl. I; a note by R. Savignac in *Revue biblique*, XLI (1932), 597; and J. J. Langendorf and G. Zimmermann, "Trois monuments inconnus des croisés; I. La Chapelle du château de Montréal (Jordanie)," *Genava*, XII (1964), 125-143. For Li Vaux Moysi see R. Savignac, "Ou'aïrah," *Revue biblique*, XII (1903), 114-120.

distinguished work. But its natural position was strong, and its wall, if coarsely built, stood solidly. In the end it was only starvation that reduced it.

The history of Kerak can be followed in the narratives of the chroniclers, but that of Subaibah, the L'Assebebe of the Franks, is much less easily traced.¹⁰ Built on a hilltop above Banyas, its considerable ruins present no very clear picture, and here too thirteenth-century Mamluk rebuilding is more conspicuous than the crusading work. The former includes rounded towers with well-made circular talus which suggest the work of Baybars; the crusading design consisted in rectangular towers of low projection. At the highest point of the ridge, as usual facing the junction with the main hillside, was a rectangular keep with square corner towers. The masonry is largely undressed stone. The castle seems to have been built between 1129 and 1132 and was finally lost in 1164. It represents therefore an early, undeveloped stage of crusading work. Compared with the masonry of Kerak and Subaibah, that of Saone and Jubail and many of the churches stands out as a superior achievement.

Arab workmanship and its fine quality have figured in the account of these two castles. It was work with a long tradition behind it. The twentieth century has seen the rediscovery of a great art period, that of the Umayyads. The excavation of Khirbat al-Mafjar, near Jericho, has completed the picture of an advanced architectural achievement, in which figure sculpture, stucco ornament, and mosaic played a large decorative part, but which was also capable of castles with some claim to planned fortification. 'Abbāsid building, of which the round city of Baghdad was the great example, is less fully known, but the walls of Cairo, erected under the Fāṭimid caliph al-Mustaṣir (1036-1094) by his vizir Badr al-Jamālī (1074-1094) and planned by engineers from Edessa, remain with their great gateways as an example of magnificence in fortification, an example which crusading embassies, such as that sent to Cairo in 1097, cannot have been slow to notice.

In Syria eleventh-century work is less clearly dated, and was certainly less ambitious in its scale. Nūr-ad-Dīn enlarged the citadel at Aleppo, but it has been much altered, and the magnificent gateway was built by Saladin's son aẓ-Zāhir, who also faced the tell with the

10. Deschamps, *Défense du royaume*, pp. 144-175; *Survey of Western Palestine*, I (London, 1881), 125-128. See also A. Grabois, "La Cité de Baniyas et le château de Subeibeh pendant les croisades," *Cahiers de civilisation médiévale*, XIII (1970), 43-62 [J. F.].

marble slabs that still largely remain. Saladin's own most famous work was the citadel at Cairo,¹¹ but later his brother and successor al-'Ādil much enlarged the defensive works, encasing Saladin's round towers with ones of much greater size, and breaking the pattern of circular towers with some of rectangular shape such as he had used at Damascus, where the citadel, covering an area of 500 feet from north to south and 750 feet from east to west, was on flat low-lying ground and, apart from some water defenses, depended on the massive strength of its fortifications.¹² Al-'Ādil's large rusticated blocks can be found in Moslem work at Baalbek, on Mount Tabor, and at Bosra. He was a great builder, and his followers worked on similar lines, as can be seen, for instance, in the castle of 'Ajlūn overlooking the Jordan valley.¹³

The Franks, however, during the period of al-'Ādil's undertakings, had not been idle. The turn of the century saw some of their most striking and accomplished building enterprises. In particular the two military orders of the Hospital and the Temple now emerged as the vigorous leaders in the reorganization of defense and in plans for reconquest. More and more the strongholds of the kingdom passed into their keeping.

In 1186 the castle of Margat near Latakia was ceded by Bertrand Mazoir to the Hospitallers; two years later Saladin on his northern campaign did not dare to attack it, though his troops defiled past it on the coastal road. The castle then was already a position of some strength, though any fortification on that steep mountain spur would present problems to a besieger. Only an exhaustive analysis accompanied by excavation could establish its history.¹⁴ Today it

11. K. A. C. Creswell, *Early Muslim Architecture: Umayyads, Early 'Abbāsids and Ṭūlūnids* (2 vols., Oxford, 1932-1940); "Fortification in Islam before A.D. 1250," *Proceedings of the British Academy* (1952), pp. 89-125; "Archaeological Researches at the Citadel of Cairo," *Bulletin de l'Institut français d'archéologie orientale*, XXIII (1924), 89-167; and *The Muslim Architecture of Egypt*, I (Oxford, 1952), 161-219; J. Sauvaget, *Alep: Essai sur le développement d'une grande ville syrienne, des origines au milieu du XIX^e siècle* (Haut Commissariat de l'État français en Syrie et au Liban, Service des antiquités, Bibliothèque archéologique et historique, vol. XXXVI, 2 parts, text and album; Paris, 1941); J. Barthoux, "Description d'une forteresse de Saladin découverte au Sināi," *Syria*, III (1922), 44-57.

12. D. J. C. King, "The Defences of the Citadel of Damascus: A Great Mohammedan Fortress of the Time of the Crusades," *Archaeologia*, XCIV (1951), 57-96. See also J. Sauvaget, "La Citadelle de Damas," *Syria*, XI (1930), 59-90, 216-241.

13. C. N. Johns, "Mediaeval 'Ajlūn," *Quarterly of the Department of Antiquities in Palestine*, I (1931), 21-33; A. Abel, "La Citadelle Eyyubite de Bosra Ecki Cham," *Annales archéologiques de Syrie*, VI (1956), 95-138.

14. M. van Berchem and E. Fatio, *Voyage en Syrie* (Mémoires publiés par les membres de l'Institut français d'archéologie orientale du Caire, vols. XXXVII-XXXVIII; 2 vols., Cairo, 1913-1915), I, 292-320; Chandon de Briailles, "Lignages d'Outre-Mer: Les Seigneurs de

exists as a great triangle, the southern angle of which is cut off by a wall, separating the castle from the base court; the latter had a double line of fortifications, with either a rock face or a natural precipice beyond. The inner enceinte is almost entirely destroyed, the outer much ruined and its battlements fallen. The Hospitallers built here with comparatively small stones, and the villagers have steadily pulled down the walls, but the great circular tower, which controlled the southern point, still looms up over the ruins (pl. LIIIa). Beside it are the remains of the hall and the chapel, whose foliage capitals recall the earlier work at Tortosa. Wilbrand of Oldenburg in 1211 writes of the greatness and splendor of Margat, whose towers "seem to support the heavens, rather than exist for defense,"¹⁵ and it is reasonable to think that by that date the main building campaign had been carried out. The castle, however, must have been well maintained. It was the last of the great northern castles to fall, as Kalavun did not undermine its walls until 1285, fourteen years after the surrender of Krak des Chevaliers.

Among crusading castles, among castles of any place or period, Krak des Chevaliers has a proud preëminence.¹⁶ Known to the Arabs as Ḥiṣn al-Akrād, the castle of the Kurds, it was called by the Franks "Le Crat," and then by a confusion with *karak* (fortress), "Le Crac." Its present, slightly romanticized, title of Krak des Chevaliers is a later embellishment. Nowhere can the development of crusading schemes of fortification be so clearly followed, and nowhere is the general effect of the building more completely preserved. Alone of crusading castles it has been systematically excavated and restored. The castle from its hilltop looks down over fertile country. Burchard of Mount Sion, writing about 1280, after Krak had been lost, describes the plain stretching from Krak to Tortosa as containing "many villages, and fair groves of olive-trees, fig trees and other trees of diverse sorts, and much timber. Moreover, it has plentiful streams and pasture; wherefore the Turcomans, and Midianites, and Bedouins dwell there in tents with their wives and children, their flocks and their camels. I have seen there a very great herd of camels, and I believe that there were several thousands of camels there."¹⁷

Margat," *Syria*, XXV (1948), 231-258; and R. Breton, "Monographie du château de Markab, en Syrie," *Mélanges de l'Université Saint-Joseph*, XLVII (1972), 251-274.

15. Laurent, *Peregrinatores*, p. 170.

16. Deschamps, *Crac des Chevaliers*; D. J. C. King, "The Taking of Le Krak des Chevaliers in 1271," *Antiquity*, XXIII (1949), 83-92.

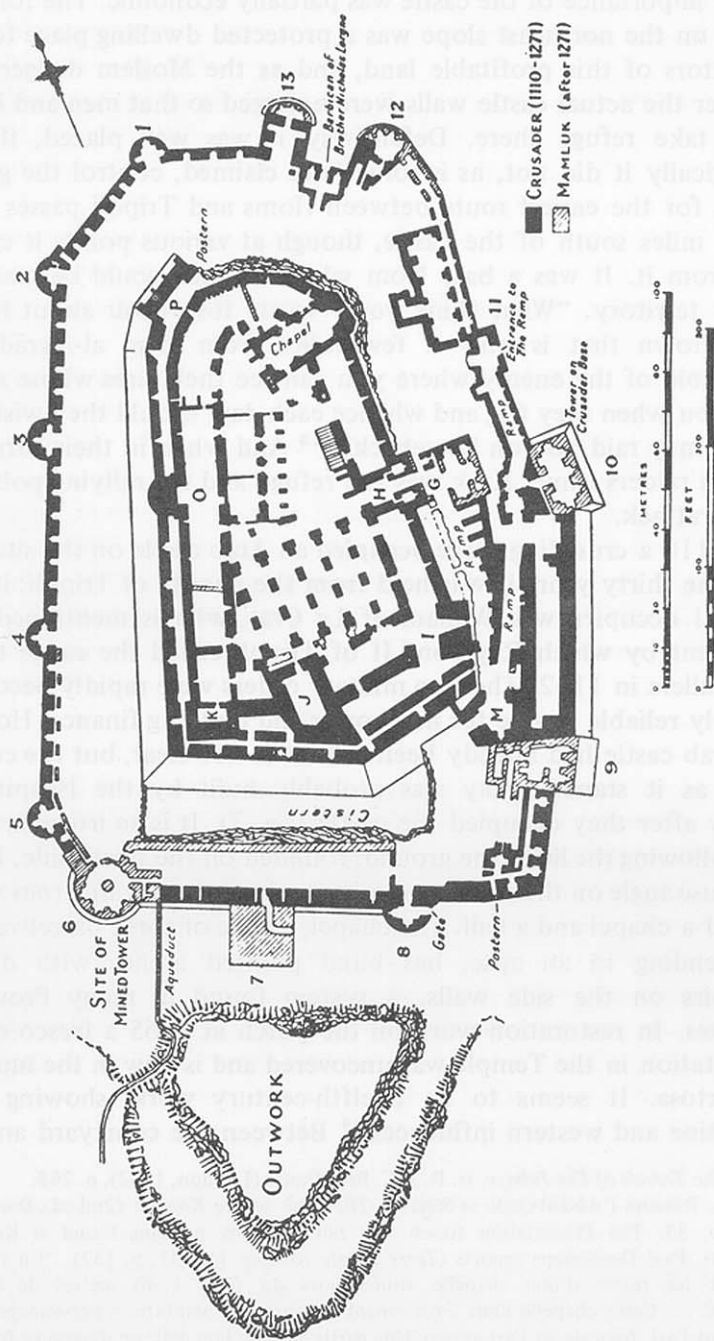
17. "Burchard of Mt. Sion A.D. 1280," tr. A. Stewart (*PPTS*, vol. XII; London, 1896), p. 18; Laurent, *Peregrinatores*, p. 29.

The importance of the castle was partially economic. The fortified village on the northeast slope was a protected dwelling place for the cultivators of this profitable land, and as the Moslem danger grew stronger the actual castle walls were enlarged so that men and beasts could take refuge there. Defensively it was well placed, though strategically it did not, as is sometimes claimed, control the gap of Homs, for the easiest route between Homs and Tripoli passes some eleven miles south of the castle, though at various points it can be seen from it. It was a base from which inroads could be made on enemy territory. "What think you," wrote Ibn-Jubair about Homs, "of a town that is only a few miles from Ḥiṣn al-Akrād, the stronghold of the enemy where you can see their fires whose sparks burn you when they fly, and whence each day, should they wish, the enemy may raid you on horseback?"¹⁸ And when in their turns the Moslem raiders came, Krak was the refuge and the rallying point for counterattack.

In 1110 a crusading force occupied an Arab castle on the site, and for some thirty years it was held from the county of Tripoli; its last baronial occupier was William of Le Crat, who is mentioned in a document by which Raymond II of Tripoli ceded the castle to the Hospitallers in 1142. The two military orders were rapidly becoming the only reliable source for manpower and building finance. How far the Arab castle had already been rebuilt is not clear, but the central block as it stands today was probably built by the Hospitallers shortly after they occupied the castle (fig. 7). It is an irregular polygon, following the lie of the ground, rounded on the north side, but at an obtuse angle on the south enclosing an inner courtyard from which opened a chapel and a hall. The chapel, a nave of three barrel-vaulted bays ending in an apse, has blind pointed arches with double voussoirs on the side walls, a system found in many Provençal churches. In restoration work on the porch in 1965 a fresco of the Presentation in the Temple was uncovered and is now in the museum at Tortosa. It seems to be twelfth-century work, showing both Byzantine and western influences.¹⁹ Between the courtyard and the

18. *The Travels of Ibn Jubayr*, tr. R. J. C. Broadhurst (London, 1952), p. 268.

19. A. Rihaoui ('Abd-al-Qādir ar-Riḥāwī), *The Krak of the Knights* (2nd ed., Damascus, 1966), p. 33. The Presentation fresco was not the only painting found at Krak des Chevaliers. Paul Deschamps reports (*Terre Sainte romane* [1964], p. 137): "En 1935 on découvrit les restes d'une chapelle située hors du Crac à 40 mètres de l'entrée principale. . . . Cette chapelle était entièrement couverte de peintures à personnages où se combinent l'art français et l'art syrien. Une partie était en bon état; on déposa ce fragment et on le reporta sur une toile. Une inscription latine a révélé qu'une des figures représentait saint Pantaléon, médecin martyrisé à Nicomédie en 303." Deschamps says this fresco was taken to Tortosa with the Presentation, but it is not there, and so far all attempts to locate it have failed. [J. F.]



7. Plan of Krak des Chevaliers. After F. Anus

wall are vaulted chambers providing kitchen and other accommodation. The projecting towers of the outer wall were rectangular, and there were two entrances, one on the east face (H) between two towers and leading directly into the court, the other a right-angled entry in a tower (P) on the northwest face. On the outer face of the tower the wall is slightly advanced from the main curtain and provided with three large arches, which could be used from the top platform as machicolations, through which missiles could be thrown. It was a primitive form, which can be found also at Niort and elsewhere in France, and it seems soon to have been abandoned at Krak, for the wall was reinforced, the arches closed, and more conventional brattices placed on it.

The second half of the century was a period of considerable seismic disturbance, and much earthquake damage was done in 1170 and again in 1202.²⁰ Between these years, in 1188, Saladin had left Krak unassailed, and its strength must already have been impressive. Then at some time around the turn of the century a new enlargement was undertaken. A second outer enceinte was built, at a distance varying from 52 to 75 feet from the original outer wall. This new enceinte was provided with semicircular towers, with stirrup-shaped loopholes allowing of direct downward shooting at the base of the walls. Towers and walls were crowned with merlons, and the *chemin-de-ronde* was supported on a vaulted passage from which opened loopholes and brattices. Once this new outer defense was completed it was possible to undertake considerable rebuilding of the inner enceinte. The central tower (O) of the west face was enclosed in a round tower, and a *talus* was built all along the west and south faces, forming a vaulted passage with, on the west face, the old wall, and on the south a new building, as the defenses here were advanced considerably beyond the earlier line. From this southern *talus* rise three towers, rounded on the exterior side and joined to the slope of the *talus* by most carefully worked masonry (pl. LIIIb). These towers were the living quarters of the knights, the western being designed for the commandant and containing a fine vaulted chamber with decorative carving on the windows and capitals. On the interior side the towers were separated from the main court, at this point covered over so as to form a raised esplanade, and were connected to it only by a stepped bridge. The knights were always a minority in a garrison of mixed races, and such means of isolation were probably a safeguard against interior mutinies, rather than to establish a final

20. *RHC, Or.*, IV, 154. On the question of earthquakes see D. H. K. Amiran, "A Revised Earthquake-Catalogue of Palestine," *Israel Exploration Journal*, II (1952), 48. On the earthquake of 1202 see H. E. Mayer, "Two Unpublished Letters on the Syrian Earthquake of 1202," *Medieval and Middle Eastern Studies in Honor of Aziz Suryal Atiya*, ed. S. A.

strong point. Wilbrand of Oldenburg in 1212 estimated the garrison of Krak at 2,000 combatants. These would be largely native Maronites or Syrian mercenaries, and the proportion of knights and lay-brothers of the Hospital must always have been a small one. Fifty or sixty knights was a normal complement.

Below the inner south face was a great water tank, providing a moat and a bathing and watering place. On the east face, the most important feature of the thirteenth-century work was the long ramp leading, with a series of sharp turns, to the original gateway, and protected by a rectangular tower (M), and by an elaborate but much rebuilt gateway. Last of the defense works, not including hasty repair work of which there are several indications, is the barbican protecting a postern on the north face, which is dated by an inscription to the command of Nicholas Lorgne (most probably 1254-1259).

Much of this outer enceinte has been rebuilt by its Moslem conquerors. The continuous machicolations which are now such a conspicuous feature of the south and east walls suggest their handiwork, and the great rectangular tower of the south front carries an inscription in honor of Kalavun dating it to 1285. Much of this was repair work after the siege, when in 1271 Baybars forced his way into the outer court but, confronted by the great south work, resorted to the ruse of a forged letter to induce surrender.

Krak's immense impressiveness depends on its mass, its masonry, and the great skill with which it fits its hilltop site (volume I, frontispiece; pl. LIIIa). In defensive science it is a more completely concentric castle than any other in the crusading kingdom. The inner walls overlook the outer, and at no point is the space between too broad for support to be given. But on one building, the loggia to their hall, the knights indulged themselves in ornament, and the naturalistic leaves of the capitals and the traceries of the openings are elegant Gothic of the mid-thirteenth century, rare survivors of that period of new hope when Louis IX came to the Holy Land. On a pillar in the gallery is carved a Latin couplet warning that pride can destroy all virtues, perhaps a useful admonition in this mighty fortress.

The other military order had meanwhile been extending its territories and building new fortresses. It has been argued²¹ that each

Hanna (Leyden, 1972), pp. 295-310.

21. Lawrence, *Crusader Castles*, I, 42; J. S. C. Riley-Smith, "The Templars and the Castle of Tortosa in Syria: An Unknown Document concerning the Acquisition of the Fortress," *English Historical Review*, LXXXIV (1969), 278-288.

order had its own distinctive type of building and that while the Hospitallers evolved the complex interrelated defenses of Krak, the Templars remained constant to simpler Byzantine patterns. This view, however, can hardly be substantiated. It is true that the two Templar castles whose layout can still be traced, Tortosa and Château Pèlerin, are both built on the seashore and therefore entirely different in scheme from the hill castles of Margat or Krak; but the defenses of Château Pèlerin are as carefully devised in their system of support as anything worked out by the Hospitallers. Of the Templars' hill castle at Safad there are insufficient remains for any accurate assessment of its plan.

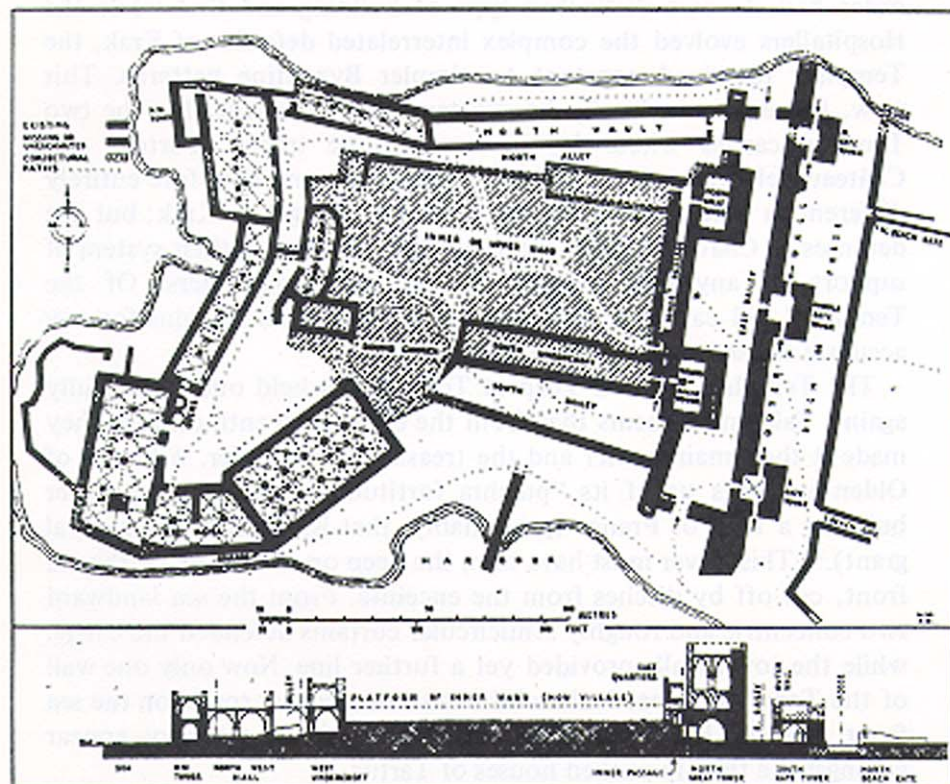
The Templars in their keep at Tortosa had held out successfully against Saladin. It seems that from the early thirteenth century they made it their main center and the treasury of the order. Wilbrand of Oldenburg tells us of its "pulchra fortitudo," and its great tower built by a king of France (presumably, that is, financed by a royal grant).²² This tower must have been the keep on the center of the sea front, cut off by ditches from the enceinte. From the sea landward two concentric and roughly semicircular curtains defended the castle, while the town walls provided yet a further line. Now only one wall of the Templars' great hall and the talus of a corner tower on the sea front remain. Here and there fragments of old masonry appear amongst the thickly packed houses of Tartus.

Next to Tortosa in importance for the order was their Palestinian castle Château Pèlerin, on the rocky promontory at 'Atlit south of Mount Carmel.²³ In the twelfth century the order had held a small outpost east of here at Le Destroit or Pierre Encise, a narrow defile close to the coast. In 1217 they began work on the promontory with its small harbor, aided by the Teutonic Knights (who did not complete their own castle of Montfort till 1229) and partially financed by a Fleming, Walter of Avesnes, while a short way south on the coast the Hospitallers busied themselves with the refortification of Caesarea.

The castle of Château Pèlerin is one of the most splendid and significant undertakings of the crusading revival (fig. 8). Surrounded on three sides by the sea, all its defensive strength was concentrated on the east front where it joined the mainland. Here there was a triple line of defense: a ditch with a low fortification on its eastern side, an outer wall with three rectangular gate towers, in which there

22. Laurent, *Peregrinatores*, p. 169.

23. C. N. Johns, *A Guide to 'Atlit* (Jerusalem, 1947). See also his articles in the *Quarterly of the Department of Antiquities in Palestine*, I-VI (1932-1938).



8. Plan of Château Pélerin

were right-angle entrances and which rose to a height of some fifty-eight feet. Wall and towers were supplied with double rows of loop-holes, which in the case of the wall were manned from an inner gallery and from an open parapet. Beyond lay the east bailey with towering above it the two great towers, 110 feet high, linked by a wall of massive masonry, possibly coming from the ancient ruins which the scholasticus Oliver tells us were found, along with a hoard of gold, when the foundations were dug.²⁴ Excavations have shown that this was the site of a Phœnician settlement, and these great blocks, larger than any the crusaders used elsewhere (a single one, Oliver says, could hardly be pulled by two oxen) may have come from their walls. This triple line of defense was arranged concentrically, that is, the inner wall commanded the outer and the two great towers were placed opposite the spaces between the three towers of

24. Oliver Scholasticus, *Historia Damiatina* (ed. H. Hoogeweg as *Die Schriften des kölnler Domscholasters, späteren Bischofs von Paderborn und Kardinal-Bischofs von S. Sabina, Oliverus*; Bibliothek des litterarischen Vereins in Stuttgart, CCH; Tübingen, 1894), 169-172.

the outer wall. Lesser walls followed the irregular sea front of the little peninsula and on its farthest point, at sea level, were grouped some vaulted halls, with ribbed vaulting supported on pillars and tracery windows, very pleasant places in the summer heat. The chapel, of which only a few courses of the wall remain, was a twelve-sided building with a pentagonal apse and two radiating chapels; its ribbed vaults were supported on a central pillar. Pococke in 1745 described it as "built in a light Gothic taste."²⁵ Two English naval officers in 1817-1818 speak of a cornice "in alto-relievo," with heads of different animals and a double row of arch arcades on the outside.²⁶ It must have been a building of some distinction, and is the one known example in Palestine of a type which was to become familiar in Europe as a Templar church. The hall of the north great tower, one wall of which is standing, shows masonry of the same type, ribbed vaults and corbels with human heads (pl. XXIV). Hall and chapel probably date from some last stage of building, for the hall is a third story and the original towers are described by Oliver as composed of two. Here, more than anywhere else, fragmentary as it is, some idea can be obtained of the Gothic splendor of the mid-thirteenth century in Acre and its surrounding strong points.

Château Pèlerin was never taken; it was evacuated, the fortifications were dismantled, but the castle, never occupied as a Moslem fortress at least before the eighteenth century, remained little changed. Badly shaken by the earthquake of 1837, its destruction was completed by Ibrahim Pasha, who carried off its stone for the refortification of Acre.

The castle of Safad had originally been one of the many sites fortified by Fulk of Anjou. Taken by Saladin, it had been dismantled and the route from Damascus and Galilee left unprotected, along with the rich lands lying around the north of Lake Tiberias (the Sea of Galilee). Ceded to the Franks by aṣ-Ṣāliḥ Ismā'īl at the time of the crusade of Theobald of Champagne (1239-1240), its rebuilding was due to the enthusiasm of a pilgrim, Benedict of Alignan, bishop of Marseilles. His preaching roused the people of Acre, and his appeal to the master of the Temple, Armand of Perigord, persuaded the order to undertake the work.²⁷ In 1240 building was begun: knights and

25. R. Pococke, *A Description of the East and Some Other Countries*, I (London, 1743), 57.

26. Ch. L. Irby and J. Mangles, *Travels in Egypt and Nubia, Syria and Asia Minor, during the Years 1817 and 1818* (London, 1823), p. 191.

27. R. B. C. Huygens, "Un Nouveau texte du traité 'De constructione castrī Saphet'," *Studi medievali*, ser. 3, VI-1 (1965), 355-387.

citizens gave their labor and many prisoners of war were employed. Twenty years later, when the bishop revisited Palestine, he found a magnificent castle on the site where he had laid the first foundation stone. For all its ditches and seven great towers, it was not to remain in Christian hands. In 1266 Safad fell. Today, among its vague ruins, the ground plan and scheme of defenses cannot be clearly traced.

The last work undertaken by the Templars was at the castle of Belfort (Qal'at ash-Shaqīf).²⁸ This too was one of Fulk's buildings, originally a rectangular keep of two stories overlooking a rock-cut ditch, the central point of an irregular circuit of walls surrounding the plateau above the river Litani. The type of masonry and scheme of the building suggest a date contemporary with the crusading works at Saone and the first buildings at Krak. Belfort then belonged to the lords of Sidon, and its siege by Saladin, when Reginald of Sidon's negotiations and eventually his fortitude under torture gained time for the crusading concentration on Acre, was a critical episode of the campaign. Belfort fell, however, and from 1190 to 1240 was in Moslem hands. The two round towers with their skillfully rounded glacis, the finest work of the building, may date from the time of al-'Ādil, though they have closer points of resemblance with Baybars's work at Krak. In 1240 it was restored by treaty, and in 1260 Julian of Sidon, after his irresponsible raids had roused the Mongols to the plunder of his city, sold it to the Templars. The fine hall, built in smooth-faced masonry, with ribbed vaults, much decayed since Rey drew it in 1859, must be their work. In 1268 the castle finally fell: a carved lion, the emblem of its conqueror, Baybars, has been found among the ruins.

The castles as such by no means represent the whole of the crusaders' activity in fortification. Much of their work consisted of town walls, and some of their most celebrated strong points are elements in schemes of city defense. The strength of the city of Tyre was such that, Ibn-Jubair says, "it was spoken of proverbially."²⁹ Across the narrow isthmus which joined it to the mainland there were three walls with twelve towers: "I have never seen better ones," wrote Burchard, "in any part of the world."³⁰ Along the coast the story of the town walls is one of constant rebuilding. Acre, Jaffa, Ascalon were erected only to be overthrown. Acre in the thirteenth

28. Deschamps, *Défense du royaume*, pp. 176-209.

29. *RHC, Or.*, III, 451-455; *The Travels of Ibn Jubayr*, tr. Broadhurst, p. 319.

30. Laurent, *Peregrinatores*, p. 25.

century had as fine walls as any, extended to include the outer suburbs at the time of Louis IX's visit. Caesarea, Jaffa, fortified by Frederick II but again ruined, and Sidon were all repaired by the pious king Louis, who worked with his own hands at the task of building. In 1227 some crusaders, waiting for the dilatory Hohenstaufen emperor, had occupied themselves in building the small sea castle on an isolated rock in the port of Sidon; now on the land side Louis built a citadel in the winter of 1253-1254, the foundations of which, in the old Phoenician acropolis, can still partially be traced under later Turkish rebuilding. Tiberias still had in 1837 a complete circuit of walls with round projecting towers, which may well have included crusading work, but in the great earthquake of that year they were completely destroyed.³¹ At Beirut under John I of Ibelin the walls and castle were splendidly maintained. Wilbrand of Oldenburg (1211) gives us a rare glimpse of the interior of a seignorial establishment. The great hall opened on the sea; its mosaic pavement simulated waves; the vaulted ceiling was painted with the signs of the zodiac; a fountain in the middle, figured with dragons and other beasts, cast a jet of water upwards, whose sound "soothed to sleep those who came to repose themselves."³²

Most notable of all were the walls and citadel of Jerusalem. To the Franks the Herodian tower of Phasaël with its great courses of masonry was the Tower of David, and here the kings eventually fixed their palace, building an irregular courtyard defended by rectangular towers. The Tower of Phasaël itself, so familiar a landmark on medieval maps of Jerusalem and on the seals and coins of the Latin kings, was dismantled by an-Nāṣir Dā'ūd of Kerak in 1239. "The stones were so large that all wondered at them."³³

With the exception of Saone and Margat nothing has been said as yet of the fortresses of the principality of Antioch.³⁴ The city itself

31. A. and L. de Laborde, *Voyage de la Syrie* (Paris, 1837), pls. LXI, LXII.

32. Laurent, *Peregrinatores*, pp. 166-167. See also, for Beirut, Du Mesnil du Buisson, "Les Anciennes défenses de Beyrouth," *Syria*, II (1921), 235-257, 317-327, and lithographs in de Laborde, *op. cit.*, pls. XXVII, XXVIII.

33. Continuation of William of Tyre, *RHC, Occ.*, II, 529. See C. N. Johns, "Excavations at the Citadel, Jerusalem: Interim Report, 1935," *Quarterly of the Department of Antiquities in Palestine*, V (1935), 127-131; "The Citadel, Jerusalem: A Summary of Work since 1934," *ibid.*, XIV (1950), 121-190; and *Guide to the Citadel of Jerusalem* (Jerusalem, 1944).

34. For the Antiochene castles see C. Cahen, *La Syrie du nord à l'époque des croisades et la principauté franque d'Antioche* (Institut français de Damas, Bibliothèque orientale, vol. I; Paris, 1940), pp. 109-176. See also Deschamps, *La Défense du Comté de Tripoli et de la Principauté d'Antioche* (in press) [J. F.].

had its great circuit of Byzantine walls stretching up the slopes of Mount Silpius to the citadel that crowned the summit. Today mostly mere foundations (vol. I, 1958 ed., fig. 2A), they still cause wonder at the scale and problems of their construction. History has given to the Antiochene castles a character of their own. Small Byzantine strongholds were numerous on the defiles of the Amanus mountains and in the plain stretching towards Aleppo; these were occupied by the crusaders and in many cases little altered. The principality in its early days threatened Aleppo, and the Franks fortified Sarmadā and al-Athārib as advanced posts against it, but their hold was brief and uncertain and Moslem reconquest swept them back to a confined area around Antioch itself, destroying or rebuilding their castles in the plain. Ḥārim, where on a large tell the Franks enlarged a Byzantine strong point, was completely rebuilt by az-Zāhir at the beginning of the thirteenth century and the slopes faced with stone as in the great citadel at Aleppo. To the southeast, controlling the Orontes valley, were a group of fortresses, many of them known only as names of uncertain identification. To the northwest of the bridge at Jisr ash-Shughūr was the double castle of Shughr Bakās. It is built on a narrow spur separated from the hillside by an artificially cut ditch, similar to that at Saone but much less deep. The peculiarity of the setting is a depression in the middle of the spur, which has been emphasized by ditches cut at either end of it and which separates the castle into two independent units. Taken by Saladin in 1188, it was not recaptured, and the present somewhat scanty ruins seem mainly Moslem rebuilding of the thirteenth century.

To the south of the river crossing, high in the hills overlooking the path through to Latakia, the castle of Bourzey, possibly the Rochefort of some crusading documents, still has a tower of roughly bossed masonry which may be Frank, but which is poor and hurried building. It depended on its natural strength rather than its walls. Hidden in the hills in the bend made by the Orontes, off the main tracks, the "little castle" (al-Quṣair), the Cursat of the crusades (Qal'at az-Zau), is somewhat better preserved.³⁵ The property of the Latin patriarch of Antioch, frequently his retreat in times of dispute, its repair was financed by the papacy in 1256, and the two rounded towers still standing are owed to this assistance. They are built in bossed stone, the bosses being chiseled smooth, and are indeed of a "pulchra fortitudo" worthy of the special interest of Rome in their

35. Van Berchem and Fatio, *Voyage*, I, 241-251.

erection (pl. LIVa). But with them the rebuilding ceased and the remaining defense works are undistinguished.

From Antioch the Syrian Gates led through the Amanus range to the coastal plain, the main route to Cilicia. On one of the approaches to the pass the castle of Baghrās, the Gaston of the crusaders, was held in turn by the Templars, the Armenians, and the Moslems, and each occupation has left its mark. Farther north a group of castles controlled the fertile eastern Cilician plain, the center of the kingdom of Little Armenia.³⁶ These castles are generally placed on rocky hills, and their walls follow the line of the natural escarpment. Rounded towers, in small, bossed masonry, project from the walls; and the bent entrance is generally employed, sometimes with a complicated ramp. Byzantine and crusading methods mingle with local practice. At the castle of Seleucia above the Calycadnus, the Hospitallers, after receiving it from Leon II in 1210, used fine ashlar masonry and vaulting, which are worthy of the standards of their contemporary building at Krak (pl. LIVb). At the opposite eastern end of the kingdom, another Hospitaller holding at Tall Ḥamdūn (Toprakkale) has horseshoe towers rising as at Krak from a talus faced with masonry.

The Armenian castles have not yet been fully studied. Some of them, such as Ilan-kale, the castle of the serpents, have no documented history, though Ilan-kale with its great flanking towers is still a most impressive ruin. At Sis, the fortress protecting the Armenian capital sprawls unevenly along a narrow ridge, and at places the natural rock provides the defense works, or only a thin breastwork gives some additional cover. At Anazarba the castle stands on a precipitous limestone crag rising from the plain. It includes stretches of Byzantine wall, some Arab rebuilding after its

36. V. Langlois, *Voyage dans la Cilicie et dans les montagnes du Taurus, exécuté pendant les années 1852-1853* . . . (Paris, 1861); L. M. Alishan, *Sissouan, ou l'Arméno-Cilicie: Description géographique et historique avec carte et illustrations* (Venice, 1899); Fedden and Thomson, *Crusader Castles* (1957); J. Gottwald, articles in *Byzantinische Zeitschrift*: "Die Kirche und das Schloss Paperon in Kilikisch-Armenien," XXXVI (1936), 86-100; "Die Burg Til im südöstlichen Kilikien," XL (1940), 89-104; and "Burgen und Kirchen im mittleren Kilikien," XLI (1941), 82-103; P. Deschamps, "Le Château de Servantikar en Cilicie: Le Défilé de Marris et la frontière du comté d'Edesse," *Syria*, XVIII (1937), 379-388; E. H. King, "A Journey through Armenian Cilicia," *Journal of the Royal Central Asian Society*, XXIV (1937), 234-246; M. Gough, "Anazarbus," *Anatolian Studies*, II (1952), 119-125; J. G. Dunbar and W. W. M. Boal, "The Castle of Vagha," *Anatolian Studies*, XIV (1964), 175-184; E. Herzfeld and S. Guyer, *Monumenta Asiae Minoris antiqua*; vol. II, *Meriamlik und Korykos: Zwei christliche Ruinenstätten des rauhen Kilikiens* (Manchester, 1930); and G. R. Youngs, "Three Cilician Castles," *Anatolian Studies*, XV (1965), 113-134.

capture by Hārūn ar-Rashīd in 796, and some characteristic Armenian rounded towers; a narrow col joins the two enceintes and on it stands a rectangular tower, dated by an inscription to 1188. At Sarvantikar, which was in Antiochene hands from 1185 to 1194, the keep may be Frankish work. Lampron, north of Tarsus, was the center of a powerful fief and many of its living rooms are still standing, inside two rounded towers above the rock moat. Vahka, on an outcrop of rock, has round towers of comparatively slight projection, machicolations, and a right-angled entrance: the main building stage can probably be assigned to the prosperous reign of Leon II (1187-1219). At Corycus (Le Courc, Gorigos) there is an island fortress, partially built, according to an inscription, by Heṭoum I in 1251, joined at one time by an aqueduct to a land citadel that incorporates a Roman gateway and a tower with a classical doorway.

Farther west, in the sweep of the bay of Pamphylia, three fortified sites, still strikingly preserved, Adalia (Antalya), 'Alaya (Alanya), and Anamur, still have much thirteenth-century work, but Selchūkid, not Armenian. 'Alaya, or more correctly 'Alā'iyah, takes its name from the Selchūkid sultan 'Alā'-ad-Dīn Kai-Kobād I (1220-1237), a great builder, whose octagonal tower, walls, and citadel still stand in remarkable completeness. Anamur still awaits exhaustive study, and certainly its excellent repair is partially due to later rebuilding (vol. II, 1962 ed., pl. 1b), but its main plan and much of the work date from this impressive if brief period of Selchūkid building initiative.³⁷

No short summary can do justice to the tangled problem of crusading castles. Making the fullest allowance for previous work and native skill, the crusaders showed a resourcefulness and determination in building which must always be a considerable factor in any assessment of their achievement. The narrow stretch of country from the Taurus mountains to the gulf of Aqaba contains some of the most impressive of surviving medieval fortifications. That the crusaders were innovators in methods of defense remains unproven. They borrowed eclectically from the west and the east, from the present and the past, and they learned from a prolonged and rarely broken experience. They accomplished such achievements as Krak des Chevaliers, and, whatever the origin of its details, they were by then master builders.

37. Seton Lloyd and D. Storm Rice, *Alanya ('Alā'iyya)* (British Institute of Archaeology at Ankara, Occasional Publications, 4; London, 1958).