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# The Castle of Silifke, a neglected Hospitaller fortification in Cilicia

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The modern town of Silifke is located in Cilicia Tracheia, where the river Göksu, the ancient Kalykadnos, leaves the Taurus Mountains and enters into an alluvial plain before reaching the coast. It covers the site of its ancient predecessor, founded in the Hellenistic Period and thriving during the Roman and Byzantine epochs. The castle lies immediately to the west of the town, on an isolated hill of oval shape, 185 m above sea level (Fig. 1). Between the hill of the castle, most probably the location of the ancient acropolis, and the town proper an elevated terrace is located, which is thought to have been the site of the Hellenistic *polis*.

# **History**

Founded by Seleukos I Nikator in the early 3<sup>rd</sup> century BC, *Seleukeia* later became the centre of a Roman province and in the Early Byzantine period the seat of a metropolitan¹. During the Byzantine-Arab Wars of the 9<sup>th</sup> and 10<sup>th</sup> centuries, *Selefkia*, as it was called then, seems to have been in Byzantine hands throughout². Whether there was an early castle, built at that time to protect the town and the new coastal *theme* of the same name³, remains doubtful. It is more probable that the town with its walls constituted the principal fortification in this

period, as there is evidence that the walls of the ancient town were rebuilt by the Byzantines (see below). At the end of 1099, emperor Alexios I Komnenos charged his admiral Eusthatios with the rebuilding of the castle of Selefkia (κάστρον Σελεύκειαν) and instructed him to surround the town there with ditches. Together with the simultaneously erected fortification at nearby Korykos, it was constructed to consolidate the Byzantine position in western Cilicia and to control the sea traffic to and from the Levant<sup>5</sup>. Both places served as bases for naval operations, although Selefkia, after the loss of Korykos to the Crusaders probably in 1109, now became a border town. In 1137 Emperor John II Komnenos led a campaign against Cilicia and North Syria. One of his first measures was to relieve Selefkia, which the Armenian Baron Levon I had attempted to subjugate. Levon pursued an expansionist policy and had occupied a large part of the former Crusader Cilicia in the years between 1132 and 11368. In a letter from 1137 the town is described as flourishing. Shortly afterwards, it seems to have been for a time in Armenian hands, most probably after the return of the Armenian prince Thoros II from Constantinople in 114410. Whether it came under Byzantine rule again, when Andronikos Komnenos, a cousin of the emperor, was sent in 1152 to subdue Thoros, is not clear. In any case, during the campaign of Emperor Manuel I against Thoros in 1158, the town appears as a Byzantine border post against Armenian Cilicia, where troops were stationed<sup>11</sup>. The Armenian attempts to expand their dominion to the west were finally successful: The town seems to have been in their hands before 1179, as at the Council of Hromgla in that year the visit of the Armenian bishop Basil from Seleukia is recorded<sup>12</sup>. In 1189 Baron Levon II, the later King Levon I, ceded the lordship to Shahinshah of Sasun, the husband of his niece15. The Crusader army led by German Emperor Frederick I had already reached the town in June 1190, when the emperor had his fatal bath in the river nearby 14. After Shahinshah's death in 1193, Selewkia, as it was called now, came one year later into the hands of Constantine of Gomardias, who appears as its lord in the list of noblemen established on the occasion of the coronation of King Levon I in 1198, the so-called Coronation List<sup>15</sup>. In 1207 Levon took his baron Henry and his son Constantine of Gomardias, lord of Selewkia, prisoner, and thus the lordship fell to the crown.

The growing threat of the Seljuks during this decade led Levon in 1210 to cede the south-western flank of Cilicia to the Hospitallers<sup>16</sup>, who had supported him before against the Seljuks<sup>17</sup>. The donation comprised the town of Selefkia (*civitas Seleph*)<sup>18</sup>, which was to become the centre of the new Hospitaller march, and the fortified places *Castellum Novum* (Arm. Norpert; today Tokmar Kalesi)<sup>19</sup>, and *Camardesium* (Arm. Gomardias)<sup>20</sup>, both former possessions of Baron Henry<sup>21</sup>. Furthermore, the Hospitallers were given rights over Laranda, today Karaman, which at that time was still in Seljuk hands<sup>22</sup>.

During the following years, the Seljuk threat increased. In 1216, the town was attacked by Sultan Kaykā'ūs I, although without success. This caused the Hospitallers to voluntarily place a corps of 400 knights a year at Constantine's disposal<sup>23</sup>. After having conquered the fortified town of Kalonoros (today Alanya) in 1221, Kaykā'ūs' successor to the sultanate, 'Alā al-Dīn Kayqubād, "seized the territory of Isauria as far as the gates of Selefkia, a town which was saved by the brethren of the Hospital with the help of the Armenians'<sup>24</sup>. This suggests that Castellum Novum and Camardesium may have been lost to the Seljuks in 1225.

In 1226, after the death of her husband Philip of Antioch, Isabella, the daughter of King Levon I and queen of Armenia, fled to Selefkia seeking refuge with the Hospitallers. She tried to escape the marriage to Hethum, the son of Constantine, then regent of Armenia for her, as she was under age. Thereupon, Constantine laid siege to Selefkia, finally prompting the Hospitallers to sell the town and the castle to him and to abandon it, together with the 12-years-old Isabella within<sup>25</sup>. A further reason for this decision was the uncomfortable position of the Order at that time. Their domain was permanently threatened by the Seljuks and they were interested in good relations with the ruling Armenian party.

After the coronation of Hethum in the same year, Selefkia seems to have been part of the royal domain, as an inscription over the gate of the castle refers to King Hethum I (1226–1279). In 1263 the Karamanids, after having occupied the neighbouring region of Isauria, laid siege to Selefkia but were repelled by Hethum<sup>26</sup>. During the reign of King Peter I of Cyprus (1359–1369) the town was still in Armenian hands<sup>27</sup>. Shortly afterwards, it was conquered by the Karamanids. For the next hundred years it was a bone of contention between the latter and the Ottomans, who finally occupied it under Gedik Ahmet Pasha in 1471, followed by a final Karamanid interregnum from 1473 to 1475<sup>28</sup>.

### History of research

The town and its castle were described by several travellers from the 15th to the early decades of the 20<sup>th</sup> century. Giosafat Barbaro, who visited the town in 1474, relates that the castle had two walls with a space of 30 or more paces between them, a tower-flanked gate at the outer circuit with iron wings 15 feet high, and a large cistern inside<sup>29</sup>. In the 1670s, the Turkish traveller Evliya Çelebi reports 23 towers, sixty houses and a mosque<sup>30</sup>. Explorers in the 19<sup>th</sup> century such as Francis Beaufort<sup>31</sup>, Charles Irby and James Mangles<sup>32</sup>, Léon de Laborde<sup>33</sup>, Victor Langlois<sup>34</sup>, Charles Texier<sup>35</sup>, and Rudolf Heberdey, together with Adolf Wilhelm<sup>36</sup>, added some further details. Langlois found the remains of two Byzantine inscriptions inside the castle, which led him to assume

that the present castle was erected on the remains of a Byzantine predecessor. In 1962, the towers at the south front of the main wall were repaired. Results of scientific explorations of the castle were presented by Hansgerd Hellenkemper in 1976 and Robert W. Edwards in 1987<sup>57</sup>. In 2001, a survey was executed on behalf of the Turkish Ministry of Culture and Tourism, as a prerequisite for conservation measures<sup>38</sup>. During recent years some parts of the castle were restored, primarily around the gate tower on the north side. In the summer of 2011 excavations and cleanings were conducted at the western section of the inner courtyard as well as in and around the gate tower<sup>39</sup>.

As an outcome of these explorations it is now more or less established that an originally Byzantine castle was later remodelled to a great extent, adapting it to more modern standards of fortification. Although it was always clear that most of the extant fabric dates from the High Middle Ages, or more precisely from the 13<sup>th</sup> century, the amount of Hospitaller or Armenian work remained under dispute. Fedden and Thomson were the first to suppose that the Hospitallers may have remodelled the castle immediately after they had taken it over in 1210<sup>40</sup>. Edwards, who published the hitherto most detailed study, thought that there are primarily Frankish influences with no clearly identifiable Armenian elements<sup>41</sup>. Others, however, assume that a complete rebuilding by the Armenians took place during the first half of the 13<sup>th</sup> century<sup>42</sup>.

Although further archaeological interventions are necessary to obtain more evidence, a systematic approach based on a thorough examination of the remains above ground and a comparative analysis of contemporary equivalents may lead to a better understanding of the structural history of the castle and result in a clearer determination of its building fabric.

### The medieval town

For the appropriate assessment of Hospitaller Selefkia it has to be taken into account that it was not the castle that was donated in 1210 but rather the town of Selefkia (*civitas Seleph*), which, as a matter of course, included the castle. The town was walled since antiquity but we do not know if these early fortifications comprised the castle hill<sup>43</sup>. In 1826 Léon de Laborde still saw remains of a town wall, which was dotted with numerous towers<sup>44</sup>. The fact that it crossed an ancient necropolis suggests that this wall was of late antique or medieval origin<sup>45</sup>. Although no remains have survived, earlier records allow one to trace its course with some certainty<sup>46</sup>. It is a hemicycle with its open side facing the Göksu (Fig. 2). The eastern section ran from the river to the south, starting immediately west of the ancient stadium but encompassing the still preserved Roman temple alongside İnönü Bulvarı<sup>47</sup>. A gate of the Flavian period (69–96 CE) is recorded to have stood there near the river<sup>48</sup>. The wall seems to have followed

the direction of the Gazi Osman Pasha Sokak, then turning westward to cross the ancient necropolis located south of the bending of the Menderes Caddesi to the south-west. The western section encompassed not only the Byzantine cistern (Tekir Ambarı) but also the elevated terrace north of it. From there, a ridge leads northward to a rocky knoll overlooking the river. There is no doubt that the ridge was crowned by the town wall and the knoll by a tower, which is corroborated by traces of an artificial levelling of the rock there.

The well-preserved early Byzantine cistern was cut into the rock and has a rectangular layout of huge dimensions<sup>49</sup>: 23 m x 46 m (75 x 150 feet), depth ca. 12 m<sup>50</sup>. It was once covered and was certainly in use during the Middle Ages. A further monument which may have been used at that time is the 5<sup>th</sup> century Byzantine church, erected on the ruins of a Roman temple<sup>51</sup>. The course of the wall shows that the extent of the town has not changed much from the Byzantine period to the early 20<sup>th</sup> century. It even reveals details of the ancient street grid with the well-discernable Cardo and Decumanus Maximus<sup>52</sup>. That the town wall was still in good repair during the Middle Ages can be deduced from Anna Comnena's observaltion that Admiral Eusthatios surrounded the town with ditches, without imparting information on the walls<sup>53</sup>. In view of all this, one has to take into account that the Hospitallers at Selefkia obviously disposed of two independent fortifications, with the castle acting as the town's citadel.

# The layout of the castle

Perched on a rocky mound of oval shape, the castle with its fairly well preserved walls takes up the entire plateau at its summit<sup>54</sup>. It has an overall length of 275 m and a maximum width of 105 m<sup>55</sup>. Its layout is marked by a concentric design, with a main wall on the edge of the hilltop, and a lower fore-wall on a precipitous ledge further down the slope<sup>56</sup>, which on the south side surmounts a stone-lined glacis (Fig. 3). A unique characteristic is the surrounding rock-cut moat, with its outer flank or counterscarp likewise revetted with stones. Due to the fact that the moat was hewn into the slope of the castle hill, its counterscarp turned into the inner flank of a rampart, which was crowned by a further wall beyond the moat<sup>57</sup>.

The main wall has an average thickness of 3 m and is dotted with U- and D-shaped towers except at the central north section, where two rectangular towers are located. Especially at the western parts of the castle, vaulted halls run along the wall. At the fore-wall only two small towers are discernible, which are located at its northern section.

The castle was entered on the north-east side. The tower-flanked outer gate mentioned by Barbaro in the 15<sup>th</sup> century must have been located north-west of tower W (at 1 on the plan)<sup>58</sup>.

Passing this gate the visitor entered a narrow barbican<sup>59</sup>. A postern immediately north-west of tower W (5) allowed one to attack an enemy having already occupied it. At the western end of the barbican the rectangular gate tower C is situated (Fig. 4). Above the recently restored portal (2), a *khachkar* and an Armenian inscription are visible<sup>60</sup>, both in situ. The latter, having lost its lower half during the 19<sup>th</sup> century, bears the name of King Hethum (I) and the year 1236<sup>61</sup>. Inside the tower the way bends to the south and, passing a wide pointed arch, the visitor entered the lists, i.e. the space between main wall and fore-wall. From there he had to turn west to pass a further gate between tower B1 and the fore-wall (3) and to access the inner ward of the castle somewhere east of tower E (probably at 4). It seems that the reason for the bending of hall G to the south was to leave space for a gate north of it, although this has to be proven by excavations. All in all, it can be established that the access to the castle was well-secured by four successive gates.

The interior of the castle is now excavated at its western section, where numerous ground walls of Ottoman-period houses were uncovered, as well as the mosque of sultan Bayezid II (1481–1512) described by Evliya Çelebi (at X), and some cisterns (L). The remainder is taken up by shapeless ruins and debris.

# The Byzantine castle

Any structural analysis of the castle has to start with the assessment of the remains of the Byzantine castle. Up to now, there is no evidence for fortified structures on the castle hill earlier than 109962. A survey of the walls and their masonry reveals that substantial parts of this first fortification are preserved. There is evidence that the later builders did not change the principal layout of the castle, but rather used the pre-existing structures as a base for their remodelling of the fortifications. The measures executed consisted of a reinforcement of the older wall by adding a new wall at its outer face, at some sections (north wall) also at the inner face and even by encasing the older wall from both sides. At the south wall, the extent of rebuilding was greater, as there only few traces of the original fabric are observable. Contrary to older beliefs63, there is no evidence of a different course of the older wall in this section. The wall of this phase had a thickness of 60–80 cm and consists of two faces bound by a rubble core. The faces show small, square, regularly coursed blocks of uniform size with the joints pointed flush. The material is a whitish-grey limestone, obviously quarried from the moat around the castle.

At the north wall the amount of rebuilding is far less, implying that the remodelling of the castle was not fully accomplished. This is indicated by the curtain B1–B2, where the

eastern section of the wall was reinforced, while the western section displays its original Byzantine masonry (Fig. 5), identical to that of the early phase of Korykos' land castle. The two rectangular towers (B1, B2) originally seem to be Byzantine constructions, too. The facing of B1, however, consists of the same masonry as at all the curtains of the main wall.

The base of the ruined tower B2 was recently exposed. revealing at least three building periods: An originally rectangular tower was later extended at the front, leaving merely a small passage between its front side and the fore-wall. Wall structures on the ground imply that this extension was once linked to gate tower C, thus transforming the lists in this section into a second barbican. In a third step the tower was extended at its western flank and the corners chamfered. Rusticated ashlars at the corners suggest Armenian workmanship, although it could as well have been Ottoman work, creating a bastion for the defence of the castle's less well fortified northern flank.

The second important section for the study of the castle's early structures is the south-western flank, where the long hall K is located. The east end of which is formed by a Byzantine wall, being part of a huge pentagonal tower whose remains can clearly be identified further down the slope. This prominent tower (B3)<sup>66</sup>, ignored by most earlier investigators of the castle<sup>67</sup>, protected the exposed corner of K and, what is more important, flanked the long curtain ranging from this point to tower I. Its integration into the later structures attests to its re-use, forming an integral part of the castle's defensive system.

At this section, some stretches of the Byzantine fore-wall are preserved, clearly distinguishable from later refurbishments by its masonry. At tower I, the fore-wall had to be moved outwards, whereas the former alignment, overlapped by the later tower, is still visible. Immediately south of tower I, the round front of another tower (J) arises from the debris. Its masonry is of the early type, which seems to rule out an Armenian origin, although its shape may allude to it. Another short stretch of the Byzantine fore-wall is preserved in front of tower N, revealed by the crumbling down of the later reinforcement. Its position on the line of the later fore-wall indicates that in this section the latter was constructed by simply cladding the earlier fore-wall with a new facing.

A further Byzantine element at the south wall is the cistern outlet S. Although much altered by the restorations of the surrounding wall facing in 1962, its purpose is clear in view of the large cistern R inside the wall at this section<sup>68</sup>, with which it must have communicated. This is corroborated by the remains of hydraulic plaster covering the interior of S. The existence of S provides further evidence for the assumption that the main wall of the extant castle was erected on the line of its predecessor.

### The Hospitaller castle

As indicated above, and in view of the fact that there is no real evidence for an Armenian intervention from the period before 1210, the hypothesis of a Hospitaller origin of the extensive rebuilding of the castle stands to reason. In order to provide evidence for this hypothesis, elements and characteristics of the castle will be discussed in the following<sup>69</sup>.

### The masonry

The extant building fabric is at large parts characterised by the masonry of the wall facings, medium-sized smooth ashlars laid in regular, ca. 60 cm high courses. The material used for the stonework is local limestone of a light brown colour. Ancient inscriptions on some of the blocks suggest that it was taken from the remains of ancient Seleukeia. This rather uniform masonry is found at the majority of the buildings, which is the curtain walls, all towers with round fronts, gate tower C, the halls running alongside the inner main wall and most sections of the fore-wall and the glacis attached to it<sup>70</sup>. It is characterised by mortar joints, filled with bits of brick and small stone chips. That these structures are all from the same building phase is confirmed by common features such as sizing and coursing of the masonry, the stone-cutting, the mortar and, in particular, the mason's marks (Fig. 6). Some, though not all, of the latter are known from other Armenian sites<sup>71</sup>. This may be explained by the employment of Armenian workers.

Such masonry is not typical of Armenian fortifications, which are usually built of cruder ashlars or rubble, less uniform in size and with a rough or bossed surface. The kind of masonry employed at Silifke is however identical to that of the outer enceinte and the south front of the Crac des Chevaliers in Syria. Although this may not constitute a conclusive argument, the impression is created that there is a tendency to standardise the size and cut of the stone, a development that evolved during the last decades of the 12<sup>th</sup> century in France (*petit appareil*). On the other hand, the filling of the interstices with stone chips is also found in Armenian fortifications and may thus point to the engagement of Armenian workmen. Edwards' remark that "the Armenians would never use a smooth ashlar as an exterior facing stone on walls subject to direct attack", however, contradicts the assumption of an Armenian builder<sup>72</sup>.

# The concentric layout

Due to the above-mentioned observations it is clear that the fore-wall was already erected during the first construction phase. Contrary to Edwards' belief<sup>73</sup>, there is no doubt that the fore-wall surrounded the main wall on all sides74, for which reason it was a concentric castle already before the 13th century. This principle was alien to Armenian fortification of the High Middle Ages. During the building phase under review, however, it was even advanced, be it by means of strengthening or rebuilding the older fore-wall or by its re-aligning where the construction of larger towers made it necessary (Fig. 7). Although the outer enceinte is less strongly fortified than similar structures at the Hospitaller castles of the Levant, there is evidence that it was likewise an integral part of the castle's defensive system. Narrow passages in front of the towers B2, Q, I, and E, which could easily be blocked, and gates (3 and 7 on the plan) enabled to control the lists in sections. There seems to have been a postern south of S, from where defenders could have accessed the moat<sup>75</sup>. The concentric scheme, an old pattern of fortification developed in the ancient Near East and conveyed to the Middle Ages by the Byzantines, was rapidly adopted by the Crusaders who evolved it to a hallmark of their fortification. Particularly the castles of the military orders almost always were of the concentric type. It offered ample possibilities for the access control, enabling to convert sections of the lists into barbicans, an arrangement already implemented at the early Crusader castle of Montréal (Shaubaq)76, and later, analogous and probably contemporaneous to Silifke, at the Hospitaller castle of Margat.

### The moat and its defences

Moats around hilltop castles are a feature of elaborate Crusader and Islamic fortifications<sup>77</sup>. Armenian castles in rare cases had neck ditches but no moats of this kind<sup>78</sup>, even at sites where it would have been suitable if not essential such as at the south bailey of Anavarza. Equally unusual is the revetment of the slope of the castle hill, a further characteristic known from Crusader and Islamic sites. When applied in full, the revetment formed a glacis continuing to the bottom of the moat. It is commonly combined with the revetment of the opposite flank of the moat, the counterscarp (**Fig. 8**). Even more striking is the additional fortification of the rampart beyond the moat, which was crowned by third wall<sup>79</sup>, with its inner face associated with the stone lining of the counterscarp. This feature is known from the Land Walls of Constantinople and the landward wall of Tripoli/Lebanon, and, which is certainly of a noteworthy significance, of the contemporary castle of Margat, the administrative centre of the Hospitallers in Syria.

# The gate tower

Although the Armenian inscription and the *khachkar* seem to be indicative of an Armenian origin of the tower, the results of an in-depth study of the structure do not support this assumption<sup>80</sup>. Both slabs were inserted secondarily, possibly together with the machicolation above them, which may well have been an addition of a later (i.e. Armenian) building phase (Fig. 4). Furthermore, the mason's marks at the interior wall facing are the same as those at the towers on the south front of the castle. Finally, in the construction of the building neither of the known Armenian measurement units was used<sup>81</sup>, but rather western ones. The dimensions (outside  $8,50 \times 9,75$  m, inside  $5,54 \times 6,53$  m) best comply with the ancient *pied du roi*<sup>82</sup>, a widely-used unit in western medieval construction. Expressed in this unit the dimensions are  $26 \times 30$  p (outside),  $17 \times 20$  p (inside). Further peculiarities that discount Armenian construction principles are the front and back door at the entrance portal, the lacking of a slot machicolation and, revealed by a recent sounding, a pit behind the entrance which may have been covered by a trap-door.

# The design of the towers

Although the outer appearance of the U-shaped towers at the south front resembles Armenian examples of the same type, there is one decisive difference: The towers here rise from a plinth, separated from the tower shaft by a scarped zone (Fig. 9). This arrangement is uncommon to Armenian fortification, where U-shaped towers usually had a straight shaft lacking a plinth or talus<sup>83</sup>. On the other hand, towers of this type were introduced in Crusader fortification at the end of the 12<sup>th</sup> century: The U-shaped tower at the east wall of Ascalon (Fig. 10), which is exactly of the same build as those of Silifke, was probably erected by King Richard I in 1192<sup>84</sup>. Later, the Crusaders often made use of this type, for example at Crac des Chevaliers (towers of the south front, combined with a glacis)<sup>85</sup>, Margat (north-east tower of main ward), Cursat (towers at southern enceinte)<sup>86</sup>, Montfort (front tower)<sup>87</sup>, Arsūf (towers at main ward of citadel, gate of town wall)<sup>88</sup> etc.

From the tower of Ascalon a direct line leads to the fortification developments in the early Angevin Empire. Here, in the 1160s Richard's father King Henry II launched a refortification campaign to better protect his realm against King Louis VII, with whom the conflict had intensified. The fortifications of that period are marked by the experimentation with different tower forms, of which the D- or U-shaped type finally prevailed. The campaigns at the castles of Chinon and Gisors, where in the 1170s Henry II had erected a whole series of new towers of different shape<sup>89</sup>, were followed by a further one at Dover Castle in the 1180s<sup>90</sup>. During the

subsequent decade, the model of the rounded tower with a talus at its base had already reached the status of a standard in fortification, attested by the castles of Chepstow, refortified in the 1190s by William Marshal<sup>91</sup>, a faithful knight of King Henry II, and Château Gaillard<sup>92</sup>, erected 1196–1198 by King Richard. The model was further promoted by King Philip II Augustus, an adversary of the Plantagenets and the true promoter of the round tower, which he evolved to form the essential element of his fortification scheme, the *système philippien*<sup>93</sup>. Its pre-eminent example is certainly the fortification of the Louvre, erected at the fringes of Paris during the late 1190s. Here, U-shaped towers flanked the gate, according to ancient tradition<sup>94</sup>. This leads to the presumable source of inspiration for this model, ancient U-shaped Gallo-Roman towers having survived in France and the British Isles<sup>95</sup>.

If Armenian influence has played its role on the development in the West or East, is an issue still under debate. The specific form of the tower, however, widely used in 13<sup>th</sup> century European fortification, and some other clues rather suggest a western origin<sup>96</sup>. A demonstrative example is given by the castle of Montfort, built by the Teutonic Order from 1226 onwards. Here, at the front tower, French influence is obvious, as at other parts of the castle, especially the sculpture, which reveal a strong French influence. On the other hand, mason's marks which are also found in Armenian constructions, and the possibility of Armenian measurement units used at some of the rounded towers<sup>97</sup>, suggests that especially the latter were erected by a joint workforce. This is a phenomenon often perceived in Crusader fortifications, explaining the Armenian influences there<sup>98</sup>.

In the context of the discussion on Silifke, it is noteworthy that the Hospitallers often made use of this type of tower and its variants. At Margat, the north-east tower of the main ward is notable in this respect. Although not exactly U-shaped, viewed from the outer ward it emerged as a mighty bulwark, which effectively defended this vulnerable point.

Even more interesting is the major building campaign that the Hospitallers carried out at Crac des Chevaliers after 1210, a date corroborated by latest research. There, two of the three rectangular towers at the south front of the main ward were enlarged to bulky U-shaped towers with their fronts integrated into a high talus covering the entire south section of the main ward. The talus, for which the term *glacis* may be more suitable, continues around the south-west corner and stretches along the entire west front of the inner ward. The arrangement is quite similar to that of the south front of Silifke, even more so, as in both cases the glacis extends to the bottom of a surrounding moat. The Hospitallers additionally added a circumvallation around the old castle, thus creating a new second line of defence, studded with semi-circular towers. The whole was encircled by a new moat, which had a stone-lined counterscarp, as the scant remains at the south-west side indicate.

A further feature, now only perceivable at the towers of the south front, is that of the loopholes. The openings at the well-preserved examples of tower I are headed by a rectangular top. This is quite unusual for Armenian loopholes which usually have round-headed embrasures and rounded tops. The latter are splayed at the base, a common feature of contemporary loopholes in East and West and thus no discriminating element.

### The continuous halls

Although halls along curtain walls do exist in Armenian fortifications<sup>100</sup>, they are hardly systematically employed. On the other hand, this arrangement is something of a hallmark of any significant fortification of the military orders, especially of those with a concentric layout. The first Hospitaller castle at the site of Crac des Chevaliers, erected immediately after the devastating earthquake of 1170, illustrates this in an exemplary way. Turning back to Silifke, the halls Y1, G, H, K and M not only present the same arrangement, but are rather built exactly in the same way as at the Crac, pointed barrel vaults with a rubble facing at the upper parts and hatches. The measurement unit used in the construction of the two big halls (H and K) for example, is once more the *pied du roi*, while none of the known Armenian units match. Hall H measures outside 28,1 by 13,4 m (86 x 41 p), inside 8,15 x 25,45 m (25 x 78 p), hall K measures inside 8,15 x 55,05 m (25 p x 28 t)<sup>101</sup>.

There is evidence that the halls once ran along the entire south section, which has however to be verified by excavations. Hall Y2 is the only Armenian hall, if not the only structure attributable with certainty to the Armenians<sup>102</sup>. This is attested by the measurement unit used<sup>103</sup>, the vaulting, which comprises groin vaults with a cross-shaped keystone, and the Armenian inscription on the wall facing the ward<sup>104</sup>. The latter is original, with a framing moulding carved into the surface of the adjoining ashlars.

### **Conclusion**

Based on a comparative analysis of the castle's layout and its principal structures, many conclusions could be drawn concerning its building history, resulting in the first, though still tentative, reconstruction of the castle's building phases. Further, many new observations were made, in particular on remains of the Byzantine predecessor, on the sequence of gates and barbicans, on mason's marks, on construction principles and measurement units used, on the building sequence of particular structures (e.g. tower B2), on the configuration of the fore-wall, on the defences of the moat (glacis, counterscarp wall). In addition, a hitherto completely ignored tower (B3) was detected.

The principal focus of this study was however put on the main building phase, which comprised the main wall and the halls attached to it (except Y2), all towers with rounded fronts, gate tower C, and the fore-wall and the glacis attached to it. Although there are clues that Armenian workmen were employed in the building of these structures, most notably the towers, the synopsis of characteristic features leads to the conclusion that the refortification of the castle was not planned by Armenian architects. Armenian castles had outer wards rather than fore-walls and rarely were completely surrounded by moats. Likewise, they did not have such a type of glacis or a talus at the base of their walls, a characteristic feature of Crusader, and, one must not forget, Islamic fortified architecture.

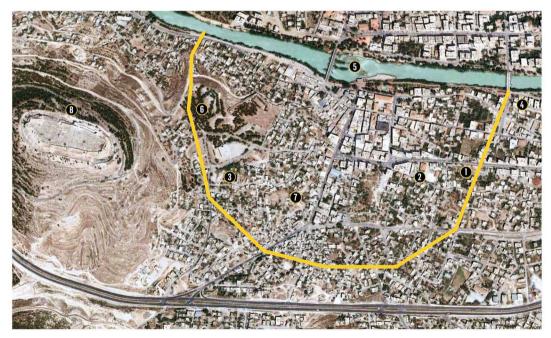
The comparative analysis, however, provides ample evidence for an assignment of these remains to the Hospitallers. There are not only numerous analogies to Levantine castles of the Hospitallers such as Margat and Crac des Chevaliers, but also a lot of references to characteristics of Crusader fortification. The Order seems to have had a vital interest to effectively fortify the centre of its new march on the Cilician border. The rather feeble fortifications of the old Byzantine castle could not fulfil this purpose nor were they adapted to modern standards. Therefore, the Hospitallers reinforced it to a great extent converting it into a strong bulwark. The pre-existing concentric layout perfectly accommodated their needs. Although the remaining Byzantine structures at the north section might suggest that their building plans were not finished, the topographical conditions, however, did not allow the construction of larger towers.

It is interesting to note that primarily the south front facing the town was studded with impressive towers. The north front, undoubtedly no less endangered in case of an attack, was less strongly fortified. This leads one to assume that not only military considerations were of importance but also representative needs. Here, at the administrative centre of its Cilician march, the Order documented its pretensions and power not much less than at its Levantine fortifications. This key stronghold should demonstrate that the Cilician dominion was of equal importance for the Order to those in Syria and Palestine.

Fig. 2

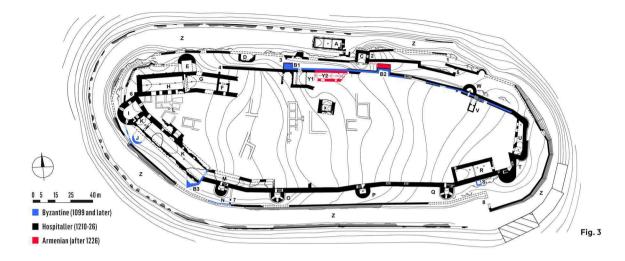


View of the castle from SE. (Phot. Mathias Piana).



Plan of the town (based on Google Earth view):

- 1. Roman temple, 2. remains of colonnaded street, 3. Byzantine cistern, 4. location of hippodrome,
- 5. Roman bridge, 6. assumed location of Hellenistic polis, 7. Roman theatre, 8. medieval castle.



Plan of the castle (after Edwards with corrections): 1. outer gate, 2. main portal, 3. lists gate, 4. location of inner gate, 5. to 8. postern gates, A. cistern, B1. to B3. Byzantine towers, C. gate tower, D. chapel, E. NW tower, F. to H. NW halls, I. W tower, J. Byzantine (?) tower, K. SW hall, L. cistern, M. S hall, N. to Q. towers of south front, R. cistern, S. cistern outlet, T. E towers, U. E hall, V. interior building, W. NE tower, X. interior hall, Y1. to Y2. N halls, Z. moat.



Gate tower from E, in 1994 (left), in 2012 (right) (Phot. Mathias Piana).

Fig. 4



W section of N enceinte, looking W: Byzantine main wall and tower B1 (top left), fore-wall (bottom left) and moat (bottom right).

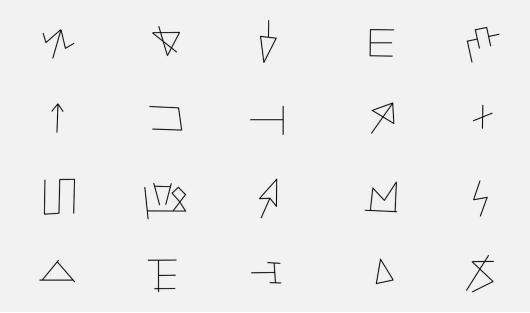


Fig. 6

Mason's marks from the castle (in the first two rows frequently found Armenian marks).



W section of S enceinte from SW: 1. later fore-wall, 2. earlier fore-wall, 3. glacis, 4. Byzantine(?) round tower, 5. tower I, 6. latrine outlet.



S section of enceinte and moat, looking W towards tower P.

Fig. 7

Fig. 10



Tower N (left) with plinth and scarp.



Ascalon: tower at the middle of the land wall, from N.

### References

- ALISHAN, Léonce M. (1899) Sissouan ou le Arméno--Cilicie: description géographique et historique. Venezia: Lazar.
- BEAUFORT, Francis R. (1817) Karamania, or, a brief description of the South Coast of Asia-Minor and of the remains of antiquity: with plans, views, &c. collected during a survey of that coast, under the orders of the lords commissioners of the admiralty, in the Years 1811 & 1812. London: R. Hunter.
- **BEKKER, Immanuel (1853)** *Michaelis Attaliotae Historia.* Bonn: Weber.
- **BILLER, Thomas; RADT, Timm (2009)** Kürsat: eine unerforschte Burg der Kreuzfahrerzeit. *Istanbuler Mitteilungen*. Istambul. 59, pp. 359–381
- BONGARS, Jacques (1611) Liber secretorvm fidelivm crvcis super Terræ Sanctæ recvperatione et conservatione quo et Terræ Sanctæ historia ab origine & eiusdem vicinarumque pruinciarum geographica descriptio continetur. Hannover.
- BONGARS, Jacques (1611) Gesta Dei per Francos siue orientalivm expeditionvm, et regni Francorvm Hierosolimitani historia. Hanoviae: typis Wechelianis apud heredes Ioan Aubrii Wechel.
- BORAN, Ali (2012) 2011 Yılı Silifke Kalesi Kazı Çalış-maları. Excavations at Silifke Citadel. *ANMED News of Archaeology from Anatolia's Mediterranean Areas*. Antalya. 10, pp. 99–102.
- **BRAND, Charles M., ed. (1976)** John Kinnamos *Deeds of John and Manuel Comnenus*. New York, NY: Columbia University Press.
- **BRINDLE, Steven (2012)** *Dover Castle.* London: English Heritage.
- **BUDDE, Ludwig (1972)** Antike Mosaiken in Kilikien. Band 2, die heidnischen Mosaiken. Recklinghausen: Aurel Bongers.
- BUDGE, Ernest A.W. (1932) The Chronography of Gregory Abû'l Faraj, the Son of Aaron, the Hebrew Physician, Commonly Known as Bar Hebraeus, Being the First Part of His Political History of the World, 2 vols., London: Oxford University Press.
- **CERVELLIN-CHEVALIER, Isabelle, ed. (2002)** Une histoire du doux pays de Chypre: traduction du manuscrit de Venise de Leontios Machairas. Nancy: Institut d'Études Néo-Helléniques.

- CHEVALIER, Marie-Anna (2009) Les ordres religieux--militaires en Arménie cilicienne. Templiers, hospitaliers, teutoniques & Arméniens à l'époque des croisades. Paris: Geuthner.
- **COLLIGNON, Maxime (1880)** Notes d'un voyage en Asie-Mineure. II. Adalia, la Cilicie-Trachée, le Taurus. *Revue de Deux Mondes*. Paris. 38, pp. 891–917.
- **DE GOEJE, Michael J. (1889)** *Liber viarum et regnorum*. Leiden: Brill.
- **DÉDÉYAN, Gérard (1980)** La chronique attribuée au Connétable Smbat. Paris: Geuthner.
- **DUFAŸ, Bruno (2009)** Premier bilan des fouilles de la forteresse de Chinon, 2003–2009. *Revue Archéologique du Centre de la France*. Tours. 48, pp. 249–252.
- DULAURIER, Édouard (1869a) Extrait de l'Histoire d'Arménie de Guiragos de Kantzag. Recueil des Historiens des Croisades. Documents arméniens, vol. 1, Paris, pp. 411-430.
- **DULAURIER, Edouard (1869b)** Chronique du Royaume de la Petite Arménie, par le Connétable Sĕmpad. *Recueil des Historiens des Croisades. Documents Arméniens*, vol. 1, Paris, pp. 605–680.
- **EDWARDS, Robert W. (1987)** *The fortifications of Armenian Cilicia*. Washington D.C.: Dumbarton Oaks Research Library and Collection.
- **EICKHOFF, Ekkehard (1977)** Friedrich Barbarossa im Orient: Kreuzzug und Tod Friedrichs I. Tübingen: Wasmuth.
- **EYDOUX, Henri-Paul (1982)** Les châteaux du soleil. Forteresses et guerres de croisés. Paris: Perrin.
- **FAUCHERRE, Nicolas (2004)** La forteresse de Shawbak (Crac de Montréal), une des premières forteresses franques sous son corset mamelouk. In FAUCHERRE, Nicolas; MESQUI, Jean; PROUTEAU, Nicolas, eds. *La fortification au temps des Croisades: actes du Colloque International de Parthenay.* Rennes: Presses Universitaires de Rennes, pp. 43–66.
- **FOSS, Clive (1982)** The defenses of Asia Minor against the Turks. *The Greek Orthodox Theological Review.* Brookline, MA. 27, pp. 145–205.
- **GLYKATZI-AHRWEILER, Hélène (1960)** Les forteresses construites en Asie Mineure face à l'invasion Seldjoukide. In DÖLGER, Franz; BECK, Hans-Georg, eds. *Akten des XI. Internationalen Byzantinistenkongresses München 1958.* München: Beck, pp. 182–189.

- GOITEIN, Shelomo D. (1964) A letter from Seleucia (Cilicia) dated 21 July 1137. Speculum. Cambridge. 39, pp. 298–303.
- HANISCH, Hanspeter (2009) Über das Wirken armenischer Bauhandwerker im frühen Mittelalter. In memoriam Josef Strzygowski. Bregenz: Vorarlberger Landesmuseum.
- **HEBERDEY, Rudolf; WILHELM, Adolf (1896)** Reisen in Kilikien, ausgeführt 1891 und 1892 im Auftrage der Kaiserlichen Akademie der Wissenschaften. Wien: Österreichische Akademie der Wissenschaften.
- **HÉLIOT, Pierre (1964)** Le Château Gaillard et les forteresses des XIIe et XIIIe siècles en Europe occidentale. *Château Gaillard, 1: Colloque des Andelys: 30 mai–4 juin 1962.* Caen: Université, pp. 53–75.
- HELLENKEMPER, Hansgerd (1976) Burgen der Kreuzritterzeit in der Grafschaft Edessa und im Königreich Kleinarmenien. Studien zur historischen Siedlungsgeographie Südost-Kleinasiens. Bonn: Habelt.
- **HILD, Friedrich; HELLENKEMPER, Hansgerd (1990)** *Kilikien und Isaurien*. 2 vols., Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- **iNALCIK, Halil (1989)** The Ottoman Turks and the Crusades, 1451–1522. In ZACOUR, Norman P.; HAZARD, Harry, W., eds. *The impact of the Crusades on Europe*. Philadelphia, PA: University of Pennsylvania Press, pp. 311–353.
- IRBY, Charles, MANGLES, James (1823) Travels in Egypt and Nubia, Syria and Asia Minor during the years 1817 and 1818. London: T. White & Co.
- **KEIL, Josef; WILHELM, Adolf (1931)** *Denkmäler aus dem rauhen Kilikien*. Manchester: The Manchester University Press.
- KRUTA, Venceslas; FLEURY, Michel (1985) Premiers résultats des fouilles de la cour carrée du Louvre. Comptes-rendus des séances de l'Académie des Inscriptions et Belles-Lettres. Paris. 129:4, pp. 649–672.
- LABORDE, Léon de (1838) Voyage de l'Asie mineure par Mrs. Alexandre de Laborde, Becker, Hall, et Léon de Laborde. Paris: Firmin Didot.
- LANGENDORF, Jean-Jacques; ZIMMERMANN, Gérard (1964) – Trois monuments inconnus des croisés. I. La Chapelle du château de Montréal (Jordanie). II. L'octogone du château de Tripoli (Liban). III. La forteresse de Séléfké (Turquie). Genava. Genève. 12, pp. 123–165.

- LANGLOIS, Victor (1954) Inscriptions grecques, romaines, byzantines et arméniennes de la Cilicie. Paris:

  A. Leleux.
- **LANGLOIS, Victor (1859)** Les ruines de Séleucie dans la Cilicie-Trachée. *Revue Archéologique*. Paris. 15:2, pp. 748–754.
- LANGLOIS, Victor (1861) Voyage dans la Cilicie et dans les montagnes de Taurus, exécuté pendant les années 1852– -1853 par l'ordre de l'Empereur et sous les auspices du Ministre de l'Instruction Publique. Paris: Benjamin Duprat.
- **LANGLOIS, Victor (1863)** *Le trésor des chartes d'Arménie ou cartulaire de la chancellerie royale des Roupéniens.* Venezia: Imprimerie Arménienne de Saint Lazare.
- **LILIE, Ralph-Johannes (1993)** Byzantium and the Crusader States, 1096–1204. Oxford: Oxford University Press
- **MAGOULIAS, Harry J. (1984)** *O City of Byzantium: Annals of Niketas Choniates.* Detroit, MI: Wayne State University Press.
- **MESQUI, Jean; TOUSSAINT, Patrick (1990)** Le château de Gisors aux XIIe et XIIIe siècles. *Archéologie Médiévale*. Caen. 20, pp. 253–317.
- **MESQUI, Jean (1991)** Châteaux et enceintes de la France médiévale. De la défense à la résidence. Vol. I: Les organes de la défense. Paris: Picard.
- MORRAY, David W. (1997) Silifke. In *The Encyclopedia* of Islam, New Edition. Vol. IX, Leiden: Brill, p. 611.
- MÜLLER-WIENER, Wolfgang (1966) Castles of the Crusaders. London: Thames & Hudson.
- ÖZKAYA, İsmail Y. (2006) Conservation Problems of Four Sites in Cilicia. In Management and Preservation of Archaeological Sites, 4th Bilateral Meeting of ICO-MOS TURKEY - ICOMOS GREECE, 29 April - 2 May 2002, Side (Antalya-Turkey). Taksim, Istanbul: Side Foundations for Education Culture and Art, pp. 23-33.
- PIANA, Mathias (2007) Frühe Zwinger und Vorbefestigungen an Burgen der Kreuzfahrerzeit. In MÜLLER, Heinz; SCHMITT, Reinhard, eds. Zwinger und Vorbefestigungen. Tagung vom 10. bis 12. November 2006 auf Schloss Neuenburg bei Freyburg (Unstrut). Langenweißbach: Beier & Beran, pp. 53–62.
- PIANA, Mathias (2008) Die Deutschordensburg Montfort (Qal'at al-Qur'ain). In PIANA, Mathias, ed. Burgen und Städte der Kreuzzugszeit. Petersberg: Michael Imhof, pp. 343–355.

### Notes

- POSSINUS, Petrus (1864) Annæ Comnenæ Porphyrogenitæ Cæsarissæ Alexias. Patrologia Graeca. Ed. Jacques P. Migne. Paris: Migne, cols. 59–1244.
- PRINGLE, Denys (1984) King Richard and the Walls of Ascalon. Palestine Exploration Quarterly. London. 116, pp. 133–147.
- **RAMSAY, William M. (1890)** *The Historical Geography of Asia Minor.* London: Royal Geographical Society.
- RAMUSIO, Giovanni Battista (1559) Delle navigatione et viaggi, vol. 2, Venezia: Giunti, f. 91v.–112r.
- RILEY-SMITH, Jonathan (1967) The Knights of St. John in Jerusalem and Cyprus, 1050–1310. London, New York, NY: Macmillan; St. Martin's Press.
- RÖHRICHT, Reinhold (1893–1904) Regesta Regni Hierosolymitani (MXCVII–MCCXCI). 2 vols., Innsbruck: Libraria Academica Wagneriana.
- **ROLL, Israel (2008)** Der frühislamische Basar und die Kreuzfahrerburg in Apollonia-Arsūf. In PIANA, Mathias, ed. *Burgen und Städte der Kreuzzugszeit*. Petersberg: Michael Imhof, pp. 252–262.
- **TAŞKIRAN, Celal (1994)** Silifke (Seleucia on Calycadnus) and environs. Ankara: SIM Matbaacılık.
- **TEKEYAN, P. Pascal (1939)** Controverses christologiques en Arméno-Cilicie dans la seconde moitié du XIIe siècle (1165–1198). Roma: Pontificium Institutum Orientalium Studiorum.
- **TEXIER, Charles (1862)** Asie Mineure. Description géographique, historique et archéologique des provinces et des villes de la Chersonnèse d'Asie. Paris: Firmin Didot.
- TURNER, Rick; JOHNSON, Andy, eds. (2006) Chepstow Castle: its History & Buildings. Almeley: Logaston Press.
- YILDIZ, Sara Nur (2005) Reconceptualizing the Seljuk-Cilician Frontier: Armenians, Latins and Turks in Conflict and Alliance during the Early Thirteenth Century. In CURTA, Florin, ed. - Borders, barriers, and ethnogenesis: frontiers in Late Antiquity and the Middle Ages. Turnhout: Brepols, pp. 91–120.
- ZIMMER, John; MEYER, Werner; BOSCARDIN, Letizia (2011) – Krak des Chevaliers in Syrien. Archäologie und Bauforschung 2003 bis 2007. Braubach: Deutsche Burgenvereinigung.

- 1 For the history of the site see Edwards, 1987, p. 228, nn. 3 and 4 (summary of earlier works), and additionally: Hild & Hellenkemper, 1990, pp. 402–406; Lilie, 1993, pp. 108–110, 117, 253; Morray, 1997.
- 2 Ibn Khurdādhbih wrote 847 in his kitāb al-masālik wa l-mamālik (ed. and trans. De Goeje, 1889, p. 80) that the governor of that province was in charge of guarding the Cilician Gates and that it comprised ten other fortified places. For 879 it is recorded that the nobility of the town fought against Arab invaders: Bar Hebraeus, Chronicle, trans. Budge, vol. I 1932, p. 148.
- 3 Between 927 and 934, during the reign of emperor Romanos I Lekapenos, the *kleisoura Seleukeia* was converted into a theme: Hild & Hellenkemper, 1990, p. 403.
- Anna Comnena, Alexias, ed. Possinus, 1864, col. 857; Edwards, 1987, p. 221, has 1104, obviously mistaken by Anna Comnena's confused chronology. For a conclusive reconstruction of the chronological sequence of the events see Lilie, 1993, pp. 262, 264–265, 274.
- 5 Glykatzi-Ahrweiler, 1960, p. 185.
- **6** Lilie, 1993, pp. 107–108.
- 7 John Kinnamos, Epitome, trans. Brand, 1976, pp. 21–22; Niketas Choniates, Chronike Diegesis, trans. Magoulias, 1984, pp. 13–14.
- 8 It is recorded that the mountainous hinterland of the town was settled by Armenians as early as 1069. According to Michael Attaleiates, *Istoria*, ed. Bekker, 1853, p. 137, Emperor Romanos IV Diogenes ordered the Armenians from the mountains of Selefkia to assault a Seljuk detachment, which fled from Ikonion to Cilicia.
- 9 Goitein, 1964.
- 10 Kirakos of Gandzag, History of Armenia, trans. Dulaurier, 1869, p. 416. It is not probable that the Seleucia mentioned there is Seleucia Pieria, the harbour of Antioch, as the southernmost place held by Thoros was Alexandreta, the Iskenderun of today.
- 11 John Kinnamos, Epitome, trans. Brand, 1976, p. 137.
- 12 Tekeyan, 1939, p. 39.
- 13 Sempad the Constable, Chronicle, trans. Dédéyan, 1980, p. 65.
- 14 Eickhoff, 1977, pp. 158-162.
- **15** Sempad the Constable, *Chronicle*, trans. Dédéyan, 1980, p. 79.

- 16 Langlois, 1863, pp. 112–114: Letter of Levon II from April this year to pope Innocent III, in which he refers to the donation. The original charter is not preserved. Innocent confirmed the donation on 3 August this year: Ibid., pp. 114–115.
- 17 For the background of these events see Riley-Smith, 1967, pp. 153–157; Yildiz, 2005, pp. 99–101. The Hospitallers had properties in the area since 1149: Röhricht, 1893, pp. 63–64 (no. 253).
- 18 The first castellan of Seleukia was Heymericus de Pax (Langlois, 1863, pp. 116, 133), the former castellan of Margat (Syria), mentioned in 1206: Röhricht, 1904, p. 53 (no. 817a). The second castellan was Feraldus de Baras, mentioned in 1214 (Langlois, 1863, pp. 123, 125). In 1226, on the occasion of the restitution of the place to the Armenians, Bertrand appears as castellan: Sempad the Constable, *Chronicle*, trans. Dulaurier, 1869, p. 648.
- 19 Hild & Hellenkemper, 1990, p. 367. The castle is an Armenian construction, which may well have been erected in the late 12th century, when it was owned by Baron Henry.
- 20 Hild & Hellenkemper, 1990, p. 309 (Komardias). Contrary to the proposed location near Yeşilovacık, where no suitable remains are preserved, there is more evidence that the fortification was located on the Ovacık Peninsula east of it, where two walls of ancient Aphrodisias (Ibid., pp. 195–196) run across the peninsula. The eastern harbour of the peninsula was known in the Middle Ages as Porto Cavaliere, which might allude to the Hospitaller Knights. Another possibility is Dana (or Kargıncık) Island further east, the location of ancient Pityussa (Ibid., p. 380), known in the medieval period as Provensale or Portus Prodensalium: Marino Sanudo, Secreta fidelium crucis, ed. Bongars, 1611, p. 89. Beaufort saw a citadel on the highest peak of the island in 1812: Beaufort, 1817, pp. 206–208.
- 21 He appears 1198 as their lord in the *Coronation List*: Sempad the Constable, *Chronicle*, trans. Dédéyan, 1980, p. 79.
- 22 Langlois, 1863, pp. 115–117. It seems to have been later occupied by Levon, as it was re-conquered by sultan Kayka'ūs in 1216: Sempad the Constable, Chronicle, trans. Dulaurier, 1869, p. 644. If the Hospitallers ever exerted their rights on Laranda remains doubtful, as it was too far away from their main area of interest.

- 23 Sempad the Constable, Chronicle, trans. Dulaurier, 1869, p. 646. The Recueil des Historiens des Croisades edition is used here, as it includes additional information from the Echmiadzin manuscript of the Chronicle.
- 24 Sempad the Constable, *Chronicle*, trans. Dulaurier, 1869, p. 645, under the Armenian year 665 (1216–17). The campaign, which was led by Kayqubād's commander and governor of Antalya, Mubāriz al-Dīn Er-Tokush, however occurred in 1225: Yildiz, 2005, pp. 108–109.
- 25 Sempad the Constable, Chronicle, trans. Dulaurier, 1869, p. 648; Kirakos of Gandzag, History of Armenia, trans. Dulaurier, 1869, pp. 428–429; Barhebraeus, Chronicle, trans. Budge, vol. I 1932, pp. 381, 389–390; A.S. Matevosyan, Colophons de manuscripts arméniens du XIIIe siècle, Col. 122–124, p. 166 (1230), trans. Chevalier, 2009, p. 758.
- 26 Sempad the Constable, Chronicle, trans. Dédéyan, 1980, pp. 108, 110.
- 27 Leontios Machairas, *Chronicle*, trans. Cervellin-Chevalier, 2002, p. 72.
- **28** After its conquest by a Crusader fleet in 1473, it was held by Kasım of Karaman until 1475: Inalcik, 1989, p. 328.
- 29 Giosafat Barbaro, *Il viaggio della Tana, & nella Persia*, ed. Ramusio, vol. II 1559, f. 100v.
- 30 Evliya Çelebi, Seyahatname, trans. Taşkiran, 1994, p. 36.
- **31** Beaufort, 1817, pp. 213–218.
- 32 Irby & Mangles, 1823, pp. 522-524.
- 33 Laborde, 1838, pp. 128-130.
- **34** Langlois, 1859, 1861, pp. 185–192.
- **35** Texier, 1862, pp. 724–725.
- 36 Heberdey & Wilhelm, 1896, pp. 100-108.
- **37** Hellenkemper, 1976, pp. 249–254; Edwards, 1987, pp. 221–229.
- **38** Özkaya, 2006, pp. 26–27.
- 39 Boran, 2012.
- **40** Fedden & Thomson, 1957, p. 103.
- 41 Edwards, 1987, p. 228.
- **42** Foss, 1982, p. 159; Hild & Hellenkemper, 1990, p. 405.

- 43 For the topography and the monuments of the town see Beaufort, 1817, pp. 213–217; Laborde, 1838, pp. 128–130; Langlois, 1859, 1861, pp. 187–189; Texier, 1862, p. 725; Collignon, 1880, pp. 909–910; Ramsay, 1890, pp. 379–380; Heberdey & Wilhelm, 1896, pp. 100–105; Keil & Wilhelm, 1931, pp. 3–8; Budde, 1972, pp. 153–158; Hild & Hellenkemper, 1990, pp. 404–405; Taşkiran, 1994, pp. 26–34.
- 44 Laborde, 1838, p. 130. Budde, 1972, p. 55, mentions round towers. Laborde, however, depicts rectangular towers at the eastern section on his plan of the town: Ibid.: Pl. LXXXI.148.
- 45 This is also attested by Heberdey & Wilhelm, 1896, p. 103, who saw the remains in 1891.
- **46** Laborde, 1838, p. 130 and Pl. LXXXI.148; Taşkiran, 1994, p. 37.
- **47** According to Laborde, the outer wall of the stadium at the side opposite the river formed a section of the town wall there: Laborde, 1838, p. 130.
- 48 Budde, 1972, p. 155. The gate may have been located in today's Cavit Erdem Caddesi, the former Anamur Yolu, representing the ancient route from Taşucu (ancient Holmoi) to the town.
- 49 For an architectural survey see Keil & Wilhelm, 1931, pp. 4-6.
- 50 This amounts to a capacity of 12,000 m<sup>3</sup>.
- **51** Laborde, 1838, pp. 129–130; Langlois, 1854, p. 4; Keil & Wilhelm, 1931, pp. 7–8.
- 52 A short colonnaded section of the latter is preserved in the yard of the Cumhuriyet İlköğretim Okulu (Public Primary School) near the Mirza Bey Caddesi.
- **53** The Greek text of the *Alexias* (ed. Possinus, 1864: col. 857) leaves no doubt that she did not mean the ditches around the castle, a hitherto ignored fact.
- 54 Forearlier descriptions of the castle see Fedden & Thomson, 1957, pp. 103–105 (mistakenly labelled as Camardesium); Langendorf & Zimmermann, 1964, pp. 161–165; Müller-Wiener, 1966, pp. 80–81; Hellenkemper, 1976, pp. 251–254; Eydoux, 1982, pp. 370–372; Edwards, 1987, pp. 224–229; Hild & Hellenkemper, 1990, p. 405; Taşkiran, 1994, pp. 34–37;
- 55 Including the fore-walls but without the ditch. Adding the latter the dimensions are 330 x 130 m.

- 56 The fore-wall, which surrounds the main wall at all sections, is ca. 3 to 14 m distant from the main wall. It had a thickness of 1.5–1.9 m (north side), its parapet 0.8 m. Edwards, 1987, p. 22, regards its southern sections merely as a revetment wall of the moat. At places however, where pieces of the glacis have fallen off, it becomes clear that the fore-wall was built first, and the glacis attached to it in a second step. An early depiction of the castle, although somewhat schematic, shows a proper fore-wall running around its eastern corner, where today a restaurant is located: Alishan, 1899, p. 333. The same is shown on the earliest plan: Fedden & Thomson, 1957, p. 103 Fig. XI.
- 57 The best-preserved remains are on the north-west side.
- 58 Giosafat Barbaro, Il viaggio della Tana, & nella Persia, ed. Ramusio, vol. II 1559, f. 100v: "Climbing further up you can find the gates of the first wall, which are almost on top of the hill. They have a tower on each side and they are made of iron with no timber, ca. fifteen feet high and half the size large. They are so well made that they look like they were made of silver and they are very big and strong." (Translation by Elena Bellomo).
- 59 Edwards, 1987, p. 225, denominated this outer wall as an 'outwork', although there is no doubt that it delimited a barbican, a characteristic element, especially in the Crusader period, to protect the gate: Piana, 2007.
- 60 The *khachkar* is framed by a pointed arch. The central cross has been erased save two rings of the foot resting on a graded pedestal. At either side of the foot a rosette is placed, while the central part of the cross is surrounded by and three Armenian letters, of which only a capital letter ça is clearly identifiable. The *khachkar* has a counterpart over the main entrance at the land castle of Korykos, showing similar rosettes around the central cross.
- 61 The then complete inscription was first published by Beaufort, 1817, p. 212. See further Langlois, 1854, pp. 53–54 no. 175; Alishan, 1899, p. 331. The recent reconstruction of the lower part of the inscription plate is too short.
- **62** The first one who realised that the basic structure is a Byzantine castle which was built not before the 11th century was Charles Texier: Texier, 1862, p. 725.
- 63 Hellenkemper, 1976, p. 252.
- 64 Boran, 2012, p. 99.

- **65** This hypothesis can only be elucidated by further excavations. If there was a postern in this short wall stretch, by analogy with the barbican in front of gate tower C, cannot be derived from the exposed remains.
- **66** The projecting part was solid, indicated by its massive rubble core.
- 67 Only Langendorf & Zimmermann, 1964, p. 162, Pl. VIII (tower 17), 165, mention a tower there, without further specification.
- **68** This was ignored by Edwards, 1987, p. 227, who regarded it as a postern.
- 69 For a detailed description of the structures see Langendorf & Zimmermann, 1964, pp. 155–165, Hellenkemper, 1976, pp. 251–254, Edwards, 1987, pp. 224–229, Hild & Hellenkemper, 1990, p. 405.
- 70 The section of the glacis around the eastern end of the castle, where the sloping rock is revetted with smaller blocks less regularly coursed, represents perhaps an earlier building phase.
- **71** For a comprehensive overview see Hanisch, 2009, pp. 11–16.
- 72 Edwards, 1987, p. 228.
- 73 Edwards, 1987, p. 228, considers the plan completely different from that of Korykos, an opinion which cannot be maintained in view of the aforementioned findings and the fact that Korykos is a lowland castle.
- 74 That a genuine fore-wall surrounds the main wall on all sides can be derived from the meanwhile numerous spots where natural erosion caused breaches providing insight into the wall structure.
- 75 The fore-wall had an offset at this point, indicated on the earliest plan of the castle: Fedden & Thomson, 1957, p. 103 Fig. XI.
- **76** Faucherre, 2004.
- 77 Examples for castles with moats at hilltop level are Crac des Chevaliers, Margat, Qal'at Shīrkūh (Palmyra), Qal'at Shumaymīs (all Syria), Montpèlerin/Tripoli (Lebanon) or Qal'at al-Rabad /'Ajlūn (Jordan). The Syrian citadels of Aleppo, Hārim, Homs and Hama had moats at the bottom of the castle hill, as well as Crusader castles such as Turbessel (Turkey), Toron or Beaufort (both Lebanon).
- 78 Examples are Hromgla (Rumkale) or Anavarza.
- 79 This observation has been ignored by earlier explorers of the castle.

- 80 The tower was recently completely restored, comprising a reconstruction of the lost outer portal and the parapet. The observations presented here are based on investigations prior to this (1994 and after).
- 81 For an overview see Hanisch, 2009, pp. 10-11.
- **82** The *pied du roi* (abbr. p) equals 32.659 cm. Six *pieds* amount to one *toise* (abbr. t) of 1.959 m.
- 83 One of the very few examples is the south tower of Savranda Kalesi.
- 84 Pringle, 1984, p. 142.
- 85 Zimmer, Meyer & Boscardin, 2011, pp. 263–266.
- 86 Biller & Radt, 2009, pp. 370-378.
- 87 Piana, 2008, pp. 347-349.
- 88 Roll, 2008, pp. 256-261.
- 89 Dufaÿ, 2009; Mesqui & Toussaint, 1990.
- 90 Brindle, 2012, 23-31. While the keep, the inner bailey wall and the northern enceinte are studded with rectangular towers, at the western enceinte the more advanced model of the D-shaped tower rising from a plinth was implemented.
- 91 Turner & Johnson, 2006, pp. 51–70. The middle and the lower bailey with its D-shaped and round towers were dated according to a dendrochronological analysis of the preserved doors of the main gatehouse.
- 92 Héliot, 1964.
- 93 On which see Mesqui, 1991, pp. 162–175.
- 94 Kruta & Fleury, 1985, pp. 657-659.
- 95 Well-preserved examples are for instance Carcassonne (main wall of the Cité), Senlis (enceinte Gallo-Romaine), Pevensey, Portchester, and Burgh Castles. For a more thorough discussion of the development see Turner & Johnson, 2006, pp. 81–90 (chapter by Richard Avent: William Marshal's castle at Chepstow & its place in military architecture).
- **96** Hellenkemper, 1976, pp. 252–253, identified forms and elements of both spheres at the castle of Silifke.

- 97 For example at tower E, where the dimensions can be well expressed in the Armenian foot (*otn*; abbr. o) of 32.06 cm, which seems to be used here. The outer width of the tower is 11.20 m (35 o), while the width of its chamber is 6.10 m (19 o). At the towers on the south front the dimensions can neither be expressed in the known Armenian nor in commonly used Western units. For the assessment of their outer dimensions, however, their bases have to be exposed.
- 98 Hanisch, 2009, pp. 39-44.
- 99 The origins of these tower forms are discussed in Biller, 2006, pp. 168–181, however ignoring the 12th-century development in Western Europe and thus mislead in some conclusions. At Silifke, however, a collaboration between Armenians and Hospitallers is assumed.
- 100 For example at the castles of Gökvelioğlu and Tumlu. Toprakkale does not count here, as its halls are mainly Mamluk additions.
- **101** The outer dimensions of K cannot be measured without exposing the ground walls.
- 102 A peculiar case is the area around the north-west corner of hall H, delimitated by the north-western flank of tower I and a wall starting from here running around the corner of H. This space was once covered by a vault, as the preserved remains indicate. The vaulting may have been an Armenian addition. The aforementioned wall abuts on tower I with a seam, but it represents the castle's main wall in this section.
- 103 The hall has an overall width of 7,38 m (23 o), an internal width of 4,18 m (13 o) and a wall thickness of 1,6 m (5 o). The adjoining hall Y1 has an inner width of 7,20 m (22 p), a measure which cannot be expressed in Armenian units.
- 104 Langlois, 1854, p. 54, no. 176; Keil & Wilhelm, 1931, p. 238. The heavily weathered inscription may be read thus: "This (work) is dedicated to King Hethum, the ..., for the benefit of his sons and the people, ... for their lifetime". I am indebted to Sevak Hovhannisyan for the translation. Hethum may correspond to Hethum I (1226–1270), referred to in the inscription over the main gate.