

tower. The manuals make a clear distinction between towers and tortoises and the *Alexiad* is unprecedented and appears incorrect in these usages.¹⁵ A related passage is discussed below.

The *Alexiad* provides in Book XI a highly select description of the Crusader siege of Nicaea in spring of 1097, focusing heavily on an attempt to undermine a tower. The western sources describe a variety of such attempts to sap the walls, which the *Alexiad* perhaps briefly alludes to in noting that the Crusaders "allotted towers and battlements to certain sections of their forces" on the assumption that rivalry would result in a vigorous pursuit of the siege. The *Alexiad*'s focus is solely on the attempt of Raymond of St. Gilles (the role also played in this same operation by Adhemar, Bishop of Puy is not mentioned, perhaps to elide that of Raymond) on the so-called Gonatas ("Kneeling") tower.¹⁶ The selection is perhaps influenced in part by the fact that an attempt on the same tower had featured in the revolt of Bardas Skleros in the 980s, on which the text provides a brief digression and hence a link to Byzantine history, and the opportunity for the humorous comment that the crusader attempt caused the tower, which Skleros had partially undermined, to lean still further, and hence deserve its name even more.

The Western sources provide detailed information on this specific attempt of St. Gilles, which differs significantly with what is in the *Alexiad*. The anonymous *Gesta Francorum*¹⁷ mentions sappers who dug to the foundations and inserted beams and pieces of wood, under covering fire from men with crossbows and bows ("arbalistae et sagittarii"); no mention is made of any siege shelter or tower. Raymond of Argilers,¹⁸ chaplain to St. Gilles, says they began to undermine a tower after making a testudo ("facta testudine"). Albert of Aachen¹⁹ says that after making a "vine" testudo ("facta testudine viminea") they undermined the wall with "curved mattocks" ("uncis ligonibus") and created an opening such that two men could enter. William of Tyre²⁰ indicates that they worked "under a most solid testudo" ("sub testudine solidissima") and that with iron tools ("ferreis instrumentis") opened a hole large enough for two

armed men to enter. Finally Guibert of Nogent²¹ makes no mention of any protective shelter, but notes that the miners were defended by men with bows, crossbows and slings ("cum arciballistis et arcubus et balcaris habenae tortoribus"). The sources also indicate that St. Gilles arrived at Nicaea only on May 16 and that the attempt on the Gonatas tower occurred before June 3, leaving at most a seventeen day window for preparation, construction and implementation of the siege engine in question.²²

The *Alexiad* indicates that St. Gilles built a circular tower (μόσυνα κυκλοτερή τεκτηνόμενος) and covered it with hides, and plaited it with withies, presumably "in the middle" (κατὰ δὲ τὸ μέσον λύγους διαπλέξας), although Lieb translates "la face intérieure". The text subsequently notes that St. Gilles put inside it (ἐνὸς τούτου) armed men, described as τεχνοσουλῆτας, to fight those on top of the wall, and others to sap the wall with iron tools. We hear no more of the armed men. The sappers excavate foundation stones, replace them with wooden logs, and upon seeing daylight fire the logs and Gonatas tower leaned still more.

The *Alexiad*'s description here has some unusual features. The text does, as noted, elsewhere employ μόσυν of a tower, and that is apparently the intended usage here, although a "circular" siege tower is not readily paralleled. As noted earlier the *Alexiad* describes Bohemund's tower as constructed "on a four-sided base" and this is consistent with descriptions of mobile towers in the manuals; the text adds that Bohemund's tower was under construction for a year. Again as noted above the reference to a siege tower as a χελώνη is odd. Paul Chevedden has suggested²³ that the tower in question is a "cat-castle", a combined siege tower, with troops at the level of the top of the wall, and sappers' shed, citing as a sole parallel the devices in Philip of Macedon's siege of Echinus. The Western sources, however, clearly do not describe a tower, but rather either omit any reference to a siege engine or refer only to a testudo, which is what one would expect in a sapping operation, adding men with crossbows, bows and slings said to be defending the sappers, weapons appropriate for firing from the ground to drive back defenders on the battlements.²⁴ The *Alexiad*'s epithet for these armed troops, the

Homeric τεχνοσουλῆτας, is problematic in meaning.²⁵ The translators render it with "batterers of the wall",²⁶ "hommes armés pour battre la muraille",²⁷ and "Mauerzerstörer",²⁸ and these men are said to be placed "inside" the device, yet they are also said to fight with the defenders on top of the wall. Presumably the *Alexiad* refers to the same troops said to be providing covering fire mentioned in the Western sources and the Homeric epithet should not be pressed too literally. Also, as R. Rogers notes,²⁹ such sheds as those mentioned in the Western sources protected not only work crews, but also defenders using bows and crossbows. The plaited osiers, whatever their location on the device, seem more appropriate to a tortoise than a tower, and perhaps reflect a confused report recalling the *testudo viminea* (a tortoise with plaited sides) mentioned by Albert of Aachen. I suggest, then, that given the great variance from the Western descriptions and the unusual features and nomenclature of the device in question, the *Alexiad* presents a confused description which is to be taken with skepticism or that given the earlier conflation of siege tower with χελώνη, the term μόσυν here is to be taken as equivalent to a testudo. Notably the *Alexiad* adds after the initial description of the device that "those possessed of more experience of machines call it a tortoise" (ὅν οἱ πλείονα ἐμπειρίαν τῶν μηχανικῶν κεκτημένοι χελώνην καπονομάζουσιν), again suggesting terminological confusion or in this case perhaps the underlying reality.

To move now to siege descriptions in other historians, a comparison of the *Alexiad*'s approach to siege descriptions with that of Leo the Deacon³⁰ (ca. 950–994) is instructive. Leo describes sieges of Candax, Mopsuestia, Antioch, and Preslav, with briefer references to others. At Candax the siege begins with artillery (almost certainly traction trebuchets) hurling stones at defenders on the battlements. A ram, termed by Leo a *helepolis*, is employed and sappers steal into the moat with "stone cutting tools". The ram was achieving some success and the sappers propped their excavation, added kindling, set it afire, and the wall collapsed. Notable here is the simultaneous use of three techniques, artillery, the ram, and the sap, as well as the fact that Leo appropriates with exact verbal repetitions portions of his description from the sixth century historian Agathias' description of Narses' siege of Cumae in 552.³¹ Leo describes at Mopsuestia

a sapping operation with a lengthy tunnel intended by its starting point some distance from the walls to escape the notice of the besieged, removal of the excavated soil which is thrown into the nearby river, the undermining and propping of the wall (but not initial tunnel) and the subsequent firing of the prop and collapse of the wall. At Antioch Leo mentions the use of scaling ladders made to fit exactly the height of the walls. At Preslav the Byzantines use bows, stone-throwing devices, slings and javelins to force the defenders back from the battlements while others sap the wall on ladders.

There are some obvious similarities here with the descriptions in the *Alexiad*, for example, the basics of a sap, the removal of the excavated dirt from the tunnel, the need for precision in measuring siege devices. Yet the differences are striking. Leo uses an earlier historical source for much of his description of the siege of Candax, while a search via the *Thesaurus Linguae Graecae* indicates that, apart from the epithet from Homer and one adjective from Psellus, virtually no comparable verbal similarities from earlier literary or historical writers can be found in the *Alexiad*. Notable also is the *Alexiad*'s use of technical terms of interest in the details of construction, aspects absent in Leo.

Another valuable contrast is provided by John Kinnamos³² (ca. 1143–1185), an eyewitness to the siege of Zeugminon in 1165, which he records. He says (24.1: 19) that a wooden tower (ξύλινον πύργον) was built to allow men to fight directly at the battlements. No aspect of its construction is described nor is it mentioned further. He then notes that the emperor ordered the defensive ditches filled so the machines could cross. There is no mention of filler tortoises at all that is said subsequently is that the attempt failed. He then adds that the Byzantines undermined the walls and used stone-throwers (πετροβόλοι) to smash them. The only detail of the sapping method is the verb υπομοχλεύοντας, "undermining with crowbars" no mention is made of protective shelters or the prop and burn technique. The report concludes with the death of a woman who made obscene gestures from the walls against the Romans and was shot by an archer. The story is suspiciously similar to an incident in Leo the Deacon,³³ so much so that it is almost certainly a literary borrowing. Again by contrast the *Alexiad*'s siege descriptions are notable for their technical detail and lack of literary allusion.

Niketas Choniates (ca. 1155–1217) in his *Historia*³⁴ also records a number of sieges. Like Kinnamos he describes that of Zeugminon (134: 75ff) mentioning that the moat was filled (τὴν τάφρον

15 A similar apparent error occurs later at *Alexiad* XIV: 2, 9–10 in the description of Baldwin's siege of Tyre, where his siege machines, described in all other sources as towers (see R. Rogers, *Latin Siege Warfare in the Twelfth Century* [Oxford, 1997], 79–81) are also called χελώναι.

16 On the tower see C. Foss, *Nicaea: A Byzantine Capital and its Praises* (Brookline, 1996), 48, 92.

17 *Gesta Francorum et altorum Hierosolimitanorum*, ed. and tr. by R. Hill (London, 1962), 15.

18 Raimund de Aguilers canonici Podiensis historia Francorum qui cepervit Iherusalem, *Recueil des historiens des croisades: Historiens occidentaux* (Paris, 1866) III: 239.

19 Alberti Aqueensis, *Historia Hierosolymitana*, *Recueil des historiens des croisades. Historiens occidentaux* (Paris, 1844–1895) IV: 323.

20 Guillaume de Tyr, *Chronique*, ed. R. B. C. Huygens (Turnhout, 1986) I: 206; lines 28–32.

21 Guibert de Nogent, *Des Gesta per Francos et cing autres textes*, ed. R. B. C. Huygens (Turnhout, 1996), 146.

22 Rogers, *Latin Siege Warfare*, 17, 19.

23 P. Chevedden, "The Invention of the Counterweight Trebuchet: A Study in Cultural Diffusion", *DOP* 54 (2000): 71–116, spec. 83.

24 Cf., for example, Leo the Deacon, VIII: 5 (*The History of Leo the Deacon: Byzantine Military Expansion in the Tenth Century*. Introduction, Translation, and Annotations by A.-M. Talbot and D. F. Sullivan with the assistance of G. T. Dennis and S. McGrath [Washington, D.C., 2005]) where at the siege of Preslav the Roman attackers drive defenders back from the battlements "with bows and stone-throwing devices, and with slings and javelins".

25 A Homeric epithet of Ares, it is used earlier (*Alexiad*, II: 1) as an epithet of George Palaeologos and (VI: 13) of Byzantine troops who storm Poimancoon, while Niketas Choniates uses it twice of a battering ram.

26 E. Dawes, *Alexiad of the Princess Anna Comnena* (London, 1928) and E. R. A. Sewter, *The Alexiad, Anna Comnena* (London-New York, 1969).

27 *Alexiad*, ed. and tr. B. Leib (Paris 1937–45).

28 *Alexias, Anna Komnene*, ed. D. Reinsch (Berlin-New York, 2001).

29 Rogers, *Latin Siege Warfare*, 252.

30 See Talbot and Sullivan, *Leo the Deacon*.

31 Ibid., 78, note 41.

32 Ioannes Cinnamus, *Epitome rerum ab Ioanne et Manuele Comnenis gestarum*, ed. A. Meineke (Bonn, 1838); C. Brand, *Deeds of John and Manuel Comnenus by John Kinnamos* (New York, 1976).

33 See Talbot and Sullivan, *Leo the Deacon*, 77, note 37.

34 *Niketae Choniatae Historia*, ed. J. L. van Dieten (Berlin-New York 1975).