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# The Battle of Anglon (540 CE): A Victory of Archery?

by KAVEH FARROKH

**ABSTRACT.** This article provides a Sassanian perspective on the possible battle tactics utilized by Nabades to secure victory against a Romano-Byzantine force at the Battle of Anglon (542 CE). Procopius, as the primary source, appears to attribute Nabades' victory primarily to archery, however the application of archery even if fired at closer ranges would have been most effective against unarmored troops, (i.e. Heruli auxiliaries) thereby questioning the role of this combat arm as the sole element in the securing of the Sassanian victory. Analysis of Sassanian tactics and combat methods would suggest that Nabades was most likely able to secure victory by a combination of archery and close quarters combat integrated with the psychological tactic of surprise in order to maximize the impact of his successful assault against an enemy of larger troop size.

**KEYWORDS:** SĀSSĀNIAN ARMY. BATTLE OF ANGLON. ARCHERY.

## *Introduction: Anglon and the Question of Sāssānian Combined-Arms Doctrine*

**T**his article engages in a reassessment of the battle of Anglon from the Sāssānian perspective of combined-arms operations, by way of analyses of Procopius' account in comparison to reports by primary Iranian sources pertaining to military domains (e.g. *Tir-Yasht*, *Menog-e Xrad*, *Šāhnāme*), descriptions of Sāssānian warfare as provided by primary Roman sources (e.g. Ammianus Marcellinus), and recent archaeological studies (e.g. Vestemin in northern Iran, Dura Europos in Syria, etc.) and ballistic analyses<sup>1</sup>.

Recent scholarship has also reassessed combined-arms warfare in antiquity, as exemplified by Wrightson's study of Hellenic warfare which has recognised

1 Eghdami et al., 2025; Pettigrew & Tayler, 2023; Karamian, Farrokh, Kiapi & Nemati, 2018.

that the coordinated use of multiple combat arms was more commonplace and structurally established than formerly assumed<sup>2</sup>. While Wrightson's research is primarily concentrated on the Hellenic realm, this work has provided a useful comparative framework for reconsidering similar patterns in Sāssānian warfare, notably in environments where topography and tactical sequencing played significant roles.

The Sāssānian success at the Battle of Anglon (543 CE) has been attributed by Procopius of Caesarea to the adept deployment of archery. This is in overall consistency with the traditional Western scholarly interpretation of Sāssānian (and broader pre-Islamic Iranian warfare) as being primarily archery-cavalry centric<sup>3</sup>, an interpretation based upon Roman sources, (i.e. Ammianus Marcellinus, Procopius), which has led to the obfuscation of the complexities of the established tactical tendencies of the Sāssānian *spāh*<sup>4</sup> (army). A closer examination of textual and archaeological sources serves to question Procopius' analysis of the battle, in favor of a more complex Sāssānian tactical approach to warfare characterized by combined arms (archery as a shock arm with infantry and/or cavalry deployed for exploitation and breakthrough), environmental (i.e. terrain) considerations and psychological warfare for the exploitation of the enemy's disarray. In this re-examination, Nabades' victory is outlined not as the primary outcome of Sāssānian archery efficacy but the consequence of a combined battle tactic, in which the ambush is sequentially applied by the initial concentration of close-range archery barrage followed by the sudden deployment of professional close quarters combat infantry. This would be consistent with the establishment of the Sāssānian *spāh* as a professional military organization in which elite cavalry (*savārān*), trained combat infantry (*paighān* and later Dailamite formations), and missile troops were deployed in tactical coordination<sup>5</sup>.

While this study raises questions regarding the sufficiency of Procopius' emphasis on Sāssānian archery, it does not seek to reject his description of the battle at Anglon. Rather, this is a re-examination of the battle within its specific tactical and environmental framework. Procopius may certainly be accurate in describing

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2 Wrightson, 2019, pp.1–15.

3 Shahbazi, 1987, pp.724-730; Shahbazi, 1986, pp.489-499.

4 Howard-Johnston 1995; Edwell 2021.

5 Farrokh 2017; Syvānne 2021.

the prominence of archery; however, narrative compression may serve to inadvertently obscure the full complexity of the battle. The objective of this article is to therefore refine, rather than overturn, the classical account.

### *Background to the Invasion of Persarmenia*

Commagene had been invaded in 542 CE by the forces of the Sāssānian spāh (army) on the orders of Šhāhanshāh Khosrow I (r.531-579 CE) who then ordered his forces to pull back into Adhur Gushnasp in Ādurbādāgān region (historical Azerbaijan province in northwest Iran). This was part of Khosrow I's tactical redeployment towards the Sāssānian objective of invading the Byzantine-ruled territories of Armenia. Emperor Justinian I (r. 527-565 CE) who had engaged in diplomatic negotiations with Khosrow I, was to receive news of the outbreak of a major plague (known as the Justinian Plague) in the spāh as well as outbreak of a major rebellion based in southwest Iran's Khuzestan region against Khosrow I led by his eldest son, prince Anōshazād. Upon receipt of these developments in the Sāssānian empire Justinian I sought to exploit these circumstances by ordering Romano-Byzantine armies stationed in the eastern regions of the realm to launch a major offensive into Persarmenia (Sāssānian ruled territories of Armenia). It was in the context of this Romano-Byzantine invasion in which the Battle of Anglon (543 CE) took place.

The *magister militum per Orientem* (Master of Military in the Orient/East) was Martin and his contingents based in Citharizum, with Valerian the *magister militum per Armeniam* (Master of Military in the Armenia), based near Theodosiopolis who was to be joined with Armenian troops and Narses along with his Herul contingent.

Martin was also supported by contingents led by generals Theoctistus, Ildenger, Adolius and Peter. The primary objective of the Romano-Byzantine offensive was the seizure of Dvin, an important commercial center and capital city of Persarmenia<sup>6</sup>. Once deployed for the invasion, the disparate Romano-Byzantine forces arrived to coalesce upon their crossing of the Sāssānian border into Per-

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6 Syvānne has observed that Valerian and the local Armenian Catholicos and his brother may have been the original planners of the operation as local Christian envoys would often switch sides to the Romano-Byzantines at Dvin (2021, p.238).

sarmenia (Peter was possibly the vanguard of the advance)<sup>7</sup>, with a combined total of 30,000 troops<sup>8</sup>. The Sāssānians had entrusted the Spāh's defense of Dvin<sup>9</sup> to the Sardār (commander) known as Nabades (Nābed) in command of 4000 professional (troops/warriors). Nabades selected the village of Anglon located in mountainous (located approximately 21 kilometers from Dvin)<sup>11</sup> (Map 1) in the ostensible endeavor to rely on an ambush stratagem for confronting the larger Romano-Byzantine force<sup>12</sup>.

### *The Battle of Anglon as narrated by Procopius*

The advance into Sāssānian territory was reportedly disciplined at first, however when situated a day's march to Anglon, the Romano-Byzantines captured a Sāssānian spy who informed them that Nabades and his entire force had retreated from Anglon<sup>13</sup>. This then resulted in the slackening of the cohesion of Romano-Byzantine troops as they dispersed to engage in pillage<sup>14</sup> with professional troops mixing with the baggage train during this phase of the advance towards Anglon<sup>15</sup>. As the Romano-Byzantine force approached close to Anglon, their spies informed the commanders of the presence of Nabades and his forces ready for battle in the village<sup>16</sup>. Despite this information reportedly causing surprise among the Romano-Byzantine ranks, these rapidly adapted by deploying in battle array: Martin and his troops were situated in the center, Peter was in command

7 Syväne, 2021, p.237.

8 Procopius, *History of the Wars*, II, 24.16 (Romano-Byzantine troop strength), 25.9 (Sāssānian troop strength); consult also discussion of the antagonists' troop numbers by Greatrex & Lieu (2002, p.116).

9 Dvin itself was most likely akin to modern day Angel (also: Angegh) located in Armenia's Ayrarat (Ararat) province (Petersen, 2013, p.xxvii) located approximately 35 kilometers south of Yerevan (modern capital of the Republic of Armenia).

10 Etymologically explained as derived from Middle Iranian *duwīn*, *dovīn* [hill] (Minorsky, 1930, p.41; Chaumont, 1986, pp.416-438); in contra (against scholarship explaining the Middle Iranian origins for Dvin) consult Kettenhofen (1996, pp.616-619).

11 Bury, 1958, p.108.

12 Stein, 1949, p.500.

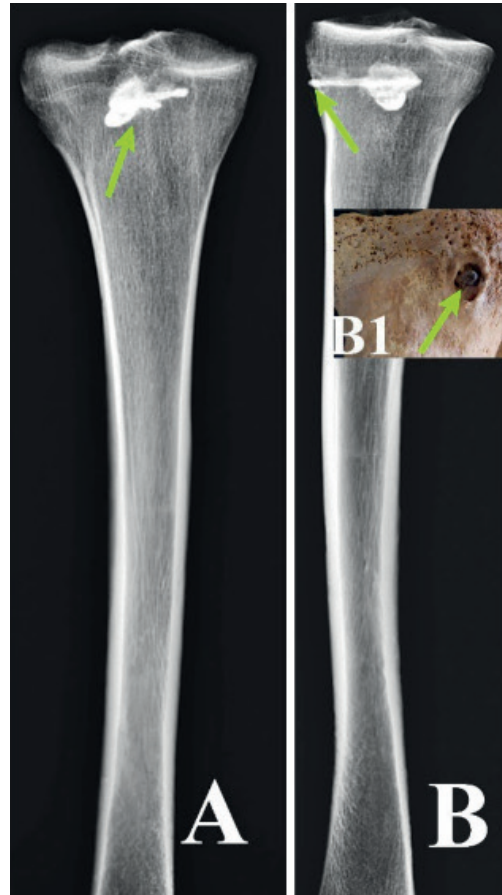
13 Syväne, 2021, p.238.

14 Petersen, 2013, p.543.

15 Procopius, *History of the Wars*, II, 25.14.

16 Procopius, *History of the Wars*, II, 25.15.

Figure 1: Photograph of arrowhead lodged between the epiphysis and metaphysis of the right tibia:  
 (A) Anterior–posterior view,  
 (B) lateral view and (B1) detailed perspective of arrowhead (Eghdami et al, 2025).



of the right wing with Valerianus (joined with pro-Roman Armenian troops and Herul warriors) leading the left wing of the Romano-Byzantine forces<sup>17</sup>.

The Romano-Byzantine forces continued to advance to then halt as they arrived close to the Sāssānian forces. A major liability for the Romano-Byzantine forces prior to the battle was their haste in forming their battle lines along with the uneven characteristics of the terrain<sup>18</sup>. Anglon also featured a fortress built atop a steep mountain encircled by dwellings characterized by closed spaces between them. Nabades' prepared for the Romano-Byzantine's arrival by (1) blockage of entrances to the village of Anglon with a type of barrier composed of carts and stones (2) stationing of troops in the village of Anglon (outside of the fortress) with ambushes prepared in the dwellings and (3) additional forces deployed in the fortress<sup>19</sup>. Organized into smaller areas by Nabades for the upcoming combat<sup>20</sup>, the Sāssānian *artēštārān* (Middle Persian: warriors) had also been instructed

17 Procopius, *History of the Wars*, II, 25.16-17.

18 Procopius, *History of the Wars*, II, 25.18.

19 Petersen, 2013, p.543.

20 Syväne, 2021, p.238.

by their commander to not initiate combat until they themselves were attacked<sup>21</sup>.

The attack was initiated by the Persarmenian Narses from Valerianus' left flank, leading a mix of Herul and Romano-Byzantine troops (possibly also accompanied by pro-Roman Armenian troops). Narses and his troops engaged successfully in close quarters combat with the enemy troops arrayed against them, resulting in the latter's "*flight ... to the fortress*" (as per Procopius)<sup>22</sup>. The "*flight*" however may have been a tactical ruse to draw the Romano-Byzantines in pursuit of them further into the village<sup>23</sup>. Sāsānian military strategies included the tactic of feigning defeat and retreat in the endeavor to lure the enemy into predesignated traps or ambushes<sup>24</sup>. What is evident is that Narses engaged in pursuit with the center and right flanks joining him in battle<sup>25</sup>, but these actions had inadvertently led into Nabades' trap: he emerged unexpectedly from the village to attack, resulting in Narses being fatally wounded (to die shortly after) and the slaying of numbers of troops, notably the Heruli<sup>26</sup> as further examined below.

Procopius has provided a vivid overview of the battle's ensuing developments:

"Then, as was to be expected, great confusion fell upon the Roman army, and Nabedes let out the whole Persian force upon his opponents. And the Persians, shooting into great masses of the enemy in the narrow alleys, killed a large number without difficulty ... And the Romans did not withstand the enemy and all of them fled as fast as they could, never once thinking of resistance and heedless of shame or of any other worthy motive. And this proved a disaster for the Romans so great as to exceed anything that had ever befallen them previously. For great numbers of them perished and still more fell into the hands of the enemy. And their weapons and draught animals which were taken by the enemy amounted to such an imposing number that Persia seemed as a result of this affair to have become richer."<sup>27</sup>

21 Procopius, *History of the Wars*, II, 25.19.

22 Procopius, *History of the Wars*, II, 25.20-21.

23 Syväne, 2021, p.238.

24 Jalali, 1383/2004, p.80.

25 Procopius, *History of the Wars*, II, 25.22.

26 Procopius, *History of the Wars*, II, 25.23-24. Narses, who had been critically struck in the temple, was carried out of the battle by his brother Isaac but was to fatally succumb to his wounds shortly after.

27 Procopius. *De Bellis* (edited by Haury, revised by Wirth, 1962-1964,) Vol. I, *Bellum Persicum*, II. 25.32-34; English translation (Dewing, 1914, *Procopius, History of the Wars*) Vol. I, pp. 485-487, II.25.32-34); Original Greek: καὶ τότε δὴ σύγχεσις μεγάλη τῷ Ῥωμαϊκῷ

As per Procopius description, the comprehensive of Romano-Byzantine forces at Anglon had been primarily (if not singularly) achieved because of Sāsānian archery. Based upon this paradigm, the efficacy of Nabad's ambush had been amplified due to (a) Anglon's narrow streets, allowing for missiles to be fired at closer ranges allowing for enhancement of arrowhead penetration capabilities as a result of firing at closer ranges combined with (b) Sāsānian capabilities at the rapid discharge of large volumes



Figure 2: Sassanian metalwork of the 7<sup>th</sup> Century CE depicting Bahram Gur engaged in the hunt with archery (his female Greek companion Azadeh, seated behind him) (Hermitage -Inv.S-252); note prey with limbs locked with “U-shaped” arrowhead.

of missiles<sup>28</sup>. Nevertheless, despite the failure at Anglon, the Romano-Byzantines did score a degree of (albeit more) modest military success when a separate force led by Peranius and Justus invaded the Taraunon region to seize plunder to then return to Romano-Byzantine territory<sup>29</sup>.

στρατεύματι ἐγένετο, καὶ Ναβήδης ἐπὶ τοὺς πολεμίους ἀφῆκε πᾶσαν τὴν Περσῶν δύναμιν. οἱ δὲ Πέρσαι, εἰς πικνὰ τῶν πολεμίων ἐν ταῖς στενωποῖς τοξεύοντες, πολλοὺς ἀπόνως ἀπέκτεινον. οἱ δὲ Ῥωμαῖοι οὔτε ὑπέμειναν οὔτε ἀντέστησαν, ἀλλ' ἔφρουγον ἅπαντες ὅτι τάχιστα, αἰσχύνης τε καὶ παντὸς ἀξίου λόγου ἀμελήσαντες. καὶ συμφορὰ τοῖς Ῥωμαίοις τοσοῦτον μέγεθος ἐγένετο, ὅσον οὐπω πρότερον οὐδεμία ξυνέβη. πολλοὶ μὲν γὰρ αὐτῶν ἀπώλοντο, πλείους δὲ ἔτι ζῶντες ἐς τὰς τῶν πολεμίων χειράς ἔπεσον· ὄπλα τε καὶ ὑποζύγια τοσαῦτα ἐλήφθη, ὥστε πλουσιωτέραν ἐκ τοῦ πράγματος δοκεῖν γενέσθαι τὴν Περσίαν.

28 Farrokh, 2017, p.71.

29 Syvänne, 2021, p.239.

### *The Role of Sāsānian Archery at Anglon*

In the specific tactical environment of Anglon, archery may indeed have been uniquely effective. Anglon's constricted alleyways imposing the compression of advancing troops to exposure of archery fire from elevated and proximate positions, would have maximized the density and lethality of missile shots. Archery deployed in his type of terrain, would have imposed severe disruption to even heavily armored troops, especially archers would be firing from concealed, adjacent and/or elevated positions. Procopius' emphasis on concentrated Persian archery in this type of urban combat environment cannot be minimized as oratory hyperbole, but as a factual documentation of the seminal role of archery fire in the case of Anglon. However, the tactical dominance of archery in any given phase of combat at Anglon, would not exclude the participation of additional coordinated combat elements. Archery fire, especially in ambush situations, often operated as a preparative and disordering system that preceded exploitation.

Was the spāh's victory at Anglon achieved exclusively by means of archery? This query pertains to the tactical role of archery in the spāh's battle patterns. Archery was accorded a seminal role in Sāsānian warfare (and Iranian martial culture as a whole)<sup>30</sup> as indicated in Zoroastrian sources<sup>31</sup>. Iranian archery has been acclaimed by a number of classical sources, such as Herodotus (in reference to the Achaemenids)<sup>32</sup>, Strabo (during the Parthian era<sup>33</sup>, as well as Procopius<sup>34</sup> and Ammianus Marcellinus who observed the efficacy of Sāsānian archery<sup>35</sup>. The Sāsānians utilized archery for set-piece battles (disruption of enemy formations for the facilitation of the primary strikes of armored cavalry lancers and/or combat infantry) and siege warfare (for engagement in close quarters combat against

30 Modi, 1969, pp.175-186.

31 One example for the reverence of archery is provided in the *Tir-Yasht* which states that "... the mental arrow [speed immeasurable and only mentally conceived]...was of Erekhsha, the swift Iranian archer; the swiftest archer among all Iranians..." (VIII, 6). Another example of the prestige of archery as cited in the Zoroastrian texts is provided by the by the *Menog-e Xrad* which states "...the spirit of complete mindfulness a bow, and the spirit of liberality an arrow..." (XLIII, 1-12).

32 Herodotus, *The Histories*, I, 136.

33 Strabo, XV, III, 18.

34 Procopius, *History of the Wars*, I, 18.

35 Ammianus Marcellinus, *The later Roman Empire*, XXV, I,13.

enemy troops stationed at parapets, fortifications, gates, etc.)<sup>36</sup>.

Archery no matter how well implemented however is beset by its limitations. More specifically, the penetration capabilities of Sāsānian arrowheads were conditional upon two primary factors. The first was the distance over which the missile had been fired; the longer the distance travelled by the propelled missile was proportional to its increasing loss of power due to battlefield atmospheric conditions (e.g. wind, air friction, etc.). As per Procopius' descriptions, Nabades had sprung his ambush at close quarters, therefore Sāsānian missiles were travelling over shorter ranges, thus delivering their arrowheads with greater momentum. The second factor influencing the penetration capabilities of the Sāsānian arrowhead was the targeted enemy's amount and quality of armored defence (or resistivity) against the missile. Pettigrew and Taylor's scientific study in 2023 reconstructing the launches of missiles with (bilobate and trilobate) arrowheads concluded the latter as more efficient (or lethal) against targets with no armor as well as linen, leather armor, wooden shields<sup>37</sup>. Procopius has described the Heruli as having been especially vulnerable to the demonstrations of Sāsānian archery at close ranges:

“... the Eruli who had at the first fallen upon the enemy with Narses and were fighting for the most part without protection. For the Eruli have neither helmet nor corselet nor any other protective armour, except a shield and a thick jacket, which they gird about them before they enter a struggle. And indeed the Erulian slaves go into battle without even a shield, and when they prove themselves brave men in war, then their masters permit them to protect themselves in battle with shields. Such is the custom of the Eruli”<sup>38</sup>.

It is possible that Nabades may have instructed his artēštārān to more comprehensively target Narses' least protected troops, who (as per Procopius' de-

36 Farrokh, Maksymiuk, & Sánchez Gracia, 2018, pp.42, 44, 109; Farrokh, Karamian & Maksymiuk, 2018, pp.49-50, 54.

37 Pettigrew & Taylor, 2023, pp.8-15.

38 *Procopius. De Bellis* (edited by Haurly, revised by Wirth, 1962-1964) Vol. I, *Bellum Persicum*, II.25.26–28); English translation (Dewing, 1914, *Procopius, History of the Wars*) Vol. I, p. 486, at Wars II.25.26–28); Original Greek: ἦσαν δὲ καὶ οἱ Ἑρουλοὶ, οἱ μετὰ Ναρσῆ πρώτοι τοῖς πολεμίοις ἐπέπεσον, γυμνοὶ τὰ πολλὰ μαχόμενοι. οὔτε γὰρ κράνος οὔτε θώρακα οὔτε ἄλλο τι ὄπλον ἔχουσιν, πλὴν ἀσπίδος καὶ χιτῶνος παχέος, ὃν πρὸ τοῦ ἀγῶνος περιζώννυνται. καὶ οἱ δοῦλοι αὐτῶν ἐς τὴν μάχην οὐδὲ ἀσπίδα ἔχοντες ἴσιν· ἐπειδὴν δὲ ἀνδρείως ἐν πολέμῳ δοκιμάσωσιν, τότε δὴ καὶ ἀσπίδα φέρειν οἱ δεσπότηαι συγχωροῦσιν. τοιοῦτος Ἑρουλοῖς ὁ νόμος.

scription) would have been the Heruli entering combat “*without protection*”. If these were Nabades’ instructions, this may have been an attempt at implementing archery also as a shock (or psychological) weapon at Anglon, however the application of archery as both a tactical and psychological weapon would have been more characteristic of Sāssānian siege warfare<sup>39</sup>.

Another question not addressed by Procopius is Sāssānian archery’s usage of various types of arrowheads for differing battlefield applications and how this standard Sāssānian practice may have been applied at Anglon<sup>40</sup>. The Mehr-Yasht for example reports of “*falcon-winged*”, “*iron-bladed*”, “*vulture-feathered*”, “*horn-handled*”, “*lead-poisoned*”, and “*yellow-pointed*” types of arrows<sup>41</sup>. Reports of dart-type missiles utilized by Sāssānian infantry have also been provided by Libanius<sup>42</sup>. While archery proved decisive against the unarmored Heruli, the armor and shields of professional Romano-Byzantine infantry would have afforded considerably more resilience even at closer ranges of Sāssānian missile fire. Pettigrew and Taylor however provide the following caution with respect to the performance of missiles against armored targets:

“Further tests should expand on these results by considering a greater variety of arrow point designs, targets, and various ballistic impacts that likely occurred on ancient battlefields, where arrows of different design and mass were shot from powerful military bows and impacted targets of different compositions at variable distances”<sup>43</sup>.

The researchers’ cautionary note is warranted in the Sāssānian context: there have been no scientific studies to date examining the impacts of different types of Sāssānian arrows on various types of armor in proportion to distances and firing methods utilized. Put simply, this suggests for scientific studies of applied Sāssānian archery factoring statics (notably potential energy prior to missile launch), dynamics (notably velocity, kinetic energy arrow propulsion, and momentum of impact on targets) and material(s) and construction of (Sāssānian)

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39 Farrokh, Khorasani & Dwyer, 2018, p.93.

40 The manufacture of Sāssānian arrows is typically recognized to have been made with tanged arrowheads, with finds at Dura Europos also having discovered Sāssānian arrowheads of socketed design.

41 *Mehr Yasht*, X, 129; Studies of ancient Iranian sources by Tafazzoli reveal additional types of arrows (e.g. “*three-feathered*”, “*eagle-feathered*”) (1993, p.193).

42 Libanius, *Orationes*, LIX, 69.

43 Pettigrew & Taylor, 2023, p.15.

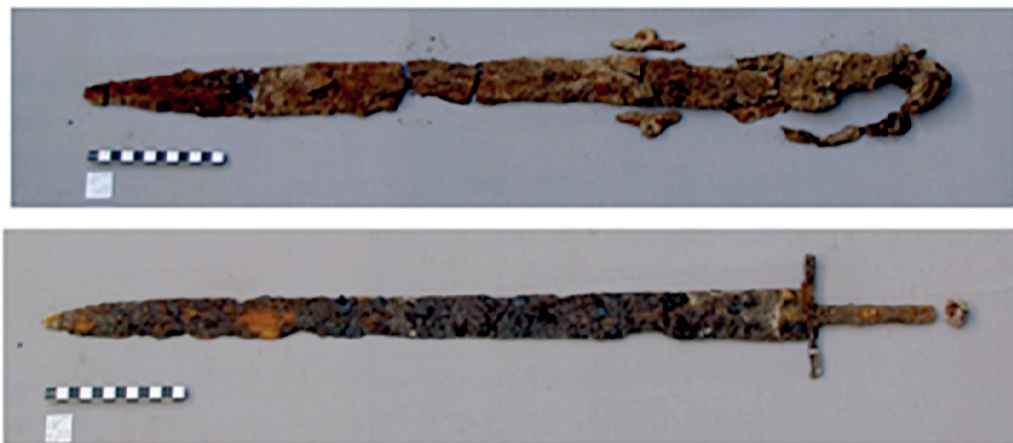


Figure 3: Late Parthian or early Sassanian era scabbard-slide swords discovered in Vestemin, Northern Iran (Source: Karamian, Farrokh, Kiapi & Nemati, 2018).

bows and missiles (particularly the shape, weight, width and length of arrowheads)<sup>44</sup>. A series of such studies would provide documented statistical data, facilitating improved adjusted (or rectified) hypotheses regarding the range and efficacy of impact of Sāsānian arrows<sup>45</sup>. A model for such studies is provided by Berg and Lampe of the Worcester Polytechnic Institute who investigated the penetration efficacy of the lance in accordance with the left-right angle ( $\Theta$ ) and up-down angle ( $\Phi$ ) as deployed by the cavalryman attacking targets<sup>46</sup>. Nevertheless, while modern ballistic reconstructions highlight the conditional nature of arrow penetration against armored targets, such findings fail to refute the tactical efficacy of archery fire at Anglon. Even where missile penetration was reduced, the aggregate kinetic and psychological impacts of concentrated archery volleys in restricted terrain would have dislocated command organisation, formation cohesion and visibility.

44 One key domain of investigation would be the obtaining of scientific data of momentum upon impact of Sāsānian arrowheads upon Romano-Byzantine armor (in the case of Anglon, of the types that would have been prevalent among Romano-Byzantines forces deployed along the Sāsānian frontiers in the 6<sup>th</sup> century CE).

45 The question of range is arrived at in circumspect fashion much of this will depend on the potential energy (PE) of the weapon when fully drawn which will depend on the specifics and robustness of the bow constructed (composite of sinew, bone, wood, glue, etc. however the quality of these materials will vary in accordance with the region from which these were extracted).

46 Berg & Lampe, 2002.

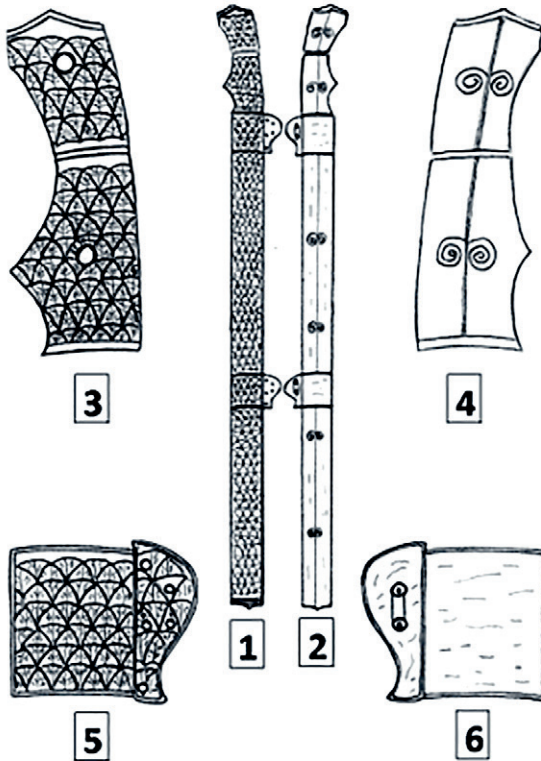


Figure 4: Late Sassanian Swords: Entire sword from front (1) and back (2) Sword handle at front (3) and back (4) Sword Mount at front (5) and back (6) (Drawings by Kaveh Farrokh, 2004).

Roudbordeh and Navaeiyan during which a skeleton was discovered with an iron trilobate (three-bladed) arrowhead burrowed deeply into the shin bone (more specifically, the epiphysis and metaphysis of the right tibia)<sup>47</sup> (Figure 1). Notable is the deep penetration into the bone, making subsequent attempts at contemporary medical extraction untenable.

There are indications that skillful Sāsānian archers were also possibly capable of “locking” their target’s limbs (hands, arms, legs) with a single shot. Such an action would sufficiently injure the opponent as to effectively neutralize his threat to Sāsānian troops during battle. A depiction of such a shot is provided

The role of missile fire, in the Sāsānian context, was the battlefield neutralization of the opponent, achieved by either the killing or disabling (severe injury) of the target. This paradigm would be of utility against more heavily and comprehensively armored professional Romano-Byzantine troops where the Sāsānian archer could choose to target the less well protected (or armored) sections of his opponent’s limbs or torso. In such a scenario the objective would be to inflict as much injury as possible, notably bone penetration. An example of the effects of this ancient type of Iranian archery was provided in the 2025 excavation of a (pre-Sāsānian) Parthian-era gravesite in northern Iran conducted by Eghdami,

47 Eghdami, Roudbordeh & Navaeiyan, 2025, pp.1-9, Figure 4.

in Sāsānian metalwork (dated to the 7<sup>th</sup> century CE) illustrating Sāsānian king Bahrām Gur (r.420-438 CE) hunting game<sup>48</sup>. Notable is the depiction of Bahram’s deployment of a missile with a “U-shaped” arrowhead that has “locked” together two hooves of a stricken prey (Figure 2). This raises the question of whether such a “Bahram Gur” technique (with “U-shaped” arrowheads) may have been deployed at some capacity against the arms and or legs of Romano-Byzantine troops at Anglon. The proximity of the latter (notably during Nabades’ ambush in the village) would have facilitated higher accuracy (and momentum) of Sāsānian missile shots.

However, the Sāsānians were also possibly capable of disabling two targets with a single shot, if situated in proximity of their targets. This type of capability however most likely varied upon the warrior’s battle experience and skills. A second description of Bahrām Gur in relation to archery pertains to a narrative of his boyhood in which he allegedly killed two animals (a wild ass and lion) with a single arrow shot<sup>49</sup>. Such a scenario may have occurred at select instances during Nabades’ ambush at Anglon where two Romano-Byzantine troops (and/or Heruli auxiliaries) may have been injured or slain by a single shot. While Procopius does not provide specific descriptions of Sāsānian archery deployment, it is possible that one of the reasons for the efficacy of archery during that battle was due to skill (or dexterity) of arrowshots, significantly facilitated by proximity.

### *Close Quarters Combat at Anglon? The Role of Sāsānian Infantry*

While archery was apparently seminal in its contribution to the Romano-Byzantine rout at Anglon the Sāsānians were also trained for close quarters combat, questioning the notion of the lack of close quarters combat at Anglon. Unlike their Parthian predecessors, the Sāsānians placed notable emphasis on fielding professional infantry troops since the early period of their dynasty.

As noted by Syväne and Maksymiuk the origins of the Sāsānian infantry forces may be traced to the professional corps stationed at Darabgird in Persis during the early years of the dynasty, with these also trained to operate alongside the cavalry<sup>50</sup>. As noted by Kolesnikoff Sāsānian infantry forces were in prac-

48 Hermitage Museum, St. Petersburg, Inv.S-252.

49 Modi, 1969, p.180

50 Syväne & Maksymiuk, 2018, p.21. As further noted by Syväne and Maksymiuk, this

tice integral to the military operations of the spāh<sup>51</sup>. Extrapolating from primary sources, Jalali classifies Sāssānian infantry into three categories<sup>52</sup>: (1) the *paighān* heavy (armored and armed) infantry, with a subdivision of spearmen identified as the *neyze-daran* (2) light infantry or peasant levies and (3) foot archers. The *paighān* were also deployed alongside battle elephants (these reported as having had iron towers with archers) as documented in reference to Shapur II's 350 CE siege of Nisibis<sup>53</sup>.

Earlier scholarship, often primarily reliant upon Roman literary sources tended to emphasize selective reports<sup>54</sup> such as Herodian who describes the spāh as "... a horde of men rather than an army"<sup>55</sup>. This paradigm has been particularly consistent with regards to Sāssānian infantry, based on primary sources such as Procopius' whose account of (Sāssānian) "infantry" at the battle of Dara (530 CE) describes these as:

"...nothing more than a crowd of pitiable peasants ... have no weapons at all with which they might trouble their opponents, and they only hold before themselves those enormous shields in order that they may not possibly be hit by the enemy ...".<sup>56</sup>

As noted by Jalali, these types of accounts of Sāssānian infantry are characteristic of unpaid, poorly armed and trained serfs pressed into military service by the Sāssānian state<sup>57</sup>. It is likely that the disparaging observations of Sāssānian "infantry" by Ammianus Marcellinus and Procopius may have been in reference to peasant levies as opposed to professional types such as the *paighān* and the later Dailamites (discussed later in this article). In contrast to Roman claims of Sāssānian infantry as being untrained serfs pressed into military service, the

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body of infantry were heirs of past Achaemenid martial traditions of combat infantry and archers.

51 Kolesnikoff, 2535/1976, p.122.

52 Jalali, 1382/2003, p.15.

53 Julian, *Orationes*, 2.63b.

54 Edwell, 2021, p.63.

55 Herodian, *History of the Empire*, 6.7.1.

56 Procopius. *De Bellis* (edited by Haury, revised by Wirth, 1962-1964) Vol. I, *Bellum Persicum*, II.14.8–9); English translation (Dewing, 1914, *Procopius, History of the Wars.*) Vol. I, pp. 120–121, at Wars I.14.8–9); Original Greek: οὐδὲν δὲ ἄλλο ἢ πλῆθος γεωργῶν ἐλεινῶν ἐδόκουν εἶναι, ὅπλα μὲν οὐδὲν ἔχοντες, ᾗ τοὺς πολεμίους ἂν ἐνοχλήσειαν, τὰς δὲ ἀσπίδας τὰς μεγάλας μόνον προβαλλόμενοι, ὅπως μὴ ποτε τρωθῶσιν ὑπὸ τῶν πολεμίων.

57 Jalali, 1382/2003, p.15.



Fig. 5: Location of Anglon in 543 CE (Kaveh Farrokh, 2025).

spāh's professional infantry was regularly paid from the imperial registry<sup>58</sup>, not unlike their Roman counterparts.

Interestingly Procopius describes Sāssānian “infantry” (in reference to the battle of Dara 531 CE) as having had no weapons at all. A closer examination of the classical sources however provides alternate perspectives of foot soldiers in service of the Sāssānian spāh. Emperor Julian's (r. sole Augustus, 361-363 CE) panegyric of his cousin Constantius II (r. 324-361) explicitly reports of Sāssānian “*hoplites*” operating alongside battle elephants during the siege against Roman-held city of Nisibis<sup>59</sup> in 350 CE. Ammianus Marcellinus' disparaging observations of Sāssānian “infantry” is somewhat contrasted with his separate refer-

<sup>58</sup> Howard-Johnston, 1995, p.219.

<sup>59</sup> Julian, *Orationes*, 2.65b-2.65c.

ence to Sāsānian “*murmillos*”<sup>60</sup> during Julian’s invasion of the Sāsānian empire in 363 CE<sup>61</sup>. The example of setting martial expectations for close-quarter combat against Roman troops could be established by the person of the king, such as the case of Shapur II (r. 309-379 CE) who partook in hand-to-hand combat during the siege of Amida in 359 CE<sup>62</sup>. As noted by Edwell “*The ability to operate in close-quarters during sieges is a possible indicator of an improved infantry capacity of the Sasanian army*”<sup>63</sup>.

While Julian and Ammianus references do not further elaborate details as to the armaments, armor and training of the Sāsānian “hoplites” or “*murmillos*”, a number of studies have researched the archaeological array of Sāsānian infantry and cavalry close quarters combat weaponry (e.g. swords, daggers, spears, battle-axes, javelins, slings)<sup>64</sup>, armor<sup>65</sup>, shields<sup>66</sup>, and helmets<sup>67</sup>. An indication of early types of Sāsānian paighān heavy infantry has been discovered with the skeleton of the fallen Sāsānian trooper at Dura Europos’ tower 19 during Shapur I’s siege of the city in c.256 CE<sup>68</sup>. Heavy swords for close quarters combat were prominent in the military systems of late Parthian to early Sassanian era as evidenced by finds of five such samples excavated from crypts in Northern Iran’s Vestemin region<sup>69</sup> (Figure 3).

One example of the seminal role of Sāsānian combat infantry in Sāsānian

60 A type of armored gladiator.

61 Ammianus Marcellinus, *The later Roman Empire*, XXIII, 6.83.

62 Ammianus Marcellinus, *The later Roman Empire*, XIX, 1.5, 7.8.

63 Edwell, 2021, p.64; see also Maurice’s report regarding evidence as to the existence of trained troops (*Strategikon*, XI, I).

64 Mirzavand, 1397/2018, pp.38-40; Overlaet, 1998, pp.278-285, 287-289; Masia, 2000, pp.185-288; Khorasani, 2006, pp.84-98, 416-423; Farrokh & Khorasani, 2020, pp.26-29, 34; see also Tafazolli on the Pahlavi (Middle Persian) nomenclature of Sāsānian weaponry, armor and helmets (1993, pp.187-198).

65 Dwyer, Farrokh & Khorasani, 2021, pp.145-183.

66 Mirzavand, 1397/2018, pp.41-42.

67 Farrokh, Karamian, Kubic, & Oshterinani, 2017, pp.124-163; Overlaet, 1998, pp.286-287, 289.

68 The fallen trooper’s defensive combat gear included a distinct short sleeve “T-shirt” style garment reaching to his hips, shield of wickerwork (Achaemenid-style) construction, and two-piece “ridge” helmet indicate that he was expected to engage enemy combatants in close quarters combat, notably in siege situations (Farrokh & Khorasani, 2020, pp.28-29, 32-34).

69 Karamian, Farrokh, Kiapi & Nemati, 2018, pp.44-50.

battle tactics against Roman front lines is described by the *Chronicum Anonymum*<sup>70</sup>: (1) the first strike would be conducted by the savārān who would be followed to their rear by the combat infantry (2) the savārān would approach very close to the enemy's front lines, appearing as if they were getting ready to engage in combat (3) instead of engaging in combat the attacking savārān would disengage by splitting into two groups, one of which would retire to the left and the other to right (4) the combat infantry, having followed the savārān to their front (now retired away from the front lines) begin engaging the enemy front lines in close quarters combat. It is also clear that such types of "infantry" could not have been of the peasant levy types given their rudimentary (or lack of) combat skills and minimal combat gear. It is highly unlikely that the spāh would have fielded such types of troops to engage the formidably equipped and trained Roman infantry. In such a scenario (poorly equipped and untrained) peasant levy would have been repelled and destroyed with little difficulty by the Romans. Instead, the spāh's infantry forces in this savārān-combat infantry tactic were most likely of professional Paighān troops.

Murmillos type infantry are no longer mentioned in later Sāsānian armies, notably from the reign of Khosrow I (r. 531-579 CE) in the 6<sup>th</sup> century CE when a new and highly effective professional infantry force competent in close quarters combat from North Iran, the Dailamites, began to make a pronounced appearance in the armies of the spāh<sup>71</sup>. Procopius acknowledges the Dailamites as having been "...all foot-soldiers, each man carrying a sword and shield and three javelins in his hand"<sup>72</sup> in contrast to the serf-type personnel he describes with derision. Agathias designates them as proficient with swords, daggers, slings, and pikes<sup>73</sup>, however the Dailamites were also adept at the use of *tabarzin* (battle-axe)<sup>74</sup>, the *zhupin* (two-pronged javelin)<sup>75</sup> and maces as well as being equipped with shields and armor<sup>76</sup>. Archaeological excavations conducted in northern Iran reveal the

70 *Chronicum Anonymum*, XXXVI.

71 Mobbayen, 1386/2007, pp.109-112, 115; It would appear that the Spāh had phased out the Paighān infantry corps in favor of the Dailamites by the late 6<sup>th</sup> century CE (Farrokh & Khorasani, 2020, pp.31-32).

72 Procopius, *History of the Wars*, II, 14.3-9.

73 Agathias, *Historiae*, 3.17.

74 Matufi, 1378/1999, p.439.

75 Overlaet, 1998, p.268.

76 Ibn Isfandyar, *Tarikh Tabristan*, pp. 59, 64, 108-109, 18, 185, 205, 234, 274; see also

Dailamites as having been equipped with the same type of Sāsānian (lappet-suspension) swords<sup>77</sup> (Figure 4), helmets (spangenhelm-type)<sup>78</sup>, and military regalia (e.g. belt ornamentations)<sup>79</sup> utilized by the spāh's elite units of the savārān cavalry corps<sup>80</sup>. In summary, while the artēštārān at Anglon are often described as the savārān cavalry (with numbers of these dismounted for close quarters combat)<sup>81</sup>, Nabades' artēštārān most likely also included Dailamite professional infantry.

While Procopius does not provide detailed descriptions of close quarters combat at Anglon, a possible indication of this scenario may have been narrated with respect to the fatal (surprise) attack on Narses:

“But all of a sudden the men who were in ambush, as has been said, came out from the cabins along the narrow alleys, and killed some of the Eruli, falling unexpectedly upon them, and they struck Narses himself a blow on the temple. ... And he died shortly afterwards, having proved himself a brave man in this engagement”.<sup>82</sup>

Procopius' brief report of Narses' fatal head injury appears broadly consistent with patterns suggested by the close quarter statistical analyses by Khorasani et al. of the Šāhnāme of body areas most targeted by artēštārān during combat in which the head is the second most targeted area (n=27) with the waist as the most highly targeted (n=28) and the neck the third most targeted (n=19)<sup>83</sup>. Examples of close quarters infantry combat techniques reported are grappling and throwing the enemy, knife fighting and punching the head of the enemy<sup>84</sup>. Further analyses of favored weaponry for close quarters combat indicates the sword as

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Matufi (1378/1999, p.303).

77 Overlaet, 1998, pp.278-285, 287-289.

78 Overlaet, 1998, pp.286-287.

79 Overlaet, 1998, pp.268-277.

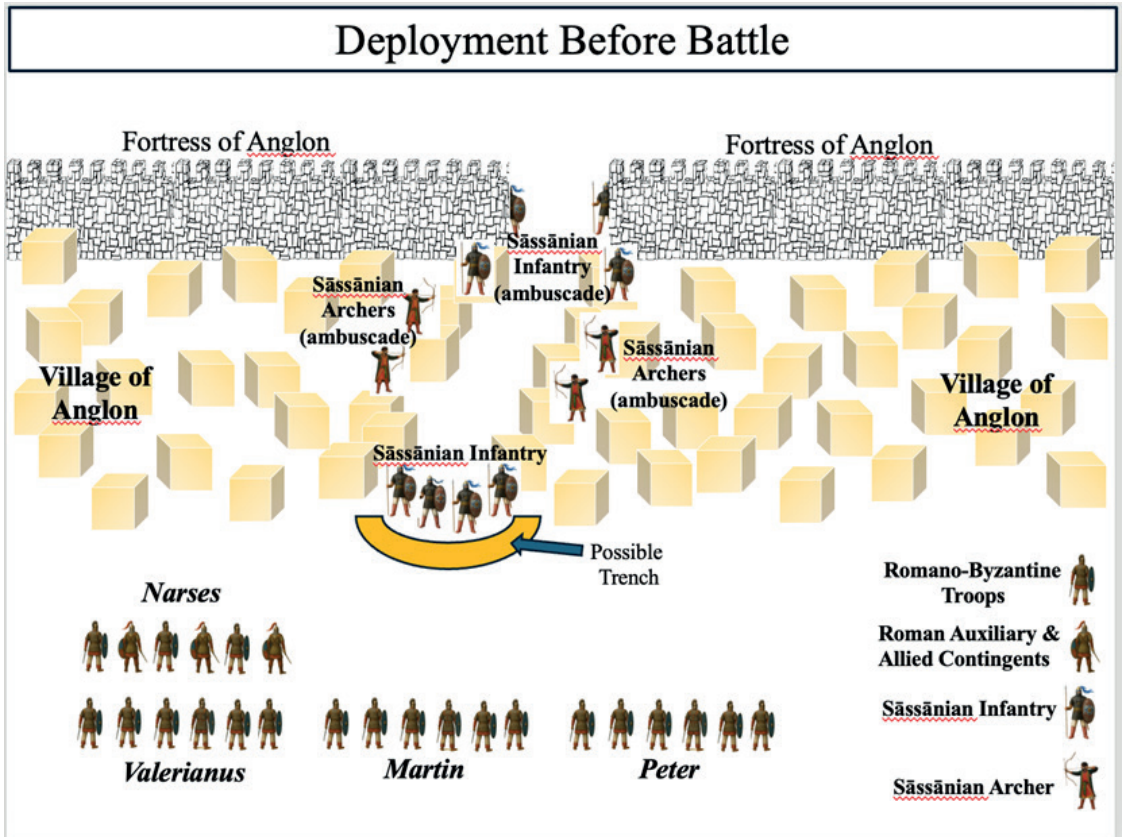
80 Overlaet's findings are suggestive that the Dailamites may possibly been accorded a higher rank in comparison to their non-Dailamite paighān predecessors.

81 Syväne, 2021, p.238.

82 *Procopius. De Bellis* (edited by Haury, revised by Wirth, 1962-1964) Vol. I, *Bellum Persicum*, II.25.23–24); English translation (Dewing, 1914, *Procopius, History of the Wars*,) Vol. I, p. 485–487, at Wars I. 25.23–24); Original Greek: ἐξελθόντες δὲ ἐκ τοῦ αἰφνιδίου ἐκ τῶν κατὰ τοὺς στενωποὺς οἰκίσκων οἱ προλοχίζοντες, ὥσπερ ἐρρήθη, τῶν τε Ἐρούλων τινὰς κτείνουσιν, ἀπροσδόκητοι ἐπιπεσόντες, καὶ Ναρσῆν κατὰ κόρρης αὐτὸν παίουσι. καὶ αὐτὸν Ἰσαάκης ὁ ἀδελφὸς καιρίαν τυπέντα ὑπεξήγαγε τῶν μαχομένων. ὃς δὴ ὀλίγῳ ὕστερον ἐτελεύτησεν, ἀνὴρ ἀγαθὸς ἐν τῷ πόνῳ τούτῳ γενόμενος.

83 Khorasani, Shafeian & Singh, 2012, pp.58-59, Table 1.

84 Khorasani, Shafeian & Singh, 2012, p.60, Table 3.



the artēštārān’s preferred weapon of choice (n=25) followed closely by the mace (n=21) and then lasso (n=10) and lastly the dagger (n=9)<sup>85</sup>. In sword combat the artēštārān most frequently targeted the head (n=10) of the opponent followed by the neck (n= 5)<sup>86</sup>.

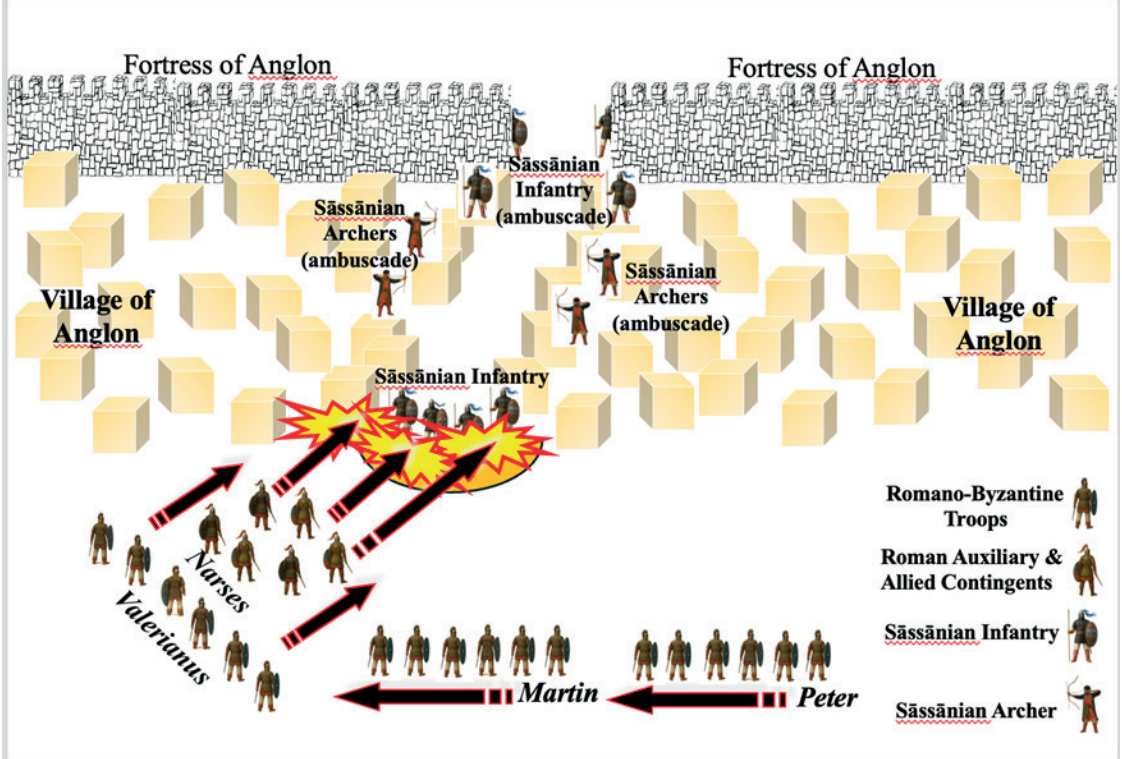
It is also worth noting that similar patterns of tactical sequencing—particularly the coordination of archery with controlled engagement and disengagement—have been reported in reference to other Romano- Sāsānian encounters, such as the Battle of Callinicum (April 19, 531 CE)<sup>87</sup>. While the contexts differ, the recurrence of such patterns may suggest a wider range of flexible battlefield

85 Khorasani, Shafeian & Singh, 2012, pp.58-59, Table 1.

86 Khorasani, Shafeian & Singh, 2012, pp.58-59, Table 1.

87 Hughes, 2010, pp.59, 62-64.

## [A] Narses Leads Assault

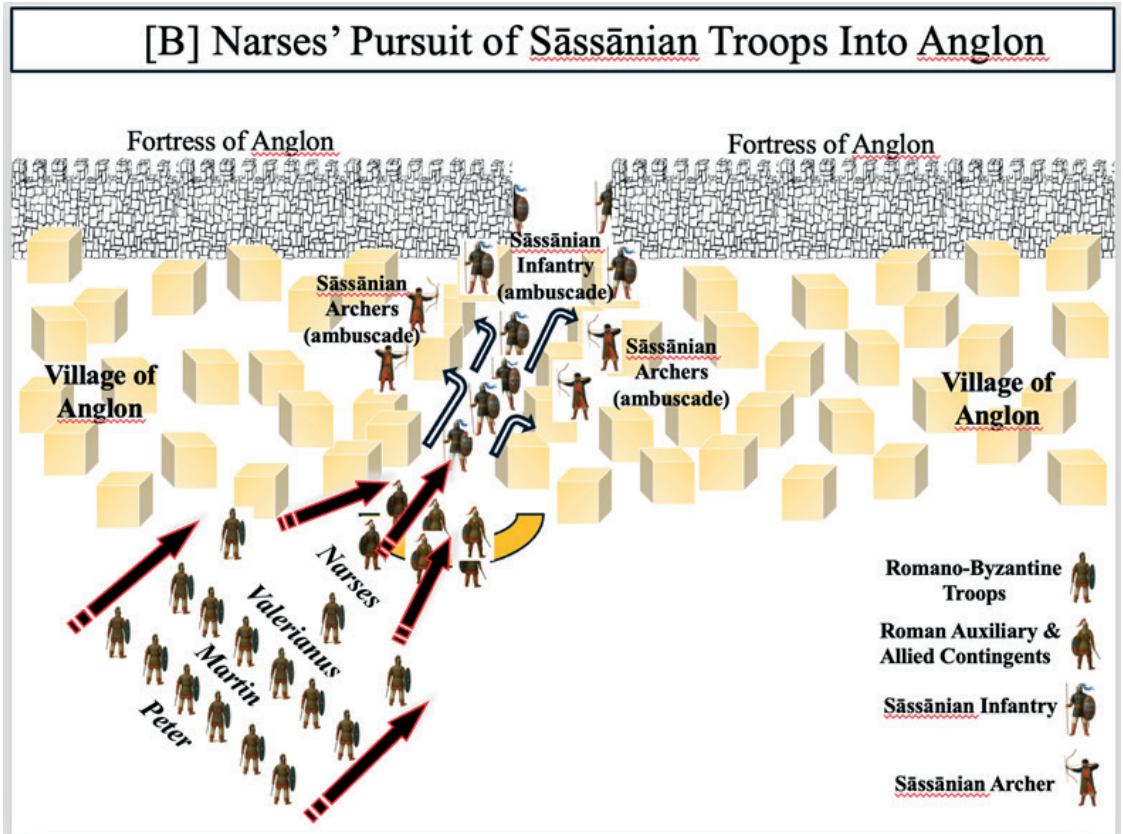


practices rather than isolated cases of improvisation.

On a final note, the psychological impact of unexpected and concentrated archery fire in constricted terrain should not be underestimated. Ambush conditions amplify shock effects, particularly where command figures fall early in the engagement<sup>88</sup> While specific evidence for linguistic manipulation or formalized psychological tactics at Anglon is lacking, the sudden collapse of cohesion described by Procopius is consistent with ambush-induced panic rather than solely kinetic lethality<sup>89</sup>.

<sup>88</sup> Inostransev, 1926, pp.14-16; Farrokh, 2023, pp.61-70.

<sup>89</sup> Dinawari, *Ayoon al-Akhbar*, p.193.



*Conclusion: A Reconsideration of Sassanian Tactics at Anglon*

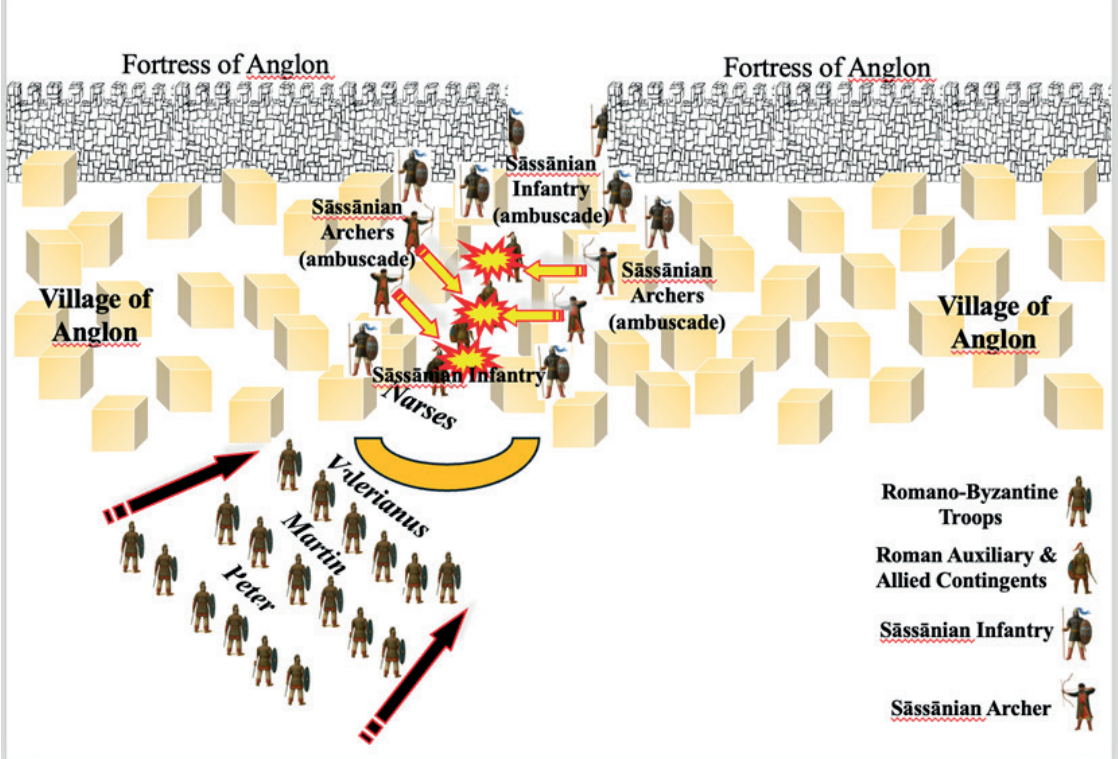
In the aftermath of their battlefield success at Anglon (see Diagrams), the Sāsānians refrained from a full-fledged pursuit due to concerns that their numerically larger foes could cease flight to then rally and fight<sup>90</sup>. Nabadēs' caution at this phase of the battle was consistent with the spāh's overall tactical norms of restraint in the pursuit of routed enemy forces<sup>91</sup>, a tactical admonition also reported in the Šāhnāme<sup>92</sup>. Interestingly Procopius also reports of the spāh's military

<sup>90</sup> Syväne, 2021, pp.238-239; see also Procopius (*History of the Wars*, II, 25.30-32).

<sup>91</sup> Jalali, 1383/2004, p.90.

<sup>92</sup> Firdowsi provides a strong warning against reckless pursuits of "defeated" enemies in which the defeated enemy seems to be absconding or when one sees the "backs of the enemy" [*Cho to poshte doshman bebinee*] leading to cautioning that the field army ab-

### [C] Sāsānian Archery Surprise Blitz

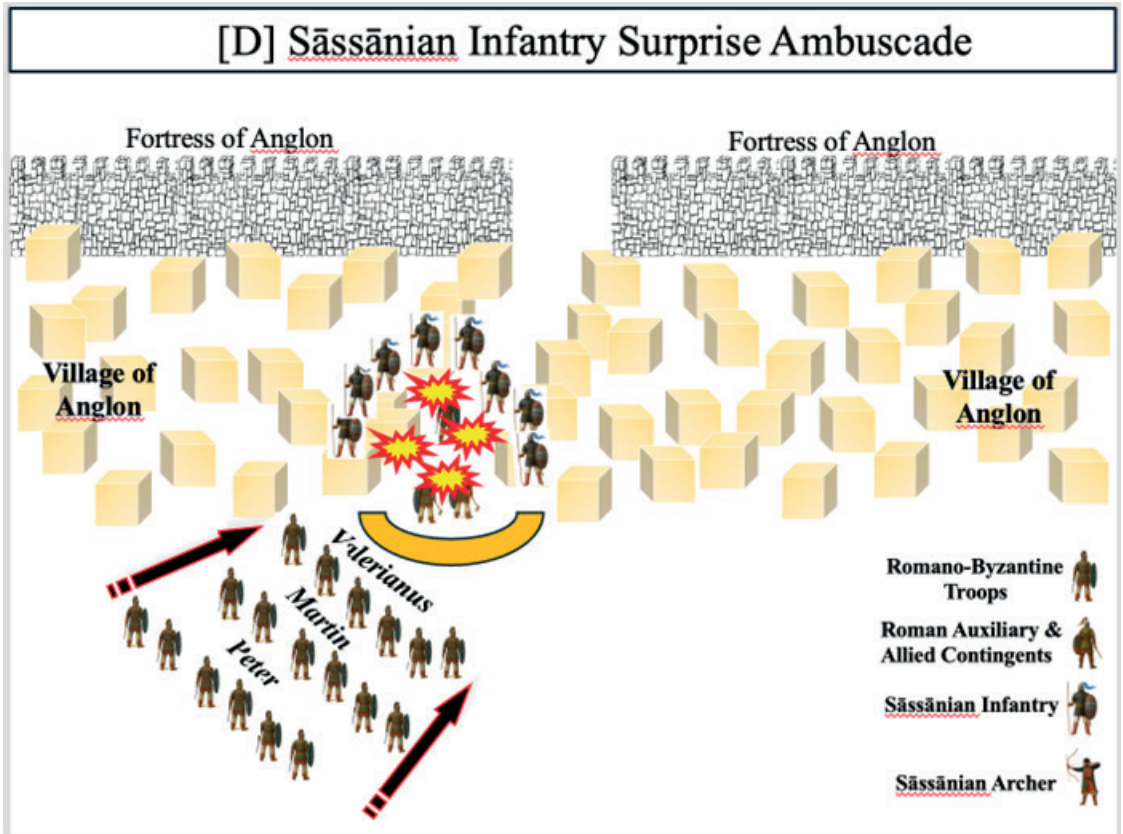


practice of caution against the pursuit of defeated enemy forces<sup>93</sup>. In summary Nabades' battle idea was to deploy his outnumbered artēštārān in surprise ambush with archery with probable application of close quarters combat followed by a limited pursuit as warranted by caution against a numerically superior and well-trained force.

Traditionally interpreted as an accomplishment of Sāsānian archery, a more in-depth analysis of the battle of Anglon suggests a more complex coordination

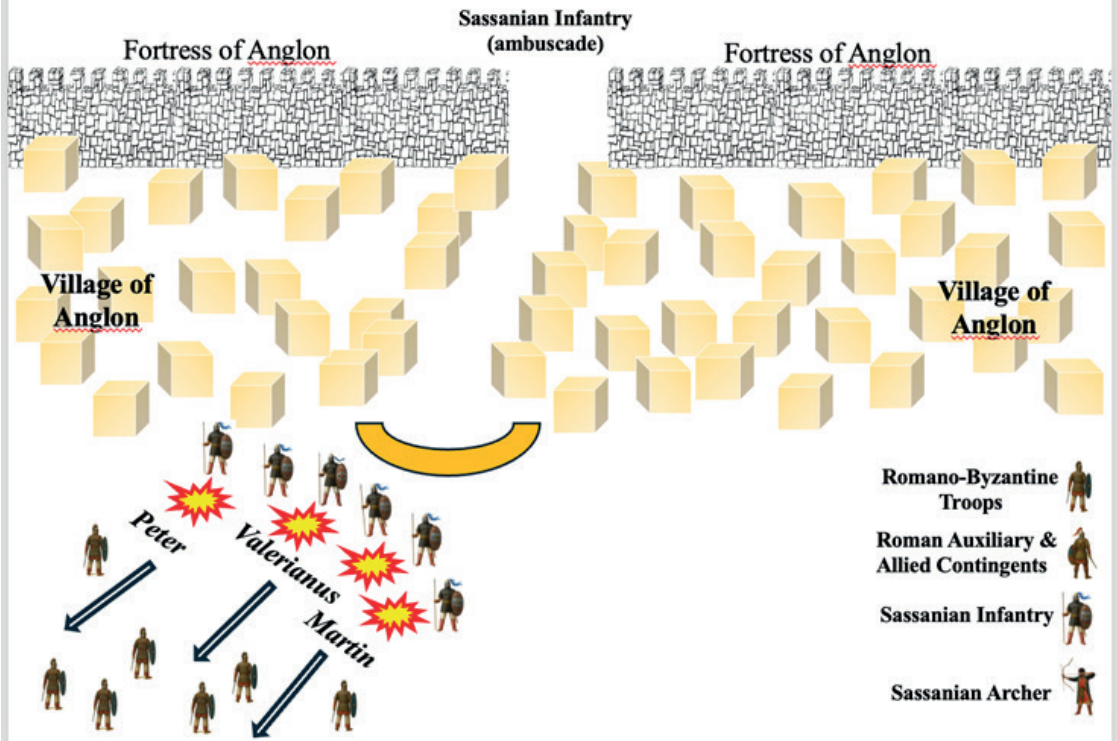
stain from charging towards the enemy [*Mataz va mapardaz*] (*Šāhnāme* (ed. Mohl, 1995), p.1539).

93 Procopius, *History of the Wars*, I, 4.



(and/or integration) of discipline, astuteness and terrain management in the endeavor to counterbalance a quantitatively superior and professional force. While Sāsānian archery was certainly effective at close range against unarmored targets, notably the lightly (or sans) armored Heruli auxiliaries, this battlefield success was the result of Nabades' strategy of systematically channelling these troops into limited battlefield spaces (typical of closely proximate urban environments) which would allow for the maximization of missile momentum and consequent enhancement of target penetration. The unexpected (?) deployment of close-quarters professional combat infantry (possibly Dailamites or later Paighān troops) in the aftermath of the shock of archery, allowed Nabades to accomplish his objective of exacting a heavy toll from advancing Romano-Byzantine forces. Procopius' account (albeit brief) of Narses' demise is consistent with Sassanian

## [E] Final Sāsānian Attacks & Romano-Byzantine Retreat



close quarters combat in accordance with weapons deployment and targeting systems as designated in Iranian primary sources as well as archaeological and osteoarchaeological data. Psychological warfare (a significant element in Sāsānian battle practice) served to amplify the physical impacts of archery and close quarters combat of the ambush at Anglon, resulting in disarray and alarm within Romano-Byzantine ranks.

In conclusion, Anglon is not to be viewed as a contradiction of the classical account, but as a case in which its seemingly descriptive simplicity is only reflective of the most observable phase of a more complex tactical process.

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Busto di Pirro re dell'Epiro, Ercolano, da un originale del 290 a.C.  
Ora al Museo Archeologico Nazionale di Napoli  
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