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Military Reasons of Heraclius' Successes Against the Sasanian Spāh: A Re-Examination of Karantabias' Analysis

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Abstract

This article addresses and re-examines Marc-Anthony Karantabias' analysis of factors that contributed to the defeat of the Sasanian Spāh by Heraclius by 627-628 CE. Karantabias' analysis may be categorized into four (military) misconceptions with respect to the Spāh: (1) the notion that the late Sasanian Spāh lacked stirrups for the Savaran cavalry (2) the alleged refusal or lack of knowledge of the Mongolian draw which is proposed to have been of greater efficacy than the Sasanian (3-finger) bowshot (3) the notion of "Persian conservatism" leading to the Spāh's refusal to adopt new military technologies and (4) the alleged supremacy of Steep/Central Asian and/or Hun-Turkic cavalry warfare over the Sasanians. These four misconceptions fail to be supported by a close examination of archaeological sites (e.g., Taghe Bostan) and artifacts (e.g., Sasanian stirrups, metal works, etc.), primary sources and pertinent research studies. A fifth misconception pertains to the lack of consideration of the shortcomings of the Sasanian four-Spadbed system which Heraclius was able to successfully exploit against the Sasanian empire. In conclusion, Heraclius' successes are attributed to his exploitation of the weaknesses of the four-Spāhbed system as well as the Byzantine willingness to adopt Steppe/Central Asian technology (e.g., compound bow, iron stirrup).

Keywords: Sasanian Byzantine, Central Asia, Steppe Khazar-Turkic, Spāh Savaran Archery, Stirrup Lappet.

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Introduction

Marc-Anthony Karantabias has provided the following four premises or misconceptions as to why the Romano-Byzantine armies led by: Emperor Heraclius were able to achieve their militarily successes following a series of continuous defeats at the hands of the Sasanian Spad during the war's first two decades: (1) Sasanian cavalry did not adopt stirrups (2) the Byzantines adopted the Mongolian draw which the Sasanians did not, and that the Mongolian draw (combined with the Byzantine adoption of the stirrup) is of superior effectiveness in comparison to the Sasanian draw (3) the Spāh did not adopt Central Asian military technology due to Persian conservatism and (4) Turkic steppe nomads militarily superseded the Sasanian Spāh in warfare. A fifth misconception by: Karantabias is the failure to account for the weaknesses of the Spāh's four-Spāhbed system for the defense of the Sasanian empire's realms notably towards the west, north, east/northeast, and south. This article examines the cogency and consistency of Karantabias' misconceptions with respect to the available archaeological data, primary courses and pertinent scholarship.

Synopsis of the Romano-Byzantine Sasanian War (602 or 603 CE – 628 CE)

Prior to the last Romano/Byzantine-Sasanian War (602/603-628 CE) Sasanian king Khosrow II (r. 590, 591-628 CE) had succeeded in wresting the throne from his challenger Bahram Chobin (Bahrām VI Čōbīn) by: 591 CE with the military assistance of Romano-Byzantine Emperor Maurice (r. 582-602 CE). The ensuing treaty signed between Khosrow II and Maurice obliged the Sasanian Empire to yield large tracts of their territories to the Romano-Byzantines. These included strategic territories in northeast Mesopotamia, particularly the city of Dara notable for its powerful fortifications (Maurice did agree to Nisibis being under Sasanian jurisdiction). The Sasanians also had to yield the Iranian-held sections of Armenia and Iberia in the Caucasus to Maurice. The Sasanians abided by: the treaty up to the time of Maurice's assassination by: Phocas (r. 602–610 CE) in November 602 CE. The latter then dispatched messengers to Khosrow II (r. 590, 591-628 CE) in order to announce his assumption of the Byzantine throne (Farrokh, 2021: 13). Khosrow II in turn refused to recognize the authority of Phocas. In practice, Khosrow II had now found the pretext he required to reverse the terms of his treaty with the Romano-Byzantines, by: using the excuse of being obliged to 'avenge' the assassination of Maurice. Phocas' position remained tenuous as seen with the rebellion against him by: Narses, the governor of the Byzantine-held regions of Mesopotamia, a situation which further weakened the Romano-Byzantine army in the face of the Sasanians. Edessa soon fell to Narses in 603 CE (Farrokh, 2021: 13), prompting Phocas to dispatch an army led by: Germanicus to besiege the city. It is not fully clear whether it was Germanicus who had besieged Edessa as other sources (e.g., Michael the Syrian, X, 25) cite a certain John or Iwannis who had conducted the siege.. It was here where Narses appealed to Khosrow II for military assistance (Theophanes, Chronographia

(ed. De Boor, 1883-1885), A.M. 6095), in effect inviting the Sasanian Spāh to enter into a war against the Romano-Byzantine Empire. Khosrow II obliged by: dispatching a Sasanian force which defeated Germanicus. In practice, the internecine conflicts of the Romano-Byzantines had afforded Khosrow II with the military opportunity for reversing the territorial terms of the treaty he had concluded with the late Maurice. The ensuing war was to be characterized by: three successive phases. The first were the initial Sasanian expansions in 602 or 603 to 622 CE (Farrokh, 2021: 13-17). The second phase involved the successful Romano-Byzantine counteroffensive in 622 CE up to the Sasanian siege of Constantinople in 626 CE (Chica, 2021a: .20-30; Navarro, 2021: 33-36). The third and final phase was the military alliance of the Romano-Byzantine and Khazar militaries, resulting in successful anti-Sasanian offensives which led to the end of the war in 628 CE (Chica, 2021b: 42-48).

The first phase of the war unfolded in 602 or 603 CE during which the Sasanian Spāh (army) conquered Dara in 604 CE followed by: the capture of Resaina, Tur-Abdin, Mardin, Amida, Carrhae, Callinicum Cirecesium, and Edessa by: 609-610 CE with Armenia also secured by: 610 CE. Having overthrown Phocas in 610 CE, Emperor Heraclius failed to prevent Sasanian military expansion into Anatolia and Syria, with the Spāh capturing Caeserea, Apamea, Emesa and Antioch by: 611 CE. Further expansions into Anatolia led to the capture of Melitene in 613 CE and following the Spāh's defeat of a Byzantine force led by: Heraclius, his brother Theodore and Byzantine general Niketas, Cilicia and the entirety of Syria (notably Damascus) were then annexed into the Sasanian empire that same year. Palestine and the city of Damascus fell to the Spāh the following year in 614 CE, during which the Spāh further expanded into Anatolia capturing Ephesus that same year and Chalcedon soon after. The capture of Sardis in Western Anatolia in 616 CE led to a Sasanian naval attack in the following year in 617 CE against Constantia (site of Salamis). by: 618 CE, Sasanian forces had thrust into Byzantine Egypt, capturing Alexandria in 619 CE and the entirety of Egypt by: 621 CE.

The second phase of war ensued with Heraclius succeeding in defeating the Spāh in battle for the first time in 622 CE (Theophanes, Chronographia (ed. De Boor, 1883-1885), A.M. 6113, 304.13-18), however the overall initiative of the war remained with the Sasanians at this stage in the war. In that same year, (Ankara in Anatolia) and the island of Rhodos (Rhodes) had fallen to the Sasanian forces. The extent of Sasanian successes at this time is indicated by: the discovery of a cache of Sasanian coins dated to c. 623 CE in Samos (Greatrex & Lieu, 2002: 197). Despite their upper hand at this stage of the war, the Sasanians lacked the necessary number of troops needed to safeguard the territories they had conquered in Anatolia, the Near East and the Caucasus. Armenia and northern Anatolia which feature a long coastline with the Black Sea were dangerously exposed to potential naval Byzantine landings to the strategic rear of Sasanian forces operating in western Anatolia and the Near East. In addition, much of Anatolian interior remained unguarded by: Sasanian forces, a factor which allowed Heraclius to re-

assemble his armies to strike eastwards into the Caucasus, northwest Iran and northern Mesopotamia. This was a strategic failure as addressed more fully in the discussion of Misconception 5 (Strategic Weaknesses of the Spāh's Four-Spāhbed System). Heraclius was able to re-organize and retrain his armies (see: discussion on the military factors in Heraclius' success further below) and was ready to unfold his counterstrikes by: March 624 CE. Byzantine armies recovered Cappadocia (Norwich, 1997: 91; Kaegi, 2003: 125) to then punch into Armenia and Nakhchevan further south just above Atropatene or Adhurbadegan (historical Azerbaijan province in northwest Iran) (Farrokh, 2007: 257). The Byzantines then defeated a Sasanian force at Ganzaka in Adhurbadegan. This led to Heraclius' destruction of the Adur Gushnasp fire temple (in modern-day Takhte Soleiman) in Adhurbadegan which was subjected to further Byzantine attacks (Kaegi, 2003: 127). Heraclius then deployed to Albania in the Caucasus (modern-day Republic of Azerbaijan) to regroup and to recruit allies from among the Caucasian kingdoms and notably the Khazar Turks (Farrokh, 2007: 257).

Khosrow II responded to these developments by: dispatching three armies led by: generals Shahrbaraz (recalled from his campaign further west in Anatolia), Shahraplakan and Shahen to destroy Heraclius. Much of the lands taken by: Heraclius in northwest Iran were retaken by: the Spāh. As Shahrbaraz and Shahen were still marching into the Caucasus, Shahraplakan caught up with the Byzantine force and inflicted an initial defeat on Heraclius, forcing him to deploy into eastern Anatolia (Moses of Dasxuranci, History of the Albanians (tr. C.J.F. Dowsett), II.10 (132.21-133.11)). Shahrbaraz arrived to join Shahraplaken to destroy Heraclius' force, but the latter emerged victorious destroying the combined force: Shahraplakan was killed with Shahrbaraz forced to escape (Theophanes, Chronographia (ed. De Boor, 1883-1885), A.M. 6115, 308.27-312.8). As per Sebeos however, Shahrbaraz was actually accompanying Shahen with the two forces then defeated by: Heraclius (Armenian History, 125-126, 81-83). Shahrbaraz however then deployed back into Anatolia to link with the Turkic Avars in attacking Constantinople (Farrokh, 2007: 257). Meanwhile a portion of Shahrbaraz's forces were assigned to Shahen (Theophanes, Chronographia (ed. De Boor, 1883-1885), A.M. 6117, 315.2-26) now tasked with finishing off Heraclius' forces. Heraclius responded to these developments by: dividing his armies into three: his brother Theodore was tasked with confronting Shahen, another portion sent to Constantinople to bolster the city's defenders with the remainder of the force to stay with Heraclius who positioned himself for impeding attacks into Iran and Mesopotamia (Norwich, 1997: 92). The decisive showdown between Shahen and Theodore occurred sometime in 626 or 627 CE with the latter emerging victorious (Theophanes, Chronographia (ed. De Boor, 1883-1885), A.M. 6117, 315.2-26). Meanwhile, Constantinople was being besieged by: Shahrbaraz with the support of his Avar and Slav allies in 626 (Navarro, 2021: 33-36) CE but the Iranian general withdrew from the war upon being persuaded by: Heraclius that Khosrow II was plotting against him (Kaegi, 2003: 148). With Shahrbaraz having now retired with his

army to Syria, a massive Byzantine flotilla ferrying a powerful army landed along the Black Sea coastlines of Circassia in the northern Caucasus. These developments were not detected by: the Sasanians. Heraclius now joined forces with the Khaganate of the Khazar Turks. The Khazars invaded Albania with reputedly large slaughter (Moses of Dasxuranci, History of the Albanians (tr. C.J.F. Dowsett), II.11, 135.5-140.14), to then attack join the Byzantines in attacking Georgia (Chica, 2021b: 43), wiping out a small 1000-man Sasanian force at Tbilisi (Moses of Dasxuranci, History of the Albanians (tr. C.J.F. Dowsett), II.11, 135.5-140.14).

The combined Byzantine-Khazar armies in the Caucasus stood at 120,000 troops, vastly outnumbering the local Sasanian forces (Farrokh, 2007: 258). Sasanian troops had been scattered too widely in Egypt, Anatolia and the Near East, greatly aiding the powerful and concentrated campaigns of Heraclius in the Caucasus and soon into northwest Iran. This was again a demonstration of the failure of the strategic paradigm of the Sasanian empire's four-Spāhbed system discussed later in this article (Misconception 5). Heraclius and his Khazar allies entered Armenia where numbers of local warriors joined them in their attacks into northwest Iran. Heraclius with the support of his Khazar and Armenian allies now struck into Adhurbadegan, and from the western side of lake Urumia marched into the Zagros and from there, broke into Iraqi Kurdistan, reaching the Tigris River. This led to the final hard-fought battle of Nineveh (December 12, 627 CE) resulting in the defeat of a Sasanian led force led by: Razutis who was killed during the engagement (Chica, 2021b: 48). With no other Sasanian forces left to confront Heraclius who was nearing Ctesiphon, Khosrow II was deposed and succeeded by: his son Shiroe or Kavad II in early 628 CE who arranged for peace terms with Heraclius, leading to the official end of the war.

Misconception 1: Sasanian cavalry had not adopted Stirrups

Karantabias' fourth assertion (in support of Bivar's earlier 1972 hypothesis (Bivar, 1972: 290-291)) is that the Sasanian Asawaran/Savaran failed to adopt stirrups:

> *"The most notable of the [Byzantine] adoptions [from the Khazars and Steppe Nomads] was the iron stirrup and was accomplished under Herakleios. ... The Sasanian refusal to reform their clibonarius can be seen at Taq-i Bustan, where, on a statue, Khusrau II is portrayed in his heavy armor, yet the stirrup is absent. The statue then leads us to assume that the clibonarius of the Sassanid army must not have stirrups, ... this is one factor which may be considered in the final victory over the Persians (Karantabias, 2005: 30) ...*"

The hypothesis of the Sasanians not having adopted the stirrup for their cavalry cannot be verified for three reasons: (1) archaeological data (2) close analyses of Sasanian sites

depicting cavalry (notably at Taghe Bostan) and (3) references in the Islamic sources. The first reason pertains to archaeological data: archaeologists have in fact discovered a pair of Sasanian cavalry stirrups at Marlik which have been chronologically dated to the late Sasanian era, or more specifically to 600 CE (Alofs, 2014: 431) (Römisches Germanisches Museum, Mainz, Germany, Inv. 037985 and Inv. 037986) (Fig. 1). This means that the present archaeological data is dated to two to three years before the onset of the Byzantine Sasanian war. As noted by: Alofs:

Fig. 1: Sasanian stirrups dated to the late 6th century CE Marlik, presently housed at the Römisches Germanisches Museum in Mainz, Germany (Inventory number: O. 37985-37986).

> *"The Sasanian Persians too knew of the stirrup. ... around 600 the stirrup had been widely adopted both to the West and to the East of the Persian Empire, and was at least known in Iran proper. There are even signs that the use of the stirrup in Persia pre-dates this". (Alofs, 2014: 431)*

In summary, the archaeological data challenges the notion that stirrups did not exist in the Sasanian Spāh at the time of Heraclius' counteroffensives (Farrokh, 2017: 107). Scholarship of ancient Iranian militaria such as the studies of Nicolle affirm that the Sasanians had adopted stirrups by: the later years of their reign (Nicolle, 1996: 20).

The second factor not considered by: Karantabias is Herrmann's comprehensive research study of Parthian and Sasanian equestrian technology (Herrmann, 1989: 757-809) conducted after Bivar's publication. As noted previously, Karantabias has based his conclusion on Bivar's assertion that the statue of the knight representing Khosrow II at Taghe Bostan lacks stirrups. This observation however fails to account for the damaged characteristics of the statue of Khosrow II at Taghe Bostan (Fig. 2), which Herrmann has addressed (1989: 771):

> *"... the knight's foot at Taq-i Bostan has broken off, but if we look at the stag hunt [panel at the iwan], it is noteworthy that the galloping king and riders have their legs and feet forward, held in a position as if resting*

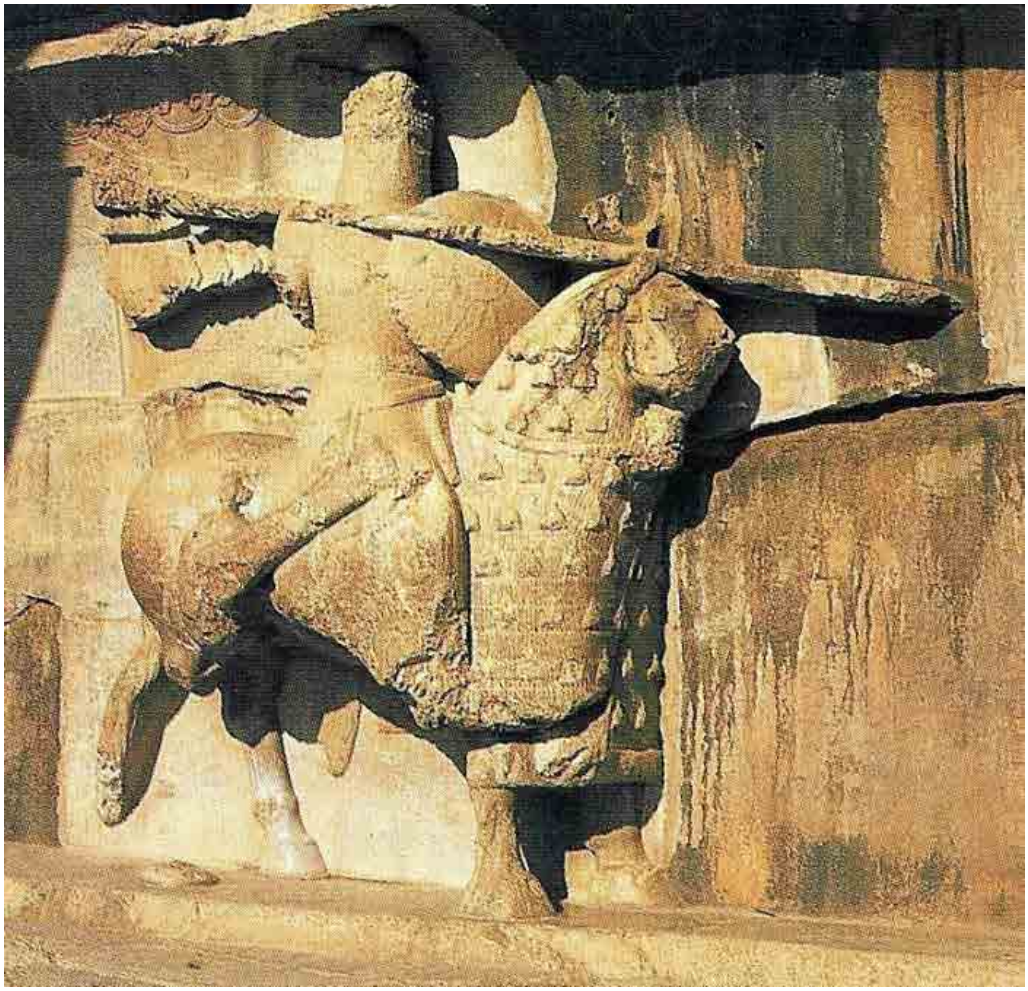

Fig. 2: The figure of the armored knight believed to be Khosrow II and his steed Sabdiz at the interior of the grand iwan or vault at Taghe Bostan (Photo source: Farrokh, 2007: 225).

> *in stirrups. Even when the king has stopped after the hunt ... the king's legs remain in this forward position. ... Comparing the legs of riders of galloping horses, those of the Nagsh-i Rustam jousts differ markedly from those on the Tag-i Bostan stag hunt".*

There are two important observations made by: Herrmann. First, as the legs of the Taghe Bostan rider have broken off over time (Fig. 2), no valid conclusions may be drawn as to whether were (or were not) being originally portrayed on the statue. In this regard, the more recent analyses by: Alofs have discovered what appears to be strap (for a stirrup) on the Taghe Bostan statue of the Sasanian knight (Alofs, 2014: 431). Herrmann's second observation (as affirmed by: Alofs (2014: 431-432)) pertains to the stag hunt scenes at the iwan in Taghe Bostan. Towards the bottom of that panel is a depiction of rider shooting his arrow downwards at prey, with his feet portrayed in the horizontal position consistent with the use of stirrups (Fig. 3). To the rear of that rider are another five riders with another Fig. to the topo of the mounted archer

Fig. 3: The right panel at the ingress way into the major vault at Taghe Bostan (Photo source: Shayar Mahabadi, 2004, in Kaveh Farrokh.com, link: https://www.kavehfarrokh.com/ancient-prehistory-651-a-d/Sasanians/the-site-of-taghe-bostan). Note the larger figure of the rider at bottom center (the king Khosrow II) shooting his arrow downwards, the five riders to his rear riders with another smaller figure to the top of the shooting king – all of whom have their feet pointed horizontally. At the top is the figure of king attended by a courtesan who holds an umbrella over his head – this rider's feet are not fully discernable. Note that the horseman shooting arrows has his sword suspended in a manner consistent with adjustable straps (lappet suspension system).

- these also have their feet portrayed in the horizontal position, again consistent with the use of stirrups (Fig. 3). These portrayals are in contrast with the earlier Savaran/ Aswaran (sans stirrups; see for example platework of Shapur II (r. 309-379 CE) hunting lions at Hermitage Museum, St. Petersburg, Inv.S-253; Consult discussion of this plate by: Farrokh, Khorasani & Dwyer, 2018: 88-89) (Fig. 4) who would point their feet downwards (like a ballerina) as seen at Nagshe Rustam (Herrmann, 1989: 771). Alofs also notes that the Sasanian (and Romano-Byzantine) cavalrymen adopted the long tunic reaching significantly below the knees, which may be due to the adoption of the stirrup (Alofs, 2014: 432). The earlier short tunics of the late Parthian and early (or middle era) Sasanians for example were designed such that the rider could jump onto the saddle (as not stirrup was available), however with the adoption of the stirrup the Sasanian knight's long tunic was no longer an obstruction for mounting of the horse. An added benefit for the rider was that the longer tunic now also provided him with

Fig. 4: Shapur II (r. 309-379 CE) with stirrup engaged in the hunting of lions (Photo source: Hermitage Museum, S-253). Note foot pointed downwards.

enhanced shielding against the elements. A well-preserved sample of a late Sasanian tunic is the Brahmag e Artesharih (lit. costume/uniform of warriors) kaftan discovered in the Caucasus (Hermitage, Inv.Kz-6584; this bears the revered Sasanian Senmurv motif) (Fig. 5).

Fig. 5: Sasanian Brahmag e Artesharih (lit. costume/uniform of warriors) kaftan discovered in the Caucasus (Photo source: Hermitage Museum, Inv.Kz-6584).

Another seminal observation made by: Herrmann is the evolution of Sasanian saddle technology as evidenced in Sasanian silver plates. The bow-front saddle is seen with riders depicted in later Sasanian plates which would be consistent with the Sasanian adoption of the stirrup (Herrmann, 1989: 771). The earlier horned saddle which had served the Parthian and Sasanian cavalry so well (due to the lack of stirrups) had now been replaced by: a bow-front model. It is highly unlikely that the Sasanians would have chosen to abandon the (safe) horned saddle for the bow-front version without adopting the stirrup as this would have made their riders precariously unstable, especially when engaged in archery, close quarters and lance combat on horseback. Another observation of late Sasanian plates made by: Herrmann is that the legs of the riders are hanging down comparatively straight, even as stirrups are not depicted (Herrmann, 1989: 771). The only exceptions as per the later plates are the one of Varakhan (Hermitage Museum, St. Petersburg, S-24) and Bahram Gur (Museum für Islamische Kunst, Berlin, no.I. 4925; see these plates in Harper & Myers (1981, Plates 20 & 23)), both of whom are hunting boars, however as Herrmann notes, both riders are protecting their legs (by folding their legs) against wild boars (Herrmann, 1989: 771). Older depictions of riders on Sasanian plates show their legs often flexed at the knee, with the lower leg flexed back at an angle, consistent with the lack of stirrups.

The third factor for consideration is the references to the Persian use of the stirrup provided by: the Arab-Muslim polymath al-Jahiz (776-869 CE; full name: Abu Osman amr ibn Bahr al-Jahiz). As noted by: Trombley (2002: 257):

> *"... one must note of a tradition reported by: al-Jahiz that some of the first ansar – Muhammad's 'helpers' in al-Madina – adopted certain Persian usages, including stirrups, but gave them up after adhering to Islam".*

Jahiz makes reference to the early Arab's choices of not using the stirrup is in the context of a hypothetical debate in which an Iranian is implying a sense of cultural supremacy by: noting how the Arabs lack the stirrup (unlike the Iranians) (Jahiz, Al Bayan wa Tabyeen (ed. Bayan, 1960), 3, 28-29; 14, 3-19). As Nicole further avers, there are also references to the prophet Muhammed (c.570-632 CE) having made disparaging allusions of the Persians' use of the stirrup (Nicolle, 2005: 21). Note that prophet Muhammad's reference would have allegedly been during his time of proselytizing the Islam faith from sometime in c.613 CE (Ramadan, 2007: 37–39) until his death in 632 CE, again overlapping the Sasanian war against the Romano-Byzantine Sasanian war (602-628 CE). In conclusion, while it is challenging to verify as to whether the entire Sasanian cavalry were using stirrups (Burns, 2020: 275), the pertinent scholarship affirms that the main body of this military corps in the late Sasanian era were utilizing stirrups (Trombley, 2002: 257; Alofs, 2014: 431; Nicolle, 1996: 20; Nicolle, 2005: 21).

Misconception 2: The Byzantines adopted the Mongolian draw which (combined with the stirrup) is superior against the Sasanian draw.

As noted by: Karantabias:

> *"The other prominent feature that set apart the East Roman heavy cavalry from the Persian's was the method used in the bowshot. ... The Huns used a 'Mongolian draw,' as it came to be known, which maximized the damage of the compound bow by: using the thumb during the draw. Both the bow and the draw were adopted by: the Ρωμαίοι [Romans]. The Persians used a different form of shooting which utilized the three lower fingers. ... the compound bow ... could have a longer range through the superior power of its shot and the support of the stirrup (2005: 31). ... the advent of the new καταφρακτος [kataphraktos; cataphracts], which utilized the thumb technique of the bowshot in conjunction with the new use of the stirrup, added to the Persian defeat (2005: 34)".*

There are two fallacies inherent in the above statement. The first is that the Mongolian draw is superior in range and power with respect to its launched missile in comparison to the traditional Sasanian method (and by: implication other bowshot types) of drawing the bow. The second fallacy is the assumption that the Sasanians did not know of or had rejected the application of the thumb (so-called Mongolian) draw in their horse archery. This is similar to Karantabias' misconception of the Sasanians having rejected the stirrup (misconception 1) which he attributes to "Persian conservatism" (misconception 3).

Karantabias has not provided academic analyses to prove the validity of his first fallacy with respect to the superiority of the thumb draw. To scientifically verify the hypothesis of the superiority of the thumb draw would require a research study in which: (a) compound bows used by: the Byzantine and Sasanians in the early 7th century would be built in replication of the originals as much as possible and (b) implement missile firing by: both the Mongolian and Sasanian methods, collect data and draw statistical comparisons. While no such studies have been implemented, Antony Karasulas has conducted informal preliminary arrow shooting tests in Australia in the early 2000s using bows of the compound type comparing the relative efficacies of the thumb draw and Sasanian three-finger bowshots. Antony Karasulas is a military expert of ancient warfare and is an expert archer, who shoots arrows utilizing different firing strategies. He was in communication with Kaveh Farrokh in 2003 in regards to military weaponry pertaining (esp. archery) to the latter's first book project on Sasanian cavalry published in 2005. Karasulas had published his own textbook on Steppe/Central Asian mounted archery in 2004 in which he also describes the relative efficacy of the Mongolian and Sasanian 3-finger method draw (2004: 24). We need to emphasize that actually the Sasanians used a two-finger draw in contrast to the Parthian three-finger draw (Consult

discussion of this plate by: Farrokh, Khorasani & Dwyer, 2018). It means that they used their middle and ring finger to draw the bowstring by: extending their index finger and their little (pinky) finger. However, they are both types of finger-draw in contrast to the thumb-draw techniques. While more comprehensive studies are required, Karasulas' shooting tests have failed to demonstrate the superiority of the thumb draw over the two-finger method in power and range (Farrokh, 2017: 310). As noted by: Karasulas (2004: 24):

> *"The Persians were apparently using their forefingers to achieve the same result [as achieved in the Mongolian draw in which the forefinger knuckle applies pressure to the arrow to hold it in place on the bowstring] and, like the 'Mongolian Draw' the Persian method worked to secure the arrow from falling off the bow while riding".*

In summary, there is no technical evidence that the thumb draw was superior (with respect to missile range and propulsion power) to the Sasanian system for drawing the bow (two-fingers with pointed index finger) as Karantabias has suggested. Karantabias has also failed to address the sophistication of Sasanian archery, notably with respect to the role of different types of arrowheads (e.g., U-shaped, 'falcon winged', etc.) (Farrokh, 2017: 60-61) and bows (Farrokh, 2017: 67-68). In general, different types of arrowheads would be deployed by: the Sasanians in accordance with fluid battlefield circumstances. Heavier compound bows would be used for firing certain types of arrows for achieving penetration through armor, versus lighter bows used for massed "Katyusha" shooting into enemy formations (mounted or on foot).

Karantabias' misconception with respect to Sasanian archery may be relying on Procopius' report of the archery exchanges between Sasanian and Byzantine troops at the battle of Callinicum (Procopius, History of the Wars, I, XVIII):

> *"…their [the Sasanians] missiles were incomparably more frequent, since the Persians are almost all bowmen and they learn to make their shots much more rapidly than any other men, still the bows which sent the arrows were weak and not very tightly strung…The Roman bowmen are always slower indeed, but inasmuch as their bows are extremely stiff and very tightly strung..".*

As explained by: Karasulas (Personal Communication, May 12, 2003), the high impoundment of the Turco-Avar-Hun-Turkic origin Romano-Byzantine compound bow would be at its highest level of effectiveness when shot by: foot archers fighting defensively due to the stability of their platform. The Savaran who were charging

towards the defeated Romano-Byzantine forces at Callinicum, were being attacked with deadly missile barrages. The mounted Savaran engaged in their own archery, and like their Byzantine counterparts at the time, most likely lacked stirrups. Therefore, their (mounted) platform provided less stability for their archery than their foot-based opponents. As concluded by: Karasulas, the primary factor was platform stability, and not the "weakness" of the Persian bows as Procopius and Maurice's Strategikon (XI, 1) have stated. The mobility of the Sasanian cavalry in battle (sans stirrups in 531 CE) would have reduced the power of their own composite bows. Had stirrups had been available to the Savaran at Callinicum, these then could have delivered their missiles with greater power and momentum. This situational liability may perhaps explain in part Procopius' report that Byzantine archery was more powerful during this battle. The Savaran however were able to compensate (as Procopius reports) with their greater speed in firing off missiles. As per the question of the power of Sasanian bows (and archery in general), this was to be demonstrated just 11 years later at the Battle of Anglon (542 CE). In this battle a Byzantine force of 30,000 troops was defeated by: a 4000-man Sasanian force of dismounted fighters, most likely the Savaran or Dailamites. The Sasanians were shooting their archery as foot archers, like the Byzantine foot archers at Callinicum. As reported by: Procopius (History of the Wars, XXV, 1-35):

> *"…all of a sudden the men who were in ambush [Sasanian Spāh]… came out from the cabins along the narrow alleys…great confusion fell upon the Roman army, and Nabedes [Sasanian commander at Anglon] 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…Romans did not withstand the enemy and all of them fled as fast as they could…especially all the generals…kept fleeing still faster…had not the courage to array themselves against the Persians if they overtook them…this proved a disaster for the Romans…so great as to exceed anything that had ever befallen them previously…great numbers of them perished and still more fell into the hands of the enemy".*

As per the above description by: Procopius, the dismounted (or Dailamite infantry?) Sasanian force defeated their numerically superior Byzantine by: means of archery. As in Callinicum, the arrows released by: foot archery proved especially effective, penetrating the armor of the Byzantines with a high level of effectiveness. The impact of Sasanian archery would have been amplified in close quarter situations, especially in Anglon's narrow streets and alleyways (Farrokh, 2017: 71). Sasanian training in the rapid shooting of arrows would have also served to amplify the Byzantines' casualties at Anglon.

Finally, the notion that the thumb Draw was either unknown to and/or rejected as a bowshot method by: the Sasanian Spāh may be questioned. A comprehensive analysis of Sasanian archery strategies published in RAMA (Revista de Artes Marciales Asiáticas) would indicate that the thumb draw may have been integrated as one of bow shot methods of the Spāh (Farrokh, Khorasani & Dwyer, 2018: 101). This is provided by: the early post-Sasanian depiction of Pur-e Vahman drawing his bow in the thumb-draw method (Hermitage Museum, St. Petersburg, Inv.S-247) (Fig. 6). Khorasani's analyses have shown that Sasanian bows acquired increasingly "Hun"-type features such as shorter ears, longer limbs (in proportion) with possibly wider limbs (Khorasani, 2006: 291) following the reforms of the 6th century CE.

Fig. 6: Pur-e Vahman engaged in the Parthian shot against pursuing lion (Photo source: Hermitage Museum, Inv.S-247).

Misconception 3: "Persian Conservatism" led to the rejection of Central Asian Military Technology

As noted by: Karantabias (Karantabias, 2005: 30):

> *"Persian conservatism hindered any efforts to compete with the more advanced καταφρακτος [kataphraktos; cataphracts] ... this is one factor which may be considered in the final victory over the Persians".*

As the concept of "Persian conservatism" has not been semantically defined it may be assumed that Karantabias is referring to the Sasanians' reluctance in adopting new and different military technologies and tactical methods. He then contrasts this with

the willingness of the Byzantines to incorporate Hun-Turkic military equipment into their armies, especially the iron stirrup, the "Hun" bow and corresponding "Mongolian Draw" for releasing the arrow. Karantabias correctly concludes that the availability of the iron stirrup would have provided the Byzantine cavalryman a more stable platform with which to (1) shoot his missile (by the thumb Draw) (2) deploy his lance during a cavalry charge into enemy lines and (3) engage in combat with swords, etc. on horseback. He then concludes that this combination (rider stability, Hun bow and thumb draw) would have allowed the Byzantine cavalryman to shoot his arrows with greater power and range in comparison to his Sasanian counterpart. This supposition rests on the three (already addressed) assumptions that the Sasanians did not adopt stirrups, Hun-Turkic archery technology, which Karantabias then attributes to "Persian conservatism" (Karantabias, 2005: 30).

The validity of the notion that "Persian conservatism" (Karantabias, 2005: 30) served as an impediment against the incorporation of steppe military technology can be assessed. The Sasanians actually adopted the steppe and Central Asian lappet suspension system (Fig. 7) as well as the "P-mount" for their swords (Fig. 8). This can be seen in several examples of late Sasanian swords (Fig.s 9-10). In the latter case, there are several archaeological finds of Sasanian swords that demonstrate this fact. As noted by: Lerner, the traditional Sasanian "broadsword" of the scabbard slide system (Fig. 11) remained as a ceremonial weapon even as steppe technologies for swords and their suspension had been adopted by: the Sasanians (Lerner, 2002: 102-103).

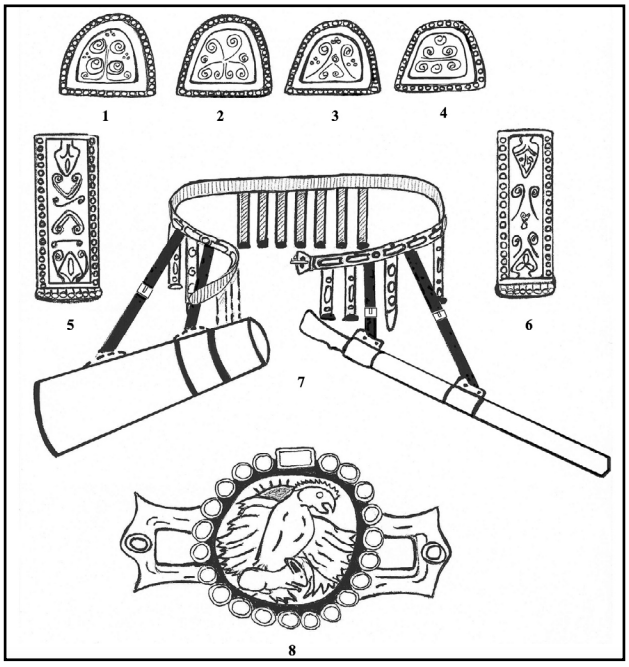

Fig. 7: Late Sasanian Belts: (1-6) Late Sasanian 'Celtic' pattern belt decorations from Northern Iran Daylaman region (7) Turco-Avar lappet style suspension for swords and quivers of the type seen with the knight at the Taghe Bostan vault (Fig. 2) (8) Sasanian gold belt buckle discovered in Nahavand (Drawings by Kaveh Farrokh, 2004).

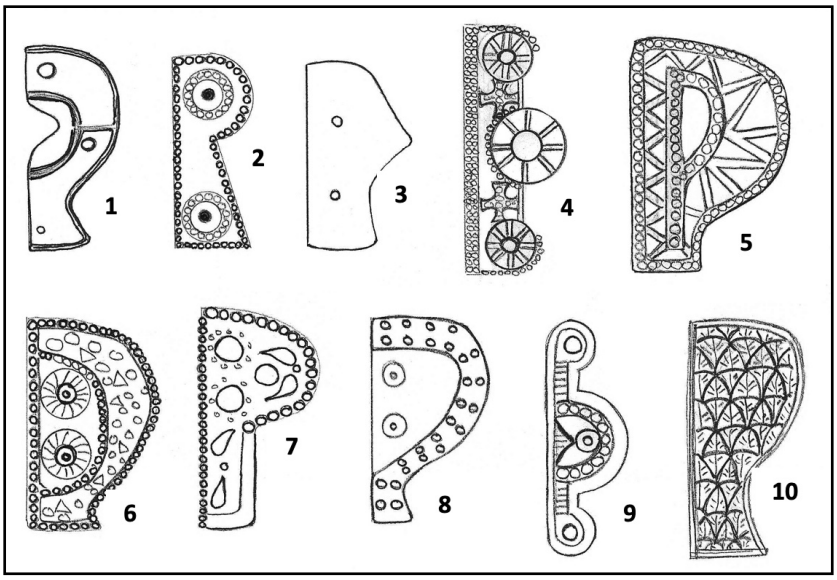

Fig. 8: Sword mounts: (1-2) Avar (3) East Iranian/Soghdian (4-9) Hunnic or Turkic (10) Late Sasanian – early post-Sasanian Daylamite (Drawings by Kaveh Farrokh, 2004, see also Masia, 2000 and Balint, 1978).

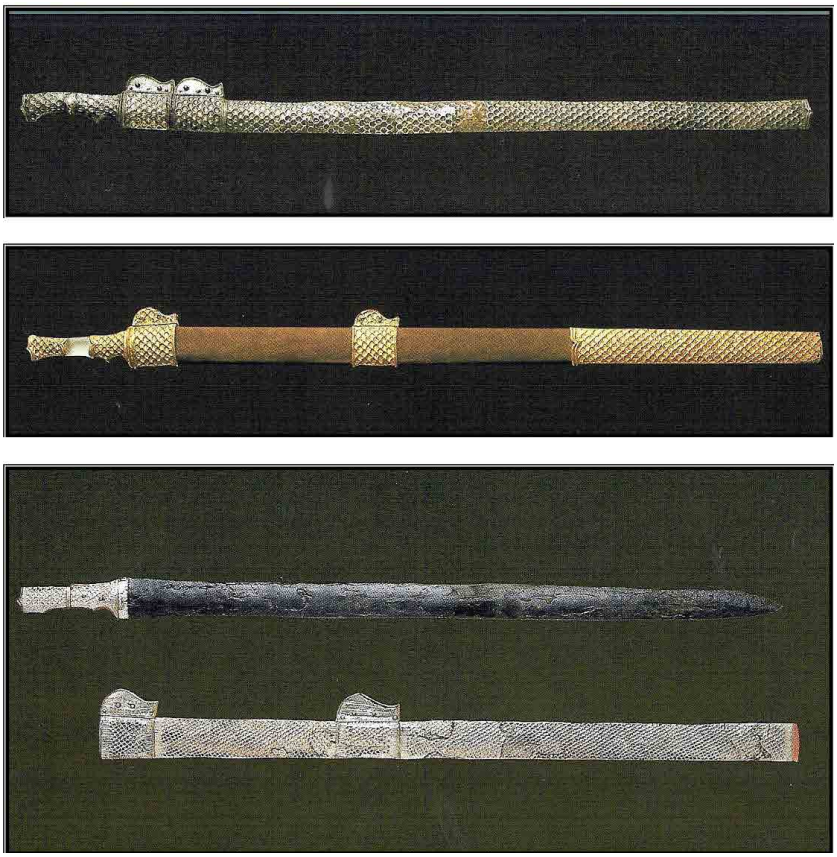

Fig. 9: Samples of late Sasanian swords of the lappet-suspension system dated to late 6th or early 7th centuries CE (Top: Louvre, Inv. MAO. 423; Middle: Louvre, Inv. AO. 25534; Bottom: Römisches Germanisches Museum, Mainz, Germany, Inv. 037985 and Inv. O. 379386).

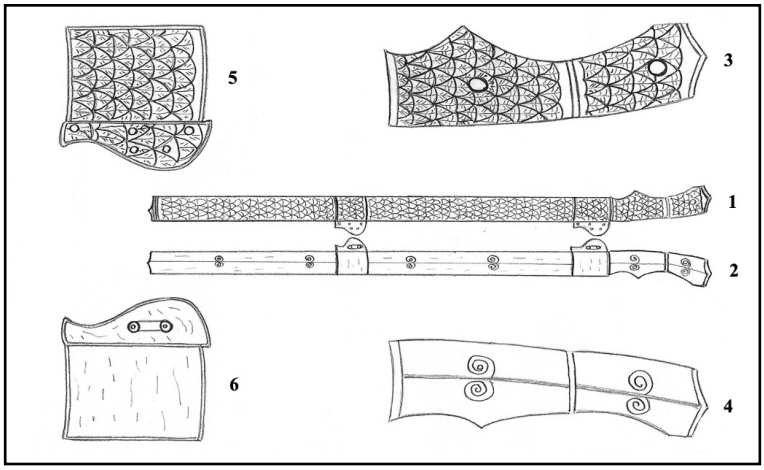

Fig. 10: Drawing of Late Sasanian Swords: Entire sword from front (1) and back (2) Sword handle at front (3) and back (4) Sword Mount at front (5) and back (6) (Drawings by Kaveh Farrokh, 2004).

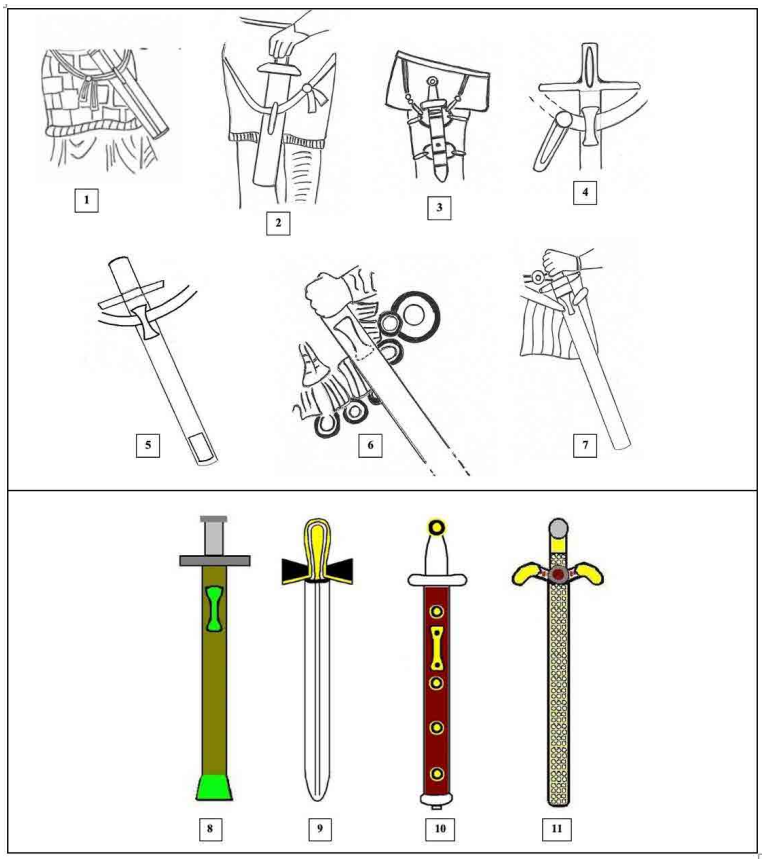

Fig. 11: Drawings of Sasanian scabbard-slide swords: (1-2) Kushan swords from Gandaharan stone reliefs (3) Parthian and Sarmatian 'thigh' dagger (4-5) Bishapur 3rd century CE (6) Shapur I at Nagsh-e-Rustam 3rd century CE (7-8) Bishapur 3rd century CE (9-10) Sasanian circa 4-6th centuries CE – scabbard for (10) based partly on finds made in Tcherdyne (Perm) (11) Khosrow II at upper vault at Tagh-e-Bostan – 7th century CE (Drawings by Kaveh Farrokh, 2004).

A cursory examination of Taghe Bostan serves to illustrate Lerner's observation. The knight at the vault in the ivan at Tagh-e Bostan is wearing the lappet suspension system (Farrokh, 2017: 61-62) (Fig. 2) with the right panel (depicting the royal hunt) at the ingress way clearly showing a horseman (Khosrow II) whose sword has been suspended in a manner consistent with lappet adjustments (Farrokh, 2017: 44) (Fig. 3). At the interior of the ivan vault where the knight is located, there is a panel (above the knight) where Khosrow II now stands with a "ceremonial" type "broadsword" (Fig. 12). In summary, there is evidence that the Sasanians, while adhering to ceremonial traditions, were concurrently utilizing steppe-central Asian technologies for their military. It is thus clear that new innovations were utilized by: the Sasanians. The Karantabias thesis of "Persian conservatism" is then challenged by: an apparent contradiction: why would the Sasanians selectively adopt lappet suspension and P-mount technology but then choose to reject stirrups and archery technologies? The question however is null and void: as alluded to already, the Sasanians did have stirrups and had adopted new innovations in archery technology. The military development of the Spāh, notably by: the later Sasanian era, had been heavily influenced as a result of its battles in Central Asia as discussed in misconception 4.

Fig. 12: Khosrow II (center) stands with ceremonial sword (see: drawing reconstruction in Fig. 11). The figure of Anahita stands to the kings left with Ahura-Mazda or possibly a grand Magus standing to the right. (Photo Source: Shahyar Mahabadi, 2004 in Kavehfarrokh.com, link: https://www.kavehfarrokh.com/ancient-prehistory-651-a-d/Sasanians/an-overview-of-taghe-bostan/).

Second, the notion of "Persian conservatism" may also be challenged on the grounds that the Sasanians actively recruited steppe warriors into the Spāh's battle order given their martial capabilities and technologies which helped to enhance the military efficiency and battlefield performance of the Spāh (Jalali, 1383/2004: 58-59). Warrior peoples such as the Gok Turks from Central Asia were recruited into the Spāh (Jalali, 1383/2004: 62), as well as warriors from the Caucasus such as the Sabirs (Pigulevskaya, 1372/1994: 203), Sunitae (Whitby, 1994: 255), Svants (Pigulevskaya, 1372/1994: 203) and notably, as per the reports of the Raftarnamye Anoushirvan, the Khazars who were recruited during the reign of Khosrow I Anoushirvan (r. 531-579 CE) (Raftarnamye Anoushirvan (tr. Imam-Shushtari, 1348/1970: 248-249)). The third factor pertains to Sasanian military experiences in Central Asia, and their impacts on ensuing military reforms during the 6th century CE as discussed in misconception 4.

Misconception 4: Hun-Turkic nomadic armies superseded the Sasanian Spāh in cavalry warfare

Karantabias states (2005: 30):

> *"Through these facts [alleged lack of stirrups and Central Asian technology among the Sasanians], the heavy cavalry of the Ρωμαίοι [Romans] seemed to have been in a better position than the Persian by: adopting technology from the powerful tribes of Central Asia…"*

The above statement bears two hypotheses. The first is that the Romano-Byzantines were "in a better position" than the Sasanians to adopt the technology of Central Asia. The second hypothesis which is implied or derived from the first is that the military systems and warfare methods of Central Asia superseded those of the Sasanians, notably by: the late 6th or 7th centuries CE. As will be discussed further below, this is not substantiated by: the military history of the Sasanian empire and Central Asia. The notion that the Sasanian cataphracts, known as the Savaran or Asbaran lancers, were not capable (in comparison to their καταφρακτος [kataphraktos; cataphracts] counterparts) of steppe nomad types of horse archery warfare. The reasoning is based on the hypothesis that the Sasanians had refused to adopt such strategies into their armored lancer regiments due to "Persian conservatism" which has already been addressed.

As per Karantabias' first hypothesis, that the Romano-Byzantines were better placed to interact with Central Asia technology is untenable in strictly geographical terms. The Sasanians were the direct neighbours of Central Asia, whereas the Romano-Byzantine Empire was not. The Sasanian empire shared a very long border with Central Asia along its northeastern marches, stretching (at its greatest extent in the early 7th century CE) from the southeast corners of the Caspian Sea to the borders of Soghdia compromising the modern-day Central Asian states of Turkmenistan, Tajikistan, Uzbekistan, Kyrgyzstan

and Kazakhstan (Fig. 13). The Sasanian empire was heavily engaged in trade with Central Asia as a whole, notwithstanding the integration of its roadways with the Silk route. In practice the Sasanian Empire was much better placed to directly interact and trade with Central Asia with respect to commercial and technological exchanges, including military. Karantabias may be referring to Romano-Byzantine contacts with Khazars, Avars and other Hun-Turkic peoples they had encountered in the Balkans. In the broader sense these peoples shared many of the same types of military technologies with the warrior peoples of Central Asia, however it remains unclear as to what is meant by: Karantabias with respect to the Romano-Byzantines being better placed to adopt technologies from Central Asia.

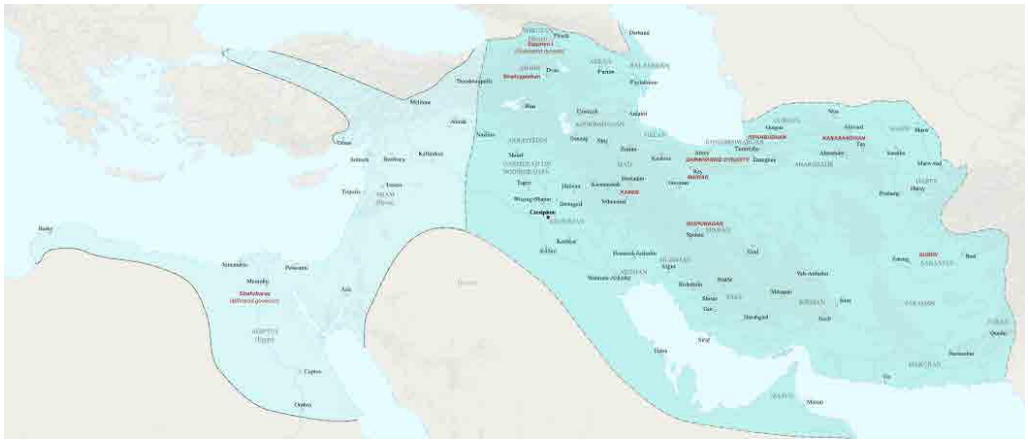

Fig. 13: Map of the Sasanian empire at its greatest extent in the early 7th century CE during the reign of Khosrow II (Source: User Ro 4444 in Wikipedia, link: https://commons.wikimedia.org/wiki/File:The_Sasanian_Empire_at_its_apex_under_Khosrow_II.svg). Note the long border marches of the empire with Central Asia to the northeast.

The notion that the late Sasanians were superseded by: the Turkic and Central Asian peoples in cavalry warfare is not supported by: documented historical events. The Sasanians had extensive military experience in wars against the successive invasions of Central Asian warrior peoples. Mention may be made of Shapur II (r. 309-379 CE) and his wars against the Chionites whose threats to the empire's northeast had forced the Spāh to abandon its sieges against the Romans in 337 CE (Farrokh, 2007: 202). Shapur II was able to defeat the Chionites by: 357 CE (Frye, 1985: 137) followed by: a peace treaty with them (Ammianus Marcellinus, XVII, V, 1) in circa the following year. Shapur II then recruited the Chionites as allies in his wars against the Romans, notably at the siege of Amida in 359 CE (Farrokh, Maksymiuk & Sánchez-Gracia, 2018: 47, 106, 108). In the wake of the defeated Chionites were to arrive another invading warrior people from Central Asia in the 440s CE known as the Kidarties (or Chuls (Greatrex, 1998: 45)) who were eventually expelled from Sasanian territories in the northeast of the empire and Central Asia by: Yazdegird II (r.438-457 CE) and the Spāh in a series of phased offensives in c.443-450 CE (Farrokh, 2007: 214-215; Farrokh, 2017: 205-

206). Pirouz I (r. 459-484 CE) defeated the Kidarites in their own home territories and captured their capital Baalam by: 466 CE or 468 CE. According to Greatrex Pirouz officially declared his victory in 466 CE over the Kidarites by: an embassy dispatched to Byzantine Emperor Leo (r.457-474 CE) in Constantinople (1998: 46). Kurbanov disputes this date and proposes Pirouz's final victory as having been achieved in 468 CE (2010: 104).

This Spāh's successes against the Kidarites proved to be ephemeral as these had now yielded their territories to the Hephthalite Huns by: the late 460s CE (Greatrex, 1998: 45). Bahram Gur (r. 420-438 CE) and the Spāh had comprehensively defeated the Hephthalite Huns earlier in 421 CE (Dinawari, Akhbar al Tawaal: 84-85; see also analysis by: Frye (1984: 352)), but these had progressively recovered militarily over the ensuing decades. The Sasanians would soon face one of the greatest threats to their empire to be posed by: the Hephthalites in the 5th century CE. The identity of the Hephthalites remains debated, with the overall consensus suggesting that these were an Altaic-speaking people (Frye, 1996: 175). Pirouz I and the Spāh fought and were defeated at the hands of the Hephthalites in 474-475 CE (Kurbanov, 2010: 166; Peroz and his army had been trapped by: the Hephthalites with no chance of escape - Procopius notes of Peroz's humiliation of having had to prostrate himself before the Hephthalite king in order to secure the release of the Spāh and himself (History of the Wars I, 3)) and 476-477 CE (Kurbanov, 2010: 104. Joshua the Stylite notes of how Peroz and the surviving members of his army were captured and forced to pay the Hephthalites a ransom of thirty mule-loads of silver Drachmas in order to secure their freedom (ed. & tr. Wright, 1882: 10). Pirouz I's third and final battle against the Hephthalites in 484 CE ended in a disastrous and costly defeat for the Spāh, with the king himself having died during combat (Procopius, History of the Wars, I, 4; Dinawari, Akhbar Al-Tawwal: 29; Tabari, Iran during the Sasanians: 359-397. See also Kurbanov (2010: 170) and Greatrex (1998: 47); for detailed military analysis of these wars consult Farrokh (2017: 206-212). While it is not established with certainty if the Hephthalites had military technological advantages over their contemporary Sasanian opponents with respect to stirrups, lapper-suspension gear and archery technology, the uninterrupted consistency of Hephthalite victories over the Spāh in 474 to 484 CE would suggest that their armies may have held advantages in equestrian and weapons suspension gear allowing their cavalry to battle with a more stable platform for engaging in horse archery, lance and close quarters combat (Farrokh, 2017: 209-212). Two types of archaeological data provide information as to the state of Hephthalite cavalry. A silver bowl (dated to 460-479 CE) discovered in Pakistan (currently housed at the British Museum, Department of British and Medieval Antiquities) depicts a Hephthalite cavalryman engaged in the Parthian Shot (Fig. 14) however this rider is not shown with stirrups, with his feet pointed downwards consistent with the lack of stirrups. However, another depiction of Hephthalite cavalrymen seen with the stone carvings in India's Ramban district of India

(in the state of Jammu and Kashmir) examined by: an Indian-Russian archaeological research team (Polosmak, 2018), display the riders' feet in the horizontal position consistent with the use of stirrup (Fig. 15). The Hephthalites were in close proximity to China, where the stirrup may have been invented by: the early 4th century CE (Dien, 1986: 33). Dien examines a representation of triangular shaped set of stirrups from a Jin tomb (dated c.302 CE) in Changsha, China. Archaeological data in the form of early Chinese stirrups have been discovered in the Feng Sufu tomb (c. 415 CE) along with an earlier sample (gilded bronze construction dated to c. mid-fourth century CE) discovered in one of tombs of Wanbaoting. The arrival of the stirrup in northern China led to the rise of new local military elites (Dien, 1986: 34) who were in close proximity to Central Asia and its warrior peoples such as the Hephthalites. Stirrups provided the Chinese military the solution they required in order to enhance the stability of their Tieji (Iron cavalry) (Dien, 1986: 37-38). Stirrups also facilitated the Chinese cavalry's use of more powerful bows on horseback (Dien, 1986: 34). The Hephthalite rider depicted in the silver bowl (Fig. 14) does display him with archery gear of the Turkic-Avar compound type with the angled tilt of the rider's large sword a possible indication of a new type of weapons suspension system, however no actual lappets are depicted on that bowl, like those seen with the Sasanian knight inside the vault at Taghe Bostan. The warrior on the bowl is shown carrying his sword via a scabbard slide system (Fig. 2).

Fig. 14: Silver bowl (dated to 460-479 CE) discovered in Pakistan (currently housed at the British Museum, Department of British and Medieval Antiquities) depicting a Hephthalite cavalryman engaged in the Parthian Shot while engaged in the hunt (Source: User PHGCOM in Wikipedia, Link: https://commons.wikimedia.org/wiki/File:SilverBowlNFPPakistan5-6thcenturyCE.JPG). While the depiction does not show the rider with stirrups, the archery gear appears to be of the Turkic-Avar compound type with the angled tilt of the rider's large sword a possible indication of new type of weapons suspension system, however no actual lappets are depicted on the bowl, like those seen with knight at vault at Taghe Bostan. The sword on this bowl is hung via the older method of scabbard slide system (Fig. 2).

Fig. 15: Stone carving Hephthalite cavalrymen in the Ramban district of India (in the state of Jammu and Kashmir) examined by an Indian-Russian archaeological research team; note drawing by Ye. Shumakova for context (Source: Steppe History Forum, Link: https://scfh.ru/en/papers/riders-lost-in-the-himalayas). Note that the riders' feet are depicted in the horizontal position in a way consistent with the use of stirrup, unlike when the feet are pointed downwards when the rider is not using stirrups.

The Spāh's defeats against the Hephthalites in the mid-late 5th century CE was a major factor in which military changes in the Savaran's equipment began to be implemented during the reign of Kavad (r. 488–496, 498-531 CE) and were to continue after his reign, bearing tangible results by: the 560s CE during the reign of Khosrow I (r. 531-579 CE) (Rubin, 1995: 227-297; Schindel, 2003: 675-690). A seminal military restructuring applied during the reign of Khosrow I was the Divan Spāh (Matufi, 1378/1999: 209) (lit. army office; approximate modern-day equivalent of the Ministry of War) cited as the "Diwan al-Jund" in Arabic by: Dinawari (Dinawari, Akhbar ol Tawaal (ed. Guirgass, 1888): 74) in the Islamic era. Supervised by: a grand Dabir (high ranking advisor who also acted as scribe). The grand Dabir at the time of Khosrow I was known as Pabag or Babak whose post was of high status in the Spāh and Sasanian empire overall (Dinawari, Akhbar ol Tawaal (ed. Guirgass, 1888): 79). The Divan Spāh is described by: the Tarikh-e Gozide text as having "…been organized [by the Sasanians] with the affairs of [military] reviews having been given a great deal of importance" (Tarikh-e Gozide (edited by: A. Navai, 1363/1984): 110). The military review process, which was itself reformed during the 6th century CE, allowed for a professional evaluation of the Spāh's combat readiness, details which were documented (along with the tabulation of professional military personnel) in the tomes of the Divan Spāh (Matufi, 1378/1999: 209). The role of the Dabir in this endeavor was critical for three reasons (Tafazzoli, 2000: 14): (1) supervising improvements to military equipment (2) application of inspection regimens for all units every four months and (3) supervision of military instructors training novice units in cavalry warfare, archery, close quarters combat, etc. It is notable that lower-ranking Dabirs were also assigned to military units partaking in battle so that their combat performance and battle outcomes would be recorded

(Al-Jahshiyari, Kitab al-Vozara va al-Kitab (tr. by: Tabatabai, 1348/1970): 29). These records of battles would then be archived as reference documents for objectively evaluating the Spāh's military strengths and especially weaknesses (Farrokh, 2017: 16). These same observed and documented shortcomings could then be addressed in order to enhance the Spāh's battlefield effectiveness. More specifically these records of the Divan Spāh system would be consulted by: the war council, the Spāh military command and Shahanshah (King of Kings) to objectively evaluate recent and past combat performance against formidable adversaries such as the Romano-Byzantines and Central Asian/Steppe warriors (Farrokh, 2017: 16). Put simply, the Spāh was an evolving military force during the Sasanian era notably as a result of the 6th century CE reforms, adapting its weaponry and tactics in accordance with the capabilities and strengths of its opponents along the Romano-Byzantine, Caucasian and Central Asian frontiers. As noted previously the Spāh had undergone a number of critical changes to its military equipment as a result of its military interactions and influences from Central Asia, notably the lappet suspension system, P-mounts for swords and (by the late 6th century CE) stirrups.

The impacts of the military reforms appear to have borne results during the reign of Kavad, given his defeating of the invading Khazars in the Caucasus in 489-490 CE (Zarrin'kub, 1381/2002: 223) and his successful expulsion of the Hephthalites from Khorasan by: the early 500s CE (Schindel, 2003: 675-690). Despite Kavad's success in northeast, the Hephthalites remained at large in the northeast, retaining the military potential to attack into the Sasanian empire's larger Khorasan-Afghanistan region. Khosrow I struck an alliance with the Gok Turks who had arrived to the northeast of the Hephthalites in Central Asia. Khosrow I and the Spāh struck the Hephthalites in 557-558 CE (Bactria was most likely under full Sasanian control by: 560 CE) with the Turks striking them from the north. The Sasanians and Gok Turks who appropriated former Hephthalite territories to the south and north respectively. The breakdown of relations between the Sasanians and Turks a number of years after led to the new military threat of the Turks joined by: their conquered Hephthalite subjects (referred to as the Turco-Hephthalites) during the reign of Hormuz IV (r. 579 – 590 CE). A very large Turco-Hephthalite invasion force invaded the northeastern marches of the Sasanian empire, inflicting heavy losses to defending Sasanian troops (Reza, 1374/1995: 110). Tabari reports the size of the Turco-Hephthalite invasion forces at the large Fig. of 300,000 troops (Tabari (tr. Payande, 1352/1974): 726) with Firdowsi's Shahnameh reporting the invaders numbering at 400,000 warriors (Reza, 1374/1995: 112, Footnote 35) (Chinese sources estimated the invasion forces at 100,000 to 300,000 troops (As cited by: Matufi, 1378/1999: 182)). While the size of these numbers is most likely inflated, it is agreed that the Spāh, which had to also monitor the western and Caucasian frontiers facing the Romano-Byzantines and Khazars/steppe warriors respectively, was significantly outnumbered. This obliged the Sasanian war council to select an

elite force of crack cavalry (Tabari (tr. Bosworth, 1999): 301; see also analysis by: Safa, 1369/1990: 14) numbered at 12,000 (Firdowsi's Shahnameh (as cited by: Reza, 1374/1995: 111) and Dinawari, Akhbar ol Tawwal (tr. Neshat, 1346/1967): 84-85) to be led by: general Bahram Chobin (Tabari (tr. Bosworth, 1999): 301). In the critical battle fought between Bahram Chobin and Turkish Khagan at either Herat or Balkh, the Sasanians defeated their opponents in 588 CE (Czegledy, 1958: 22).

The Turco-Hephthalites rallied to reform their battered armies to again be defeated by: Bahram Chobin at the castle of Avaze with Herat cleared of the invaders by: 589 CE. With the western (Gok) Turks defeated, Bahram Chobin marched further into Central Asia to defeat the Eastern Turkish Khaganate (Shahbazi, 1988: 514-522) by: that same year. Another demonstration of the Spāh's military ascendancy over Central Asian/Steppe armies was to occur in the early 7th century CE in 619 CE, the same year general Shahrbaraz ejected the Romano-Byzantines out of Egypt. Having recovered from their 588 CE defeats, the Turco-Hephthalites took advantage of the Spāh's war with Byzantium to once again invade the Sasanian empire's northeastern marches (mainly Khorasan and Afghanistan). As in 588 CE, the Spāh was not able to dispatch a large military force to eject the Turco-Hephthalites. The Spāh once again opted to assemble a smaller elite force to confront and eject the invaders. Khosrow II summoned the Armenian general Smbat Bagratuni to lead his 2000 Armenian cavalry (Sebeos, Armenian History (tr. Thompson, 1999), Chapter 28: 50) and a force of the Savaran to neutralize the renewed Turco-Hephthalite threat. Bagratuni defeated the Turco-Hephthalites in a major battle against their armies (Sebeos, Armenian History (tr. Thompson, 1999), Chapter 28: 50) in Tus, Khorasan. Despite this defeat the Turco-Hephthalites were strongly reinforced by: the Turkish Khagan with (according to Sebeos) 300,000 troops (Sebeos, Armenian History (tr. Thompson, 1999), Chapter 28: 50). While these numbers are most likely exaggerated, the Naxarar-Savaran force was most likely significantly outnumbered. The revitalized Turco-Hephthalites renewed their invasion, and this time reached all the way to Rayy (vicinity of modern Tehran) and even Isfahan in central Iran (Howard-Johnston, 2010: 63) but then withdrew after plunder. Bagratuni pursued the Turco-Hephthalites and forced them into battle, emerging victorious (Sebeos, Armenian History (tr. Thompson, 1999), Chapter 28: 52), to then reach all the way to Balkh in northern Afghanistan (Reza, 1374/1995: 130). In summary, the Spāh had achieved a high level of military proficiency over Central Asian/Steppe type armies by: the late 6th and early 7th centuries CE which is indicative of significant developments in Sasanian weaponry and tactics. These successes would have been highly unlikely had the Sasanian army chosen to refrain from improving their military equipment and tactics due to "Persian conservatism". Put simply, practical military adaptation in the face of threats posed by: Central Asian/Steppe armies would have been a matter of necessity for the survival of the Sasanian empire.

The Romano-Byzantine empire possessed an exceptionally efficient military machine open to innovative military ideas, including those of neighboring peoples as well as their opponents. In this regard, Karantabias provides astute observations with respect to two factors that resulted in adaptive military impacts that facilitated Heraclius' successes against the Spāh: adoption of nomadic equipment (especially in archery) and renewed as well as improved training incorporating Steppe tactics (Karantabias, 2005: 29-30, 34). Karantabias affirms that the Byzantine adoption of the Steppe technologies such as the iron stirrup, composite bow (and its associated method of the thumb draw) significantly enhanced Byzantine military performance. The composite bow however was already in use earlier by: the troops of Byzantine general Belisarius (Fields, 2002: 331) during the reign of Emperor Justinian (r. 527-565 CE). As a result, these technologies were evidently present among the Byzantines, at the outbreak of hostilities with Khosrow II in 603 CE. We should also note that Sasanians also used composite bows and its use was not restricted to the steppe peoples.

The second factor alluded to by: Karantabias pertains to the highly effectual and arduous training provided for the battered Byzantine army at Caesarea Mazaka (Karantabias, 2005: 31-34). This factor made a notable difference in assisting Heraclius' military recovery and his eventual victory over Khosrow II by: 628 CE. The training regimen at Caesarea Mazaka provided four major benefits for the Byzantine military: (1) a military paradigm shift from a defensive to offensive strategic posture (2) an increased level of integration of steppe (Hun-Turkic) military equipment into Byzantine armies (3) adaptation and integration of steppe battlefield tactics and (4) the possible direct integration of significant numbers of Turkic Khazar cavalry into the Byzantine battle order. With respect to the latter category, Karantabias acknowledges that (2005: 33):

> *"The expertise of the Turkish cavalry may eventually have contributed to the education of the Eastern Roman cavalry…the training at Caesarea was thus complete with the supplement of troops from the steppes".*

The 7-month training period at Caesarea alongside the Khazar Turks resulted in the vast improvement of the Byzantine army's military performance against its opponent, the Sasanian Spāh. Theophanes also reports of a large force of 40,000 Turkic Khazars having arrived into the army of Heraclius after Khazar armies operating in the Sasanian empire's northwest withdrew back into the Caucasus (Theophanes, Chronographia (ed. De Boor, 1883-1885), A.M. 6117). Essentially, the Byzantine's military's integration of Khazar Turkic battle tactics would have given rise to a whole new military force. This new and revitalized Byzantine force would be a different and much more effective force than that which the Spāh had defeated in the earlier phases of the war. When Heraclius unleashed his counter-offensives, the Spāh would most likely have been surprised by: the unfolding of their opponents' new tactics and enhanced fighting efficiency on the

battlefield. The Spāh would now find itself fighting a "western" army also highly capable of applying Steppe/Central Asian tactics such as horse archery and the feigned retreat, courtesy of effective Khazar Turkic military training at Caesarea. The availability and adoption of Steppe/Central Asian technologies (e.g., stirrups) certainly served to further amplify the efficacy of the revitalized Byzantine forces. Heraclius' hard-fought victory against the Spāh at Nineveh in 627 CE may be attributed at least in part to the Byzantine army's implementation of classical Steppe/Central Asian tactics, notably the luring of portions of Sasanian forces into a pre-designated area to then outflank them (Karantabias, 2005: 36-37). This tactic however was not unknown to the Sasanians as Karantabias may be implying. As noted by: Howard-Johnston, one of the Spāh's strategies in coping with invaders from Central Asia was to lead them into predesignated "kill zones" to then entrap the enemy (Howard-Johnston, 1995: 193; For further analysis of these tactics in the context of the Spāh's integration of military forces with fortifications, see Farrokh, Karamian & Karamian, 2021: 139). It may thus be proposed that the Spāh was now confronting a significantly more efficient Byzantine army that was now able to implement new "eastern" tactics, elements of which they themselves had used in their own battle doctrine. Put simply, Sasanian generals would have not expected these types of tactics from a "Western" army, now schooled in such stratagems by: the Khazar Turks. The Byzantines already possessed a highly effective force of armored lancers that were highly effective in comparison to their Sasanian Savaran foes, as well as a large and highly effective combat infantry force. While the Sasanians did field effective infantry of their own, notably the Dailamites of northern Iran by: late Sasanian times (Farrokh & Khorasani, 2020: 31-32), the Byzantines continued to hold their overall edge over the Sasanians in this domain of warfare.

Misconception 5: Not Factoring the Strategic Weaknesses of the Spāh's Four-Spāhbed System

The factors discussed in the previous section were instrumental in Heraclius' subsequent victories with the support of his Khazar Turkic allies over the Spāh which led to the end of the war in 628 CE. In this context, Karantabias reports with respect to the Khazars that (2005: 33):

> *"The Kok [Gök] Turks' impact in battle against the Persians was very apparent. Theophanes claimed that everywhere they went, they burned towns and took Persian captives".*

The above statement and referencing to Theophanes again is in reference to the overall fallacy of Steppe/Central Asian (in this case, Khazar Turkic) combat supremacy over the Sasanians. The statement fails to account for the failure of the Sasanian empire's four-Spāhbod system in which four generals or Spāhbeds (Christensen, 1944: 370) were

in command of four major zones of the empire (Tabari, I: 489): the Xwarbārān-Spāhbed (general of the West), Ādurbādagān-Spāhbed (general of the north), Xwarāsān-Spāhbed (general of the East) and Nēmrōz Spāhbed (general of the south) (Tafazzoli, 2000: 8). This "Quatro system" was one of the consequences of the Sasanian empire's military reforms of the 6th century CE which had replaced the office of the Eiran-Spāhbed (who was the commander in chief of all troops of the Spāh) with the four regional Spāhbeds. The Xwarbārān-Spāhbed and Xwarāsān-Spāhbed offices were often confronted the armies of the Romano-Byzantines and the nomads of Central Asia (notably Turkic and Hephthalite invaders) respectively (Frye, 1985: 154). The office of the Ādurbādagān-Spāhbed was also critical as this was responsible for the security of the Caucasian marches to the north of Ādurbādagān (historical Azerbaijan in northwest Iran) notably against steppe warriors such as the Khazar Turks. This office was also entrusted with defending the empire's northwest from potential offensives from eastern Anatolia and northwest Mesopotamia. The Nēmrōz Spāhbed was also of prime importance for its defense of the empire's southern marches and corresponding regions of the Persian Gulf. The four-Spāhbod system was integrated into Sasanian empire's military architecture of fortresses, moats, and larger works such as Wall of Derbent in the Caucasus, the Walls of Gorgan and Tammisha facing Central Asia and the Khandaq Shapur to the south (Farrokh, Karamian & Karamian, 2021: 117-151).

The "Quatro" system had been designed to rationalize the empire's military resources for being able to fight against invasions multiple fronts simultaneously. In this respect the four-Spāhbed system was essentially rather defensive. While the four-Spāhbed system did entail the assembly of troops for offensive operations into the enemy's territories, there are no indications that this system was designed for prolonged wars involving sustained and continuous offensives aimed for the permanent occupation of enemy territories. Khosrow II's invasion of the Byzantine empire following the assassination of Phocas resulted in a prolonged war for which the four-Spāhbed system had not been capable of sustaining in the long-term. The Sasanians simply did not have sufficient troops to not only invade, but also permanently occupy Byzantine territories, let alone also guard their frontiers facing Central Asia as well as against potential attacks emanating from the Arabian Peninsula. The over-extension of military resources as well as communications and supply lines beyond the four-Spāhbed system over a prolonged period resulted in the opening of dangerous "blind spots" in large swathes of territory in Anatolia, the Caucasus (notably the Black Sea coastline and the northern steppes), precisely the same regions where Heraclius struck in concert with his Khazar allies. The Sasanians simply did not have the numbers of professional troops necessary to maintain a military presence along all of these fronts, not to mention Central Asia as discussed with the Turco-Hephthalite invasions discussed previously. As noted by: Howard-Johnston the Romano-Byzantines had access to double the manpower and resources in comparison to the Sasanians (Howard-Johnston, 1995: 168). Note that the Sasanians

would be further outnumbered when factoring Heraclius' allies among the Khazars.

Frye has noted of a primary weakness of the Spāh's doctrine of stationing the main proportion of its armies in the regional Spāhbod command zones at the expense of the interior (Frye, 1977: 7-15). More specifically, the interior of Iran was relatively sparse with respect to professional forces, a specially dangerous situation if enemy armies punched through any of the Spāhbod regions, allowing them to invade deep into the Iranian interior in which the local regions would be unable to mount effective resistance. This scenario occurred late in the war when Heraclius inflicted a massive pincer movement against the Sasanian empire by: attacking in concert with his Khazar Turkic allies in the Caucasus who tore through the Ādurbādagān-Spāhbed to the north of the empire. When Heraclius arrived in Tbilisi to join his Khazar allies in attacking the southern Caucasus (modern Republic of Azerbaijan) and northwest Iran, the Spāh had few troops with which to resist them (Farrokh, 2007: 258-259).

Conclusion

In conclusion, the failure of the four-Spāhbed system in the context of a long war played a significant role in the defeat of Khosrow II. Sasanian armies and the Savaran in particular were professionally trained to prevail on battlefields more suited for conquest versus long-term occupation of enemy territory. More specifically the Spāh was characterized by: initiative and combat efficacy which was suited for its more elite and highly trained forces such as the Savaran cavalry and the Dailamite infantry corps. This same adaptive feature proved to be a liability in terms of what the Spāh lacked capacity: perpetual presence across all captured territories over a prolonged period. This was imposed by: the limited numbers of highly trained troops that the Spāh was able to field, a situation further compounded with the withdrawal of Shahrbaraz from the war. Within this context, Karantabias provides an adaptive analysis of enhanced Byzantine battlefield performance due to their military training alongside the Khazars at Caesarea Mazaka as well adoption of Steppe/Central Asian equipment. Another factor in Heraclius' eventual success had to do with morale and theological factors. General Shahrbaraz's capture of the True Cross in Jerusalem in 619 CE and its dispatch to Ctesiphon facilitated Heraclius' appeal to the Byzantine populace to engage in a religious crusade to recover this sacred relic for Christendom (Farrokh, 2007: 256-257).

Karantabias' four (military) paradigms or misconceptions with respect to the Spāh fail to be supported when examined in the context of archaeological data, primary sources and recent studies. First, the notion that the late Sasanian Spāh lacked stirrups in contradicted by: the discovery of early 7th century CE stirrups (Römisches Germanisches Museum, Mainz, Germany, Inv. 037985 and Inv. 037986). Second, the alleged refusal or lack of knowledge of the thumb draw which is described as more effective than the Sasanian 2-finger bowshot is not academically supported. In addition, the thumb draw was most likely known by: the Sasanians who most likely used this

in their wide array of shooting methods as dictated by: battlefield circumstances. Third, the notion of "Persian conservatism" rejecting new military technologies is contradicted by: a closer examination of archaeological sites (e.g., Taghe Bostan) as well as archaeological data (e.g., P-mounts on Sasanian swords, lappet suspension, stirrups). The fourth misconception of the alleged superiority of Steppe/Central Asian warfare over the Sasanians is contradicted by: an examination of the history of the Spāh's wars against Central Asian armies, notably in 588 CE and 619 CE. Like the Romano-Byzantine army, the Sasanian Spāh was a highly adaptive military machine capable of adapting to contemporary military circumstances in order to most adaptively defend the interests of the empire.

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دلایل موفقیت نظامی هراکلیوس در برابر سپاه ساسانی (نقدی بر دیدگاه‌های کارنتابیاس)

کاوه فرخ[I]

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چکیده

این پژوهش به تحلیل (پاسخ) دیدگاه‌های «مارک-آنتونی کارنتابیاس» دربارهٔ عوامل اصلی شکست «سپاه ساسانی» در برابر هراکلیوس به سال‌های ۶۲۷-۶۲۸م. متمرکز است. تحلیل کارنتابیاس را می‌توان به چهار تصور مشخص نادرست (نظامی) در موضوع با سپاه (ساسانی) دسته‌بندی کرد: نخست، این دیدگاه که سپاه متأخر ساسانی فاقد ابزار «رکاب»، برای سواره‌نظام بوده است. دو، عدم آگاهی و شناخت لازم ایرانیان از سبک تیراندازی شصتی (رها کردن زه‌کمان با انگشت شصت؛ معروف به تیراندازی مغولی) با این ادعا که که آن‌ها کارایی بیشتری نسبت به تیراندازی معروف دوانگشتی ساسانی داشته‌اند. سه، دیدگاه تأکید بر «ترس و محافظه‌کاری پارسیان» (ایرانیان) که به‌خودیِ خود منجر به امتناع سپاه از پذیرش فناوری‌های جدید نظامی بوده است. چهارم، دیدگاه ادعایی برتری سبک و رزم‌افزارهای سواره‌نظامان استپ/آسیای میانه و یا سواره‌نظام «هون-ترک» در مقابل سبک و رزم‌افزارهای ساسانی است. این چهار برداشت نادرست با تکیه و بررسی دقیق محوطه‌های باستان‌شناختی چون تاق‌بستان، و آثار برجای مانده چون رکاب‌های ساسانی (چون آثار فلزی)، به‌عنوان منابع اصلی و پژوهشی به پاسخ خواهد آمد. پنجمین موضوعی که باید بر آن تأکید کرد که البته ایشان نادرست آن را متوجه شده‌اند: که بهره‌گیری سپاه ساسانی از ساختار«چهار سپاهبد» (چهار کوست، تقسیم کشور به چهار منطقهٔ نظامی) موجب ناکارآمدی ارتش (ساسانی) شده بود؛ «هراکلیوس» با شناسایی این ضعف و بهره‌برداری از آن، توانست به موفقیت‌هایی در برابر سپاه ساسانی دست‌یابد. درواقع، ناکارآمدی ساختار نظامی چهار سپهبد، آن‌هم در یک جنگ طولانی، نقش به‌سزایی در شکست «خسرو دوم» داشت. ارتش‌های ساسانی و به‌ویژه «اسواران» به‌طور حرفه‌ای آموزش چگونگی پیروزی بر دشمن در میدان‌های نبرد و گشایش سرزمین‌های دشمنان را دیده بودند؛ از همه مهم‌تر، سپاه ساسانی براساس ابتکار عمل، قدرت رزمی بالا تعریف شده بود که این موضوع ناشی از بهره‌گیری از سرداران نخبه، گروه‌های آموزش دیدهٔ بسیار حرفه‌ای چون: اسواران و بخش پیاده‌نظام معروف به «دیالمه» بود.

کلیدواژگان: ساسانیان، بیزانس، آسیای میانه، اسواران، کمان‌وران.

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مقدمه

این پژوهش به تحلیل (پاسخ) دیدگاه‌های «مارک-آنتونی کارانتابیاس» دربارهٔ عوامل اصلی شکست «سپاه ساسانی» در برابر «هراکلیوس» به سال‌های ۶۲۷-۶۲۸م. متمرکز است. تحلیل کارانتابیاس را می‌توان به چهار تصور مشخص نادرست (نظامی) در موضوع با سپاه دسته‌بندی کرد: نخست، این دیدگاه که سپاه متأخر ساسانی فاقد ابزار «رکاب»، برای سواره نظام بوده است. دو، عدم آگاهی و شناخت لازم ایرانیان از سبک تیراندازی با شصت کشیدن (با انگشت شصت؛ معروف به تیراندازی مغولی) با این ادعا که که آن‌ها کارایی بیشتری نسبت به تیراندازی معروف دوانگشتی ساسانی داشته‌اند. سه، دیدگاه تأکید بر «ترس و محافظه‌کاری پارسیان» که به‌خودی‌خود منجر به امتناع سپاه از پذیرش فناوری‌های جدید نظامی بوده است. چهارم، دیدگاه ادعایی برتری سبک و رزم‌افزارهای سواره‌نظامان استپ/آسیای میانه و یا سواره‌نظام «هون-ترک» در مقابل سبک و رزم‌افزارهای ساسانی است. این چهار برداشت نادرست با تکیه و بررسی دقیق محوطه‌های باستان‌شناختی چون تاق‌بستان، رکاب‌های ساسانی (چون آثار فلزی)، منابع اصلی و پژوهشی به پاسخ خواهد آمد. پنجمین موضوعی که باید بر آن تأکید کرد که البته ایشان نادرست آن را متوجه شده است: بهره‌گیری سپاه ساسانی از ابزار «چهار سپاهبد» (چهار کوست، تقسیم کشور به چهار منطقهٔ نظامی) موجب ناکارآمدی ارتش شده بود؛ هراکلیوس با شناسایی این ضعف و بهره‌برداری از آن، توانست به موفقیت‌هایی در برابر سپاه ساسانی دست‌یابد.

نبردهای ایران و روم (سدهٔ ششم میلادی)

نخستین مرحله از جنگ میان ایران و روم به سال ۶۰۲ یا ۶۰۳م. برمی‌گردد که به گشایش شهر «دارا» (: در استان کنونی ماردین ترکیه) به‌دست سپاه ساسانی در سال ۶۰۴م. فرجامید. پس از این رخداد، به سال ۶۰۹-۶۱۰م.، رسایینا، تور عبدین، ماردین، آمد، حران (کاره)، الرقه، قرقسین و ادسا را تصرف کردند و به ۶۱۰م. امنیت ارمنستان نیز تضمین شد. پیش‌رَوی سپاه ساسانی به‌سوی آناتولی به تصرف ملطیه در سال ۶۱۳م. انجامید؛ هم‌چنین، سپاه ساسانی با شکست نیروی بیزانس به فرماندهی هراکلیوس، برادرش «تئودور» و ژنرال بیزانسی نیکتاس، کلیکیه و تمام سوریه را در همان سال پیوست شاهنشاهی ساسانی کرد. فلسطین، شهر دمشق به سال ۶۱۴م. و با پیش‌رَوی سپاه به‌سوی آناتولی موجب گشایش «افسس» (افسوس) و «کلسدون» (کدیکوی) نیز شد. آناتولی به سال ۶۱۶م. قسطنطنیه به سال ۶۱۷م. به‌سال ۶۱۸-۶۲۱م. تمام مصر در تصرف ایران ساسانی درآمد.

دومین مرحلهٔ جنگ به پیروزی هراکلیوس در شکست سپاه ساسانی به سال ۶۲۲م. انجامید. فرماندهی ساسانی فاقد تعداد نیروهای لازم برای پاسداری از سرزمین‌هایی بودند که در آناتولی، خاور نزدیک و تا به قفقاز گشوده بودند؛ افزون‌تر، ارمنستان و شمال آناتولی دارای خط ساحلی طولانی با دریای سیاه هستند، و این بخش فرصتی برای یورش احتمالی ناوهای دریایی بیزانس به عقب استراتژیک نیروهای ساسانی بود که در غرب آناتولی و خاور نزدیک سرگرم نبرد بودند. هم‌چنین، بسیاری از مناطق داخلی آناتولی فاقد دژهای حفاظتی ساسانی برای مراقبت لازم بود؛ این موضوع به هراکلیوس اجازه داد تا ارتش خود را دوباره جمع‌آوری نموده و به شرق قفقاز، شمال‌غربی ایران و شمال بین‌النهرین حمله کند.

«خسرو دوم» به‌منظور قطع پیش‌رَوی هراکلیوس، سه سپاه به فرماندهی به‌ترتیب «شهربراز»، «شهراپلکان (:شهرابرکان)» و «شاهین» اعزام کرد. سرزمین‌های بسیار فتح شده در شمال ایران، بازپس گرفته شد؛ شهربراز و شاهین به‌سوی قفقاز پیش‌رَوی کردند؛ شهرابرکان با نیروی‌های بیزانسی روبه‌رو و نخستین شکست را بدانان چشانید و آن‌ها را وادار به عقب‌نشینی به شرق آناتولی

کرد. شهربراز به‌سوی شهرابرکان حرکت کرد تا متحدانه هراکلیوس را از پای درآورند، اما ناهماهنگی میان این نیروها موجب شد تا شهرابرکان کشته و شهربراز فرار کرد. شکست‌های پیاپی، نه‌تنها به ازدست رفتن برخی بخش‌های جغرافیایی انجامید، کمکی که خزرها و ارمنستان به رومی‌ها کردند، می‌تواند عدم توانایی سیستم فرماندهی چهار ناحیه (هر منطقهٔ جغرافیایی ایران یک فرمانده نظامی داشته است) را نشان می‌دهد. اینک با توجه به شرح جنگ مذکور، به پاسخ کارنتابیاس برمی‌گردم.

بحث و تحلیل

- **دیدگاه نخست:** نخستین تصور نادرست ایشان به موضوع عدم آشنایی سپاهیان ساسانی با رکاب برمی‌گردد؛ این تصور به سه دلیل فاقد هر گونه وجاهت است؛ الف) داده‌های باستان‌شناختی. ب) محوطه‌های خاص درهم‌تنیده با هنر سوارکاری چون تاق‌بستان. پ) منابع اسلامی. برای اثبات دیدگاه نخست (الف) باید به کشف رکاب‌های ساسانی متأخر (یا مربوط به سال ۶۰۰ م.) به‌دست آمده از مارلیک اشاره کرد. در صورت پذیرش تاریخ‌گذاری آن به سال ۶۰۰م.، یعنی این‌که ساسانیان با این موضوع (رکاب) پیش از نبرد با رومیان آشنا بوده‌اند. نویسنده (کارنتابیاس) نه‌تنها به دیدگاه‌های «نیکول» بی‌توجه بوده است که بر روی دستاوردهای تحقیقات جامع «هرمان» در موضوع فنون سوارکاری اشکانی و ساسانی نیز چشمان خود را بسته است. هرمان نه‌تنها به سوارکار (به گمانی از اسواران) با رکاب (بالای نقش خسرو دوم درحال تیراندازی) در تاق‌بستان اشاره دارد که بشقاب معروف به «نقش شکار شاپور دوم» در موزه ارمیتاژ (روسیه) نیز رد دیدگاه کارنتابیاس است. دو، هرمان مطالعاتی جامع در موضوع فناوری زین اسب‌های ساسانی از راه ظروف فلزی ساسانی به انجام رسانیده است. قوس کمانی‌شکل جلوی زین گواه روایی نوعی رکاب در دورهٔ ساسانی متأخر است. به گمان بسیار این تکنیک، جایگزین نوع زین‌های شاخکی قدیمی پارت-آغازساسانی شده است که احتیاج به رکاب نداشته‌اند. سه، منابع اسلامی چون «جاحظ» داده‌هایی دقیق داده‌اند. جاحظ به چگونگی معرفی «رکاب» از سوی پارسیان به گروه «انصار محمد» در مدینه و استقبال آنان از آن، آشکارا اشاره دارد؛ هر چند کارنتابیاس تلاش نموده تا استفاده از رکاب در سپاه ساسانی در تمام آن دوره را به زیر پرسش ببرد، اما واقعیت این است که در دورهٔ متأخر ساسانی، رکاب بخشی از زین و یراق سپاه ساسانی بود.

- **دیدگاه دوم:** دیدگاه ایشان دربارهٔ برتری سپاه بیزانس به‌دلیل استفاده از کمان وری‌شصتی (مغولی) و نیز رکاب به‌عنوان عاملی مهم در پیروزی نیز نادرست است. نخست این‌که دو برداشت «تعصبی» در این دیدگاه وجود دارد؛ الف) قدرت کشش و پرتاب تیر به روش مغولی (شصتی) دارای اثرگذاری بهتری از سبک سنتی تیراندازی ساسانی بوده است. دو) این‌که سپاه ساسانی با شیوهٔ تیرپرتاب شصتی ناآگاه بوده و یا ناتوان به استفاده از این روش بوده است. با وجود این، کارنتابیاس هیچ دلیل علمی برای برتری شیوهٔ شصتی بر شیوهٔ ساسانی ارائه نکرده است. افزون‌تر هیچ شواهد تاریخی برای برتری کمان وری‌شصتی بر کمان وری دوانگشتی ساسانی در دست نیست! واقعیت این است، که ساسانیان از گونه‌های مختلف سرپیکان با توجه به شرایط میدان نبرد بهره می‌بردند؛ کمان‌های کمپاند سنگین‌تر برای بهره‌گیری از نوع تیرها بود که برای نفوذ به زره استفاده می‌شدند؛ کمان‌های سبک‌تر برای تیراندازی انبوه (کاتیوشا وار) برای درهم کوبیدن آرایش (سواره یا پیاده) دشمن به‌کار می‌رفت.

- **دیدگاه سوم:** این دیدگاه، به ترس و احتیاط پارسیان به‌عنوان عاملی در عدم استفاده از فناوری‌های جنگی آسیای میانه می‌پردازد. آیا احتیاط‌کاری پارسیان در معنی عدم استفاده ساسانیان (یک مقطع تاریخی) از فناوری جنگی آسیای میانه را معنی می‌دهد که کارنتابیاس از

آن بهره می‌برد! با توجه به تصویر (۷-۱۱) چگونگی استفاده ساسانیان (دست‌کم دورهٔ متأخر) از ابزارهای جنگی معمول درمیان جنگاوران استپ‌ها و آسیای میانه به‌خوبی قابل مشاهده است. واقعیت این است که ساسانیان در کنار رزم‌افزار بومی، از رزم‌افزارهای جدید (دیگر نواحی) نیز بهره بردند.

- **دیدگاه چهارم:** جایگزینی و رواج رزم‌افزارهای گروه‌های قومی هون-ترک آسیای میانه به‌جای رزم‌افزارهای ایران ساسانی متأخر. این دیدگاه نیز در جهت «برتری بخشی» به رومیان ازسوی ایشان آورده شده است. هم‌چنین برای اعتباربخشی به عمومیت و رواج رزم‌افزارهای آسیای میانه، به‌ویژه در سدهٔ ششم میلادی به‌جای آن‌چه که رزم‌افزارهای رایج ساسانی (به‌منظور بی‌اعتبار کردن رزم‌افزارهای ایرانی) است! هم‌چنان‌که با گذشت زمان ایران ساسانی از این رزم‌افزارها (آسیای میانه) بهره برده است؛ زیرا مردمان آسیای میانه از کهن‌سال همسایهٔ دیوار به دیوار ایران بوده‌اند، اما همسایهٔ روم نبوده‌اند.

نتیجه‌گیری

واقعیت شکست خسرو دوم در نبرد با بیزانس، پیش از هر چیز به ساختار ناکارآمد چهار کوستی (تقسیم ایران به چهار منطقهٔ نظامی) در یک جنگ طولانی برمی‌گردد. افزون‌تر، برخلاف ایشان، سپاه ساسانی بسیار آموزش دیده برای نبردهای مختلف بود؛ سپاه ساسانی هم برای چگونگی گشایش سرزمین‌های دشمنان و هم برای چگونگی دوام در سرزمین به‌دست آمده، آموزش‌های لازم را می‌دید. در این سپاه، سواره‌نظام معروف به «اسواران» و نیز پیاده‌نظام «دیالمه» (مزدگیران) بخشی از ارتش بسیار آموزش دیدهٔ ایران ساسانی بود. کارانتابیاس در یادداشت خود با توجه به پیروزی هراکلیوس، با تأکید بر نوع آموزش‌های سپاه بیزانسی (چون بیاری خزرها در قیصریه مازاکا (در ترکیه کنونی) و نیز تمرکز بر تجهیزات آنان چون رزم‌افزارهای آسیای میانه، با تمرکز بر ترس و احتیاط ایرانیان در صدد نمایش برتری طلبی رومی (غربی) است.