Dacian Cost Benefit Analysis:

The Geopolitical Factors

Geopolitical Factors

Manpower

The conquest and subsequent annexation of Dacia resulted in a substantial increase in the number of troops stationed in the region. The Dacian annexation of AD 106 clearly extended the physical length of the Roman frontier in the Danubian region (see figs. 13 and 14), and required a commensurate increase in the number of troops stationed to protect it. In order to defend their new acquisition the Romans built and manned two fortresses and approximately 49 forts, situated along the boundaries of the new province and within the province itself (see fig. 15). 505 Estimates for the number of troops stationed within Dacia after the conclusion of the Dacian wars are the subject of considerable controversy, with substantially differing figures presented. Diaconescu estimates that the Romans placed between 55,000 and 60,000 troops in Dacia,506 and Bennett demonstrates the existence of at least 27,000 Roman troops there before July AD 110, through

⁵⁰⁵ Bennett, *Trajan Optimus Princeps: A Life and Times*, p.164; N. Gudea, "The Defensive System of Roman Dacia," *Britannia* 10 (1979): p.72.

Diaconescu, "The Towns of Roman Dacia: An Overview of Recent Archaeological Research," p.120; unfortunately, Diaconescu does not present the calculations utilised to achieve these figures.

the use of three extant discharge documents.⁵⁰⁷ These 27,000 troops certainly participated in the Dacian wars of AD 101 – 107 and were apparently utilised in the initial construction work in Dacia, yet it would be foolish to suggest that the entire contingent of auxiliary troops stationed in Dacia were retired in AD 110. Therefore, Bennett's figures provide us with some idea of how many additional troops were used during the early phase of provincial reconstruction, above and beyond those utilised after AD 110 which must be included in any assessment of the costs associated with the annexation of Dacia. Although this figure represents a relatively short-term expense, it does not significantly contribute to the determination of Roman forces stationed in Dacia after AD 110. It is important to clarify, as much as possible, the number of troops stationed in Dacia after the conquest as these figures will provide an indication of the expense, both in economic and manpower terms, that Rome was required to commit to this new province. Furthermore, an examination of the troop placement not only gives some indication of the purpose for the presence of these troops but also enhances our understanding of the regional geopolitical environment, and internal issues.

The three military discharge diplomas demonstrate that Trajan based at

⁵⁰⁷ Bennett, Trajan Optimus Princeps: A Life and Times, p.166.

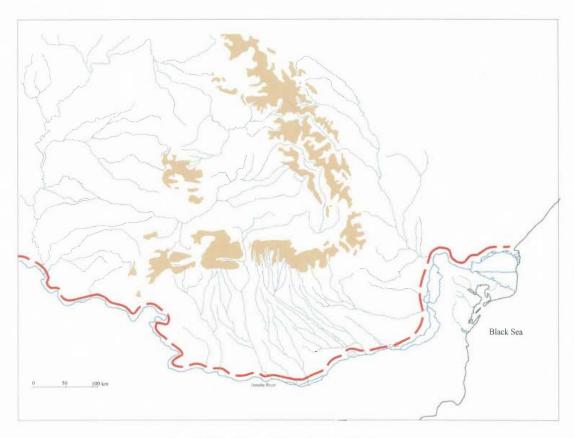


Fig. 13. Pre-Annexation Roman Frontier

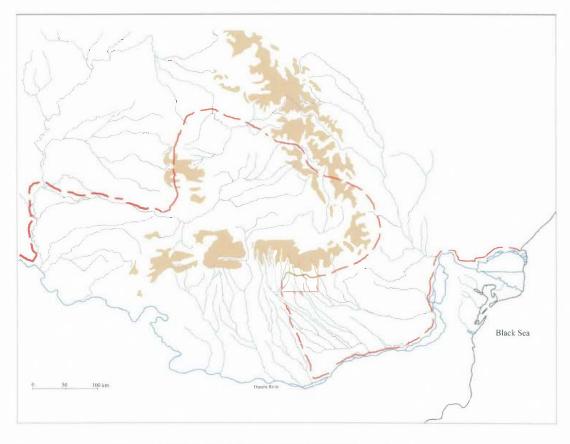


Fig. 14. Post-Annexation Roman Frontier

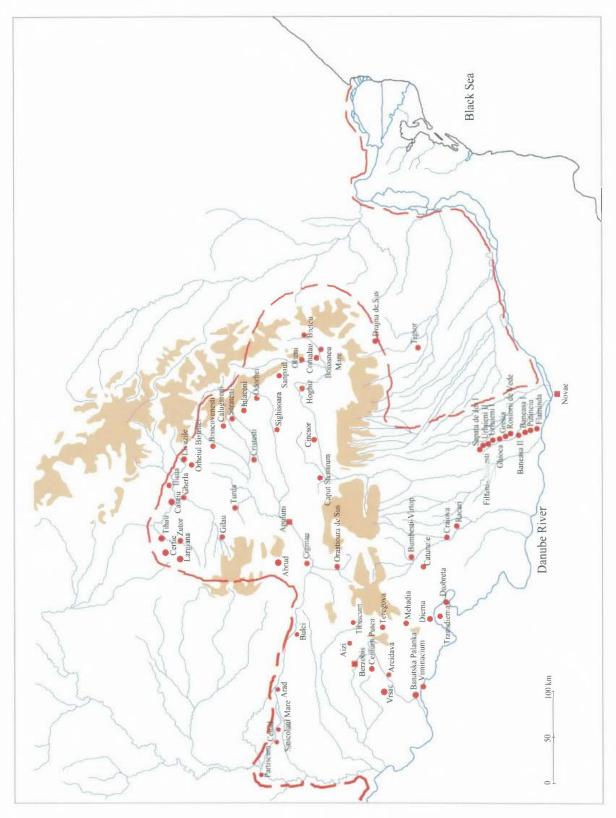


Fig. 15. Roman Defensive Network in Dacia

least 21 quingenariae and seven milliariae in Dacia prior to AD 110,508 as well as two legions in Dacia after the completion of the Dacian wars. If all these units were at full strength this equates to approximately 29,500 troops. As Bennett states, these numbers provide only a nominal muster and not by any means a conclusive figure of the troop numbers in Roman Dacia for the period immediately after annexation. Additionally, as has already been mentioned, these troops, excluding the two legions, only represent the number of soldiers discharged between February and July AD 110.509 A survey of the number of forts and fortresses in Dacia offer a clearer indication of the likely long-term troop allocation in Dacia, which was clearly substantially higher than 29,500. Evidence indicates that Trajan placed two fortresses, and at least 49 forts in Dacia;510 it is therefore clear that Trajan required at least 51 contingents to cover the 51 locations mentioned. It is known that the two legions IIII Flavia Felix and XIII Gemina were stationed in the two fortresses at Berzobis and Apulum respectively,⁵¹¹ leaving at least 49 forts that needed to have been

⁵⁰⁸ CIL 16.57, 16.160, 16.163.

⁵⁰⁹ Bennett, *Trajan Optimus Princeps: A Life and Times*, p.166.

⁵¹⁰ Ibid., p.164; Diaconescu, "The Towns of Roman Dacia: An Overview of Recent Archaeological Research," p.72.

Diaconescu, "The Towns of Roman Dacia: An Overview of Recent Archaeological Research," pp.93; 97; Bennett, *Trajan Optimus Princeps: A Life and Times*, p.164.

manned.

If each of the 49 forts was manned by at least a quingenary cohort each, that is 500 troops the smallest unit likely to be stationed at these fortresses, then the allocation of Roman troops in Dacia must have been at least 36,500 troops (including legio IIII Flavia Felix and legio XIII Gemina). It is clear from the evidence presented in the inscriptions that not all Roman forts in Dacia were limited to a quingenary cohort, some housing a milliaria of 1,000 troops.⁵¹² The inscriptions provide evidence of seven groups of the larger size, which equates to 25 percent of the detachments listed in the discharge documents. If this trend were true of Roman Dacia as a whole then approximately 12 of the forts would have contained cohortes milliariae, adding a further 6,000 troops to the above figure of 36,500 and presenting a plausible total of approximately 42,500 troops stationed in Dacia. This consists of 30,500 auxiliaries and 12,000 legionaries,⁵¹³ to which must be added the 17,500 additional troops for the

Gudea suggests that some forts actually housed more than one unit, potentially increasing the number of troops stationed in Dacia even further. However, as there is no clear evidence for how many, or which, forts contained multiple units, any estimations about how many additional forces may have been stationed in the new province are not currently possible: Gudea, "The Defensive System of Roman Dacia," p.85.

At this point it is also important to remember that in addition to the listed forces until AD 110 there was an additional 17,500 troops in the new province.

period preceding July AD 110. This would provide us with a total of 60,000 troops for the period prior to July AD 110, and a figure of 42,500 soldiers for the period after the listed discharges took place. The resultant figures compare favourably with those presented by Diaconescu of between 55,000 and 60,000.⁵¹⁴

These figures clearly demonstrate the overall manpower utilised to defend the region increased significantly after the completion of the Dacian conquest. This is despite the fact that the section of the Danubian frontier between Viminacium and the Olt river, which formed a large part of the border between Moesia Superior and the newly-formed Dacian province, was demilitarized reducing the number of troops stationed there by as many as 10,000 men.⁵¹⁵ The troop numbers presented suggest that the manpower utilised to defend the post-annexation frontier exceeded the numbers utilised to defend the pre-conquest frontier by approximately 32,500 troops.⁵¹⁶

An analysis of the placement of Roman defensive infrastructure in Roman

Diaconescu, 'The Towns of Roman Dacia: an overview of recent archaeological research', p.120.

⁵¹⁵ Webster, The Roman Imperial Army of the First and Second Centuries A.D., p.59.

⁵¹⁶ This figure is based on the troop allocation to Dacia after the discharges of AD 110.

Dacia and the types of troops utilised at these installations is important as it indicates the reasons for the substantial increase in manpower that occurred in this region after the completion of the Roman annexation of Dacia. The reasons for the placement of these troops and installations have been debated by some historians who would like to attribute placement of forts and the deployment of troops to one of two causes: a defensive network designed to prevent external threats from penetrating the province,⁵¹⁷ or for internal security and policing.⁵¹⁸ It will be demonstrated that the placement of Roman forces was, at least in this instance, able to achieve both goals.

Bennett argues that the Roman forces were placed to best defend the new province from outside hostility.⁵¹⁹ Bennett's hypothesis that the Roman military was placed in order to best be able to defend the newly-formed Dacian province from external threats is valid, as many of the Roman installations in Dacia were placed directly on the frontier or near important crossroads where the Roman forces were able to dominate communications movement into and

⁵¹⁷ Bennett, Trajan Optimus Princeps: A Life and Times, p.166.

Diaconescu, "The Towns of Roman Dacia: An Overview of Recent Archaeological Research," p.126.

⁵¹⁹ Bennett, *Trajan Optimus Princeps: A Life and Times*, pp.166-67.

out of the province.⁵²⁰ The primary threat that these measures were designed to counter, in his opinion, was the free movement of the Sarmatian tribes to the east and west of Roman Dacia through the newly-formed province.⁵²¹

Conversely, Diaconescu has recently argued that the placement of the Roman forces and installations demonstrates that the Roman forces in Dacia were intended to function primarily as an army of occupation concerned with the policing, administration, and Romanisation of the new province and that Rome did not expect an external threat to emerge. Although Diaconescu is undoubtedly correct when he states that the Roman army was concerned with the policing and administration of Dacia, the evidence clearly illustrates that this was not to the exclusion of frontier defence.

Both of these theories have significant merit and the reality of why the Romans required as large a force as they did is as a result of a combination of both of these factors. As Wheeler argues, Roman forces stationed in the provinces or on the frontiers could, and more often than not did serve both of

⁵²⁰ Ibid., p.167.

⁵²¹ Ibid., pp.166-67.

Diaconescu, "The Towns of Roman Dacia: An Overview of Recent Archaeological Research," p.126.

these purposes,⁵²³ and a close examination of the Roman defensive network in Dacia confirms this.

In order to demonstrate that the Roman defensive network in Dacia was concerned in guarding against external threats an examination of potential regional threats must be undertaken, followed by an examination of the structure and placement of the defensive network in order to determine whether the defensive system possessed any elements designed to counter the potential threat. In the case of Dacia a potential threat is evident with the Iazyges, who demonstrated their displeasure after not having territory returned that was promised to them after the completion of the Dacian wars. 524 Evidence indicates that the issue with the Iazyges continued at least into the reign of the emperor Hadrian.⁵²⁵ Additional external threats can also be demonstrated elsewhere in the region of the newly-formed province in the form of the Roxolani, the Scythians, the Free Dacians and the German threat in the North-west.⁵²⁶

E. L. Wheeler, "Methodological Limits and the Mirage of Roman Strategy, Part One," *The Journal of Military History* 57, no. 1 (1993): p.10.

This is discussed in more detail in Hostility on other fronts section pp.260ff.

⁵²⁵ Mócsy, Pannonia and Upper Moesia, p.89.

This is discussed in more detail in the Hostility on other fronts section pp.260ff.

The defensive network set up by Trajan and developed by Hadrian demonstrates a clear attempt to counter these external threats. A large number of the auxiliary forts constructed in Dacia were placed almost directly on the frontiers of the province, with watchtowers placed forward of their position, clearly intended to warn of external threats to the frontier. The fact that the watchtowers formed the outermost line of the defences demonstrates without doubt that they were intended to provide an early warning system for the forts which were located between 1.5 and 15 kilometres from the frontier itself. 527 Nicolae Gudea has demonstrated that the lines of sight determined from the placement of these forts created a chain of watchtowers, each able to signal another and convey the presence of a threat back to the nearest auxiliary fort. These forts would then convey the warning to other auxiliary forts stationed still further from the frontier, and they in turn would convey the message to the legions stationed in the central regions of Dacia. 528 This system indicates that Trajan created an in-depth defence system in Dacia. The watchtowers formed the early warning system against external threats, 529 with the forts closest to

⁵²⁷ Gudea, "The Defensive System of Roman Dacia," p.74.

⁵²⁸ Ibid., p.75.

D. J. Woolliscroft, "Signalling and the Design of the German Limes," in Roman Frontiers Studies 1995 Proceedings of the XVIth International Congress of Roman Frontier Studies, ed. W. Groenman-van Waateringe, et al. (Exeter: Oxbow Books, 1997), pp.595-602, for a

the first line of defence.⁵³⁰ The intermediate forts were generally manned by auxiliary cavalry which could rapidly move to reinforce the frontier where and when necessary,⁵³¹ and the final line of defence was formed by the legions whose central placement allowed them to march to the site of any actual or potential conflict in a matter of days (see Fig. 16).

The frontier and intermediate forts would easily have been able to deal with any low to medium-intensity threats against Dacia, in the form of small lazygian, German or Roxolanian raiding parties. This is further highlighted by the fact that the intermediate forts were generally placed at important crossroads or passes likely to be utilised by raiders and or invaders.⁵³² It is likely that only moderate to high-intensity threats would have required the participation of the Roman legions to defend the frontiers of the province.

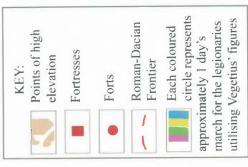
After the founding of the Dacian state by Burebista the number of fortifications built under the authority of the Dacian king was seen to increase

discussion of Roman watchtower systems.

⁵³⁰ Ibid., p.70.

⁵³¹ Ibid.

⁵³² Ibid.



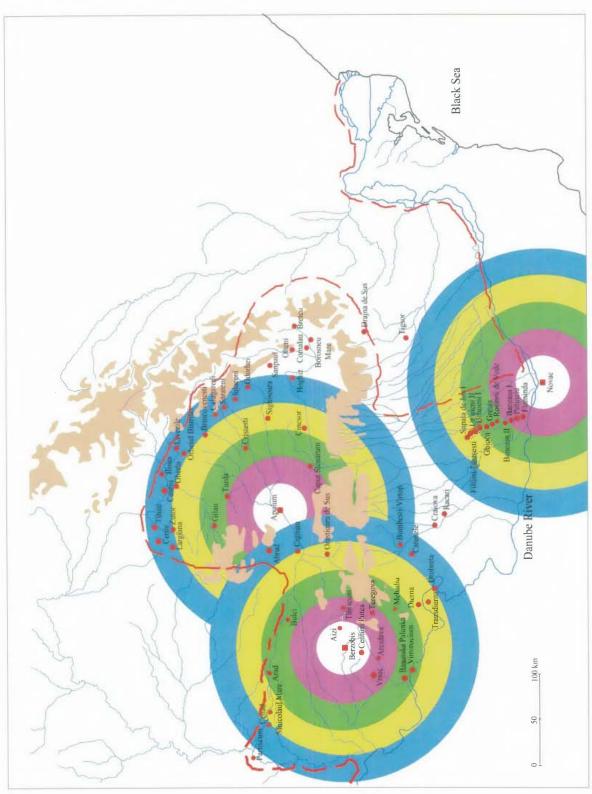


Fig. 16. Legionary Defensive Cover in Dacia

substantially.⁵³³ This increase was largely the result of enhanced desire for centralisation in Dacia by Burebista who needed to manage his newly-unified kingdom. The primary purpose of these fortifications was to centralise control, protect and supervise economically important regions and protect the Dacian capital Sarmizegetusa Regia.⁵³⁴ A survey of these fortresses and fortified settlements demonstrates that they were placed in important strategic and economic points near iron mines, salt reserves, and commercial roads from which they were able to supervise and control access and trade corridors.⁵³⁵

Even though the placement of Roman auxiliary camps and legionary fortresses did not directly correspond with the locations of the forcibly abandoned pre-annexation Dacian fortresses, many were placed nearby in order to take advantage of the pre-existing centralisation of administration and economy. ⁵³⁶ In the central zone of the new province the Roman installations were constructed in lowland regions, often in plains, ⁵³⁷ close to the mountainous areas that had been the sites of the Dacian citadels. Their construction in

⁵³³ Crişan, Dacii Din Estul Transilvaniei, p.194.

⁵³⁴ Ibid.

⁵³⁵ Ibid., p.188.

Diaconescu, "The Towns of Roman Dacia: An Overview of Recent Archaeological Research," p.126.

⁵³⁷ Ibid., p.127.

these lowland regions can be ascribed to the nature of the forces present, which would have been more effective in this type of terrain. The Roman occupation forces situated in the central zone consisted largely of cavalry *alae* and legionary troops.⁵³⁸ The proximity of Roman bases to abandoned Dacian sites is evidenced by both the Roman auxiliary camp of Cincşor, which was placed near the destroyed Dacian fortress at Breaza,⁵³⁹ and the Roman fort at Feldioara, which was sited near the Dacian fort at Arpaşu de Sus.⁵⁴⁰ This was likely the result of the Roman desire to utilise pre-annexation centralisation and the regional control network created by Burebista.⁵⁴¹

The placement of the two Roman legions at Apulum and Berzobis clearly illustrates the Roman desire to maintain control over the provincial populace and the economic resources within the province. The placement of IIII *Flavia* and XIII *Gemina* put them in the centre of the most highly-populated regions of Roman Dacia, giving them effective control over the populace. Their placement also ensured a strong Romanising influence in the most valuable

⁵³⁸ Gudea, "The Defensive System of Roman Dacia," pp.84-85.

Diaconescu, "The Towns of Roman Dacia: An Overview of Recent Archaeological Research," p.127.

⁵⁴⁰ Ibid.

This region was also the most fertile and agriculturally viable area and hence likely possessed the highest concentration of the population.

and productive regions of central Dacia.⁵⁴² These regions would also have been where the majority of the settlers from other parts of the empire would have been relocated.

It is therefore clear that the manpower required on the Danubian frontier increased substantially after Trajan's annexation of Dacia, leading to a commensurate increase in the costs of securing the region. This increase was necessary both in order to secure the newly-established frontier and effectively administer and police Roman Dacia, as is demonstrated by the placement of Roman forces on the frontier of the newly-established province, and the establishment of Roman forts and fortresses in the interior of the province, often close to where the Dacian forts constructed to achieve centralised control by Burebista and Decebalus had been located.

The manpower required to defend and garrison Dacia after conquest resulted in a substantial disadvantage to the Romans, even though the creation of the Dacian salient allowed the Romans to reduce the numbers of troops stationed along the Danube by as many as 10,000 men. The garrison station in Dacia exceeded the numbers utilised pre-annexation by approximately

⁵⁴² Gudea, "The Defensive System of Roman Dacia," p.86.

32,500 troops.

Hostility on other Fronts

It is clear that the Roman annexation of Dacia opened up new fronts and intensified the hostilities on some existing fronts, resulting in a moderate increase in hostilities in the short to medium-term. It must be noted however that much of the demonstrable post-annexation hostility originated prior to the conquest of Dacia, indicating that at least some of the hostility that took place in this period would likely have occurred even if the annexation had not proceeded.

The Sarmatian Iazyges (see fig. 17), who even before the Dacian annexation had demonstrated some sporadic hostility towards Rome, as is clearly illustrated by Domitian's need to concentrate troops on the Pannonian frontier during his reign,⁵⁴³ caused significant problems for the Romans after the completion of the annexation. The Iazyges had previously been relocated to the Hungarian plain, between the Danube and Tisa rivers, in approximately AD 20 during the reign of Tiberius. Tiberius' plan was clearly to utilise the Iazyges as a buffer state between the Dacians and Roman Pannonia. That

⁵⁴³ Mócsy, Pannonia and Upper Moesia, p.89.

the Iazyges had become hostile towards Rome before the start of the Dacian war, at least by the reign of Domitian, is evident. Domitian, hoping to utilise their client status requested their assistance against the Dacians during the Dacian war of AD 88. The Iazyges' refusal led to a conflict between Domitian and the Iazyges, requiring the emperor to come to terms with the Dacian king Decebalus in order to be able to effectively prosecute a war against the Marcomanni, Quadi, and Iazyges who were apparently threatening Pannonia. Therefore, this prevents them from being considered a new enemy purely as a result of the Dacian annexation, although the level of hostility that they displayed towards Rome certainly increased after the completion of this conquest.

In the period after the Dacian annexation it is believed that the Iazyges were responsible for damage to the legionary forts at Campona, Vetus Salina, and Intercisa in the years AD 117 and AD 119.⁵⁴⁴ One clear reason for the increase in the hostility displayed by the Iazyges after the Dacian annexation was that Trajan had promised to return to the Iazyges lands in the Banat that they had lost to the Dacians previously.⁵⁴⁵ After the completion of the

⁵⁴⁴ Ibid., p.101.

⁵⁴⁵ Dio, LXVIII.10.4.

Dacian wars Trajan refused to return the Banat to the Iazyges.⁵⁴⁶ Another issue that particularly angered the Iazyges was that the annexation of Dacia, and particularly the Roman occupation of Oltenia,⁵⁴⁷ prevented them from undertaking their seasonal migration and communicating freely with the Roxolani, the other Sarmatian tribe in the region who were situated on the Eastern side of the newly-founded province.⁵⁴⁸ The Romans employed military and economic measures against the Iazyges by restricting free access to the Roman markets in the newly-constituted province.⁵⁴⁹ This is evidenced by the fact that Samian ware found in the Hungarian plains dates at the earliest to the reign of Marcus Aurelius, who after many hard-fought battles during the Marcomannic wars came to terms with the Iazyges.⁵⁵⁰

Marcus Aurelius' agreement with the Iazyges concluded that they would again be allowed to trade in the Roman markets, but only on specific days.

Marcus Aurelius' agreement also allowed the Iazyges to travel through Dacia so that they could undertake their seasonal migrations and communicate

⁵⁴⁶ Lepper and Frere, *Trajan's Column*, p.309.

⁵⁴⁷ Dio, LXVIII.10.3.

⁵⁴⁸ Mócsy, Pannonia and Upper Moesia, p.193.

⁵⁴⁹ Ibid.

⁵⁵⁰ Ibid.

with their kin, the Roxolani. Marcus Aurelius did place a condition on any travel through Dacia – the Iazyges were only allowed to travel through the province under the supervision of the Dacian governor.⁵⁵¹ This suggests that the free communication and travel between the two Sarmatian tribes was a concern for the Romans, possibly because of the embryonic anti-Roman coalition evident in the early stages of the Dacian wars and later during the Marcomannic wars.⁵⁵²

The Sarmatian Roxolani, located to the East of the Carpathian mountain range (see fig. 17), caused significant trouble to the Romans both before and after the completion of the Dacian annexation. The Roxolani are mentioned as early as the reign of Julius Caesar as allies of the contemporary Dacian monarch Burebista and the Bastarnae. They are again mentioned in connection with the Dacians and and the Bastarnae during the reign of Nero. The Roxolani came to some degree of prominence during the reign of Domitian when it is known that they participated in at least two raids against Roman territory in AD 69 and AD 70, which culminated in the death of the Roman Governor

Dio, LXXII.7.1-5; LXXII.8.1; LXXII.16.1; Lepper and Frere, *Trajan's Column*, p.316.

⁵⁵² See Security section to follow.

⁵⁵³ Bennett, *Trajan Optimus Princeps: A Life and Times*, p.87.

⁵⁵⁴ Millar, The Roman Empire and Its Neighbours, p.271.

Fig. 17. Regional Enemies Map

Fronteius Agrippa.⁵⁵⁵ Throughout Trajan's Dacian wars the Roxolani are known to have fought against Rome as allies of the Dacians in at least the first war (see fig. 18). There is some discussion regarding whether the Roxolani had been bought off by the Romans before the commencement of the second



Fig. 18. Trajan's Column Scene XXXVII Cast 94 Sarmatian Allies

war, however this remains uncertain.556

The trouble caused by the Roxolani did not end with the completion of the Dacian wars, when they turned their attention from Moesia to the new province of Dacia. Some of their actions can be attributed to displeasure at the Roman occupation of Wallacia immediately after the conclusion of the

⁵⁵⁵ Suet., Dom., 6.1; Lepper and Frere, Trajan's Column, p.37.

⁵⁵⁶ Strobel, Untersuchungen zu den Dakerkriegen Trajans: Studien zur Geschichte des Mittleren und Unteren Donauraumes in der Hohen Kaiserzeit, p.203.

conquest (see fig. 17). This region was the traditional homeland of the Roxolani before the annexation. After the annexation the Roxolani, in conjunction with the Iazyges, attacked the new province during Hadrian's reign, 557 resulting in the death of the Roman governor Q. Julius Quadratus Bassus. This was even though the Romans had apparently abandoned Wallacia during Trajan's deployment of garrisons with only a minimal number of advance points left in the region, and were apparently paying the Roxolani annual subsidies. Although the Roxolani cannot be considered a new threat resulting solely from the Roman annexation of Dacia, the threat they posed apparently intensified as they were able to threaten Roman territory on two fronts.

As with the Iazyges, the Marcomanni and the Quadi had come into conflict with Rome prior to the annexation of Dacia, because as Dio tells us they also refused to assist Domitian in his campaign against the Dacians in AD 88,⁵⁶⁰ and they threatened the security of the province of Pannonia. This hostility re-emerged after the completion of the Dacian annexation. The Quadi and Marcomanni are believed to have participated in the destruction

Lepper and Frere, *Trajan's Column*, pp.309-10.

⁵⁵⁸ Bennett, *Trajan Optimus Princeps: A Life and Times*, p.203.

⁵⁵⁹ Gordon, "Subsidies in Roman Imperial Defence," p.62.

⁵⁶⁰ Dio, LXVII.7.1.

of the legionary forts at Campona, Vetus Salina, and Intercisa in AD 117 and AD 119,⁵⁶¹ and the hostility displayed by these Germans continued into the reigns of Hadrian, Antoninus Pius, and Marcus Aurelius.⁵⁶² Marcus Aurelius ended up waging long and expensive campaigns against these peoples in the Marcomannic wars from AD 167 – AD 180.

The Dacian annexation saw a moderate increase in the hostility in the region. Although much of this hostility originated prior to the conquest of the region the intensity increased as a result of Trajan's refusal to return the Banat plain to the Iazyges after the annexation. Additionally, more direct contact with the Quadi and Marcomanni increased pre-existing hostility and the potential for Roman territory to be directly attacked.

Security

The Dacian annexation substantially added to the security of the Danubian frontier by subduing the most active, potentially dangerous, and successful opponent in the region. Several Roman emperors had periodic concerns over the security of the Danubian provinces as a result of Dacian

⁵⁶¹ Mócsy, Pannonia and Upper Moesia, p.101.

⁵⁶² Ibid., pp.102-103; 87.

aggression. This is clearly illustrated by an examination of the military contact between the Dacians and the Romans in the one and a half centuries before Trajan's principate, and this emperor's first war against the Dacians in AD 101. Similarly, an examination of this period also demonstrates that, by the time of Trajan's reign, the Dacians were perceived as a more significant threat than other potential and actual enemies on the Danubian frontier. In order to demonstrate the significance of the Dacian threat several factors need to be examined: the Dacian willingness to interfere in Roman-held territory, the quality of the military leadership they had available, and their chances of success in a sizeable engagement against the Roman army.

The Dacians were, for much of their history prior to the reign of Burebista, 60 BC to 44 BC, individual tribes engaged in internal disputes and incessant infighting and as such no real threat to the Roman Empire, even though they engaged on occasion in cross-border raids into the Roman-controlled provinces of Moesia and Pannonia.⁵⁶³ During these periods of internal disunity no evidence of a concerted Roman effort to subdue Dacia exists. This changed dramatically under the leadership of the Dacian king

⁵⁶³ Strabo, 7.3.11.

Burebista.⁵⁶⁴ The leadership of Burebista saw the Dacians become, for the first time in their history, a united state under the leadership of a single ruler, a threat to the nearby Roman provinces, and a potential threat to the empire itself.⁵⁶⁵ The unification of Dacia was a result of the military conquest of non-indigenous Celtic settlers, demonstrating the growing military capacity of the Dacians under the guidance of Burebista.

Suetonius tells us that Caesar planned an expedition against the Dacians.⁵⁶⁶ The reason given by Suetonius for this was that Caesar wished to remove them from the Black Sea area and Thrace, which according to Suetonius they had recently occupied.⁵⁶⁷ This occupation of the Dobrudja was a direct result of Burebista's policy of regional expansion and unification which, if judged by Caesar' proposed action, the Romans saw as a threat to their own dominance in the region. Caesar's plan for an attack against the Dacians before his death illustrates that a united Dacia under the rule of a competent and expansionist monarch posed a significant enough threat to

⁵⁶⁴ Also spelt Boerebistas and Byrebista in Strabo, 7.3.11, 7.3.12.

⁵⁶⁵ Strabo, 7.3.11.

⁵⁶⁶ Suet., Iul., 44.3.

⁵⁶⁷ Suet., *Iul.*, 44.3.

Rome to warrant at least some form of punitive action.⁵⁶⁸ However, as both Burebista and Caesar were assassinated in 44 BC, the plans for a Dacian offensive were abandoned by Rome, which had more pressing internal issues to deal with. Burebista's assassination saw the Dacian state collapse and temporarily revert into separate tribal groups. Strabo indicates that after Burebista's death the Dacian state was divided into four parts,⁵⁶⁹ each ruled independently of the others, reducing the threat the Dacians posed to Rome and the security of the Danubian provinces.

Daco-Romano military contact was re-initiated during the reign of Augustus. Dio wrote that the Dacians had sent envoys to Augustus making certain requests, apparently in return for their support of Octavian in his war against Antony.⁵⁷⁰ Dio does not provide us with details of what exactly the Dacians requested. It is clear that that none of their requests were granted and in retaliation, they offered their support to Octavian's enemy Antony. Their assistance proved of little benefit to Antony due to renewed Dacian infighting which delayed the arrival of the army promised to Antony.⁵⁷¹ The

⁵⁶⁸ Suet., *Iul.*, 44; Suet., *Aug.*, 8; Strabo, 7.3.5.

⁵⁶⁹ Strabo, 7.3.11.

⁵⁷⁰ Dio, LI.22.

⁵⁷¹ Dio, LI.22.

Dacians' actions clearly demonstrate their willingness to become involved in the internal politics of the dominant regional power to advance their own ends.

Augustus sent a punitive expedition against the Dacians led by Marcus Crassus in 29 BC,⁵⁷² 15 years after Burebista's assassination. Apparently Dacia continued to suffer from internal dissention because Strabo tells us that by the time of Crassus' punitive expedition Dacia had split into five internal factions,⁵⁷³ effectively ending any significant threat that Dacia might have posed to Rome, as the only unified 'barbarian' state. Nevertheless, Augustus' need to send Marcus Crassus on this expedition against the Dacians is evidence that the divided Dacia was still causing the Roman Empire some concerns, although greatly diminished by this lack of unity. The Dacians continued their raids in Pannonia and Moesia later in Augustus' reign and during the reign of Tiberius, illustrating that they were by no means cowed.⁵⁷⁴ Although Augustus launched several expeditions against the Dacians, possibly even killing three of their five leaders and inflicting heavy casualties on them, 575

⁵⁷² Dio, LI.23.

⁵⁷³ Strabo, 7.3.11.

⁵⁷⁴ Dio, LIV.36, LV.30; Suet., *Tib.*, 41.

⁵⁷⁵ Suet., Aug., 63.

the Dacian activity during Tiberius' reign indicates that they were far from subdued, contrary to Augustus' claims in the *Res Gestae*. ⁵⁷⁶

In the time between Tiberius' and Domitian's reign little Dacian activity is recorded; the Dacians, who had after Burebista's death divided into smaller tribal settlements, posed no substantial threat to the security of the provinces or the Empire. By AD 85-86, the Dacians had amalgamated under the control of a new king, Decebalus. 577 For the second time in Dacia's history the Dacians were able to unite under a single monarch. Decebalus' reunification of Dacia ensured that the Dacians were once again perceived as a threat to the security of the Danubian provinces and the Empire.

A re-united Dacia again shifted the balance of power along the Danubian frontier and saw the re-emergence of Dacian raiding activity in Rome's Danubian provinces. The intensity and scale of these raids increased substantially to the point that the Roman governor of Moesia, Oppius Sabinus, was killed in the winter of AD 85-86,578 an affront that would have been difficult

⁵⁷⁶ Aug., Res Gestae, 30.2.

Webster, The Roman Imperial Army of the First and Second Centuries A.D., p.52.

Williams, Romans and Barbarians Four Views from the Empire's Edge 1st Century AD, p.160;Daicoviciu, "Dakien Und Rom in Der Prinzipatszeit," p.915; Bennett, Trajan OptimusPrinceps: A Life and Times, p.86.

for any emperor to ignore. It was to prevent the continued raiding and redress the affront committed against Rome that must have been amongst the prime motivations that led Domitian to open hostilities with the Dacians, and to start what Dio describes as a 'serious war'. 579 The first of Domitian's expeditions consisted of a 'large force' led by the praetorian prefect Cornelius Fuscus in AD 85-86.580 Dio states that Decebalus had sent an envoy to Domitian to offer a peace treaty,⁵⁸¹ after learning of Fuscus' advance, but before the antagonists encountered each other. Overconfident, the emperor rejected this offer and the expedition ended in disaster for the Romans in AD 86.582 Fuscus, and the forces he led, Legio V Alaudae, were killed,583 and the Dacians captured their standards and war machines. It was not until Trajan's campaigns that these items were retrieved. The fact that the Dacians were able to defeat the first Roman expedition that was sent against them confirms the military threat that they posed to the Roman forces.

Domitian appointed Tettius Julianus to lead the second expedition

⁵⁷⁹ Dio, LXVII.6.

⁵⁸⁰ Dio, LXVII.6.

⁵⁸¹ Dio, LXVII.6.

⁵⁸² Webster, The Roman Imperial Army of the First and Second Centuries A.D., p.52.

⁵⁸³ Bennett, Trajan Optimus Princeps: A Life and Times, p.29.

against the Dacians.⁵⁸⁴ Julianus crossed into Dacia in AD 88 most likely by way of the Iron Gate Pass near Tapae in the west of Dacia,⁵⁸⁵ where according to Dio he encountered the Dacians and slew a great number of them,⁵⁸⁶ although suffering serious losses in a set battle.⁵⁸⁷ This victory went a long way to redeeming the tarnished honour of the empire,⁵⁸⁸ but cannot be judged as a decisive blow against the Dacian state. Domitian, who now found himself under pressure from several other fronts: the revolt of Antonius Saturninus on the Rhine, and the defections of the Marcomanni,⁵⁸⁹ Quadi, and Sarmatae Iazyges, was forced to come to terms with the Dacians as quickly as possible. Domitian's hasty withdrawal, and the bias of the sources, makes his goals somewhat uncertain.

The treaty between Domitian and Decebalus, although on the face of

⁵⁸⁴ Dio, LXVII.10.

⁵⁸⁵ See fig. 42.

⁵⁸⁶ Dio, LXVII.10.

⁵⁸⁷ Webster, The Roman Imperial Army of the First and Second Centuries A.D., p.52.

⁵⁸⁸ R. Syme, "The Lower Danube under Trajan," *The Journal of Roman Studies* 49 (1959): p.31.

Williams, Romans and Barbarians Four Views from the Empire's Edge 1st Century AD, p.161, suggests that Decebalus may have encouraged the Marcomanni, thereby forcibly drawing some of Domitian's attention away from Dacia and placing himself in a far stronger bargaining position; cf. Daicoviciu, "Dakien und Rom in der Prinzipatszeit," p.915.

it nothing more than an effort to buy the Dacians off, can be interpreted as being accomplished in the Roman tradition of appointing client kings to act as a buffer zone between the Roman frontier and their enemies. ⁵⁹⁰ This may in fact have been Domitian's goal from the outset. In effect, this treaty ensured that Dacia stood as a forward bulkhead of the Roman Empire, separating a number of warlike tribes that were causing the Empire concern. ⁵⁹¹ Domitian's treaty with Decebalus used Dacia in very much the same way that the Dacian province created by Trajan did, but without the direct military involvement of Rome. ⁵⁹² Much of the negativity about this treaty can be ascribed, as Syme and Strobel have done, to an anti-Domitianic tradition prevalent in Trajanic Rome. ⁵⁹³

⁵⁹⁰ Strobel, Untersuchungen zu den Dakerkriegen Trajans: Studien zur Geschichte des Mittleren und Unteren Donauraumes in der Hohen Kaiserzeit, p.155; Daicoviciu, "Dakien und Rom in der Prinzipatszeit," p.915.

Daicoviciu, op. cit., pp.852-853; the author also suggests, correctly in my opinion, that an annexation of Dacia also provided an opportunity to pressure the flanks and rear of some of Rome's enemies.

⁵⁹² Syme, "The Lower Danube under Trajan," p.31; Strobel, Untersuchungen zu den Dakerkriegen Trajans: Studien zur Geschichte des Mittleren und Unteren Donauraumes in der Hohen Kaiserzeit, p.155.

⁵⁹³ Syme, "The Lower Danube under Trajan," p.31; Strobel, Untersuchungen zu den Dakerkriegen Trajans: Studien zur Geschichte des Mittleren und Unteren Donauraumes in der Hohen Kaiserzeit, p.155.

Dio's account of the reasons for Trajan's Dacian wars commencing in AD 101 suggest that the emperor, amongst other concerns, was worried about the apparent increase in the pride and power of the Dacians.⁵⁹⁴ This clearly suggests that Trajan viewed the Dacians as a threat to the security of at least the nearby Roman provinces of Moesia and Pannonia. In and of itself Trajan's concern for the security of the frontier does not make a strong case for annexation. It does, however, suggest that Trajan felt that the Dacians needed to have a demonstration of Roman superiority, an objective that could have been achieved by means of a punitive expedition and show of force, which was likely the goal for the first war AD 101 - 102. No primary source states that Trajan's objective before the onset of the first war in AD 101 was an annexation of Dacia.

Karl Strobel has estimated that the pre-annexation population of Dacian would have been somewhere in the vicinity of 1,000,000 people, based on the likely percentage of military-aged males in similar communities. Strobel suggests that a united Dacia, as it was only under Burebista and Decebalus, might have possessed a potential army of 250,000 combatants.⁵⁹⁵ This is

⁵⁹⁴ Dio, LXVIII.15.6.1-3.

⁵⁹⁵ Strobel, Untersuchungen Zu Den Dakerkriegen Trajans: Studien Zur Geschichte Des Mittleren Und Unteren Donauraumes in Der Hohen Kaiserzeit, p.58.

before Decebalus' allies are factored in, suggesting that Decebalus possessed a sufficiently large force to make the invasion of the neighbouring Roman provinces of Moesia, Illyricum, or Pannonia possible, ⁵⁹⁶ particularly when the empire's lack of in-depth defence policy is taken into account. ⁵⁹⁷ This is further illustrated by the successful raids and incursions into these territories throughout the first century AD. ⁵⁹⁸ Dacia's geographical location further reinforces the potential threat it posed to the security of the Roman Empire. It was located between the Germans and Iazyges in the West and Roxolani and Parthians in the East, several of whom had already displayed hostility towards Rome. Any sign of continued Dacian success or Roman weakness might have led to a conflict on multiple borders.

Rome could not have sustained such a war for any duration, particularly after the Augustan military reforms.⁵⁹⁹ The fact that Decebalus was allied to at least some of his neighbours, as is clearly depicted on the Adamklissi monument and Trajan's Column (See Figs. 18-20), where both Germans

⁵⁹⁶ Tac., *Agr.*, 41.

Williams, Romans and Barbarians Four Views from the Empire's Edge 1st Century AD, p.178;
Daicoviciu, "Dakien Und Rom in Der Prinzipatszeit," pp.915ff.

⁵⁹⁸ Millar, The Roman Empire and Its Neighbours, p.276.

⁵⁹⁹ P. Petit, *Pax Romana*, trans. James Willis (London: The University of California Press, 1967), pp.17-20.

and Sarmatians are depicted fighting on behalf of the Dacian forces, clearly demonstrates this aspect of the threat Dacia posed to Rome.

Having examined the repeated interference by the Dacians in Rome's northern holdings and the internal politics of the Empire itself, the ability of the Dacian army to threaten the Roman troops in any meaningful manner on the battlefield must be established. Rather than just examining the Dacian army as a force, a determination of the Dacian threat will be clarified by determining; the quality of their commander, equipment, and by examining what the Romans felt they needed to do in order to defeat the Dacian forces in the wars of AD 101 – 106. The results demonstrate that although the Dacians were defeated by the Romans and that this defeat has too often been described as a relatively easy victory, the Romans felt that the Dacians posed a significant threat to the Roman army on the battlefield.

There can be little doubt that Decebalus was an excellent military commander and was much respected by his enemies. Dio tells us that Decebalus, much like Burebista, was able to impose unity and quickly earned for himself a reputation as both a great leader, 600 and an excellent military

This leadership is further illustrated by Decebalus' ability to unite the again disparate Dacian and Getic tribes under his leadership, a feat matched only by Burebista.







- 279 -

commander.601 Decebalus' successes against the Romans, such as the defeat of Fuscus in AD 86, demonstrated his military prowess. The clever ambush which led to Fuscus' death and the loss of a legion, 602 certainly confirm Dio's assessment of his abilities. Decebalus was clearly a leader with foresight, as he is known to have attempted the creation of an anti-Roman coalition with other Northern peoples including the Germans, and Sarmatians. The fact that he achieved some success, which is amply illustrated by depictions of both Germans and Sarmatians on the Tropaeum Traiani crenallations and the depictions of the Roxolani participating the Moesian counter-attack on Trajan's Column (see figs. 18-20), suggest he was a charismatic leader and not without influence in the region. Decebalus' not infrequent raids into Roman territory between AD 85 and 106 demonstrate his lack of fear. The success of these raids, which led to the collection of arms and treasure, demonstrate that he was capable, under the right conditions, of defeating his most potent enemy in battle.

There is some conjecture about the way in which the Dacian military was equipped. Many modern observers present an image of the Dacian soldier very

⁶⁰¹ Dio, LXVII.6.

Daicoviciu, "Dakien und Rom in der Prinzipatszeit," p.915.

similar to that depicted in the spiral relief on Trajan's Column.⁶⁰³ This view suggests that the Dacians fought with no more protection than an auxiliary style shield wielding a short curved knife-like weapon (see fig. 21). Further examination demonstrates the likelihood that many of the Dacian warriors actually wore helmets and possibly metallic armour, and wielded a far more devastating weapon with a blade measuring up to 68 centimetres in length, capable of causing significant damage to contemporary Roman armour. The inherent biases of the Roman sources, including Trajan's Column, preclude



Fig. 21. Falx wielding Dacians

them from clearly indicating whether or not the Dacian forces were a potential

⁶⁰³ MacKendrick, The Dacian Stones Speak, p.97.

The Column is of limited value in determining the potential threat that the Dacian forces posed to Rome's soldiery as its depictions of the armour and weapons used by both armies are rendered in a highly stylized and conventional manner, 605 with two notable exceptions (See Figs. 22 and 23).606 Adding further confusion to the issue, many of the weapons originally represented on Trajan's Column were made of metal and are now, due mostly to scavenging, lost to us, leaving an incomplete picture of this aspect of the Dacian forces.607 The victory monument at Adamklissi, which was designed and constructed by soldiers who had fought in these campaigns, is less conventional, and more helpful. Its depictions of both the Roman and

Two of the three main sources of evidence about the nature of the Dacian military equipment, Trajan's Column and the Adamklissi Monument, are of Roman origin; although the third, the archaeological remains, is free of any deliberate bias; the Roman defeat of and souveniring of Dacian military equipment has affected the transmission of goods that would be of interest in this discussion.

Williams, Romans and Barbarians Four Views from the Empire's Edge 1st Century AD, p.185; I.
 M. Ferris, Enemies of Rome: Barbarians through Roman Eyes (Gloucester: Sutton Publishing,
 2000), p.65; Strobel, Untersuchungen zu den Dakerkriegen Trajans: Studien zur Geschichte des
 Mittleren und Unteren Donauraumes in der Hohen Kaiserzeit, p.60.

The Roman style *aries* used by the Dacians in Scene XXXII, Cast 79, and the Roman *carroballista* used in Scene LXVI, Cast 169.

⁶⁰⁷ Williams, Romans and Barbarians Four Views from the Empire's Edge 1st Century AD, p.182.

Dacian forces contribute the bulk of the evidence about the manner in which the average Roman and Dacian soldier was equipped. The archaeological remains also contribute a great deal of important information about the potential threat that the Dacian forces posed to the Roman army.

A re-examination of the indigenous Dacian weapon, the *falx*, achieved by comparing the depictions of it on Trajan's Column, 608 with those on the Adamklissi Metopes and the archaeological finds assists in demonstrating the actual threat Dacian soldiers posed to their Roman counterparts on the battlefield. 609 This weapon is of particular interest in any study of the composition of the Dacian army and the threat they posed to the security of the empire because of the profound effect it is known to have had on the Roman soldiers who confronted it. During the course of the Dacian wars the Romans made various changes to their military equipment in order to reduce the impact of this weapon. They introduced a previously unused piece of military equipment, the *manica*, 610 they returned to modified forms of the older

608 Scene LXXII, Cast 187.

⁶⁰⁹ Metopes XVIII, XX, XXXIV, XXXV.

Metopes XVIII, XX, prior to these wars the *manica* was used solely by gladiators; R. H. Robinson, *The Armour of Imperial Rome* (London: Scribner, 1975), p.186.



Fig. 22. Trajan's Column Scene XXXII Cast 79 Dacian Siege of a Roman fort in Moesia



Fig. 23. Trajan's Column SceneLXVI Cast 169 Dacians using a Carroballista

lorica hamata and lorica squamata armours exclusively for these campaigns,⁶¹¹ and they made improvements to the design of the Roman helmet specifically to strengthen it against downward blows.⁶¹²

Changes such as these were not undertaken without reason. An examination of Roman military equipment up to this period demonstrates that although armour periodically evolved, 613 this usually happened in response to a specific catalyst. Moreover, at no previous time was a new item of protective gear introduced to counter a particular weapon and then discarded at the conclusion of the war as was the case with the *manica*. Therefore, these modifications to the Roman legionary's defensive equipment, together with evidence from Trajan's Column and the Adamklissi Monument, help to illustrate the fact that the Dacian forces posed enough of a threat that a major offensive against the Dacians required significant Roman innovation and preparation to reduce potential casualties. 614

It has been argued that the quality and quantity of available military

⁶¹¹ Ibid., p.170; Metopes XVIII, XX, XXXI.

⁶¹² Metope XX.

⁶¹³ S. Anglim et al., Fighting Techniques of the Ancient World; 3000 BC - 500 AD (London: Green hill Books, 2002), p.65.

⁶¹⁴ C. M. Gilliver, *The Roman Art of War* (United Kingdom: Tempus, 1999), p.18.

equipment was one advantage that the Romans possessed over many of their enemies.615 This was largely because of large-scale access to iron ore, with less resource-rich nations demonstrating a tendency to prefer weapons that required less iron for construction, such as spears, and reserving weapons that required larger quantities of iron for the wealthiest members of society. Roman legionaries were all equipped with the gladius. As opposed to the Spanish and Gallic forces where only tribal chieftains could afford such a weapon, Todd, primarily on the basis of grave finds, has determined that only about ten percent of barbarian warriors in this period would have had access to a sword.616 The depictions on Trajan's Column and the Adamklissi Monument show an extremely high percentage of Dacian warriors armed with the falx, suggesting that the Romans apparently did not possess this advantage over the Dacian army. Dacia is known to have been resource-rich in various metals: gold, silver, copper, and most importantly for the present discussion, iron.617

A. K. Goldsworthy, *Roman Warfare* (London: Cassell, 2000), p.45, suggests that one of the Roman army's primary military advantages was the result of the quantity of swords they issued.

M. Todd, The Northern Barbarians 100 B.C. - A.D. 300 (London: Hutchinson & Co. Ltd, 1975), p.170.

Williams, Romans and Barbarians Four Views from the Empire's Edge 1st Century AD, p.178.

Additionally, there is ample evidence to suggest that the Dacians were prolific, as well as proficient, metal workers. Excavations at Sarmizegetusa Regia have revealed that at least two of the terraced areas, which the Dacian capital rested on, were dedicated to the metal trade.⁶¹⁸ The first of these terraced areas contained eight furnaces and one tonne of iron ore formed into round 'cakes'.619 The second of the metal-working terraces was evidently dedicated to the manufacture of iron implements, such as tools and weapons; several hundred implements have been found during excavation, 620 including spearheads, axes, daggers and falces. The discovery of evidence of large-scale metalworking in this area is not uncommon. This suggests that the Dacians had a highly-developed metal manufacturing industry, and that they possessed a sufficiently large and skilled workforce capable of arming and armouring a significant percentage of their warriors. Therefore, given these finds it is likely that the Dacians were substantially better equipped than many of Rome's enemies, particularly those commonly described as barbarians.

A minimalist approach might suggest that the average Daci Comati would

⁶¹⁸ R. F. Hoddinott, *The Thracians* (Spain: Thames and Hudson, 1981), p.150.

⁶¹⁹ Ibid., p.151.

⁶²⁰ G. A. Popescu, ed., *I Daci* (Italy: Electra, 1997), pp.269-71.

be equipped with an oval shield,⁶²¹ similar to that of the Roman auxiliaries, and possess a melee weapon, be it one of a variety of swords, a *falx*, an axe or most likely a spear.⁶²² In consideration of the Dacian iron resources and their ability to work them, it is likely that a far greater percentage of the Dacian soldiers were equipped with effective armour and weapons.

There is much disagreement amongst historians regarding what the Dacian *falx* actually looked like. This debate is significant as an understanding of the weapon gives us a clearer understanding of the potential threat the Dacian forces posed to their Roman enemies.⁶²³ Most of this debate centres around the differences in the depictions of this weapon on Trajan's Column and the Adamklissi Monument. The images on the Column (see fig. 21) depict the *falx* as a short-bladed, single-handed weapon used in conjunction with a shield.⁶²⁴ The Adamklissi Monument's depictions however differ in several

⁶²¹ Millar, The Roman Empire and Its Neighbours, p.275.

M. Todd, Everyday Life of the Northern Barbarians: Goths, Franks, and Vandals (New York: Dorset Press, 1972), pp.112-19.

L. Rossi, *Trajan's Column and the Dacian Wars* (London: Thames and Hudson, 1971), p.122, prefers the Adamklissi *falx*; Sir I. Richmond, *Trajan's Army on Trajan's Column* (London: The British School at Rome, 1982), p.50, believes that the Dacians used the shorter *falx* as depicted on Trajan's Column.

⁶²⁴ Scene LXXII, Cast 187.

key ways. The Adamklissi monument depicts four distinct falx designs (see figs. 24-27), all of which are substantially longer than those shown on Trajan's Column and which can be characterised as a large double-handed weapon used without a shield. 625 Some commentators have described the falx depicted on Trajan's Column as a Getan falx, 626 and have stated that this was the weapon that the Roman army faced whilst invading Dacia. Others prefer the Adamklissi falx as the weapon most commonly used against Trajan's army. 627 Proponents of the former theory state that the depictions of the falx found on the Adamklissi metopes belong to a different racial group, of Sarmatian stock, living in the vicinity. 628 If the Dacian falx were actually the small singlehanded weapon depicted on the Column the modifications that the Romans applied to their armour would have been unnecessary, as the momentum and reach of such a weapon would have been unable to threaten a normally equipped Roman soldier.

When the images of the Dacian falx are subjected to scrutiny, and

⁶²⁵ Metopes XVIII, XX, XXXIV.

⁶²⁶ Richmond, Trajan's Army on Trajan's Column, p.50.

Anglim et al., Fighting Techniques of the Ancient World; 3000 BC - 500 AD, p.142.

Even if this could be proven there is no reason to believe that the larger *falx* was not used by the Dacians.



Fig. 24, Metope XXXIV

Fig. 25. Metope XVIII







Fig. 27. Metope number unknown

compared with archaeological finds, it becomes clear that many of the falx designs depicted on the Adamklissi monument possessed a blade that was approximately 30-40 centimetres in length with a handle approximately onethird longer than the blade. This assists in reconciling the images from the Adamklissi monument with those from Trajan's Column. Archaeological evidence from Sarmizegetusa Regia indicates that some of these weapons possessed a blade as long as 68 centimetres (see fig. 28). Furthermore, it seems likely that the falx could be used as either a one or two-handed weapon, with or without a shield. The Dacus Pilleatus pictured in scene LXVI, Casts 168 - 169 on Trajan's Column (see fig. 29) highlights this effectively (See Fig. 29), clearly illustrating that the Dacian weapon has a handle approximately onethird longer than the blade, and is clearly of sufficient length to be used in a double-handed fashion.



Fig. 28. Dacian Falxs discovered at Sarmizegetusa Regia



Fig. 29. Trajan's Column Scene LXVI Cast 168, Dacian Pilleati wielding a Falx
Fronto describes the gaping wounds that this weapon was known to
inflict, which do not coincide with the likely effects of the weapon depicted
on the Column.⁶²⁹ A recent article by David Sim, in which the author has

constructed and tested the Dacian *falx* goes some way to demonstrating the truth of Fronto's comment. Sim's experiments have shown that the *falx* was capable of inflicting a crippling if not fatal wound to an unprotected oppo-

Fronto, 9: In bellum profectus est cum cognitis militibus hostem Parthum contemnentibus, sagittarum ictus post ingentia Dacorum falcibus inlata vulnera despicatui habentibus; cf. D. Sim, "The Making and Testing of the Battle Falx Also Known as the Dacian Battle Scythe," The Journal of Roman Military Equipment Studies 11 (2000): pp.37-40; Goldsworthy, Roman Warfare, p.127.

nent.⁶³⁰ Further tests carried out by Sim proved that although armour significantly reduced the severity of the 'wound' created, depending on its location, the damage inflicted would have incapacitated the majority of recipients rendering them unable to continue the fight.⁶³¹

The Dacian warrior was unquestionably a serious threat to his Roman counterpart. Decebalus is known to have taken in Roman deserters which he might have used to train his own troops in the Roman art of war. In addition to the Dacian contact with the Roman troops in Pannonia and Moesia, this suggests that the Dacians would have had an understanding of how best to fight the Roman soldiers. Therefore, it can justifiably be assumed that the typical Dacian attack against their heavily-armoured opponents targeted the enemy's weakest points: the helmet, shoulder, leg, or right arm, 632 which

Sim, "The Making and Testing of the Battle Falx Also Known as the Dacian Battle Scythe," p.40; Sim's test involved striking plastina, a product with properties similar to human flesh; the *falx* delivered 140 – 150 joules of impact energy at a velocity of 20 – 25 metres per second, enough to produce a 'wound' that was 165 millimetres long, 113 millimetres deep, and 9 millimetres wide.

⁶³¹ Ibid. The armour penetration test was conducted on a 1.2 millimetre-thick piece of mild steel, and the weapon created a 40 millimetre long and 6 millimetre wide laceration and its point projected 38 millimetres beyond the steel.

⁶³² Metopes XVIII, XX, illustrate the exposed parts of Roman soldiers in combat; A. K. Goldsworthy, *The Roman Army at War 100 BC - AD 200* (Oxford: Clarendon Press, 1996),

would project beyond the protection of the *scutum* whilst trying to stab his opponent in the abdomen, the stroke that Roman soldiers were trained to utilise.⁶³³ If the Dacians were able to land such strokes they would have been able to inflict the sort of disabling injuries described by Fronto.

The Dacian army was far more advanced technologically than any other barbarian army against which the Romans had previously fought. Scene XXV, Cast 63 on Trajan's Column shows Trajan examining a Dacian bow and arrow. 634 Only the arrow remains, the bow which would have originally been made of metal and in Trajan's right hand is missing. Yet the bow was clearly of some interest to the Emperor and it has been argued that it is not likely to have been an ordinary composite bow similar to the ones used by the Roman auxiliaries and which are regularly depicted being used by the Dacians. 635 One suggestion based on the previous scene is that it may have been a *gastraphetes*, an early type of torsion powered crossbow, 636 which is particularly interesting as it would suggest that the Dacians were well advanced in their use of

_

p.220.

⁶³³ Vegetius, I.12.

⁶³⁴ Lepper and Frere, *Trajan's Column*, p.272.

⁶³⁵ Scene XXXII, Casts 77 – 79; Rossi, *Trajan's Column and the Dacian Wars*, pp.124-25.

⁶³⁶ Lepper and Frere, Trajan's Column, p.272.

complex torsion powered weaponry. The preceding scene depicts a Dacian, amidst a stand of trees holding an arrow. The bow, like the following panel, is missing.⁶³⁷ The grip that this Dacian employs is particularly uncharacteristic of an archer utilising a normal bow. Lepper and Frere suggest that the missing weapon, like that missing from the emperor's hands, was a crossbow of some type, most likely the *gastraphetes*.

The Dacian use of armour is another contentious issue which would assist in demonstrating the threat that the Dacian soldiers posed to the Roman troops on the battlefield. Most authors seem to believe that the Dacian forces wore no armour at all;⁶³⁸ this opinion is again based on the conventional depictions of Dacian troops on Trajan's Column, where they appear to rely exclusively on their oval shields for protection. These shields, identical to those carried by the Roman auxiliaries, only differed in the designs portrayed on their facade.⁶³⁹ The highly-stylised nature of the Column's depictions of

⁶³⁷ Scene XXIV, Cast 61.

I. Glodariu and I. Eugen, Civilizatia Fierului La Daci (Cluj-Napoca: Editura Dacia, 1979), p.180; Strobel, Untersuchungen zu den Dakerkriegen Trajans: Studien zur Geschichte des Mittleren und Unteren Donauraumes in der Hohen Kaiserzeit, p.61; Glodariu, Civilizatia Fierului La Daci, p.180.

⁶³⁹ Dacian shield Scenes XXIV, Casts 60 – 61, XXXI; Roman shield Scenes XXIV, Cast 58, XXXII; Rossi, Trajan's Column and the Dacian Wars, p.121.

the Dacian forces as a barbaric peoples must be reiterated. 640 Strobel sensibly argues that it would be nearly unbelievable to think that after hundreds of years of contact with the Celts, Greeks, Sarmatians, and Romans that the Dacians would not have adopted body armour in some form.⁶⁴¹ The obvious abundance of iron in the region and the Dacian skill at working it make the argument that the Dacians did not utilise effective armour even less plausible. A careful examination of the Adamklissi Metopes and the base of Trajan's Column itself demonstrates that the native Dacian forces and some of their allies wore armour.⁶⁴² Close examination of the Adamklissi Metopes illustrates that some of the Dacians are depicted wearing helmets.⁶⁴³ The congeries armorum of Trajan's Column illustrates scale armour, mail armour and helmets (see fig. 30);644 and armour is also depicted on Trajan's victory coins. Although it is impossible to say exactly how widespread the use of armour was amongst the Dacian forces, I believe that it can be safely assumed that many of the pilleati had access to and utilised quality metal armours, 645

⁶⁴⁰ Lepper and Frere, *Trajan's Column*, p.272.

⁶⁴¹ Strobel, Untersuchungen Zu Den Dakerkriegen Trajans: Studien Zur Geschichte Des Mittleren Und Unteren Donauraumes in Der Hohen Kaiserzeit, p.61.

Rossi, Trajan's Column and the Dacian Wars, p.122.

⁶⁴³ Metopes XVIII, XX, XXXIV, XXXV

⁶⁴⁴ Rossi, Trajan's Column and the Dacian Wars, p.122.

⁶⁴⁵ Todd, Everyday Life of the Northern Barbarians: Goths, Franks, and Vandals, pp.109-12.



Fig. 30. Trajan's Column, congeries armorum

although this could still be well underestimating how widespread the use of armour was in Dacia. It is evident that from the time of Burebista's reign the Dacian forces had undergone some degree of Romanisation,⁶⁴⁶ and some degree of professionalisation,⁶⁴⁷ which is demonstrated by the fact that many of the Dacian fortresses were manned by permanent garrisons that oversaw resource-important regions.⁶⁴⁸ This suggests that the Dacian forces were far better equipped than the sources biased in favour of the Romans lead us to

⁶⁴⁶ Davies, "Trajan's First Dacian War," p.88.

⁶⁴⁷ Williams, Romans and Barbarians Four Views from the Empire's Edge 1st Century AD, p.179.

⁶⁴⁸ Crişan, Dacii Din Estul Transilvaniei, pp.185; 88.

believe.

An examination of the sequence of scenes on the Column which depict the Dacian counter-attack, XXXI - XLI, reveals a number of features that demonstrate some of the potential security risks posed by the Dacian army. Trajan's forced departure from his winter quarters clearly illustrates that the Dacian counter-offensive was not a trivial matter that could be handled by locally-based troops and their respective commanders. In the majority of cases, even as late as the 5th century AD, barbarian attacks, in general, against well-constructed Roman fortifications were unlikely to succeed. 649 Elton further states that in most attacks of this kind the barbarians did not even make it past the outer defences of the fortification in question. 650 Scene XXXII on the Column however depicts the Dacian forces after they have already managed to bypass the outer-defences and are actively engaged in an assault on the walls of the fort and attempting to gain entry using a battering ram. Also depicted are Dacian archers presumably attempting to stop the Roman garrison from interfering with the battering ram;⁶⁵¹ Elton attributes this tactic

Elton, Frontiers of the Roman Empire, p.261; cf. Dio, LVI.22; Todd, The Northern Barbarians 100 B.C. - A.D. 300, p.178.

⁶⁵⁰ Elton, Frontiers of the Roman Empire, p.261.

⁶⁵¹ Scene XXXII, Cast 79.

to Roman siege practices.⁶⁵² This is an indication that the Dacian army had been trained in the Roman art of war.

Of particular interest is the Dacian use of *carroballistae* depicted on Trajan's Column in Scene LXVI, Cast 169 to defend the walls of a Dacian fortress against Roman assault. The *carroballistae* are depicted on several occasions being used by the Roman forces. Their use by the Dacians further highlights the degree of Romanisation in the Dacian army and the sophisticated level of the technology in use by this 'barbarian' army. These weapons most likely came into Dacian possession through the technicians Decebalus had received from Domitian or were salvaged after Fuscus' defeat.⁶⁵³

Finally, the seriousness of the military threat posed by Dacia can be best demonstrated by an examination of how they were countered by the Romans, who felt it necessary to adopt new and to re-introduce modified protective equipment during the course of the Dacian wars. The Roman army as it is depicted on Trajan's Column is very different to how it would actually have appeared on the battlefield.⁶⁵⁴ The Column, as it does with the

⁶⁵² Elton, Frontiers of the Roman Empire, p.259.

⁶⁵³ Rossi, Trajan's Column and the Dacian Wars, p.125.

⁶⁵⁴ Ibid., p.185; Goldsworthy, Roman Warfare, p.126.

Dacians, presents the Roman army in an extremely conventional manner.⁶⁵⁵ All Roman legionaries are depicted as armoured in *lorica segmentata*, the latest development in Roman armour.⁶⁵⁶ Conversely, the Adamklissi monument offers a far more realistic depiction of the Roman forces.⁶⁵⁷ The Romans as depicted on the Adamklissi Monument wear several different types of armour, ranging from the *lorica segmentata* to the older *lorica hamata* and *lorica squamata*.⁶⁵⁸ These older armour types were adopted in order to minimise the effect of the *falx*. Both of these older varieties of armour were more flexible and able to distribute the impact damage more widely than the newer more rigid *lorica segmentata*, constructed of plates encircling the soldier's torso.

The rigidity of the *lorica segmentata* made it a liability against the Dacian *falx*. As a result of this rigidity the *falx* was more easily able to puncture the armour and thereby more likely to inflict incapacitating wounds to its wearer. The more flexible armours, *lorica hamata* and *lorica squamata*, were less likely to allow the point of the weapon to puncture them and additionally spread the

⁶⁵⁵ Williams, Romans and Barbarians Four Views from the Empire's Edge 1st Century AD, p.185.

⁶⁵⁶ Rossi, Trajan's Column and the Dacian Wars, p.122.

Williams, Romans and Barbarians Four Views from the Empire's Edge 1st Century AD, p.185; Goldsworthy, Roman Warfare, p.126.

⁶⁵⁸ Robinson, *The Armour of Imperial Rome*, p.170.

impact damage received, although to prevent serious injury a heavily padded vestment would need to have been worn beneath the armour. Moreover, these suits of armour also displayed unique modifications, proving that these were not just depictions of armour that had not yet been replaced. The Adamklissi Metopes depict *lorica hamata* and *lorica squamata* both lengthened, using a single row of *pteruges* at the sleeves and a double row below the skirt to protect the upper-thigh region of the legionary.⁶⁵⁹

Furthermore, the Adamklissi Monument gives a clear indication of other changes adopted by the Roman forces in an effort to deal with the Dacian military and its unique weapon, the *falx*. Clearly visible on the Monument is the gladiatorial *manica*, which had previously been used exclusively in the arena. The *manica*, as pictured on the Adamklissi Metopes, was a metal sheath of overlapping bands strapped to the legionary's sword arm. This item had never previously nor was ever again employed as a part of the legionary's protective equipment. This fact alone indicates that the *falx* was of

⁶⁵⁹ Ibid., p.170; These modifications are the clearest evidence that these suits of armour were not just remnants of previous eras but re-introduced especially for these wars.

E. Köhne, and C. Ewigleben, eds., *Gladiators and Caesars, the Power of Spectacle in Ancient Rome* (London: British Museum Press, 2000), p.47.

⁶⁶¹ Metopes XVIII, XX, XXXV.

particular concern to the Roman soldier. The manica was employed because, even though a falx wound to the arm may not have resulted in fatality, it would undoubtedly have resulted in the disabling of the legionary struck. The fact that he was injured on the battlefield probably would have made him more of a hindrance, both psychologically and physically, to his own forces. The Roman legionary helmet of this period also clearly differs from previous models. The modified Roman legionary helmet is depicted on the Adamklissi Monument with a well-defined reinforcing cross-brace,662 originating from a field modification intended to prevent the Dacian falx from puncturing the helmet and inflicting a serious injury. At that time, head wounds were the most likely to result in a fatality.663 A further modification to the armour of the Roman legionary fighting in Dacia was the adoption of greaves to protect the lower leg from disabling falx injuries. Unlike any opponent the Romans had faced before the Dacians, their falx compelled the Roman army to change radically the way that their soldiers were equipped.

Although Trajan's Column can easily be interpreted as depicting the Dacian wars as a relatively easy victory for Trajan's forces, the reality was quite

662 Metope XX.

⁶⁶³ Goldsworthy, The Roman Army at War 100 BC - AD 200, p.220.

the opposite. To defeat the Dacian army and be in a position to claim Dacia as a province the Romans needed to defeat an army substantially more diverse, Romanised and professionally-equipped than is depicted either on Trajan's Column or in the literary account of Dio. The Romans were forced to storm several extremely well-defended fortifications, technologically the equivalent of those produced by the Romans and more advanced than anything else anywhere in Europe at the time. The potential dangers that the Romans faced every time they came into contact with the Dacians is highlighted by the fact that they were required to change and enhance the armour worn by their legionaries, in order to reduce the number of casualties inflicted upon them in battle.

Trajan's annexation of Dacia substantially enhanced the security of several Roman provinces and the Empire as a whole. This conquest put an end to attempts to form an anti-Roman coalition north of the Rhine-Danube frontier. The technological superiority of the Dacians over Rome's other enemies in the region combined with the likelihood that Decebalus possessed a substantial standing army like that of Burebista, 664 and his abilities as a general all combined to ensure that the Roman victory over the Dacians

⁶⁶⁴ Crişan, Burebista and His Time, p.89.

eliminated a threat to the security of the nearby Roman provinces and the Empire itself.

Tactical Advantages

Tactically the Dacian annexation provided some benefit to Rome, as the Roman emperor was more able to position his forces to threaten several enemies in the region, particularly the Germans and Sarmatians. An examination of the placements of Roman forts and fortresses in Dacia suggests that one reason for their choice of placement was to restrict the movement and communications of several nearby enemies.665 The ability to restrict free movement through Dacia and prevent the Iazyges and Roxolani from making physical contact was a tactical advantage, as it would have made the formation of an anti-Roman alliance between these two peoples vastly more difficult. The Romans made no serious attempts to prevent all travel through Dacia by these peoples but ensured that they escorted either tribe whilst they were crossing Roman-Dacia, and limited how often they allowed these tribes thoroughfare. The placement of the fortifications within Dacia also allowed the Roman troops to be rapidly deployed to the nearby frontiers in case of trouble. Additionally,

⁶⁶⁵ See also Manpower section above.

the number of troops stationed within Dacia itself allowed for a substantial force to be assembled relatively quickly to counter any regional threat.

The Dacian annexation provided Rome with a significant tactical advantage. By annexing this region the Romans were able to restrict the movement and communications of several nearby enemies of Rome, and position forces to threaten several nearby enemies.

Strategic Advantages

The Dacian annexation offered important strategic advantages for the security of the Roman Empire. The Dacian annexation broke the direct line of contact and communication between several of Rome's enemies, eliminated the main threat north of the Danube, afforded protection to the Balkan provinces, and demonstrated that Rome would not tolerate continued hostility in the region.

The disruption of contact and communication of Rome's enemies north of the Danube made the formation of any potential anti-Roman alliance substantially more difficult. From West to East the Romans faced the Germans, the Sarmatian Iazyges, the Dacians, and another Sarmatian tribe the Roxolani

directly on the Danubian front. The potential for an anti-Roman alliance being formed along this front by the peoples living North of the Danube was very real, as was demonstrated particularly by the activities of the Germans and Sarmatians during Domitian's reign.⁶⁶⁶ Furthermore, it is clear that the Dacians attempted to initiate an anti-Roman alliance, with some demonstrable success, which served only to increase the potential threat to the Empire (see figs. 18-20). Had this potential been converted into reality, the threat to the Empire may have proved too much for Rome to be able to quell, leading to the potential loss of Rome's Danubian provinces or worse.⁶⁶⁷

The Roman frontier defences were weakened after the military reforms of Augustus. ⁶⁶⁸ These reforms included a reduction of the number of Roman legions from approximately sixty, a number attained during the civil wars under Caesar and the Triumvirs, ⁶⁶⁹ to twenty-five after the Varian disaster during Augustus' reign. This reorganisation, a measure implemented in order to restrict expenditure on the military forces based along the frontiers and in

Mócsy, *Pannonia and Upper Moesia*, p.102; Suet., *Tib.*, 17 discusses the potential for the Germans making an alliance with the Pannonians, which was forestalled only by the conquest of Illyricum, in Augustus's reign.

⁶⁶⁷ Millar, The Roman Empire and Its Neighbours, p.272.

⁶⁶⁸ Petit, *Pax Romana*, pp.17-20.

⁶⁶⁹ Ibid., p.17; Anglim et al., Fighting Techniques of the Ancient World; 3000 BC - 500 AD, p.64.

order to decrease the potential for further internal strife within the Empire, saw a change in the way the Roman military machine could be utilised, from a tool of expansionistic policy to one geared almost exclusively to imperial defence.

The Augustan reorganisation led to the adoption of a distinctly shallow defensive policy relying on the strength of the frontiers to protect the Empire (if these frontiers were to fall then the potential existed for much of the Empire to be rapidly overrun). Over 9500 kilometres of frontier were protected by only 25 legions and an undeterminable number of auxiliaries, leaving the Empire vulnerable to attacks delivered in strength against multiple borders, and with no in-depth defence in place to halt the progression of enemy forces.⁶⁷⁰ Generally, assaults against a single border could be dealt with by transferring forces from a nearby secure frontier, highlighting the potential threat of a conflict along multiple borders where it would not be possible to transfer the required troops. This problem is particularly evident along the Danubian frontier in Domitian's reign when, due to the uprising of the Marcomanni, the Sarmatae Iazyges and Quadi, Domitian was forced to make terms with

⁶⁷⁰ Petit, Pax Romana, p.17.

Decebalus even after achieving a victory over the Dacian forces at Tapae.⁶⁷¹

The choice of Dacia as Rome's target to alleviate the pressure on this frontier was a well-considered one. The Dacians presented the most serious threat to Rome on the Danubian frontier. The Dacian army at its height is believed to have consisted of up to 250,000 combatants,⁶⁷² under the control of one militarily-capable leader.⁶⁷³ This meant that the Dacians presented a more significant threat than the other enemies of Rome along the Danubian frontier, which were primarily tribal units notoriously difficult to combine into a single attacking unit, and more difficult still to keep operational for the period of time necessary for a successful campaign.⁶⁷⁴ The Dacians were also largely immune to Roman bribery and diplomatic intervention, which often proved a valuable technique used by the Romans to disband tribal

Dio, LXVII.7.2; see also Tiberius' invasion of Germany which failed because he was required to suppress the revolts in Pannonia and Dalmatia; Williams, *Romans and Barbarians Four Views from the Empire's Edge 1st Century AD*, p.161, mentions the possibility that the Marcomanni were incited by Decebalus.

⁶⁷² Strobel, Untersuchungen zu den Dakerkriegen Trajans: Studien zur Geschichte des Mittleren und Unteren Donauraumes in der Hohen Kaiserzeit, p.58; Strabo, VII.3.13, says that during the reign of Burebista the Dacian army numbered approximately 200,000 combatants.

⁶⁷³ Crişan, Burebista and His Time, p.93.

⁶⁷⁴ Goldsworthy, The Roman Army at War 100 BC - AD 200, p.51.

conglomerations and sow internal unrest.⁶⁷⁵ Although Decebalus accepted Roman gold and technical experts under the pretence of a client relationship with Rome, he used these in an effort to prepare for the next engagement with the Romans.⁶⁷⁶

Continued Dacian success at cross-border raiding in Roman-held territory had the potential to encourage other enemies of Rome along this frontier to engage in similarly destructive behaviour. Strategically the Roman defeat of the Dacians also provided a clear warning to Rome's other enemies on the Danubian frontier, something that was clearly a consideration as is evidenced by the victory monument dedicated to Mars Ultor built at Adamklissi. The Adamklissi monument illustrates the defeat of the Dacians and their allies and is placed near the area under the control of the Sarmatian Roxolani, a clear demonstration of what would befall any who tried to emulate the Dacian example by threatening Roman control of the Danubian region. That other enemies of Rome were involved in Trajan's Dacian wars is illustrated by the base of Trajan's column, which displays armour and weapons that are mostly likely representations of equipment used by Sarmatians and Germans, not

⁶⁷⁵ Tac., Ann., II.26.

⁶⁷⁶ Dio, LXVIII.10.3.

Dacians.⁶⁷⁷ That these pieces of equipment are depicted on the column further supports the argument that the Dacian wars were, in part, fought in an effort to demonstrate Roman supremacy over the other peoples along the Danubian frontier. This demonstration of power must certainly be considered a strategic advantage.

The Dacian annexation provided a substantial strategic advantage to the Romans for a number of reasons: it broke the direct lines of contact and communication between a number of Rome's enemies, it eliminated the most serious and persistent threat on this frontier, it also provided a clear psychological warning to Rome's other enemies both on the frontier and in the region in general demonstrating Rome's reaction to threatening behaviour, and it prevented the potential creation of an anti-Roman alliance by annexing the only power that possessed the centralised control to lead such an alliance. For these reasons the Dacian annexation is considered to have been substantially advantageous to the Romans in a regional strategic sense.

Overall the geopolitical factors examined were significantly more advantageous than not, even though two of the factors examined proved

Wilcox, Barbarians against Rome, Rome's Celtic, Germanic, Spanish and Gallic Enemies, p.25.

disadvantageous to Rome. As the result of this annexation Rome faced increased hostility on other fronts, albeit with existing enemies, and the manpower required to garrison and defend the region from external threats exceeded the forces that had been utilised to protect the pre-annexation Danubian frontier. The strategic and tactical advantages acquired by Rome were valuable and the enhanced security resulting from the Dacian defeat was particularly beneficial to Rome.