THE ARMY OF ALEXANDER THE GREAT AND COMBAT STRESS SYNDROME (326 BC)

ABSTRACT

In the summer of 326 BC, Alexander the Great's triumphal seven-year campaign in Asia was unexpectedly halted in the upper reaches of the Indus river — not by enemy action, but by the troops' refusal to march further eastwards. A possible reason for such drastic action by an army which had, until that point, followed its king with blind devotion, was that severe combat stress may have set in. This syndrome, as it is defined today, has been thoroughly researched. The present article investigates the possibility that combat stress perhaps provides an explanation for this dramatic occurrence in which Alexander's dream of an empire extending to the ends of the earth was shattered.

1. COMBAT STRESS

1.1 Presentation

The first description of combat stress as the cause of specific psychiatric attrition among soldiers dates back to the American Civil War (1861-1865). Hammond, the Physician-General of the Northern forces, described it at the time as "nostalgia", a form of severe depression caused by prolonged absence from one's home and family (Louw 1989:145-8; Bourne 1969:219-36). During the First World War a comparable condition was identified and termed "shell shock". This was initially ascribed to micro-vascular brain damage caused by close-range explosions, but it was gradually realised that only a small minority of patients had in fact sustained organic brain damage. Eventually, psychiatric trauma emerged as probable aetiology (Louw 1989:145-8; Marmar & Horowitz 1988:81-103; Bourne 1969:219-236).

The nature and scope of combat stress were more clearly defined during the Second World War, with terms such as "combat exhaustion/ fatigue" and even "combat neurosis" being used. "Combat fatigue" was also identified in the Korean War, while the Vietnam War popularised the term "post-traumatic stress disorder", or PTSD (Louw 1989; Marmar & Horowitz 1988; Bourne 1969). Closer to home, Feinstein and Potgieter researched the syndrome in the Angolan border war, producing

results which correlate to a great extent with those mentioned above, and with the Vietnam experience in particular (Louw 1989).

The incidence of combat stress in the various wars has been summarised by Bourne (1969:219-236) and Allerton (1969:10-140). In the American Civil War "nostalgia" was identified in 2,3-3,3 soldiers in every 1000. A further 20,8 per 1000 were discharged on account of "paralysis" and 6 per 1000 with a diagnosis of "insanity". During the First World War the incidence of "shell shock" among the Allies was approximately one-third of that of the comparable "combat fatigue" in the Second World War, which was estimated at 10%. This figure is speculative, however. The USA reported an incidence of 101 per 1000 soldiers in the European campaign. Interestingly enough, the German Army did not identify the syndrome in either world war (Glass 1969: xiv-xxx). In the Korean War combat fatigue was diagnosed in 37 soldiers per 1000, and in Vietnam PTSD was identified in 10-12 per 1000 (although the observation of patients over a longer period revealed a much higher prevalence — at least 20%). In the Angolan border war, the long-term incidence was 26% (Louw 1989).

1.2 Clinical picture

Combat stress has a very varied symptom complex and, as well as presenting as an acute syndrome, it may occur with delayed onset, even years later. The American Psychiatric Association pioneered the establishment of standardised diagnostic criteria, which first appeared in their Diagnostic Statistics Manual (DSM) in 1952. These were progressively adapted, and the DSM-III criteria are still considered normative (Louw 1989; Marmar & Horowitz 1988; Elder & Clipp 1988: 131-154).

The symptom complex, which in Vietnam typically occurred early (in 50% of cases, in the first three months after arrival in the combat zone), is influenced by the following factors: the degree of combat trauma, personality types (with higher incidence in the emotionally unstable), state of health, personal acceptance of the combat milieu (e.g. the justified nature of the war) and confidence in the military command (Tischler 1969:19-45). It is generally accepted that, depending on the scope of the stress involved, every single person probably has a

"psychiatric breaking-point", and that lesser or isolated symptoms will present even in otherwise "normal" soldiers (Marmar & Horowitz 1988).

In terms of the DSM-III description, the syndrome is seen as a transient psychological disorder in a basically healthy person, diagnosed according to the following criteria (Elder & Clipp 1988):

- being exposed to considerable combat stress;
- reliving moments of trauma in nightmares, involuntary flashbacks and disturbing memories;
- becoming emotionally "blunted" and withdrawing from social interaction;
- experiencing personality disorders such as pathological feelings of guilt, hyperactivity, selective memory loss and/or sleep disturbance.
 This all add up to psychiatric attrition, often associated with aggression and distrust, anorexia, addiction to alcohol and/or drugs, depression, extreme exhaustion and lack of initiative.

1.3 Treatment and prognosis

The experience of the Vietnam War, in particular, was that treatment generally produced favourable results. Preventative treatment was based on anticipation of the condition in vulnerable subjects, although it proved impractical to institute intensive psychological identification programmes. Effective after-care was crucial. Treatment near the combat zone was preferable, rather than at the base hospital. It comprised psychological support and the creation of a positive expectation of the patient's speedy return to health and active service. Medication could assist recovery. A cure would take several months, but the prognosis for otherwise healthy subjects was good (Marmar & Horowitz 1988; Allerton 1969).

2. ALEXANDER AND HIS ARMY

In order to assess the role of combat stress in the specific incident of 326 BC, it is necessary to outline the events leading up to it.



Figure 4: A mosaic from Pompeii depicting Alexander the Great charging on his horse, Bucephalus, in the battle against Darius III at Issus, 333 BC. Naples Museum.

In 334 BC, Alexander, the 22-year-old king of Macedonia, invaded Asia with the intention of confronting the Persian Empire on its own turf. Alexander's victorious campaign is justly famous (Hammond 1981). At the battles of Granicus (334 BC), Issus (333 BC) (Fig. 4) and Gaugamela (331 BC) the Persians were decisively defeated. Their king, Darius III, fled and was murdered by his own soldiers in the following year. The Persian Empire extended to the Indus River, and Alexander continued his campaign eastward. By 327 BC he had conquered Bactria and Sogdiana, which brought him to the eastern border of Persia's erstwhile sphere of influence. He crossed the Khyber Pass to the Indus Valley, winning a bloody battle at the Hydaspes/Djelum

River (the upper reaches of the Indus) in 326 BC, and prepared to invade India. It was at this stage that the decisive confrontation with his army occurred.

The composition of Alexander's army had changed considerably over the course of his Asian campaign. In 334 BC he had crossed the Dardanelles with approximately 35 000 men: 30 000 infantry (12 000 of them Macedonians and the rest Greeks and other allies) and 5 000 cavalry (1800 Macedonians — known as the "Companions", 1 800 Thessalonians, and the rest other allies). The Macedonian component, which would comprise the core of his army and most of the officer corps throughout, thus represented approximately 40% of the total (Tarn 1948:1.10-13). Losses were consistently made good by reinforcements from Macedonia (Hammond 1981:218; Tarn 1948:2.135) as well as mercenaries and conscripts from conquered nations. The success of Alexander's campaign encouraged mercenaries and foreign army units to join him with a view to the riches to be gained from the spoils of war, among other considerations (Hammond 1981:218).

Before Gaugamela (331 BC) Alexander received a considerable number of reinforcements from Macedonia and elsewhere, bringing his army's total strength to almost 50 000, of whom about 30% were Macedonians (Tarn 1948:2.182-9). In Bactria (327 BC), too, large numbers of soldiers (including a Macedonian infantry battalion) joined him, but it proved necessary to leave a sizeable component behind as an army of occupation in the conquered areas (Tarn 1948:2.168). Although he thus had far more soldiers at his disposal, his army for the invasion of India was only approximately 30 000 strong (6 500 cavalry and 23 500 infantry). Of this force, only about one-sixth were Macedonians. It thus became increasingly difficult for Alexander to employ veteran infantry and Macedonian officers (Hammond 1981:213-5). After waging war in Asia for seven years, Alexander faced the pro blem that the European core component of his army had been drastically reduced. He could not expect further reinforcements from Macedonia (Tarn 1948:2.143) and, according to the historian Quintus Curtius Rufus (9.3.10-11), his Macedonian troops had become increasingly aware of the progressively alien culture of his army.

3. THE INCIDENT AT THE HYPHASIS/BEAS RIVER, 326 BC

It is important to note that Alexander based his Indian campaign on the faulty assumption that India was relatively small and that its eastern border with the mythical "Eastern Ocean" was within military reach. According to his information, the Eastern Ocean encircled Asia to the north-east and linked with the known oceans, the Red Sea, *inter alia*, to the west. It was even thought that the Indus joined the Nile in some way. Alexander's driving passion was to reach the "end of the world", the coast of the Eastern Ocean. He was completely ignorant of the existence of China, East Asia and South-east Asia (Hammond 1981:202-3; Tarn 1948:2.275-85).

The Indian campaign began in the Indus Valley with the battle of Hydaspes/Djelum against Porus. Alexander won this battle, but with significant losses (Hammond 1981:207-10). Although fifteen elephants had been used at Gaugamela, Alexander's army now had to contend for the first time with a large number of battle-elephants — 200. This had a strong demoralising effect on his soldiers and officers (Curtius 9.2.3). From here Alexander moved eastwards, crossing various other branches of the Indus under difficult circumstances until he reached the Hyphasis/Beas River in the present-day Punjab. The summer monsoon season of 326 BC was particularly hot, and the Aratta people defended their territory ferociously. Alexander sustained heavy losses in taking Sangala (Wood 1997:190-7). According to Curtius, Alexander learnt from Porus (who became his ally after the battle of Hydaspes) and from other sources that the Ganges (the largest river in India), was situated twelve days' march to the east and that there was a very powerful kingdom in the area, with an army of more than 200 000 as well as 2 000 war chariots and 3 000 battle-elephants. Porus also told him that the king, Aggrammes, was a weakling whom Alexander would be able to defeat (Curtius 9.2.3). However, some modern historians doubt whether Alexander had ever heard of the Ganges (Tarn 1948:2.280).

The historian Lucius Flavius Arrianus (Arrian) in his *Anabasis of Alexander* 5.25-9, tells us that it was under these circumstances that the Macedonians became dispirited and staged their revolt. It was clear

to them that, despite the disturbing rumours about what lay on the other side of the Hyphasis, the king was determined to press on eastwards. They had been willing to assist Alexander in conquering the Persian Empire (their traditional enemy), but now he seemed to have set his sights on braving unknown worlds and dangers in India, and this went beyond their brief (Tarn 1948:1.97-8). When Alexander heard that there was dissatisfaction among his troops, he summoned the senior officers to persuade them to support his plan — or to be dissuaded from it (Arrian 5.25-9). It is interesting that he called all the officers together, when only the Macedonians were dissatisfied (Hammond 1981:213-5). In fact, there is reason to believe that Porus and the non-Macedonian/Greek troops were actually in favour of (even enthusiastic about) invading India under Alexander's leadership (Hammond 1981:213-5). Arrian (5.25-9) writes that Alexander's speech reminded his soldiers of what they had already achieved and conquered. He told them that there was only a small area left, between the Ganges and the Eastern Ocean. Once they had secured this conquest, he assured them, the fighting would finally be over and they would all be rich with the spoils of war. Curtius's version of this speech (9.2.12-30) emphasises Alexander's praise of his Macedonian core troops and his contemptuous dismissal of the rumours about what awaited them in India.

There was a lengthy silence after his speech as Alexander waited for his army's reaction. The response came from one of his senior Macedonian leaders, Coenus, who would succumb to disease some weeks later (Hammond 1981:213-5). According to Arrian (5.27.2-9), Coenus praised Alexander for his wise leadership over the years and for the fact that he had never ruled as a tyrant, but went on to say that the troops felt it was time to call a halt to the campaign. Of the large initial contingent of Macedonians, only a small number remained, and they were mentally drained, as well as physically exhausted. He advised Alexander not to attempt to command unwilling troops, but rather to return home for a while in order to assemble a fresh army, to attain further triumphs. In Curtius's version, Coenus emphasised the troops' willingness to perform any reasonable task, but clearly states that they felt the proposed invasion of an unknown India to be too much to ask of an exhausted army with rusty weapons and tattered apparel. Shortages had already forced them to wear Persian clothing, and they were degenerating amid the alien and impure cultures of the army. Alexander's envisaged campaign was suited to his own greatness of spirit, but had become too demanding for his soldiers, according to Coenus (Curtius 9.3.9).

Disturbed, Alexander retired to his tent. He informed the officers the next day that he intended to continue the campaign. He said that, even if all the Macedonians refused to follow him, he was confident that the rest of his army would do so. The Macedonians would then be at liberty to return home, in the knowledge that they had deserted their king. After this, Alexander withdrew to his tent for three days. When no alternative response was forthcoming from his soldiers, he called in the senior officers of his Companions and his personal friends (all of whom were Macedonians). He informed them that a special sacrificial offering had shown unfavourable signs for the crossing of the Hyphasis/Beas River, and that he had thus decided to go no further. Alexander had realised that, without his Macedonians, he would be lost (Hammond 1981:214).

His decision was applauded by the army (Arrian 5.28). Homage before the royal tent was followed by thanksgiving sacrifices, for which twelve gigantic altars were built, which would remain landmarks for centuries (Hammond 1981:215). After further festivities, Alexander retraced his steps to the Hydaspes/Djelum and began to prepare for his next campaign, southwards along the Indus to the sea. The soldiers gave their full support to this march. However, Tarn (1948:2.102) believes that the particularly bloodthirsty manner in which Southern India was conquered may reflect the high levels of frustration and exhaustion prevalent in the army, and that the soldiers wanted to ensure thereby that absolutely no resistance could remain. In his campaign against the Malli, Alexander sustained a serious injury when he found himself in the forefront of an attack on the city walls. Although this episode might be read as indicating laxness on the part of an unwilling army, we have no proof of this being the case (Hammond 1981: 221-7).

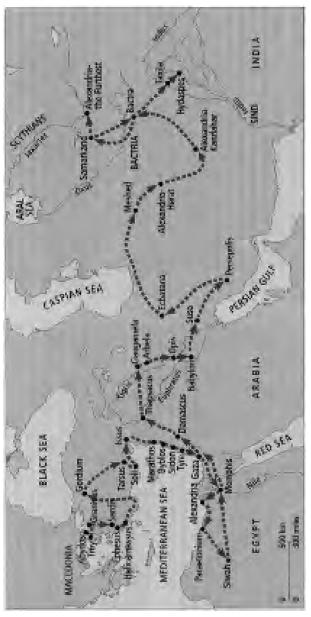


Figure 5: Alexander's campaigns.

Curtius (4.15-23) claims that the army revolted again in the country of the Malli, where the combat was ferocious, because they were being forced to do battle across the Ganges. However, as a follower of the Peripatetic School in Athens, Curtius was not particularly well disposed towards Alexander as a result of his estrangement from Aristotle, and this information must thus be approached with caution (Tarn 1948: 2.129). The suggestion that the army had crossed the Ganges at this stage is, in any case, incorrect: Alexander was on the banks of the Indus, far west of the Ganges.

In September 325 BC Alexander reached the mouth of the Indus and began his return march to Mesopotamia, never again to return to the eastern border of his new Empire.

4. DISCUSSION

To what extent, then, could what we know as combat stress have been responsible for Alexander's confrontation with his army? Combat stress is defined today as the temporary disintegration of a soldier's psychological integrity as a result of severe, sustained tension in a battle situation (Strange 1969:75-93). The symptom complex is very varied, as has been indicated, but with suitable therapy the vast majority of patients can ultimately be rehabilitated. The American experience in Vietnam was that the syndrome characteristically occurred soon after exposure to combat. It was more common among older soldiers and those with unstable personalities. Factors such as strong camaraderie, confidence in military leaders, faith in the cause being fought for, and good health could fortify a soldier against it (Elder & Clipp 1988:131-54).

The syndrome thus typically affects an individual soldier rather than a whole army or a unit. Alexander's confrontation with his army at the Hyphasis/Beas River thus falls outside the current understanding of combat stress. However, any army consists of individuals. Alexander's problem in 326 BC may therefore be approached from this angle by focusing on the content of Coenus's speech explaining the soldiers' actions to the king. We may also use other available information to draw conclusions about how the soldiers could have been influenced by the very special circumstances of the time. Was a key component of Alexander's army perhaps paralysed by combat stress?

Since Arrian is generally considered the most reliable ancient source for the history of Alexander (Cilliers & Retief 1999:63-76) (pp. in this volume), we shall consider his version of Coenus's speech here. (Indeed, Curtius's version does not differ significantly.) Although Arrian's history was based on contemporary information from Ptolemy and the King's Journals (sources viewed by most scholars as reliable), it was written three centuries after Alexander's death. Arrian's version of Coenus's speech thus falls into the same category as the Greek historian Thucydides's version of Pericles's "Funeral Oration", for example. None of the speeches reflected in the works of ancient historians pretends to quote the exact words of the speaker. On the contrary, such speeches offered the author an opportunity to display his rhetorical skills. For his contemporaries, who viewed historiography as an art, this was accepted practice. However, Thucydides's "declaration of intent" in this connection shows that ancient historians actually did attempt to write as factually as possible:

I have reflected the speeches in the way which appeared to me best suited to the various people on each occasion, while remaining as close as possible to the general gist of what was truly said (1.22).

Thus, from Coenus's speech as reflected by Arrian (5.27.2-9) it appears that after so many years of war the decimated Macedonians (on whose behalf he offers his plea) were feeling physically exhausted but even more spiritually drained, and longing to return home to their own people. Coenus suggests that Alexander return at a later stage to pursue further victories with a fresh army, unsullied by the horrors of the campaign. This is clearly the plea of a loyal soldier who has "reached the end of the road" physically and mentally, and for whom the atrocities of war have become an insuperable obstacle. Hammond (1981:213-5) notes that this was no mutiny in the normal sense of the word: only the Macedonians were involved, and their request was merely that Alexander should cease to forge further east; they did not demand that he return home immediately (they merely suggested this). Coenus also prefaced his speech by respectfully removing his helmet. What is more, although the king took three days to respond, there were no disturbances among the soldiers during this period. When Alexander indicated that he would indeed call a halt to his eastern campaign, but continue with the difficult conquest of Southern India, the Macedonians were willing to accept this compromise.

The Macedonian army was a professional body of career soldiers directly responsible and closely bound to the king (Hammond 1981: 24). It could be argued that such a military corps would not sustain combat stress unless they were affected by unprecedented and exceptionally stressful factors. It should also be borne in mind that, although the Macedonian component of Alexander's army had been decimated by the battle at the Hydaspes (which reduced them to one-sixth of the total), the army as a whole was very strong. At the beginning of his Indian campaign Alexander had as many as 120 000 soldiers at his disposal, the majority being mercenaries, along with some Indian and Iranian conscripts (Hammond 1981:203). One could, however, make a case for the existence of unprecedented stress factors in the summer of 326 BC:

- A short time earlier, at the battle of the Hydaspes, the Macedonians had experienced their first and very traumatic confrontation with an army comprising a strong unit of battle elephants. The casualty figure was high and Alexander's army was demoralised (Curtius 8.14; Arrian 5.15-18; Wood 1997:190).
- According to all indications, the summer campaign from the Hydaspes/Djelum across various large branches of the Indus in its upper reaches was a new and debilitating experience. The extreme weather of the monsoon season was enervating and the solid Indian resistance subjected the army to continuous fierce fighting right to the banks of the Hyphasis/Beas (Wood 1997:190-7; Tarn 1948: 1.97-8).
- Arrian (5.21.1-5) and Curtius (9.2.3) both claim that Alexander and his army only gradually gained knowledge of the large rivers and powerful peoples (with enormous armies, battle chariots and a multiplicity of battle elephants) in the part of India which they were about to invade. Although Tarn (1948:2.280) does not believe there to be any evidence that Alexander and his Macedonians were aware of these threats, both the residents of the area and the Indian soldiers in his army are likely to have had such knowledge and to have passed it on. Even without reliable information, such rumours

would surely have proved most troubling to the exhausted Macedonians. It is clear that knowledge of the Indian continent was lacking at the time, and that Alexander had believed that a relatively short campaign would bring him to the "Eastern Ocean" and the edge of the known world (Tarn 1948:2.286-96).

It has already been mentioned that, in terms of modern medical understanding, the combat stress syndrome affects individual soldiers rather than entire armies. It is perhaps unlikely that key commanders among the Macedonians would have been affected in such a way as to provoke the crisis. According to tradition, the protest was orderly, and Coenus's behaviour shows no signs of psychiatric attrition. The impasse was also speedily resolved once Alexander cancelled the proposed Indian campaign. Combat stress does typically have a good prognosis today, but a cure is never so swiftly effected.

5. CONCLUSION

In terms of the diagnostic DSM-III criteria we cannot blame combat stress, as defined today, for the revolt of Alexander's army in 326 BC. This Macedonian action was not marked by psychological disturbance in specific individuals, but rather by a general grievance against the king's plans for invading India. Unprecedented stress factors did pertain at that stage of the campaign, but it is doubtful whether these were severe enough to elicit the combat stress syndrome in a professional and highly experienced army. In Vietnam, for instance, the symptom complex was typically observed in soldiers who had only recently transferred from civilian life to the severe trauma of the battleground (Tischler 1969:19-25).

At the Hyphasis/Beas River, however, Alexander's Macedonians were moved to protest by severe combat tension — an unprecedented occurrence, but one which was to be repeated two years later at Opis (Tarn 1948:2.286-96). Coenus's plea explicitly describes the mental and physical exhaustion of his comrades as well as their longing to return home to their fatherland and their families after seven years of intense warfare. Although such factors do not qualify as defining the typical combat stress syndrome in terms of the DSM-III criteria, it is interesting to note that, when combat stress and psychiatric attrition

were first scientifically recognised — during the American Civil War — this was ascribed to "nostalgia", a depression caused by a long absence from one's home and loved ones (Bourne 1969:219). We thus propose the hypothesis that the unique reaction of Alexander's experienced, battle-hardened Macedonians on the Indian border in the summer of 326 BC may be viewed as a valid variant of combat stress. According to Arrian (5.27), the intense desire to see their homeland once more was, indeed, one of the main reasons for the Macedonian protest.

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The army of Alexander the Great and combat stress

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