# Lieutenant General SL Menezes Memorial USI Essay Competition 2016

# The Battle of Hydaspes\*

## Commander Sarat Menon®

#### Introduction

Alexander became the ruler of Macedon in 336 BC taking over from his father Philip the Second. Immediately after taking over, he conquered all of Greece. His greed for wealth, power and recognition took him to the Kingdom of Persia where he engaged the mighty Persians in three major battles. The brilliant strategist and ferocious commander that Alexander was, he was knocking on the doors of India by 326 BC.

In his quest to conquer India, Alexander stumbled upon the fiercest of resistance from King Porus of the Kingdom of Pauravas located east of the river Hydaspes (present Jhelum) in 326 BC. The battle pitched two armies with completely different fighting techniques and skills against each other ending in a decisive victory for Alexander. Hydaspes resulted in a paradigm shift in the Indian military theory and practice since the battle taught the Indians that only a standing army composed of professionals supported by the State could stop an invader.<sup>1</sup>

# Aim

The aim of this paper is to describe the Battle of Hydaspes fought in 326 BC between the Macedonian army led by Alexander and the army of Paurvas led by King Porus and to draw some lessons which may be relevant even today.

## **Background**

In 326 BC, the northern part of the Indian Subcontinent consisting of the present day Uttar Pradesh, Madhya Pradesh, Orissa and Bihar was ruled by the Nanda Empire and the fertile land of Punjab was ruled by several kings fighting amongst themselves. In order to enter India, Alexander had to cross two major rivers of Indus

Journal of the United Service Institution of India, Vol. CXLVI, No. 606, October-December 2016.

<sup>\*</sup>This is a slightly edited version of the essay which was the winner of First Prize in Lieutenant General SL Menezes Memorial USI Essay Competition 2016, instituted in 2015 on a subject related to the Armed Forces Historical Research.

**<sup>©</sup>Commander Sarat Menon** is presently at Defence Services Staff College, Wellington.

and Hydaspes. The Kingdom of Eastern Gandhara located between these two major rivers was ruled by King Ambhi. **Figure 1** refers.

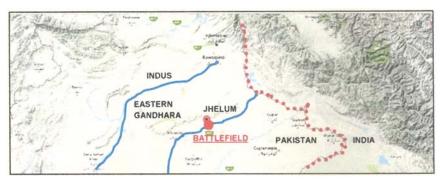


Figure 1: Map depicting Hydaspes (Jhelum)

When Alexander challenged Ambhi, the latter had two options; he could fight and see his city annihilated by the stronger army of Alexander who were well prepared for crossing Indus or not oppose Alexander and save his city from death and destruction. Alexander was known to execute vanquished rulers in a gory manner to send a stern message across to others who were contemplating opposition. King Ambhi thus avoided confrontation and did not offer any kind of resistance to Alexander.

Alexander crossed Indus with ease and commandeered Ambhi's kingdom making it his base of operations for mounting further attacks East of Hydaspes. After two months of marching, Alexander's army reached the western banks of river Hydaspes and was confronted by the massive army of King Porus on the other bank. Porus was a tough warrior and refused to surrender. Instead, he challenged Alexander to fight.

## Analysis of the Order of Battle (ORBAT)

# Army of Alexander.

- (a) **Strength**. Though historical accounts on the strength of Alexander's army vary, it is estimated that he reached the Western bank of Hydaspes with 30,000 infantry and 6,000 cavalry.
- (b) **Cavalry**. The 6000 strong cavalry of Alexander comprised the strong Companion Cavalry and the Scythian Horse

Archers. The characteristics of the cavalry are given below:-

(i) **The Companion Cavalry**. The Companion Cavalry were the elite cavalry of the Macedonian Army. A cavalry man carried a *xyston* (spear/javelin), wore body armour, shoulder guards and helmets, but bore no shield. A curved sword was carried in addition for close combat. **Figure 2** refers. The Companion Cavalry was categorised as heavy cavalry.



Figure 2: Companion Cavalry

- (ii) The Scythian Horse Archers. The Scythian horse archers were inducted into the Macedonian Army post campaign in Bactria and Sogdiana. These archers were no armour and were not suited for frontal attack like the Companion Cavalry. Instead they shot arrows from the horseback while the horse was moving at high speed and were effective in engaging enemy flanks and rear thus harassing the enemy. Figure 3 refers. These horse archers were categorised as light cavalry.
- (c) **Infantry**. The Macedonian Infantry operated in a rectangular military formation called Phalanx. Each infantry man of the Phalanx carried a *sarissa* (double pointed pike of over six metres long) and a curved sword for close combat. The soldiers wore light armour and carried a wooden shield tipped with bronze. The Phalanx maintained a tight formation and was almost invincible in frontal attacks. The Phalanx could easily move forward and rear, however, its flanks were vulnerable. **Figure 4** refers.



Figure 3 : Scythian Horse Archers



Figure 4: Macedonian Phalanx

(d) River Crossing. The Macedonians were experts in river crossing. They crossed the Nile and Euphrates on a bridge of boats, forded Tigris, Oxus and Jaxartes on a pathway made of skin bags filled with straw and Indus by a boat

bridge<sup>2</sup>. The extent of river Hydaspes was not a matter of concern for the Macedonians.

(e) **Leadership.** Alexander was a formidable military leader, strategist and a professional warrior with incomparable experience in fighting battles against the best armies in the world. He had the phenomenal ability to quickly read the battlefield and formulate a strategy to gain advantage. When faced with opponents who used unfamiliar fighting techniques, Alexander would adapt his forces to match his opponent's fighting style which helped him to win battles even in situations where his forces were outnumbered.

# The Army of Porus.

- (a) **Strength**. King Porus had assembled a *Chaturanga Sena* comprising approximately 30,000 infantry, 4,000 cavalry, 300 Chariots and 200 Elephants.<sup>3</sup> These forces occupied the river bank at all the main fording points in the immediate area.
- (b) **Chariots**. The Chariots brought mobility to the battle field. The chariots either charged at the enemy or encircled them. The chariots offered three distinct advantages over regular foot soldiers. Firstly, the warrior on the chariot could carry more weapons than a foot soldier. Secondly, the charioteer being at an elevated position than the foot soldier enjoyed greater physical and psychological advantage. Thirdly, the soldiers on chariots were fatigue free unlike foot soldiers. The Indian Charioteers unlike the Persians fired arrows from the chariots. However, the chariots had a major disadvantage in that, they were ineffective on soft ground as their wheels would get stuck in the ground making them ineffective.
- (c) **Elephants.** The war elephant was a highly developed instrument of combat in the Indian subcontinent. The elephants were trained over a period of about 10 years and were specifically used for fighting battles. They responded to name calls, whistles and fought like any other soldier in the army. These elephants were heavily armoured and were strapped on with a castle like structure on their back which carried the archers and javelin throwers. **Figure 5** refers.



Figure 5: War Elephants

- (d) **Archers**. The archers were equipped with a bow, the length of which was comparable to height of a man. To extend it fully, the archer was required to anchor the bow on the ground and steady it with his foot. The size of the bow gave it more force and distance than the Macedonian's bow. Requirement of a firm ground was mandatory to anchor the bow and it was ineffective if used in soft or soggy ground.
- (e) **Leadership**. The Pauravas were led by King Porus who was well built and a great warrior. He refused to surrender to Alexander without offering a fight knowing fully well that he had defeated the mighty army of Persians. However, the army of King Porus was not so well equipped and also not so battle hardened as that of Alexander.

#### The Battle

#### Prelude to Battle

Post building up his army along the western bank of river Hydaspes, Alexander first attempted conquest by diplomacy. He sent his messenger to Porus, exhorting him to surrender, pay tribute and give up his throne peacefully. However, Porus refused to surrender and challenged Alexander to meet him in the battlefield.

Alexander was faced with the daunting challenge of crossing

Hydaspes to confront the army of Porus whilst maintaining the element of surprise. The river Hydaspes had swollen up and was in full flow due to the rains. Crossing the river in front of the army of Porus could have been suicidal since the archers of Porus would have engaged Alexander's army even before the battle was joined. Alexander therefore needed to devise a tactical plan to cross the river without Porus coming to know of it.

As part of deception, Alexander brought in a large amount of supplies and gave Porus the impression that he would wait until winter when the river would recede. Secondly, he stationed small units all along the river and kept moving soldiers back and forth to confuse Porus as to the actual crossing site. His most effective ploy was to make night marches with his cavalry and sound the battle cry, causing Porus to react and move his army opposite the false cry. Alexander thus, successfully conditioned the army of Porus to noises along the river bank. He achieved a tactical advantage of moving his army on his side of the river bank without provoking a major tactical response from the enemy. In effect, he lowered the anxiety and attention level of the army of Porus on the other bank. The army of Porus over a period of time got lax and lowered their surveillance of Alexander's forces.

Finally, after a period of about two months, Alexander led a contingent of army away from the camp under the cover of darkness. The army of Porus hardly noticed this because of the manner in which they were conditioned by Alexander's deceptive movements. Alexander moved an army of about 10,000 infantry soldiers, 6,000 cavalry and 1,000 horse archers about 27 km upstream along the Hydaspes river in midst of heavy rains. He chose a point along the river where there was a cape, behind which was located a valley in which Alexander was able to hide his troops from the enemy.<sup>5</sup> In addition, opposite this cape was a large wooded island on the river. This island further concealed the movement of his forces. Alexander's army crossed the river at night amidst heavy rains and thunderstorms and completed the river crossing overnight.

As dawn broke, the scouts of Porus brought news to the king that the army of Alexander had crossed the river. To deceive Porus, Alexander had left in the camp (which was pitched just opposite Paurava's camp on the other side of the river), servants and support staff who were dressed like Macedonian soldiers.<sup>6</sup> He also deliberately left all the tents of his camp spread out. As a result, Porus was not sure whether the force that had crossed the river was merely a reconnaissance team or the Macedonian main attack force.

Porus fell for Alexander's trap and presumed that the main Macedonian Army was waiting in the camp to cross at an opportune moment and a reconnaissance team had crossed the river. To confirm this, he sent a small contingent of army comprising 2,000 cavalry and 200 chariots under the command of his own son, also named Porus. Post crossing the river, Alexander's army marched downstream towards the camp of Porus and met the contingent led by the son of Porus midway.

#### The Initial Contact

Please refer to Figure 6. After crossing the river, Alexander formed up his infantry into a phalanx and ordered them to follow in formation. He then led his heavy Companion Cavalry followed by the horsemen. As soon as Alexander saw the heavy cavalry and chariots led by the son of Porus, he reconfigured his troops. Alexander withdrew his heavy cavalry since he realised that pitting his heavy cavalry against the heavy cavalry and chariots of Porus may not give him desired results. He, therefore, sent his Scythian Horse Archers (light cavalry) forward to engage the heavy cavalry and chariots of Porus. The Horse Archers showered the incoming force of young Porus with a volley of arrows. Alexander's Horse Archers stopped the army of young Porus restricting their mobility. Alexander, thereafter, committed his heavy Companion Cavalry against the opposing force. The chariots showered Alexander's cavalry with arrows, however due their restricted mobility in the soft and soggy ground (due to the rains the previous night) the chariots became sitting ducks for Alexander's cavalry. The army of young Porus found themselves outnumbered and outmanoeuvred. In the encounter, the Macedonian heavy cavalry killed the son of Porus along with 400 Indian cavalry. All the chariots were lost in the battle and the remaining 1,600 cavalry returned back to Porus informing him about the incoming raid.

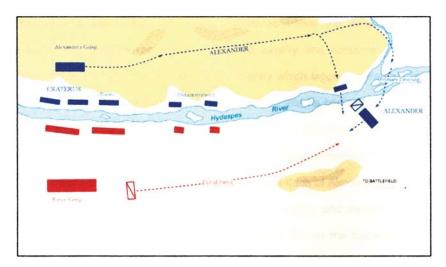


Figure 6 : Alexander crossing river

#### The Main Battle

After learning about the death of his son and defeat of his contingent, Porus realised that the Macedonian contingent across the river was a deceptive arrangement and Alexander was indeed leading the main force and was approaching downstream. It was still early in the morning and the rain had stopped. Porus took charge of his force and advanced upstream leaving behind a contingent of his force to guard his camp fearing a Macedonian landing at the rear. Porus stopped at a site where he found a relatively firm ground and formed up his army. He required the firm ground to ensure effectiveness of his chariots and archers against Alexander's forces.

On the night when Alexander crossed Hydaspes, he positioned a force midway between the main camp and the crossing point. This force crossed the river and joined Alexander's forces during his south bound approach. The reinforcements were fresh and were well rested unlike the force which was accompanying him. Alexander along with his cavalry and horsemen reached the position taken up by Porus well before his infantry which lagged hours behind. On seeing the army of Porus ahead, Alexander realised that he had to delay the battle allowing time for his infantry to join up. He, therefore, threw his horsemen archers ahead making them move along his front shooting arrows to screen his force.

This was the most apt time for Porus to attack taking advantage of Alexander's dispersed force. However, Porus refrained from mounting an attack and instead waited for Alexander to take the initiative. Alexander's infantry joined the battlefront in due course of time and he got sufficient time to form up his army for the battle. For disposition of the opposing forces please see **Figure 7**.

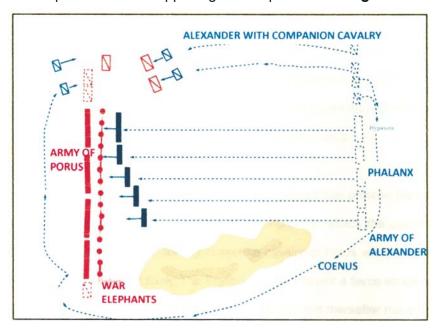


Figure 7

# Line-Up for the Battle.

**Army of Porus**. The army of Porus was deployed with 200 elephants lined up in the front, 50 feet apart followed by 20,000 infantry men flanked by 1,000 cavalry on either side screened by 150 chariots.

**Army of Alexander**. Alexander deployed his 6,000 heavy infantry arranged in a phalanx in the centre. The phalanx was backed up with 2,000 foot archers and 1,000 javelin throwers. About 1,000 Scythian Horse Archers (light cavalry) were stationed on the left flank of the phalanx and the right flank of the phalanx was guarded by 4,000 Companion Cavalry (heavy cavalry).<sup>7</sup>

# Progress of the battle

Alexander's infantry was outnumbered 3:1; however his cavalry was numerically superior to that of Porus. He, therefore, wanted to turn this into a cavalry centric battle. However, the presence of war elephants in the army of Porus added to his problems. The Macedonians had not confronted such large strength of war elephants in a battle. Although the individual fighters were not scared of the elephants, the same was not the case with the horses of the cavalry. The horses were not accustomed to the sound and smell of these elephants and panicked standing ahead of the army of Porus. Alexander had to revise his tactics to ensure effectiveness of his strong cavalry against the army of Porus.

**Phase I.** Alexander commenced the offensive and moved 4,000 of his cavalry to the left flank of Porus comprising 1,000 cavalry. Considering the overwhelming strength of Alexander's cavalry approaching his outnumbered cavalry on the left flank, Porus pulled out his cavalry from right flank and moved it behind his lines to reinforce his left flank. This mistake proved fatal for Porus.

**Phase II.** Taking advantage of the situation, Alexander ordered his cavalry commander Coenus to take the Scythian Horse Archers to attack the undefended right flank of Porus and to additionally chase the cavalry of Porus which was in the process of shifting to the left flank. The Scythian Archers mounted a fierce attack on the undefended right flank of Porus inflicting heavy casualties and thereafter moved behind Porus's lines towards the left flank.

**Phase III.** Porus launched his chariots against Alexander's 4,000 strong cavalry. However, the arrows fired by the Chariots did not prove to be very effective due to armour plates covering both troopers and the horses. Further, the horseback was a more suited mobile platform than the chariots since the terrain was not appropriate for the chariots to manoeuvre with their wheels getting frequently stuck in the muddy banks of Hydaspes. The archers in the chariots became sitting ducks for the cavalry of Alexander with their inability to manoeuvre effectively on the battlefield.

**Phase IV**. After dealing with the chariots, Alexander led a part of his Companion Cavalry westwards to give an impression to Porus that he was attempting to envelop. Porus responded by moving his left flank comprising 2,000 cavalry further outwards to prevent

envelopment. As Porus's cavalry opened out further to left, Alexander's cavalry changed direction and instead of sweeping Porus's left flank, he suddenly, turned inwards and cut off the cavalry of Porus from his main army. As this happened, Coenus also arrived at the scene from behind Porus's lines and slammed into the left flank of the Porus's army from the rear. The result was that the cavalry of Porus was suddenly fighting enemy cavalry in the front and rear. Faced with encirclement, the cavalry of Porus attempted to retreat towards their own lines. Additionally, Porus ordered his army to shift to left so that the main army of Porus could come to the rescue of the encircled cavalry.

**Phase V.** Alexander ordered his phalanx consisting of infantrymen against the main Indian line. The crucial point in the battle had been reached where much depended on how Alexander's army handled the Indian elephants. The Macedonian phalanx, which seemed to present a wall bristling with over six metres long spear. marched in unison towards the charging infantry of Porus. The Indian archers were not very effective against the incoming Macedonian attack due to the soft nature of the ground which prevented them from firmly anchoring their long bows. The infantry of Porus had a phenomenal numerical superiority over the Macedonian Phalanx. But the weakest link of the 'Chaturanga' Sena' was the poorly trained infantry. In contrast, the Macedonians drilled their infantry with the aid of drums so that the soldiers marched in unison during combat. Drill and discipline enabled the Macedonian infantry to operate as a concentrated body of massed pikemen capable of pushing and thrusting without stumbling over each other in the chaos of the battlefield. As the phalanx collided with the chaotic infantry of Porus, discipline proved to be the deciding factor towards the outcome.

**Phase VI.** The war elephants of Porus charged and crashed against sections of the phalanx. However, Alexander's infantry displayed great discipline in standing their ground against the elephants. The phalanx would open its ranks and allow a charging elephant to pass through while attacking the elephant's flanks, eyes and also the *Mahout*. A large number of Macedonian soldiers from the phalanx were also lifted from the ground by the elephants before being trampled to death under their feet. The Macedonian cavalry after pursuing the retreating cavalry of Porus came back to the battlefield to finish the enemy. While the phalanx attacked from front, the

cavalry attacked from rear. The coordinated efforts by the phalanx and the cavalry resulted in the elephants being encircled and pushed to a smaller pocket. Inside this pocket, the elephants lacked room to manoeuvre. During this, the Scythian Horsemen targeted the *Mahouts* from far leaving the elephants without anyone to guide.

**Phase VII.** Within seven hours of commencement of the battle, the army of Porus was almost annihilated. However, Porus was still fighting and in turn, was severely wounded. The Macedonian cavalry surrounded the King's elephant, killed his mahout and captured Porus. Seeing their king captured, small pockets of soldiers who were fighting, turned back and fled the battlefield. As dusk fell the battle ended.

#### Result

Nearly 20,000 infantry and cavalry of Porus lay dead on the battlefield. All the chariots were destroyed and elephants were either killed or captured. Porus was brought in front of Alexander. When the two kings met, Alexander asked Porus what to do with him. Porus is said to have replied, "treat me as a king would treat another king". Alexander was so impressed by the dignity and composure of Porus that he let Porus keep his territory and his subjects.

#### **Analysis**

Alexander's Leadership. The key to Alexander's success had been his own tactical ingenuity in the command of a professional, well trained combined arms army that coordinated its operations effectively in the face of imminent danger. Alexander's performance at Hydaspes is particularly noteworthy for the fact that he neutralised the enemy capability even before he delivered the main blow. Alexander could always manage to make his opponents react in the way he wanted which gave him the upper hand in a battle. He could identify the weak spots of the enemy in no time and then would use his own strength against enemy weakness. He never panicked during the battle in the face of grimmest of the situations and played war like an orchestra with movements of different arms coordinated to achieve victory.

**Deception.** In the battle of Hydaspes, Alexander used deception and psychological operations with tremendous success. During the initial run-up to the battle, Alexander gave sleepless nights to

Porus by moving his army along the rivers keeping Porus guessing as to the location along the river which Alexander would use for crossing. During the battle, he executed a brilliant turning movement and with the tactics of attacking enemy's flanks forced the enemy to shift his entire defensive posture and confused the enemy.

Use of a Lean and Trained Force. Alexander had an army which was much smaller in comparison to that of Porus in strength. He, however, ensured that all arms of his force were well trained unlike that of Porus. The Macedonian phalanx was much stronger and effective than the foot soldiers of Porus who were poorly trained and were not as effective in close combat. The Battle of Hydaspes was taken as a lesson by Chanakya who understood that a trained force was required to win a battle and later ensured that Mauryans were well trained before going into any battle.

Overcoming Own Weakness. Alexander knew that his army had not faced such a massive number of war elephants in any battle prior to the battle of Hydaspes. Though, Persians also used elephants against the army of Alexander in the Battle of Gaugamela in 331 BC, the number of elephants fielded was far less in comparison to that by Porus. Additionally, Alexander's cavalry horses were not confident in front of the war elephants and therefore, he used his cavalry to envelop the army of Porus and thus avoided a frontal assault by elephants which formed the first line of the *Chaturanga Sena*. Though, during the course of the battle, elephants were able to achieve some success, the battle was taken away from Porus by the brilliant turning movement displayed by Alexander's cavalry.

Applying Lessons Learned. Alexander was a keen observer and used to incorporate the lessons learned from the previous battles into the new ones. He had seen the efficacy of using Scythian Horse Archers as light cavalry during his battles in Bactria and Sogdiana of Central Asia. These horse warriors could harass the enemy with their accurate launch of arrows and their swift movement on the battlefield made it very difficult for an opposing force to target them. These horse archers were very effective in harassing the army of Porus and pinned them down effectively.

Utilising Correct Military Assets. Alexander assessed his opponent on the battlefield thoroughly and fielded the most suited

arm to fight the attacking force. Whilst moving south along Hydaspes to meet Porus, when Alexander was confronted by a contingent led by the son of Porus, Alexander's army was formed up with his Companion Heavy Cavalry in the lead followed by the Scythian Horse Archers. However, seeing the heavy cavalry and chariots of Porus, Alexander quickly withdrew his heavy cavalry and used his Scythian Horse Archers to attack the heavy cavalry and chariots, pinning them down. Alexander thereafter, used his Companion Cavalry to move in for the assault. The unique ability of identifying and deploying the most suited asset for an engagement contributed no less towards his victory at Hydaspes.

**Evolving Fighting Techniques**. The Macedonian Army was a battle hardened force and their experience in fighting varied battles won the war for Alexander. The phalanx was a far superior formation compared to the scattered untrained infantry used by Porus. The Macedonian Army evolved over a period of time and with each and every battle, new techniques and necessary modifications to weapons were undertaken resulting in improvement in fighting techniques and weaponry. However, on the other hand, fighting techniques, tactics and weapons of the *Chaturanga Sena* had not comparatively evolved resulting in Porus paying a heavy price.

#### Conclusion

The battle of Hydaspes may be considered as one of the earliest documented history of war between a European army and an army from the Indian subcontinent. The striking blow in the battle by Alexander was not by attrition warfare; instead it was achieved by combined use of manoeuvre and flexibility in switching forces in the face of a developing battle situation. He seized initiative right at the outset and retained it throughout the battle. Hydaspes resulted in a paradigm shift in Indian military theory and practice. Chanakya took lessons from Battle of Hydaspes and emphasised the importance of training for war and incorporated these whilst forming up the mightly army of Mauryan empire which ruled the subcontinent for more than a century after the battle of Hydaspes.

### **Endnotes**

<sup>&</sup>lt;sup>1</sup> Kaushik Roy, *India's Historic Battles: From Alexander the great to Kargil* (2004). p 30.

- <sup>2</sup> Gohar Ayub Khan (Former speaker and foreign minister of Pakistan). Alexander's the great Indian Campaign Battle of the Hydaspes against Raja Porus. p 2
- <sup>3</sup> David J Lonsdale. *Alexander the great, lessons in strategy* (2007 Routledge) p 87.
- <sup>4</sup> Daniel Coetzee and Lee W. Eysturlid. *Philosophers of War: The Evolution of History's Greatest Military Thinkers* (Praeger 2013). p 363.
- <sup>5</sup> Ibid. P 88
- <sup>6</sup> Roy. India's Historic Battles. p 17.
- <sup>7</sup> Ibid. P 18.
- <sup>8</sup> Guy Rogers. *Alexander: The Ambiguity of Greatness.* (Random house 2004). p 200
- <sup>9</sup> Lonsdale. Alexander the great. p 90.