*In this selection from* The Battle of Salamis: The Naval Encounter that Saved Greece – and Western Civilization *(New York: Simon & Schuster, 2004), Barry Strauss tells the dramatic story of the clash of triremes with which the battle began. The place was the Salamis Straits, near the city of Athens; the time was morning, on or about September 25, 480 B.C.*

The Admiral Ariabignes, commander of the Ionian and Carian squadrons in the Persian fleet, son of Darius and half-brother of His Majesty the Great King Xerxes, sits in the stern of his flagship. The ship, which is unusually large, has a towering stern and high bulwarks. We may imagine Ariabignes in the stern, shortly after dawn on September 25, pondering his uncertainty. Perhaps he absent-mindedly fingers the twists of the gold torque that hangs heavily around his neck. The noble blood of Gobryas, a Persian of great courage, runs in Ariabignes' veins, and it is too rich for seawater. But battle is battle, wherever it takes place, and the admiral is a seasoned warrior. He knows that confusion gets in the way of victory, and he has reason to be confused.

He had expected to catch the cowardly Greeks in the act of sneaking out of their harbors on Salamis during the night, which is why the entire Persian fleet has been deployed in darkness in the Straits. Yet not a Greek ship has budged all night except for a trireme that rowed *into* rather than out of the Straits; unbeknown to Ariabignes, it was Aristides's ship. If indeed the 40 Corinthian ships had hoisted sail at dawn and fled, then Ariabignes might have been reassured: how like the Greeks to be so paralyzed by talk

that they could not even turn tail in a timely manner. But still, he might wonder why the other Greek triremes had not followed the first to flee.

It is unlikely that Ariabignes suspects that the Persian fleet had blundered into a trap. Royal admirals do not like to admit mistakes, especially not mistakes that might discredit their brother on the throne. Xerxes himself had ordered the navy into the Straits and, Xerxes himself was there at Salamis. Aeschylus writes of the king:

He had a seat in full view of the army,

A high hill beside the broad sea.

Xerxes observed the battle from the slopes of Mount Aegaleos on the mainland. The Great King sat on a golden throne, looking down like a god from Olympus on the men who were about to die for the sake of his ambition.

Ariabignes might have comforted himself with the thought that his men would fight well regardless of what awaited them. If the sight of Xerxes on high were not enough to ensure their loyalty, then the presence of Iranian and Sacae marines on every ship should make up for it. Since crossing the Hellespont in June, only six triremes, all Greek, had defected from the Persian navy to the enemy side. So Ariabignes might have reasoned, and yet, it is doubtful that he had an inkling of what lay ahead.

Meanwhile, about a mile away on the other side of the Straits, the Greeks made full use of the advantage that they had over the Persians: the knowledge of the truth. They prepared to shock the enemy with an attack.

Surprise is a weapon. Often underestimated, it is one of the most effective and cheapest of all force multipliers as well as one of the most versatile. It is possible to surprise an enemy not only in the time or place of battle but in the manner of fighting.

Ariabignes and his other commanders knew that the entire Greek navy faced them. What they did not know, and what they could perhaps hardly fathom, was that the Greeks were ready to do battle. And yet, around seven a.m. if not earlier, events would force Ariabignes into admitting the truth. The Persians had been swindled.

Themistocles knew, as a modern military maxim puts it, that it is devastating to "come down on the enemy with thunder before he sees the lightning." The ancients put it more simply: panic, they believed, is divine. And so, the Greeks on Salamis unleashed the storm of war on an enemy that had expected a drizzle.

Shortly before seven a.m., as soon as Themistocles and the other Greek generals had finished their send-offs and the marines had boarded their triremes, an order was passed from ship to ship. Up the row of trirmes moored in the harbors and opposite the beaches of Ambelaki and Paloukia Bays, the command went out, perhaps by sounding the trumpet, perhaps by raising a purple flag, perhaps by holding aloft a gold or silver shield – or perhaps by doing all three:  the Greeks would launch their ships.

On the far side of the Straits, the first sign of trouble for the Persians was an unexpected sound from the Greek harbors. "A song-like shout sounded triumphantly from the Greeks," reports Aeschylus, "and at the same time, the island's rocks returned the high-pitched echo." This was the paean.

It was a peculiarly Greek custom, Dorian in origin, but eventually adopted by the other Greeks. Aeschylus describes the paean as a "holy cry uttered in a loud voice,…a shout offered in sacrifice, emboldening to friends, and dissolving fear of the foe." When an army marched into battle or a navy left the harbor to wage war at sea, the men sang the paean. It was a combination of prayer, cheer, and rebel yell.

The Persians had heard the paean before, most recently at Artemisium and Thermopylae. But in the last weeks, as they beat down nearly defenseless foes in Euboea, Phocis, and Attica, they had become used to its absence. It was the last thing that they had expected this morning. Aeschylus is blunt about its alleged effect on the Persian audience aboard ship:

> All the barbarians felt fear because they had been deprived of
> What they expected. The Greeks were singing the stately paean at that time
> Not for flight but because they were hastening
> Into battle and were stout of heart.

Next the alarmed Persians heard the blaring of the Greek trumpets, an unambiguous call to arms. The ancient trumpet or *salpinx* was a long, straight, narrow tube flaring into a small bell at its far end. The salpinx ranged from two-and-a-half to about five feet long: the salpinx was hardly handy, but it was certainly loud. Homer compares the sound of the salpinx to the terrible cry of Achilles. An ancient music critic, Aristides Quintilianus, calls the salpinx “a warlike and terrifying instrument,” “masculine” and “vehement.”

Next came the sound of enemy oars being rowed on command, crisply and in unison, in what Aeschylus calls “the regular stroke of the rushing oars together.” Ominously the Greek word for stroke, *embol_*, is the same word used for “charge” or “ramming.” There was no mistaking the meaning of that sound.

By now, the Greeks had left the shadow of the shore and they were clearly visible to the Persians. Only a few minutes had passed between the sound of the paean and the

sight of the enemy. Unlike the Greeks, who had put together a battle plan on shore and had enjoyed at least a little time to think things through, the Persians had to scramble.

From his flagship, Tetramnestus, King of Sidon no doubt assessed the situation. Two other Phoenician monarchs were also present nearby: Matten, King of Tyre and Merbalus, King of Aradus. Since the three of them represented the greatest naval tradition in the world, they are likely to have responded calmly. But a surge of emotions, from the lowest seaman to the loftiest courtier, stood in the way of an unperturbed reaction to the Greek challenge. Besides, the Persian commanders Megabazus and Prexaspes had the final say, and they probably did not enjoy the same ease at sea as a Phoenician.

We can only imagine the range of feelings on the Persian ships. For the captains, it may have been fear; for the rowers, fury; for the pilots, frustration; for the squadron commanders, finger-wagging; for the skeptics, self-satisfaction; for the admirals, fantasies of revenge. The Phoenicians blamed the Ionians; the Ionians blamed the Egyptians; the Egyptians blamed the Cypriots; and everyone blamed the Persians. And the Persians nervously fingered their necks, thinking of Xerxes' anger at those who failed him.

Whatever their feelings, the Persians were professional enough to hustle into order. To their credit, they rowed out from the coast of Attica towards the far side of the Straits in order to meet the Greek fleet. "When they [the Greeks] launched their ships," writes Herodotus, "the barbarians were upon them without delay."

Meanwhile on Salamis the Greek fleet got underway. As was customary, the right wing, here headed by the Spartans under Eurybiades, led the advance. Aeschylus writes:

First the right wing in a good arrangement

Leads in order, and second the whole fleet

Advances.

But where did they advance to? Herodotus offers clues, and the rest may be surmised from the ancient way of war. Triremes were, as the poet says, “bronze-rammed floating chariots.” The key to trireme battle was maximizing the chance to ram the enemy while minimizing his opportunity to ram back. Under perfect conditions, an attacker would approach a victim from the victim’s stern, to protect himself from the ram at his victim’s bow. Bow-to-bow ramming only became feasible after first strengthening the bow timbers of one’s ship, a tactic invented by Corinthians in 413 B.C. Since an enemy would not voluntarily present the sides of his triremes, ramming usually meant having to maneuver around or through an enemy fleet. The attacker would then ram his victim in the victim’s quarter, that is, the stern portion of the ship. In that position, the attacker’s own oars would be clear of the rammed ship, and he could back away quickly and easily. Furthermore, by attacking at a narrow angle, the attacker minimized the danger of wrenching his own ram off sideways.

But conditions are rarely perfect, and the attacker sometimes had to ram the enemy amidships. And sometimes he might risk coming at the enemy’s bow and then quickly turning to ram. In that case, the attacking pilot might try to use his ram to hit the oars of the other trireme and break them against the stem of his own ship, after having his own crew pull in their oars. This was a difficult maneuver but probably deadly to the enemy rowers whom it knocked about.

The basic tactic at the start of battle was to arrange one’s ships in line abreast while, at the same time, keeping gaps from opening between ships and also protecting one’s flanks. The smaller and slower a fleet, the more important it was to cover the flanks, and the Greeks were outnumbered by an enemy with lighter, faster, and more agile ships.

When they came out of their narrow-mouthed harbors, the Greeks rowed first in single file and then deployed in line abreast. Leading the ships out from Ambelaki Bay, the Spartans anchored the right end of the Greek line near the tip of the Cynosura Peninsula. The Athenians, who were probably in Paloukia Bay, anchored the left end of the Greek line either at Cape Trophy (the modern name), which is the tip of the Kamatero Peninsula, or at southeastern end of the islet of St. George. In either case, the Greek line enjoyed the advantages of land bastions at both ends and a friendly shore in its rear.

The channel to the north and east of St. George was all but closed off. Today, a reef sits to the east of St. George, between that islet and the mainland of Attica. But in antiquity the sea level in the Straits was at least five feet lower than it is today. The reef, therefore, was itself an islet in 480 B.C. The islet-reef and St. George are probably the little archipelago that the ancients called the Pharmacussae Islands. The distance between the two islets was perhaps as little as 600 yards, too narrow for either fleet to risk entrapment.

Extending between Cynosura and either Cape Trophy or St. George, the Greek line was between about two and two-and-a-half miles long. It was too short for the Greeks to deploy all their triremes in a single line, but it was perfect for two lines, the formation which the Greeks might also have used at Artemisium. The triremes in the rear

line could stand ready to counter-attack any Persian ships that tried to pass through the front line and ram Greek triremes there.

The Athenians held the left end of the Greek line; the Spartans held the right. The Aeginetans probably stood next to the Athenians. The other Greeks were deployed in between, although we do not know where. If the Corinthians had indeed sailed northwards to incite false confidence among the Persians, they surely quickly returned to the Greek line, in a position near the left end.

The Persians deployed their ships in battle order in line abreast along the Attic coast, where their infantrymen held the shore. Since the Greeks' flanks were protected by the terrain, the Persians could not outflank them. So they probably arranged their ships opposite the Greeks in two or three lines, depending on how much of the Persian fleet had entered the Straits by dawn. The Phoenicians held the right end of the Persian line, opposite the Athenians and Aeginetans. The Ionians (and perhaps other Greeks) held the left end. We do not know where the other contingents in the Persian fleet were stationed, nor is it clear which contingents were stationed outside the Straits.

The Greeks had launched their ships and the Persians had rowed out to meet them. The fleets came close enough to each other for them each to hear the trill of the other's pipers, keeping time for the oarsmen. The *aulos* or Greek pipe (sometimes mistakenly called a flute) was a cylinder with finger-holes, sounded with a reed. Normally pipes were played in pairs, one pipe fingered by each hand. A cloth band around the player's head and face was used to support the cheeks. The sound of the pipe was so stirring that Greek conservatives thundered against it because it might lead youths astray. For the same reason, the pipe proved invaluable in focusing the minds of the

oarsmen on the trireme. It served as both a metronome and as a distraction from the awfulness of what lay ahead.

Perhaps it was now that the Persians heard what Aeschylus calls "a mighty battle cry" from the Greek ships:

Oh sons of the Greeks, advance:
Liberate the fatherland, liberate
Your children, your women, and the abodes
Of your ancestral gods and the graves
Of your ancestors. Now is the battle for them all!

And the Persians answered in turn with what – to the Greeks – sounded like "the noise of the Persian tongue."

It was a historic moment. For centuries, Phoenicia had been the Eastern Mediterranean's greatest sea power. Now, a Greek upstart, a city with a new-fangled system of government – democracy – and a brand new fleet, challenged that supremacy.

The two fleets confronted each other, yet the battle did not begin at once. The Greeks flinched first. Or so it seems: at any rate, their ships begin to back water, that is, they continued to face the enemy but rowed backwards, stern first, towards the shore of Salamis. If this was panic, it was not panic on the part of the rowers. Below deck, most of the rowers could see nothing. The decision to back water came from the generals and was transmitted to captains and helmsmen by a pre-arranged signal.

Seen from above, which was Xerxes' perspective, the opening stage of the battle might have looked like a stand-off between two schools of fish. The swordfish-like Phoenician triremes, with their long narrow rams, pursued the hammerhead-shark-like

Greek vessels, with their short and stubby rams. The sharks seemed to have lost their nerve.

But the Greeks probably knew just what they were doing. We may imagine that gaps had opened up in the long Greek line; by backing water, the ships were able to close ranks. They also drew the Persians close enough to the Salamis shore to put them in range of Athenian archers on shore: protected by their shields from Persian archers, the Athenians could attack the enemy on deck or wait for Persian survivors of wrecked ships to take to the water. Still another reason for the Greek decision to back water might have been the desire to wait as long as possible for the *aura* to blow.

But the plan did not work out that way. As often in the history of battle, the first blood was shed not on a general's order but at the initiative of a subordinate who had grown tired of waiting.

On the western end of the Greek line, an Athenian captain, one Aminias of the deme of Pallene, put his ship out to sea again and rammed a Phoenician trireme. He could have seen that some Greek ships had backed too far, since they actually ran aground. He might have taken this as a sign of the jitters and he might have worried that the Persians would seize the moment. And so Aminias took matters into his own hands.

Who was this man that lit the spark of battle? Assuming that Aminias fit the usual Athenian mold of a captain, he was a man of substance but not of advanced age. He owned land and a house in Attica, had legitimate children, and was less than 50 years old. Since Athenian men tended to marry around the age of 30, Aminias was likely in his thirties or forties. He was also wealthy, since captains had to pay their own crews. Since Pallene, his home, was a farming district in central Attica, Aminias probably owed his

wealth to olives, grapes, figs, and grain. We may imagine him as fit and tough, as farmers often are, and we know that he had guts. A captain as courageous as Aminias surely had men loyal enough to follow him anywhere. But it no doubt helped that most of his rowers probably came from Pallene and many would have known each other their entire lives. Trust came easily to such a crew.

It had to, because ramming was a group effort. When Aminias decided to break out of the line and ram an enemy ship, he had to pass the order on to his helmsman, and he in turn to the rowing master, who then had to inform the crew. The marines and archers on deck had to brace themselves for impact by sitting firmly, but it was on the oarsmen's shoulders that the main burden fell. They would have to power the boat up rapidly from a standing start – or even worse, from backing water – to ramming speed.

It would not take long from the moment that Aminias gave the order to the point of impact. Athens' heavy ships could not achieve the speed of a fast trireme which, tests suggest, could accelerate from a standing start to 9 or 10 knots within about sixty seconds. But Aminias's trireme did not have to go nearly that fast. The Phoenician ships were either standing still or moving towards the Athenian ships, so the Athenian attacker did not have to outrun the enemy. Aminias merely had to go fast enough to penetrate the planks of a Phoenician ship. Depending on whether Aminias's trireme struck its victim amidships or in the quarter, a speed of 2 to 4 knots would have been sufficient.

Once the captain ordered the attack and the pilot passed the word on, the rowing master would rapidly move the crew up to a high stroke rate, perhaps approaching 50 strokes per minute. At that pace, every rower had to devote all his attention to the task at hand. For no more than a minute it might seem to him as if nothing existed except a

narrow, stinking tunnel of 170 men bent over in unison, as if rowing a single oar. Still, the mind might wander to home and happy times, to games and feasts, to anything except the split-second shock of collision. Muscles strained and lungs sucked in air; it seemed as if the agony would never end. And then suddenly, just before the moment of impact, the rowing master, primed by the pilot, ordered the men to switch to backing water, in order to keep the ram from penetrating the enemy ship too far. Then the crash came and, if all went well, the vulnerable attacker would already have begun backing off. Already working at extreme intensity, the men would have to work harder still, rowing the ship in the opposite direction from before.

Aminias's crew had slammed into a Phoenician trireme and given their captain the first kill of the day. It was a great prize but it came at a price, because the ram had penetrated too far into the Phoenician ship and the men could not extract it. The attacker's goal was always to withdraw as quickly as possible after ramming. Otherwise, if his ram remained stuck in the enemy's hull, he ran the risk of counter-attack by the enemy's marines and archers, either from their own deck or after boarding his; and the Persian deck troops outnumbered the Greeks.

Aminias's men knew all this. Below deck, they no doubt backed furiously but still they could not move their ship. Above, they could hear the footsteps of their marines and archers as they took their positions to protect the trireme. They could also hear the shouts of the Persian marines eager to board Aminias's boat. It was at this dangerous moment that other Greek ships came to Aminias's defense. Up and down the line, the battle had begun.

Meanwhile, the Phoenicians coped with the paradoxes of ramming. The trireme's ram was as lethal as it is dramatic, but at first it proved deadlier to the victim's hull than to his men. The opening made by a ram was perhaps only about one foot square in size. Water would pour into the rammed ship through the hole, and would swamp the ship but not make it sink; there was time for the crew to get out. At the point of a ram's impact a few men might die or be injured. Elsewhere on the vessel, other men might be injured by the force of the impact. Still, most men would probably make it through the ramming unharmed. But danger lay ahead.

Imagine a shower of arrows and javelins between the ships, parried when possible by shields, but sometimes finding their mark. Imagine men collapsing on deck or being speared and then thrown into the water. Others would jump into the water voluntarily to escape a foundering ship, first removing helmets and armor to keep from sinking. Meanwhile, aboard the ships, some of the marines may have made it onto the enemy deck and settled matters in hand-to-hand combat. Sword clashed with dagger and with battle-axe, spear collided with spear.

Hand-to-hand combat; close-quarter fighting; coming to grips; coming to blows: the Greeks delicately called all this the "law of hands." Greek crewmen, as Herodotus notes, had a good chance of surviving the battle if they made it through the law of hands, since they could swim to safety. Not so the Persian and Mede marines: few of them knew how to swim, and so many of them drowned.

In the end, the Greeks managed to overpower the enemy and free Aminias, his crew, and their vessel. The triumphant victors carried off the stern ornament of the Phoenician ship, probably a figurehead in the shape of a horse's head. They might have

lost a man or two in the fight, but there would be no time to mourn them, let alone to wash the blood off the deck.

And so the battle of Salamis began.