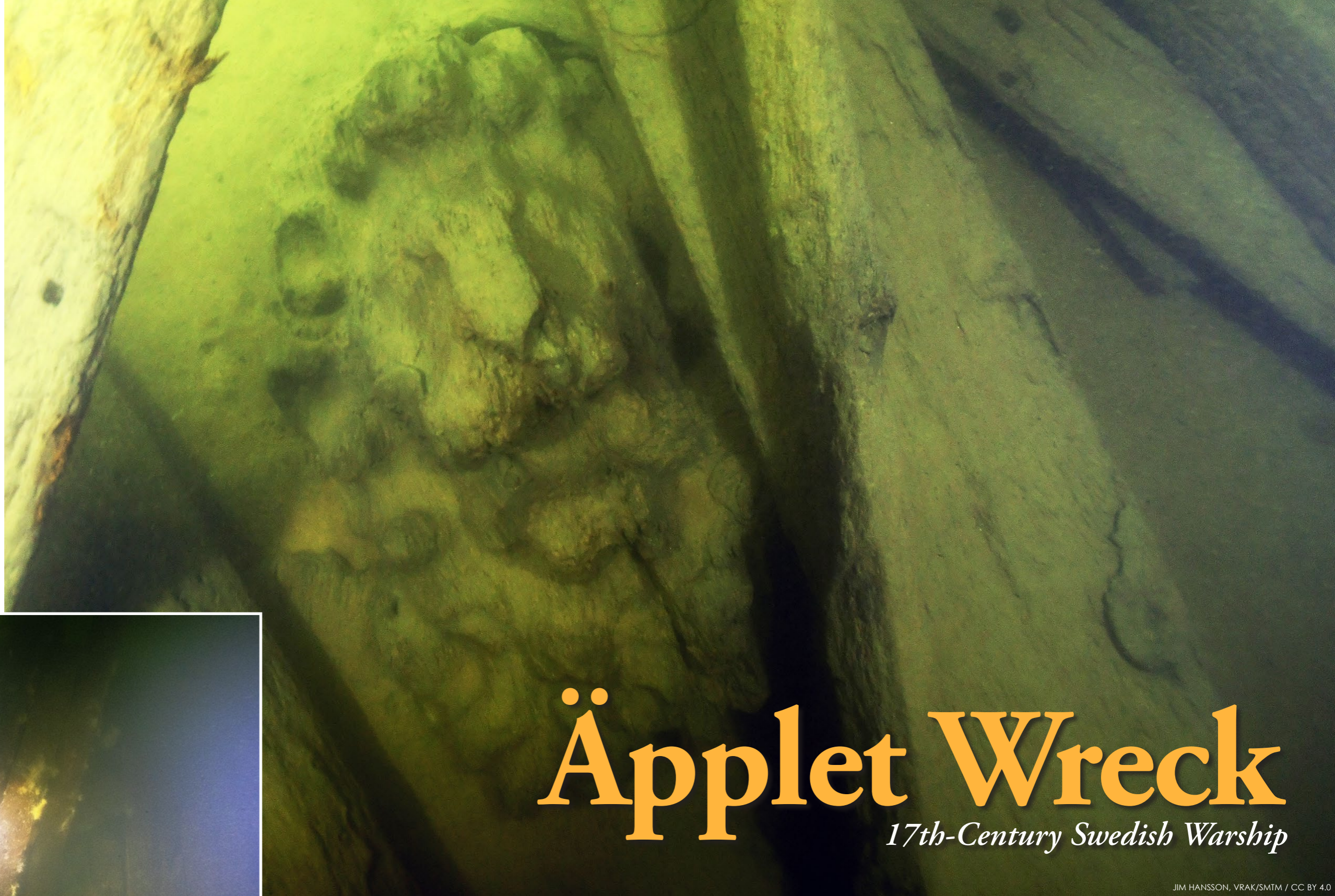


Carving on Äpplet of the left-side lion in the Swedish national coat of arms (right)

Text by Mimo Moqvist
Photos by Jim Hansson
and Patrik Höglund
Illustrations by Jim Hansson
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In 1625, Sweden's King Gustav II Adolf ordered four ships—large regal ships—to crown the fleet. The four ships were *Vasa*, *Äpplet*, *Scepter* and *Svärdet*. Mimo Moqvist relays the story of one of them: *Äpplet* (*The Apple*).



Äpplet Wreck

17th-Century Swedish Warship

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Marine archaeologist Patrik Höglund at the lower port-side battery deck

Gustav II Adolf had been king for 14 years by then, had already won two wars and was well on the way to transforming the Swedish army into the most well-trained and feared in Europe. He decided to dominate the Baltic Sea by building a strong navy so that Sweden

could control the profitable trade. In the wake of this, large, powerful warships were needed to strike fear into the hearts of his opponents, and the king called Dutchman Henrik Hybertsson to Sweden to build them. At the time, Sweden was allied with the Netherlands,

which had the best shipbuilders in Europe. Hybertsson immediately set to work, starting with the *Vasa* ship.

Henrik Hybertsson did not have an easy time as a shipbuilder; the king and the admirals had strong opinions about what they wanted a ship of this dignity



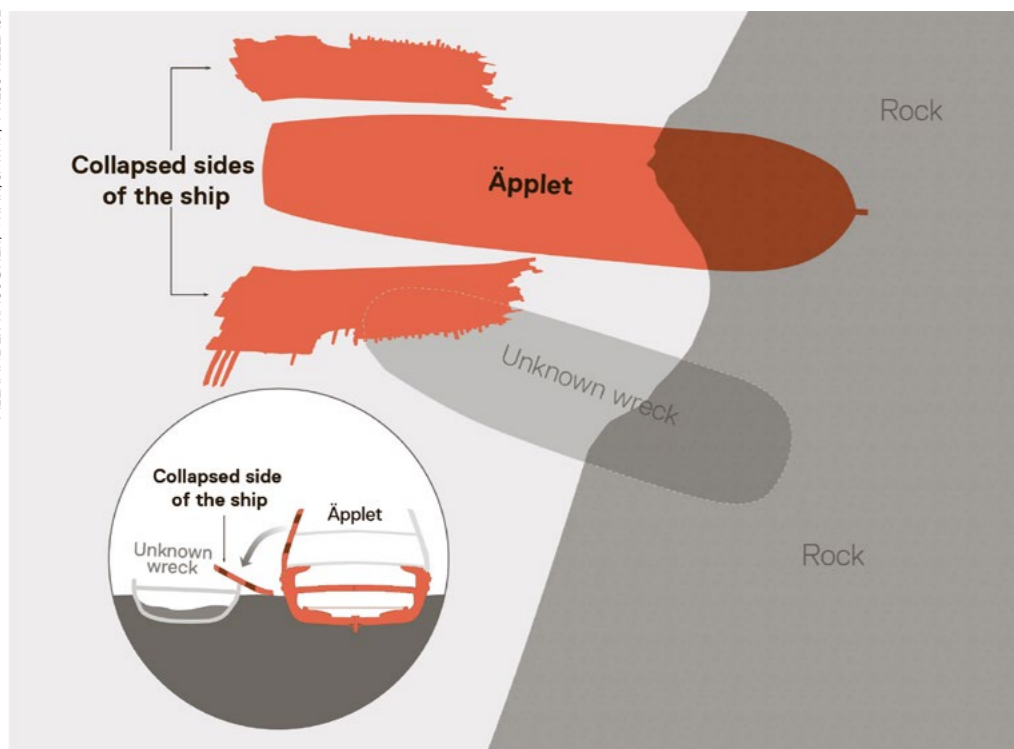


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Overview of the wreck site of Äpplet (left); Gun port on the upper battery deck at the stern (top left); Diver at gun port (top right)

that he tried to widen the ship but probably did not get that change through. For a time, the *Vasa* and *Äpplet* lay next to each other when they were built. The idea was that they would eventually sail together as flagships in the fleet.

Big ships breaking new ground

Discussions surrounding the construction of *Vasa* and its spectacular design were running high. It was breaking new ground because ships this big had never been built before. However, the ship ended up being tall and unstable because the king and the admirals wanted to include as many cannon as possible—not just many, but also large cannon.

As this had never been done before, no one knew exactly how it should be done in practice; the gun ports must not be too low and too

close to the water and not too high because then the ship would be too slender. Even here, Jakobsson doubted the stability of the ship, but a major redesign would mean serious delays. Both *Vasa* and *Äpplet* were fitted with armaments, namely 24-pound guns on both decks. This made them two of the most heavily armed ships in the world at the time.

Vasa's heyday was short. Very short. Several critical factors, including being too tall and too slender, carrying heavy armaments and an unfortunate gust of wind, caused it to heel to port so that water poured in through the open gun ports on the lower battery deck. The ship sank on the very day of its maiden voyage on 10 August 1628.

Jakobsson finished building *Äpplet*, but he made some important changes, widening the ship by 1.2 metres and mak-

ing the hull a slightly different shape to avoid a fate similar to that of *Vasa*'s. *Äpplet* was launched in the autumn of 1628 and commissioned in 1630.

As one of its first tasks, *Äpplet* participated in the large armada of around 100 ships assembled for Sweden's entry into the Thirty Years' War. In June 1630, the Swedish army was transported to Germany. Twelve thousand men, horses and supplies were shipped out with the big *Äpplet* in the lead. It had just over 1,000 men on board, 900 of whom were soldiers. The highest-ranking man on board was the king's half-brother, Admiral Karl Karlsson Gyllenhielm.

A missing queen

In the summer of 1631, a similar voyage was made. On one of the ships was Queen Maria Eleonora, who was travelling to visit her husband. On the way down to Germany, the

ships were separated by fog and storms. When *Äpplet* and most of the fleet reunited at Stralsund and unloaded the queen's ship was missing. Facing his king with a lost queen seemed downright unwise, despite blood ties, so the admiral took *Äpplet* and some other ships out to search for the missing ship. The queen was eventually found, safe and sound, on the island of Öland, where she had sought refuge from the storm.

Long and faithful service

Äpplet did not, however, enjoy the grandiose career in various sea battles that it was intended for. The ship was difficult to sail, and in a letter from naval officer Klas Fleming to the king, Fleming complained that *Äpplet* and similar ships “mostly lie in the harbour and look pretty”—to show off how

to look like, while Hybertsson, who was a recognised skilled shipwright, had a more engineering-based and practical view of what was actually feasible. The king and the admirals wanted two gun decks, which meant the ship would be tall, slender and

difficult to sail.

Unfortunately, Hybertsson died in the middle of the construction when *Vasa* was just over half-finished, so Hein Jakobsson took over and continued the building. Jakobsson later claimed, in the court records of the *Vasa*'s sinking,



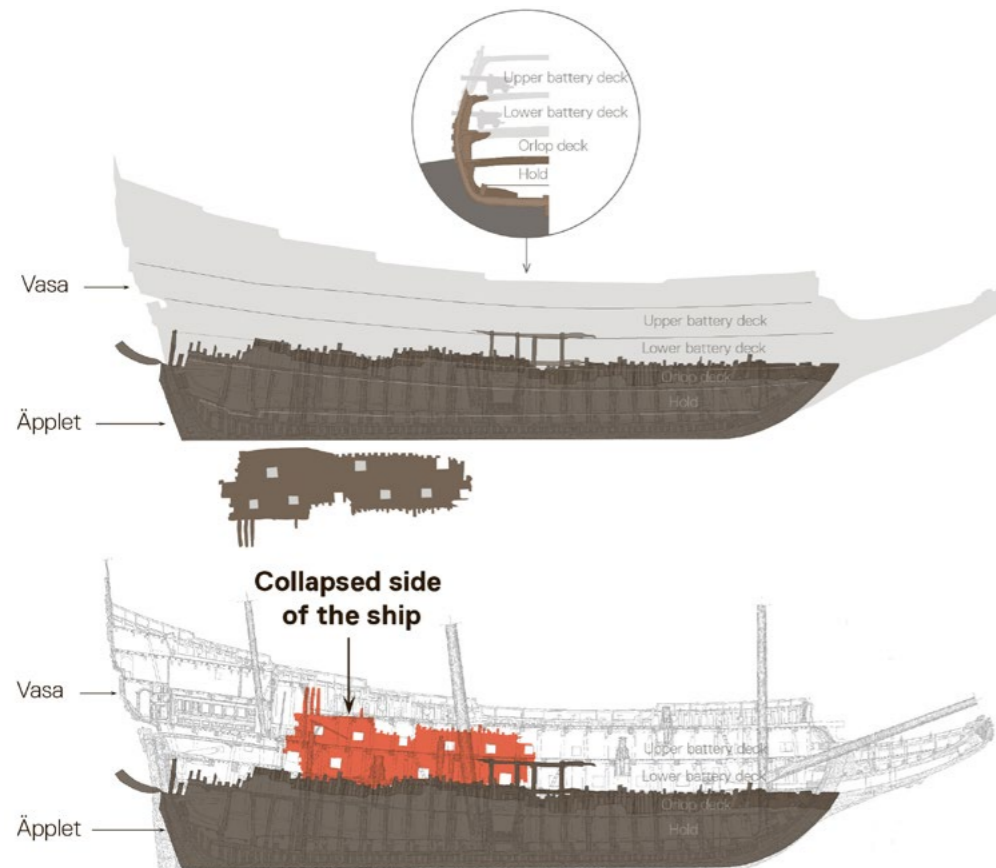
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In this painting of Stockholm from the 1630s (below), *Äpplet* may possibly be the ship to the right. Lower battery deck on *Äpplet* (left).



PER-ÅKE PERSSON, NATIONALMUSEUM / VRAK/SMTM / PRESS RELEASE

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The preserved parts of *Äpplet* in comparison with *Vasa* after reconstruction.

big and powerful they are. It is likely that *Äpplet* was often stationary, as the large ships were expensive to crew and maintain, had poorly skilled sailors and were more difficult to manoeuvre than the smaller ships. It is also worth noting that in the Thirty Years' War, which Gustav II Adolf joined in 1630, almost no naval battles were fought, and the powerful Swedish fleet was mostly occupied with transporting the army.

The king tried to sell *Äpplet* three times but did not succeed in getting rid of it. So *Äpplet* remained in the Swedish Navy and sailed for 30 years, remaining in service until 1658, when an inspection revealed that the ship was no longer in good condition and

profitable to repair. However, *Äpplet* was given one last important role when it was scuttled in 1659 in an inlet to Stockholm as part of a barrage to prevent the enemy from reaching Stockholm by sea, and there the story ends for one of Sweden's greatest warships of all time.

A new era

In 2021, marine archaeologists from VRAK Museum of Wrecks in Stockholm discovered a large wreck in a strait off Vaxholm during work with the Swedish Armed Forces. Most of the hull is preserved up to the lower battery deck and sticks up several metres from the bottom. Dropped to the bottom next to the wreck, parts of the ship's sides are relatively intact.

"Around Lucia 2021, when we made the first dive, just after a visit to *Vasa*—Well, the gut feeling said that this was something different from the smaller wrecks we found there. There was a large wreck, a giant ship, but it still had intact sides, some 6 to 7 metres up. Then we saw the sides next to it, also in large intact pieces, and realised that there were two rows of gun ports—so double gun decks—and we felt quite quickly that this... this was not an ordinary ship. It's one of the coolest wrecks I've ever seen," Jim Hansson, project manager at VRAK, said enthusiastically.

Researchers from VRAK are working on a major research project mapping wrecks in the Baltic Sea. The project is all about finding and telling

the stories of the old ships and documenting the development of the art of shipbuilding. Researchers have been conducting dives in several places, and on this particular occasion, they were not specifically looking for *Äpplet*, but they were looking for one of *Vasa*'s sister ships.

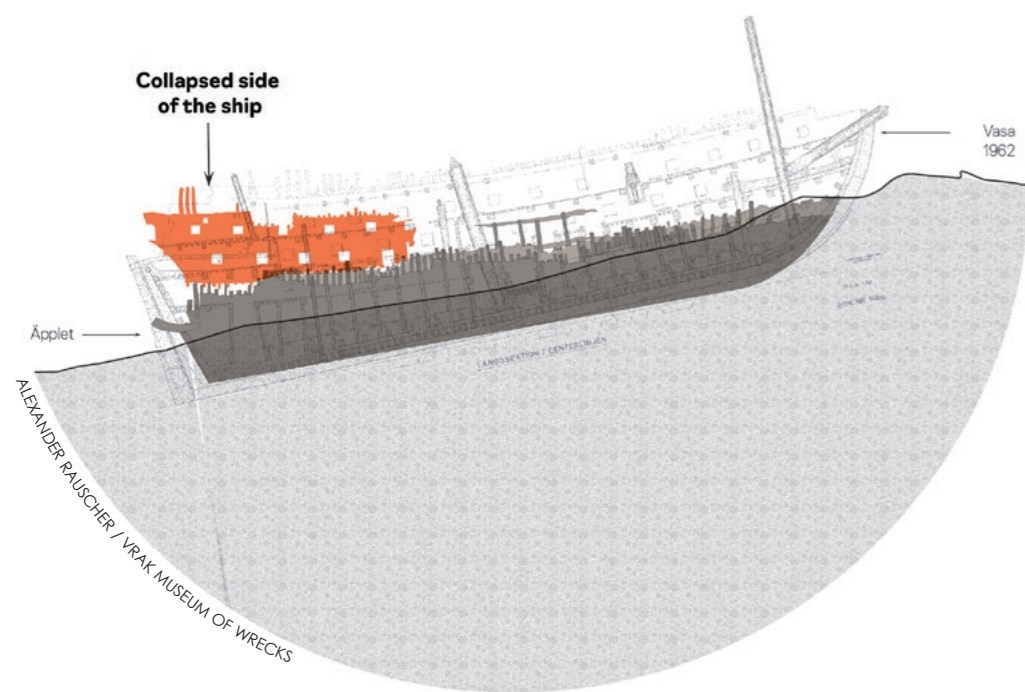
"We were specifically looking for details that we had just seen on *Vasa*," said Hansson. "We had gone through deck by deck on *Vasa*, taking photos and measurements, and now it was like a giant jigsaw puzzle we were trying to put together. When we found *Äpplet*, we immediately felt that we had to continue with this. So, we managed to do a whole week of dives in the spring of 2022; that's when we



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PATRIK HÖGLUND, VRAK/SMTM / PRESS RELEASE



measured it, took wood samples and did what we could to determine which ship it was.”

Collected measurements, technical details, wood samples and archive documents then confirmed that it was Äpplet—Vasa’s sister ship. Even the oak timbers for the ship’s construction were felled in the

same place as Vasa’s, more specifically in the spring of 1627 in Mälardalen, at Ängsö Castle between Västerås and Enköping in Sweden.

16th century-style refurbishment

The work of sinking old warships and large stone barriers

Comparison of Äpplet and Vasa (left); Diver with carving of a lion from the national coat of arms (top left); An extra gun port on Äpplet (top right)

in the strait between Rindö and Värmdö in the Stockholm archipelago began as early as the mid-16th century. This was done to block the entrance to the capital and force enemy ships to head for Kodjupet instead, where Vaxholm Fortress was waiting with its cannons. According to historical sources, at least ten large ships were sunk here in the 17th century.

“The idea was to sink two smaller ships nailed together at the bottom and then Äpplet, the big ship, on top. There is a sketch of it from the 17th century,” said Hansson. “But they ran into problems because the smaller ships moved after a storm, so when Äpplet was lowered, it ended up too deep.”

Europe was in turmoil at the time, just as it is now, so they were trying to rearm and find ways to keep the country safe—blocking the entrance

to prevent enemies was one of them. But during the actual construction of Äpplet, several changes were made, mainly after the sinking of the Vasa.

“An important part of finding Äpplet was to try to measure its width. That was one of the first things we did by checking the deck beams,” said Hansson. “We found a good technique to get the width, and once we had that, we could match it to the archives. We knew that Vasa was 11.30 metres wide, and that Äpplet would be about 1.20 metres wider, so we had those facts to go on.”

The next step was to try to find additional ship engineering solutions and construction details to see if Jakobsson made any other solutions than just changing dimensions. This might give a clearer picture of how the development of building such large ships has

progressed. But it was not easy work the researchers had ahead of them.

“This is one of the most challenging wreck sites I have worked on,” said Hansson. “It spreads out in all sorts of directions, and there are no bad dimensions, so it is difficult to get an overview of what you actually see. Add to that the fact that it’s in busy waters, cold, deep and dark—it makes the work extremely difficult. But the whole point of finding Äpplet is that now we can see and accurately compare it with Vasa, what they have changed, what we are most curious about and what is so damn cool.”

The end of big ships

The construction of such large ships in the first half of the 17th century was completely new but did not only occur in

Sweden; even the Royal Navy in England struggled with the same problems as Hybertsson and Jakobsson. It was a rather experimental business, and after the Vasa fiasco and Äpplet’s rather stagnant years of service, people did not build such large ships for almost 25 years and returned to smaller and more powerful ships.

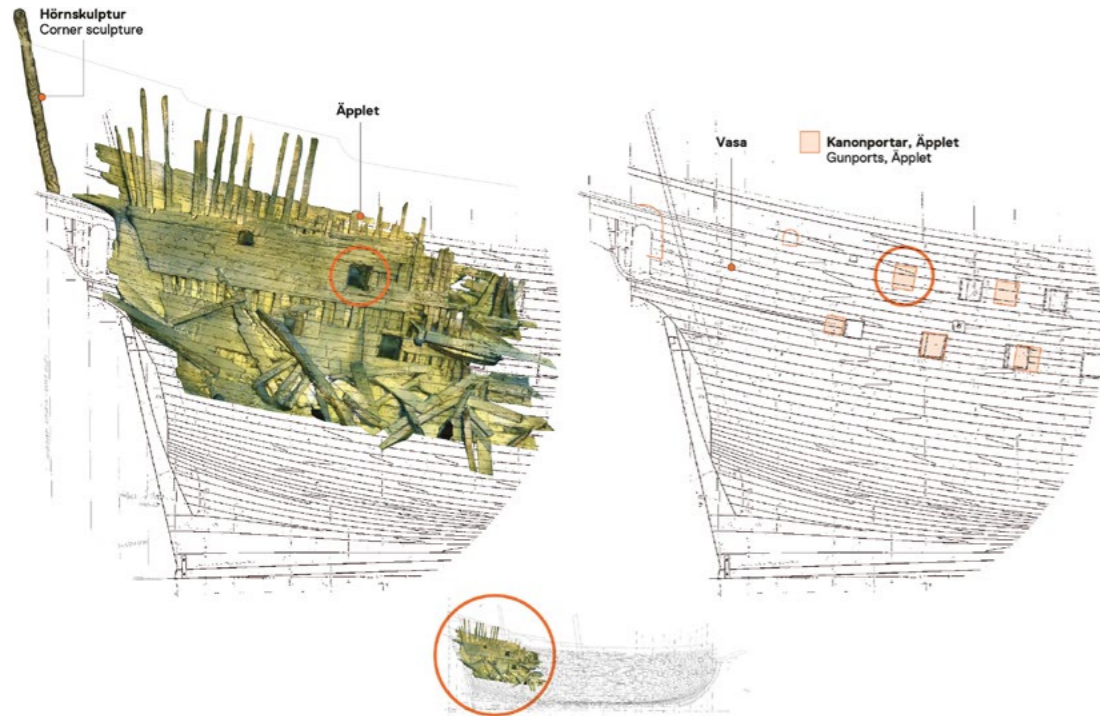
“The Dutch navy was the leader during this time—it was their golden age—and they had no large ships. Only the English made similar attempts to build large warships, but even they didn’t know how to do it practically at the time. This was not unique to Vasa. They quickly changed the armament of Äpplet; the armaments were removed as early as 1631. It’s much the same principle as when you try to develop fighter planes—it takes a couple of crashes before it gets good. So,

wrecks



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Diver documenting one of the corner sculptures on Äpplet (top); Illustration showing gunports and corner sculpture on Äpplet (left); Gun port on Äpplet (above)

we think they made more changes while Äpplet was in service,” explained Hansson.

So, not only was the size abandoned, but the concept of armouring their warships also changed, with heavier guns on the lower battery deck and lighter guns on the upper deck once again becoming the norm. This made the centre of gravity lower, the ships steadier and thus easier to sail.

“We know that the *Sword* and *Sceptre* were both wider and had lower stern casings, which was probably another development after Äpplet. But Äpplet is the ship that, for a time, actually lay next to *Vasa* during the construction period, so it is a bit special.

“It is only now, with Äpplet, that we can really talk about exactly why *Vasa* was so bad—now that we can get answers

to what changes were made to Äpplet. Perhaps it can enhance the historical value and silence those who moan about *Vasa* and that Sweden’s most visited museum (the *Vasa* Museum in Stockholm – ed.) is a tribute to the country’s biggest failure,” Hansson firmly concluded. ■

For more information, please visit: vrak.se/en



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