

The First Amputation in Australia

Australia (and for that matter, New Zealand) was discovered, somewhat by chance, by vessels of the Verenigde Nederlandse Geotroyeerde Oostindische Compagnie (commonly known as 'VOC'), the Dutch East India Company, a pious and hard-headed consortium whose motto, roughly translated, was 'God is great, but business comes first'.

To understand the events of the Company's early days, it is necessary to go back to the latter part of the fifteenth century, when Portugal and Spain came into dispute over their respective rights in South America. They appealed to the Pope who, in the Treaty of Tordesillas of 1494, allocated to Spain those lands west of a line 370 leagues west of the Cape Verde Islands (roughly, beyond 60°W); and to Portugal those to the east, in particular Brazil. It is ironic that the prelate in question was Roderigo Borgia, that most dissolute of Popes, Alexander VI.

The opening up to settlement and trade of the Far East in the next century led to the recognition that the Papal meridian had a reciprocal on the opposite side of the globe. The Portuguese, approaching by their land-hopping route round the Indian Ocean, gained a foothold in places like Goa, Macao and Timor, where they maintained a presence into our own times; the Spaniards, after Magellan, became established in the Philippines. But given the difficulties of determining longitude in those days, the line of demarcation was at best conjectural.

When the Spanish provinces in the Netherlands asserted their independence in the late 1500s, therefore, they seized on the 'grey area' for their own incursions. A number of Dutch ventures were undertaken beginning in 1595, when four vessels – the *Mauritius*, *Hollandia*, *Amsterdam* and the yacht *Duyfje* set out from the Texel, under the command of Kornelis de Houtman, on what was to be a three-year round trip. Others followed from various seaports, but when the English set up an East India Company under Royal Charter in 1600, the Dutch quickly appreciated that only by being united could they compete.

In December 1601 a merger of the Amsterdam, Zeeland (Middleburg, on the island of Walcheren), Hoorn, Enkhuisen, Delft and Rotterdam companies produced the VOC. Its charter had no fewer than 46 clauses, was originally for 21 years, and set up a board of 17 directors, the *Heren Zeventien*. Its functions were protean: apart from being an institution of merchants and shippers, it had to involve itself in shipbuilding and, in the East, in government and the military force that underpinned this government. The English and Portuguese were soon hustled out of the East Indies as we know them – the English to India, the Portuguese to toeholds on the perimeter of what became the Dutch colonial empire.

Dutch ships were designed for handling by small crews – as early as 1603 Sir Walter Raleigh lamented that ten Dutchmen could handle a vessel where the corresponding English ship would require thirty. They were built ‘shell-first’, the hull planking being formed first and the necessary braces added, by contrast with, say, English ‘frame-first’ shipbuilding in which the framing was laid out first, then covered by planking. The largest vessels were of *spiegelschepen* or square-sterned construction, but the Dutch also went in for a round-sterned vessel with the generic name of *fluyt*, which might well be little smaller. Unfortunately the curved planks at the stern of the *fluyt* showed an inclination to spring loose.

The Route Taken

The route from the Netherlands was more complex than, for instance, British ships had to contend with. It was first necessary either to pass down the Channel or else take what was known as the Backway round the north of Scotland. This was longer – some 600 miles longer, in fact – but the *Heren Seventien* liked it because it avoided the risk of capture when the Dutch were at war, or of captains making a convenient port call along the English south coast (with delay or desertion, even a touch of smuggling as a corollary) in time of peace.

Next the sailing instructions laid down what was called the *wagenspoor* or cart track, off the bulge of Africa after the Cape Verde islands. Too far east, and a ship could become embayed in the Gulf of Guinea; too far west, and it could end up in Brazil, prey to the Portuguese, who did not like what the Dutch were doing to their trade in the East. Officially one stop was permitted, at the Cape of Good Hope, which could be expected to be reached at about the four-and-a-half month stage.

Thereafter the traditional route was the coast-hopping one of the Portuguese – until 1610, that is; for that year Hendrik Brouwer picked up the westerlies off the Cape, sped across the southern Indian Ocean, swung left and reached Java in 2½ months, out of a travelling time of just under six months and a total voyage of eight. This saving of time was commercially attractive, but its attractions went even further than that.

The Hazards

For these men were being stalked by scurvy, which could disable a ship and cause her to arrive with half her crew dead and the rest half-dead. Many seamen were already in poor nutritional state when they came aboard, so that ship's diet could tip them into frank scurvy quite early in a voyage; their disorders were commonly multivitamin deficiencies, so that the clinical picture was a mixed one, and the progress of their disorder could be alarmingly rapid, both through a ship's crew and in the individual case.

The East Indies governor, Jan Pieterszoon Coon, was much impressed by Brouwer's achievement, and urged the trans-ocean route be made obligatory, which indeed it was from 1616. Meanwhile, though, the Dutch were developing an interest in the trading potential of the mysterious land to their south-east, the *Terra Australis Incognita* – the great unknown south land, of uncertain position and extent. The Dutch began to probe, in part deliberately but also on account of the peculiarity of Brouwer's route: for if the turn north towards Batavia (present-day Jakarta) was mistimed, a vessel could end up on a hostile coast. Thus the coast of what is now Western Australia could, according to circumstances, yield information or bring disaster: in 1619 Frederick de Houtman, brother of Kornelis from the first expedition, prolonged the known coast to the south; his landfall was about the latitude of Fremantle and, sailing northwards towards Dirk Hartog's 'Eendrachtland', discovered in 1616, he was, he thought, well clear of land when he encountered shoals and low-lying islands which he recognised as a hazard and so named 'Houtman's Abrolhos' from the Portuguese (some say Old Dutch) for 'keep your eyes skinned'.

The Batavia Voyage

In October 1628 the new Indiaman *Batavia* was flagship of a convoy of seven ships under the administrative control of Francisco Pelsaert, a high company official, and brother-in-law of Brouwer himself.

Batavia's skipper was Ariaen Jacobsz, and Jacobsz was a heavy-drinking womaniser with a grudge against Pelsaert. Aboard were a former Haarlem apothecary (apothecaries were the general practitioners of the time) named Jeronimus Cornelisz, travelling as an undermerchant in the company's service; a lady named Lucretia Jansz who was on her way out to join her husband Boudewijn van der Mijlen, a company official; and Lucretia's maid Zwaantje Hendrix.

Jacobsz began by molesting Lucretia and, when rebuffed, took up with the maid who appears to have been a much easier catch. He seems to have had in mind to subvert Pelsaert's authority with a view to mutiny. What he did manage, on watch on the night of 4 June 1629, was to put the ship on a reef

– and not just any reef, but Houtman’s Abrolhos. The passengers and crew got themselves on to a couple of shallow and waterless islands, losing forty in the process.

Then Jacobsz gathered a boat’s crew, taking the agreeable *Zwaantje* with one other woman and – almost as hostage – Pelsaert himself, ill with some tropical fever picked up during his earlier company service in India. Their voyage was a remarkable one: in under four weeks they travelled some 1200 miles before being picked up by the jacht *Sardam* in the Sunda strait. *Sardam* was one of *Batavia*’s convoy, from which *Batavia* had become separated, either by accident or design, after Capetown; and she was soon pressed into service for the rescue expedition. Jacobsz was left behind under arrest, but three Gujarati divers were taken along to recover the treasure: for, after all, God is great, but business comes first.

Retribution

When they returned to the reef, it was to find a scene of horror. Cornelisz had taken over the performance of the mutiny that Jacobsz had been contemplating. He and his followers had butchered over a hundred of the survivors of the shipwreck, sparing some of the women who (as Beaglehole puts it) ‘were appropriated to the use of himself and his men’. He himself ‘appropriated’ Lucretia, as suited to his pretensions; he dressed his bodyguard in salvaged scarlet with gold and silver embroidery; he had his fellow-mutineers sign a compact which designated him captain-general of his new island nation.

What he failed to do was get the better of a soldier named Wiebe Hayes who was away in search of water when the mutiny broke out and, with his party, saw off Cornelisz’s attacks and finally captured him. Pelsaert tried Cornelisz and his fellow-conspirators (Dutch law allowed torture under these circumstances to extract confessions) and sentenced seven to death by hanging. These men were to have their right hands cut off before being hanged – but Cornelisz was to have both amputated.

An illustration to the 1649 edition of the account of the mutiny, entitled *Ongeluckige Voyagie van’t schip Batavia*, shows a scene resembling a production line (Fig. 1). One of the mutineers is presenting himself for amputation, his hand on the block at the foot of which are scattered four hands removed earlier; the condemned men are being taken over from this ‘operating theatre’ to the gallows.

The technique resembled that illustrated by Scultetus (or Schultz) in 1655 in his *Armamentarium Chirurgicum*, a catalogue of surgical instruments which included explanatory notes on their applications (Fig. 2). The amputation, through the wrist, is being carried out with a broad-bladed chisel-type instrument described by Scultetus as a *scalprum* and now known as an osteotome. (Unlike a carpenter’s chisel which is bevelled on one side of the

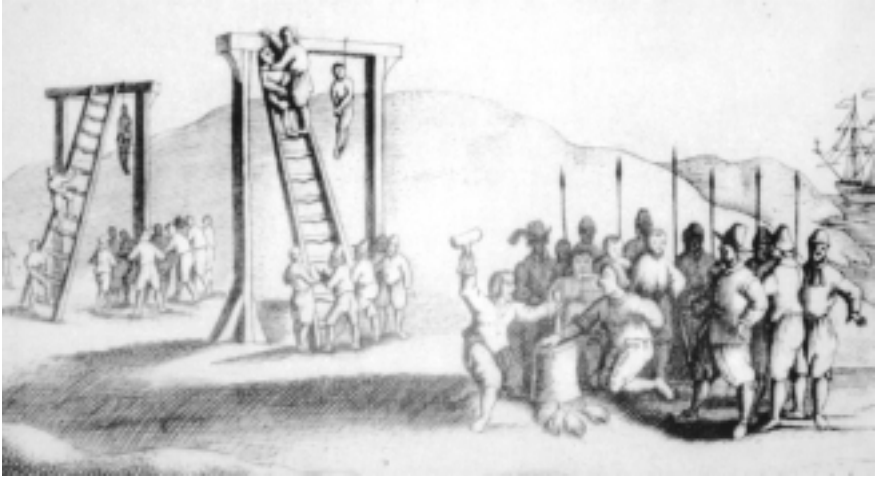


Fig. 1 The punishment of the mutineers. Illustration from the 1649 edition of *The unlucky voyage of the ship Batavia*

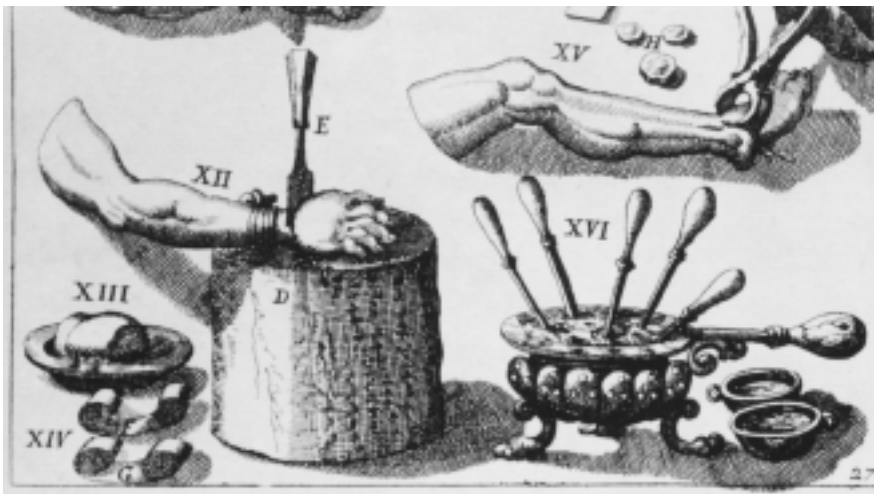


Fig. 2 Detail from Tabula XXVII of the *Armamentarium Chirurgicum* of Scultetus, showing instruments resembling those used in fig. 1

blade, the osteotome is tapered on both surfaces.) There is no evidence, in the illustration of the mutineers' punishment, of the cautery irons normally used to control bleeding and shown at XVI in the Scultetus drawing. Possibly for this reason the figure already hanging on the near gallows appears to be clutching its right wrist with its left hand.

It is uncertain who was the amputating surgeon: Franz Jansz, *Batavia*'s surgeon, had been killed during the massacre; but Aris Jansz the underbarber or surgeon's mate, who was attacked but survived, may have approached the task with some relish.

It was on 2 October 1629 that Cornelisz faced his sentence and was hanged; Pelsaert, in his report of the rescue expedition, commented that 'he died stubborn'. It shows what can happen to doctors who dabble in mutiny. Two lesser offenders were put ashore with orders to befriend the natives and search out opportunities of trade: the VOC did not miss an opportunity. The two were never heard of again. Much of *Batavia*'s treasure was recovered, and 74 survivors were taken to Batavia town.

It is pleasant to record, after detailing such misery, that the wreck of the original vessel has yielded up artefacts such as a number of the unfortunate Jansz's bleeding bowls, along with a collection of Rix dollars which probably would have mattered more to the company. But apart from those finds, it is a happy outcome that the *Batavia* herself has been lovingly recreated (Fig. 3) at Lelystad east of Amsterdam, in a volunteer shipyard on reclaimed land, at the very place that the original ship would have passed on her maiden – and only – voyage. The only significant concession to modern practice has been the adoption of the 'frame-first' method of building instead of the traditional Dutch system (and, heartened by the success of the *Batavia* project, the shipyard is now working on the construction, shell-first this time, of de Ruyter's flagship from the Anglo-Dutch wars of the 1660s, *de zeven Provinciën*).

The new *Batavia* has moreover made the voyage out to Australia – in perfect safety – and in late 2000 was berthed in Sydney harbour, where she dwarfed the *Endeavour* replica. The two vessels offer a reminder that the Dutch charted most of three coasts of Australia, while Cook the Yorkshireman filled in the east coast in the original *Endeavour*, 140 years after the wreck of the original *Batavia* provided the occasion of Australia's first amputation. There can be few countries where the birth of amputation surgery can be dated so precisely. And, given the contribution of a harsh judicial code to the early colonial history of Australia, there has to be a certain aptness in the fact that this first amputation was a judicial one.

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Acknowledgment

I must record my thanks to all those who have encouraged me to reflect on the Dutch discoveries in Australasia, and to talk about them in various places; but especially to Mrs Annet Verbout, wife of an orthopaedic colleague and herself a maritime historian, who introduced me to the *Batavia* replica in 1998.



Fig. 3 The *Batavia* replica

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