"Onder faveur van 't canon" VOC-Artillerie 1602-1796: technologische vernieuwingen, logistiek en beleid

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9.2 Summary

The Dutch were involved in voyages to Asia from an early stage. They served on Portuguese ships and Dutch merchants distributed Asian spices across Northwestern Europe. After the personal union of Spain and Portugal in 1580, King Philip II started to obstruct the distribution of colonial goods by Dutch ships. His aim was to do financial harm to the Dutch provinces, which had been in revolt since 1568. Although Dutch ships continued to sail to Lisbon during the Eighty Years' War, it became increasingly risky to do so. Moreover, price increases made it attractive for the Dutch to try to purchase spices in Asia themselves. Because various Dutch individuals in Portuguese service had collected sufficient information about the Portuguese route, the first voyage could be carried out in 1595. Strikingly, an unsuccessful attempt to take the northern route, which would have made it possible to avoid conflict with the Portuguese, had been made before that time. As it was, the route via the Cape of Good Hope remained the only option. Because of high expectations of considerable profits following the first Amsterdam and Middelburg expeditions, entrepreneurs in other cities in Holland and Zeeland started sending ships to Asia. For this purpose, they organised what were known as companies – later referred to by historians as precompanies – that were dissolved following the return of the ships. In Asia, they were fierce competitors who were played off against each other by their local business partners. Because of a lack of continuity, these temporary enterprises were no match for the Portuguese.

In the Netherlands, the idea arose that impairing the Asian trade would undermine the financial and military position of the king of Spain (also king of Portugal from 1580 to 1640). The idea became a war aim that would be financed by Dutch trading profits. This aim required a pooling of resources and a permanent organisation. In 1602, chief minister (*landsadvocaat*) Johan van Oldenbarnevelt met both requirements by establishing the United East India Company (VOC). The VOC has traditionally been seen as a trading company that used weapons in connection with its trading interests and that, according to its charter, could conclude contracts with local rulers. Furthermore, to protect itself, the VOC could take armed action to defend its interests and could maintain an army for that purpose. A correction must be made, however, regarding the assumed defensive nature of the war apparatus. Warfare was a key part of VOC operations and, just like trade, a defined product in respect of which performance in terms of the charter (damage to the Portuguese and Spanish adversary) *and* European theatre of war (strengthening the Dutch war fleet) was agreed with the contracting authority (States General), which made resources available for the purpose. The VOC charter was therefore in keeping with organised, private warfare and regulated privateering.

Regarding its operations in Asia, the VOC followed the Portuguese example and projected its power by means of a navigational envelope (a coherent combination of techniques, procedures and resources). Japan and Siam (Thailand) saw the VOC as an ally against Portugal. Their support was crucial during the establishment of Batavia as *rendezvous* and main centre of power, a time when the VOC was at its most vulnerable. The British and Javanese rulers (Bantam and Mataram) twice laid siege to Batavia (in 1619 and 1628-1629), the VOC's new nerve centre in Asia, while the Portuguese sought to counter the consolidation of the Dutch intruders in the Moluccas. The VOC survived primarily because of the organisational talent and strategic planning of Governor-General Jan Pieterszoon Coen. Many innovations were implemented for the first time and these formed the foundation for the later military policy of the VOC, which was to increase its own military power by developing

military technology while at the same time limiting the dissemination of new technical knowledge to the greatest extent possible. This would increase the VOC's own effectiveness while limiting the effectiveness of (potential) adversaries, which would in turn mean that fewer military resources would have to be used. Of all military instruments, this study focuses on artillery, the most effective weapon against local and European enemies. Owing to its technological complexity, however, artillery required major investments because of the costs of the weapons for ships, forts and field battles and the costs of personnel.

This study's main questions are as follows. First, how was the artillery organised to achieve the greatest possible effect at the lowest possible costs? Second, how was the transfer of European artillery technology controlled to make a limitation of military resources possible? An associated matter that is addressed is the extent to which the VOC was successful and the preconditions of that success.

This study shows that the military objectives were achieved by means of coherent starting points and policy implementation in five areas, namely (1) the introduction of new technology and the modification of existing technology, (2) the local production of artillery items, (3) the control of technology transfer, (4) the establishment of an efficient administration for (strategic) planning and logistics, and (5) the great attention paid to the personnel factor, an extremely important area.

Three phases that differed in terms of the intensity of policy implementation and the regions in which policy was implemented can be distinguished. The first was the phase of expansion, which lasted until approximately 1665. This was followed by a preservation phase in which the VOC emerged primarily as a trading organisation with its own military resources. A new chronological demarcation line can be dated to around 1745, when the powerful national states of England and France, both described as 'contractor states' in recent literature, also fought their wars in Asia and substantially expanded their economic power. Although the fate of the VOC in Asia therefore became more closely tied to that of the Dutch Republic in Europe, that connection was too tenuous and the Republic was no longer powerful enough to guarantee the neutrality and sovereignty of the VOC.

Despite financial problems and inadequate military power, in around 1780, the VOC proved capable of completely reconceptualising its system of defence, namely by separating commercial and military activities. Troops and military materiel would be concentrated in a few strategic *places d'armes*. Furthermore, the army was to be reorganised and professionalised, internal communication was to be accelerated by the introduction of inter-island packet ships and, finally, strategic military concentration was to take place in four core areas: the Indonesian Archipelago, Malacca, Ceylon and the Cape of Good of Hope. This vision had gradually emerged even before 1780 because of a desire to strengthen military power with limited expenditure and because it was in keeping with international and military developments that were current at the time. It was in fact about the implementation of defensive measures because of the growing confrontation with the contractor states referred to. Because of the high costs, however, the VOC could not implement these measures itself. Even the Republic could not implement them. During the Fourth Anglo-Dutch War (1780-1784), the VOC was dependent on French military assistance. The costs of this assistance, even after the value of the VOC's substantial contribution is deducted, were very high. After that war, the Dutch state started providing military support by sending squadrons of warships

and by creating a military committee that was tasked with developing plans to strengthen the VOC's defences. The Republic therefore took a step in the direction of the modern contractor state, but the VOC, afraid of harming its commercial interests, was wary of this modernity and delayed the implementation of the new plans.

This study provides new insights concerning the professionalism, inventiveness and agility of the VOC as a military organisation. A strict cost-benefit assessment and a preference for proven concepts resulted in a unique mix of old and new and revolutionary concepts which, unhindered by conservatism, could flourish while completely outdated concepts continued to exist. The greatest innovation, which remains a part of military tactics today, was the combined use of indirect and direct fire. The VOC did this by using the hand mortar to drive the enemy from cover and then using the light cannon to eliminate the exposed combatants. This tactic was developed by the VOC such that it was possible to use these weapons in the front line and even in places that were difficult to reach. Because the enemy did not know how to use mortars, they could not apply the same tactic when they captured mortars. Other examples of innovations that had important effects was the use of red-hot bullets and the use of carronades – short, high-calibre, cast-iron cannon – to fire shells, whereas the original British concept still exclusively assumed the use of solid shot.

Local production of artillery items reduced transport volumes, shortened supply lines and provided strategic self-sufficiency, which enabled more rapid responses. However, the VOC was only partially successful because regular shipping to and from the Netherlands resulted in the supply of European products that cost less than local products in Asia, and because, for a long time, the VOC was unable to attract independent entrepreneurs who were willing or able to meet the requirements set by the VOC. The attempt to set up an iron industry in India that was based on the Swedish model failed because of political problems and prohibitive differences in culture. A development based on the Swedish model would have meant a source of cheap iron, possibly significantly cheaper than that of Sweden, for the VOC's artillery.

Control of technology transfer was a frequently used method from the beginning. Siam, Tonkin (Vietnam) and Japan were exceptions. In the preservation phase, broad efforts were made to limit the acquisition of artillery by local rulers, even if they were allies of the VOC. Limiting the transfer of technology was made possible by the implementation of a disarming policy of adversaries and even allied states, supported by Company mediation between local rulers. From the second half of the eighteenth century, however, these efforts were largely undone by the activities of European competitors and smuggling, mainly in India and in peripheral regions such as the Riau Archipelago.

The VOC administration was structured in a way that facilitated artillery-related strategic planning and kept relevant (military) information about potential adversaries up to date. It was therefore possible to launch operations when the VOC had the advantage. One of the findings of this study is that the distinctive administrative and mandate structure of the VOC organisation was such that decisions in Asia were included in the line of communication much sooner than has been assumed until now. This rapid inclusion made the entire process faster. Each organisational level made decisions within its own mandate, reporting would take place retrospectively and decision making in the home country was limited to expensive operations and major investments. Because of its excellent administration, the centrally

directed VOC purchasing system enabled sound planning and implementation and was therefore an important factor in the maintenance and development of military power in Asia. The key characteristics of this purchasing system were continuity, the ability to plan and effectiveness.

Strangely enough, the VOC struggled to recruit a sufficient number of well-trained artillery personnel. Reasons for this difficulty include the lack of a formal artillery organisation, the unwillingness to pay high wages and the scarcity of artillery expertise in a Europe plagued by wars. At the time, a skilled artilleryman could usually find employment without taking the risk of travelling to Asia for a meagre salary. In addition, because all employees, regardless of hierarchical level, were held personally liable for imputable shortcomings and defects and the like (a considerable security deposit was usually required in this regard), there was overregulation in combination with a limitation of risks to the organisation. While this system existed in other parts of the VOC organisation, its use in relation to the artillery could have far-reaching consequences for the continuity of operations. Another major problem was state of health, which was poor in many places and constituted a serious problem regarding the use of artillery.

The VOC attracted personnel from all corners of Europe. It is striking that, despite their different backgrounds, VOC artillerymen were able to communicate well with each other and with counterparts outside the organisation because they had their own technical vocabulary.

The VOC, a trading company with colonial aspects, could not have performed any better in terms of artillery capability. The organisation itself and the Republic, the charter-granting and power-facilitating state, were simply not structured for and equal to the task. The rise of the contractor states, the increasing power of local principalities in India and the emergence of elusive ‘sea peoples’ at the periphery, in combination with a sharp increase in smuggling, meant that, in practice, the effective operational range of the VOC’s independent military policy was reduced to the territory of the Indonesian Archipelago. Only greater state involvement could have reversed this decline, but such involvement was prevented by political developments within the Republic and the evolving international situation.