

# The Arte of Warre

## Military books from the collection of John Clarke (d. 1778?)

One of the more important benefactions received by the Old Library in the course of its history came from Mrs Clarke, who bequeathed to Jesus College a collection of books once owned by her son, John. A library account book now in the college archives (LIB 1.1) records that 4s. 6d. was paid out by the Librarian for the 'Carriage of Mrs Clerke's books' at some time during 1791. The core of the collection is a group of volumes on military subjects, many of them dating from the sixteenth century; the name and dates inscribed upon their title pages show that they were bought by John Clarke in the 1760s and '70s.

Little seems to be known about Clarke's earlier life, or about his family's links with Jesus College. He was not a student here, but probably pursued an army career from an early age. We can only deduce that he was a relative of someone with college connections (perhaps of E. D. Clarke, the explorer and Professor of Mineralogy). He clearly had a good classical education, as evidenced by his published translation of the *Military Institutions* of Vegetius (1767),

The following were displayed in an exhibition entitled 'The art of Warre'.

Translating the classics

1. J. Clarke, trans., **Military Institutions of Vegetius** (1767)
2. J. Sadler, trans., **The Foure bookes of Flavius Vegetius Renatus** (1572)
3. **Fl. Vegetii Renati ... De Re Militari ... Sexti Julii Frontini ... de Stratagematis ... Æliani de instruendis Aciebus ... Modesti de vocabulis rei militaris ...** (1553)

More translations, classical and modern

4. J. Bingham, trans., **The Tacticks of Ælian** (1629)
5. N. Machiavelli, **The Arte of warre**, trans. Peter Whitehorne (1560)
6. F. Cotta, **Onosandro Platonico dell'Ottimo Capitano Generale** (1546)
7. **Onosandro Platonico, of the Generall Captaine**, trans. P. Whitehorne (1563)

Archery and gunnery

8. R. Ascham, **Toxophilus, the schole of shootinge** (1545)
9. Sir J. Smythe, **Certain Discourses** (1590)
10. H. Hexham, **Principles of the Art Military** (1642)

More from the late sixteenth century

11. T. Digges, **Stratioticos** (1590)
12. T. Styward, **The Pathwaie to Martiall Discipline** (1582)
13. B. Rich, **A Pathway to Military practise** (1587)
14. B. Rich, **A Martial Conference** (1598)

Advice from Cambridge

15. J. C[ruso], **Militarie Instructions for the Cavallrie** (1632)
16. Sieur du Praissac, **Art of Warre**, trans. by J. C[ruso] (1639)
17. Duc de Rohan, **The Complete Captain**, trans. by J. C[ruso]  
(1640)

Fortification

18. P. Ivie [Ive], **The Practise of Fortification** (1597)
19. J. Moore, **Modern Fortification** (1673)
20. L'Abbé Du Fay and M. Cambray, **Veritable maniere de bien fortifier de Mr de Vauban** (1702)
21. M. Goulon **Memoires pour l'attaque et pour la défense ...** (1706)

**1. Military Institutions of Vegetius, in Five Books, Translated from the Original Latin. With a Preface and Notes. By Lieutenant John Clarke.** (London: printed for the author, 1767)

G.4.28

Flavius Vegetius Renatus lived in the late fourth century AD. His ‘*De re militari libri quinque*’ (‘five books on military matters’) was one of the most frequently reprinted and translated of classical works in its field. This is the translator’s proof copy, with a scattering of corrections in his hand. Inside the front board is the inscription: ‘Presented to the Library of Jesus College Camb: by Frances Clarke the Translators sister. 1800’.

The Preface of the work has some bearing on the history of Clarke’s collection, as it refers both to earlier editions of Vegetius and to works on military subjects published in England in the sixteenth and seventeenth centuries. A number of these can be found amongst his surviving books. The purchase dates of most of the collection, however, postdate this publication, suggesting that it may have been Clarke’s work on Vegetius that inspired him to become a systematic book-collector.

**2. The Foure bookes of Flavius Vegetius Renatus, briefelye contayninge a plaine forme, and perfect knowledge of Martiall policye ...**, translated by John Sadler (London, 1572)

G.4.13

Clarke mentions this work in the Preface to his own edition, as one of the early evidences of the serious pursuit of military studies in England. He eventually acquired this finely bound presentation copy, with the author’s signature. As he points out, the dedication of the work to the Earl of Bedford, one of Queen Elizabeth’s Privy Councillors, indicates that such enterprises were valued at the highest levels, though the result in this case did not reach the standards expected by later generations. ‘The Author has often mistaken the Original, and his Work has little Value but that of Antiquity’, Clarke concludes.

**3. Fl. Vegetii Renati ... De Re Militari libri quatuor. Sexti Julii Frontini ... de Stratagematis libri totidem. Aeliani de instruendis Aciebus liber unus. Modesti de vocabulis rei militaris liber unus** (Paris, 1553)

G.3.7

In this fine folio edition, Vegetius’ text is accompanied by those of other classical authors – Frontinus ‘*On Stratagems*’, Aelian ‘*On the drawing up of a line of battle*’, and Modestus ‘*On military terminology*’. A slip preserved in the volume suggests that it was bought from C. Parker of Bond St for fifteen shillings (item 334; the publisher is correctly named in the catalogue entry, though the date is different).

For the modern reader, much of the volume’s charm lies in the lavish woodcut illustrations, which make a valiant attempt to interpret ancient descriptions for a sixteenth-century audience. The few illustrations appended to Sadler’s 1572 translation were copied from this source.

**4. The Tacticks of Ælian**, translated by John Bingham (London, 1616), with appended **The Exercise of the English in the service of ... the Lords the Estates of the united Provinces in the Low Countries**; bound with **The Art of Embattailing an Army ... the Second part of Ælian's Tacticks ... By Capt. John Bingham** (London, 1629)  
G.3.19

Throughout the eras represented in Clarke's collection, it was firmly believed that the study of classical authors had much to teach tacticians. A modern commentator (John R. Hale) notes that the development of firearms led to an increasing dependence on infantry in extended formations, which took armies away from medieval principles and closer to ancient models; 'the great innovating commanders, among them Maurice of Nassau and Gustavus Adolphus, were directly influenced by authors like Ælian'.

Bingham's dedication to Prince Charles and preface to his translation emphasise this, as does the fact that his *Exercise of the English* was included as an appendix. The experience of English soldiery fighting in the Netherlands prompted a flurry of military publications from the 1590s onwards.

**5. Niccolo Machiavelli, The Arte of warre**, translated by Peter Whitehorne ([London], 1560), bound with Whitehorne's **Certain waies for the order yng of Souldiers ... And also Fygres of certaine new plattes for fortificacion of Townes** [1562]  
G.4.12

During most of the sixteenth century, inspiration from the classics was paralleled by information from modern European writers. Machiavelli's dialogue was the first important military book to be translated from the Italian. At this stage he could still be termed 'the worthy Florentine', though a decade later his political writings had caused the serious decline of his reputation in England.

The translator, Peter Whitehorne, had gained his military experience serving in armies raised by the Emperor Charles V to fight the Moors. His *Certain waies* includes depictions of fortifications copied from an Italian source. They were the first such illustrations to appear in an English printed work.

**6. Fabio Cotta, Onosandro Platonico dell'Ottimo Capitano Generale, et del suo Ufficio ...** (Vinegia, 1546)  
G.4.10

**7. Onosandro Platonico, of the generall Captaine ...**, translated by Peter Whitehorne (London, 1563)  
G.6.20

After finishing Machiavelli, Whitehorne went on to translate an Italian version of the Greek text 'Strategicos' by Onosander. A quarto volume in the unmistakable style of Re-naissance Italy, this must qualify as one of the most elegant specimens of the printer's art in Clarke's collection. Whitehorne's translation also has ornamented capitals, but is in a relatively modest pocket-book (octavo) format.

**8. Toxophilus, the schole of shootinge conteyned in two bookes**, by Roger Ascham  
(London, 1545)

G.5.4

Ascham was a Fellow of St John's College when he produced this volume, benefiting from the fact that the college statutes of that time enabled him to continue practising his favourite sport of archery. Having gained distinction as an early student and teacher of Greek, he presented his treatise in the form of a dialogue between 'Toxophilus' (himself) and 'Philologus', a Greek tutor believed to be modelled on Sir John Cheke.

The disputants are given to quoting Plato and Homer and conclude with a scholarly wish to study ancient texts on the origin of the soul. But they chiefly display their scholarship in discussing such propositions as: 'Shootyng fit for princes and greate men', 'Shootyng, fit for Scholers and studentes', and even 'Shootinge fitter for studentes than any musike or Instrumentes'. The later part of the volume gives practical hints for achieving proficiency in the art.

The wording of the dedication to Henry VIII reflects the fervour of Ascham's Protestantism, which was seen by some in the University as too outspoken at this early stage of the English Reformation. The King, however, was pleased enough with the treatise to grant the author an annual pension of £10.

**9. Certain Discourses, written by Sir John Smythe, Knight: Concerning the formes and effects of divers sorts of weapons ... chiefly, of the Mosquet, the Caliver and the Long-bow ...** (London, 1590)

G.5.20

Where Ascham noted the relative 'discommodities of gunnes' in terms of cost, cumbersome and unreliability, by the 1590s the balance had shifted in their favour. In 1595 the government decided that the longbow would no longer be used for training infantry. Smythe, however, served as a spokesman for those who believed that archery was still the most effective form of artillery, declaring that: 'for the experience that both I and manie others ... have had of the small effect of weapons of fire in the field ... I will never doubt to adventure my life, or many lives (if I had them) amongst eight thousand Archers complet, well chosen and appointed ... against twentie thousand of the best Harquebuziers and Mosquetiers, that are in Christendome' (fol. 28v).

**10. Henry Hexham, Principles of the Art Military, Practised in the Wars of the United Netherlands ...** (2nd edition, Delft, 1642)

G.2.1

First published in 1637, this work includes illustrations demonstrating how to handle all the standard weapons of the period – pike, musket and caliver (a lighter variant of the musket). The musket was relatively simple in its 'matchlock' mechanism, relying on a smouldering match to ignite a priming charge of powder, but the dangers it presented in the hands of untrained men created an acute need for instruction and regular practice. Engraved charts of the kind supplied by Hexham were designed to aid the volunteer cap-tains who drilled the 'trained bands' of the militia.

Hexham also depicts the use of heavier forms of artillery and devices such as the gunner's quadrant, which was intended to improve their accuracy. Here the aim was to ensure that commanders understood the tasks carried out by specialist gunners.

**11. Thomas Digges, *An Arithmetical Warlike Treatise named Stratioticos*, 2nd edition (London, 1590)**

G.5.24

The usefulness of arithmetic and geometry in a military context – in the deployment of troops, the building of fortifications and the management of heavy artillery – was an important stimulus to the study of practical mathematics from the late sixteenth century onwards. Leonard Digges and his son Thomas included examples of surveying for military purposes in their ***Geometrical Practical Treatise named Pantometria*** (1571); Thomas went on to complete a companion piece in ***Stratioticos*** (1579) – ‘Compendious-ly teaching the Science of Numbers ... Together with the Moderne Militare Discipline’.

The work was originally dedicated to Digges' patron, the Earl of Leicester, who subsequently secured his appointment as muster-master for the English campaign in the Netherlands. It was thus appropriate that this second edition had appended to it ***A Breife and true report of the Proceedings of the Earle of Leycester for the reliefe of the Towne of Sluce ...***, defending the recently deceased Earl's reputation, along with ‘Ano-ther Addition concerning certain chiefe Officers of an Armie’, which Digges claimed contained knowledge gathered ‘not by superficiall Contemplations, but by actual Experience’.

In Digges' career, however, ‘Contemplations’ of an advanced kind played a major part: he had studied at Queens' College, Cambridge, associated with Dr John Dee, and paid particular attention to astronomy. As the list of ‘Bookes alreadie published by the Author of the Treatise’ indicates, he supplemented an astrological work of his father's with a description of ‘the frame of the World, according to the Copernican hypothesis’, and included with it the first known engraving to represent a potentially infinite universe.

**12. Thomas Styward, *The Pathwaie to Martiall Discipline. Now newly Imprinted ... Whereunto is added the order and use of the Spaniards in their Martiall affaires: which Copie was lately found in the Fort in Ireland, where the Spaniards and Italians had fortified themselves*** (London, 1582)

G.6.5

In dedicating his work to Elizabeth I's Admiral, Lord Howard of Effingham, Styward explains that it consists of ‘collections, gathered from most excellent souldiers, as Italian, Germaine, Swizzers, French and English, as otherwise of my little experience’. The advice of these experts is embodied in a series of woodcut illustrations, both within the text and as foldouts. Hale notes that it was rare in England for large numbers of men to drill together, with the result that ‘authors could indulge their taste for fanciful or complex evolutions with little fear of their ideas having to be put to the test.’ Many of the formations shown ‘could have no counterpart in practice.’

**13. Barnabe Rich, A Path-Way to Military practise** (London, 1587)

G.5.10

**14. Barnabe Rich, A Martial Conference** (London, 1598)

G.6.4

In contrast to someone like Digges, Rich was largely self-educated and a professional soldier from the time of his participation in Queen Mary's war with France (1557-58). He went on to fight in the Netherlands and in Ireland, where he eventually settled; nevertheless he kept in contact with literary friends in London who encouraged him to write and to publish. The resulting array of popular tracts included several on military subjects, along with romances, attacks on the vices of the age, denunciations of papistry and descriptions of Ireland.

His **Path-Way** describes the composition of an army, the duties of its different officers, and simple 'Stratagemes'. Appended to it is **A Kalendar containing the square roote of any number from 10. to 10000. Serving for the ordering of iust squares ...**, with a list showing how various numbers of troops could be drawn up in other formations – a handier equivalent of the foldout table of square measure supplied by Styward.

In 1598 Rich produced a humorous title-page for his **Martial Conference**, a dialogue 'betweene two Souldiers, the one Captain Skil ... the other Captaine Pill ... Newly translated out of Essex into English'. His preface addressed 'To the friendly Reader' explains how he has taken up the defence of the longbow more calmly than others have, and 'have likewise handled some other matters in a pleasurable sort, not of purpose to offend any man'. Since by this date a large number of works on military subjects had appeared on the English market, the move was probably a shrewd one. The public was appreciative and Rich eventually secured a small royal pension; in 1616 he was awarded the sum of £100, supposedly as 'the oldest Captain in the kingdom'.

**15. J. C[ruso] Militarie Instructions for the Cavallrie: or Rules and Directions for the Service of Horse ...** (Cambridge, 1632)

G.3.9

All these three works printed in Cambridge were produced by one man, John Cruso. Born in Norfolk, he was a member of Gonville and Caius College from 1632 and a Fellow there from 1639. In 1644 he was one of those ejected from the university on the grounds of their royalist sympathies. He practised law in the 1650s; after the Restoration of the Monarchy in 1660 he became vicar of a Radnorshire parish and Chancellor of the Diocese of St David's.

The first volume is the grandest of the three, with its folio format and splendid engraved illustrations (probably copied from a continental source). It was principally 'collected out of divers forrain authors ancient and modern', though supposedly brought in line with 'the present practise of the Low-Country Warres' (which the author had not experienced himself, though he knew a man who had).

The use of cavalry was not yet of much practical importance in England, though it was becoming so on the continent as the use of firearms (caliver and pistol) on horseback became more common. It was not until the civil wars in England in the middle of the century that the effectiveness of English cavalry was to be put to the test.

In the mean-time, the fashionability of horse-breeding and horsemanship as genteel pursuits made this an attractive book for a gentleman's library.

An inscription reveals that it is the copy presented by the author to Hamon l'Estrange, who was a historian and theologian and, more to the point here, a member of a prominent Norfolk family. He is listed as one of the dedicatees of item 17.

**16. Sieur du Praissac, The Art of Warre, with A short Method for the Easie Resolving of any Militarie Question propounded,** trans. by J. C[ruso] (Cambridge, 1639) G.6.2

This volume was printed in Cambridge, 'by Roger Daniel, Printer to that famous Univer-sitie', and bears the university's *imprimatur*, authorised by Ralph Brownrigg as Vice-Chancellor and by three heads of houses. It is also introduced by three commendatory poems, in the manner of the time: one by a sergeant-major and two by Fellows of Caius.

Du Praissac's original work had been published at Paris in the previous year. The translation is addressed 'To the Gentlemen of the Artillerie and Militarie companies in this kingdome, and particularly of that in Norwich', with the comment that 'These are times of action, and require every true hearted subject to imploy his talent for his Majesties service and the public safety'. The English Civil Wars began in 1642.

**17. The Complete Captain, or An Abbridgement of Cesars warres, with observations upon them; Together With a collection of the order of the Militia of the Ancients; and A particular Treatise of modern war: Written By the late great Generall the Duke of Rohan,** trans. by J. C[ruso] (Cambridge, 1640) G.5.30

This again was printed by Daniel and bears the university's *imprimatur*, in this case authorised by John Cosin (the Master of Peterhouse) as Vice-chancellor. It also has Norwich and Norfolk connections, as the dedication reveals.

The original author, Henri, duc de Rohan, had died in 1638. Where Du Praissac's work begins with practicalities and only in its final chapter considers 'the Grecian, and Romane Militia', this devotes a hundred pages to Caesar and other aspects of ancient history before arriving at a relatively short 'treatise of modern war'.

**18. Paule Ivie [Ive], The Practise of Fortification,** 2nd edition (London, 1597) G.4.11

This is the first book printed in England to be entirely devoted to the subject of fortification. The art of building defences to exploit or resist the strength of cannon was developed on the continent and only slowly taken up by the English; Henry VIII and his immediate successors recruited experts in such matters from Italy and Germany. Ive's material must have come, directly or indirectly, from a foreign source; it was originally published with his *Instructions for the warres* (G.5.15) translated from the French of 'William de Bellay' (Raimond Beccarie de Pavie, Baron de Fourquevaux) in 1589.



The dedication to Queen Elizabeth suggests that, while an island situation might seem to limit the need for such skills, England could altogether cease to fear her enemies 'if the rest of her chiefest havens and harbours were made as strong as some of them ... have latelie been'. Dover, in particular, had been the focus of a long-running Elizabethan construction project, which had drawn upon the skills of home-grown advisers such as Thomas Digges (see item 11).

**19. Sir Jonas Moore, *Modern Fortification: or, Elements of Military Architecture* (1673)  
G.5.27**

Moore was appointed to Charles II's Ordnance Office in 1665, during the Second Dutch War, and succeeded to the senior post of Surveyor General in 1669. He claims to have first assembled these 'precepts' for the instruction of his son (also Jonas), who was 'bred in the Office' and was briefly to succeed him as Surveyor.

As a result, his approach is straightforwardly practical: 'it is of more use to a Prince to have an Engineer that is knowing in the Measures of a Country, and in the Rates and Values of Works, than in one that can vapour, and talk of the Forms and Lines, and be ignorant otherwise: for one may lay down more Forts in an hour upon Paper, than all the Christian Princes joyned together shall make in Ten years' (p. 73).

**20. L'Abbé Du Fay and M. Cambray, *Veritable maniere de bien fortifier de Mr de Vauban*, new edition (Amsterdam, 1702)  
G.5.2**

During the later part of the seventeenth century, Louis XIV's France was recognised as the home of the most advanced military engineering and Sebastian le Prêtre, Sieur de Vauban (1633-1707), was its best-known exponent. He is said to have built or improved more than three hundred citadels and supervised more than fifty sieges. He was also a prolific author, though not all his works reached print; some, presumably, were kept for as long as possible from falling into the hands of enemies of France.

By the end of the century his fame was such that there was a great temptation for other authors to trade upon his name. This work appears to be an example of that practice. The printed 'Approbation' by the master himself, however, merely states that the volume contains nothing inconsistent with practice in the French royal service.

**21. M. Goulon, *Memoires pour l'attaque et pour la défense d'une place* (The Hague, 1706)  
G.5.34**

The publisher of this work comments that there are by now 'un assez grand nombre' of books on fortification available, but that this one is distinguished by special advice on the use of mines in sieges. It is typical of the kind of handbooks, mostly of French origin, that continued to be published up until Clarke's own day. He owned several other similar volumes.