

R. G. HAYCOCK, THE ROYAL MILITARY COLLEGE OF CANADA

Prince Maurice (1567-1625) and the Dutch Contribution to the Art of War

"The 16th century constitutes a most uninteresting time in European history;" so wrote a very famous military historian, Sir Charles Oman, in 1937.¹ Today, few would agree with him. The 16th century — for our purpose that century which started with the Dutch revolt in 1566 and ended a decade after the termination of the Thirty Years War in 1648 — was one of exciting, bloody, and fundamental change in the nature of war and, indeed, of society itself. In military terms, the early years were those in which the "Dutch model" of war was a primary contributor to the military revolution then in its formative stages in Europe. Most notable among the personages and events transforming war and society were the great Dutchmen William of Orange ("William the Silent," 1533-1584), his famous second son, Prince Maurice of Orange and Count of Nassau (1567-1625), and his royal cousins, William Louis and Johann of Nassau-Siegen.

This paper will not dwell on the debate currently swirling in historical circles about who and what caused the military revolution in Renaissance Europe; it will not examine the Dutch wars of independence against Spain,² nor will it relate to an analysis of the battles of the period; rather, it will focus on the contributions of Prince Maurice and his countrymen at the larger end of analysis — at

the intellectual and social end of the war: it will show that as representatives of Dutch culture, they were able to recognize and synthesize those new impulses in war and society stirring in Europe, and to use them in

preserving the United Provinces against Spain's overwhelming might.

To understand the contribution of Maurice, one must say a few words about warfare before his time. After the collapse of the Roman Empire in the fifth century A.D., like all the other aspects of western European civilization, war as an organized social phenomenon suffered substantial decay. Armed conflict reverted to near tribal violence. Strategy and tactics declined at the same rate as the infrastructure of the old Roman imperium.³ Nevertheless, by the ninth century, a new social order had emerged: feudalism had its power based on land, the locality, the church, and agriculture. The system was epitomized by the heavily armed mounted knight. He owed his special position as protector of society to his personal talent at arms. His domicile, the castle keep, provided succor and safety for those who traded freedoms for protection. Its high curtain walls were designed to prevent human assault. Siege warfare was the norm; battle, when it occurred, was chaotic and fluid; charger and knight dominated the battlefield. There was little discipline, control or technological innovation beyond man's muscle and individual talent with sword, axe or bow.⁴

In spite of the ascendancy of the well-armed aristocratic cavalry, a siege war and chaotic untrained swarms on the battlefield, any infantry force which could maintain its group cohesion found that it could resist the

mounted knight. However, the price paid was that battle formations became progressively more ponderous and solid, nearly square. Like a revolving door, pike formations pushed themselves around battlefields or hunkered down in bristling pike squares warding off heavy cavalry. The first and perhaps best of the pike formations (some pikes could be up to 18 feet) were the Swiss, whose representative unit was the resurrected Hellenic phalanx.⁵ And so, by the late fourteenth century, there was a tactical stalemate between offense and defence. Certainly, there was a singleness of mind in which the art of war stiffened. Moreover, there was a very limited appreciation of the abstract concept of strategy as statecraft and as a way of conducting military enterprise in support of it.⁶

Yet after the twelfth century there were signs of change. Mostly they came out of civil society. Monied economies, best typified in the Italian city states and their sophisticated trading networks, emerged. On land there were better roads and other advances, while on the sea there was a revolution in sailing boats' construction and navigation. All of this stemmed from the general rebirth of learning. The printing press and other technical innovations, especially gunpowder, jolted both land and sea warfare. These inventions led to the military revolution as much as they shook the entire social fabric of Western Europe.⁷ Furthermore, as William McNeill points out, developing monied economies and emerging middle classes commercialized war, to the point where mercenaries dominated the battlefield. Their reluctance to fight unless regularly paid or to die for someone else's cause severely hampered the course of battle.⁸

If, by the fifteenth century, early artillery

pieces could now blow down the high feudal castle walls, then innovative military architects could devise newer, low-walled, bastion-dominated fortifications as protection against gun fire. Often called the "trace italienne," this construction could withstand prolonged artillery bombardment. The net result was a resurgence of protracted siege warfare.⁹ Generally, typical war meant massive mercenary infantry formations, mostly pikemen, the deep order of battle, endless sieges requiring heavy artillery and much ammunition, stores, and time: and these only augmented the tactical and strategic stalemate of battle.¹⁰ Still, if synthesized, and articulated by the right men, the innovations of the Renaissance gave a tremendous potential to war. Such men were Maurice of Nassau and his countrymen.

Almost five centuries after Prince Maurice died (1625), Samuel Huntington pointed out that in seeking solutions soldiers are often caught between harsh military dictates on the one hand, and a myriad of social imperatives on the other.¹¹ This was no less true in Maurice's day. The Spanish threat to the United Provinces was a hard reality. That the Netherlands were undergoing the confusions of the Protestant Reformation, that the Low Countries had a particular geographical character, that they had a dynamic sea-trading and entrepreneurial middle class and a dominant form of non-absolutist civil government were just some of the social considerations faced squarely by Maurice. So, too, were the influences of past ideas, especially those of Machiavelli (1469-1527), who in the early sixteenth century rediscovered the virtues of the Graeco-Roman military system and training. Explicit in Machiavelli's writings, especially his *Arte della Guerra*, written in 1520, were the

concepts of a hierarchical chain of command, functionalism, and competence achieved by drill and training. The "villainous school of Machiavelli," as one contemporary called the Florentine's writings, also advocated armies recruited from the citizenry, because of their patriotic commitment.¹² The Princes of the House of Orange-Nassau were cultured men who had read the ancients as well as Machiavelli, and who knew of the power which the Roman system could achieve by its military discipline and social and state systems. But the Dutch princes were also aware that in the sixteenth century the mercenary character of contemporary armies gave a dubious quality to their performance in war. They knew as well that the new firearms technology — in spite of its immature development — had great potential.¹³ To Maurice and his kinsmen the key to the future was mixing the old and the new, the past and the present, to ensure survival of the United Provinces — themselves always outnumbered and frequently surrounded.¹⁴ Put practically, for land forces the Orangist princes understood that to achieve the greatest effectiveness from the tactical mix of muskets and pikes required a high degree of control which could only be achieved by a new style of combat leadership and infinitely more training. As it remains the case for soldiers today, the riddle for Maurice was how to achieve a balance of mobility and firepower to gain victory. Infantry could no longer be deployed in large mass formations like the Swiss pikemen or the troops of the cumbersome Spanish Tercio, lest stalemate or indecision result.¹⁵ Instead, there must be smaller units in linear formations containing men and officers who displayed a high degree of personal initiative and tactical and technical skills at the same time as conforming to an overall battle plan.

The answer of the Dutch leaders was a new type of professional soldier and combat leader who could combine martial knowledge with specific social and spiritual values.

Central to the understanding of the new Orangist soldier are the moral teachings of Justus Lipsius, philosopher and philologist of the University of Leiden from 1571-1591. As his sometime mentor, Lipsius had a direct influence on Maurice. This man provided the great Prince with the intellectual basis for the Dutch military reforms. Put in a nutshell, interestingly nearly three centuries before Clausewitz, who usually gets the credit, Lipsius maintained that war was not simply uncontrolled violence; rather it was a systematic use of force to achieve the goals of state.¹⁶ The ideal officer should not be motivated by glory or gain, but by the moral values of duty in the service of his community and by the need to be competent through example, drill and training. In short, social and moral factors rather than technological ones were the primary building blocks for the new Orangist armies.¹⁷ They provided the models as normative standards for all later European armies.

Thirty-five years ago, Michael Roberts, then professor of history at Queen's University Belfast, noted that the military revolution of the sixteenth century took place in four distinct areas: tactics, strategy, scale of conflict, and the impact of war on society.¹⁸ Some years ago, M.D. Feld of Harvard University added refinements of his own, by claiming that two additional factors characterize the emergence of modern armed forces in the sixteenth century. First was the substitution of technical proficiency for personal prowess, the second was the "transformation of military operations from a

self-liquidating form of venture capitalism into a systematically budgeted branch of public administration." ¹⁹ When both these assessments are combined with the ideas of Graeco-Roman traditions and the newly interpreted moral and social values of Machiavelli and Lipsius, one has the essence of the Dutch model.

The revolt of the Dutch possessions of the Spanish Empire began in 1566. In the following years there was much bloodshed and little progress in the fight for freedom.²⁰ The seventeen Dutch provinces — ten in the south, seven in the north — had great difficulty overcoming the weakness of their hastily improvised and ill-disciplined forces which were made up of a motley mixture of local militia and mercenary soldiers. There were also other serious impediments to success: the feisty particularism of each province, the inevitable internal hatreds between the Catholics and Protestants of the Low Countries, and the inability to finance war against the world's leading superpower, Spain, all added to the insurgents' problems. Spanish generals in the Low Countries, in particular first Alva, then the Duke of Parma, were among Europe's finest soldiers, as indeed Spanish armies, typified by the lethal "Tercio," were among the best of the times. Slowly but surely the Spaniards put down the rebellious Dutchmen by great slaughter and siege.²¹ By 1587, all that remained in armed revolt were areas in the north, primarily Holland, Zeeland, and Utrecht.

However, as is often the case at the moment of crisis, the hard-pressed Dutch Republic was substantially aided by larger events. First England, fearing a complete Spanish domination of her vital interests in the Low Countries, placed her fingers on the scale in

the form of troops and money. Second, Philip II sent his great Armada on its disastrous voyage to invade England, and Parma re-directed his troops from the United Provinces front to Dunkirk, expecting to board them on the Armada's ships. The defeat of that Spanish naval force in 1588 cost Spain the strategic control of the seas. Again, all set to move against the United Provinces, Parma was ordered by his king into France to fight on the Catholic side of that separate dynastic struggle.²²

All of this meant a fateful loss of Spanish strategic initiative in the Netherlands— loss of sea control, inability to resupply easily, failure to maintain goals and to concentrate forces. For the twenty-one year old Prince of Orange, on the other hand, these events presented an opportunity to seize the strategic occasion. More immediately, Maurice had time to recoup his decimated and beleaguered forces behind his strategic redoubt, that low land area of Holland protected from Spanish penetration by the North Sea and the Zuiderzee to the west and north, and rivers and marshy country to the south and east. However, none of the necessary rebuilding was to come easily, and for Prince Maurice there would be many imperatives to reconcile.²³

One of the overriding ones was political. For nearly his entire career Maurice was subject to some form of civil control. To a large degree this was the product of the unique political and military conditions of the Dutch Republic. While Maurice was at the same time *Stadtholder* in five of the provinces, and after 1588 Admiral-General of the United Netherlands as well as Captain-General of the troops in Flanders and Brabant, he was closely scrutinized by admiralty boards and

especially by the Council of State, a special committee of the United Provinces' States-General. These bodies co-ordinated military and naval affairs and carefully watched over operations, much as the Ephors had carefully scrutinized Spartan generals in ancient Greece. Maurice accepted this because he knew that success would be dependent on utilizing a wide variety of local resources.²⁴ Put in contemporary terms, Maurice and the Dutch burghers had a concept of national security which transcended military force and sought strength by tapping all aspects of the state.

Much of Maurice's synthesis can be seen in a strategic assessment of the goals of the conflict. Some historians have claimed that Prince Maurice of Orange was nothing more than a tactical military innovator, far too cautious and limited in his strategic horizons.²⁵ However, evidence does not support this judgement. Indeed, one could make a case that Maurice climbed above this level even into the heights of grand strategy, if one accepts the usual definition that grand strategy is more than just a collection of battles, but the employment of all facets of society in peace and war to achieve the goals of the state. That goal was to preserve the independence of the Dutch Republic. To discerning leaders such as Maurice, saddled as he was with finite human and material resources, it meant having only limited objectives, primarily the recovery of the seven provinces. The astute use of state finances, given him by a viable and growing Dutch sea-trading economy, and positional siege warfare epitomized by the use of new technologies in gunnery, logistics and engineering, threatened neither his restricted human resources nor his financial base so vital to his enterprise. He avoided battle,

fighting only twice (Turnhout 1597 and Nieuwpoort 1600) in two decades. He exploited his interior lines of communication, especially water transport, for he knew that he could not fight well beyond them.²⁶ All of this indicates Maurice had a larger view of war than just good tactics.²⁷ There can be no better way to underscore this than to look at his reforms.

The revolt of the Netherlands, as Geoffrey Parker says, is really the quintessential expression of the interplay between the medieval and the modern, and between continuity and change which brought about the military reformation.²⁸ The increasing importance of firearms, the spread of the Italian pattern of military architecture, the ascendancy of infantry over cavalry, and above all the rising cost of the new technologies and state organizations were major concerns for Maurice.²⁹ But the immediate question for the prince was, how does one defeat the world's greatest military power, Spain? To answer this question, one needs to look at how he thought about infantry and siege warfare, and their relation to society.

Foot soldiers, especially those armed with "the noblest of weapons," the pike, and with the expensive and hard-to-make arquebus were indeed costly.³⁰ Socially and economically Maurice, even more than his contemporaries, had to rely on mercenary soldiers. This reliance on foreigners, mostly Swiss, English, Scots, German, French, and Frisian, did not mean that Dutchmen did not fight for their own freedom; they certainly did, and Maurice always had a corps of tough Netherlanders as the nucleus of his forces. But maritime trading and business interests had first call on the local talent. This being

the case, Maurice had to use mercenaries in a new way that would overcome the questionable and dangerous loyalty of rented troops if they were not paid.³¹ Maurice's answer was to recruit mercenaries who were "well-chosen, well-fed and well-paid." High and regular wages guaranteed him content and competent soldiers. The flourishing Dutch economy gave him the financial means to do so.³²

But Maurice's troops were far more than simply highly paid. They were placed under excellent leadership and their numbers and formations were modified to reflect the ability of the state to pay and to achieve maximum flexibility and firepower on the battlefield. Instead of the heavy Spanish Tercio of 25,000 men, Maurice's were made much more manageable, finally stabilizing because of hard experience in linear battalions of about 600. To take advantage of firepower, always the surrogate of manpower, Dutch units spread out so that all men in the ranks could shoot. Far wider than deeper formations (a ratio of about 5 to 1) allowed all musketeers to fire into the opposing square while the heavy Spanish Tercio could reply only with the front two or three ranks.

What made all of this possible for the Dutch was discipline in the ranks. In military terms, discipline was instilled in the ignorant soldier by repetition, conformity, and simplicity. Daily drill routines were the organizational vehicle which made their gunpowder technology work for Orangist armies. The model for the Dutch leaders was the Roman cohort legion. They purposely designed standard marching, manoeuvring, and weapons handling exercises which produced both cohesive and effective units. To make it

easy for mercenaries and the ill-educated to understand, orders were given in Dutch, French and English, and movements were kept simple and repeated often. Many munitions were standardized and soldiers exercised daily with their arms. The best example of Dutch drill was Jacob de Gheyn's illustrated weapons manual, *Wapenhandelinge*, of 1607. It was the first modern drill book and the progenitor for every instructional military pamphlet thereafter.³³ It was widely read and emulated in the rest of Europe. New discipline and easier teaching techniques allowed the Dutch to formulate and use the "counter march" drill on the battlefield. Suggested to Maurice by his royal cousin, William Louis in 1594, it was a tactical manoeuvre to maximize the firepower of the musket. Upon firing, the first soldier moved to the rear of his five-man file to reload while the second man fired, after which the move was repeated by all of the troops. A continuous rain of shot was thereby sustained. It proved deadly to Spanish troops whose fixed square formations could only utilize their front rows of musketeers.³⁴

While Lipsius had pointed out that "Nature brings forth valiant men but good order through industry makes more," the philosopher also inculcated in the young Maurice both at the University of Leiden and through his published works, *Politicorum Liber Sex* (1589) and *De Militia Romana* (1595), the ancient notions of strength derived from commitment, a sense of duty and better education. These would provide the leadership for the new well-drilled and well-paid Dutch forces.³⁵ Consequently, the social and moral complexion of the Orangist armies was higher than most other formations whose recruits were often the "scum of the

earth." Furthermore, Maurice was well aware that the type of warfare which he had to fight, with its emphasis on siege rather than battle, needed conviction, organization, and endurance to sustain. This "guerre aux vaches," as it was then called (today it is dubbed "low intensity conflict") had to have strong leadership to execute and control. Consequently, Maurice's new military academy established at Siegen became the institution which inspired commanders. Talent, not birth, made officers. Maurice had the ratio of officers to men increased. There were also far more non-commissioned officers in the Dutch "escuadra" and "ascuadron" than in Spanish ones, and the units were much smaller and easier to manage.³⁶ In all, the Maurician tactical innovations turned battle formations into a living organism — a more cohesive and responsive whole which transcended the usual collection of immobile heavy infantry or "bellicose individuals of the feudal array."³⁷ Mass indoctrination, command and control in armies was now possible.

Siege operations were the normal military activities of the Dutch revolt. Being expensive and labour intensive, "fortress" war had to be conducted quickly and well to be successful. Between 1589 and 1609 Maurice won over thirty siege-type engagements. His innovations were masterly and instructive. Typically, he tapped the best civilian engineering and mathematical authorities around. While a student at Leiden, the young prince had been impressed by Simon Stevin of Bruges, the great Dutch mathematician who had also written widely on fortifications. This experience made Maurice "profoundly aware of the importance of the scientific study of engineering."³⁸ Consequently, his logistical preparation for

siege, whether investment or defence, took on a whole new dimension. The cheaper and faster water transportation was used where possible to move mountains of siege supplies and munitions. Peasants were no longer hired to dig entrenchments or put up fortifications. The soldiers did it and were highly paid to do so. Soon Dutch forces contained specific service corps for such engineering work. Moreover, for the first time since the days of the Roman legions the shovel was made a required part of every Dutch soldier's equipment. The army, including the officers, were part of the labouring siege train. Mathematical knowledge, as applied to gunnery, the digging of saps, mining and counter-mining, mapping and surveying, simply made Maurice's siege techniques better than his enemies'.³⁹ All of this was also very complicated. Fortress warfare demanded a combination of technical knowledge, bureaucratic practice and financial muscle. Most of it could only be obtained in the civil circles of the United Provinces. Maurice's genius was that he recognized he needed this "bourgeois-capitalist society" and he did not hesitate to use it.⁴⁰

One cannot leave the Maurician model of war by only assessing his specific military innovations, the nature of his state, or the highly successful business practices of the Dutch merchant. There are some other important considerations. While one does not want to open a Pandora's box of controversy by saying that Protestants make better soldiers than Catholics, religion was a major influence. Put in a very basic way, the Netherlands' military response to Spanish domination combined the ancient desire to be free with the newer fear that continued Hapsburg control would violently repress the

widespread and growing Dutch Protestantism.⁴¹ Beyond that, there may be an argument that Protestantism's very basis is freedom to choose and to experiment. No doubt the United Provinces' enthusiasm to sustain war against the world's superpower, against such overwhelming odds and even in spite of the internal divisions such as the deviance of the ten provinces to the south, found an added conviction in the pietist and evangelical character of Calvinism. Certainly sound business practices and an association with the rising urban middle class were not antithetical to Protestantism; neither was the concept of the pre-election of the few and a belief in heavenly salvation based on exemplary earthly performance. As Will Durant has observed, "men who chose their own pastors soon claimed to choose their governors and the self-ruled congregation became the self-ruled municipality."⁴² Calvinists believed in discipline and duty, sound organization and education, ideas not unfamiliar to Maurician military organization. Calvinists were also fairly hardened to suffering and adversity. One should also note their more ready tendency to accept into the inner circle those from all classes. Calvinism was much more representative and managerial-oriented than the hierarchical and liturgical papal model. For Maurice's armies perhaps one could translate this as the recruitment of men not because of who they were, but because of what they knew and how well they did it.⁴³

Maurice of Nassau is one of the most important of those individuals who made the military revolution of the Renaissance. His historical reputation might have been larger sooner, had the great captain preferred offensive battle or carved out a large European empire such as those who later

emulated the Dutch model. Gustavus Adolphus, Cromwell, Frederick the Great and Napoleon were such men; Maurice was not. Between 1588 and 1609 he fought only two infantry battles but over thirty sieges, and he only sallied out of the United Provinces once in force. As a tactical and logistic innovator, he gave the revolution "counter march" and the drill books; he exploited the new fire power of muskets and siege artillery; he made formations more useful and flexible by reducing their size; especially to employ firearms technology, he added an all-dimensional enhancement to siege war, proving that the Italian trace could be overcome by good logistics, good sappers and good gunners. But these were all purely field contributions. Others were made on a higher plane.

One of the major ones was that Maurice appreciated the financial, sociological and psychological faults of the traditional mercenary force. He corrected them by good and regular wages, training and discipline. With the absolute need to overcome a poverty of manpower by the use of gunpowder technology, Maurice recognized the imperatives of control through leadership and skill. Often criticized as pedantic and far too cautious or merely not reaching beyond the tactics of defence, Maurice had a far larger strategic scope than his detractors claim. First and fundamentally, he never attempted to do what the nation did not want or could not afford. He was decisive in leadership even to the point of executing his life-long friend van Oldenbarnevelt (1619), when the latter's action threatened to fracture the fragile national infra-structure. Maurice's commission was to ensure the survival and safety of the United Provinces. Nothing more and nothing less.

War to Maurice was not just the push of pike or the fall of shot. It was moral and social: war was an enterprise of teamwork and talent. So he listened to his cousins Johann and William Louis, to Lipsius and to Stevin; he read his *Aeolian* and *Vegetius*. As Admiral-General and Captain-General or as the Prince, he realized that he was just one aspect of the resources of the state, not all of it. The crises demanded unity and all-encompassing use of each resource, civil, military, moral, physical, and technical. To return to Samuel Huntington's assessment at the beginning of this paper about the military and social imperatives, Maurice's greatest strength was that he understood both of them; he could also reconcile their disparate ends and finally synthesize them in a mixture of the old and the new that was to change warfare forever.

While Maurice died in 1625, the Dutch wars continued for many more years. To a large extent, these events were dwarfed by the even more violent and destructive Thirty Years' War (1618-1648) then taking place mostly in Germany. Fuelled by the excesses of religious fervour and dynastic and hegemonic clashes, the latter conflict was profoundly influenced by the Dutch model, especially so in siege and infantry operations. Many of the princes of Europe sent their sons to study at the famous Dutch military academy at Siegen. Famous soldiers like Gustavus Adolphus of Sweden, and his able lieutenant Jacob de la Gardie, who had learned his profession in the Netherlands, were steeped in the technical and tactical system of Maurice.⁴⁴ Interestingly, even Gustavus Adolphus' nemesis of the Thirty Years' War, Albrecht von Wallenstein, established with Hans de Witte, a Flemish

entrepreneur doing business in the Holy Roman Empire, a merger of commercial and military enterprise based on what worked. It was reminiscent of Maurice's relationship with Dutch businessmen, although the Austrian had far fewer scruples than the Dutchman.⁴⁵

Louis XIV's brilliant general Viscount Turenne, and Frederick William of Prussia, owed a great deal of their success to the lessons of the Dutch army experience. The philosopher Descartes actually settled in Holland initially because he saw service in Maurice's army not only as a way to examine the best exemplar of the military profession, but "to study the various customs of men in their most natural state."⁴⁶ Indeed, on a more general plane, while the Dutch wars raged on, it became close to conventional wisdom that European gentry learned their martial skills by service in the Dutch armies. There can be little doubt, for instance, that later forces such as Cromwell's New Model Army had gained much from war in the Low Countries, especially the aspects of Calvinistic discipline and moral force.

The Dutch model was Europe's best example of an integrated civil-military system of national security, achieved through a combination of technical and tactical excellence mixed with economic prosperity. Consequently, it was emulated by more than just European soldiers. Such was the young Russian Czar, Peter Alexeievitch, later called "Peter the Great." In the summer of 1697 he and his "Great Embassy" spent months studying fortifications and working with the Dutch shipwrights and sea captains of the Dutch East India Company (established in 1602). One of his entourage, Prince Alexander of Imeritia, was dispatched at the

same time to The Hague to learn all he could about artillery. And so it was the Dutch experts that helped wrench Russia into the modern age.⁴⁷

One could go on to show how the Dutch model influenced later generations in the study of war, all the way through Montecuccoli, Marlborough and Frederick the Great. The emphasis on linear deployment, firepower and manoeuvre with small units reminds one of the British development of the "thin red line" which proved so deadly for Napoleon's battle columns. "Guerre aux vaches" held remarkable similarities to the tactics of the English, Spanish and Portuguese "Guerrillas" during the Peninsular War. Napoleon himself was well aware of the Dutch contributions. In the nineteenth century, that famous Prussian thinker, Carl von Clausewitz — today still greatly admired as a seminal military theorist — shared with Maurice and Lipsius a strong belief in the moral and psychological factors of conflict. That war was a political phenomenon rooted deeply in social values was something that all three understood in spite of the two hundred years separating them.⁴⁸ Today, few students of war, especially those concerned with the evolution of the western tradition of conflict, have not read about the Dutch model. For cadets of the Royal Military College of Canada, for instance, lectures on Prince Maurice and his contemporaries are standard fare in theories of war courses. There can be little doubt that Dutch martial culture has left an indelible mark.

REFERENCES

¹ Sir Charles Oman, cited in Geoffrey Parker, *Spain and the Netherlands 1559-1659: Ten Studies* (London:

Collins, 1979), p. 86.

² The historical debate has many sides and as many particular advocates. Primarily, it centres around four authorities. First, Sir Charles Oman, in *A History of the Art of War in the Sixteenth Century* (London: Methuen, 1937), suggested there was little interesting in the period; then in the 1950s Michael Roberts in *The Military Revolution, 1560-1660* (Belfast: Boyd, 1956) claimed that in the century of his study Europe witnessed a change in strategy, tactics, the scale of war and its impact on society. Beginning in the 1970s Geoffrey Parker has challenged this and asserted that the revolution began in the Hapsburg lands and in France in the earlier period, then spread westwards in the sixteenth century and finally to the east in the seventeenth. See Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800* (Cambridge, CUP 1988). Recently, Jeremy Black's short *A Military Revolution? Military Change and European Society, 1500-1809* (Atlantic Highland's Humanities P, 1991) contends that if there was a revolution, it took place in the century before 1550 and again after 1660.

³ Sir Charles Oman's classic work on the age is *A History of the Art of War in the Middle Ages*, 2 vols, (London: Methuen, 1924). There are many surveys of the period. See R.A. Preston *et al.*, *Men in Arms: A History of Warfare and its Interrelationships with Western Society*, 4th ed. (New York: Holt Rinehart & Winston, 1979), chapters 5 and 6. Not all agree that it was completely arid. See John Beeler, *Warfare in Feudal Europe, 730-1200*, (Ithaca: Cornell U P., 1971), especially his concluding chapter, and Philippe Contamine, *War in the Middle Ages*, Trans. Michael Jones, (London: 1984).

⁴ Sir Michael Howard has a convenient assessment of the "War of the Knights" in his *War in European History* (Oxford: OUP, 1976), 1-19.

⁵ Douglas Miller, *The Swiss at War 1300-1500* (London: Osprey, 1979), 3-4 discusses the Landswehr and Landsturm of the Swiss. Alistair John Kirk, *The Evolution of Early Modern Infantry*, Master of Arts Thesis, The Royal Military College of Canada, 1988, 11-39 gives a good survey of the Swiss evolution.

⁶ Preston *et al*, *Men in Arms*, 74. The authors make the point that while the art of war had not stagnated

because there was a single class "interested in preserving a mode of combat suited to its own abilities and position," nevertheless, they admit that "medieval thought was not concerned with 'progress' but with stability and order," (45-6; 58).

⁷ Michael Howard, *War in European Society*, 38-47. Lord Howard points out how the advances in seafaring, "Protestantism, patriotism and plunder" (43) caused extra-European economic and political expansion which, as in the Dutch case, in turn provided the wealth to carry on their war of liberation against Spain. Also see: Martin van Creveld, *Technology and War. From 2000 BC to the Present* (New York: Free P, 1989), especially 51-66 and 125-136, for the central role played by seafaring and naval war capabilities.

⁸ William H. McNeill, *The Pursuit of Power: Technology, Armed Force and Society since A.D. 1000* (Chicago: U of Chicago P, 1982), 63-116. Here McNeill concentrates on the "business" of war in Europe. Anthony Mackler, *Mercenaries*, (London: Macdonald, 1969), chapters 1 to 4 and Geoffrey Trease, *The Condottieri* (London: Thames & Hudson, 1970) offer good analyses of mercenary warfare.

⁹ Robert L. O'Connell, *Of Arms and Men: A History of War, Weapons and Aggression* (Oxford: OUP, 1989), 121-2, 132, and for an overview of siege war, see Christopher Duffy, *Siege Warfare: The Fortress in the Early Modern World, 1495-1660* (London: 1979).

¹⁰ Sir John Hackett, *The Profession of Arms* (London: Sidgwick & Jackson, 1983), 25-59.

¹¹ Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, Mass.: Harvard UP, 1957), 2.

¹² F. Strada, *De Bello Belgico: The History of the Low Country Warres*, trans. Sir Robert Stapyton (London: 1650), Bk. II, 46; Niccolo Machiavelli, *The Art of War*, trans. E. Farnsworth, 1521 (New York: Bobbs-Merrill, 1965); and Gene A. Brucker, *Renaissance Florence* (Berkeley: U of California P, 1985), 278-280. The best short article on Machiavelli is Felix Gilbert's "Machiavelli, The Renaissance of the Art of War," in Peter Paret, ed., *Makers of Modern Strategy from Machiavelli to the Nuclear Age* (Princeton, N.J.: PUP, 1986), 11-31.

¹³ J.R. Hale, *War and Society in Renaissance Europe*

1450-1620 (London: Fontana, 1985), 56-68.

¹⁴ Simon Adams, "Tactics or Politics? The Military Revolution and the Hapsburg Hegemony, 1525-1648," in John A. Lynn, ed., *Tools of War: Instruments, Ideas and Institutions of Warfare, 1445-1871* (Chicago: U of Illinois P, 1990), 11-69.

¹⁵ Kirk, *The Evolution of Infantry*, 11-69.

¹⁶ Gunther Rothenberg, "Maurice of Nassau, Gustavus Adolphus, Raimondo Montecuccoli and the Military Revolution of the Seventeenth Century," in Paret, ed., *Makers of Modern Strategy*, 35.

¹⁷ J. R. Hale, "Armies, Navies and the Art of War," chapter 7, in vol. 3 of the *New Cambridge Modern History* (Cambridge: CUP, 1968), 178-194, and Howard, *War in European History*, 57.

¹⁸ Michael Roberts, *Essays in Swedish History* (London: 1967), 195-225, cited in G. Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800* (Cambridge: CUP, 1988), 1, 2, and fn. 3.

¹⁹ M.D. Feld, "Middle Class Society and the Rise of Military Professionalism: The Dutch Army 1589-1609," in *Armed Forces and Society*, vol. 1, 4 (August 1975), 419.

²⁰ Three of the classic studies of the Dutch revolt are Pieter Geyl, *The Revolt of the Netherlands 1555-1609* (London: Ernest Benn, 1985); Geoffrey Parker, *Spain and the Netherlands, 1559-1659: Ten Studies* (London: Collins, 1979); and his *The Dutch Revolt* (Ithaca: Cornell UP, 1977).

²¹ A good contemporary account comes from the English mercenary Sir Roger Williams, who fought on both sides at various times through the Low Countries wars. See his *A Brief Discourse of Warre: The Works of Sir Roger Williams (1590)*, Hohn Evans ed. (Oxford: Clarendon P, 1972) and Sir Roger Williams, *The Actions of the Low Countries (1618)* (Ithaca: Cornell UP, 1964).

²² Geoffrey Parker, *The Army of Flanders*, 241-251, covers the events, including English and French involvements.

²³ Rothenberg, in Paret, 37-40, and Howard, *War in*

European History, 36.

²⁴ Feld, 419-423, and Kirk, 94.

²⁵ Roberts, *Essays in Swedish History*, 61-62; Geyl, 244; Rothenberg, in Paret, 37.

²⁶ For a survey of these events see R. E. and T. N. Dupuy, *The Encyclopedia of Military History from 3500 B.C. to the Present* (New York: Harper & Row, 1986), 2nd ed. rev., 448-487, and *The New Encyclopedia Britannica*, 15th ed., vol. 7, 955-6.

²⁷ Sir Basil Liddell Hart's discussion of "The Theory of Strategy," in his *Strategy* (New York: Praeger, 1972), 2nd ed. rev., 333-346, is seminal. Hart says that "Grand Strategy" is the co-ordination and direction of "all of the resources of a nation, or a band of nations towards the attainment of the political object of the war" (336).

²⁸ Parker, *The Army of Flanders*, xii.

²⁹ Hale, *War and Society in Renaissance Europe 1450-1620*, 46.

³⁰ See Clements Markham, *The Fighting Veres* (London: 1888), 57. Most armies of the time had about 60% of the formation as "shot" (arquebusier or musketeers) and the rest pike of some sort, a ratio which attests to the increasing importance of firepower. See the personal account of the English mercenary Sir Roger Williams, written in 1590: *A Brief Discourse of Warre*, 20-38. The Veres brothers, Horace and Francis, were also English mercenary "captains" fighting for the House of Orange.

³¹ Between 1572 and 1607 the Spanish, who never solved the mercenary problem, faced twenty-one mutinies of their own troops over lack of pay. Cf. Parker, *The Army of Flanders*, 185-207, and Jan Wijn, "Military Forces and Warfare 1610-1648," in *New Cambridge Modern History*, vol. 4, 209.

³² Rothenberg in Paret, 41, and Geyl, *Revolt of the Netherlands*, 235.

³³ The proper title is *Wapenhandelinghe van Roer's Musquetten ende Spiessen, Achtervolgende de Ordre van Syn Excellentie Maurits, Prins van Orangie*, published in The Hague in 1607. See McNeill, *Pursuit*

of Power, 218 fn. 9, and 134 fn. 13.

³⁴ E.M. Lloyd, *A Review of the History of Infantry*, 100.

³⁵ Kirk, 93-94 and Rothenberg in Paret, 41-42.

³⁶ Archer Jones, *The Art of War in the Western World* (New York: OUP, 1987), 221-222. His chapter 4, "The New Tactical Synthesis in Transition, 1600-1700," nicely summarizes the changes in warfare. See also Parker, *The Army in Flanders*, xv; the former had twenty-five men, the latter was a "large body."

³⁷ Hackett, *The Profession of Arms*, 59, and Kirk, 96.

³⁸ Geyl, *Revolt of the Netherlands*, 220 and Rothenberg in Paret, 43.

³⁹ J. R. Hale, "Armies, Navies and the Art of War," chapter vii in vol. 3 of the *New Cambridge Modern History* (Cambridge: CUP, 1968), 178-179. Martin van Creveld's chapter, "Siege Warfare," in *Technology in War* is a good survey of siege operations and the surrounding influences in the sixteenth and seventeenth centuries (99-109).

⁴⁰ Van Creveld, *Technology and War*, 107-108.

⁴¹ See Parker, *The Army of Flanders*, 62-79 and 233-255. Parker's *The Thirty-Years War* (New York: Military Heritage Press, 1984), chapter 1, gives most of the "religious" politics of the period since the rise of Protestant power.

⁴² Will Durant, *The History of Civilization*, vol. 6, *The Reformation*, chapter 21, "John Calvin," (New York: Simon & Shuster, 1957), 489.

⁴³ For a comment on the "principles of the reformation," see J. L. Dunstan ed., *Protestantism* (New York: Braziller, 1962), chapters 2 and 3, where the primacy of freedom and responsibility and the changing human condition within Protestant thought are discussed.

⁴⁴ Rothenberg in Paret, 46.

⁴⁵ McNeill, *The Pursuit of Power*, 120-122.

⁴⁶ Felix Gilbert ed., *The Norton History of Modern*

Europe (New York: Norton, 1970), 328-333; Geyl, *The Revolt of the Netherlands*, 244; Hale, in the *New Cambridge Modern History*, vol. 3, 177-196; Feld in *Armed Forces in Society*, vol. 1 (no. 4, August 1975), 429; and Parker, *The Military Revolution*, 77.

⁴⁷ Robert K. Massie, *Peter the Great: His Life and*

World (New York: Knopf, 1980), 168-203.

⁴⁸ Peter Paret, "Clausewitz," in *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, 186-213.