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Recalculating French Army Growth during the *Grand Siècle*, 1610–1715

John A. Lynn

By the end of the seventeenth century, European warfare had become an affair of giants, as colossal armies battled against one another. France boasted the greatest of these Goliaths, a force which totaled as many as 400,000 soldiers, at least on paper. It was the largest and hungriest institution maintained by the state. That this Titan existed by 1700, no one denies; but the pattern and timing of its growth and its final dimensions remain matters of debate. This article presents a new and more rigorous calculation of French army expansion during the period 1610–1715.

For over a century, historians divided French military expansion into two stages. First, in order to challenge Spain, Richelieu and Louis XIII assembled an army of unprecedented size in 1635. Totaling 150,000 or more, this force was at least twice as large as any previous wartime military maintained by the French monarchy. A second phase of growth followed the military and administrative reform associated with the first decades of the personal reign of Louis XIV. Troop strength reached 280,000 during the Dutch War (1672–78) and hit 400,000 in the War of the League of Augsburg (1688–97), continuing at that level for the War of the Spanish Succession (1701–14).

Since the mid-1950s, proponents of a Military Revolution in

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French Historical Studies, Vol. 18, No. 4 (Fall 1994) Copyright © 1994 by the Society for French Historical Studies early modern Europe, most notably Michael Roberts and Geoffrey Parker, have insisted that the need to raise and support armies larger than ever before called for administrative, fiscal, and governmental reforms.¹ This side of the Military Revolution has attracted historians and social scientists concerned with state formation, most notably Charles Tilly, who writes, "As they fashioned an organization for making war, the king's servants inadvertently created a centralized state. First the framework of an army, then a government built around that framework—and in its shape."² Of course, reason dictates that in order for military necessity to have brought on government reform, the growth of the army must have predated that reform, not the other way around.

Recently published revisionist scholarship jettisons this longstanding portrayal. The most serious attack denies military growth prior to 1659, while asserting that growth after that date came as a byproduct of social stability under Louis XIV. David Parrott has played a key role in questioning substantial military expansion before the Peace of the Pyrenees.³ Though not the first, he has been the most effective in arguing that very little actual reform occurred during the war years of the Richelieu era.⁴ Concerning army growth, Parrott states that the historical thesis that Richelieu instituted a virtual administrative revolution is "underpinned by an assumption that the size of the army increased massively from 1635. But this assumption proves . . . untenable."5 His research has already influenced others, including Jeremy Black, who praises it as "a fundamental work of revisionism."6 In his recent A Military Revolution? Black embraces Parrott's arguments, putting them in even stronger terms than Parrott intended. Black disputes the concept of a Military

1 Michael Roberts, The Military Revolution, 1560–1660 (Belfast, 1956); Geoffrey Parker, "The 'Military Revolution' 1560–1660—a Myth?" Journal of Modern History 48 (June 1976): 195–314; and idem, The Military Revolution: Military Innovation and the Rise of the West, 1500– 1800 (Cambridge, 1988).

² Charles Tilly, The Contentious French (Cambridge, Mass., 1986), 128.

³ David Parrott, "The Administration of the French Army during the Ministry of Cardinal Richelieu" (Ph.D. diss., Oxford University, 1985).

4 For some examples of works which detail the ineffectiveness of reform before 1659 and/or argue that military growth was limited before the personal reign of Louis XIV, see the following: Patrick Landier, "Guerre, violence, et société en France, 1635–1659" (Doctorat de troisième cycle, Université de Paris IV, 1978); Jonathan Berger, "Military and Financial Government in France, 1648–1661" (Ph.D. diss., University of Chicago, 1979); Bernhard Kroener, Les Routes et les étapes. Die Versorgung der französischen Armeen in Nordostfrankreich (1635–1661), 2 vols. (Münster, 1980); and Ronald Martin, "The Army of Louis XIV," in The Reign of Louis XIV, ed. Paul Sonnino (Atlantic Highlands, N.J., 1990).

5 Parrott, "The Administration of the French Army," iv.

6 Jeremy Black, A Military Revolution? Military Change and European Society, 1550-1800 (Atlantic Highlands, N.J., 1991), 98.

Revolution, particularly as originally proposed by Michael Roberts, who assigned it to the century 1560–1660. Crucially, Black ascribes all French military growth to Louis XIV's personal reign. The fact that he shifts the time period away from Roberts's original dates is of little consequence in itself, because others had done that before. However, much more essential, Black insists that the military expansion occurring after 1660 came only as the consequence of increased government capacity made possible by social and political compromises hammered out under Louis XIV. Therefore, Black reads out the army and war as *causes* of political change and instead reduces them to mere *effects*.

While controversy over the Military Revolution draws attention to military expansion during the mid-seventeenth century, André Corvisier requires historians to look again at the army that fought the last war of the Sun King. For years Corvisier has argued that the forces mobilized to fight the War of the Spanish Succession approached in size those raised by revolutionary France nearly a century later. Recently he restated this thesis in the first volume of the new Histoire militaire de la France.⁷ He constructs his argument by attaching additional contingents, including provincial militias and, strangely, the navy, to the 300,000 French troops he claims for the regular army. Corvisier's controversial mathematics seems to flow from his resolution to demonstrate both that a high percentage of the French male population was involved in the profession of arms and that a patriotic wave à la 1792 engulfed the France of the Sun King. In this last concern he follows the lead of Emile G. Léonard, who posited this view in the 1950s.8

Revisionist challenges to traditional conceptions of army growth as they relate to the Military Revolution, state formation, and a "patriotic" effort under Louis XIV make a recalculation of military expansion necessary. Until the last few years it was acceptable to speak of army size by appealing to official financial and military statements, *états*, but today an evaluation of army size demands a new methodology employing a wider range of source material.

Methodology: Distinctions and Sources

An effort to set the record straight must be very careful concerning exactly what is to be counted and the kinds of sources to be em-

⁷ Philippe Contamine, ed., Histoire militaire de la France, vol. 1 (Paris, 1992), 531.

⁸ Emile G. Léonard, L'Armée et ses problèmes au XVIIIe siècle (Paris, 1958).

ployed. Trying to fix army size involves a good number of technical points, but many of them come down to not comparing apples with oranges. The first and the most basic difference to bear in mind is that between a field force and a state's entire army. A single field force, usually assembled in one location under one commander, only constitutes part of the total armed might of the state, which may have more than one army on campaign at the same time, while committing still other troops to garrison duty. As strange as it may seem, historians are forever muddying the distinction between the troops marshaled for a single battle and the army as a whole.

This leads to the question of who should be counted as part of an army. Obviously, field armies and garrison forces composed of regular troops must be included, but who else? Local and provincial militia who stayed at home to guard their towns and man their walls but were not supported by the monarchy and did not necessarily serve full time ought not to be tallied as royal troops. However, militiamen who after 1688 served the king at the front in their own or regular battalions belong in the totals presented here. Noncombatants traveling with the army pose another problem. Often discussions of early modern armies calculate the numbers of traders, women, and children who accompanied the troops; however, such camp followers will not be considered in this article. Neither do valets, pages, grooms, or other personal servants qualify.

In counting troop numbers, it is also important to differentiate when units are tallied. Above all, one must differentiate peacetime from wartime forces, because they differed in composition and size. By 1670, wartime tallies generally stood three times higher than the number of troops maintained between conflicts, and the fact that armies were much smaller during peacetime years meant that when conflicts began these forces had to expand, and, understandably, this took some time. Also, at the end of each war the government demobilized, or "reformed," individual soldiers, surplus companies, and entire regiments. Beyond these dramatic shifts, more subtle rhythms determined army size during times of conflict. The combat strength of military units normally fluctuated over the course of the year. Established regiments enjoyed their most complete complement just as they entered the campaign season in May or June, but battle casualties and losses from disease and desertion eroded numbers over the summer months. Winter quarters provided time for rest, refitting, and recruitment; as new levies arrived in late winter or early spring, units grew until they went off on campaign to repeat the cycle.

Not only does a careful accounting of army size need to bear in

mind the nature of forces to be compared and the times when those forces are to be examined but also the different types of sources which provide the basis for such a study. In general this includes four varieties of records: (1) military ordonnances, (2) financial contrôles and états, (3) review reports and routes, and (4) miscellaneous correspondence. A minute study of the first, military ordonnances, promises to reveal the decrees altering army size. In the nineteenth century, Victor Belhomme made the most thorough attempt to undertake this laborious feat. He charted the number of French regiments year by year, sometimes month by month, for the entire seventeenth century.9 However, the problem with employing military ordonnances is that, as in other aspects of government as well, official ordonnances may bear little relation to reality. In fact, Belhomme's figures are suspect, because they greatly exceed the levels generated by other sources before the late 1670s, by which time Louis and Louvois had imposed greater regularity on the system.

Administrators also left behind a number of contemporary états that supply numbers of troops for the army as a whole. Such états come in several forms. A small collection known as the "Tiroirs de Louis XIV" were reports and planning documents in the king's own possession. In the majority of cases, however, official records stating the size of the entire army are financial documents generated as aids in estimating the cost of supporting the army in the present or coming year. Such financial contrôles provide a consistent and convenient source for the study of army size; therefore, generations of historians have uncritically appealed to them when judging army size. Yet the contrôles have recently come under attack. David Parrott questions their value, making the important and valid point that they were only financial documents designed to predict the amount of money that would be paid out by the monarchy for salaries and sustenance. Because troop sizes drawn from them are entirely theoretical, Parrott would completely discard them.¹⁰ But this goes too far. True, contrôles were statements of anticipated expenditures rather than head counts; however, the expenditures in question were figured as a given number of payments to a given number of troops. Therefore they were related to a projection of army size.

Financial contrôles retain important value as theoretical maxi-

⁹ Victor Belhomme, *Histoire de l'infanterie en France*, 5 vols. (Paris, 1893–1902). His lack of theoretical discussion and footnotes hide his sources, but it seems virtually certain that he relied on the military ordonnances collected at the ministry of war and the Bibliothèque Nationale.

¹⁰ Parrott, "The Administration of the French Army," 135.

mums that can then be discounted to approximate real numbers. A basic method used to set army size in financial documents and other estimates of total army size involved calculating the number of companies or battalions and squadrons present and then multiplying that number by the regulation complement of men set for that unit by ordonnance. Although this method of calculation is not always explicitly employed, it is so common that it can be assumed as underlying virtually all gross statements of army size and cost. Working within the parameters of this seventeenth-century technique, other documents, review reports, and *étapes routes* allow the raw data supplied in *états* and *contrôles* to be refashioned into more realistic estimates of army size.

Review reports and *étapes routes* provide actual head counts of troops. Review reports were prepared by military bureaucrats for administrative reasons, as when distributing pay and rations to soldiers. Troops on the road traveling from place to place carried *routes*, documents that stipulated their route and the stops they were allowed to make along the way. At each stop they were entitled to rations and lodging, so the *routes* stated exactly how many men of what ranks were to be fed and housed. By their nature, review reports and *routes* dealt only with individual units or small groups of units, rather than with an entire army, but they will be put to a broader use here. Because the actual sizes of units can be calculated from reviews and *routes*, these numbers can be used to estimate the percentage of regulation strength actually present under arms. Gross statements of army size can then be discounted by this percentage to yield a reasonable estimate of real troop numbers.

The last category of sources covers a varied range of documents that, though not systematic, can be very useful. In particular, when government officials discuss the king's forces in their letters and memoranda, they provide valuable corroboration of other sorts of documents, notably those financial *contrôles* that have come under attack. The use of sources in this manner underlines the fact that the best estimates of army size emerge from combining different sources and cross-checking whenever possible.

A Necessary Baseline: Army Figures, 1445–1610

No matter how careful the selection and calculation of figures, a study of military expansion can still go awry should it fail to establish a proper baseline against which to measure growth after 1610. In the interest of creating reasonable grounds for comparison, a careful study must go back before the seventeenth century, even extending the search to the medieval era. Philippe Contamine pegs wartime forces during the entire second half of the fifteenth century as generally reaching between 40,000 and 45,000 combatants, while he estimates the average peacetime level of the army, 1445–75, as about $14,000.^{11}$

For the Italian Wars (1494–59), Ferdinand Lot provides the best guide to the study of French army size. He deflates traditional, overblown statements of French army size. Excluding Italian units not in the pay of France, Lot arrives at a figure of 22,000–27,200 combatants for the French invasion of 1495, while he argues that the French marched into Italy in 1499 with similar forces, 23,000–29,000 troops. He argues that this second figure represented the entire force of the French army, because Louis XII left only "a simple escort" back in France. Lot estimates that 41,000 troops served François I at the time of Marignano (1515) including troops left north of the Alps to protect the provinces.¹²

The army probably hit its peak size of the sixteenth century in the summer of 1544, when François I faced attacks by both Henry VIII and Charles V. Counting François's main army around Jalons, Brissac's force that confronted the Imperials at St. Dizier, Biez's army that threw itself into Montreuil, the garrison of Boulogne, Vendôme's army around Hesdin, and troops remaining in Italy, as well as providing for miscellaneous garrisons, the total of French forces probably added up to 69,000–77,000 troops. This was an extraordinary and short-lived strain on French resources, because the army only existed at this level briefly during the late summer.¹³

There is little reason to believe that the French topped this figure during 1552, the year which witnessed both Henri II's "voyage d'Allemagne" and the siege of Metz by Charles V. Lot's analysis reveals that Henri conducted only 36,650 paid troops on his "voyage," while another 11,450 remained to defend France. Even adding in an additional 10,000 troops for garrisons in Piedmont and cer-

¹¹ Philippe Contamine, Guerre, état et société à la fin du moyen âge. Etudes sur les armées des rois de France, 1337–1494 (Paris, 1972), 278–83, 286, 316–17.

¹² Ferdinand Lot, Recherches sur les effectifs des armées françaises des Guerres d'Italie aux Guerres de Religion, 1494–1562 (Paris, 1962), 21, 26–27, 41.

¹³ Lot, Recherches, 95, 104; Charles Oman, History of the Art of War in the Sixteenth Century (London, 1937), 340, 343; Henry Lemonnier, Histoire de France, ed. Ernest Lavisse, vol. 5, part 2, La Lutte contre la maison d'Autriche, 1519–1559 (Paris, 1904), 114; Contamine, Histoire militaire, 242. It is worth noting that François I wrote that at best, his subjects could support 50,000 troops. Contamine, Histoire militaire, 305.

tain French outposts, the total still only reached 60,000. Henri again led field forces of similar proportions in 1558, when he assembled 40,150-40,550 at Pierrepont.¹⁴

Unfortunately, Lot did not devote his considerable skills to the study of the Wars of Religion (1562-98). In his treatment of them, Corvisier provides only a few generalizations and concludes that the kings of France could support no more than 50,000 men at any one time.¹⁵ Recently, James B. Wood has presented more impressive estimates for the maximum size of the royal army during the months of December 1567 and January 1568. He calculates that the monarchy claimed a paper force of 72,388 troops in the theater of combat; adding 12,000 troops stationed elsewhere in France and Italy, the theoretical total rises to 84,000, the largest force mustered by the French monarchy during the Wars of Religion. However, the manner in which Wood calculated his estimate requires that it be shaved down to a maximum paper high of no more than 80,000.¹⁶ Even allowing for this, Wood demonstrates that the government intended to maintain wartime forces that equaled those marshaled by François I and Henri II. Wood sets the peacetime strength of the army in 1572 as approximately 12,700 troops.¹⁷

In the final stage of the Wars of Religion, after Henri IV ascended to the throne in 1589, the best estimates put his army in the neighborhood of 50,000–60,000 based on multiplying the number of companies by their theoretical strengths.¹⁸ The return of peace at the close of the sixteenth century brought a thorough demobilization, and soon after the Treaty of Vervins (1598) the army shrank to a strength of 7,200–8,500.¹⁹ The figure seems to have hovered at about 10,000 during the first decade of the seventeenth century.²⁰

16 James B. Wood, "The Royal Army during the Early Wars of Religion, 1559–1576," in Society & Institutions in Early Modern France, ed. Mack P. Holt (Athens, Ga., 1991), 10–11. Upon my request, he kindly sent me copies of his archival sources so that I could verify his calculations. In a letter to me, dated 3 Sept. 1992, Wood states that 72,000 was only a theater estimate and that another 81 companies must be accounted for. He also concludes, "I have now finished my analysis of all of the first 5 wars (through 1576), and ... I think the 2nd war represents a maximum for the royal forces."

17 Wood, "The Royal Army," 3, 5-6.

18 For 1588, see BN, MSS Chatre de Cangé, vol. 18, piece 393, "Estat des compagnies de gens de guerre à pied," and Edouard La Barre Duparcq, L'Art militaire pendant les Guerres de Religion, 1562–1598 (Paris, 1863), 24. For 1597, see BN, MSS Chatre de Cangé, vol. 20, piece 33, "Etat des regiments . . . en janvier 1597."

19 Sully, Mémoires de Maximillien de Béthune duc de Sully, 3 vols. (London, 1747), 2:26.

20 Joseph Servan, Recherches sur la force de l'armée française, depuis Henri IV jusqu'à la fin de 1806 (Paris, 1806), 2–4. This book is much cited, but its value is limited by the fact that it does not cite its archival sources.

¹⁴ Lot, Recherches, 129-30, 133, 179-86.

¹⁵ Contamine, Histoire militaire, 305, 310-14.

When Henri IV decided to challenge Spain in 1610, he planned for wartime forces on the scale of the previous century, totaling about 55,000 men.²¹

This examination of the period from the late Middle Ages through 1610 reveals less military growth than might be expected. Wartime highs ranged from 40,000 to 45,000 in the late fifteenth century and reached 50,000 to 80,000 in the sixteenth, while considering the period as a whole, peacetime highs of 10,000 to 20,000 were common.

Theoretical Maximum Troop Figures, 1610–1715

Bearing these benchmarks in mind, consider the theoretical paper totals raised and maintained by the French after 1610. The minor wars of the 1620s sent the size of the French army above the 10,000 peacetime level of the previous decade. At the Assembly of Notables held in 1626, Marshal Schomberg announced the monarchy's intention to maintain an army of 30,000.²² However, a "Projet de dépense" for 1627 indicates a strength of only about 18,000 men.²³ Renewed war with the Huguenots made such a force inadequate; the siege of La Rochelle, 1627–28, alone required 28,000 troops.²⁴ David Parrott believes that by 1630 the official strength of the army, with forces in Champagne and Italy, stood at 39,000.²⁵

Full-scale war would send these figures soaring in the next five years. Direct French participation in the Thirty Years' War began in 1635, and the struggle continued long after the Treaties of Westphalia were signed in 1648; not until the Treaty of the Pyrenees in 1659 would peace return. This long era of war created armies of unprecedented size, according to official documents. Because so much of the current historiographical debate rests on the timing and level of increases from 1635 to 1659, they demand special attention.

Several sources point to important increases in 1634, as the French mobilized to enter the war with Spain. An "Estat des gens de guerre qui sont sur pied à la fin d'Aoust 1634," shows 100,368 sol-

²¹ Sully, Mémoires des sages et royales oeconomies d'estat de Henry le grand, vols. 8–9 in Collection des Mémoires relatifs à l'histoire de France, ed. Petitot, 2nd ser. (Paris, 1821), 8:351, 9:65–68.

²² Edouard La Barre Duparcq, Histoire de l'art de la guerre, vol. 2 (Paris, 1864), 159; Belhomme, Infanterie, 1:337.

²³ BN, MSS Chatre de Cangé, vol. 22, pieces 63 and 64, "Projet de dépense de l'extraordinaire des guerres pour l'année 1627."

²⁴ F. de Vaux de Folletier, Le Siège de la Rochelle (Paris, 1931), 237-38.

²⁵ Parrott, "The Administration of the French Army," 142.

diers in service at that time.²⁶ A letter from Richelieu to the king in September supports this figure, mentioning 89,000 men in French service, out of an intended 95,000, with more on the way.²⁷ In October, an additional "Estat des troupes faict en octobre 1634," boosts the number to 124,500.28 Building from such an expanding base, the financial documents for 1635 seem reasonable. A projection for 1635 drafted in November 1634 set the number of troops slightly higher at 125,000.29 Again correspondence confirms this financial document as more than merely a statement of funds to be spent, because Servien, the secretary of state for war, outlined the use of 115,000 men for 1635 in a document written in January of that year. His total falls short of 125,000 by a mere 8 percent.³⁰ It seems reasonable to surmise that as war approached and tensions grew, so did the desire for more troops, and this may explain the higher projections made by mid-1635. A contrôle from April sets troop size at 142,000-144,000.31 The well-known and much misused contrôle for May 1635 prominently reprinted in Avenel's collection is usually employed to justify claims that the French planned to mobilize 150,000 troops; however, if its numbers are calculated with care, they actually project a force of as many as 168,100.32 With such documentation it seems entirely reasonable, even modest, to adopt the traditional estimate of French intentions: 150,000 troops for the campaign season of 1635.

The year 1636 brought even higher projections. A "Contrôle général des armées du Roy pour l'année 1636" dated December 1635 and contained in the collection of military ordonnances at the Archives de Guerre, breaks the year into three periods with the following troop strengths: 157,979 to 15 April, 179,900 from 15 April to the end of July, and 164,260 from the end of July to the point when the troops would enter winter quarters.³³ Because this particularly interesting document takes into account the natural growth and decline in numbers over the course of the year, it seems to reflect

26 BN, MSS f. fr. 6385.

27 Armand-Jean du Plessis, duc de Richelieu, Lettres, instructions diplomatiques et papiers d'état du cardinal de Richelieu, ed. Avenel, 8 vols. (Paris, 1853-77), 4:601.

28 BN, MSS f. fr. 6385, "Estat des troupes faict en octobre 1634."

29 Archives des Affaires Etrangères (hereafter cited as AAE), 811, fol. 120, 7 Nov. 1634 plans for 1635, in Parrott, "The Administration of the French Army," 19. Even in Parrott's opinion this letter is "an indication of actual intentions." AAE, France 811, fol. 129, 7 Nov. 1634, in Richard Bonney, *The King's Debts* (Oxford, 1981), 173, gives the total as 124,500. 30 AAE, France, 813, fol. 15, letter of 10 Jan. 1635, Servien to Richelieu, in Parrott, "The

Administration of the French Army," 107. 31 AAE, France 813, fol. 301, 23 April 1635, in Bonney, The King's Debts, 173.

32 AAE, 70, fol. 37, Contrôle for 1635, in Avenel, ed., Lettres, 5:3-6.

33 Archives de Guerre (hereafter cited as AG), Collection des ordonnances militaires, vol. 14, piece 87, "Contrôle générale des armées du Roy pour l'année 1636," dated Dec. 1635. military reality more than simply to serve as a financial convenience. Other *contrôles*, apparently drafted in 1636, gave markedly higher estimates. Both David Parrott and Richard Bonney cite *contrôles* that projected 172,000 infantry, 21,400 cavalry, and 12,000 additional cavalry, for a total of 205,000 troops, which included the small army under Bernard of Saxe Weimar, which received French pay.³⁴

Numbers dropped in 1637-a contrôle for that year reduced the troop total to 134,720—however, they mounted again in 1638– 39.35 An "Etat des troupes devant servir en 1638" listed 160,010 troops.³⁶ Another "Etat des troupes pour 1639," describing winter quarters 1638–39, brought the number down to 148,180.37 However, a July 1639 état presents a much higher total, perhaps the highest for the war, 211,950.38 This again includes troops under Bernard. One last source worth mentioning provides the basis for an estimate of troop strength in 1642. This "Estat des armées du roy en 1642" lists only the numbers of infantry and cavalry companies, but figuring these at their full strengths produces a total of at least 164,000 troops.³⁹ So the Richelieu ministry recorded paper numbers that varied from 135,000 to 211,000, and commonly hovered around 150,000-160,000. Lest these grand sums seem entirely out of line, it is worth noting that Richelieu reconciled Louis XIII to the expense of the war by reminding him that by sustaining 180,000 troops the king had provided "posterity an immortal argument of the power of this crown."40

It seems that *contrôles* and *états* for the entire army are rare or nonexistent during the Mazarin regime. Still, Belhomme's study of the ordonnances may aid in tracing the pattern of army size after 1642, for though his numbers are not acceptable as literal reality, their rise and fall probably reflect trends. His calculations indicate

34 AAE, France 820, fol. 200, Contrôle générale, 15 April 1636, in Parrott, "The Administration of the French Army," 91, 99. Bonney, *The King's Debts*, 173n, employs the same piece to reach a lower total of 199,400.

35 AAE, France 828, fols. 311-23, 330-51, 1637, in Parrott, "The Administration of the French Army," 115.

36 AAE, France 832, fol. 1, in Bernard Kroener, "Die Entwicklung der Truppenstärken in den französischen Armeen zwischen 1635 und 1661," in Forschungen und Quellen zur Geschichte des Dreissig jährigen Krieges, ed. Konrad Repgen (Münster, 1981), 201. Using other documents in the same carton, fols. 1–19, Parrott, "The Administration of the French Army," 117, calculated a total of 164,000.

37 AAE, France 832, fols. 288–93, in Kroener, "Die Entwicklung der Truppenstärken," 201.

38 BN, MSS f. fr. 17555, fol. 1, "Etat des troupes . . . durant l'année 1639," in Kroener, "Die Entwicklung der Truppenstärken," 203.

39 BN, MSS Collection Dupuy, no. 590, piece 244.

40 Richelieu, "Succincte Narration des grandes actions du roi," in Petitot, Collection des mémoires, 11:317.

two high points in the curve of army size, one in 1636 and a second somewhat higher level from 1644 until the partial demobilization that followed the Treaties of Westphalia.⁴¹ After 1649 the army never again matched the levels it had hit in 1635–48.

At the victorious conclusion of the long and exhausting struggle with Spain in 1659, the French "reformed" the army by cutting the number of companies drastically; however, Louis apparently kept a large percentage of the actual troops. Mazarin informed Turenne late that year, "It is therefore necessary to eliminate [*reformer*] a good number of companies, . . . [but] it is the King's intention not to discharge a single cavalryman or infantryman, but to fortify well the companies that remain by incorporating into them the soldiers from those [companies] that are eliminated."⁴² Review reports collected by Kroener reveal the practical effect of this pruning and filling: companies with only 15 men in 1659, or 50 percent of their regulation strength of 30, mustered fully 50 men or more, 100 percent of their new increased official complement, in 1660.⁴³

Louis XIV himself boasted of having nearly 72,000 troops after demobilization, clearly the largest peacetime force the French had ever supported.⁴⁴ The army continued to shrink for the next several years, declining sometime before early 1665, when a tally of units pegs the army at about 50,000 just before the buildup for the War of Devolution (1667–68). The number of troops began to increase late in 1665, probably passing 60,000.⁴⁵ Referring to a letter of March 1666, Rousset concludes that the king's troops reached 72,000 then, whereas Louis André, citing other documents, argues that the army topped 97,515 later in the year, a figure that seems high.⁴⁶ During the first year of the War of Devolution, Louis's personal information set the strength at about 82,000, but this may not include all garrisons.⁴⁷ The careful historian Paul Sonnino estimates the size of Louis's army

41 See Belhomme, Infanterie, vols. 1 and 2.

42 Jules Mazarin, Lettres du cardinal Mazarin pendant son Ministre, Chéruel and Avenel, eds., vol. 9 (Paris, 1906), 378, letter of 19 Oct. 1659. Using his methods of counting units, Belhomme describes this as a drastic cut, from 156,000 infantry in 1658 to 67,000 in 1659. Belhomme, Infanterie, 2:88, 92.

43 Bernard Kroener, Les Routes et les étapes, 177.

44 Louis XIV, Oeuvres de Louis XIV, Grimoard and Grouvelle, eds., 6 vols. (Paris, 1806), 3:32.

45 AG, Arch. hist. 78, feuille 165.

46 AG, A1198, 5 March 1666, letter from Louvois to Pradel in Camille Rousset, Histoire de Louvois, 4 vols. (Paris, 1862–64), 1:97. Louis André, Michel Le Tellier et l'organisation de l'armée monarchique (Paris, 1906), 294, and his Michel Le Tellier et Louvois (Paris, 1942), 314n.

47 AG, Bibliothèque du Ministère de Guerre (hereafter cited as вмG), Tiroirs de Louis XIV, p. 36: "Etats des regiments de cavalerie en 1667"; p. 37: Etats des troupes destinées pour la garde de S. M. et pour servir dans les armées"; and pp. 39–40: "Etat des troupes d'infanterie estants sur pied en l'année 1667."

at 85,000 by the end of the 1667 campaign.⁴⁸ The year 1668 brought even larger armies totaling 134,000, but the return to peace again caused the French to demobilize back to only 70,000.⁴⁹

Louis next began to gear up for the Dutch War. In 1670 he expanded his army once again by raising 20,000 new men, so in early 1672 the army reached about 120,000.⁵⁰ Over the course of the year, he issued additional orders to recruit enough troops to increase the number to 144,000.⁵¹ The Dutch War high hit 279,610, as indicated by a key document from January 1678.⁵² This included 219,250 infantry and 60,360 cavalry, while 116,370 of the total served in garrisons. The inevitable "reform" of the army after the Treaty of Nijmegen reduced forces to 146,980 men, officers not included, in 1679.⁵³ This seems to have fallen to about 125,000 in 1681.⁵⁴ Numbers increased again for the brief contest with Spain of 1683–84, with demobilization back to 165,000 after the Truce of Ratisbon.⁵⁵

During the War of the League of Augsburg, the French army topped 400,000 for the first time, at least on paper. At the start of the conflict, Louvois believed that by late 1688 he could field about 207,000 with the levies he anticipated.⁵⁶ In his *L'Armée française en 1690*, Belhomme argues that forces reached 381,819 men and 23,138 officers, for a total of 404,957 that year.⁵⁷ It should be remembered that in 1688 Louvois instituted the royal *milice*, which allowed the monarchy to conscript men to serve at the front in new provincial battalions. Other sources ascribe even greater numbers to the French army. No less an authority than Louis's great engineer, Sébastien le Prestre de Vauban, a man given to statistics, estimated royal forces in 1693 at the generous figure of 438,000.⁵⁸ A financial *état* dating from the 1690s gives a detailed accounting of 343,323 infantry and 67,334

48 Paul Sonnino, Louis XIV and the Origins of the Dutch War (Cambridge, 1988), 17.

49 AG, BMG, Tiroirs de Louis XIV, pp. 46-48, "Estat des trouppes d'infanterie que le Roy a sur pied en mars 1668"; pp. 50-64, "Estat des trouppes de cavalerie que le Roy a sur pied en mars 1668"; Sonnino, Origins of the Dutch War, 127-28n.

50 On increases in 1670 and 1671, see Sonnino, Origins of the Dutch War, 127, 155. AG, ВМG, Tiroirs de Louis XIV, pp. 76–77, 4 Feb. 1672.

51 Sonnino, Origins of the Dutch War, 177, 162.

52 AG, BMG, Tiroirs de Louis XIV, p. 110, "Troupes que le Roy auvis sur pied le premier janvier 1678."

⁵³ AN, G71774, piece 52, "Etat des troupes que le roy a eu sur pied," figures for 1679, 1684, 1696, and 1699.

54 AG, A1687, 20 Sept. 1681, Le Pelletier to Louvois, in Rousset, Louvois, 3:216.

⁵⁵ AN, G71774, piece 52, sets the number at 165,807 troops, without including officers. AG, A¹772, piece 267, in Rousset, *Louvois*, 3:287, puts it at 161,995.

56 AG, A1808, 8 Sept. 1688, letter from Louvois to Asfeld, in Rousset, Louvois, 4:88.

57 Victor Belhomme, L'Armée française en 1690 (Paris, 1895), 104, 199. I have deducted the local militia from his total.

58 Sébastien le Prestre de Vauban, Oisivetés de M. de Vauban, 3 vols. (Paris, 1842-46), 2:237, 252-60.

cavalry, a total of 410,657 troops, not including officers, for the year 1696.⁵⁹ Adding officers to the numbers in the *état* would produce a total equal to that supplied by Vauban. These sources, then, exceed the traditional figure of 400,000 French troops for the War of the League of Augsburg; in fact, an estimate of 420,000 officers and men would not be out of place. According to the above-mentioned *état*, by early 1699 the army had fallen to about 185,716 enlisted men, after regiments had been disbanded.⁶⁰ With a reduction of company strength in December 1699, the size of the army fell by about 40,000, contracting it further to 140,000–145,000.⁶¹

The return of fighting in 1701 sent army size spiraling upward again. In 1702 it reached 220,502.62 Servan's study set the wartime high at 392,223; however, original sources put the number lower.63 A detailed financial *état* listing troops to be employed in 1707 supports an estimate of army size at 318,000 infantry, 39,000 cavalry, and 16,000 dragoons, for a total of 373,000 officers and men.64 This document, which does not appear to have been used by military historians before now, corroborates another much-used *état* dating from 1710. It enumerates 323,665 infantry, including detached companies, 41,073 cavalry, and 16,491 dragoons, adding up to a total of only 377,105 troops, of whom 21,062 were officers.65 These numbers fall short of justifying the traditionally accepted paper figure of 400,000 soldiers engaged as full time troops in garrison or with the field armies; in fact, 380,000 would seem more in line with archival sources. After peace returned, the army fell back to a peacetime strength of about 133,000.66 Over the remaining decades of the ancien régime, the army typically echoed the figures it had reached under Louis XIV in war and peace.⁶⁷ Such is the tally of theoretical numbers; however, revisionist scholarship rightly demands that historians probe for the firmer core of reality within the inflated paper totals.

 $_{\rm 59\;AN},$ G71774, piece 52. I have subtracted the 1,500 for the Hôtel des Invalides and 3,080 for the arrière ban.

60 AN, G71774, piece 52.

61 Georges Girard, Le Service militaire en France à la fin du règne de Louis XIV: Racolage et milice (1701–1715) (Paris, 1915), 4.

62 AG, A11579, "Mémoire des trouppes que le roy a sur pied, janvier, 1702" in Girard, Racolage et milice, 5-7.

63 Servan, Recherches, 58-59.

64 AN, G71780, piece 212, "Etat des régiments . . . qui seront au service du Roy pendant la campagne 1707."

65 AG, MR 1701, piece 13, "Estat contenant le nombre . . . sur pied en 1710."

66 Servan, Recherches, 60.

67 John A. Lynn, "The Pattern of Army Growth, 1445-1945," in The Tools of War: Ideas, Instruments, and Institutions of Warfare, 1445-1871, ed. John A. Lynn (Urbana, Ill., 1990), 3-4.

Discounting the Paper Figures

By establishing the difference between the official dimensions and the actual size of units, review reports and *routes* provide the data necessary to discount official statements of army size. Bernard Kroener supplies the foundation of this effort by compiling review reports that establish the average number of men actually present under arms in French infantry and cavalry companies from 1635 to 1660.⁶⁸ A second data set compiled from archival sources for this article covers the remainder of the *grand siècle*.

Because the most crucial figures for the first half of the seventeenth century, and those best documented in the *contrôles*, come from the period 1635–39, these five years deserve the most attention. Unfortunately, Kroener's treatments of 1635 and 1636 are in error to some degree. On average, the infantry companies he studied for 1635 claimed 43 men present; however, he mistakenly assumes that regulation company strength for French foot in both 1635 and 1636 was 50 men when it was, in fact, 100.⁶⁹ Thus, while he put the infantry at a suspiciously high 86 percent of regulation strength, they actually stood at only 43 percent. This lower figure tallies much better with the percentage for cavalry companies, which only reached 46 percent of official strength. Pursuing this line even further, in 1636, usually accepted as a high point for the army as it massed to repel a Spanish invasion, Kroener's sample suggests an infantry company strength of only 35 percent with cavalry at 38 percent.

Combining the corrected version of Kroener's numbers with theoretical highs taken from financial *contrôles* results in some unexpected findings. The discounted size of the army in 1635 falls to about 72,000 troops. This seems a small figure, particularly in light of the fact that Richelieu already believed that 89,000 men had been massed before the end of 1635.⁷⁰ However, if Kroener's sample can be trusted, not only was the army of 1635 small, but it was not exceeded by the forces assembled in 1636. However, the situation changed greatly in 1638 and 1639, years for which Kroener's methods seem both clear and correct. For these two years, the infantry complement rose to 64 percent and 72 percent, and cavalry stood at 45 percent and 70 percent. Such full ranks make 1639 the year

⁶⁸ Kroener, Les Routes et les étapes, 177-78.

⁶⁹ A variety of sources make clear that the official company size stood at 100: Richelieu, *Testament politique*, ed. Louis André (Paris, 1947), 478; AG, A132, piece 250, 1636 commission to Pontchartrain; and AG, A129, fol. 219, 13 Sept. 1636, order for La Tremouille. My thanks to David Parrott for supplying these last two references.

⁷⁰ Avenel, Lettres, 4:601, 13 Sept. 1634, Richelieu to the king.

of highest troop strength, with a very substantial 152,000 men.⁷¹ It should be noted that André Corvisier also employed Kroener's work, but Corvisier erred by accepting Belhomme's exaggerated theoretical numbers; thus, Corvisier arrives at a discounted size of 166,320 infantrymen alone for 1639.⁷²

Given the great variety between the lows and highs generated by Kroener's percentages, perhaps it is a safer course not to accept his exact estimates year by year, but to take them as a basis to arrive at a general discount rate to cover the first critical five years of the war. A straight mathematical average of Kroener's corrected estimates results in a discount rate of 57 percent.

David Parrott disagrees and proposes an estimate of 50 percent.73 Here, he echoes Richelieu who commented, "If one wants to have fifty thousand effectives, it is necessary to levy one hundred, counting a regiment of twenty companies that ought to have 2,000 men as only 1,000."74 Parrott then further reduces the actual number, by assuming a 25 percent error caused by officers padding their companies with phony soldiers, passe volants, at reviews. With all these deductions, Parrott pulls down the traditional figure of 150,000 for 1635 to 50,000-55,000.75 But Parrott cites varying figures in somewhat different contexts in such a way that they can be read, and cited, to support conflicting theses. At another point he credits the real force with about 70,000 troops, at least for the first half of the campaign.⁷⁶ And both figures need to be put in the context of his overall estimate that, "aside from the exceptional, by definition, temporary, peaks in troop strength, such as that of summer 1636, the French army was rarely of more than 60,000-70,000 infantry and 15,000-20,000 cavalry during the 1630s."77 Accepting this last set of figures produces a total of 75,000-90,000 troops, which he would drive even higher in 1636.78

Although there is no simple mechanical method to manufacture a discount rate from the above findings and claims, an overview of the best research suggests that a rate of 60 percent provides the most

⁷¹ BN, MSS f. fr. 17555, fol. 1, "Etat des troupes . . . durant l'année 1639," in Kroener, "Die Entwicklung der Truppenstärken," 203.

⁷² Contamine, Histoire militaire, 364.

⁷³ Parrott, "The Administration of the French Army," 135.

⁷⁴ Richelieu, Testament politique, 478.

⁷⁵ Parrott, "The Administration of the French Army," 135.

⁷⁶ Ibid., 110–11.

⁷⁷ Ibid., iv.

⁷⁸ In a letter of 2 Aug. 1992 Parrott stated that his 70,000 estimate for 1635 was "well on the way to the 80–100,000 that I suggest is the size of force which the government is striving to maintain from 1636."

reasonable guide. This is the discount rate that Corvisier accepts, and even Parrott gives it credence as the contemporary principle of "douze pour vingt."⁷⁹ Multiplying official tallies for 1636 and 1639 by this discount yields a high point for the war of about 125,000 men. Such an estimate falls between the extremes generated by Kroener's modified numbers. Moreover, it even approaches Parrott's second estimate of 75,000–90,000, when one adjusts for extreme wartime peaks, such as occurred in 1636 and 1639. Adopting 125,000 as a wartime peak for the war with Spain might even be credited as an act of moderation, because a case could be made for a figure in excess of 152,000 in 1639.

Turning to the data collected for this article, the next discounted wartime high dates from the Dutch War, because documentation for the War of Devolution is very slim.⁸⁰ According to a sample of 155 companies, in 1676-77, when a French infantry company was supposed to number 50 men, actual companies mustered a surprisingly high average of 44.4 men, or 89 percent of full strength. As strange as this may seem, it accords with Louis's own evaluation, because he argued in 1667 for a discount of 85 percent.⁸¹ Cavalry companies were even more likely to fill up, mounting 96 percent of a full complement. This very high percentage of cavaliers in a unit was typical of the personal reign of Louis XIV. Three factors explain this phenomenon: (1) the much greater prestige of service in the cavalry, (2) the larger recruitment bounties paid to cavalrymen, and (3) the higher salaries they earned. Owing to all three factors, cavalry regiments had their pick of men, meeting their goals before infantry units did.

Using these percentages in conjunction with paper figures for peak size during the Dutch War leads to an estimate of 253,000 actual troops. This figure certainly seems high; it may result from the fact that the sample dates from the end of winter quarters, when recruits had just been added and units enjoyed their maximum strength of the year. In any case, the numbers show units far closer to their theoretical strength than they had been before 1659. With the return of peace, reviews of 171 companies in garrison in Italy in 1682 suggest

80 See the numerous *routes* preserved in Archives municipales d'Amiens (hereafter cited as Amiens), EE 392, March 1676, plus the following documents: Archives Départementales du Nord, C 2321, 6 Oct. 1672; AG, BMG, A1b1628, vol. 2:5–7, 9–10, 13–15, 17–19, 21–23, 25–27, 33–35, 65–67, 69–71; AG, A1295, piece 86; and AN, G71774, pieces 10 and 11.

81 Louis XIV, Mémoires de Louis XIV, Charles Dryss, ed., vol. 2 (Paris, 1860), 306.

⁷⁹ Corvisier, *Louvois*, 82. Parrott, "The Administration of the French Army," 111. Parrott argues that this level of wastage was so commonly assumed that in documents estimating army size for 1637, regiments of 20 companies were counted not as 2000 men but as 1200.

that companies approached full strength during the period of halfwar/half-peace that was the 1680s.⁸² With such high percentages, the official figure of about 150,000 men in the peacetime army need be pared down only to roughly 120,000 in real terms.

The War of the League of Augsburg provides some of the most interesting discoveries. Early in the war, 1689–92, company strengths ran fairly high once again. Records of 226 companies, all of which passed through Amiens and left routes in their wake, reveal an average infantry company of 42.2 men and sergeants, or 84 percent of the official full strength of 50.83 A small sample from Burgundy and a much larger one from Alsace, 1691-92, correspond with the Amiens numbers. The 40 companies from Burgundy stood at an average of only 33.5, but this low figure results from the inclusion of one particularly under-strength regiment; without it, the average rises to 39.0.84 The massive sample of units receiving étapes in Alsace must be handled with great care, because the accountants clearly listed several regiments as full that were not. However, using only the most solid records, the Alsace sample still consists of 416 companies, and these suggest an average of about 41 men per company, or 82 percent.⁸⁵ The 57 cavalry companies from six different regiments listed on Amiens routes averaged 34.9 men, or 87 percent of official strength of 40; dragoons had essentially full complements of 40.86 A sample of 90 cavalry companies which rode through Alsace during the first half of 1691 numbered 36.3 men per company, or 90.1 percent full strength; 47 dragoon companies averaged out at 37.4, or 93.5 percent.87

Later, in 1695–96, the percentages had not changed much, according to a sample of 523 companies all from Amiens *routes*. French infantry companies, supposed to contain 55 men by then, had 43.8, or 80 percent of capacity. *Milice* companies, theoretically at 60, had 50.2, or 83.7 percent;⁸⁸ cavalry and dragoons claimed 35.5 and 35.3 respectively, or 88.8 and 88.3 percent of a full complement each.

82 AN, Z1c414, August 1682, December 1682.

83 Amiens, EE 394, EE 395, EE 396.

84 Archives municipales de Dijon (hereafter cited as Dijon), H 228, 8 Feb. 1692; Dijon, H 228, 8 Feb. 1692; and Archives Départementales de la Côte d'Or, C 3675, 23 Jan. 1693.

85 BN, MSS f. fr. 4565-4567, three "estat et compte ... de la fourniture des estappes faites aux troupees" covering the months from Apr. 1691 to March 1692. I must thank Dr. David Stewart who chased down the figures for me.

86 Belhomme, L'Armée française en 1690, pp. 88, 93–96, states that the size of both cavalry and dragoon companies in 1690 was 40 men. AN, G71774, piece 52, seems to count cavalry and dragoon companies at 35 men in 1696.

87 вм, мss f. fr. 4566.

88 Léon Hennet, Les Milices et les troupes provinciales (Paris, 1884), 32.

The *étapes* documents employed for the War of the League of Augsburg do not simply date from the spring, when regiments had just incorporated recruits, but from the fall as well, when regiments would be at a relatively weak point. The balance seems reasonable. Therefore, if one accepts that theoretical size stood as high as 420,000 in 1696, a sixth of which would have been cavalry, the real count could have reached 340,000.

During the few years between the War of the League of Augsburg and the War of the Spanish Succession, the official number of men in French companies fell somewhat, but the percentage at full strength rose. In 1700, French line infantry companies, which were then set at 35 by regulation, averaged out at 35.1 men per company in the 39 companies of the sample.⁸⁹ Cavalry companies, which in December 1699 were officially reduced to only 20 troopers each, showed 20.3 men present, so their numbers topped 100 percent of full strength.⁹⁰ Putting all this together fully justifies the estimate of total troop strength at about 140,000 men.

With the return of war, an exhausted France mobilized once again, but it did not reach the level of forces it had hit in the previous contest. A sample of 240 infantry companies that passed though Amiens and Lille puts the size of the average company at only 32.3 in 1702–4.⁹¹ This, at a time when regulation size was 45, meant real companies were only 72 percent of full size.⁹² A much smaller sample of only 16 cavalry companies again shows them at very near their regulation strength of 35. With 34.1 men per company, they mounted 97 percent of theoretical size.

By late in the war, 1709–11, both infantry and cavalry companies had declined somewhat. The large and varied sample of companies used here includes 1,284 French companies listed in *routes* from Amiens, review reports from Dijon, and tallies of front-line units reported in military correspondence.⁹³ French infantry companies changed in size during the war; until 1710 they stood at 45

89 Archives municipales de Lille (hereafter cited as Lille), 11,113, 10 and 24 Oct., 7 and 8 Nov., and 2, 12, and 26 Dec. 1700.

91 Amiens, EE 411, EE 412; Lille 11,113, 5 and 26 March, 4 Apr. 1702; see as well, Georges Girard, ed. "Un Soldat de Malplaquet: Lettres du capitaine de Saint-Mayme," *Carnet de Sabretache* (1922), 515.

92 Infantry company size stood at 45 until Sept. 1710. Girard, Racolage et milice, 11.

93 Amiens, EE 421, EE 423, EE 424, EE 427, EE 432; Dijon, H 243, H 244; AG, A12152, piece 208, 17 Sept. 1709, "Etat de la force de quarante-deux battalions et de ce qu'on leur donne de recrues," in *Mémoires militaires relatifs à la succession d'Espagne sous Louis XIV*, ed. Vault and Pelet, vol. 9 (Paris, 1855), 383; AG, A12214, 10 Apr. 1710, letter from d'Alborgessy, review of troops being sent to Douai.

⁹⁰ For changes in company size in 1699 see Girard, Racolage et milice, 4.

men, but a regulation of that year raised their size to 50 soldiers.⁹⁴ The average company strength of 31.2 means that infantry was 62–69 percent complete. Cavalry and dragoons were again organized in companies of 35 men, but in reality cavalry companies stood at 30.5, or 87 percent, and dragoons at 31.1, or 89 percent. The sources that generate these estimates deserve some discussion, because they lead to important conclusions.

Documents from Amiens, Dijon, and the front showed roughly similar company sizes. The average number of men in infantry companies moving through Amiens stood at 29.9, whereas it rose to 34.0 in Dijon reports. This is a significant difference, to be sure, but it only amounts to 8 percent in a company of 50 men.⁹⁵ Another key document is the "Etat de la force de quarante-deux battalions et de ce qu'on leur donne de recrues," dated 17 September 1709, but it requires some interpretation, because the battalions listed had just suffered casualties at the bloody battle of Malplaquet. Approximate battalion size before the battle can be reconstructed by allowing for the casualty rates of these battalions, and this method yields an average company of 31.9 men.⁹⁶ Interpreting the document in another fashion, one can add in the number of replacements assigned to each battalion to arrive at a new company strength of 30.9. A second battlefield report, listing units to be sent to Douai in April 1710, shows company strength down to 28.2.97

Using the sample collected for this study to discount army size as in 1707 and 1710 yields a figure of about 255,000 troops. This is much smaller than the 340,000 estimated for the War of the League

96 In early August, the army of Flanders claimed 128 battalions of infantry. AG, A12152, piece 31, "Disposition de l'infanterie," in Vault and Pelet, 333–34. Detailed casualty reports for officers at Malplaquet suggest that the battalions of the 17 Sept. review suffered average casualties on the same level as the other battalions in the army. AG, A12152, piece 225, "Etat des officiers tués, blessés et prisonniers à la bataille de Malplaquet," in Vault and Pelet, Mémoires militaires, 378–81. Consequently, it is reasonable to argue that the battalions suffered no more than an average number of casualties in the ranks. If 11,000 is a reasonable estimate for French casualties at Malplaquet, the infantry alone would perhaps have lost two-thirds of these men, or 7,330, and each battalion would have lost on average about 57 men. Gaston Bodart, Militär-historisches Kriegs-Lexikon, 1618–1905 (Vienna and Leipzig, 1908), 160; Claude G. Sturgill, Marshal Villars and the War of the Spanish Succession (Lexington, 1965), 98. This would mean that the sample which claimed an average company strength of 27.2 after Malplaquet probably was up to 31.9 before the action.

⁹⁷ AG, A12214, piece 107, 10 Apr. 1710, letter from d'Alborgessy, review of troops being sent to Douai. Claude Sturgill argues that in the spring of 1710, the average strength of the battalions under Villars was only 250. Sturgill, *Marshal Villars*, 101–2. However, my graduate student, George Satterfield, was unable to turn up any such information in the sources Sturgill cited.

⁹⁴ Regulation of 20 Sept. 1710. Girard, Racolage et milice, 10-11.

⁹⁵ The larger Dijon figure is explained by the passage through Dijon of one large and probably brand new regiment enjoying a nearly full complement. Dijon, H244, 6–7 May 1710.

of Augsburg. Remember, both figures are only estimates and may understate the totals somewhat, because they discount the army on the basis of percentages for only French regiments, whereas foreign regiments in French service tended to be closer to their full complements than were native units.

Comparing Results: Revisionism Revised

With the discounted figures in hand, it is possible to make certain judgments concerning the pattern of military expansion during the grand siècle (see table and figure 1). Most importantly, the data presented in this article demonstrate that with the onset of war in 1635. royal forces increased significantly over previous levels. Their expansion ought to be measured against a baseline of wartime highs, 1494-1610, which repeatedly reached 50,000 and peaked at 80,000 on a few occasions before 1570. If such levels are compared with theoretical maximums of 205,000-211,000 soldiers during the period 1635–42, the increase ranges from 250 percent to 400 percent. But this would not be a fair comparison, because the key figures for the earlier period collected in this article are closer to actual than theoretical maximums. The discounted totals for 1635–42 arrived at above reduce the peak size of the army to 125,000. Consequently, even if the 50.000–80.000 total for the period before 1610 is taken without discount, the army raised under Richelieu was still at least 60 percent larger than anything that preceded it, and if the earlier tallies are discounted by as little as 10 percent, which seems reasonable, then one has to conclude that the army of 1635-42 exceeded sixteenth-century highs by at least 75 percent. In addition, the army created in 1635 doubled the size of any royal French force mobilized after 1570. Such increases may not equal the extreme estimates of some historians, but they still constitute a quantum leap upward. The contrast between the 55,000 troops Henri IV intended to raise for his struggle with Spain in 1610 and the 150,000 Louis XIII tried to mobilize against the same enemy in 1635 highlights the military expansion of the first half of the seventeenth century.

In his dissertation, David Parrott makes a strong case that the Richelieu ministry bungled its way through the daunting task of supporting its army without engaging in substantial reform. Parrott believes that the army did not grow enough to impose reform upon the government; moreover, he seems to assume that if the army existed at a given size it had to be supported by the government at that size. Yet the French monarchy fielded armies larger than it could

Time Period or War	Theoretical Peace High	Theoretical War High	Discounted War High
1445–1475	14,000		
Second half of the 15th Century		40-45,000	
1490	17,100		
1540s and 1550s		70-80,000	60-70,000?
1567-68		80,000	70,000?
Early 1670s	12,700		
Wars of Religion, 1589–98		50-60,000	
1600–10	10,000		
1610, as planned		55,000	
1610–15	10,000		
Thirty Years' War, 1635–48		200,000	125,000
1660–1666	72,000		
War of Devolution, 1667–68		134,000	
Dutch War, 1672–78		279,600	253,000
1678-88	165,000		
War of the League of Augsburg,			
1688–97		420,000	340,000
1698-1700	140-145,000		
War of the Spanish Succession,			
1701–14		380,000	255,000
1715–25	130-160,000		
War of the Austrian Succession,			
1740-48		390,000	
1749-56	160,000		

 Table 1
 The Growth of the French Army Size, 1445–1750

maintain from its own resources. These armies made ends meet by two methods. First, the monarchy called upon the personal financial resources of the officers, who contributed to the maintenance of their own commands.⁹⁸ Second, despite official protests, soldiers took for themselves what the state failed to supply; in short, they pillaged.⁹⁹ The chaos and horrors typical of the war between France and Spain, 1635–59, came precisely because the army grew substantially, not because it did not grow enough to precipitate reform. Jeremy Black would uncouple the reforms that occurred after 1659 from the strains exerted by army growth before that date, but they were as important to the process of institutional change in France as was the

⁹⁸ Louis Tuetey, Les Officiers de l'ancien régime. Nobles et roturiers (Paris, 1908); this is a point also made by Parrott in his dissertation.

⁹⁹ John A. Lynn, "How War Fed War: The Tax of Violence and Contributions during the grand siècle," Journal of Modern History 65 (June 1993): 286–310.

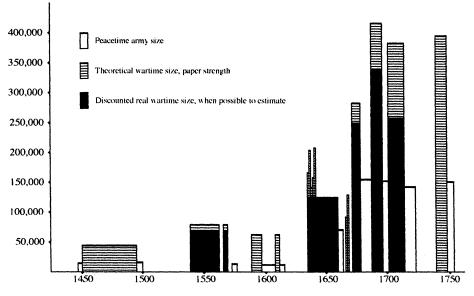


Figure 1. The growth of the French army, 1445–1750

abuse of Brandenburg during the Thirty Years' War to the creation of the state and army of the Great Elector after 1648.

While military expansion before 1659 rates as considerable, that occurring after 1659 was staggering. Theoretical maximums topped 400,000 during the War of the League of Augsburg, while discounted figures for the same war set the number of troops under arms as about 340,000. Measured by either scale, this was unparalleled. By the end of the century theoretical wartime levels had increased 500–800 percent over the peaks of the sixteenth century. Discounted tallies rose 400–700 percent. Peacetime levels rose by even greater percentages; if theoretical peacetime figures before 1610 were normally between 10,000 and 20,000, the peacetime strength after 1679 hovered between 130,000 and 150,000, an increase of 650–1,500 percent!

However, the expansion of the army during the War of the Spanish Succession, when discounted regular army strength only reached 255,000, did not match that attained during the War of the League of Augsburg. On reflection, this makes sense, because the number of troops that the state could support depended directly upon the amount of wealth that the monarchy could mobilize for its army, and because the aging king had run out of resources. First, the War of the League of Augsburg had exhausted government finance. Second, the potential to raise "contributions," or war taxes, on occupied territory decreased as repeated defeats drove French forces back to their own borders in the northeast. And third, the traditional recourse of relying upon aristocratic officers to maintain their units out of pocket had already overtaxed noble fortunes in the previous war, so that particular well was going dry.

Therefore, the numbers do not support Corvisier's thesis that the forces raised under Louis XIV matched those levied in 1794, at the height of Republican defense. To his count of regular French regiments, Corvisier adds naval forces, bourgeois militias, and coast guards to yield a grand total of 600,000. If the point that Corvisier wishes to make is that far more men bore arms than a simple tally of soldiers would indicate, he makes his point admirably. However, it is another matter to compare this to the national defense mounted by the Revolutionary regime. If one adds together numbers in this fashion for Louis XIV, one must do it for the Revolution, and the sum of the army, navy, National Guard, and armées révolutionnaires in 1793-94 would greatly surpass anything under Louis XIV.¹⁰⁰ Returning the focus to front line troops only, once the levée en masse had raked in its bounty of recruits, the French had mobilized 1,169,000 men by the late summer of 1794, and it has become almost traditional to discount this to 750,000 men actually under arms.¹⁰¹ This far exceeds the 255,000 army troops credited here to Louis XIV from 1709 to 1711.

A Caveat: Change Beyond the Numbers

All the attention given here to figures should not obscure the point that the contrast between the army of the seventeenth century and that which preceded it was more than just a matter of how many more soldiers served Louis XIV than fought for François I. Beyond the simple question of size, the army changed in character over time, and it could be argued that this difference in character mattered as much or more than did numbers alone.

Consider, for example, the way in which armies were assembled, the time they remained together, and the rapidity with which they were dismissed. During the Italian Wars, French kings built their armies, particularly their infantry, from mercenary units which could

¹⁰⁰ The National Guard alone was supposed to provide a reserve of 1,200,000 men in 1789. Jacques Godechot, Institutions de la France sous la Révolution et l'Empire (Paris, 1968), 133.

¹⁰¹ Godechot, Institutions de la France, 362; Jean-Paul Bertaud, La Révolution armée (Paris, 1979), 137-39.

be purchased "off the shelf." Thus in 1544, François I only concluded his contract with the Swiss in July, but this still gave them time to arrive and constitute the core of the Valois infantry at the camp de Jalons in late August and early September. Hiring Swiss or Landsknecht bands was more expensive than paying native French units on a day-to-day basis, but the mercenaries arrived fully armed and fully trained, ready to put in the line. When the threat ended, François put them back on the shelf just as easily as he had taken them off it in the first place; thus a sixteenth-century army could be created for a particular campaign and then quickly dismissed.

In the seventeenth century all this changed. Although the Bourbons still recruited foreign troops, the great majority of the army was now made up of French regiments maintained permanently as a standing army or at least for the duration of a particular war. In 1544 the foreign infantry contingents in François I's main force amounted to as much as 80 percent of his foot soldiers.¹⁰² Yet by 1710 the number of foreign infantrymen in French service had sunk to 14 percent, and certain of these "foreign" units were from areas which, in fact, lay within the domains of Louis XIV.¹⁰³ When war came, new recruits fleshed out established French regiments or stood to colors in entirely new units. In such a system, the government equipped the common soldier, fed him, and paid him while he learned and practiced his profession. Characteristically, it took many months for a seventeenth-century French army to be ready to go into action at full force, and regiments now served summer and winter, as long as the war lasted. Thus, the Bourbon state created and maintained an army in being, as opposed to assembling an army from "spare parts" for a single campaign. Over and above the great increase in numbers, saying that François I mustered 80,000 troops in the fall of 1544 means something very different from saying that Louis XIV commanded 420,000 in 1696.

Conclusion

This article has charted the dimensions and development of one of those giants that dominated warfare by 1700. On the whole, earlier, traditional notions of French army growth have fared well in these pages, even though particular figures have been questioned or redefined. The two-step concept of French military expansion, first

¹⁰² Lot, Recherches, 103-4.

¹⁰³ AG, MR 1701, piece 13, "Estat contenant le nombre . . . sur pied en 1710."

substantial under Richelieu and later spectacular under Louis XIV, emerges in a modified form but still intact. Louis XIII nearly doubled previous troop levels when he and his able first minister entered the lists against Spain. Later, the Sun King commanded wartime forces armies five to eight times greater than those that had fought for his Valois predecessors; perhaps even more important was the large standing army that remained in peacetime. Yet this recognition of dramatic army expansion under Louis XIV is qualified by the knowledge that his forces during the War of the Spanish Succession did not reach the proportions of those he had marshaled for the War of the League of Augsburg.

Most readers are, understandably, more interested in the implications of this army growth than in the mounting numbers themselves, yet time and space prohibit a discussion of their great political and social impact on these pages. But certainly any argument based on cause and effect must begin with knowledge of the timing and extent of that expansion. So here it is enough just to get the numbers and timing right, or as right as the current state of research permits.