Olli Bäckström

Military Revolution
and the
Thirty Years War
1618–1648

Aspects of Institutional
Change and Decline

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Foreword

Military history can be divided roughly into two main strands of publications: those that deal with military events in a traditional narrative format and those that approach military history from structural and societal perspectives. The present book, like many others that cover the early modern period of military history, falls decidedly into the latter category. The key concepts in the present investigation are change and decline, two processes that military history has traditionally attributed to either evolution or revolution. The nature and pace of military mutability has often been studied in the context of military hardware and tactics alone. This contribution, however, intends to investigate military change and decline within the framework of early modern military institutions, an approach originating from the so-called Military Revolution theory developed by Michael Roberts. Intellectual synergy is sought by cross-fertilising the Military Revolution theory with the ancillary sciences of sociology and economics. An interdisciplinary method can be expected to enhance the theoretical depth of any investigation regarding institutional development or diminution. The final qualification to this survey is its historical context, the Thirty Years War (1618–1648). Historians have already identified how that war changed the political and constitutional landscape of early modern Europe through the sheer scale and reach of the warfare and violence. The sizes of armies were increased, while the normative boundaries of warfare were being rearticulated. It can also be assumed that the Thirty Years War reconfigured military institutions in terms of size, structure,

and systemic purpose. This assumption of military-institutional variance during the Thirty Years War serves as a starting point for the following inquiry.

Major Problems of the Military Revolution

This book investigates military-institutional change and decline in early modern Europe and evaluates whether such transformation or regression can be attributed to the most protracted and devastating conflict of the seventeenth century – the Thirty Years War. In the field of military history, the connection between warfare and institutional development has been articulated most emphatically within the so-called Military Revolution theory. The original author of the thesis was Michael Roberts, who suggested that changes in military technology and tactics between 1560 and 1660 led to a revolutionary transformation in the way early modern states organised themselves for war. To Roberts, the catalyst for these changes was to be found in the reforms of Maurice of Nassau and Gustaf Adolf of Sweden, who had introduced linear formations and combined-arms tactics to conventional field operations.[1] The first historian to qualify the original Military Revolution theory was Geoffrey Parker, who suggested that the most profound military-technical change behind the quantitative and institutional growth of early modern armies was the proliferation of trace italienne or artillery fortifications that required unprecedently large numbers of troops to defend or besiege them.[2]

Geoffrey Parker also expanded the Military Revolution theory to cover the wider world beyond Europe. Thanks to the innova-

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1 Roberts, 1995.
2 Parker, 1995.

tions inherent in the Military Revolution, Parker contended, Europeans managed to exert military superiority over non-European peoples and thus enable the 'rise of the West'.[3] Meanwhile Jeremy Black criticised the original Military Revolution theory for over-emphasising the timeframe 1560–1660 as the most transformative phase of military change and for devoting too much attention to battlefield tactics at the expense of other military activities, such as naval warfare. In Black's view, the real Military Revolution occurred between 1660 and 1760 with the increasing growth in army sizes, adoption of more uniform military tactics and training, and institutionalised military-political cooperation between rulers and nobilities.[4]

The Military Revolution theory became part of the syllabus in early modern military studies after the publication of an edited collection of essays in 1995. The writers of *The Military Revolution Debate* sought to probe the theoretical limits of the Military Revolution by investigating, among other things, the growth of army sizes, the impact of *trace italienne*, finances of military expenditure, and military professionalisation.[5] In his own essay Clifford J. Rogers refashioned the Military Revolution schematic by proposing an alternative model of 'punctuated equilibrium' to explain the nature and pace of military change. The punctuated equilibrium, a concept Rogers borrowed from natural sciences, postulated the existence of several minor military revolutions instead of one all-encompassing one. By using this innovative model, Rogers identified two tactical revolutions in the age of the Hundred Years War (1337–1453) – well before the timeframe originally proposed by Michael Roberts.[6]

In their own blunt revisionism, Frank Jacob and Gilmar Visoni-Alonzo repudiate the entirety of the Military Revolution

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3 Parker, 1996.
4 Black, 1991.
5 Arnold, 1995; Jones, 1995; Lynn, 1995a; Lynn, 1995b; Thompson, 1995.
6 Rogers, 1995.

theory, which to them is an artificial, Eurocentric construction based on assumptions rather than historical proof. Instead, Jacob and Visoni-Alonzo see all warfare developing through a process of evolution, which biological concept they retrieve from a long tradition of teleological history.[7] In a more general context, Maria Sjöberg deems the Military Revolution theory 'outdated', as scholars have come to emphasise continuous development instead of abrupt change. To Sjöberg, the most profound change to occur in the Military Revolutionary era was the separation between the military and civilian spheres of everyday life.[8] John Childs has dismissed the Military Revolution as a historiographical misconception and argued instead that warfare changes through an evolutionary process alone.[9]

Discussion about military-technological innovations tend to eclipse the true essence of the Military Revolution theory – that of institutional change. There are, however, several studies that address the institutional dimensions of the Military Revolution. Robert I. Frost has remedied this negligence by turning his back quite intentionally on the technological details of the Military Revolution and concentrating on its political, social, and constitutional effects on the realms of north-eastern Europe – a geographical area often neglected in the study of early modern warfare.[10] Jeremy Black has emphasised how military organisations reflect cultural issues rather than tactics and technologies, particularly in the way non-European military organisations were shaped by issues of social cohesion rather than a drive for military effectiveness alone.[11] David Parrott has considered the persuasiveness of the Military Revolution theory in the context of military entrepreneurship. Parrott stresses the continued relevance of military enterprise and private proprietorship over means of warfare

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   7 Jacob & Visoni-Alonzo, 2016, pp. 1, 87.
   8 Sjöberg, 2014, p. 147.
   9 Childs, 2004.
  10 Frost, 2000.
  11 Black, 1998.

throughout the early modern period and questions the assertion that the Military Revolution led to state domination over all aspects of organised violence.[12] Michael Roberts himself brought into view organisational aspects of the Military Revolution and the Thirty Years War in his two-volume study of Sweden in the age of Gustaf Adolf. In the second volume Roberts systematically deconstructs the military-administrative reforms of Gustaf Adolf against the European background and provides an arc of Swedish military-institutional change from 1611 to 1632.[13]

The two current key contributions to the institutional aspect of the Military Revolution are the monographs by Brian M. Downing and Jan Glete. Downing argued that the Military Revolution resulted in the disappearance of medieval constitutionalism and the emergence of military-bureaucratic absolutism. In one notable exception to this arc, the Dutch Republic, an oligarchic form of rule helped to maintain constitutional government. One organisational symptom of movement from medieval constitutionalism towards military absolutism was the decline of medieval military systems and their replacement by standing armies. In the long run, military service in standing armies nevertheless facilitated liberalisation and franchise extension, thus paving way for modern-day democracy.[14] The arguments made by Jan Glete are even more aligned with the positions of the present investigation. In his study, Glete presents the early modern fiscal-military state as a complex organisation that existed to reduce the transaction costs of warfare and acted as a social container for various capabilities and skills. Glete's approach connects the Military Revolution theory with the wider traditions of sociological and economical sciences, an interdisciplinary approach this book seeks to emulate.[15]

Review of the impressive corpus of research literature reveals the major problems of the Military Revolution theory. One is the

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12 Parrott, 2012.
13 Roberts, 1958, pp. 169–304.
14 Downing, 1992, pp. 238, 252–253.
15 Glete, 2002.

idea of revolutionary change. Did the Military Revolution reverse the conditions of contemporaneous warfare, or should we find another term to describe the pace, extent, and legacy of the military changes that occurred between 1560 and 1660? Some military historians have offered more moderate words such as 'reform' or 'transformation', while others repudiate the possibility of abrupt change altogether and explain military history as an evolutionary process. The latter position is highly problematic, as evolution cannot just be assumed to rule military history by principle. Any claim that all military change occurs as evolutionary descent is a bold one and requires strong proof. So far, such convincing evidence does not exist.

Another major problem of the Military Revolution is the timeframe proposed by Michael Roberts. The century between 1560 and 1660 has been deemed both too narrow and too broad, depending on what aspect or area of military change one wishes to explore. There has been a tendency to expand the original timeframe to include much or all the early modern era (1500–1800), while in some cases military revolutions have been identified outside the period 1560–1660 and indeed beyond the early modern era. Attempts to pinpoint the Military Revolution to a specific war or other event are rare. One notable example of such a focused approach is Derek Croxton's article on the strategic implications of the Military Revolution during the Thirty Years War.[16]

One last major problem with the Military Revolution is the theory's regional or national applicability. Michael Roberts was a doyen in the field of seventeenth-century Swedish history, and the origins of his thesis reflected that expertise. In his 1955 essay Roberts extrapolated arguments about Gustaf Adolf and the Swedish military success in the Thirty Years War to cover much of early modern Europe, which bold and sweeping assertion has invited justified and necessary criticism. In one notable example of such warrantable re-evaluation, David Parrott has shown the difficulty in applying the tenets of the Military Revolution thesis

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16 Croxton, 1998.

to Richelieu's France, which did not follow the path of military development proposed by Roberts.[17] A similar qualification of the Military Revolution theory has been offered by Olaf van Nimwegen in the context of the Dutch Republic.[18] Most of the pushback, however, has been aimed at Geoffrey Parker and his rearticulation of the original theory that connected the Military Revolution with European colonial expansion and 'the rise of the West'. The criticism of Parker's Military Revolution thesis falls into two trends. In the first, Parker's thesis is questioned as an oversimplification of a colonial expansion that was more than just a series of military conquests. According to the second, the Military Revolution is an inherently Eurocentric concept that disregards non-European military innovations and adaptations. In the worst cases, a Eurocentric Military Revolution robs the non-European military actors of their agency in confrontations that cannot be explained solely through an assumption of European tactical and technological dominance.

Criticism aimed at the Military Revolution theory is mostly legitimate and indeed necessary. Few military historians would today assert that the existing conditions of warfare were reversed between 1560 and 1660. The appraisal of military change as something short of revolutionary upheaval does not, however, mean that military history can be explained as undisrupted and smooth teleology towards modernity. The changes identified by Roberts, Parker, and other proponents of the Military Revolution are indisputable: tactics did change, army sizes did grow, artillery bastions did come to dominate positional warfare, officer corps did emerge as professionals of warfare, military institutions did become more sophisticated, and early modern states did make more assertive claims for the monopoly of violence. To understand the impact of these changes, the Military Revolution theory should not be altogether dismissed or disregarded, but carefully reassessed in terms of qualifications and nuances. One case study where historians could

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17 Parrott, 2001.
18 Nimwegen, 2010.

find such theoretical recalibrations of the Military Revolution is the great cauldron of early modern warfare, the Thirty Years War.

Sociology and the Thirty Years War

Reciprocity between war and institutional change has been one of the central arguments postulated by sociology. Herbert Spencer argued as early as 1876 that primitive leadership structures emerged from warfare and that subjection to a government and centralised regulating systems all resulted from the practice of war.[19] War and warfare were also central elements in Max Weber's ambitious and far-reaching explanation of economy and society. Weber defined the 'modern military state' as an opposite to the levies of agricultural tribes, militias of medieval cities, and feudal armies, for which 'the self-equipment and self-provisioning of those obliged to fight was normal'. The modern military state, however, was characterised by the fact that equipment and provisions were supplied from the magazines of the ruler.[20] The agreement between Weber's assertions and the tenets of the Military Revolution theory is apparent. Weber's disciple Otto Hintze was even more unequivocal about the historical interconnectedness of state formation and warfare: 'All state organization was originally military organization, organization for war', Hintze declared in his 1906 lecture.[21] He regarded the Thirty Years War as a watershed event in the military-organisational history of Europe. From the end of the fourteenth century to the middle of the seventeenth century, the prevailing mercenary system of warfare had not yet fully integrated with the political institutions, Hintze asserted, nor was state organisation yet coagulated into the 'absolutist-centralist state toward which it was moving'.[22] From the second half of the seventeenth century to the nineteenth century, European state

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19 Spencer, 1876, p. 616.
20 Weber, 1978, pp. 980–981.
21 Hintze, 1975, p. 181.
22 Ibid., p. 187.

formation followed two divergent paths: a continental one that led to absolutist-militarist states and one followed by liberal England 'with its militia, Parliament, and self-government'.[23] Again, Hintze's essay anticipated much of the later discussions around the Military Revolution theory and its state-formative and military-organisational implications.

The great contributor to the sociology of military structures was Stanislaw Andrzejewski, who investigated the military organisation as a sociological subject. Andrzejewski observed that success in war depended on the coordination of individual actions. The larger the military organisation, the more coordination and layers of hierarchy it required. This realisation led him to conclude that the defining factor in military organisations was their ability to command the resources of the society, above all its labour force. To put his argument in quantifiable terms, Andrzejewski came up with a metric for a military participation ratio, which meant 'the proportion of militarily utilized individuals in the total population'. The military participation ratio could be used to identify different types of military organisation that reflected differing levels of participation and varying forms of civilian–military relationships.[24]

Contemporary sociology is hesitant to attribute all state formation to war, but it remains one of the key structural explanations for the origin of states among demographic factors and the forces of production.[25] Michael Mann identified military force as one historical source of social power alongside ideology, economy, and politics.[26] In the field of political science, the Spencerian–Weberian tradition has been condensed by Charles Tilly in the maxim 'war made the state and the state made war'. This pithy statement served as a spearhead for a whole theoretical framework that presented coercion and capital as the two driving forces of European state formation. According to Tilly, military inno-

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23   Ibid., p. 187.
24   Andrzejewski, 1954, pp. 29, 33.
25   Giddens, 1989, pp. 248–249.
26   Mann, 2012.

vation in early modern Europe, namely firearms technology and mass armies, made war more expensive for nascent states and necessitated the development of surplus-rich capitalist economies to finance the increased demands of warfare. Capital-rich territories favoured the emergence of urban polities such as Venice or the Dutch Republic, while areas dominated by coercive manorial authorities, such as Russia, tended to go the way of absolutist rule. Most Europeans realms, however, were middle grounds between the two competing trends of coercion and capital.[27] Later Tilly qualified his dialectical model by proposing that state formation resulted from a continuous process of state intervention and particularistic responses, such as resistance, bargaining, and settlements, that together increased the state's capacity, thus further encouraging renewed state expansion and intervention.[28] Modern mainstream sociology, which sees the state more as a set of social relations than simply as a coercive apparatus, still accepts Tilly's contentions yet seeks to qualify them with a critical eye on specific areas and periods.[29]

Anthony Giddens has been careful not to overemphasise the role of war and warfare in state formation, but has nevertheless identified a strong coercive strain in the class-divided society that predated modern capitalist ones. The early modern state, according to Giddens, was unable to penetrate deeply into localised customs, for which reason sheer military power remained the only method for government officials to 'contain' outlying regions, where direct administrative control was weak.[30] The militarist tradition of sociology has survived strongest in the work of Gianfranco Poggi, who asserts that the modern state was created principally for warfare and that it remains interested establishing and maintaining military might.[31]

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27 Tilly, 1975, p. 42.
28 Tilly, 2004, p. 7.
29 Kaspersen, Strandsbjerg & Teschke, 2017.
30 Giddens, 1989, p. 183.
31 Poggi, 2004, p. 99.

The central principle of modern sociology, and one that has not yet been fully explored in the context of military history, is the idea of historical growth in the scale, stratification, and complexity of human societies. This process was already articulated by Herbert Spencer, who likened the development of human societies to the growth and evolution of biological organisms.[32] The concept of aggregating social complexity was also implied by Karl Marx, whose grand theory of historical materialism suggested increased complexification in the restless production relationships of the capitalist-bourgeois society as compared to the stagnant feudal and slave labour economies that predated it.[33] Ferdinand Tönnies identified a difference between 'community' (*Gemeinschaft*) and 'society' (*Gesellschaft*). The former was held together by social control, morals, and tradition, while the latter was propped up by laws and institutions. Tönnies found the archetype of the *Gemeinschaft* in premodern rural society, whereas the *Gesellschaft* was an expression of modernity and its institutional embodiments: states, corporations, and associations.[34]

The conception of social-historical complexification and specialisation is usually associated with Max Weber and his study of economy and society. One of Weber's key tenets was the proposition that in premodern societies the use of force had been a consensual action agreed upon by kin groups; in the modern society, it became an institutional action taken by the state. Such actions, therefore, would presuppose the existence of complex organisations able to perform them. The primary complex organisation capable of carrying out such actions, Weber asserted, was the bureaucracy, which had come to exist in the public and private spheres only in the modern era.[35] The Weberian tradition can be identified in the work of Norbert Elias, who was interested in the

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32 Spencer, 1876, pp. 481–482.
33 Marx, [1845] 2001, 'History: fundamental conditions', in The German Ideology. https://www.marxists.org/archive/marx/works/1845/german-ideology/ch01a.htm#a3.
34 Tönnies, 1887.
35 Weber, 1978, pp. 956–957.

ways individual psyche is moulded by social attitudes. After the Middle Ages, Europeans had begun to practise self-restraint in violence, sex, manners, and speech. The cause behind this change, Elias argued, was the emergence of the centralised, differentiated, and socially complex early modern state that was able to impose psychological norms and standards on its subjects.[36]

The idea of increased organisational complexification and specialisation also forms an integral part of mainstream economics and business management theories. This process can already be found in the economic concept of division of labour, in which production is divided into a series of separate functions carried out by assigned workers, who only focus on their own tasks.[37] Business management, much like sociology, sees specialisation in the way institutions develop. Successful institutions are those that manage to use hierarchy, specialisation, and scale to their advantage. By creating such capabilities and further developing them, institutions can reduce transaction costs and increase the flow of information from low-level agents to decision-making managers, thus overcoming some of the major problems inherent in mainstream economics. The mechanism driving such specialisation is often represented as institutional evolution, in which institutions, such as corporations, respond to competition or resolve difficulties by further developing existing practices and capabilities rather than instigating radical reforms or policy reversals.[38]

Complexification of societies is best represented in contemporary sociology by systems theory, which studies society as a complex arrangement of interrelated and interdependent elements. The great modern authority in systems theory was Talcott Parsons. According to Parsons, every society must qualify for certain societal functions to maintain stable social conditions. The four core functions are adaptation (collection and redistribution of resources in interaction with the environment), goal attainment

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36 Elias, 2000.
37 Smith, 2003, pp. 10–12.
38 Westall, 1998, pp. 61–62.

(ability to make resolutions and decide on them), integration (harmonisation of societal values and norms), and latency (ability to maintain and pass on integrative social elements), identified by Parsons as the AGIL paradigm. As such, the AGIL functions can only be applied to a complex society or one that has industry, commerce, political organs, educational institutions, organised religion, and media.[39] In the spirit of Max Weber, Parsons differentiated the modern society from its predecessor by three evolutionary universals: administrative bureaucracy, money, and markets.[40] Although Parsons considered the study of institutions to be the primary occupation of sociology, he did not, curiously enough, include military institutions in his own investigations. For Parsons, societies complexified through an evolutionary process in which war played a disruptive although at times necessary role.[41] Alan Touraine presented systems theory as a system of actions, meaning a set of relations between potentially conflicting actors belonging to a same social sphere. Touraine's society was not an organisation but merely actions and relations. The history of society was fundamentally the history of social movements.[42]

The argumentation in the present investigation is based largely on the systems theory of Niklas Luhmann. According to Luhmann, the early modern era was a transitional period from the old, territorially segmented social order to a more modern society characterised by stratified and autopoietic (self-renewing) social subsystems that have been differentiated from the rest of the society. The key characteristic of modern subsystems is that they produce self-contained communication referring to their own specialities – with economic communication, for instance, consisting of information about remittances and changes of ownership.[43] Examples of social subsystems are political systems, economic

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39 Parsons, 1991.
40 Parsons, 1982, p. 309.
41 Parsons, 1991, p. 17.
42 Touraine, 1981, p. 25.
43 Luhmann, 2013, pp. 1–167.

systems, scientific systems, and religious systems that are based on power, money, truth, and belief, respectively.[44] One could also add the military as its own subsystem based on the use of force. Contemporary sociology does not see subsystems as fixed entities but rather as outcomes of continuous processes. With the growth in the complexity of social systems, there appears a tendency towards selection that subsequently leads to separation into sub-systems that are autonomous from one another.[45] Therefore, the military would create its own increasingly differentiated subsys-tems, such as military institutions and organisations with specific tasks and authorities. The process of selection would conversely suggest the existence of systemic decline and obsolescence, as purposeless subsystems get replaced by more utile ones.

Mainstream sociology identifies a systemic departure from older European social structures occurring sometime in the early modern era. The Military Revolution theory would narrow that timeframe to the century between 1560 and 1660. The present study attempts to offer an even more particular epoch for mili-tary-institutional change and decline, namely that of the Thirty Years War in 1618–1648. The idea that a single war could intro-duce institutional and social changes is not a novel one. It has been argued, for instance, that the Peninsular War (1807–1814) acted as a catalyst for liberal economic policies in Spain, thus introduc-ing redefined property rights, ameliorated transaction costs, and redistribution of wealth.[46] In the field of international relations, the Thirty Years War has indeed been associated with the institu-tionalisation of the sovereign territorial states and their interac-tive coexistence – the so-called Westphalian state system that is still assumed to be in place today.[47]

To understand the catalytic nature of the Thirty Years War, a summary of its origins and course is necessary. The origins of the

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44 Baraldi, Corsi & Esposito, 2021, p. 171.
45 Šubrt, 2020, p. 47.
46 Prados de la Escosura & Santiago-Caballero, 2022, p. 189.
47 Philpott, 2001, p. 4.

war have been attributed to confessional strife and institutional crises in the Holy Roman Empire, dynastic conflict between the Habsburgs and the Bourbons, social contradictions within the Estates of the Bohemian kingdom, endemic warfare inherent in a system characterised by military entrepreneurship and the lack of a monopoly of violence, class struggle in Europe, naked greed and power lust, or a combination of several of these reasons.[48] The Thirty Years War is often periodised according to principal theatres of war or prominent belligerents. Therefore, the first period of the war is described as the Bohemian phase that began with the defenestration of the Habsburg notables in Prague in May 1618 and ended with the rebel defeat at the Battle of White Mountain in November 1620. The following decade has several overlapping labels as the Palatine, Lower Saxon, or Danish phase of the war. It was a confusing period in the conflict, when the Habsburgs and the Catholic League were opposed by a range of mid-ranking Protestant princes and realms within and beyond the Holy Roman Empire. The two major escalatory events occurred in 1630 and 1635, when Sweden and France joined the war in opposition to the emperor and the Spanish king. The final distinctive phase ran from 1642 to 1648, when the logic of war was being dictated by the ongoing peace negotiations in Westphalia.[49]

The Thirty Years War can also be dissected according to military-institutional characteristics. From 1618 to 1624, the war was being fought on one side by the Catholic League army and the patrimonial troops of the Austrian Habsburgs, and on the other by the levied troops of the Bohemian rebel confederates and private armies of those German Protestant princes, who constituted the Protestant Union. The most distinctive feature of this early period of the war was the operational activity of the two Protestant general contractors, Ernst von Mansfeld and Christian of Brunswick,

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48 Asch, 1997; Bäckström, 2013; Burkhardt, 1992; Friedrich, 1962; Gutmann, 1988; Melton, 2007; Münkler, 2005; Ogilvie, 1992; Polišenský, 1968, pp. 34–43; Steinberg, 1966; Sutherland, 1992; Wilson, 2009.
49 Parker, 1997; Schmidt, 2006; Schormann, 2004.

who waged asymmetrical warfare against the Habsburgs as semi-independent non-state agents.[50] The year 1625 marked a major structural turning point in the war, when Ferdinand II commissioned Albrecht von Wallenstein to raise an entire imperial army as a general contractor and an imperial generalissimo. The first imperial army, which eventually swallowed up the Catholic League contingents and grew to exceed 100,000 men, dominated the war until 1630, when Ferdinand dismissed Wallenstein from imperial service and allowed the army to fall into disrepair.[51]

The invasion of Germany by Gustaf Adolf in 1630 introduced to the war another mass army that consisted of native Swedish conscripts and hired foreign mercenaries and auxiliaries. The army of the 'Lion of the North', which expelled the Imperialists from most of Germany and may have eventually numbered 160,000 men, provided the intellectual impetus for the Military Revolution theory as originally devised by Michael Roberts.[52] France joining the war in 1635 with its own substantial armies did not alter the institutional outlook of warfare, but it did nevertheless maintain an intensity of war that would have otherwise diminished as a result of the Swedish military setbacks in 1634–1635. Institutionally, the French participation was eclipsed in 1635 by the Peace of Prague, which proscribed the formation of confessional and private military confederations. The German princes, who now flocked under the imperial banners, attached their own troops to imperial contingents. The restructuring of the imperial war effort created four main contingents to combat Sweden, France, and their few remaining allies in Germany: an Imperialist-Saxon army in the south-east, an imperial Habsburg army in the south, a Bavarian army in the south-west, and a Westphalian army in the north-west.[53]

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50 Bäckström, 2011.
51 Mann, 2016.
52 Roberts, 1958.
53 Wilson, 2009, pp. 570, 598–599.

The last major structural alteration in the military organisations occurred in the final decade of the war when the tactical composition of the armies changed. The protracted and destructive war had made it increasingly difficult to provision armies and to find replacements for losses, for which reason the army sizes shrank in the last ten years of the conflict. The scarcity of material sources, the strategic imperative of territorial control, and the stretched lines of communication favoured a more mobile and operational style of warfare – one that was best carried out by cavalry. A mobile yet smaller army made up of experienced soldiers sacrificed little or no tactical effectiveness, while its 'logistical footprint', as David Parrott formulated his argument, remained small, thus facilitating provisioning.[54] The final decade of the Thirty Years War therefore saw the belligerents address the key structural challenge of the protracted and resource-consuming war: how to raise operationally capable armies and how to maintain their combat effectiveness from one campaign season to the next.

Research Method and Sources

The purpose of this book is to identify such change and decline in European military institutions that can be attributed to the Thirty Years War. This research problem serves a dual purpose of informing us about the early modern military institutions and about the Thirty Years War itself. The four military institutions selected for this investigation – the cavalry service, militias, regular armies, and war commissariats – all reflect different institutionalised forms of land warfare and are therefore analytically relevant to the evaluation of the Military Revolution theory as well as the history of the Thirty Years War, which was fought predominantly on land. The Thirty Years War has already been investigated as a source of political, economic, demographic, and cultural change, while the institutional and organisational aspects of the war have been subsumed into dispersed studies about specific realms, regions, and

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54 Parrott, 2012, pp. 180–185.

armies. The present inquiry, therefore, aims to offer a comparative, interdisciplinary, and cross-national study of various institutional perspectives into the Thirty Years War.

For present purposes, an 'institution' is defined as a legally recognised organisation that is a part of the society and which serves a public purpose. 'Change' in this study means alteration or modification, making something different from its earlier form. As such, change implies positive institutional development towards something more functional or purposeful. 'Decline' is understood as its opposite, a pathway towards institutional marginalisation, inoperativeness, or even extinction. Given the length and intensity of the Thirty Years War, it can be assumed that all military-institutional development followed one of these two paths; in the light of military history, uninterrupted stasis during decades-long war would be an unlikely institutional condition.

A study of early modern military change inevitably becomes a litmus test for the credibility of the Military Revolution theory. The present inquiry understands the Military Revolution theory in its original context and meaning as proposed by Michael Roberts: that tactical and technological changes between 1560 and 1660 led to a revolutionary increase in the physical and institutional reach of early modern armed forces. The acute research obstacle of the Military Revolution is the fact that it is essentially a declarative theory that explains an end result of military development without clearly elucidating the path that led there. To achieve such elucidation, the Military Revolution requires ancillary theories and concepts to explain the mechanics of organisational life cycles. Such theories and analytical tools are best supplied by sociology and mainstream economics. This investigation thus relies on the authority of traditional sociology that sees social history in terms of increased selection, complexification, and sophistication. This sociological tradition, perhaps best represented in the field of military history by Max Weber and Otto Hintze, is supported in this study by contemporary systems theory and the work of its prominent authority, Niklas Luhmann. Economics offers very practical analytical tools for the analysis of organisational functions and

logic. It also provides one of the key notions behind all early modern warfare, that of division of labour, a concept that explains the functioning of military labour markets and the structuration of standing armies. The economic theories and models of business management relevant for the present investigation are those that explore organisational competence, efficiency, and decline.

The method for investigating institutional development in early modern military history must be qualitative, as structural changes in the organisation of warfare cannot be presented in purely quantifiable metrics. At the most fundamental level, the research method applied to this study is content analysis, in which certain organisational signifiers, namely contemporaneous terms for offices, institutions, and practices, are identified in the primary sources or such secondary works that are based on rigorous primary source research. The appearance of these signifiers is then analysed in terms of their operation and evaluated against the Military Revolution thesis and its ancillary sociological or economic theories, and always in the context of one specific institution and its military-historical framework. The investigation proceeds from the methodological assumption that the utilised sociological and economic frameworks are not mere hypotheses but sound and applicable theories.

To present institutional development and complexification in a way that would agree with the methodological logic of content analysis, this book employs a structure that is both thematical and chronological. Therefore, the present inquiry opens with an investigation into the noble cavalry service that was already an archaic institution at the outbreak of the Thirty Years War in 1618. As a remnant of the old feudal order, the cavalry service is also the institution that is most removed from the model of a modern society as presented by sociology. The next topic of inquiry is the militias that were chronologically closer to the epoch of the Thirty Years War, as interest in them as viable military alternatives to mounted knights and hired mercenaries only developed in the late Middle Ages. The third institution to be studied is the regular army of recruited or conscripted soldiers. Regular armies had

already gone through several alterations in their weaponry, tactics, size, composition, organisation, and origins since the Middle Ages; such restless adaptation reflects the central tenets of the Military Revolution theory, modern sociology, and mainstream economics. The final subject of analysis is the war commissariat, which was still a recent innovation in the early seventeenth century. The war commissariat was also an institution that grew in terms of size, authority, scope of duties, and levels of hierarchy during the Thirty Years War itself, thus making it the logical terminus for a comparative content analysis of military-institutional development during the Thirty Years War.

One conspicuous institutional omission from this study is the early modern navy. There are three reasons for this exclusion. The first is the limited scope of naval operations during the Thirty Years War. Navies were employed to protect colonial and commercial interests rather than to wage large-scale and protracted war in Europe, which would undermine the logic of investigating their institutional development in the context of the Thirty Years War. The second reason touches on the Military Revolution theory. Naval warfare had no role in Roberts's original theory, and navies were first attached to the Military Revolution in the context of the 'rise of the West' rather than as devices to explain the emergence of professional armies, military administrations, and European power states. The third and more practical reason is the fact that the European naval administrations from the time of the Thirty Years War have already been investigated with a great deal of thoroughness and thought.[55] A comparative study of navies in the Thirty Years War would add little value to this existing body of authoritative research.

The four military institutions included in the book will be examined in main chapters that are divided into subtopics. These subtopics deal with each institution in the context of the main belligerents in Thirty Years War: the Holy Roman Empire, Hab-

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55 See, for example, Bellamy, 2006; Bruijn, 2011; Glete, 2010a; Goodman, 1997; James, 2004.

sburg Spain and Portugal, Sweden, Denmark, France, and the Dutch Republic. These subtopics intend to illustrate institutional parallels and divergencies between the realms fighting the Thirty Years War. Each subsection begins with a brief overview of the military institution's historical background in the studied realm (or realms). Discussion then moves to institutional developments during the Thirty Years War, which presented differing conditions and challenges to each of the belligerent realms. General trends of institutional change or decline after the Thirty Years War are also identified. Each subsection will then end in institutional analysis that attempts to explain different experiences and outcomes through the mechanisms of the Military Revolution and its ancillary socio-economic theories. The differing arcs of institutional development favour the employment of variable analytical tools, which are used to elucidate such aspects and perspectives that offer most insight into specific institutions in specific realms. The epilogue will bring together all the analytical results from the previous chapters.

This investigation is based on both primary and secondary sources. Some of the primary sources are archived folios, others printed documents in edited and published collections. The documents, which take the form of reports and letters, generally represent a view 'from above', meaning military-political authorities and their servants. Printed primary sources, such as military treatises and news chronicles, provide a larger context of warfare and mentalities. Quite often these primary sources must be read in terms of discourse analysis to extract deeper meaning and real-life applicability of the studied terms and signifiers. The secondary sources fall into two categories, historical and analytical. The historical sources consist of specialist literature on three topics: the Thirty Years War, Military Revolution, and early modern warfare. Analytical sources include sociology, economics, and some literature from other research fields, such as international relations or modern military science.

Cavalry Service

French *Ban et arrière-ban* and the Nordic Cavalry Services

Encyclopaedias broadly define knights' service as a set of military duties performed in return for tenures of land. Because medieval knights were mounted warriors, their form of feudal military service was synonymous with cavalry. Sociological assessment of the institutions of cavalry service focuses necessarily on forms of tenure, the discussion of which will rely on terminology provided by Max Weber in his study of economy and society. The starting point for any survey of tenure-based institutional change or decline is the original form of feudal lease attached to mounted military service. Broadly speaking, the tenure of knightly estates was not originally normative ownership but rather usufruct that was contingent on military service as cavalry.[56] Examination of cavalry service in the Thirty Years War reveals that institution's incompatibility with the dynamics of the Military Revolution. The key concept behind the institutional implementation of cavalry service during the Thirty Years War is complexity, which is central to modern systems theory. In the light of the Military Revolution and sociology, a survey about the employment of feudal cavalry service during the Thirty Years War inevitably tracks decline and institutional failure rather than institutional refinement and transformation.

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56 Rogers, 2010, p. 354.

In European military history, feudal cavalry duties could take various forms: guard duties in castles and keeps, providing armed retinue for the lord during his travels, or participation in military expeditions and wars. The cavalry service of the land-owning elites was the oldest surviving European military institution in the epoch of the Thirty Years War. The origins of the institution could be traced back to Republican Rome, where free men of substantial economic means served the expanding realm as mounted and armoured *equites* or knights.[57] The early medieval Franks, who adopted aspects of Roman warfare, maintained a similar system of elite cavalry groups or *comitati*.[58] The armoured knight embodied medieval warfare, and Charles Oman indeed described the period between the battles of Hastings (1066) and Crécy (1346) as the epoch of the 'supremacy of feudal cavalry'.[59] The supremacy of the mounted knight was largely derived from a feudal system of production and the general ecosystem of medieval warfare. As Clifford J. Rogers has elucidated, the feudal knight was supported by the toil of tenant peasants, which left him with time to hone his fighting skills. The knight's better diet made him stronger and bigger than his non-peer foes, and his capital surplus allowed investment in horses, weapons, and that most exorbitantly costly military outlay – armour.[60]

During the Renaissance, the idea of the nobility's inherent virtue began to find new avenues of expression alongside the traditional feudal cavalry service. While the nobles continued to reject labour and commerce as unworthy occupations, they started to embrace civic participation and well-rounded education as virtues that were no less glorious than the medieval warrior profession.[61] This change in self-perception reflected a general transformation in noble service away from purely military duties to

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57 Dixon and Southern, 2005, p. 20.
58 Beeler, 1972, p. 9.
59 Oman, 1953, p. 47.
60 Rogers, 1995, p. 57.
61 Ruggiero, 2015, p. 80–81.

ones that involved administration. The purely military institutions of knightly service nevertheless continued to exist in many European realms during the Thirty Years War and even after it, although their military relevance had already been eclipsed by the recruited mass armies before 1618.

The tradition of noble cavalry service survived in France in the form of the *ban et arrière-ban*. The loosely articulated *ban et arrière-ban* had traditionally meant the obligation of nobles and fief-holders to appear for military service when summoned to do so by the crown. As Jacques de Lalande explained in his 1675 treatise, the institution traced its origins back to the earliest Middle Ages, when it was known as 'Bannus & Heribannus'.[62] The practice fell into disuse in the high Middle Ages, but was revived by Philip IV after the disastrous military defeat against Flemish militiamen at Courtrai in 1302. Philip rather ingeniously incorporated into the *ban et arrière-ban* a tax that could be paid as a substitute for actual cavalry service. The monies raised via this tax could then be used to hire professional soldiers, which lessened the monarch's reliance on the military services of the noble stratum. In the sixteenth century many French noblemen indeed preferred commuting the cavalry service into remittances of money, although this bankrupted some of the poorer nobles.[63]

In 1635 Richelieu once again attempted to revive the *ban et arrière-ban* as a source of manpower for cavalry. The length of military service was set for forty days. Contrary to the government's expectation that the French nobles would flock under royal standards because they felt honour-bound to do so, many of the more impoverished nobles failed to answer the summons altogether. Of those nobles who did show up, many were ill-equipped and unable to provide any meaningful military service. Before the end of the forty days of service, most of the levied nobles had already left the army.[64] Many of those cavalrymen raised by *ban et arrière-ban*

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62 Lalande, 1675, p. 7.
63 Nolan, 2006, p. 31.
64 Parrott, 2001, p. 63.

in the summer of 1635 were rushed to Cardinal La Vallette, whose French army in Lorraine consisted of 6,000 Swiss mercenaries, four regiments (or roughly 3,000 men) of recruited French infantrymen, and 2,000 "chevaux de l'arrière-ban." La Vallette's cavalry element was both quantitatively and qualitatively outmatched by the Lorrainers and Imperialists, whose cavalry soldiers were more numerous, more experienced, and better equipped.[65]

In 1638, after several failed attempts to reinstitute the *ban et arrière-ban* as a source of military manpower, the central government finally acknowledged the structural limitations of cavalry service and effectively commuted it into a tax – the revenues of which could be used to raise and maintain recruited cavalry contingents.[66] Despite this commutation there were still sporadic attempts to raise cavalry by invoking the *ban et arrière-ban*. One such occasion was the siege of Hondarribia in 1638, during which the French sought to augment their besieging army with militias and noble levies. The crown managed to muster 500 cavalrymen via *ban et arrière-ban* in the province of Rouergue, although the siege ended in a French failure before any of these cavalry levies could be deployed.[67]

In the decades following the Thirty Years War, the French monarchy, embodied in the 'Sun King' Louis XIV, began to adopt an increasingly absolutist outlook. According to Camille Rousset, the nobility's *ban et arrière-ban* was incompatible with the new absolute monarchy and its claim for the monopoly of violence.[68] Nevertheless, the *ban et arrière-ban* was still being invoked during the Franco-Dutch War in 1674, although some in the military command viewed it with derision. Sébastian de Vauban, the royal fortification engineer, described the noble levies as being 'poor, inconvenient, and very badly equipped', and thus subjected to misery and maladies if sent into combat. Vauban therefore

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65 Mercure François, 1639, p. 36.
66 Parrott, 2001, p. 64.
67 Cabrol, 1860, pp. 323–324.
68 Rousset, 1862, p. 95.

advised François Michel Le Tellier, Marquis of Louvois, that the *ban et arrière-ban* levies should be restricted to garrison duties alone.[69] Louvois, however, acted against the wishes of Vauban and sent the mustered noble levies to Lorraine, where they served with enthusiasm but also a lack of appreciation for tactical priorities. Marshal Turenne indeed regarded their slow operational tempo a danger to the whole army.[70] Another major problem was the poor discipline among the noble levies: 'There is no disorder that this nobility has not committed wherever it has passed through', one *intendant* complained to Louvois.[71] The cavalry levy, which operated without hurry and lived off the land by pillage, would not have been out of place in the military landscape of the Thirty Years War, but in the age of synchronised and high-paced *guerre du cabinet* waged by Louis, the *ban et arrière-ban* was something of a military anachronism.

The nobility's cavalry service of *rostjeneste* was a social-political institution of fundamental significance in Denmark during the Thirty Years War. It was *rostjeneste* and *rostjeneste* alone that stipulated who belonged to the nobility and who did not. Because noble status depended on *rostjeneste*, cavalry service was both a military duty and a social privilege. The cavalrymen were not typically nobles themselves, but, as the French envoy Charles Ogier explained in 1634, professional soldiers hired by the *rostjeneste* nobility.[72] Readiness to spend private money on hired *rostjeneste* cavalry reflected the nobility's desire to limit the social expansion of their privileged Estate. Danish nobility indeed remained a highly exclusive and self-contained social stratum for the better part of the Thirty Years War. For many generations, hardly anyone had been elevated to noble status, with the isolated exceptions of some foreigners who had served in the Danish military. The period of the Kejserkrigen had introduced foreign officers to

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69 Ibid., p. 96.
70 Ibid., p. 98.
71 Ibid., p. 99.
72 Clausen, 1914, p. 28.

Danish service in sufficient enough numbers that, in 1641, the crown regarded it necessary to regulate inclusion in the noble stratum with certain conditions. All entrants were expected to provide proof of their noble pedigree outside Denmark. After proving themselves as social peers to Danish nobles, the foreign entrants were to swear fealty to the Danish crown.[73]

The military organisation of *rostjeneste* had been loose and provisional until 1625, when it was reorganised on a more permanent footing. The *rostjeneste* cavalry would consist of seven squadrons: three from Jutland, two from Scania, and one each from the islands of Funen and Zealand. This reform created not only permanent cavalry units but also a permanent institution, within which the *rostjeneste* units could be mustered and deployed. The organisation set up in the reform could henceforth act independently of the civilian administrative apparatus.[74] As Knud J. V. Jespersen has pointed out, this reorganisation did not occur out of military necessity, but instead reflected major changes in the forms of noble tenure, landownership, and property conditions.[75] From 1625 onwards, the *rostjeneste* was no longer the personal duty of a mounted knight (who in terms of military reality had ceased to exist anyway), but a permanent military institution in which the state had vested interest and which ultimately fell within the state's sphere of control.[76]

However, the great structural problem of the *rostjeneste* was its inability to provide large enough numbers of cavalrymen. This systemic failure became evident during the Kejserkrigen in 1625–1629, when the Danish nobles managed to muster only a thousand riders. One reason behind this failure was the belated mobilisation of the *rostjeneste* companies in 1627; another was the nobility's reluctance to serve in Holstein, which they considered to exist outside the borders of the Danish realm and therefore beyond

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73 Lind, 1994, p. 189.
74 Jespersen, 2018, pp. 91–92.
75 Ibid., p. 212.
76 Ibid., p. 213.

the institutional limits of their cavalry service.[77] In the later war against the Swedes in 1643–1645, the Danish nobility provided hardly any cavalry at all. At the Rigsdag of May 1644, the nobility suggested that it might train and lead the peasant militias in the context of its *rostjeneste* obligation.[78] Even this duty proved too much for the nobles, who complained to the Rigsråd in June 1645 that they could no longer drill and lead the militias on their own but needed the crown to provide them with additional non-noble warrant officers to share some of the burdens of command.[79]

It is worth considering to what extent the Thirty Years War affected the 'Revolution from Above', which Frederick III launched twelve years after the war. The embattled *rostjeneste* survived the Thirty Years War, but with a significant portion of its social capital lost in the process. The consistent underperformance of the nobility's *rostjeneste* in 1625–1629, 1643–1645, and finally in 1657–1660 undoubtedly contributed to the other Estates' lack of toleration regarding the nobility's fiscally privileged status.[80] The nobility's inability to provide any meaningful numbers of cavalry-men in the Kejserkrigen had been an early and alarming shock, which was then followed by institutional erosion of the *rostjeneste* during Torstensson's War (1643–1645), when the nobility itself actively commuted *rostjeneste* into other forms of wartime service. These early failures and institutional precedents provided wider context for the Second Northern War in 1655–1660, when the nobility yet again failed to justify its fiscal privileges in terms of military performance. The nobility had already in the 1650s agreed to provide the new standing army with cavalrymen in lieu of its previous *rostjeneste* obligations.[81] When the *rostjeneste* institution was finally abolished by Christian V in 1679, the nobil-

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77 Kancelliets brevbøger, 1929, p. 182, 8 September 1627.
78 Erslev, 1888–1890, pp. 13–15, 23–25 May 1644.
79 Erslev, 1888–1890, p. 138, 25 June 1645.
80 Fridericia, 1894, pp. 490–550; Frost, 2000, pp. 193–198.
81 Jespersen, 1985, p. 277.

ity's cavalry service was subsumed into the part conscripted, part recruited standing army.[82]

Sweden shared with Denmark the institution of noble cavalry service. In Sweden, this institution was called *rusttjänst*; the word closely resembled the corresponding Danish term, but that is where the similarities ended. By early seventeenth century, the Swedish nobility had already transformed into a service elite in which noble status could be attained (and maintained) by ways other than just cavalry service. The Swedish nobles had become increasingly incapable of providing *rusttjänst* service, for which reason the early Vasa monarchs had found it necessary to expand their forms of service to other military roles and even civil administration. The key for maintaining and rewarding the growing service elite was expropriated ecclesiastical land, which the Vasa monarchs redistributed to their servants. The enfeoffments were linked to the service performed, and they were to act as sources of revenue for specific functions. Some of these enfeoffments lapsed when the contract between the crown and the servitor expired. As many of the contractual enfeoffments were related to military service, war could become a desirable condition for the service elite.[83]

This noble military service, however, was no longer by definition *rusttjänst*, as it could cover commissions in infantry regiments, navy, or fiscal-military administration. Whereas in the reign of Gustav Vasa the *rusttjänst* had provided one third of Swedish cavalry, in the Thirty Years War this proportion had dropped to just 7 per cent.[84] One major structural problem in the *rusttjänst* was the nobility's growing inability to provide mounted soldiers from recently purchased fiefs that had been previously encumbered with royal taxation and conscription.[85] There were times, however, when the *rusttjänst* cavalry could still make a difference. One such time was Torstensson's War, when Fredrick Stenbock's

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82 Jespersen, 1983, p. 4.
83 Frost, 2000, pp. 122–123.
84 Mankell, 1869, p. 489.
85 Odhner, 1865, p. 208.

rusttjänst cavalry squadron performed a key role in protecting Swedish lines of communication from insurgents in Scania.[86]

The *rusttjänst* retained some of its military role after the Thirty Years War. In the wars of Charles X and Charles XI in 1655–1679, the quotas of *rusttjänst* cavalry were even increased.[87] Even though such an increase in the *rusttjänst* was never realised, the core of the extraordinary wartime cavalry (meaning cavalry companies that were not part of the standing regional regiments) was formed by the nobility's *rusttjänst* servitors, who received a salary from the crown. After the war most of these institutionally hybrid feudal/recruited companies were again dissolved.[88] As a result of the fiscal and military reforms of Charles XI, all cavalry was to be provided by designated farm-owners or *rusthållar* in return for fiscal privileges. The nobility lost full tax exemptions for their farms but retained the right to maintain manors (*säterier*) without the obligation to produce cavalry from them. In practice, the distinction between *rusttjänst* and *rusthållning* became muddled, and subsequently the *rusttjänst* lost all practical meaning as a military institution.[89]

The examples of France, Denmark, and Sweden testify of moribund cavalry service institutions, whose shortcomings were devastatingly revealed by the Thirty Years War. All three realms shared the same profound deficiency in their cavalry services: the inability of the elites to produce cavalrymen in numbers adequate for the transformed needs of contemporaneous warfare. As Geoffrey Parker has emphasised, the nearly exponential growth in European army sizes in 1500–1800 was the most visible characteristic of the Military Revolution. Institutions that could not respond to such increased demands for manpower had no future in the kind of military landscape that was already taking shape during the Thirty Years War. In terms of quality, the French and Nordic

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86 SRA RR/B222/fols, pp. 317–318, 18 March 1644.
87 Ericsson, 2002, p. 182; Isacson, 2002, p. 278.
88 Rystad, 2005, p. 211.
89 Villstrand, 2011, p. 405.

feudal cavalrymen appear to have been equal to recruited riders, which did not grant them any tactical edge over other forms of cavalry; later in the seventeenth century the French *ban et arrière-ban* cavalry even appears to have fallen below the standards of ordinary recruited cavalrymen.

Another perspective into Franco-Nordic cavalry services is offered by Max Weber and his dichotomy of early modern state formation. Weber divided states into two categories according to the nature of their service elites: one kind of servitors owned the means of government, for instance capital, armed forces, and estates, while the other category were divorced from the means of government in the same way that workers are divorced (or alienated in the Marxist sense) from the means of production.[90] In the case of the Franco-Nordic cavalry services, the Thirty Years War represented a transitory phase in which the cavalry service-rendering elites moved away from being prebendal servitors to salaried ones.

The Thirty Years War illustrates a situation, described by Weber, in which the landed noble no longer held his military office as a revenue-generating prebend but rather as a salaried commission from the state.[91] This trend was visible in Sweden and France even before the Thirty Years War, when noble status in those realms was already separated from cavalry service. This reality was reflected by the potential of the Swedish officer corps to emerge as its own political Estate separate from the nobility (a possibility that was finally terminated by the 1617 *riksdags-sordning*) and by the implementation of enfeoffments that were linked to specific functions in the military or state administration. Because many of these enfeoffments were not allodial or transferable, the Swedish nobility made a transition already during the Thirty Years War from prebendal cavalry service to circumstances that resembled the Weberian wage system of state service, where

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90 Weber, 1926, p. 11.
91 Weber, 1978, pp. 966–967.

the military labourers (nobility) were separated from the actual means of warfare (provision of cavalry forces).[92]

In France the erosion of the prebendal systems of cavalry service was propelled by the expanding disassociation between the military professions and membership in the Second Estate (nobility) – a divergence that was embodied in the growing class of *noblesse de robe* or noblemen who were more likely to find employment in government bureaucracies or judicial parliaments than in the army.[93] The commutation of the *ban et arrière-ban* to a tax in 1638 represented subjectification of feudal cavalry service-rendering nobles to a service elite that contributed fiscally to the development and maintenance of the state's monopoly over organised violence. The example of Bourbon France from the era of the Thirty Years War supports the Weberian notion of military bureaucratisation that was driven by the diminution of those social strata that had previously provided military manpower from their own resources.[94]

The prebendal concept of feudal cavalry service persisted in Denmark throughout the Thirty Years War and indeed continued to do so until 1660 and the introduction of absolutism. Even so, the Danish nobility had already adopted a double role as both providers of feudal cavalry service and commissioned officers in the part conscripted, part recruited royal army during the Thirty Years War. The Danish nobility's shift towards a salaried or commissioned military role was precipitated by Torstensson's War, which exacerbated the socio-economic stratification within the noble Estate, leaving some nobles more capable of rendering *rostjeneste* service than others. The nobles' increased reliance on military commissions as sources of revenue and prestige also made them more dependent on the monarch, who controlled the allocation of commissions before and after the Thirty Years War.[95] By

92 Weber, 1926, p. 11.
93 Haddad, 2021; Roberts, 1958, p. 28.
94 Weber, 1978, p. 981.
95 Frost, 2000, pp. 196–198.

1660, the nobility's salaried relationship with the emerging power state had effectively replaced the prebendal way of rendering feudal cavalry service.

German *Ritterdienst* and Spanish *Lanzas*

Noble cavalry service was alien to the Dutch Republic as well as to some parts of the Spanish realm. In the Middle Ages, the Dutch nobility had been expected to serve their feudal overlords, the local counts, as mounted knights in exchange for holding their fiefs. Henk van Nierop has concluded that personal military service of feudal vassals was discontinued during the reign of Charles V (1506–1555). Some nobles were still titled as knights in the sixteenth century, but this no longer implied military profession but rather status within the noble stratum.[96] During the Eighty Years War (1568–1648), the Dutch Republic relied exclusively on recruited cavalry.

During the War of Granada (1482–1492), the army of Castile had largely consisted of the grandees' mounted retainers and middle-ranking knights such as *caballeros* and *hidalgos*. Even the humble *acostamiento* light horsemen fought in the context of mounted cavalry service, although some of them also received salaries from the royal coffers.[97] The military service of the mounted knights began to wither away after the completion of the *Reconquista* in 1492. The feudal cavalry service of the *caballeros cuantiosos* was finally abolished by Philip III in 1619, as the Castilian Estates had come to view the institution as a tool of fiscal oppression that caused the lower nobility to abandon their estates in order to escape its effects.[98] In 1631 Philip IV allowed the upper strata of the nobility to commute their cavalry service into *lanzas* or remittances of money.[99] As a result, there was no longer clear

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96   Nierop, 1993, p. 159.
97   García, 2003, p. 40.
98   Ortiz, 1985, p. 54.
99   Storrs & Scott, 1996, p. 5.

connection between noble status and cavalry service in the Castilian heartlands of the Spanish realm. *Hidalguía* or noble status was consequently attainable to anyone who was rich enough to purchase land and then buy himself a title.[100] The absence of institutionalised cavalry service did not mean that the Spanish *hidalgos* would not have exhibited martial leanings like other European nobles. Many restless *hidalgos* sought adventure, glory, and extra income by joining the native *tercios*, where they already constituted up to 15 per cent of the manpower in the sixteenth century.[101]

The need for military manpower nevertheless induced Charles II to revive the medieval knightly military orders in the 1670s. In practice this meant that the crown would only allow fresh knighthoods (*hábitos*) for those who had already served in a military capacity. Those who were already members of the military orders were expected to serve in person or send three paid substitutes. Some members of the orders objected to these demands by claiming that they were eligible for cavalry service only against the Moors. Others skirted the whole vexatious issue by sending the crown substitutes of poor quality – very much in the spirit of the bankrupted 'refeudalisation' of the army that had occurred in the later stages of the Thirty Years War.[102]

In the Kingdom of Naples, a constituent part of the Spanish realm, cavalry service was very much aligned with noble ethos. Neapolitan nobles not only rode to war in Spanish service, but they also used mounts as means to conduct riot control and urban warfare in the tumultuous streets of Naples.[103] Police actions against the notorious Calabrian brigands, who operated in large mounted bands, also necessitated the consistent employment of cavalry units.[104] However, the ancient Langobard *eribanno*, in

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100 Elliott, 1970, pp. 451–452.
101 Sherer, 2017, p. 21.
102 Storrs, 2006, p. 38.
103 Marino, 2011, p. 103.
104 Hanlon, 2014, p. 53.

which feudal overlords had mobilised mounted warriors through their vassals, had already ceased to exist during the high Middle Ages. By 1300, many urban communities, which dominated the surrounding countryside in the role of feudal landlords, had switched to raising infantry and cavalry alike by a combination of militia duty and recruitment.[105] Therefore, during the Thirty Years War, Italian nobles in Habsburg service raised cavalry contingents by recruiting them. The institutional framework for these musters was consequently military entrepreneurship rather than the feudal *eribanno*. As the prolific historian Cesare Cantù once argued in his universal history, the feudal nature of cavalry effectively ceased to exist during the Thirty Years War, as cavalrymen were recruited from the *plebe* or commoners, while the hierarchy within the noble officer corps was determined by the military chain of command instead of social prestige.[106]

In the province of Franche-Comté, which the Spaniards occupied as a subsidiary of the Spanish Netherlands, the *ban et arrière-ban* continued to exist throughout the Thirty Years War as a legacy of the province's Burgundian past. The Comtoise nobility was expected to provide 400 light horsemen as their feudal due to the Spanish administration in Dole. The distribution of cavalry between all the fiefs was done in proportion to the income declared by the feudal vassals. The duration of the cavalry service was fixed at six weeks, for which period the cavalrymen could receive a contribution of 135 francs to cover subsistence and equipment costs. The feudal vassals also had the option of commuting the *ban et arrière-ban* to remittances of money. The *ban et arrière-ban* could only be summoned at a time of crisis, and the place and time of the musters had to be designated by the Spanish governor in Dole. The inability to appear at the muster, or to provide a monetary subsidiary, would incur a fine.[107]

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105 Cantù, 1863, pp. 127–131.
106 Ibid., p. 203.
107 Piépape, 1881, pp. 324–325.

The obligation of the noble stratum to render cavalry service (*Ritterdienst*) to their liege lords had not yet died out in the Holy Roman Empire, although it was starting to lose its relevance as a military institution by 1618. We can still find cavalry service being occasionally invoked by some of the smaller or middle-ranking principalities during the Thirty Years War. One such example comes from Mainz in 1621, when the ecclesiastical prince-bishop Johann von Aschhausen summoned his feudal retainers to defend the electorate against a possible attack by Ernst von Mansfeld and his itinerant mercenary army.[108] That same year Margrave Christian of Bayreuth obliged his nobility to provide the principality with one rider for each 150 florins of income.[109] In 1630 Christian William, the newly returned secular Administrator of Magdeburg, commanded all of the Archbishopric's feudal vassals to come to the city's defence with 'faithful, experienced retainers, capable horses, good weapons, with each man being armed with two pistols and a bandolier'. Any vassal failing to perform this duty, Christian William warned, was to lose his fief.[110]

Technically cavalry service meant an obligation to furnish a quota of equipped and armed riders for military service. The two problems with cavalry service were quality and quantity. In relation to the first problem, Margrave Johann Sigismund of Brandenburg had complained that the kind of riders showing up for cavalry service were mere 'coachmen' dressed in rags instead of armour.[111] The problem of quantity meant that the number of troops provided by the cavalry service was often too low for operational purposes. When Duke Wilhelm of Saxe-Weimar inspected his feudal *Ritterpferden* in 1626, only fifty-three riders appeared at the muster.[112] This was not an acceptable number in the age of the Military Revolution, when wars were fought with mass armies.

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108 Weiss, 2000, p. 369.
109 Heilmann, 1868, p. 863.
110 Lundorp, 1741, p. 204, year 1630, public patent of Administrator Christian William.
111 Hahn, 1855, p. 145.
112 Linsenbarth, 1939, p. 17.

In practice, cavalry service had been commuted into a monetary contribution in many parts of the empire. In 1631, for instance, when the Imperialists were threatening the security of the electorate, the noble class of Saxony performed its service by paying a voluntary 'Donation' of 200,000 guldens for the common defence.[113] Another trend could be seen in the Duchy of Württemberg, where the noble *Ritterschaft* had already morphed into salaried mercenary cavalry in the sixteenth century.[114] These problems and evolutions of cavalry service indicate that it was no longer a viable military institution in the Holy Roman Empire during the Thirty Years War.

Evidence from the Thirty Years War suggests that the cavalry service was merging with another ancient military institution, the universal male levy. The peasant levy was allegedly instituted by the first Saxon rulers of Germany in the tenth century, employed to defend the eastern borderlands against Magyar invaders. There is not yet historical consensus on the meaning of the term *agrarii milites* or 'farmer soldiers', but some historians are now viewing it as a supportive institution that coexisted with the feudal levy of heavy cavalrymen.[115] The military history of medieval Germany testifies of the divergence of these two institutions, but evidence from the Thirty Years War indicates again a degree of convergence.

This convergence is elucidated by examples from Saxony. In April 1620 Elector John George issued a proclamation in which he commanded those eligible for *Ritterdienst* to immediately mobilise with their 'armaments, men-at-arms, and horses'. John George then elaborated that the *Ritterdienst* involved the levying of every tenth man from among 'our demesne tenants [*Lehnleute*] and subjects [*Unterthanen*]'. The levied men should appear in musters 'well-armed' and with 'gunpowder, match, and ammunition'. If these numbers were to prove insufficient, the nobility should levy every fifth man and finally all the available manpower if the

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113 Vehse, 1854, p. 5.
114 Statistisch-Topographischen Bureau, 1863, p. 78.
115 Rogers, 2010, pp. 10–11.

Defensionswerk or territorial defence necessitated it.[116] A careful reading of this mandate suggests that *Ritterdienst* had become an umbrella term for popular military service in general and that in practice it was expected to produce cavalrymen and infantry alike, according to the resources available. The requirement of 'match' is particularly revealing, as it suggests the desire to levy mounted infantrymen armed with matchlock muskets rather than actual cavalrymen, who would have had little use for matches in their pistols and wheel-lock harquebuses.

In 1632 Saxony faced a far more dangerous foe than the Lusatian Estates, when imperial armies under the command of Heinrich Holk and Matthias Gallas invaded Misnia and Vogtland in the southern parts of the electorate. According to a Swedish diplomat, John George had given instructions to levy armed retainers for the defence of Misnia and Vogtland on the principle of 'par ban et arriereban', a French term synonymous with *Ritterdienst*.[117] A contemporaneous chronicle by Christian Lehmann reveals that the levied troops consisted of hunters, gamekeepers, and peasants, and that they were mustered and commanded by ducal bailiffs and foresters. None of the levied peasants appear to have been mounted troops; instead of cavalry action they conducted guerrilla warfare or manned field fortifications.[118] The 'arriere ban' employed in defence of Misnia and Vogtland had therefore become indistinguishable from any ordinary levy of irregular musketeers.

After 1648, the institution of *Ritterdienst*, which had been of marginal military importance during the Thirty Years War, was either transformed into a fiscal obligation or merged with the militias. In 1656 the nobility of Mark-Brandenburg had still raised 500 recruited riders for Elector Frederick William, but this duty

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116 Lundorp, 1739, p. 228, 6 April 1620, public mandate of John George.
117 *Historiska Handlingar*, 1907, p. 48, 22 August 1632, Lars Tungel to Heinrich Schwallenberg.
118 Lehmann, 2013, pp. 30–62.

was commuted to money in 1663.[119] But there were still sporadic attempts to mobilise feudal cavalry. In 1664 the Duke of Weimar, who feared a possible invasion by the Elector of Mainz, summoned the nobility to perform its *Ritterdienst* with 'strong horses, muskets, gunpowder, and ammunition', while the Landgrave of Hesse-Cassel resorted to a general levy of every fifth able-bodied man for his princedom's defence.[120] In the end, the commutation of cavalry service into money appears to have continued as a dominant trend in Germany and one institutionalised in the imperial military reform of 1681.

In their capacity as central European rulers, the Austrian Habsburgs could employ such feudal cavalry institutions that were not accessible to German princes. According to a medieval principle, all nobility and clergy in the Habsburg-ruled Kingdom of Hungary were obliged to provide their monarch (during much of the Thirty Years War the future Emperor Ferdinand III) with *insurrectio personalis* or personal cavalry service. The military service of the manorial overlords also extended to their peasants, who were to be levied within the framework of *militia portalis*, a quota system based on the property and income of the peasants' landlord.[121] The basic unit of the quotas was a levy of twenty men, *húsz* in Hungarian, which name later evolved into 'hussar', the Hungarian light cavalryman. The great magnates of Hungary enjoyed the privilege of maintaining their private armies or *banderia*, which effectively formed the mass of the Hungarian feudal cavalry levies.[122] The military logic behind the maintenance of Hungarian feudal levies was the defence of the Military Frontier (*Militär Grenitz*) against incursions from the Ottoman territories to the south. Feudal cavalry levies and warrior societies such as the Balkan *hajduks* remained by nature in a constant state of military readiness, which made them the most feasible military

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119 Königl. Gesellschaft der Wissenschaften, 1779, p. 1125.
120 Kirchhof, [1664] 1871, p. 182.
121 Hochedlinger, 2013, p. 82.
122 Ibid., p. 82.

institutions for the kind of existential and endemic warfare that characterised the frontier lands between Habsburg Austria and the Ottoman sultanate. There even warriors of peasant origins could receive privileges similar to those of the nobility in return for military service.[123]

Sizeable Hungarian cavalry contingents were indeed mustered in the Thirty Years War. In November 1634, for instance, the Imperialists deployed a regiment of 1,000 Hungarian dragoons in Silesia. There were some risks involved in the use of the Hungarian *banderia*, as such troops were thought to suffer from poor discipline. Ferdinand II himself instructed Field Marshal Rudolf Colloredo to monitor the progress of the Hungarian dragoons and to make sure that the collateral damage they caused during their march through Bohemia would be kept to a minimum.[124] Political conjunctures, such as ongoing peace negotiations with the troublesome princes of Transylvania, could also persuade the emperor to refrain from calling a full-scale *insurrectio* of the Hungarian feudal levies.[125] The mobilisation of the Hungarian cavalry levies did not end with the Thirty Years War but continued to take place time and again during the later centuries.

The Habsburgs rulers of Bohemia had inherited a whole social stratum of knights from the realm's medieval Premyslid kings. The royal Bohemian army, which was once again restored after the interregnum of the Hussite Wars (1419–1436), consisted of three parts: the peasant levy, mercenary contingents, and the knights. This whole army was mobilised on the principle of a feudal levy under which the lords would muster with retinues of mounted men-at-arms and peasant infantry. This massed levy was used exclusively for national defence.[126] Some of this Bohemian feudal tradition can be identified in Albrecht von Wallenstein's partic-

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123 Ágoston, 2010, p. 122.
124 Čechová, Janáček & Koči, 1977, p. 333, 11 November 1634, Ferdinand II to Rudolf Colloredo.
125 Čechová, Janáček & Koči, 1977, p. 203, 19 October 1633, Ferdinand II to Wallenstein.
126 Iwanczak, 2000, p. 20.

ipation in the War of Gradisca in 1617, when Wallenstein provided Archduke Ferdinand of Inner Austria (future Ferdinand II) with 180 cavalrymen and 80 musketeers, who Wallenstein had recruited, equipped, and maintained at his own expense.[127] During the Bohemian Rebellion in 1618–1620, much of the knightly class rallied to the insurgent cause, but the armed levies they provided for the national army were mostly of poor quality, lacking in training and being equipped with inadequate weaponry. The size of the levies was also modest. The small estates of the Bohemian knights could only provide two or three men-at-arms each and were nearly incapable of producing officers.[128]

Because most of the Bohemian knights were Protestants or Utraquists, the large-scale confiscation of the knights' estates and their subsequent dejection as a social stratum after the *Landesordnung* of 1627 effectively demolished the material and institutional foundations of the medieval cavalry service.[129] The reconstitution of the patrimonial lands also affected Austria, where the local nobility had been obliged to lead their vassals to war if the lands were under threat from an enemy attack. The new *Landesordnung*, however, explicitly proscribed any military recruitment or mobilisation of levies without consent from the Habsburg rulers of Bohemia and Austria. From then on, the monopoly of violence in the patrimonial lands was firmly in Habsburg hands.[130]

The most useful conceptual framework for analysing the atrophy of Habsburg and imperial cavalry services is the Military Revolution theory – or rather its variation proposed by Clifford J. Rogers, who suggested the existence of several successive military revolutions that went all the way back to the high Middle Ages. The earliest of these revolutions postulated by Rogers was the Infantry Revolution of the fourteenth century that signified the shift of tactical advantage from heavy cavalry to infantry-

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127 Bireley, 2014, p. 82.
128 Polišenský, 1971, p. 103.
129 Bérenger, 1994, pp. 265–267.
130 Mears, 1988, pp. 130–132.

men armed with pikes, halberds, longbows, and crossbows. This was followed in the fifteenth century by the Artillery Revolution, which referred to the appearance and proliferation of cannon and bombards capable of reducing castles and demolishing city walls.[131]

By the early sixteenth century, these two military revolutions had conflated and produced large infantry contingents armed with a combination of pikes and harquebuses. The Swiss mercenaries and German *Landsknechte* had already testified of the new tactical advantage of drilled pikemen and harquebusiers over mounted knights, and the Spaniards wished to emulate this military development by creating their own Swiss-type infantry phalanxes. However, because Spain was still relatively impoverished in the early sixteenth century (before the flow of silver really started from the Americas), the Spaniards were compelled to raise and train their own infantry contingents instead of just hiring mercenary infantry from abroad.[132] This necessity effectively meant that the social and economic basis of the Spanish military had to be recalibrated to accommodate the creation and maintenance of standing infantry *tercios* – a structural overhaul that could only happen at the expense of the medieval knight service. The process of turning the Spanish military into an organisation that was dominated by quantitatively and qualitatively strong infantry formations was completed well before the outbreak of the Thirty Years War.

The eclipse of the feudal cavalry service was less abrupt in the Holy Roman Empire. The Habsburgs maintained the traditional feudal cavalry levies in their Hungarian lands as well as along the military border with the Ottoman sultanate. The institutional maintenance of feudal cavalry levies made sense in a frontier zone that was in a constant state of endemic 'small war' between the Habsburgs' vassals and the Turkish raiders. Instead of abandoning the feudal cavalry service, Habsburg Austria incorporated it

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131 Rogers, 1995, pp. 58–61, 64–73.
132 Delbrück, 1990, pp. 13–16, 19.

into the upgrading of frontier defences along the *Militär Grenitz*. The feudal levies continued to provide manpower for the frontier defences that were only gradually bureaucratised and centralised in the century after the Thirty Years War.[133] In institutional terms, the central European feudal cavalry service did not disappear because of an abrupt Military Revolution but rather accommodated itself with the Austrian power state in a gradual process that seemed more evolutionary than revolutionary in its pace and outcome. In the pre-war Bohemian Kingdom, which did not have a standing army of its own, the feudal service remained not only a viable military organisation for raising troops but also a social necessity to justify the political relevance of the knightly stratum. Conversely, its demise during the Thirty Years War was a political and constitutional necessity for the Habsburg rulers who sought to consolidate their monopoly of violence in reconquered Bohemia.

The steep decline of the German *Ritterdienst* during the Thirty Years War was yet another punctuation in the equilibrium model of the Military Revolution proposed by Rogers. Whereas in Spain the feudal cavalry service gave way to an infantry-dominated military organisation and in Austria morphed with the state-controlled system of frontier maintenance, in Germany the *Ritterdienst* was in most cases either commuted into fiscal contributions or merged with other military institutions, such as the nascent standing armies and the militias. The end results of these two paths of institutional development conformed to the key characteristics of the Military Revolution: growth in the scale of warfare, increased military professionalism, and an enhanced claim for the state's monopoly of violence. The institutional abatement of the *Ritterdienst* in 1618–1648 was not in itself a revolutionary transformation of warfare but rather a subsidiary among other developments, whose colligation constituted the wider framework of the Military Revolution theory.

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133 Ágoston, 2010, p. 131.

Cavalry Service and the Problem of Complexity

Feudal cavalry service declined institutionally in all the belligerent realms during the Thirty Years War. This decline can be understood in sociological terms by viewing it from the perspectives of traditional Weberian sociology and modern systems theory. In the sociological terms articulated by Weber, the decline of feudal cavalry service represented the service elites' shift from the prebendal model, where the nobles held their military offices as revenue-generating prebends from the early modern state, to a model where they had salaried positions in the military organisation.[134] In its original form, feudal cavalry service was essentially a licence for the knight to appropriate land revenue for the upkeep of his own military capabilities – horses, weapons, armour, retainers, and so on. It was still understood in the seventeenth century that such feudal tenures were to be held in perpetuity.[135] In some cases, as in early modern Sweden, the prebendal model had shifted to a variation in which the noble officer received revenue-generating enfeoffments for duties other than just the traditional cavalry service. Furthermore, perpetual tenure of cavalry service-tied enfeoffments was no longer to be taken for granted, as they could be allocated as temporary or conditional leases. What propelled such a shift, Weber argued, was the trend of monetisation in the economy. Land rents, often paid in kind in medieval times, were replaced by taxes, almost invariably paid in money by the time of the Thirty Years War.[136]

The erosion of a prebendal model of cavalry service and the perpetual feudal tenure resulted in two trends that can be identified in various feudal cavalry levies during the Thirty Years War. One was the commutation of cavalry service into monetary remittances and contributions. This artifice, which was common in France and the Holy Roman Empire during the Thirty Years War, meant that the nobles rendered their cavalry service in the form

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134 Weber, 1978, pp. 966–967.
135 Philipps, 1660, p. 10.
136 Weber, 1978, p. 968.

of money, which the early modern state then used for hiring professional cavalry. Another trend was the employment of nobles as commissioned officers in the regular armies, a practice which occurred in all the belligerent realms of the Thirty Years War. This not only diminished the institutional logic of feudal cavalry service but also intensified bureaucratisation and hierarchisation in the armed forces – two developments that were apposite to Weber's characterisation of a prebendal mode of service, which was based on personal and lifelong tenure of land and office. Bureaucratisation, Weber reminded his readers, was also a dynamic process, and one that sought to expand in both qualitative and quantitative terms.[137] This observation aligns with the tenets of systems theory, which leads us to consider cavalry service as a systemic organisation.

One defining characteristic of a modern subsystem, according to Niklas Luhmann, is its complexity, which is realised in a set of relations between the elements in the system (system complexity) and possibilities of compatibility with the environment (environmental complexity). As only system complexity is organised complexity, the system relations of a military organisation appear as hierarchies and chains of command.[138] What limited early modern cavalry services as complex systems was, therefore, their lack of institutional hierarchy. Cavalry service was offered by the vassal (knight) and received by his overlord (monarch) without intermediating institutions or organisations; system relations within feudal cavalry service were consequently reduced and compatible. The Military Revolution altered this complexity by demanding more hierarchisation from all forms of warfare, including cavalry combat. No matter whether cavalry contingents were recruited as volunteers or summoned as vassals, in the field they all had to be organised into chains of command that corresponded with the respective unit sizes (cornets, companies, squadrons, or regiments). The logic of system relations changed: cavalry service

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137 Ibid., pp. 966, 968–969.
138 Baraldi, Corsi & Esposito, 2021, pp. 49–50.

troopers were no longer directly answerable to the liege lord but to their commanding officers in the military hierarchy.

In the terms of Niklas Luhmann, the cavalry service institution received an additional layer of distinction, as its inclusion hierarchy (the social hierarchy of nobles) was compounded by a command hierarchy (the military chain of command).[139] The most obvious and feasible way to circumvent these altered systemic circumstances and to maintain the traditional unmediated system relations with the overlord was for the cavalry service-rendering noble to commute his physical service into remittances of money, which the liege lord would then use to hire professional cavalry. The inherent paradox of the competing inclusion and command hierarchies was only resolved by the introduction of a table of ranks, a measure not yet implemented anywhere during the Thirty Years War.

The environmental complexity surrounding cavalry service institutions in 1618–1648 should be assessed in terms of the Military Revolution theory and the general processes of early modern state formation. To begin with, the tactical and technological changes that we today see as catalysts behind the Military Revolution, as well as the convoluted path of early modern state formation, were not organised complexity but rather outcomes of contingencies, accidents, opportunities, and dead ends. The compatibility of the feudal cavalry service with its altered environment was, therefore, not assured. The Military Revolution theory, for one, indicates as much. As Michael Roberts argued, changes in tactics and technologies between 1560 and 1660 necessitated the employment of large-scale military formations led by professional officer corps.[140] These new demands of warfare were realised in the Thirty Years War, which was not only a protracted conflict but also an unprecedented one in its size and impact. Feudal cavalry could no longer meet the demands of altered warfare either qualitatively or quantitatively. Its inability to expand on these terms

139 Luhmann, 2013, p. 201.
140 Roberts, 1995, pp. 18–26.

designated feudal cavalry service as something other than a military bureaucracy, as was implied by Weber.

State formation comprised another sphere of environmental complexity that proved increasingly incompatible with the principles of feudal cavalry service. Systems theory identifies historical development from the territorially segmented feudal order to a hierarchical Estate society of the early modern era, which is, in its turn, dissolved horizontally into differentiated and specialised modern subsystems.[141] As the era of the Thirty Years War shows, cavalry services struggled to cope with the complexity of the Estate society and the emerging early modern state that was in the process of creating impersonal infrastructures of power, which announced and amplified authority through institutions – a model of historical sociology devised by Michael Mann.[142] Emerging infrastructures of power necessitated institutions that were normative, regulated, and permanent. The feudal cavalry service, which was based on personal and unmediated power relations, and which was only summoned intermittently and sporadically, failed to meet these demands. A systems-theoretical autopsy of the cavalry service reveals that it lacked the kind of functional differentiation and high internal complexity that are necessary preconditions for subsystem evolution.[143] The only avenue left for the feudal cavalry service was to decline and wither away – a trend that greatly accelerated and, in some instances, even reached closure during the Thirty Years War.

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141 Baraldi, Corsi & Esposito, 2021, p. 67.
142 Mann, 1988.
143 Luhmann, 2012, p. 336.

Militias and Levies

German *Ausschuß* and French *Milice*

A militia is usually defined as a military force that operates on a non-permanent basis and is therefore differentiated from regular troops and standing armies. Militias and levies can also be thought to be more inclusive than regular armies. A limited militia consists of volunteers, while a universal levy would be a normative and articulated obligation. Degrees of voluntarism and coercion obfuscate the boundaries between militias and levies on the one hand and recruited armies and conscription on the other. This chapter will only investigate irregular and non-permanent military institutions that can be broadly understood as militias and levies, while regular armies, whether recruited or conscripted, will be handled in the succeeding chapter. There is no clear taxonomy of early modern militias, but some categorisation will result from an investigation of militias in the Thirty Years War. The main fault line can be discovered between urban militias and rural levies, a division which existed among all the belligerent realms of the war. Other differences were quantitative, referring to the demographic reach of militia service, and qualitative, in terms of the degree of military proficiency (training). To understand the militias' place among the military institutions of the Thirty Years War, it becomes necessary to view them from the perspectives of the Military Revolution theory and such social science theories that address the conflict between agency and structures, as well as problems of institutional proficiency. Systems theory again proves to be a useful analytical tool for such inquiries.

Urban militias and peasant levies were a ubiquitous part of the early modern military landscape. Even though militias had existed in Europe throughout the Middle Ages, the early modern epoch differentiated itself from the past by investing militias and levies with high military expectations. In his iconic book *The Prince* (1513), Niccolò Machiavelli famously eulogised the virtues of 'national arms' that were far more dependable than the fickle and capricious mercenaries and foreign auxiliaries.[144] Machiavelli's less well-known book *The Art of War* (1521) disseminated its author's favourable view of national militias to northern Italy and beyond. While most Italian city-states had employed urban militias throughout the Middle Ages, Machiavelli's printed thoughts encouraged the Florentine Republic to expand its native force and to muster a rural levy, the *Ordinanza del contado*, alongside the urban militia. The militia model presented by Machiavelli implied a departure from medieval militias, as it relied on the two-tier selection of a general levy and a selected core of the most capable and promising militiamen. In this sense Machiavelli's militia model has been viewed as a forerunner to the early modern conscript armies.[145]

The emergence of large professional armies and the growth in the scale and demands of warfare, the two main characteristics of the Military Revolution as articulated by Michael Roberts, did not erase enthusiasm for civic militias and levies. The Dutch philosopher Justus Lipsius continued to promote Machiavelli's ideas by stressing obedience, loyalty, and commitment to service as military virtues. The military superiority of ancient Rome, Lipsius contented, was based on its citizen-soldiers, who were better drilled and more motivated than Rome's enemies. Lipsius boldly asserted that any military force that combined Roman military discipline with modern firepower would be unbeatable in battle.[146] The Machiavellian notions of citizen-soldiers and the military reforms

144 Machiavelli, 1992, p. 37.
145 Guidi, 2020, pp. 2–3, 203.
146 Leira, 2008, p. 679.

of Prince Maurice of Nassau aroused interest in Germany. Writing in 1617, the German news pamphleteer and political theorist Michael Lundorp idealised 'conscripted militias', which were not simply mobs of unruly commoners but had historically consisted of 'keen soldiers and mighty men of valour chosen from among the people'.[147] Many other authors and princes alike shared the assumption that peasants, who were used to labour and exposure to the elements, would make ideal soldiers. It was also assumed that peasants and other subjects had a vested interest to defend their families, homes, and possessions, and would therefore prove to be more diligent and committed soldiers than paid mercenaries. These expectations led German princes to form militias for the purpose of *Landesdefension* or common territorial defence.[148] Many such militias, volunteer and conscripted, rural and urban, were maintained by German princes in the early seventeenth century. The generic German term for these levied militias was *Ausschuß*. Between 1600 and 1618 such *Ausschuß* militias were set up in Hesse, Brunswick, Mainz, Würzburg, Bamberg, Baden, and Ansbach, among other territories.[149]

The most numerous peasant levies were mustered in the Wittelsbach dominions in the early 1630s. In 1633 Prince-elector Ferdinand of Bavaria, archbishop of Cologne, decreed that every town and parish in his ecclesiastical electorate should provide the levy with an able-bodied man for every five thalers of evaluated income. This ratio was estimated to produce 4,800 levied men, which could be doubled in times of 'extraordinary need'.[150] Ferdinand's brother, Duke Maximilian of Bavaria, had organised an even larger levy of men. From 1598 onward, Duke Maximilian had experimented with a hybrid model of *Landesdefension* that combined recruited soldiers with levied men. The local officials were instructed to maintain muster registers that included the

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147 Lundorp, 1617, p. 430.
148 Frauenholz, 1939, pp. 8–17.
149 Whaley, 2012, p. 495.
150 Nowosadtko, 2010, p. 192.

names of all able-bodied men eligible for military service. From those muster registers every thirtieth, tenth, fifth, and third man would be picked for service as pikemen, musketeers, or cavalrymen. The muster in 1610 produced 6,000–7,000 levied infantry and ten companies of cavalry that were augmented with 3,000 recruited soldiers.[151] In the 1610s the number of eligible men was increased to some 12,000, and by 1621 Bavaria possessed a nominal levy of over 15,000 men.[152] In late 1631, when Bavaria faced an imminent Swedish invasion, the number of men in the muster registers peaked at 16,706.[153] One Bavarian innovation was the establishment of a *Schüßen- und Jägerregiment* in 1642. This was a specialist troop of hunters and gamekeepers who were expected to serve as sharpshooters and light infantry.[154] In reality, the Bavarian levies were never mustered in full strength: in 1632 Duke Maximilian, who had come to regard the levies as waste of money, expanded *Ausschuß* service to allow those levied to make an optional contribution to cover the cost of hiring mercenaries.[155]

The Bavarian model of levying quotas from the muster registers had been effectively copied by the Duchy of Neuburg in 1605. As in Bavaria, the levying of troops necessitated the establishment of a special musters commission to oversee aspects of mustering and equipping those picked for military service.[156] The Electors Palatine had also maintained a militia of both infantry and cavalrymen. These Palatine militiamen were regularly drilled in target shooting.[157] The focus of the Palatine militia was in the Upper Palatinate, where Frederick V levied 2,000 men in 1621. Most of those mustered were enrolled into Ernst von Mansfeld's mercenary army as musketeers. After the occupation of the Palatinate

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151 Heilmann, 1868, pp. 793–815.
152 Ibid., p. 823.
153 Ibid., p. 825.
154 Ibid., pp. 831–832.
155 Whaley, 2012, p. 496.
156 Heilmann, 1868, p. 839.
157 Ibid., p. 846.

by Duke Maximilian, the Palatine militia was dissolved, and its militiamen disarmed.[158]

The proliferation of German militias had not gone unnoticed in Vienna. In 1604 the Austrian military paymaster (*Kriegszahl-maister*) Zacharias Geizkofler recommended to Rudolf II the establishment of a Dutch-style militia in the Habsburg patrimonial lands.[159] A militia was no novelty in the patrimonial lands, as peasants had been levied to fight for the Habsburgs already in the Hussite Wars. These levies, which mustered every tenth man in the patrimonial lands, necessitated the formation of new institutions to oversee musters. The basic unit for raising peasant militias was the parish, and above these were instituted so-called 'quarters' (*Landesviertel*) in both Lower and Upper Austria. The Ottoman menace of the sixteenth century necessitated the expansion of the levying to include every thirtieth, twentieth, tenth, and fifth man according to the scale of enemy threat. The potential size of the Austrian levy thus ranged from 5,000 to 20,000 men.[160] These levies were mustered and equipped by the Austrian Estates, and their military command was in the hands of a *Landobrist*, a military official who represented both the Estates and the ruler.[161] During the Thirty Years War these levies were not mobilised but were instead used as recruiting pools for the imperial army and its regiments. In Tyrol this system of using levied peasants as manpower for the regular army evolved into semi-permanent land regiments, four of which were created in 1636.[162] It is understandable that the Habsburgs did not mobilise their Austrian peasant militias due to the high frequency, scale, and intensity of peasant rebellions in many parts of the country during the Thirty Years War. As a result, however, the institution of the peasant levy had

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158 Ibid., pp. 856, 858.
159 Whaley, 2012, pp. 495–496.
160 Hochedlinger, 2013, pp. 79, 81.
161 Hochedlinger, 2013, p. 79; MacHardy, 2003, p. 35.
162 Hochedlinger, 2013, pp. 80–81.

fallen into fatal disrepair by the eve of the Austro-Turkish War in 1683.[163]

Urban militias had existed in Germany since the Middle Ages, but they too were greatly reinvigorated by the Dutch military reforms of the late sixteenth century. The institution of an urban militia is perhaps best illustrated by the regulations issued by the city of Hamburg in 1626. According to the *Wacht- und Feuer-Ord- nung* stipulated by the city's military council (*Kriegsrath*), every 'burgher, inhabitant, and subject' was eligible to serve as a militia- man, guard, or firefighter. These obligations were not exclusive but rather formed an aggregate of duties, of which the necessity to fight fires was more pertinent than others in the context of early modern urban life.[164] In order to mobilise and lead these militiamen, guards, and firefighters, the city was divided into five regiments or 'colonelships' (*Colonellschaften*). Each regiment was further divided into ten companies that had their own chains of command from captains to warrant officers (*Rottmeister*). The companies also had their own muster scribes (*Munsterschreiber*) to keep track of the levied men.[165] These positions were electable: the lower officers elected their company captains, who in their turn elected the colonels in charge of the regiments. The colo- nels bore a heavy responsibility: it was their duty to maintain key defensive installations and to perform fire inspections by visiting town houses in person.[166] The companies were drilled regularly. The exercises included marches, the forming of battle orders, and weapons handling. The militiamen were to be armed with swords, muskets, and pikes. The proportion of pikemen in the companies was to be no more than one quarter, the rest being armed with muskets and swords. The city stipulated strict uniformity in arms: any unauthorised alteration of weapons was to be punished with a

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163 Ibid., p. 79.
164 Sammlung der hamburgischen Geseze, 1771, p. 122.
165 Ibid., p. 124.
166 Ibid., p. 129.

fine of three Lubecker marks.[167] Certain professionals, such as doctors, priests, teachers, apothecaries, and millers, were exempted from ordinary guard duties. This exemption also included professional soldiers employed by the city council.[168]

The military standing of German cities was highly stratified during the Thirty Years War. A major city like Hamburg was a respectable military power in its own right, while many smaller cities were fully subordinated to the military-political institutions of territorial princes. Nuremberg was a unique case, as it was both an imperial free city as well as a middle-sized territorial principality. In the Middle Ages Nuremberg had consistently purchased bailiwicks and jurisdictions from the German emperors and had thus ended up controlling over 400 dependent villages and 1,650 square kilometres of territory.[169] As a territorial principality and a city-state, Nuremberg employed various institutions for raising and maintaining military troops. One of these institutions was the militia. In 1599 the Nuremberg *Rath* mustered 1,000 men from among the city's artisans and apprentices. These levied militiamen were later organised into *Bürgerfahnen* or 'burgher platoons'. In 1619 the *Bürgerfahnen* were supplied with distinctive coloured vests, thus making Nuremberg one of the early users of military uniforms. That same year the city also invoked the institution of *Ausschuß* in the surrounding countryside and mustered some 1,500 levied peasants (one third pikemen, two thirds musketeers). These musters were augmented with the recruitment of 150 professional cavalrymen. By 1621 Nuremberg maintained five recruited platoons in addition to the six *Bürgerfahnen*.[170] In 1632 the city mustered twelve *Ausschuß-Compagnien* from the countryside to help the city's defenders and their Swedish allies. That same year Nuremberg raised an entire recruited regiment

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167 Ibid., pp. 133–134.
168 Ibid., pp. 137–138.
169 Wilson, 2017, pp. 390, 518.
170 Heilmann, 1868, p. 871.

for Swedish service.[171] Instead of *Ritterdienst* cavalry, Nuremberg possessed one company of *Bürgerreiter* or mounted urban militia.[172] This was because Nuremberg's extensive dominion over the surrounding territory was based on purchased imperial jurisdictions rather than bonds of feudal vassalage.

The *Ausschuß* militias, which had rarely met the expectations of territorial rulers in terms of quantity or quality during the Thirty Years War, did not wither away after 1648 but rather found a new lease of life as an alternative to the increasingly expensive professional armies. During the Nine Years War in 1688–1697, when the Holy Roman Empire was invaded by France, the militias emerged as key assets for territorial defence. In 1688 the Duchy of Württemberg mustered an unprecedently large levy of 40,000 militiamen for the defence of the Franconian and Swabian circles.[173] The maintenance of drilled and armed levies had been stipulated in the many regulations set down by the imperial circles from 1651 onwards. In Bavaria, for instance, the circle diet stipulated in 1664 that every Estate would keep a list of men eligible for militia duty, and that the militiamen would be maintained in a state of military preparedness.[174] A Franconian ordinance from 1688 regulated that all militiamen were to be provided with grey overcoats, muskets, and swords. The pike no longer belonged to the arsenals of the *Ausschuß* militias, who had become a paramilitary force of musketeers.[175]

Finally, we should investigate militias that had no formal organisation whatsoever. Such militias could have been bands of outlaws, criminal gangs, companies of freebooting deserters, or, most likely, ad hoc peasant contingents formed for purposes of local defence. Some historians have identified in the Thirty Years War an existential conflict between soldiers and peasants. Her-

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171 Ibid., p. 872.
172 Ibid., p. 873.
173 Heidenreich, 1721, p. 373.
174 Moser, 1747, p. 278.
175 Ibid., p. 283.

bert Langer, who analysed the Thirty Years War from the perspective of cultural history, described peasants and soldiers as 'mortal enemies' based on the evidence found in contemporaneous pamphlets, sayings, and even literature such as Hans Jakob von Grimmelshausen's picaresque novel *Simplicissimus*.[176] Dick Harrison has argued that the deepest division in the Thirty Years War did not run between political factions or confessional parties but between soldiers and peasants. Peasants regarded all soldiers as enemies, and soldiers regarded peasants as potential objects of pillage.[177]

These views, while simplistic, are not unjustified. There certainly appears to have been many instances of warfare carried out by peasants outside any formal military institutions. In most such cases, spontaneous peasant warfare was desultory and possibly even self-defeating. When Alsatian peasants met Swedes in battle at Sundgau and Dammerkirch in 1633, for instance, they were massacred almost to the last man (at Dammerkirch the Swedes allegedly spared only one young boy).[178] The lack of military organisation among the insurgent peasants must have been a major contributing factor in such calamitous defeats.

There is, however, one notable example of insurgent peasants forging their own military organisation. During the Peasants' War in Upper Austria in 1626, the insurgent peasants formed a veritable army with its own leadership positions and division of duties. The peasants camped in the manner of armies, with an armed contingent and a separate civilian baggage train. The insurgents imitated military hierarchies with a chain of command that ran from the rebel leader Stefan Fadinger down to colonel generals, captains in chief, colonels, lieutenant colonels, captains, lieutenants, sergeants, and corporals. Their armies also had field scribes, surgeons, proviant masters, chiefs of fortification construction, and chief artillerists. In addition to infantry and artillery, the

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176 Langer, 1982, pp. 105–106.
177 Harrison, 2014, p. 149.
178 Abelinus, 1745, p. 450; Mercure François, 1637, p. 454.

insurgents possessed a modest cavalry contingent as well as a military intelligence branch. The peasants also employed drummers and pipers to signal information and to assist in the coordination of military manoeuvres.[179]

The general outlook of the Austrian peasant army in 1626 resembled that of the rebellious German peasants in 1525. The sixteenth-century German peasant insurgents too had organised themselves militarily with commanders, elected sergeants, artillery, and pipers and drummers. The rebellious German peasants had been influenced by medieval militia traditions as well as by the organisational forms of the recruited mercenary armies.[180] In a similar, way, the Austrian insurgents of 1626 derived organisational inspiration from the precedent of the German Peasant War of 1525 and the regular armies of the early seventeenth century.

In France, the obligation to provide wartime service extended even to the commoners, although such levies did not exist in any clearly institutionalised forms in the seventeenth century. Cardinal Richelieu regarded the *milice* as an external source of infantry manpower that would be levied in lieu of the noble cavalry service or the *ban et arrière-ban*.[181] In practice, levies of commoners were last-resort efforts aimed to address emergencies.[182] The main military emergency was the 'Year of the Corbie' in 1636, when Spanish and imperial armies invaded French territory and even approached the outskirts of Paris. The central state did not respond to this emergency by levying masses of peasants, but instead chose to mobilise key communities. One such community was the city of Paris, whose burghers had been exempted from the *ban et arrière-ban* but not from all defensive duties for the realm. The central state invited journeyman artisans and apprentices, the professional stratum deemed most worthy and capable of military

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179 Stieve, 1891, p. 99.
180 Whaley, 2012, pp. 224, 229–230.
181 Avenel, 1858, p. 422, January–May 1636, Richelieu to Henri II de Bourbon, Prince of Condé.
182 Showalter & Astore, 2007, p. 40.

service, to take up arms when summoned to do so by the king. Previously this duty to defend the realm was understood as service in the city militia, but after the French defeat at Corbie, the king's summons suggested that the craftsmen might have to join the royal army.[183] In practice, wealthy Parisian burghers and senior artisans would exempt themselves from armed service by paying a monetary contribution instead.[184] Elsewhere, as in Beauvais, north of Paris, the community might collectively levy contributions, repair city defences, and mobilise urban militias.[185]

As Jacques Gebelin observed, sometimes the forced levy of militiamen applied to the whole kingdom and sometimes to one or more provinces. Sometimes it only concerned individual towns, rural parishes, or villages.[186] The actual process of levying militiamen as reinforcements for regular infantry battalions was devolved to *intendants* or designated commissars. The local parishes would provide the manpower, but the costs of armaments, equipment, and pay were charged from the royal treasury. When militiamen were mobilised in separate contingents, their service was temporary. The 500 militiamen mobilised to take part in the siege of Motte in 1645, for instance, were permitted to return home once the siege had ended.[187] The central state viewed urban militias with a mixture of scepticism and suspicion. Towns were not authorised to maintain major fortifications, and many fortifications that existed as remnants of earlier ages were destroyed in the seventeenth century.[188]

The French militias did not play any prominent role in the Thirty Years War, although there were some campaigns in which militiamen were present in substantial numbers. In 1637 Charles de Schomberg commanded a hybrid army of regulars and militiamen in his successful defence of Languedoc against the invading

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183 Drévillon, 2014, p. 47.
184 Gebelin, 1882, p. 19.
185 Drévillon, 2014, p. 45.
186 Gebelin, 1882, p. 19.
187 Ibid., p. 20.
188 Lynn, 1998, pp. 372–373.

Spaniards.[189] Later, in 1639, Schomberg was still expected to aug-ment his troops by organising local militiamen into companies commanded by 'men of experience', meaning nobles mobilised through the *ban et arrière-ban*.[190] Even as late as 1644, the mayor and aldermen of Langres mobilised a militia of infantrymen that successfully repelled several incursions by Croat light cavalry in the district of the 'three bishoprics' (Metz, Toul, and Verdun).[191] Perhaps the most extensive use of militias was made in the Catalan frontier, where French military authorities levied insurgent Cata-lan militiamen as auxiliaries.[192] These latter militias, of course, were not French but Catalan subjects of the Spanish crown.

In the decades that followed the Thirty Years War, the *milice* was reinvigorated by Louis XIV and his minister of war Louvois. Although there did not yet exist any official decree for compul-sory military service during the Franco-Dutch War (1672–1678), the pressing demand for manpower caused the royal government to form an entire army of militiamen in Languedoc, where 6,000 were recruited or even impressed to service and kept in arms year in, year out as an expedient to fill in the depleted ranks of regu-lar battalions.[193] In addition to the provincial militias, some urban communities had also retained the privilege to maintain burgher militias for their own defence. Such urban militias, however, were strictly submitted to local royal commanders, and they could not mobilise themselves or assemble in any form without govern-ment approval. When Louis commuted all command positions in the urban militias into purchasable offices, the choice of the militiamen and the appointment of militia officers became wholly dependent on the *intendants* of the administrative regions. This

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189 Devic, 1745, pp. 611–612.
190 Avenel, 1867, p. 292, 3 March 1639, Richelieu to Charles de Schomb-erg.
191 Mercure François, 1648, p. 144.
192 Mercure François, 1647, p. 654.
193 Gebelin, 1882, p. 21.

reform effectively amalgamated the urban militias into the royal army.[194]

The Thirty Years War accelerated two major trends in the institutional logic of German and French militias: the long-term decline of urban militias and the conflation of popular levies with the emerging standing armies. The first trend, the eclipse of urban militias, can be understood in those military terms that characterised positional warfare in the Thirty Years War. Few German cities had any notable armed forces – the only city to act as a medium-sized belligerent was Nuremberg, while Hamburg used the strength of its urban militia, hired troops, and navy to remain neutral and out of the marauding armies' path. Most sieges in the Thirty Years War were conducted under circumstances where both the besiegers and the besieged consisted largely, or even exclusively, of regular troops. According to the logic of the Military Revolution as articulated by Geoffrey Parker, the sieges of the Thirty Years War were major operational undertakings in terms of both scale and intensity. By the end of the Thirty Years War, most field armies were dispersed into hundreds of fortified garrisons and artillery fortresses that constituted the real battleground of the conflict. In these circumstances, the prospects of an urban militia defending the city unaided by regular troops looked slim.[195]

The second major trend in Germany and France was the transformation of levies and militias into reserve pools of military manpower for the emerging standing armies. This course reflected another key aspect of the Military Revolution, the predominance of professional troops. The Dutch-style linear tactics of the Thirty Years War necessitated high standards of drill and training, which effectively excluded the possibility that militias could provide a viable military alternative to recruited professional soldiers. The reformed tactics also imposed stricter subordination to a growing stratum of officers and non-commissioned officers (NCOs), a tendency which also worked to undermine the usability of farm-

194 Ibid., p. 28.
195 Parker, 1996, p. 168.

ers and townsmen who were not integrated into or accustomed to military hierarchies. The institutional logic of the Military Revolution, therefore, caused militias to either wither away or to merge with the 'articulated organism' of standing armies.[196]

Peasant Levies in Scandinavia

The Danish monarch Christian IV, who had been frustrated by the poor military performance of peasant levies in the Kalmar War against Sweden in 1611–1613, regarded the levied peasants as 'worse than beasts' in comparison to recruited troops.[197] However, although the Danish peasant levy may not have been a desirable military institution, it was nevertheless an indispensable one. At times of war, particularly during Torstensson's War in 1643–1645, the peasant militias were the only sizeable military force that could be mustered and deployed to meet a foreign invasion in a precipitated manner. There were two forms of levy or *opbud* in Denmark proper: the urban *borgervæbning* and the rural *landeværn*. Every able-bodied man was eligible to serve in either levy, depending on whether they lived in town or countryside.[198] When peasant levies were mustered, as during the Kejserkrigen in 1627, the peasants were expected to bring their own 'pikes, pitchforks, guns, or other weapons'. The mustered peasants were to have officers appointed from among their own peers, while the operational command of the militia companies was invested with the provincial governors or *lensmænd*.[199] The projected size of the 1627 militia was 8,500 men, with more than half of them (5,000) raised from Jutland. Christian was aware that many levied peasants would attempt to evade militia service by fleeing to the staple towns (*købstader*), for

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196 Roberts, 1995, pp. 14–15.
197 Bricka & Fridericia, 1887–1889, p. 59, 15 May 1611, memorandum by Christian IV.
198 Lind, 1994, pp. 24–25.
199 Kancelliets brevbøger, 1929, p. 174, 2 September 1627.

which reason he instructed the war commissars to remain vigilant and to return all caught militiamen to their companies.[200]

Burgher militias existed in most Danish towns of significant size, which would have meant at least every staple town. The largest urban militia in Copenhagen was effectively under direct royal control. During the Thirty Years War, Christian IV issued several instructions to the Copenhagen militia. The duties articulated by the king included maintenance of defensive installations, the securing of roads leading in and out of the city (including ice roads in wintertime), and general vigilance against enemy spies and saboteurs.[201] During the Kejserkrigen in 1627, Christian reminded the burgher militiamen to maintain their own muskets and one year's worth of 'provisions and ammunition'.[202] In the interwar years of the 1630s the militia and town guards were employed to police the influx of beggars and vagabonds from war-torn Germany.[203] The *landeværn* of Danish peasants was regulated more loosely to defend the realm by arms at a time of enemy invasion. Levied peasants were also often employed as labour to construct field fortifications, palisades, and other defensive installations.[204]

Militias also existed in other parts of the Oldenburg realm, namely Norway, Holstein, and the Archbishopric of Bremen-Verden, the last of which formed part of the Oldenburg possessions during Torstensson's War. While the *Krigsordinans* of 1628 had established an institutional standing army in Norway, in practice the levied peasants remained the only practical source of reinforcements during times of war. Maintaining troop levels was a pressing problem for all early modern armies. David Parrott has elucidated this problem with an analogy of a bathtub half-filled with water, occasionally refilled from a tap but lacking a plug: 'The moment the tap is turned off – the moment that additional

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200 Kancelliets brevbøger, 1929, p. 175, 2 September 1627.
201 Nielsen, 1877, p. 44, 28 February 1625; Nielsen, 1882, p. 279, 23 April 1645.
202 Kancelliets brevbøger, 1929, p. 174, 2 September 1627.
203 Nielsen, 1882, p. 170, 5 November 1636.
204 Kancelliets brevbøger, 1968, pp. 168–169, 12 December 1644.

recruitment stops for some reason – the existing water rapidly runs out of the bath.'[205] In this analogy the standing army was the bathtub and the peasant levy provided the water from the tap. This system of filling the ranks of the standing army with levied peasants effectively turned the Norwegian army into a hybrid military force during Torstensson's War. Regiments and companies would have small cadres of professional officers or regular soldiers, while a varying degree of the rank and file, often the majority, would consist of levied peasants.[206]

The militia in Holstein was part of a wider trend in the Holy Roman Empire. As elsewhere in the empire, it was called the *Ausschuß*, and it potentially required every able-bodied male to serve in a military capacity if needed. In practice, the Holsteiner *Ausschuß* was more selective than the Danish *opbud*, which was a universal male levy. The core of the Holsteiner *Ausschuß* consisted of the so-called *freien Knechte* or 'free soldiers', which was a term generally used to denote experienced soldiers. In some sources these *freien Knechte* were referred to as *Moorbauren* or 'moor peasants', which referred to the militiamen's place of origin, the marshland district of Dithmarschen north-east of the Elbe.[207] According to H. Schröder, the *Moorbauren* were volunteer militiamen who operated under the direct command of a Danish war commissar. These paramilitary militiamen were organised into six rotes of 169 each, and they were provided training and arms by the Danish garrison at Glückstadt. During Torstensson's War, they received part of their wages in captured loot, and they were exempted from all labour duties.[208] The protocols of the Glückstadt war council reveal that in October 1644, 600 of them were present in Glückstadt.[209] Duke Frederick III of Holstein-Gottorp

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205   Parrott, 2001, p. 178.
206   Bäckström, 2018, pp. 256–265.
207   Schröder, 1832, p. 881.
208   Ibid., p. 881.
209   DRA, Krigsrådet i Glückstadt/Regeringskancelliet i Glückstadt/XV/ Militaria/No. 25/Krigsrådsprotokol 08.1644–08.1645, 31 October 1644.

too had wanted to make his territorial militia more professional by placing trained officers in its charge. The Estates of Holstein-Gottorp, namely the prelates and nobility plus a few enfranchised towns, dismissed his plan as excessive expenditure.[210]

Finally, the Oldenburg state had command over the peasant levies in Bremen-Verden during the episcopal reign of Crown Prince Frederick from 1635 to 1645. The Archbishopric of Bremen-Verden was something of an oddity in the Holy Roman Empire, as its prince-bishop had nominal suzerainty over a cluster of autonomous peasant republics in the vast marshlands between the Weser and Elbe rivers. These peasant republics – Hadeln, Kehdingen, Wursten, and Alten Land – maintained a tradition of armed resistance against any invader: they had mustered troops to fend off incursions by Imperialists, Hamburgers, Danes, and military entrepreneurs alike in the 1620s and 1630s. An anecdotical entry in a Hadelner chronicle from 1623 reveals the indifference of the independent-minded marshlanders to the nature of any invaders: 'On 7 November of this year there arrived in the Bishopric of Bremen 800 cavalrymen in search of winter quarters. When the people asked them who they were, they answered that they served the Devil, after which the inhabitants rallied themselves and drove out these unwanted guests.'[211] To the fiercely particular marshlanders, the Devil was not a Catholic or Protestant, but only an aggressor.

The traditions of particularism and armed resistance among the Bremener marshlanders can be explained by political autonomy and communalism. The peasants of Kehdingen insisted that they still had the right to representation in the Bremener Diet, even though they had been formally excluded in the 1590s. Hadeln remained a self-ruling peasant republic with its own laws and a political assembly. Wursten, on the other hand, had lost most of its traditional privileges in the 1525 Treaty of Stade that had abolished the local constitution and subjected the inhabitants to duties

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210 Lind, 1994, p. 34.
211 Chronik des Landes Hadeln, 1843, p. 266.

and dues imposed by the Archbishop of Bremen.[212] Even though privileges and constitutional traditions varied from one marshland republic to another, they all shared the same mechanics of communalism. In his famous thesis, Peter Blickle argued that the replacement of manorial justice in the Holy Roman Empire by territorial law or *Landsrecht* transferred responsibility for security from feudal lords to urban and peasant communities. While the new communalist organisations were primarily defensive, they also had the ability to be proactive or indeed act offensively against potential threats to their territorial inviolability or social privileges. In the context of military institutions, communalism redistributed control and exercise of violence beyond the traditional feudal or princely military establishments.[213]

While Blickle's thesis has elicited criticism, much of it justified, his central contention remains valid in the context of the marshland republics and their military institutions. All the marshland communities from Wursten to Dithmarschen shared the same environment, in which floods and inundations were a constant and existential threat to settlements. To fight this threat, the peasants had organised themselves into labour units that busied themselves with digging channels and constructing dikes. The mechanics of fighting inundations involved rapid transfer of intelligence and expeditious mobilisation of manpower and equipment. This same system that was used to fight the environment could be therefore transformed into a military institution for the purpose of territorial defence. A necessary qualification to Blickle's thesis might be the situation in Wursten and Alten Land in 1632, when the local peasants did not so much defend their own communalism from the Imperialists and the Danes as the suzerainty of their overlord John Frederick of Schleswig-Holstein-Gottorp, the Archbishop of Bremen before Crown Prince Frederick.[214] Peasant communalism

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212 Wilson, 2017, pp. 582–584.
213 Blickle, 1986.
214 Bäckström, 2018, pp. 234–236.

was not necessarily antithetical to princely and ecclesiastical juris-
dictions within the Holy Roman Empire.

The Danish levies survived the Thirty Years War and contin-
ued to exist in myriad forms for the next hundred years, and in
some instances even longer. The *Hærordning* of 1652 instituted
the *landeværn* as a third branch of the land forces alongside the
standing infantry regiments and the parish districts' cavalry for-
mations. It stipulated that the militia companies would be mus-
tered, trained, equipped, and maintained by the *lensmænd* in their
respective districts, an arrangement that introduced disparity
among the militias according to the availability of local resources
and the organisational capabilities of the individual *lensman*.[215]

The Thirty Years War nevertheless contributed to the relative
decline of the militias. When another war against Sweden broke
out in 1657, the Danish realm was experiencing severe economic
and social problems. The Thirty Years War had greatly impov-
erished the population, and state revenues were in steep decline.
Domestic politics were greatly hampered by the increasing antag-
onism between the monarch and the elites as well as by the dis-
cord among the Estates.[216] Under such circumstances, it was not
too surprising that the Danish militiamen proved reluctant to
fight or even muster. When they were employed in battle, their
performance was not impressive. In February 1658, for instance,
a hybrid force of 3,000 regular soldiers and 1,500 levied peasants
was swiftly defeated by the Swedes, who attacked Zealand over
the frozen Little Belt. The collapse of the Danish defences resulted
in a Swedish-dictated peace treaty at Roskilde later that month.[217]

The militias' outlook was less dismal in Norway, where the
border districts provided auxiliary peasant levies that cooperated
with the regular field regiments. These militia companies were
typically employed in various border-watching duties. Some of
the border levies were referred to as 'land dragoons', implying that

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215 Rockstroh, 1905–1906, pp. 370, 372.
216 Johnsen, 1967, p. 25.
217 Ibid., p. 34.

they moved on horseback. As Norwegian warfare was distinctively hybrid by this time, some of these militia companies were mixed with regular troops.[218] The main contribution of the Norwegian peasant militia was to provide manpower for the insurgency that erupted in the Swedish-occupied Trøndelag in 1658. One Swedish officer justified his hasty retreat from the province by claiming that the 'whole commonalty in the Trondheim province has become rebellious and has joined forces with the enemy's cavalry and foot-folk'.[219] This so-called Krabbekrigen in Norway (1657–1658) testified of the continuing military potential in such militias that were employed in insurgency and territorial defence.

Sweden was distinguished from other belligerents of the Thirty Years War by its standing army of native conscripts. The early Vasas, whose meagre fiscal resources had prevented them from employing recruited troops in large numbers, had been forced to levy native peasants for their many wars in Scandinavia and the Baltic region from the mid-sixteenth century onwards. The legal basis for this levying was the universal male obligation of 'defence service' articulated in King Christopher's Land Law of 1442. The peasants understood that the law only obliged them to serve militarily on home territory; this reasoning led to large-scale desertions when the early Vasas attempted to send native troops to foreign theatres of war.[220] In the late sixteenth century the peasant levy or *uppbåd* began to evolve into a system of conscription that provided manpower for a native standing army.

The *uppbåd* continued to exist as a separate militia into the nineteenth century, but it played little military role during the Thirty Years War. The only time when *uppbåd* levies were sent into action occurred during Torstensson's War, when levied peasants were employed in the conquest of the Norwegian provinces of Jämtland and Härjedalen alongside with regular troops. The Norwegians soon reconquered these provinces, with the *uppbåd*

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218 Ibid., pp. 69, 107–111.
219 Ibid., p. 335.
220 Hallenberg & Holm, 2016, p. 165.

levies failing to check or even discernibly slow down the enemy advance.[221] The Swedes in that war made better use of the *bergsknektar*, who were not quite *uppbåd* militiamen but not conscripted or recruited soldiers either. In 1621 the mining districts of Dalarna province and the royal government had concluded a contract under which the mining communities committed themselves to maintaining a standing force of 1,400 foot soldiers or *bergsknektar* in return for an exemption from conscription.[222] Typically four miners would maintain between them one soldier in an allotment system known as *knektehåll*, although in some of the more impoverished districts the responsibility was shared by six miners. It was expected that the *bergsknektar* were drilled regularly by professional officers, but requests sent to the *krigskollegium* during Torstensson's War suggested an acute shortage of proficient trainers and commanders.[223] The *bergsknektar* provided the professional core for those irregular forces that sought to hinder the Norwegian advance into Sweden. At the Battle of Lake Bysjön in December 1644, the *bergsknektar* and the levied peasants attached to them performed well against numerically superior Norwegian hybrid contingents and were only forced to retreat after they ran out of ammunition.[224]

The Swedish peasant militia developed along two diverging paths after the Thirty Years War. The *uppbåd* continued to exist in its traditional form, which essentially meant its relative decline in military importance. During the Russo-Swedish War in 1656–1658, the government in Stockholm forbade the provincial governor of southern Finland to muster peasant levies, as the government feared the collateral damage that levied peasants might cause to manorial and royal properties on their march towards

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221 Bäckström, 2018, pp. 324, 333.
222 Roberts, 1958, p. 209.
223 KrA/0001/E c/11 (1644)/Krigskollegii brevböcker 1644–1645, fol. 1021, 25 June 1644, Johan Berndes to the krigskollegium.
224 Gyllenius, 1882, p. 95.

the theatre of war in the east.[225] Meanwhile, the *knektehåll* that had provided the logistical basis for *bergsknektar*, continued to develop into a more systematic form. The principle of maintaining militiamen on a permanent basis spread out from the mining districts and began to influence the military thinking of the absolutist monarch Charles XI. The driving force behind the proliferation of the *knektehåll* was the Peasants' Estate, which had always detested universal male conscription. When Charles reorganised the realm's economy on the principle of *indelningsverk*, a system where all outlays were allocated specific sources of revenue, the military sphere of his reform was founded on the *knektehåll* by forming peasant farms into rotes that would each maintain an infantry soldier permanently. One manifestation of the Swedish militia therefore evolved into a native standing army.[226]

The theoretical conception of early modern communalism provides some analytical insight into the Nordic peasant levies of the Thirty Years War. The authors of an anthology published in 2004 agreed that communalism explains some key characteristics of peasant societies in the early modern North. Up until the seventeenth century, peasant societies were connected to one another horizontally instead of being subordinated to a vertical political hierarchy, which granted them certain freedoms from royal control. One reason why the Nordic peasant communities had enjoyed varying degrees of autonomy was their ability to mobilise armed forces. These grassroots military organisations were not antithetical to the nascent early modern states, as their existence was based on negotiated agreements between the peasant societies and the crown.[227] In the field of military history, this peasant communalism manifested itself in the employment of structures and techniques of communal life for military purposes – for instance, the conversion of flood controls to popular defences in Dithmarschen

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225 Svenska riksrådets protokoll, 1923, pp. 526, 544–545, 3 and 10 July 1656.
226 Upton, 1998, p. 73–74.
227 Katajala, 2004, pp. 264–265.

and the Bremener marshlands, or the right of the Swedish mining communities to maintain their own troops.

The latter half of the seventeenth century saw the introduction of royal absolutism in Denmark and Sweden and, consequently, also decline in both peasant communalism and peasant levies. In Denmark the peasant levies lost military significance after the establishment of the part recruited, part conscripted standing army. The Norwegian militia did not disappear but instead morphed into a standing army of native conscripts. In Sweden one aspect of the militia, the *knektehåll* of the miner-soldiers, provided an institutional blueprint for the establishment of the Carolean allotment system. In all these instances the communalist peasant militias gave way for standing armies raised and maintained by the emerging power state. The Nordic Military Revolution coursed along different channels yet towards the same outcome: the monopoly of violence of the early modern state.

Iberian and Dutch Militias

Habsburg Spain did not have any universal system of militias but rather maintained them in different capacities in different parts of the empire. Smaller Iberian provinces such as Guipúzcoa (Basque Gipuzkoa) had been obliged to provide their monarch (for Guipúzcoans the king of Navarre) with levies of troops based on the *auxilium regio*, military service performed by the feudal vassal. The local Estates, acting collectively as the *Provincia*, were responsible for raising and maintaining the levies, and they shared military command with a royal captain general appointed by the monarch. However, by devolving extra military authority to the local Estates, the monarch could shift most, if not all, of the military burdens to their shoulders.[228] At a time of crisis, the *Diputación a Guerra*, the provincial council of war, would order a general levy and fix the number of soldiers to be provided by the local councils according to their districts' sizes and means. Ordi-

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228 Estrella, 2009, p. 75.

nary mayors were then responsible for organising the levies in the jurisdictions and forming the troops into companies, whose captains were placed under the command of a single colonel.[229]

The outbreak of war with France in 1635 allowed the central government to increase the size and scope of the Guipúzcoan levies. Between 1636 and 1638, no less than 11,700 Guipúzcoan militiamen were employed in the defence of the province. They were even made to serve outside the borders of the realm. The local Estates, in return, made several attempts to use this extended militia service as a bargaining chip to extract recognition for privileges and constitutional rights from Madrid.[230]

The largest potential Iberian militia would have existed in Castile, the heartland of the Spanish empire. The central government had made two attempts in the 1590s to establish a Castilian militia of 60,000 men. Both attempts had failed after fruitless negotiations over exemptions and privileges with the local oligarchies and communities.[231] In 1609 the government finally promulgated a militia decree that appeared to honour local privileges and exemptions. By 1632 Castile had twenty militia units totalling 43,540 men, considerably fewer than the 60,000 militiamen envisioned in the 1590s. The quality of the conscripted militiamen, who were often fed piecemeal into the frontline *tercios* and regiments, was not good. Assembling them took time, and their morale was generally low. Some were even sent to war in chains as if they were military slaves.[232] Yet another problem was the shortage of weapons: less than a third of the Castilian militiamen had any weapons, and in some parts of the Castilian interior the proportion of armed militiamen was less than 1 per cent.[233] In the end, the programme of a universal Castilian militia was buried beneath an even more ambitious project of the Union of Arms.

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229 Ibid., p. 76.
230 Ibid., p. 76.
231 Ibid., p. 82.
232 Thompson, 2020, p. 74.
233 Estrella, 2009, pp. 82–83.

According to this plan devised by the crown, the constituent parts of the Spanish empire would all contribute troops to the creation of a reserve army 140,000 strong.[234] The Union of Arms necessitated professional troops rather than militiamen. In 1637 Castile established five provincial *tercios* of 1,000 men each. These *tercios* were recruited and financed by the Castilian cities according to their sizes and means. The traditional militia service was subsequently converted to a tax that was used to finance the armies fighting the Portuguese and Catalan separatists in the 1640s.[235]

Foreign allies aside, the Portuguese and the Catalans fought their wars of liberation almost exclusively with militias – or at least with armies based on them. Portugal had never had an actual army until 1570, when King Dom Sebastião established a national militia to acts as a reserve force at a time of a military crisis. Militias were raised by twenty-five provincial districts or *comarcas*. All men between the ages 18 and 60 were eligible to serve in the militias, although clergy and nobility were exempted. Anyone who owned a horse was also exempted in the expectation that he would serve in the cavalry arm of the national reserve force. The militiamen were drilled monthly and they were expected to provide their own weapons. Nobles formed the militia's officer corps.[236]

The Habsburg rulers of Portugal eyed the national militia with suspicion and chose to bring recruited foreign troops into Portugal rather than make any use of the native militia. Other aspects of Portuguese defence were also neglected by the Spanish regime, including fortifications, munitions, foundries, and even the stud farms that provided horses for the cavalry. After the outbreak of the revolution in 1640, King João IV used the existing pool of militiamen (as documented in the rosters of the *comarcas*) to create a standing army of 20,000 infantry and 4,000 cavalry.[237] The traditional militia therefore gave way to a new native army that existed

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234 Lynch, 1969, p. 97.
235 Estrella, 2009, p. 84.
236 Tengwall, 2010, p. 184.
237 Ibid., pp. 184–187.

on a permanent standing, although its size was greatly reduced in 1668 at the request of the fiscally encumbered Estates.[238] If the modernising aspect of the Military Revolution theory is understood to manifest itself in the establishment of standing native armies that do not serve on contractual basis alone, then revolutionary Portugal must be viewed as an early precursor in the emergence of the modern military state.

The closest thing to a national militia in Catalonia had been the *sometent* and the *unió*, effectively localised posses that were used to combat the acute problem of banditry. These law enforcement institutions were of limited value, as the bandits often enjoyed the advantages of higher mobility, better organisation, superior weapons, and wider public support.[239] After the rebellion in 1640, the insurgent Catalan authorities raised troops that were often described in the primary sources as militias.[240] The same word, however, was also applied to the Castilian troops under the command of Marquis of Los Vélez, who made the first Spanish attempt to recover Catalonia.[241] For most of their rebellion, the Catalonian insurgents operated together with regular French auxiliary troops, for which reason it might be more useful to label them as hybrid contingents rather than institutionalised militias.

Militias were purposeful military institutions in the context of early modern colonialism, as such formations were eligible to co-opt European colonists and local aboriginals into their ranks. In Spanish Mexico, for instance, the *presidios* or military outposts maintained varying complements of semi-permanent militiamen. Such militiamen were by background settlers, ranchers, and miners, and received military ranks and pay in return for their service. The highest-ranking militia officer was the *Maestro de Campo*,

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238 Costa, 2021, p. 92.
239 Elliott, 1984, pp. 103–104.
240 Sala, 1642, pp. 11, 15, 29.
241 Ibid., p. 28.

who could raise a frontier army or maintain some specific system of local defence.[242]

The defence of the Portuguese Pernambuco in Brazil, the largest sugar-producing territory in the early seventeenth century, was devolved to a mixture of garrison troops and local militias. The treatment of African slaves was harsh in the plantations of Pernambuco, which impeded cooperation between European colonialists and Africans. Yet there appears to have existed one volunteer company of Africans and Afro-Europeans in 1633.[243] The Dutch invasion of Pernambuco was initially opposed by militiamen, who by 1631 numbered more than 3,000. They were supported by five 'flying' companies of guerrillas that consisted of 200 Portuguese colonists and 300 natives. The Portuguese relief force that arrived in Pernambuco in 1632 grew the size of the armed forces to 900 Portuguese and Spanish regulars, 500 militia cavalrymen (*ordenanças de cavalaria*), 417 irregulars, 200 natives, and 3,095 militiamen. According to Evalda Cabral de Mello, the large number of the militiamen masks the fact that they were prone to desertion and that only a minority of them ever joined the flying columns and other troops of the line.[244]

Some Italian militias took part in the Spanish war effort during the Thirty Years War. Following a Franco-Savoyard invasion in 1625, the Spanish governor of Milan mobilised peasant militias to defend the duchy. These militias were dismantled after the cessation of hostilities, but were hastily reconstituted in 1635, when the French again invaded northern Italy. This reconstituted militia was not a universal levy of peasants. Instead, the Spaniards chose to raise only 8,000 men, who were either volunteers or selected by lotteries in the villages. The militia companies were commanded by noble officers and were amalgamated into the *tercios* of the regular army. The militiamen received weapons from the Milanese stores, and it was expected that they would be paid in the manner

242 Naylor & Polzer, 1986, pp. 26–29.
243 Silva, 2013, p. 123.
244 Mello, 2007, pp. 185–186.

of recruited soldiers. In addition to these hybrid *tercios* of regulars and militiamen, the military authorities in Milan also mobilised more traditional and informal levies of peasants under the leadership of manorial lords.[245]

Gregory Hanlon has described the use of these Milanese militias as being more defensive than offensive. The militias were used primarily to reinforce garrisons, guard towns and forts, and to escort supply convoys. The militiamen were also employed as labourers in the construction of fieldworks.[246] Some of the more offensive use of the militias involved skirmishing with the opposing Parman militiamen (the Duke of Parma being a French ally) and foraging activities that bordered on outright brigandage.[247] In the end, the Milanese militias did little to win battles for the Spaniards, but their relentless small war with the opposing Parman militias, fought often on enemy territory, nevertheless increased the Parman burdens of war and greatly contributed to the demographic disaster which accompanied the war in Parma.[248]

The Spanish Road, the military-logistical route that connected northern Italy with the Spanish Netherlands, traversed through Franche-Comté, a region under Spanish occupation since 1556. The viceroys and governors of the Spanish Netherlands maintained there a militia of 5,500 foot and 250 horse. The infantry element was divided into three regiments raised by the bailiwicks of Amont, Dole, and Aval, respectively. The regiments were commanded by colonels, who appointed their own captains. The officers, who were expected to be 'natives of the country and familiar with the practices of war', were mostly nobles, although capable members of the bourgeoisie were also included in their ranks.[249] The rank and file were selected by the *communautés* (municipalities), which were also responsible for arming and clothing the

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245 Hanlon, 2015, pp. 3–4.
246 Ibid., p. 5.
247 Ibid., p. 8.
248 Hanlon, 2012; Hanlon, 2015, p. 18.
249 Piépape, 1881, p. 323.

militiamen. The cavalry element among the militia consisted of cuirassiers and harquebusiers, who were armed with pistols and wheel-lock harquebuses. The foot companies were organised as any other regular infantry, with a complement of 50 pikemen, 10 halberdiers, 40 musketeers, and 90 harquebusiers.[250] The *communautés* also had to meet any shortfall in the number of officers, which became increasingly acute during the Thirty Years War. The *communautés* did not have to maintain the militiamen indefinitely, as the responsibility for the militia's upkeep shifted to the Spanish crown after a service term of six weeks. In practice, however, the *communautés* had to maintain the militiamen and some of their officers beyond this period as credit extended to the crown.[251]

In the view of Léonce de Piépape, the Comtoise militia was adequate for peacetime duties, when it could be expected to fight off small incursions by enemy irregulars or bandits. It was not, however, capable of fighting regular armies on equal footing. The main fault in the militia was its administration, which failed to provide the militiamen with sufficient equipment, provisions, or money. During the Thirty Years War, the Comtoise militiamen resorted to unauthorised foraging and outright pillage, wandering aimlessly around the province, committing all kinds of excesses along the way. These problems were exacerbated by the growing influx of deserters and opportunistic mercenaries, who encouraged indiscipline and wanton behaviour among the militia.[252] There were sporadic attempts to reinforce discipline in the militia (as in 1633), but even these endeavours were powerless in the face of the war-weary *communautés* that were too destitute and too demographically crippled to provide the militia with qualitatively satisfying manpower.[253]

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250 Ibid., p. 324.
251 Louis, 2005, p. 168.
252 Piépape, 1881, pp. 325–326.
253 Ibid., pp. 343–344.

In the late sixteenth century, Justus Lipsius found an adherent in Prince Maurice of Nassau, whose military reforms sought to instil strong discipline and a deep sense of public duty in the Dutch officer corps. Military-political circumstances, however, forced the Dutch to effectively abandon the idea of a citizen army; instead, the Dutch cultivated the ideals of Machiavelli and Lipsius among their recruited professional soldiers.[254] The seventeenth-century Dutch militias are often thought to be synonymous with the traditional burgher militias of the cities. Nothing has done more to reinforce this association than Rembrandt's famous painting *The Night Watch* (1642), which portrays the retinue of the militia captain Frans Banning Cocq. The importance of the civic militias had somewhat declined because of the increased professionalisation of the Dutch armies, but participation in the militias again increased with the resumption of the Dutch–Spanish war in 1621. In towns such as Gorinchem in southern Holland, the urban authorities divided the town into quarters that were responsible for levying a militia company. The militiamen were armed and drilled, and they swore an oath of allegiance to the town itself. The Utrecht militia, which was more provincial than urban in its outlook, swore an oath to the city as well as to the state of the province of the same name.[255] Breaking the oath could cause them to lose their civic rights, which was not a light punishment in the extensively urbanised Dutch society.[256] In the first decades of the Eighty Years War (1568–1648), membership in civic militias had been a precondition for burgher status, but in most towns this requirement was dropped as a result of increased immigration. Militiamen were, however, still required to provide their own weapons, a qualification which excluded many of the poorer townsmen from service in the civic militias.[257]

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254 Rothenberg, 1986, p. 35.
255 Israel, 1998, p. 456.
256 't Hart, 2014, pp. 83, 85–86.
257 Grayson, 1980, p. 39.

During the first years of renewed Dutch–Spanish warfare in 1618–1620, the civic militias had conflated with other militias known as the *waardgelders*. According to contemporaries such as the political scientist Hugo Grotius, the main difference between the *waardgelders* and civic militias was that the former received pay for service.[258] The council of state (*Raad van State*) viewed the *waardgelders* as being poorly trained and motivated only by the promise of pay and the expectation of idle service.[259] All militias were first and foremostly employed in the defence of their own localities. There were instances during the Thirty Years War when some militias were moved from their own districts to frontier garrisons. It was exceptional for militias to partake in field operations, although this too occurred during the recapture of Breda in 1637, when Prince Frederick Henry incorporated some militiamen into his siege army.[260]

After the Thirty Years War, the civic militias were increasingly eclipsed by the Dutch army that consisted of recruited and salaried soldiers. Unlike in Spain and France, where the militias began to evolve into pools of auxiliary manpower that would fill potential gaps in the regular regiments, in the Netherlands the military authorities were convinced that the army could always turn to itinerant ex-soldiers, deserters, and released prisoners of war as its reserves. The government therefore did not provide the company commanders with levied militiamen, but instead compensated them for losses and casualties and provided fiscal incentives for further recruitment.[261] Once mobilised, the civic militias had a more political than directly military impact. The militias soon evolved into an anti-regency bloc, which promoted the leadership of the House of Orange. The political purges, which were tolerated, promoted, or even actively carried out by the militias, culminated in the gruesome murders of the leading regents Johan

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258 Nimwegen, 2010, p. 38.
259 Ibid., p. 38.
260 't Hart, 2014, p. 86.
261 Nimwegen, 2010, pp. 317–336.

and Cornelis de Witt in 1672.[262] In return for their advocacy of the Orangist cause, the new government restored to the civic militias their independence and institutional privileges. The militias were subsequently regarded as forums of public opinion and ramparts against regent rule.[263] The reaffirmation of the civic militias as political vehicles in Dutch society would later go on to shape the nature and outcome of the civil disturbances of the late eighteenth century.[264]

Iberian and Dutch militias of the Thirty Years War provide contradictory case studies for the evaluation of the Military Revolution theory. On the surface, the creation of a national Portuguese militia in 1640 and its later development into a standing army appear to vindicate the Military Revolution theory as originally presented by Michael Roberts. Lorraine White, however, is more critical of such an interpretation and has instead proposed that the establishment and deployment of the Portuguese militia merely reflected particularistic realities, namely the scarcity of manpower and money with which to fight the Portuguese war of liberation against Habsburg Spain.[265]

White's perspective is worthy of serious consideration, as it reminds us that not all institutional developments resulted from universal tendencies, which essentially define the Military Revolution theory. Some institutional fiats could indeed be instigated by exigencies tied to specific temporalities and locations. One possible way of framing the sudden inception of the Portuguese national militia could be the sociological concept known as the paradox of embedded agency. This concept reflects the tension between prevailing structural realities and the agency of an institutional actor.[266] In the Portuguese case, the institutional actor, namely King João IV and his regime, wanted a military force capa-

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262 Israel, 1998, pp. 803–805.
263 Ibid., p. 804.
264 Ibid., pp. 965–967, 1105.
265 White, 2003, p. 89.
266 Pawlak, 2011, p. 357.

ble of withstanding the power of the Spanish army. This agency was challenged by the structural realities in Portugal, or the shortage of military manpower and the limited fiscal ability of the new Portuguese realm to maintain an army for a prolonged period. The establishment of a national militia was therefore an institutional compromise between the agency of the restored Portuguese state and the limited structural resources available for large-scale and protracted warfare.

The colonial militia in Portuguese Brazil existed independently of King João's insurgent state formation and the larger war in Europe. In his critique of the Military Revolution thesis, J. C. Sharman has pointed to the European colonial expansion in the wider world as counterproof to Roberts's sweeping assertions. As Sharman postulates, the colonial militaries did not rely on large numbers, state institutions, or even the tactical innovations of the Dutch school of warfare to expand and maintain their footholds in the Americas, Africa, and Asia. In Sharman's wider historical model, the European colonial and imperial expansion was not the result of any rational and goal-oriented Military Revolution but rather the outcome of various cultural influences on the practice of warfare.[267] While it is difficult to identify cultural influences in the employment of Portuguese colonial militias during the Thirty Years War, their connection to the Military Revolution and its key characteristics appears frail, as argued by Sharman. The effective core of the Portuguese-Brazilian militia consisted of settled colonists and Native Americans, whose military efficiency rested on guerrilla warfare rather than those conventional linear tactics that supposedly drove the Military Revolution. Once again, it seems that the Portuguese militias in Brazil accommodated themselves to localised circumstances rather than institutional ideals imposed from above by the nascent power state.

The militias in Habsburg Spain were so myriad and varied that they can only be understood in the context of the conglomerate state and its heterogeneous institutions. The conglomerate state, a

267 Sharman, 2019, pp. 4–7, 26–27, 41.

concept brought into the historiographical mainstream by Harald Gustafsson, refers to such early modern polities that shared a ruling monarch but possibly little else. The conglomerate territories had distinctive relations to their ruler as well as separate privileges and institutions.[268] One such territorially varied institution in Habsburg Spain was the militia. In the Spanish peninsula, the non-Castilian regions used the provisioning of local militias as a bargaining tool to extract wider constitutional, political, and economical concessions from Madrid. Habsburg Spain was therefore becoming more and not less conglomerate during the Thirty Years War, a political entropy that does not agree with the ideas of centralisation and undisputed state monopoly of violence inherent in the Military Revolution theory.

Militias in Italy and Franche-Comté predated Spanish rule, for which reason their continued existence after the Thirty Years War raises the issue of institutional non-change. Many sociologists assert that institutions are bound to change when they face altered exogeneous and endogenous conditions.[269] More altered exogeneous conditions than the outbreak of the Thirty Years War could have hardly existed, but even during a large-scale European land war, the Italian and Comtoise militias, which were institutionally more disposed towards internal policing duties than extraterritorial warfare, retained their old structures and institutional boundaries. The methods and goals of the Comtoise militia, on the other hand, did change when the militia's ranks were suddenly filled with ill-motivated deserters and frustrated *routiers*. Sociology indicates that whatever purpose an institution has, there always remains room for unintended, undesired, and unexpected outcomes.[270] In the case of Franche-Comté and the Thirty Years War, the militia went rogue and became a liability to the very people it was supposed to protect.

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268 Gustafsson, 1998, p. 194.
269 Saurugger & Terpan, 2016, p. 6.
270 Pawlak, 2011, p. 357.

Spanish and Italian militias, which were raised intermittently up until the eighteenth century, sit uncomfortably with the Military Revolution theory that assumes uninterrupted institutional growth and solidification. They do, however, lend more support for a theoretical framework often employed as a corollary to the Military Revolution, namely the concept of a fiscal-military system. The militias of Habsburg Spain followed a general European trend in which noble cavalry obligations and popular militia duties were commuted into permanent taxes or one-off monetary contributions. Spanish military systems were converted into fiscal ones, which in sociological terms indicates a change of institutional purpose and in the historical view suggests the maturation of the fiscal-military system, the purported end result of the Military Revolution.[271] Yet reality once again undermines the suppositions of the Military Revolution, as the increased taxation and other wartime fiscal artifices of the Habsburg state translated into transfer and out-contracting of financial powers and tax collection to landlords and urban communities. As Carlos Javier de Carlos Morales has argued, the hasty process of commuting militia services into remittances of money was more financial devolution than a military revolution.[272]

The *waardgelders* and other Dutch levies were synonymous with urban militias, for which reason their institutional arc cannot be separated from the development of towns and cities. The Dutch urban militias survived the Thirty Years War institutionally intact even though their military performance had been modest at best and negligible at worst. The context for understanding their survival and continued relevance in the Dutch Republic is not military but political history. The reduction of the Dutch guilds into mere trade associations in the early sixteenth century, an intentional policy pursued by Charles V, who wished to enhance the governing role of the Habsburg-associated patrician class, had resulted in an urban political void, which the militias

271 Glete, 2002, pp. 1–61.
272 Carlos Morales, 2018, pp. 130–131.

and their ambitious leaders subsequently rushed to fill. The militias became political assemblies that claimed to represent ordinary citizens through the mediation of their captains, who acted as popular spokespersons.[273] The militias retained their political clout during the Thirty Years War, and they were instrumental in the reassertion of Orangist rule in 1672. Although the Dutch militias and their part-time burgher soldiers cannot be regarded as true agents of the theoretical Military Revolution, their ability to carry out very actual political revolutions was not diminished by the wars of the seventeenth century.

Differentiating the Militias

When militias of the Thirty Years War are viewed from the perspective of systemic complexity, they appear as armed contingents with reduced hierarchies. Many belligerent realms set up rudimentary organisations to train and drill levied militiamen, but when the time came to field militias, it was often discovered that they lacked officers, weapons, supplies, proficiency, and discipline. As a result, many militias failed to support their realm's military interests or even acted against them, as was the case in Franche-Comté. There existed, however, some exceptions to this rule. Urban militias, such as that of Hamburg, could be organised into a consistent military hierarchy that ran down from colonels to warrant officers. The Holsteiner *freien Knechte* were semi-professional soldiers, whose very name refers to military seniority and experience. Apart from military hierarchy, systemic complexity was introduced into militias by mechanisms of mobilisation. As with layers of military hierarchy, there were also great regional variations in the ways militias were brought into the field and maintained there. In some regions militias and levies were summoned by bailiffs of the ruling monarchs or princes, in others they were incorporated into feudal structures where military responsibilities had been devolved to local nobles.

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273 Friedrichs, 2002, p. 53.

Differentiating militias and levies from cavalry services on the one hand and regular armies on the other requires careful qualification and attention to nuances. Systems-theoretical differentiation can only exist between separate subsystems, as differentiation from the environment.[274] From the view of military history, therefore, the problem becomes how to delineate clear and institutionalised boundaries between militias and other military systems. The institutional differences between militia and cavalry service are relatively clear. Cavalry service concerned only prebendal elites, while militia service was a duty for commoners, meaning burghers and peasants. Cavalry service was also exclusively a mounted form of warfare, while militias consisted predominantly of infantry. The military history of the Thirty Years War, nevertheless, provided some exceptions to the latter rule, namely the partially mounted militias in Franche-Comté, Portugal, and certain German principalities. Differentiating militias from regular armies is less straightforward. The most practicable criteria are temporal and spatial: militias and levies were non-permanent military institutions whose scope of military duties was limited to temporary territorial defence as opposed to protracted and extensive campaigns on foreign soil.

One indicator of the militias' status as differentiated subsystems might be their ability to avoid submergence into or total replacement by other military subsystems (namely, the regular army). Although the process of Military Revolution in general, and the conjuncture of the Thirty Years War in particular, presented colossal challenges to the militia as a military system, all militias endured well beyond the Thirty Years War – some even into the nineteenth century. Systems theory explains institutional survival as autopoiesis or as the system's ability to reproduce itself, and subsequently presupposes that an autopoietic subsystem consists of operational elements that are unique to itself – that is, that the system is closed and the only one employing its own types of operation. This postulation, however, would lump all histori-

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274 Baraldi, Corsi & Esposito, 2021, p. 61.

cal military institutions into a single subsystem, a generalising approach in systems theory that troubled Niklas Luhmann. He therefore suggested that most social subsystems, excluding only communication systems, define their own specific forms of operation and regulate which of their internal elements determine systemic identity and enable self-reproduction.[275] In the case of early modern militias, the reproduced operational element was the potential for military agency by the civilian population – meaning those urban and rural commoners who were not privileged nobles or full-time soldiers.

Militias in the Thirty Years War illustrate conflict between agency and exogeneous conditions. Rulers' desire to operate efficient militias as systems of territorial defence or perhaps even as alternatives to regular armies was offset by the structural limitations in economy and demographics. Levies did not guarantee the supply of military-quality manpower, while removing commoners from industry and the non-military labour market meant paying an opportunity cost in the form of forfeited economic surplus and revenue. On the other hand, the reduced internal complexity of most militias and levies translated into low transaction costs, as the militias were unencumbered by multi-layered military hierarchy, administrative efforts, and the entire 'business of war' that stipulated public–private partnerships and entrepreneurial logic of military maintenance. If the agency of the ruler was strong enough that they would push through and employ militias as major (or, in the case of insurgent Portugal, as dominant) military institutions, exogeneous conditions beyond the ruler's control could still produce contingent obstacles and unanticipated outcomes. Arming and mobilising the commonalty was one thing, maintaining them under state control was another.

Perhaps the most striking phenomenon in militia warfare during the Thirty Years War was the endemic and existential peasant violence that was not tied to any single territorial unit or institutional framework. As organising principles, autonomous peas-

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275 Luhmann, 1995, p. 34.

ant militias relied on historical precedents of peasant warfare and cooperative tradition instead of the military-administrative institutions of the early modern territorial state. The omnipresent grassroots warfare gave the Thirty Years War a peculiar outlook that likens it in many ways to the asymmetrical conflicts of our own age. Modern political science has identified the existence of so-called 'new wars' that are fought at least partly by non-state actors, such as paramilitary organisations, terrorists, or organised crime groups. The involvement of non-state actors in the new wars causes them to be asymmetrical conflicts in which the aims and methods of the opposing sides are not commensurate. Similarities between the asymmetrical new wars and the Thirty Years War are striking.[276]

The early modern state may have had two reasons to retain militias and levies in the military-institutional arsenal. The first reason was a military one. Although militias performed poorly in the Thirty Years War and possibly failed to meet (admittedly unrealistic) expectations, the war nevertheless drove home the lesson that manpower contributed crucially to both tactical and strategic success. Retaining institutional access to supernumerary pools of manpower was a rational choice despite any temporal or spatial limitations to the use of such a reserve force. Another reason would have been constitutional. Militia service was viewed by commoners not only as an obligation but also as a right. This was particularly true in the case of urban militias, the existence of which represented autonomy from princely rulers. In other instances, as in the Nordic countries, the maintenance of peasant levies presented opportunities for interstitial bargaining or mediating efforts.[277] In constitutional terms, militia service remained an enduring facet of that particularistic grassroots collectivism that Peter Blickle identified as communalism.[278] The early modern state was not yet robust enough that it would have attempted to

276 Münkler, 2005, pp. 42–50.
277 Bäckström, 2021; Skoog, 2021.
278 Blickle, 1986.

attack such deep-rooted social structures in the era of the Thirty Years War.

Traditional sociology sees the history of human organisation as one that moves increasingly towards technical and functional specialisation. Max Weber indeed argued that the specialisation of functions was crucial to the modern development of the organisation of labour.[279] There is a case to be made that the military labour force of the early modern militias could specialise in a certain type of warfare and that this specialisation can be identified during the Thirty Years War. This specialisation would have been guerrilla warfare. As early as 1623 an English pamphlet described how Brunswick peasants sniped at Catholic League soldiers in the forests with their small-bore fowling pieces, 'which are a great deale surer shooters, and fitter for their handling, than the warre-like Musket'.[280] Later in the war Portuguese militiamen in the Americas and armed peasants in northern Germany and Denmark (the so-called *Schnaphahnen* or *snapphanar*) waged systematic guerrilla warfare with varying degrees of success. The catalyst behind this functional specialisation in guerrilla warfare, it has been argued, was the proliferation of the flintlock musket, which was better suited for clandestine operations than the bulkier and simmering matchlock musket.[281] The transformation of guerrilla warfare during the Thirty Years War was a technical facet of the wider Military Revolution and, as such, of some historical significance for the institutional development towards differentiated and specialised social subsystems.

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279 Weber, 1978, pp. 228.
280 More newes from the Duke of Brunswick, 1623, p. 16.
281 Bäckström, 2018, pp. 201–208.

Regular Armies

Landsknechte and *Tercios*

Although the definition of a regular army is fluid – it can fundamentally refer to any military organisation that is not 'irregular' – in most cases it is understood as an extension of state power and one that carries out conventional forms of warfare. The remaining chapters will look at regular armies of the Thirty Years War as both differentiated systems and areas of entrepreneurial practices. Whereas most studies of the Military Revolution have explored technological advances and tactical standardisation as manifestations of revolutionary (or evolutionary) change, the present investigation focuses on specialisation of military labour and centralisation of warfare as signifiers of institutional change and decline. The key themes emerging from the study of regular armies and the Thirty Years War are the consolidation of state monopoly of violence and the systemic change from one method of raising armies to another. The regular armies of the Thirty Years War provide the historian with a theoretical nexus, where the Military Revolution theory, sociological study of organisations, and the economics of labour rationality all intersect and commingle.

Early modern regular armies were not yet synonymous with standing armies. Regular armies that had existed since the late Middle Ages were kept in arms intermittently. They were usually raised at the start of the campaign season in spring and dismissed at the outset of winter. Some armies were kept in winter quarters and redeployed at the start of the new campaign season, but even then, regular armies were no longer maintained after the cessation

of hostilities. Standing armies, on the other hand, are explicitly permanent forces that are kept in operational readiness indefinitely. The existence of such armies is considered to be indicative of modernity by the Military Revolution theory and the tenets of traditional sociology.

Unlike the nobility's cavalry service or even the peasant levy, the regular armies of the Thirty Years War were not rooted in any age-old institutional tradition. One likely institutional predecessor to the early modern regular armies can be found in the French *compagnies d'ordonnance*, which Charles VII set up in 1445. The origins of the *ordonnances* were in the protracted warfare of the Hundred Years War, which had riddled France with a surplus of masterless mercenary companies, or *écorcheurs* ('flayers'), whose violent peregrinations devastated entire provinces in southern France.[282] Building on precedents of mounted companies that were kept on the royal payroll, Charles pushed through an arrangement under which some *compagnies* were paid regularly, kept in permanent garrisons, and subjected to a chain of command that ran from local military-fiscal officials to the Valois court itself. This reform allowed the Valois monarchy to contest the turbulent *écorcheurs* and to make claims for local monopolies of violence.[283]

The introduction of the *compagnies d'ordonnance* in France in 1445 and later in Burgundy in 1471 did not cause the itinerant mercenary companies to disappear, but it did coincide with a development in which the free mercenary companies consolidated into larger and more regulated contingents. A major milestone in this development was the establishment of the German *Landsknecht* regiments by Emperor Maximilian I in the 1480s. The *Landsknechte* imitated the organisation and tactics of the Swiss infantry and were formed into regiments of 2,000–3,000 foot, armed predominantly with pikes. The *Landsknechte* could be recruited legally by the emperor or his vassals by concluding a contract with a reputable mercenary commander who had the contacts and resources to

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282 Contamine, 2017, p. 267.
283 Solon, 1976.

hire large numbers of soldiers. After receiving patents and necessary permissions from the emperor or the territorial princes, the *Landsknecht* commander subcontracted recruitment to the captains, who hired soldiers to each company individually.

Following initial musters the soldiers were organised into regiments and introduced to the terms and conditions articulated in the Articles of War.[284] As Fritz Redlich observed, the Articles of War evolved from simple agreements of mutual obligations between soldiers and commanders into more comprehensive promulgations about discipline and obedience to the ruler.[285] The first of these more principled imperial *Reichs-Policey-Ordnungen* was issued in 1530, and they were later reiterated in 1548 and 1577. The *Ordnungen* covered issues of military jurisdiction, soldiers' outlook, and civil–military relations. Above all, they attempted to regulate billeting and provisioning. Hospitality was to be extended to native and officially sanctioned *Landsknechte* alone – the *Ordnungen* clearly sought to place safeguards against the reappearance of the dreaded *écorcheurs*. One way to regulate rapine and plunder was to institutionalise a practice by which towns and communities could pay fire-ransoms (*Brandschatzung*) as safeguards against wanton arson, violence, and theft.[286]

The internal chain of command in the *Landsknecht* contingents provided the template for regimental hierarchies in the Thirty Years War. The contractor-commander of the regiment held the rank of a colonel and his second in command was the lieutenant colonel. The other regimental staff included a paymaster, sergeant of the watch, quartermaster, proviant master, bailiff, and a provost. Companies had their own staffs consisting of commanding captains, lieutenants, company quartermasters, and surgeons. All these officers were appointed by the colonel as commissioned by the employer – for instance, the emperor or another territorial prince. What separated the *Landsknecht* regiments from their

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284 Millar, 1971, pp. 96–97.
285 Redlich, 1964, p. 121.
286 Krüger, 1996, pp. 50–52.

later successors was the fact that the *Landsknechte* rank and file still elected their own corporals and other NCOs.[287]

Although the *Landsknecht* contingents bore many of the characteristics of later regular regiments, they did not yet constitute a standing army. While Maximilian I certainly had ambitions for an imperial army after being crowned emperor in 1493, the *Landsknechte* retained their contractual relationship with him. Turning the *Landsknecht* regiments into a standing army would have necessitated permanent financing, but this was something that the imperial Estates refused to grant. The Estates' scepticism was motivated on the one hand by the fear that the emperor might use a standing army as a tool of repression and on the other by simple parsimony. Permanently financing a standing army of 50,000 salaried soldiers (as proposed by Maximilian I in 1510) was simply beyond the means of the imperial Estates.[288]

Over the course of the latter half of the sixteenth century, the corporate and autonomous *Landsknechte* degenerated into mere salaried 'soldiers'. The reasons behind this retrogression were both social and economic. Population growth and series of bad harvests placed increased pressure on land use and forced more people to seek livelihood in wage labour. These trends coincided with inflation that drove up prices and wages. The outcome of these phenomena was a general proletarianisation of the labour force in western and central Europe. From the 1570s onwards, it seems, the captain-proprietors began to exploit the asymmetrical labour market by usurping control over all leadership appointments, including those of the NCOs formerly elected by the *Landsknechte* themselves.[289] The judicial autonomy of the *Landsknechte* disappeared in tandem with significant reduction in company sizes, from the traditional 500 to 200 or even 100. Together, these various developments made the soldiers' lives more hierarchical, con-

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287 Millar, 1971, p. 97.
288 Whaley, 2012, p. 75.
289 Swart, 2006, pp. 75–77, 80.

trolled, and subordinated. They could no longer be justly labelled as true *Landsknechte*.[290]

Another contributing factor to the disappearance of the *Landsknechte* appears to have been the proliferation of the matchlock musket. The traditional weapons of the *Landsknechte* – the pike, the halberd, and the fearsome great sword or *Zweihänder* – required physical strength and specialist skills.[291] The matchlock musket, however, was a weapon that could be assigned to any recruit or militiaman. Although the employment of the matchlock musket in battle formations required techniques that could only be instilled through repeated drill, in most combat scenarios typical to early modern warfare, namely skirmishes and sieges, the musketeers only had to master three actions: to load, aim, and fire. The matchlock musket acted as an economiser in military training and an equaliser in combat effectiveness.

Recruited native pikemen formed the professional core in the armies of the Spanish Habsburgs. These contingents of heavy infantry first appeared in service during Spain's Italian campaigns in 1496–1497. In addition to the main body of pikemen, these formations also included crossbowmen and harquebusiers. During the second Italian expedition in 1500, the harquebusiers already made up a quarter of these contingents. These 'squadrons' were made up of twelve companies of 500 men each. Two of the companies consisted exclusively of pikemen, while the remaining companies included 200 pikemen, 200 'sword-and-buckler men' (*rodeleros*), and 100 harquebusiers.[292] The hierarchy of the Spanish squadrons vaguely resembled those of the German *Landsknechte*. The 6,000-strong squadron was headed by a colonel and the 500-strong companies by captains. At the lower company level, command was held by five centurions in each company. These

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290 Ibid., pp. 81, 92.
291 Blau, 1882, p. 47.
292 Albi de la Cuesta, 2019, pp. 39, 41.

centurions together with the fifty squad leaders or corporals comprised a stratum of warrant officers.[293]

In the sixteenth century, these large contingents of heavy infantry came to be known as *tercios*. The term *tercio* denoted a third of a field army, which in the sixteenth century typically meant 10,000 men. A typical *tercio* was therefore a contingent of 3,000 men – half the size of the earlier squadron. By the early seventeenth century, the *tercios* had again been reduced in size to 1,500 or even 1,000 men.[294] Their tactical composition had also changed, as the sword-and-buckler men had disappeared. The complement subsequently consisted of pikemen, harquebusiers, and musketeers.[295] The native *tercios*, whose manpower had been mostly recruited from Castile, formed the elite core of the famed Army of Flanders during the Thirty Years War. The structure of the Army of Flanders reflected both the tradition of the *Landsknecht* regiments and new realities of warfare that had grown in scope, size, and demands. The highest-ranking infantry commander was the *Maestro de Campo General*, whose rank provided the title for Giorgio Basta's famed military manual. The *Maestro de Campo General* was superseded only by the captain general (*Capitán General*) of the army up until 1631, when the Spaniards created an intermediate position of a governor of arms to coordinate the operations of infantry, cavalry, and artillery.[296] The native *tercios* were commanded by the *Maestros de Campo* and the ordinary infantry regiments of Italians, Walloons, and other nationalities by colonels. The last high-ranking infantry rank in the *tercios* and regiments was the sergeant major, whose main duty was to train the soldiers.[297]

Most of the remaining *tercios* were deployed in Italy, where the Spanish Habsburgs maintained sizeable and consistent military

293 Ibid., p. 41.
294 Puype, 1997, p. 74.
295 González de León, 2009, p. 32.
296 Ibid., pp. 17–18, 29–32.
297 Ibid., pp. 20–23.

presence. There too the Spanish army was commanded by a captain general from his post in Milan. During the reign of Philip IV, the Spanish crown maintained eighteen Italian infantry regiments, many of which saw service in the Spanish Netherlands and Germany.[298] The ethnic outlook of the Spanish armies was heterogeneous. While the bulk of the Spanish infantry regiments and *tercios* consisted of Italians and Spaniards (the latter being in the minority), the cavalry in the Army of Flanders consisted of Walloons, Germans, Croats, Albanians, and other nationalities. The basic cavalry unit was the company, but from the 1630s onwards the German cavalry, according to the established practice in the Holy Roman Empire, was organised into regiments led by cavalry colonels.[299] The Spanish army succeeded in attracting substantial numbers of troops beyond Spain's sphere of influence; in 1638 the field army commanded by Prince Thomas of Savoy, then the captain general in Flanders, included three Spanish *tercios*, two Italian regiments, two Irish regiments, two German regiments, one English regiment, and ten squadrons of Croatian cavalry.[300]

Various practices for recruiting troops existed in the extensive and dispersed Spanish realm. The most common practice was recruitment by commission. Under this system, the central authority, either the council of war in Madrid or the captain generals in Flanders and Lombardy, authorised a captain to raise a company on the crown's behalf. The captain would then decide the schedule and area of recruitment. After he had recruited the necessary quota of men, the captain would present the company to royal commissars at a designated muster area. During the initial recruitment process, which was expected to take roughly twenty days, the captain paid salaries to the recruits. The captain did not pay these wages from his own pocket – he would have received the necessary funds from the crown, although he would deduct the value of supplies, equipment, and possible advances

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298 Bazy, 1864, pp. 22–24, 51.
299 González de León, 2009, pp. 24–26.
300 Bazy, 1864, p. 26.

before remitting the monies to the recruits.[301] The commissioned companies, however, failed to form a basis for any standing army, as they were disbanded by the government whenever their troop strength became too low.[302]

The Spanish crown could only issue commissions within its own territories. Another method was therefore needed when the royal government wished to raise troops in Germany, Britain, or those parts of Italy that did not belong to Spain. Under such circumstances, Spain resorted to using military contractors. These were typically colonels who raised entire regiments for credit. The crown and the contractor concluded an agreement under which the crown promised to pay the contractor an advance sum of money as well as steady remittances of wages thereafter. The contractor-colonel, for his part, committed to raising the requested number of troops within a certain timeframe.[303] For the employer, the attraction of recruitment by contract lay in the prospect of acquiring professional and even readily equipped soldiers in large numbers and in a short time.[304] The incentives for the recruiter-contractors were profit and possible enfeoffments. Money could be made by pocketing the difference between remittances and recruitment costs or by collecting contributions from occupied territories (these could include neutral or even friendly territories). Employers who were short of cash or not willing to farm out revenue sources might compensate the military entrepreneur with land and titles.[305]

Contracting was not reserved for foreign recruiting grounds alone, as the recruitment of most Walloon regiments in the Spanish Netherlands was contracted out to local nobles during the Thirty Years War. The royal government was forced to extend the recruitment period from twenty to sixty days so as to allow the

301 Parker, 2004, pp. 29–32.
302 Ibid., p. 37.
303 Ibid., p. 32.
304 Tallett, 1992, p. 72.
305 Asch, 1997, p. 157.

contractors ample time to find the necessary manpower. In return for its patience the crown received contingents that were kept in arms from one campaign season to another instead of being breezily disbanded in the manner of the commissioned companies.[306]

Some of the recruiters in Spanish employ reached the magnitude of general contractors – that is, military entrepreneurs who raised entire armies instead of single regiments. One such individual was Duke Charles IV of Lorraine, who was in Spanish and imperial employ at the same time. In 1637 Charles managed to muster a formidable force of sixteen cavalry regiments, two imperial infantry regiments, one Spanish cavalry regiment, and one Spanish infantry regiment that consisted of 600 Polish mercenaries.[307] His reward, it seems, was a quiet blessing from Cardinal Infante and the Brussels administration to rob blind the Spanish province of Franche-Comté; in January 1637 alone, the Comtoise Estates paid the occupying Lorrainer and imperial troops a heavy contribution of more than 240,000 francs.[308] Another prominent general contractor was the Genoese financier Ambrogio Spínola, who raised at his own expense 8,000 Lombard soldiers for the Army of Flanders in 1602. In return for his financial risk, the Spanish crown agreed to fully reimburse Spínola with interim interest. As collateral for the massive debt, the crown promised a cardinal's office for one of Spínola's sons, export licences for Sicilian grain, and a subcontract for bullion shipping in the Mediterranean. Spínola was also provided the opportunity to make profit by equipping the soldiers and retaining the pay of the casualties.[309] The role of a general contractor and unsparing financier during the Spanish–Dutch War secured Spínola the rank of the *Maestro de Campo General* in the Army of Flanders, a position he held until 1628.

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306 Parker, 2004, p. 37.
307 Robert, 1883, p. 353.
308 Louis, 2005, p. 110.
309 Hanlon, 2014, pp. 78–79.

The failure of the commissions to produce the necessary numbers of recruits and the fiscal restrictions in outsourcing recruitment to contractors induced the Spanish government to try to shift the burden of raising troops to the native elites. The Union of Arms in 1626 had been an unsuccessful attempt to broaden the domestic base of recruitment by including the non-Castilian provinces in the creation of a reserve army 140,000 strong.[310] The aim of the union had not been to create a unified royal army under Castilian suzerainty but instead an assembly of separate provincial forces of local troops under local officers and managed by local institutions.[311] Be that as it may, the ambitious union failed in the face of determined constitutional opposition from the Estates of Aragon, Valencia, Catalonia, and Portugal.[312]

The collapse of the Union of Arms induced the Spanish premier (*valido*) Olivares to seek an alternative way of raising troops via something that I. A. A. Thompson has identified as refeudalisation. The refeudalisation effectively meant devolution of recruitment, command, and management of troops to local powerbrokers, which included both landed elites and corporate entities. In practice Olivares revived existing institutional obligations or invented new ones: titled grandees were summoned to raise their vassals and lead them personally in battle; *hidalgos* and *caballeros* were ordered to render military service in return for fiscal privileges; and even the urban communities and provinces were expected to provide troops for service at home and abroad alike.[313]

The end result of Olivares's military reformation was a mixed success. Quantitatively, the reforms produced results, as Spain managed to field 133,000 troops in the various theatres of war by 1639.[314] Qualitatively, the reformed recruitment system proved

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310 Lynch, 1969, p. 97.
311 Thompson, 1992, p. 15.
312 Lynch, 1969, pp. 97–109.
313 Thompson, 1992, pp. 7, 18.
314 Ibid., p. 11.

costly and even counterproductive. The refeudalisation aspect of the reform placed the landed magnates in a conflicted position. On the one hand, the military-administrative duties imposed costs and outlays for the magnate and even challenged his ability to protect his personal followers from military service; on the other, the new duties gave the magnate access to ecclesiastical and royal administration as well as entitling him to compensations and concessions from the government. In the view of Thompson, the efficiency of the refeudalised recruitment system ultimately depended on a balance of profit and loss in the transactions between the crown and the landed elites.[315] The crown viewed this transaction in a simplistic way: the landed elites, ecclesiastical corporations, and royal towns were expected to periodically deliver fixed numbers of troops for military service. One seemingly objective way of raising troops was a lottery (*quinta*) held among all able-bodied males. The authorities expanded the eligibility for the lotteries by pushing up the age limit for military service from 40 to 70 and by revoking the traditional exemptions for students, officials, and certain occupations. Even bandits and vagabonds became eligible for military service, which caused the authorities to keep many recruits in incarceration after enlistment. Such desperate artifices would not have provided the Spanish armies with quality troops.[316]

The Peace of Westphalia in 1648 brought little respite for Spain, which was forced to continue war with France for the next eleven years and with breakaway Portugal until 1668. One major institutional problem in these protracted wars was the high rate of desertion among native troops, particularly the militias and auxiliary troops that were assigned to garrison duties.[317] After the end of the war with France, the Spanish crown remedied these shortfalls by importing foreign troops to the Portuguese theatre of war. The proportion of foreign auxiliaries and mercenaries remained high

315 Ibid., p. 19–20.
316 Parker, 2004, pp. 38–39.
317 White, 2003, p. 66.

in the armies fighting against the Portuguese, while the overall size of the Spanish army decreased.[318] This contraction in the size of the armed forces was largely explained by the decrease in Spain's military commitments during the reign of Charles II. Although the size of the Spanish field armies fluctuated greatly in the latter half of the seventeenth century, institutionally they were fixed to three core forces in Flanders, Lombardy, and Catalonia.[319]

The peculiar Spanish phenomenon of refeudalisation, which began during the Thirty Years War and continued well afterwards, highlights the environmental compatibility and institutional endurance of prebendal organisation of warfare. Whereas the general systemic trend in the development of European armed forces had been the consolidation of relations between the army and the state, in the case of Spain and the Thirty Years War these relations loosened and were returned to the intermediation of such localised powerholders whose military authority was based on feudal tenures of land and jurisdictions. This resurgence of prebendal military authority went against the sociological assumption about a correlation between state formation and state monopoly of violence, a theme that was central to Max Weber's grand explanation of how societies develop over time.[320]

The refeudalisation of the army in Spain during the Thirty Years War resonates with Niklas Luhmann's theory of recursive power that is not located in any physically identifiable person or location, but in autopoietic subsystems that generate the conditions of their own autonomy and legitimacy.[321] The refeudalisation certainly eroded rather than enhanced any claim for the monopoly of violence by the Habsburg state. It also made the Spanish army more complex as a system, not less. Whereas the army still retained its internal hierarchy and division of supervisory duties, a chain of command that had indeed served as a tem-

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318 Storrs, 2006, p. 17; White, 2003, pp. 80–81.
319 Storrs, 2006, pp. 22–23.
320 Weber, 1926, p. 8.
321 King & Thornhill, 2003, p. 104.

plate for other European realms, its recruitment and maintenance were reconfigured to involve myriad private and corporate actors – landowners, municipalities, ecclesiastical bodies, and holders of royal outsourcing contracts (*asientos*). Meanwhile the refeudalisation of the army also made it less differentiated from the surrounding environment and social institutions; indeed, the latter became increasingly involved in military matters. The erosion of systemic barriers around the army became manifest in the concrete real-life arrangement under which many soldiers practised supplementary employment in agriculture, crafts, or industry.[322] The enmeshment of public–private relations, the obfuscation of systemic boundaries, and the involvement of external social institutions in the systemic self-regeneration of the Spanish army all indicate that the early modern social subsystems could be very different entities from the differentiated, specialised, and hermetic modern subsystems sketched by Luhmann.

The recruitment and employment of regular Spanish armies during the Thirty Years War was not indicative of a Military Revolution unless one wants to identify an early modern Military Counterrevolution as well. I. A. A. Thompson articulated this dissension in the Military Revolution theory by proposing a procedural difference between feudal warfare and the contentions of the Military Revolution: in the former the charge on economy was imposed directly through the social system, while in the latter it was levied by the early modern state through the fiscal system.[323] Spanish refeudalisation during the Thirty Years War erodes the explanatory power and extent of the Military Revolution theory, as Michael Roberts defined its constitutional and social trajectory as one in which the demands of war were subjected more to the intermediation of government agents, not less.[324] The refeudalisation of the Spanish army during the Thirty Years War resonates more with the concept of a Military Devolution suggested

322 Thompson, 2020, p. 40.
323 Ibid., p. 41.
324 Roberts, 1995, pp. 22–23, 28–29.

by David Parrott, who understands it as outsourcing of military duties to private actors (military entrepreneurs). The fact that this Spanish form of Military Devolution involved the agents and corporations of the prebendal and feudal society might, to paraphrase the language of systems theory, qualify more as systemic reinvention than autopoiesis.

German Military Entrepreneurs and Their Mercenary Armies

In central Europe, the institutional fiat of a regular Habsburg army was the year 1556, when Emperor Ferdinand I established the *Hofkriegsrat* to administer military affairs in Austria and Royal Hungary. In practice this meant managing and maintaining the so-called 'Military Frontier' between the Habsburg patrimonial lands and the Ottoman sultanate. On the Habsburg side this frontier consisted of between eighty and ninety fortified localities garrisoned at any time by 11,000–14,000 mostly Hungarian soldiers. To this pool of manpower could be added 10,000–20,000 soldiers in the private armies of the Hungarian magnates and 8,000–15,000 *hajduks* or paramilitary fighters employed either by the Habsburg garrisons or the Transylvanian magnates.[325] The main responsibility of these troops was to defend the Habsburg–Ottoman frontier, for which they were mainly financed by the local Estates in Hungary, Carniola, Carinthia, Styria, and Inner Austria.[326]

During the Long Turkish War (1593–1606), Emperor Rudolf II augmented the Hungarian troops with recruits raised in Germany and abroad. Because the imperial as well as the Habsburg patrimonial Estates were initially reluctant to finance the recruitment drive, Rudolf was forced to disband units at the end of each campaign season (at the approach of winter) and recruit new troops at the start of a new season. In 1598 Rudolf finally managed to maintain three regiments all year round as garrison troops for key

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325 Ágoston, 2010, pp. 119, 122–123.
326 Ibid., p. 121.

strongholds on the Military Frontier.[327] With the conclusion of the
Peace of Zsitva-Torok and the end of the Long Turkish War in
1606, the imperial regiments were disbanded, although some 6,000
of the recruited German troops were permanently maintained as
garrison troops by Rudolf from his own personal resources.[328] As
Fritz Redlich has pointed out, the concept of maintaining existing
units with replacements did not yet exist in the early seventeenth
century.[329]

The functioning of the *Hofkriegsrat* reveals the problems relat-
ing to the employment of hired troops. The *Hofkriegsrat*, which
was directed by a president and five councillors, was responsible
for recruiting, arming, and supplying troops. Among its other
duties was the maintenance of arsenals, magazines, and fortifi-
cations in Hungary, Bohemia, and Austria. It did not, however,
have direct access to the finances that were needed for these
diverse assignments.[330] The monies for hiring soldiers would have
to be raised via taxes, but taxation depended on the consent of
the Estates of the Habsburg patrimonial lands. Thus, the Estates
would ultimately decide whether new troops could be recruited,
and the Estates used this power as political leverage even when
increased recruitment seemed pertinent or indeed unavoidable.
The Estates regulated the enlistment and billeting of troops and
even reserved the right to raise regiments and appoint offic-
ers of their own. These privileges had effectively prevented the
Habsburgs from establishing a standing army in their patrimo-
nial lands.[331] As rulers of the Holy Roman Empire, the Habsburgs
could call on the imperial Estates to provide military assistance,
but this help was limited to remittances of money called the *Türk-
enhilfe*, which (as the name implies) were only granted to defend
the empire from the Ottomans.[332]

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327 Mears, 1988, p. 124.
328 Ágoston, 2015, p. 48.
329 Redlich, 1964, pp. 317–318.
330 Ágoston, 1998, pp. 133–134.
331 Mears, 1988, p. 131.
332 Kohler, 1990, pp. 11–14.

The establishment of the imperial army during the Thirty Years War was not built on the institutions of the empire or the Habsburg patrimonial lands but rather was based on the practice of military entrepreneurship. In this procedure a ruler with the right to wage war issued a commission to raise a regiment. An enterprising colonel would raise and often arm the regiment at his own cost (although he would deduct the cost of weapons and armour from the soldier's pay), either personally or by outsourcing the task to subcontractors who would raise individual companies. The ruler would commit himself to reimbursing and rewarding the military entrepreneur and his possible subcontractors by a variety of methods. These methods could include a full remittance of costs in cash, most likely acquired by the ruler as credit from financiers, a lease on a source of revenue as in tax-farming, an enfeoffment of rent-paying land or means of production, or, as in most cases, the licence to collect contributions and other forced taxation in the name of the ruler.[333]

When Emperor Ferdinand II contracted out the recruitment, provisioning, upkeep, and finally even the command of the imperial army to Albrecht von Wallenstein in 1625, Ferdinand turned Wallenstein into a living military institution. Wallenstein embodied many functions of the fiscal-military state: he was a banker who financed Habsburg warfare, a military industrialist who provided the state with equipment and supplies, a war commissar who monitored the various subcontractors to ensure they held up their end of the deal, and finally a minister of war who oversaw the resource flow from the public sphere to the war effort. Such unprecedented authority alarmed many imperial princes and indeed the Viennese court itself, and Wallenstein was consequently removed from command in 1630. However, in the face of the Swedish onslaught, Wallenstein's management skills and personal resources became so indispensable to the Habsburg war effort that he had to be reinstated as the imperial generalissimo in 1632. During this second supreme command, Wallenstein was

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333 Parrott, 2012, pp. 90–211.

also given the authority of an imperial delegate and the power to negotiate with the vacillating Elector John George of Saxony (although Wallenstein was never given full plenary powers over war and peace, as his biographer Golo Mann pointed out).[334]

The imperial army created by Wallenstein shared an organisational template with other German armies. Military-political treatises from the early seventeenth century instructed that the armies of the Holy Roman Empire were divided into three service branches (infantry, cavalry, and artillery) that all had their own hierarchies and organisations. In his 1622 treatise *Aulico Politica*, Georg Engelhard von Löhneyss still equated the German infantry regiment with the Spanish *tercio*, when he designated its strength at 3,000 men. This massive contingent was to be commanded by the *General Oberst*, whose office was identical with that of the Spanish *Maestro de Campo General*. The *General Oberst* was seconded by the *Soldaten Oberst* and the *General-Lieutenandt des Fußvolcks*, who comprised the senior commanding staff of the regiment.[335]

Tactically, the 3,000-strong regiment was divided into ten *Fähnlein* of 300 men each. The complement of the *Fähnlein* broke down to 150 musketeers, 120 pikemen, and 30 officers, NCOs, and support staff. The *Fähnlein* was commanded by the *Hauptmann* or captain. His subordinate officers were the lieutenants and ensigns (*Fendrich*), while the underofficers consisted of sergeants and corporals.[336] Among the latter were included the captains of arms, who kept track of the soldiers' weapons, and the *Landtpassaten*, who seconded the corporals as their personal trustees ('Commendor').[337] The troops were still divided into *Rotten* of six to ten soldiers headed by a *Rottenmeister* – an organisational tradition dating back to the *Landsknechte*.[338] According to

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334 Mann, 2016, p. 803.
335 Löhneyss, 1622, pp. 629–630.
336 Ibid., p. 630.
337 Wallhausen, 1615, p. 29; Löhneyss, 1622, p. 648.
338 Löhneyss, 1622, p. 648; Wallhausen, 1615, p. 31.

the *Aulico Politica*, the cavalry was to be organised into regiment-sized contingents of 1,000 riders each. The cavalry regiment was headed by a lieutenant colonel and three *Rittmeister*, who had direct command over 250 riders each. The lower officer ranks in the cavalry were lieutenants, ensigns, and corporals. The artillery officers were specialists known as 'gun masters' (*Büschenmeister*), whereas the artillerymen were equated with the *Doppelsöldner* or pikemen who received double pay.

The old military organisation articulated in the *Aulico Politica* and other military treatises from the early seventeenth century did not survive the vicissitudes of the Thirty Years War. Whereas the composition of the imperial infantry regiment did not change, its size and purpose did. The *Fähnlein* of 300 men was rebranded as a company, which was no longer fixed at the earlier strength. This can be deduced from the fact that while the full strength of imperial foot regiments was halved to 1,500 soldiers or fewer, the nominal composition of most regiments was still typically ten companies (although the imperial muster rolls reveal some regiments of just four or five companies).[339] The tactical inflexibility of the large *tercios* that had contributed to the imperial defeat at Breitenfeld in 1631 led to increased divergence between administrative and combat units. At the Battle of Lützen in 1632, Wallenstein had consequently organised his regiments into linear formations that were roughly similar to the brigades of his Swedish opponents.[340]

The evolution of the cavalry contingents followed a similar arc. The nominal strength of the cavalry regiments remained 1,000 riders divided into ten companies of 100 men each. However, the actual combat strength of the imperial cavalry regiments was almost always lower, usually between 600 and 800 troopers, which meant that the companies too were reduced in size. Furthermore,

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339 Brnardic & Pavlovic, 2009, p. 15; Čechová, Janáček & Koči, 1977, pp. 397–400, 408–412, 429–432, 446–449, years 1632 and 1634, Kriegsliste Nr. 14, 15, 18, 20.
340 Brnardic & Pavlovic, 2009, p. 22.

muster rolls reveal that it was more typical among cavalry than infantry regiments to have complements of fewer than ten companies, sometimes as little as three.[341] Artillery units did not change structurally but instead quantitatively. Whereas Catholic League and Habsburg troops had fielded twelve field pieces at the Battle of White Mountain in 1620, twenty-five years later the joint Bavarian/Imperialist army had twenty-eight guns at the Battle of Allerheim.[342] The multiplication in the number of cannon reflected the relative increase in the field artillery's importance as an armed branch alongside infantry and cavalry.

The practicalities of protracted and large-scale war mandated reforms in the military hierarchy as well. Because the troop strength of the imperial regiments was greatly reduced while the number of regiments themselves multiplied, it became prudent to relocate administrative responsibilities above the operational regiments to the stratum of war commissars and the *Generalfeldwachtmeister*. In a process well identified by Fritz Redlich, the regimental colonels became absent owners (*Inhaber*), who issued regimental regulations, nominated officers, and exercised judicial authority over soldiers and baggage train alike. The daily management and operational command of the regiments was left to the lieutenant colonels, who represented a much more limited administrative-authoritative sphere than that of the field colonels of the pre-war era.[343] Over the course of the Thirty Years War, a new regimental rank, that of major, emerged as a key intermediate between the companies and the senior command. The Scottish military theorist James Turner, himself a veteran of the Thirty Years War, described the major as 'both an Officer of the Field, and of the Staff'. His tactical duties involved the marshalling of companies during marches and the transmittance of orders dur-

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341 Brnardic & Pavlovic, 2010, p. 6; Čechová, Janáček & Koči, 1977, pp. 400–404, 412–417,433–437, 449–454, years 1632 and 1634, Kriegsliste Nr. 14, 15, 18, 20.

342 Wilson, 2009, pp. 304, 702.

343 Brnardic & Pavlovic, 2009, pp. 15–16; Redlich, 1964, pp. 178–180.

ing battles. Administratively, he exercised the powers of the companies' inspector.[344]

The military hierarchy at the company level remained mostly unaltered throughout the Thirty Years War. There were, however, some modifications and nuanced changes. The sergeant major emerged as an intermediate rank between the officers and the NCOs. He was often the company commander's closest aide in the daily management of duties.[345] The ranks of sergeant and corporal remained the same (as they are today), but, according to Turner, the position of the *Landtpassaten* ceased to exist in the German armies either during or after the Thirty Years War.[346] The *Rottenmeister* continued to exert some authority over common soldiers but mostly in various guard or watch duties.[347]

The imperial cavalry regiments experienced more profound alterations during the Thirty Years War. They too belonged to the proprietorship of an often-absent *Inhaber*, while the management and command of cavalry regiments was delegated to either managerial colonels or lieutenant colonels.[348] The main changes occurred in the formations. For purely tactical reasons, it was often necessary to split cavalry regiments into operational squadrons that consisted of two or more companies. The proliferation of new kind of cavalry, dragoons, was also reflected in company commands, as the new dragoon companies were headed by captains while the traditional cavalry companies were still commanded by *Rittmeister*.[349] The artillery received its own general staff in the form of *Feldzeugmeister*, who had separate jurisdictions in the empire, Bohemia, and Silesia. In Bohemia and Silesia, the *Feldzeugmeister* were assisted by general inspectors, but in the

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344 Turner, 1683, pp. 224–225.
345 Brnardic and Pavlovic, 2009, p. 17.
346 Turner, 1683, p. 219.
347 Droysen, 1875, p. 82.
348 Brnardic and Pavlovic, 2010, p. 6.
349 Ibid., pp. 6–7.

German field armies the artillery staff consisted of several *Generalfeldwachtmeister*, colonels, and lieutenant colonels.[350]

The operational structure of the imperial army continued to evolve after the Thirty Years War. Writing in the 1660s, Raimondo Montecuccoli, another participant in the Thirty Years War, articulated an order of battle that borrowed much from the precedents set by the Swedish army in 1630–1648. In this revised imperial/ Habsburg doctrine, infantry regiments combined to form battalions, and together with cavalry squadrons they created brigades or linear formations with wide fronts and shallow depths. During marches, these brigades would form into vanguards (*ľavant-garde*), main battle formations (*le corps de bataille*), and rear guards (*ľarrière-garde*).[351] This effectively made the new brigades synonymous with the field armies of the Thirty Years War, a development which indicates increased operational complexity and differentiation of tactical roles in the imperial military organisation after 1648.

Recruiting an army of hired soldiers even for a limited campaign was an enterprise beyond the means of most German princes. Even John George of Saxony, perhaps the most powerful prince outside the Habsburg patrimonial lands, was under great financial strain when conducting his opportunistic invasion of Lusatia in 1620. To begin with, the parsimoniousness of the Saxon Estates forced John George to use great amounts of personal resources to muster and field an army of 7,000 men needed for the conquest of Lusatia. After a successful war John George had expected to extract compensation for his costs from the Estates of the conquered Lusatia. The local *Landtage*, however, remained intransigent and refused all extraordinary taxation on behalf of their new liege lord. As a result, John George grew increasingly indebted to the Saxon nobility, who in their turn continued to

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350 Čechová, Janáček & Koči, 1977, 395–396, 404–405, year 1632, Kriegslist Nr. 14.
351 Montecuccoli, 1734, p. 5.

organise income collection in a way that would allow their own loans to be serviced by the ducal administration.[352]

The most efficient way for German princes to wage war by hired troops was to pool their resources. This could be done by forming armed confederations such as the Protestant Union, the Catholic League, or the Heilbronn League. Another method was to conclude military alliances with either the Habsburgs or some foreign power such as Sweden or France. The third way was to pool resources within the institutional framework of the imperial circles. A well-known example of this last method was the composite army raised by the Lower Saxon Estates in 1625. The Lower Saxon *Kreistag* had agreed to mobilise an army of 12,900 men under the command of the *Kreisoberst* Christian IV, the king of Denmark. The employment of private recruiters expanded the army size to 20,000 men, and the alliance with the notorious military entrepreneurs Christian of Brunswick and Ernst von Mansfeld promised to bring in another 12,000.[353] The quality of this army was admittedly inconsistent: one Dutch diplomat described the Lower Saxon army as having fine cavalry but mediocre infantry.[354]

A shrewd imperial prince could become a military entrepreneur himself or possibly even turn his princedom into a military business. Christian of Brunswick, Ernst von Mansfeld, and Bernhard of Saxe-Weimar were examples of princes who at one point or another became independent general contractors. None of these princes, however, were truly territorial rulers. Christian of Brunswick only ever ruled the ecclesiastical fiefdom of Halberstadt, which he effectively handed over to Christian IV of Denmark in 1623. Bernhard of Saxe-Weimar briefly ruled Franconia, which the Swedish chancellor Axel Oxenstierna had enfeoffed to him as a reward for his military services in 1633. Ernst von Mansfeld never possessed any fiefdoms, although Duke Charles

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352 Schirmer, 2006, pp. 822–824.
353 Lockhart, 1996, pp. 128–129.
354 Ibid., p. 129.

Emmanuel of Savoy did grant him the empty title of the Marquis of Castel Nuovo in 1619. The power of these princely condottieri did not, therefore, rest on territorial estates but on hired troops. The armies themselves were their princedoms.[355]

Duke Charles IV of Lorraine was a qualified exception to this group. In 1631 he raised an army of hired troops that he had originally intended to use in France to support the pretensions of his brother-in-law Gaston d'Orléans, who was also the younger brother of Louis XIII. Political conjunctures, however, favoured hiring the army out to imperial service to be used against the Swedes, who were rapidly advancing towards the Rhine and the duke's own princedom. As a territorial ruler of Lorraine, Charles could extract resources from his own principality for the maintenance of a hired army. Unlike many other princes in the Holy Roman Empire, the powers of Charles were not constrained by the local Estates. The Estates in Lorraine had consisted of the clergy, towns, and the feudal nobility, whose only venue of representation, the provincial diet or the *états de généraux*, was dissolved by Charles in 1629. Once the Estates had been sidelined from the fiscal decision-making, Charles could continue the unhindered exaction of extraordinary taxation and other contributions that were mostly channelled for the upkeep of the mercenary army.[356] In 1633, however, the French annexed Lorraine and forced Charles to abdicate in favour of his brother Nicholas Francis. Charles spent the rest of the Thirty Years War in Habsburg military service. During this time he gained notoriety as an unscrupulous military entrepreneur who exacted heavy contributions from occupied territories and did not even hesitate to steal wages from his own troops.[357]

Tryntje Helfferich has described Landgrave William V of Hesse-Cassel and his widow Landgravine Amalia Elisabeth as territorial rulers who 'put themselves in the role of condottieri,

355 Droysen, 1885; Krüssmann, 2010; Wertheim, 1929.
356 Digot, 1856, p. 161.
357 Ó Siochrú, 2005, p. 907.

or mercenary generals'.[358] William, who benefited from the early military successes of his Swedish allies, had indeed managed to put together a hired army of respectable size before his death in 1637. Even though the Imperialists had conquered much of Hesse-Cassel by that time, the Hessian army had in its turn occupied large tracts of East Frisia and Westphalia. By 1640 William's widow, Amalia Elisabeth, commanded 14,400 infantry and 4,400 cavalry/dragoons in well-fortified localities in Lower Hesse and Westphalia.[359] Landgravine Amalia Elisabeth was able to permanently maintain an army of this size by two methods. Firstly, she had the ability to convince the Hessian Estates that an Imperialist victory represented an existential threat to both their political privileges and their Calvinist faith, for which reason monthly remittances for the upkeep of the standing army were a necessity. Secondly, her army could collect contributions from the occupied territories, whose inhabitants would also bear the burden for the immediate maintenance of Hessian troops in the forms of billeting and food. In many ways, Landgravine Amalia Elisabeth and Duke Charles IV were cut from the same cloth, even though they fought on opposing sides.[360]

In most imperial principalities the local Estates and their diets presented a hindrance to the maintenance of hired troops on a permanent basis. There was, however, one notable case where the Estates themselves set out to build an armed force: rebel Bohemia. As Gerhard Schormann has pointed out, the rebellious Bohemian Estates were the first protagonists of the Thirty Years War to muster a hired army.[361] The directors, who formed the executive government of the rebellious Bohemian Estates, understood that time was of the essence if they wanted to defend Bohemia against an inevitable Habsburg punitive expedition. By July 1618 the directorate had managed to put together an army of 12,000 men that

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358 Helfferich, 2013, p. 13.
359 Rommel, 1843, p. 558.
360 Helfferich, 2013, p. 39; Rommel, 1843, pp. 564–570.
361 Schormann, 2004, p. 87.

proved to be sufficiently strong and capable to stop Habsburg advance into southern Bohemia and even to recover the region with the single exception of Budweis.[362] Thanks to the subsidies paid by Duke Charles Emmanuel of Savoy and members of the Protestant Union in Germany, the directorate was able to hire Ernst von Mansfeld and his mercenary army of 2,000 infantry and 600–900 cavalry in August 1618.[363] The directorate had intended to muster and finance an army of some 30,000 men by collecting extraordinary taxes, raising loans from the nobility, selling silver and jewellery from the royal treasury, auctioning confiscated Catholic estates, and even by debasing coinage.[364]

The gold standard of the Military Revolution theory, the emergence of standing armies, did not occur in every part of the empire. The first true military state to appear from the Thirty Years War was Habsburg Austria with its incorporated patrimonial lands. Historians have debated whether the progenitor of the Austrian standing army was Albrecht von Wallenstein or someone else at a later stage, possibly Raimondo Montecuccoli or Prince Eugene of Savoy.[365] The fact remains, however, that it was Wallenstein who began to maintain regiments in employment (and deployment) year in, year out, and that this practice was continued by later Imperialist and Austrian commanders. After the Thirty Years War, Emperor Ferdinand III further reinforced this foundation by dissolving some regiments and redistributing their experienced officers and men to others. 'The existence of this veteran fighting force, overwhelmingly German in its rank and file, provided Ferdinand III and Leopold I with a core around which they could construct an enduring military establishment', John Mears has concluded.[366]

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362 Gindely, 1884, p. 92; Polišenský, 1971, p. 102.
363 Krüssmann, 2010, pp. 136–140.
364 Polišenský, 1971, pp. 103–104; Schormann, 2004, p. 87.
365 Fellner & Kretschmayr, 1907, p. 25; Barker, 1975, p. 1; Mears, 1988, p. 141.
366 Mears, 1988, pp. 138–139.

Elsewhere in the Holy Roman Empire the Thirty Years War appears to have postponed the emergence of standing armies rather than accelerated their creation. The human and material destruction of the war had made the cost of establishing standing armies prohibitive to most German princes. In the decades that followed the Thirty Years War, the imperial Estates were divided into armed princes, who retained a permanent capability to raise troops, and the unarmed Estates that contributed to collective imperial defence by paying contributions and billeting the troops of the armed princes.[367] The stratum of armed princes did not represent any direct continuation from the Thirty Years War, as some of the war's most powerful German belligerents, namely Bavaria, Saxony, Hesse-Cassel, and the Brunswick duchies, reduced their armies to skeleton forces of garrison troops immediately after the conclusion of the Peace of Westphalia. By the 1660s all these principalities had begun to rearm, and many of them were maintaining permanent armies of 2,000–5,000 men. Even though these numbers seem modest in comparison to many other European armies of the later seventeenth century, they nevertheless represented an up to tenfold increase from German troop strengths before 1618.[368]

One peculiarity was the continued or even increased military relevance of some ecclesiastical rulers. By the 1660s, the ecclesiastical electorates of Mainz and Cologne were maintaining strong fortifications and permanent contingents of 1,000–2,000 men.[369] Bernhard von Galen, the belligerent prince-bishop of Münster, could repeatedly muster armies of 10,000–20,000 men for his campaigns in the 1660s and 1670s, although it appears likely that these numbers included militiamen levied in the bishopric itself. 'Bombing Bernard' was infamous for his fearsome artillery trains that could include up to 300 field pieces, heavy cannon, howit-

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367 Whaley, 2013, pp. 36–37.
368 Wilson, 1998, p. 29.
369 Ibid., p. 30.

zers, and mortars.[370] His truculent character was in many ways the product of the Thirty Years War and the Peace of Westphalia. The latter had provided him with territorial sovereignty that allowed him to suppress his subjects and menace his neighbours. The former had taught him the practice of maintaining armies from one campaign season to another by billeting them on enemy territory, whose inhabitants were then forced to finance the prince-bishop's troops with contributions collected at sword-point.[371]

While the bishop of Münster managed to intermittently muster more troops than any other German prince since 1648, it was the previously marginal electorate of Brandenburg that emerged from the Thirty Years War as Germany's principal armed state, second only to Habsburg Austria in military strength. There were two main reasons behind this. Despite severe depopulation and economic destruction, Brandenburg recovered remarkably well from the Thirty Years War, thanks largely to the compromising and realistic fiscal expectations of electoral administrators and the land-owning Junker class who mitigated claims for rent and labour duty and even offered material help to rehouse homeless peasants.[372] The Peace of Westphalia and its immediate aftermath had also meant territorial aggrandisement for Brandenburg, as it had acquired the counties of Cleves, Mark, and Ravenberg on the Rhine as well as the bishoprics of Cammin, Halberstadt, and Minden in northern Germany. These acquisitions represented an expansion of the tax base, thus allowing Elector Frederick William to finance military recruitment with a universal excise that did not even spare the traditionally privileged nobility. Brusque fiscal policies yielded quantitative military results. When Frederick William died in 1688, Brandenburg possessed a standing army of 30,000 men.[373]

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370 Zeigert, 1984, pp. 46–47.
371 Tücking, 1865, p. 349.
372 Hagen, 1989, pp. 316–317.
373 Carsten, 1964, pp. 545–546.

No other institution characterised the Thirty Years War more than the military entrepreneurs. Duke Charles IV of Lorraine had the dubious honour of being the war's last great condottieri, as he kept his private army in arms even after the conclusion of the Peace of Westphalia. While Charles did not retain his duchy, he still managed to hold on to a sizeable nest egg equivalent to half a million British sterling in bullion.[374] This made Charles an attractive military entrepreneur to any parties that still carried out warfare after 1648. One such interested party were the Irish Confederates, who were looking for troops to help defend Ireland against the English Parliamentarians. In 1650–1652 Charles and the Irish Confederates negotiated repeatedly over the conditions and nature of Lorraine's planned participation in the Irish war, but divisions among the Irish Confederates caused the project to ultimately fail.[375] In 1652 Charles joined forces with another military entrepreneur, Duke Ulrich of Württemberg-Neuenbürg, and intervened in the ongoing Fronde Rebellion in France as a proxy warrior for the Habsburgs. His career as a military entrepreneur effectively came to an end in 1654, when the Spaniards imprisoned him on the suspicion of colluding with the French. While Duke Francis of Lorraine, the younger brother of Charles, had troops swear an oath of loyalty to Spain on condition that Charles was set free, the army eventually deserted to the French in 1655.[376]

The end of the Thirty Years War was detrimental to the military entrepreneurs, who were suddenly left without contracts, access to credit, and legitimacy to collect contributions in the name of one belligerent power or another. The second volume of Fritz Redlich's magisterial *German Military Enterpriser and His Work Force* is therefore an epic tale of the gradual decline of the military-entrepreneurial system. Whereas in the Thirty Years War many military entrepreneurs had been petty (or even grand) princes, Redlich argued, in the following century and a half they

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374 Ó Siochrú, 2009, p. 165.
375 Ó Siochrú, 2005; Ó Siochrú, 2009, pp. 162–191.
376 Monter, 2007, p. 145.

declined into rentier officers, whose work force regressed into a permanently enlisted military proletariat that was either put to long furloughs or manual labour when there was no war to be fought. In tandem with this entrepreneurial decline went the growth of state power, which saw many of the previously private aspects of military management being incorporated into the burgeoning administration of the early modern state.[377]

David Parrott has revised this sweeping narrative by emphasising the continuity of military-entrepreneurial practices among regiment proprietors and supply subcontractors after the Thirty Years War. In matters relating to supply, manufacturing, maintenance, and transportation of military goods and assets, the system of outsourcing military management to private enterprisers endured all the way to the end of the eighteenth century.[378] Officers too remained creditors to the state by providing private funds for the wages and material needs of their troops whenever the state failed to meet these demands from its own sources alone (as continued to happen throughout the eighteenth century). These outlays could be amortised by the next regimental proprietor, who would effectively buy the regiment from his predecessor. Other profits could be made by selling sub-commissions and receiving gratuities from subordinates for appointments and promotions. There was even an example from late seventeenth century of a German regiment being leased out by its owner in return for a monthly rent.[379]

There is a need to consider the possibility that the boundary between military entrepreneurs and territorial princes faded after 1648. During the Thirty Years War, military entrepreneurs had largely financed their business of war by shifting the financial and material responsibilities for maintaining armed forces from themselves to territorial communities and Estates. The military entrepreneurs achieved this by resorting to forced billeting and

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377 Redlich, 1965.
378 Parrott, 2012, pp. 300–304.
379 Ibid., pp. 293–297.

contribution collection that were imposed in the name of the military entrepreneurs' princely employers. In the decades after the Thirty Years War, the armed princes of the Holy Roman Empire treated the unarmed Estates in a similar way by forcing them to shoulder much of the financial burden for maintaining armed forces, again with the methods of billeting and contributions. The predatory logic of wartime military entrepreneurs was repeated by armed princes during peacetime. The unarmed Estates appear to have realised this, as many of them sought to break free from the exploitative relationship by contributing to the collective imperial defence in the form of troop contingents instead of money alone. In this purely institutional aspect of military entrepreneurship, the Thirty Years War only ended with the imperial military reform of 1681 that created a common defence force, whose troops were provided by all the ten imperial circles.[380]

The regular German armies of the Thirty Years War were synonymous with private military entrepreneurship to the extent that the theoretical framework for understanding the war was more Military Devolution than Military Revolution, as has been argued by David Parrott. The standing armies of the Holy Roman Empire, which were still all in a formative phase during the Thirty Years War, were not simply willed into existence by powerful territorial rulers. Instead, as most institutions in early modern society, they represented consensual and reciprocal relationships between the rulers and various interest groups – in the case of the regular armies, usually such members of the elites who had the motivation and the means to raise and maintain troops from their own resources as officer-proprietors and military entrepreneurs.[381]

Extensively institutionalised military entrepreneurship raises the question of state monopoly of violence, the purported culmination of the Military Revolution. In Max Weber's modernisation model, which essentially serves as the intellectual starting point for the Military Revolution theory, the self-equipped and

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380 Parrott, 2012, p. 284; Whaley, 2013, pp. 39–40.
381 Parrott, 2010, p. 77.

self-provisioned medieval armies were succeeded by the bureaucratic army structure, which alone 'allows for the development of professional standing armies which are necessary for the constant pacification of large territories as well as for warfare against distant enemies, especially enemies overseas'. Weber was willing to concede that the bureaucratisation of the army could be carried out by 'private capitalist enterprisers' who might provide procurement for armies and even administer them.[382] He was not, however, willing to compromise on his central thesis, according to which the modern state was, by definition, the holder of the monopoly of violence.[383]

It would be temptingly easy to view the subcontracted German armies of the Thirty Years War as a mere transitional phase in which the private entrepreneurs briefly assumed some practical aspects of military management before the armies' inevitable transition into fully state-controlled and bureaucratic machineries. However, the out-contracting of German armies reflected a long historical trend that had begun well before 1618 and continued to characterise warfare in the Holy Roman Empire into the eighteenth century. Military entrepreneurship was in many ways the defining characteristic of early modern warfare. What did change in the Holy Roman Empire during the Thirty Years War was the transmutation of aggregate-contract armies into state-commissioned armies.[384] In the typology proposed by John Lynn, the former consisted of diversely hired contingents that were combined into field units on a temporary basis, usually for single campaign seasons alone. According to Lynn, the aggregate-contract armies culminated in Wallenstein's imperial army, 'the greatest private army in Europe to fight for Emperor Ferdinand II'.[385]

The arc of Wallenstein's military entrepreneurship reveals a transition from aggregate-contract armies to state-commissioned

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382 Weber, 1978, p. 981.
383 Weber, 1926, p. 8.
384 Sandberg, 2016, pp. 282–283; Lynn, 1996, pp. 516–518.
385 Lynn, 1996, p. 517.

ones. After Wallenstein's assassination in 1634, the Habsburgs continued to maintain some imperial regiments in permanent military service, which later provided Habsburg Austria with a standing army. Military entrepreneurship in recruitment was galvanised into a commissions-based system in which permanently employed officers raised units under qualifications and stipulations set by the employer, the fiscal-military state. The colonel-proprietors still provided their troops with equipment and wages from their own private resources, but in guaranteed employment and under the authority of the state, which could now effectively claim monopoly of violence via the mediation of its standing army.[386]

The consolidation of the state monopoly of violence in Germany did not yet occur during the Thirty Years War or even immediately after it. The formation of the armed and non-armed imperial Estates in the latter half of the seventeenth century questions some of the established assumptions about the course of state formation in post-Westphalian Europe. Instead of any single territorial state (including Habsburg Austria) claiming monopoly of violence, the right and power to wage war was distributed collectively among the imperial Estates. The monopoly of violence of one state was replaced by a common pool of funds (*Reichsoperationskasse*) to pay a variety of centrally incurred costs, while the operational military contingents were maintained by the same territories that fielded them. As Peter H. Wilson has pointed out, historians are still grappling with the full scale of this devolved and collective institutionalisation of imperial warfare after 1648.[387] Be that as it may, by the end of the seventeenth century, the German military structure indeed corresponded with the system described by Charles Tilly in which certain principalities (such as Hesse-Cassel) hired out their armies against returns from collectively pooled taxation.[388] This Military Devolution of the impe-

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386 Sandberg, 2016, pp. 283–284.
387 Wilson, 2017, pp. 452–454.
388 Tilly, 1990, p. 82.

rial Estates was largely the result of the Thirty Years War and its prevailing mode of entrepreneurial warfare.

Normative sources from the era of the Thirty Years War indicate increasing systemic hierarchisation and specialisation in the armies of the Holy Roman Empire. The interplay of hierarchy and specialisation within an organisation is a central topic in modern-day business management and economics. Specialisation, to begin with, is understood by economics to be horizontal; economy of scale in the utilisation of knowledge favours narrow focus of specialisation, but alterations in the environment and introduction of new problems necessitate horizontal widening of specialisation. Hierarchies foster specialisation by shielding experts from simple problems and allowing them to concentrate on comparably difficult ones.[389]

In the kind of a military hierarchy that was being articulated normatively in the Holy Roman Empire during the Thirty Years War, and in one that still serves as a template for military chains of command and division of duties today, specialisation was stratified and quantified from bottom up. Soldiers and troopers focused their expertise on weapons and basic tactics, thus becoming specialist pikemen, musketeers, cavalry troopers, or artillerists. From warrant officers upwards, the field of expertise relating to administrative duties and the art of war increased from one command level to the next. At the top of the operational command, a German field colonel was not only a specialist in organising regiments and brigades for battle but also an expert in siege warfare, military justice, economy, cartography, construction, and the kind of social welfare endeavours that were necessary when organising the extensive baggage trains with their civilian travellers or setting up field camps the size of small cities. In the same way that specialisation is characteristic of the modern rational business organisation, as postulated by Max Weber, it is also the organising principle behind the modern military organisation

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389 Garicano & Hubbard, 2004, p. 2.

that has one logical aim: winning the war.[390] Thirty years of incessant warfare on German soil transferred the normative articulation of military specialisation and hierarchy into a practice that would be rearticulated and re-explained in increasingly scientific terms later in the seventeenth century.

Salaried Dutch Soldiers and the *Solliciteurs-Militair*

The regular armies of the Dutch Republic traced their institutional origins to the *Landsknechte* of the Holy Roman Empire – to which realm the Dutch provinces had technically belonged until the outbreak of the revolt in 1568. During the first decade of the revolt, the Dutch states had relied largely on foreign mercenaries and civic militias, the latter being organised according to the earlier principles of the *Landsknechte*. This meant that the militiamen often fought as individuals but negotiated terms of service collectively, and that their main combat unit was the regiment. The most conspicuous *Landsknecht* tradition among the civic militias had been the election of leadership positions, namely the warrant officers' ranks of *voerder* and *weifel*. In 1575–1576, however, the States-General abolished electable ranks and authorised the company commanders (captains) to appoint their subordinates.[391] This reform was accompanied by restructuring of the units, which in practice meant organising the troops into small companies instead of large regiments. Both these developments served a common purpose, which was to deprive the troops of their collective bargaining power and to turn them into salaried and institutionally subordinated soldiers instead of autonomous and independent-minded *Landsknechte*.[392]

Soon, military realities, namely the Dutch companies' relative weakness against much larger Spanish squadrons and *ter-*

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390 Weber, 1978, p. 141.
391 Nimwegen & Sicking, 2019, p. 170.
392 Ibid., pp. 172–173.

cios, forced the States-General to revert its policy of restricting unit sizes to companies. From 1578 onwards the Dutch began to combine companies of 150 men into larger contingents commanded by colonels. In administrative terms these larger contingents corresponded with regiments, but for field operations they were formed into smaller battalions.[393] In the early seventeenth century, it became a standard practice to combine three battalions into a brigade. This practice greatly increased the shock effect of the Dutch musketeers, who could now fire salvos from three battalions at once. The use of salvos subsequently became a standard infantry tactic that persisted well into the nineteenth century.[394] Although it did not constitute a revolutionary step in tactics, it did, in the words of Geoffrey Parker, turn the infantry brigade 'into a production line of death'.[395]

The only institutional framework for raising regular troops in the Dutch Republic was recruitment. The Dutch did not levy soldiers, they hired them. The practice of recruitment broadly followed the established German principles, which made perfect sense given the fact that many of the recruits were Germans. Recruitment was initiated by the States-General, which issued contracts known as capitulations for raising companies or entire regiments. The capitulations stipulated the quantity and quality of recruited troops, the timetable and muster place of the recruitment, as well as specific prerogatives such as the power to appoint officers.[396] Recruitment was based on an entrepreneurial model in which the recruiting commanders were expected to cover all the initial costs of the recruitment, including the upkeep and travel costs before the official musters. Delays imposed fiscal burdens on the military entrepreneurs, as happened in February 1629 when a group of captains complained to the States-General that they had already brought their companies up to strength and that

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393 Ibid., p. 177.
394 Nimwegen, 2010, pp. 111–112.
395 Parker, 2003, p. 184.
396 Nimwegen, 2010, p. 30.

the rapidly accumulating daily running costs should be covered by the States-General from thereon.[397] Perhaps the greatest fiscal burden for the captain-proprietors was the obligation to replace casualties at their own cost. This was a deliberate policy, by which the States-General expected to discourage military-entrepreneurial malpractices, such as drawing pay or travelling money for non-existent soldiers.[398]

The Dutch Republic facilitated military entrepreneurship by calling on the services of the so-called *solliciteurs-militair*. These were private financiers and professional lobbyists who collected pay money from public *comptoirs* and forwarded it to company commanders. If public money was not readily available, the *solliciteurs-militair* guaranteed the funds from their own resources. In return for their services, the company commanders paid the *solliciteurs-militair* a salary from the public funds and an interest on their loans.[399] In order to facilitate the transfer of payments, the states allowed the company commanders to keep the salaries of fallen soldiers as a premium to defray the costs of interests demanded by the *solliciteurs-militair*.[400] The arrangement held both advantages and dangers to the states and the *solliciteurs-militair*. The employment of the *solliciteurs-militair* greatly increased the states' ability to pay the recruited troops, but it also represented extra outlays in the forms of salaries and interest rates.[401] For the *solliciteurs-militair*, the arrangement offered high profits but also financial risks, as it was not at all uncommon for the promised public funds to fall into arrears. In May 1629, for instance, the *solliciteur* De Bruyn appealed to the States-General that they should reimburse him for the three months' worth of salaries that

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397 Nijenhuis et al., Resolutiën Staten-Generaal, 13 February 1629, https://resources.huygens.knaw.nl/besluitenstatengeneraal1576-1630/ BesluitenStaten-generaal1626-1651/silva/sg/1629/02/13 [accessed 4 November 2021].
398 Nimwegen, 2010, p. 33.
399 Brandon, 2011, p. 8.
400 '␣t Hart, 1993, p. 38.
401 Nimwegen & Sicking, 2019, pp. 170–171.

he had already paid to two companies.[402] Such individual streams of delayed remittances eventually combined into mighty rivers of arrears. By the end of the Thirty Years War, the arrears had ballooned to several million guilders, which bankrupted *solliciteurs* and incapacitated unpaid companies.[403]

The *solliciteurs*, however, bounced back as an institution time and again. There were attempts to reform the *solliciteurs-militair* and even replace them with state officials in the 1650s and 1670s, but all these undertakings eventually failed. The fundamental reason for the durability of the *solliciteurs* was the fact that there existed few alternative sources of readily available capital. In the end, the Dutch Republic could only reform the *solliciteurs-militair* by acknowledging their irreplaceableness. Eventually, the Dutch Republic institutionalised the *solliciteurs-militair* in an ordinance that fixed the number of *solliciteurs* to thirty-two qualified entrepreneurs. The *solliciteurs* were vetted before a commission and had to adhere to articulated rules and regulations. They were also expected to deposit a collateral, which they would lose if they committed malpractice. This ordinance governed the *solliciteurs-militair* until their dissolution by the Batavian Republic.[404]

Although the Dutch Republic raised troops by large-scale outsourcing and favoured foreign mercenaries in order to conserve native manpower, it was not institutionally sympathetic towards employing general contractors. The idea of a Dutch Wallenstein would indeed have been obnoxious to a political culture that cherished distribution of authority and feared military Caesarism. The one notable exception to this rule was the Dutch patronage of Ernst von Mansfeld in 1622–1625. In 1622 Prince Maurice had invited Mansfeld and his co-paladin Christian of Brunswick to join in the breaking of the Spanish siege of Bergen op Zoom. The

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402 Nijenhuis et al., Resolutiën Staten-Generaal, 2 May 1629, https://resources.huygens.knaw.nl/besluitenstatengeneraal1576-1630/BesluitenStaten-generaal1626-1651/silva/sg/1629/05/02 [accessed 15 November 2021].
403 Nimwegen, 2010, pp. 68–69.
404 Brandon, 2011, pp. 21, 32.

unpaid mercenary army of some 7,000 men soon became a nuisance to the States-General, which relocated Mansfeld's troops to East Frisia – a principality they were to occupy on behalf of the Dutch Republic.[405] Unsurprisingly, the States-General were soon flooded with East Frisian complaints about the outrages committed by Mansfeld's rapacious mercenaries.[406] Mansfeld himself was clamouring for the States-General to officialise his status as a general contractor and to grant him patents for recruiting 5,000–6,000 Scottish soldiers.[407] In practice, however, Mansfeld already was a Dutch general contractor, as the States-General allowed him to extract resources from East Frisia for the maintenance of his army. Even after Mansfeld's departure to England in 1624, the Dutch Republic continued to support him as a general contractor. The States-General loaned on bond 650,000 guilders to Charles I, which was intended for Mansfeld's support. The States-General had also directly subsidised Mansfeld in his efforts to recruit four regiments in England.[408] The tenuous relationship between Mansfeld and the States-General finally dissolved after Mansfeld moved his military enterprise to Lower Saxony in 1625. After that, his services as a general contractor were picked up by Christian IV of Denmark.

The size of the recruited Dutch armies was not institutionally fixed to any certain magnitude. What dictated the army sizes were financial resources and operational contingencies. These realities usually limited the size of the field armies to 25,000 men.[409] The overall number of Dutch troops, including those in garrison duties, fluctuated greatly because many contingents were employed only temporarily and on an ad hoc basis. Be that as it may, the Dutch

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405 Ibid., p. 42.
406 Roelevink, 1983, pp. 707, 711, 715.
407 Calendar of State Papers, 1911, nr. 845, 10 April 1623.
408 Nijenhuis et al., Resolutiën Staten-Generaal, 12 January 1629, https://resources.huygens.knaw.nl/besluitenstatengeneraal1576-1630/BesluitenStaten-generaal1626-1651/silva/sg/1629/01/12 [accessed 15 November 2021].
409 't Hart, 2014, p. 28.

army reached a formidable size during the Thirty Years War. In the 1630s and 1640s the effective strength of the Dutch army was some 60,000 men. In 1629 it peaked at 120,000 men, which placed it in the same quantitative category as the imperial army under Wallenstein in 1625–1629 and the Swedish army under Gustaf Adolf in 1632.[410]

The Dutch army went essentially unreformed for the three decades that followed the end of the Thirty Years War. Companies remained the basic units of recruitment and administration, but their maintenance proved increasingly burdensome to the commissioned captains. New captains had to pay their forerunners indemnities for weapons and equipment, while prolonged periods of peace made it harder to write off missing soldiers as casualties and therefore to maintain nominal company strengths. Unsurprisingly, some unscrupulous captains resorted to filling their muster lists with *passe-volants*, which increased the discrepancy between paper and real strengths. The Dutch army had also retained much of its ad hoc nature after the Thirty Years War, with old contingents being regularly dismissed and new ones raised in their stead.[411]

The Thirty Years War was not a revolutionary or transformative period in the history of the Dutch army. The entrepreneurial system, on which all Dutch military recruitment rested, was already established in the early phase of the Eighty Years War (1568–1648). The use of private *solliciteurs-militair* as a fiscal-military buffer to guarantee the delivery of pay under all circumstances and the obligation of the captain-proprietors to maintain stipulated troop strengths from their own resources effectively made the Dutch army a state-commissioned one, as presented in the taxonomy suggested by John Lynn.[412] As a state-commissioned organisation of recruited and salaried troops, the Dutch army was the first of its kind in Europe, and therefore its functioning can be

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410 Nimwegen, 2010, p. 46.
411 Ibid., pp. 317–318.
412 Lynn, 1996, pp. 518–519.

applied as supportive evidence for the Military Revolution theory. Major steps towards regular pay and standardised musters, however, had already been taken before the Thirty Years War with the introduction of weekly salary instalments in the 1570s and the implementation of wage and expense quotas for each province (the repartition system) in 1588.[413] Further support for the Military Revolution can be found in the fact that the structures and mechanisms of the Dutch army changed little in the eighteenth century, the main alteration being the increase in the fiscal-military risk borne by the state (one qualification inherent in the Military Revolution theory).

The internal hierarchy and organisational specialisation of the Dutch army closely resembled those of contemporaneous Spanish and German armies and do not therefore merit further investigation. Nevertheless, from the approach of institutional management, the Dutch army of the Thirty Years War and its supporting institutions provide an insight into organisational programmes. In business and government organisations, programmes mean interrelation between resources and objectives, often described as inputs and outputs.[414] Economics defines inputs as actions and resources that a company carries out to attain an objective. Outputs are the outcomes that result from the use of inputs.[415] In military terms, the inputs of an army are its recruited (or levied) soldiers, wage monies, and various supplies, such as food, fodder, clothes, weapons, and ammunition. Military outputs would consist of strategic or operational gains, whether control of territory or destruction of enemy forces. The States-General, which recruited soldiers from military labour markets, purchased armaments and supplies from private producers, and subcontracted deliveries of pay to the *solliciteurs-militair*, was remarkably successful in providing the army with a regular and nearly uninterrupted flow of inputs.

413 Nimwegen, 2010, p. 16; 't Hart, 2014, p. 43.
414 Bannock, Baxter & Rees, 1985, p. 357; Luhmann, 2018, p. 212.
415 Meredith & Shafer, 2023, pp. 6–8.

The consistent transmission of inputs eventually turned the tide of war in the Dutch Republic's favour, although at great financial cost. Defence of the republic and territorial gains (even if modest ones) were not the only outputs of the Dutch military programme. A major ancillary output of the military programme was the enhancement of internal security and improvement of civilian–military relations, which the Dutch government achieved by placing troops in garrison towns in a regularly funded and administratively controlled way. This in turn facilitated the delivery of inputs, which again increased outputs by further stabilising the institutional groundwork of the regular army. The Dutch army attained such programmatic equilibrium during the Thirty Years War that shifts towards either institutional change or decline are imperceptible to the historian. To identify the latter, however, one needs to look no further than the immediate years after 1648, when the rapid and drastic demobilisation of the Dutch army eroded it as a self-regenerating system and a container of military competencies and resources. The Dutch army of the Thirty Years War indeed elucidates the power of periodisation and time-framing behind the tenability of the Military Revolution theory: the years 1618–1648 show a robust army institution that matches voluminous inputs with consolidated outputs, while the decade after 1648, as Olaf van Nimwegen has shown, tells of institutional and programmatic contraction that does not support the notion of consistent and rapid progression towards ever-larger standing armies, a central argument in the Military Revolution theory.[416]

Standing Armies in Scandinavia

Denmark was one the few European realms to maintain a semi-permanent, if not quite a standing, army before the Thirty Years War. This system was set up in 1614, when Christian IV established two regional regiments (*landsdelsregimenter*) in Jutland/

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416 Nimwegen, 2010, pp. 301–325.

Funen and Scania/Zealand.[417] This system, which Robert I. Frost has characterised as a 'semi-professional native army', was based on the principles of fixed officer corps and rotated soldiers.[418] The soldiers were raised from 4,000 designated royal farms that provided and supported soldiers in return for tax alleviations. When the soldiers were not serving in their regiments, they were expected to live and work at the designated farms as agricultural labourers. Military service shifted the responsibility for maintaining the soldier from the farmer to the crown. Peasants were not all equally eligible for military service, as crown tenants usually hired a substitute soldier on their own or their sons' behalf.[419] This system of *inddelning* was revised in 1620, when the number of soldier farms was reduced to 400, which were expected to support officers alone as sources of revenue. The responsibility for supporting the common soldiers was extended to all royal and ecclesiastical farms that would from that point on provide the manpower as conscripts. All such farms were arranged into recruitment units or *lægder* of nine farms, while all the potential conscripts were listed in a process of *udskrivning* or 'writing out'.[420] This institution was not yet a fully matured conscript army but a quota system of administrative divisions in which the peasants from the allotted farms paid collective taxes to maintain a soldier.[421]

The reform of 1620 widened the pool of potential conscripts, but it also increased the financial burdens of the crown. Because the nobility was not ideologically disposed to support the creation of a standing army under royal control, it refused to finance the extended *udskrivning*. This left royal coffers and extraordinary taxes as the only viable sources of revenue for the army. It is, therefore, not surprising that the amount of taxes collected in Denmark and Norway rose by 255 per cent between 1638 and 1642. The

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417 Lind, 1988, p. 113.
418 Frost, 2000, pp. 120–121.
419 Lind, 1994, pp. 40–41.
420 Ibid., p. 44.
421 Frost, 2000, p. 140.

failure to reform state finances during this period led to administrative disorder, galloping public debt, and graft. As the nobility clung on to its fiscal privileges and constitutional traditions prevented the disposal of state goods, the burden of maintaining the army was placed more and more on the non-noble Estates, especially the freeholder peasants and royal tenants. Meanwhile, the increased fiscal demands grew the burghers' role as creditors to the crown, thus enhancing their standing as a political Estate.[422]

The Norwegian part of the Oldenburg realm was nearly demilitarised on the eve of the Thirty Years War. Territorial defence of Norway rested on the peasant militia, which, in the words of Øystein Rian, was a 'parody of an army, ill-trained, insufficiently armed, and without officers'.[423] These militias did not constitute a standing army, as they had to be levied, mustered, and organised before they were of any military use. At the outbreak of the Kejserkrigen in 1625, Norway possessed only sixty permanently employed soldiers at garrisons in Akershus and Bohus. These were alarmingly small numbers, and in 1627 the Norwegian stadholder Jens Juel introduced a special tax to maintain four garrisons of 330 men each.[424] The following year Juel made a proposal for a standing Norwegian army. This plan was accepted by the crown and institutionalised in the *Krigsordinans* of 1628, which reorganised the Norwegian peasant levy into a standing army of 6,200 men. At the company level the soldiers were to be commanded by professional officers and at the regimental level by the *lensmænd*.[425] The *Krigsordinans* introduced the system of *udskrivning* to Norway, although it was implemented differently there from Denmark. The Norwegian *lægder* were grouped into units of four instead of nine. The units were also organised provincially, and it was the duty of the stadholder to decide who would be entered on the conscription lists. The financial responsibility for maintaining the

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422 Heiberg, 2009, pp. 356–357, 359–362.
423 Rian, 1984, p. 87.
424 Ibid., p. 87.
425 Ibid., p. 87.

standing army fell to the Norwegian Estates rather than the Danish crown, and this condition was articulated in the Norwegian constitution (*grundlag*). The most striking difference between the Danish and Norwegian armies was the composition of the officer corps. Whereas in Denmark the officer corps was monopolised by the native nobility, the Norwegians filled the officer vacancies with non-nobles.[426]

The standing army in Denmark evolved by fits and starts during the Thirty Years War. While the dual system of *inddelning* and *udskrivning* could provide 5,400 soldiers by 1624, this conscript army was too small to bear the burden of war on its own. During the Kejserkrigen, Christian IV raised three new regiments in Denmark and one in Norway. By the end of the war in 1629, Christian maintained 22,000 soldiers in Denmark, 19,000 in Schleswig, and 6,000 in Norway.[427] Remarkably enough, this force was not dissolved after 1629 but merely trimmed down into a peacetime army of mostly recruited soldiers. The two Danish *landsdelsregimenter* were restored, while the Holsteiner Estates augmented the Danish forces by establishing three infantry regiments and two cavalry squadrons as a separate field army. The Danish nobles even allowed the conscription of demesne peasants, which was a major concession from a stratum that guarded its fiscal, social, and military privileges jealously. By 1642 the Danish, Holsteiner, and Norwegian contingents amounted to 35,000–40,000 men, which was a respectable number by European standards.[428]

These contingents failed to stop the initial Swedish invasions in 1643–1644 because they were outnumbered in the separate theatres of war in Holstein, Scania, and Jämtland. In the context of the whole of Torstensson's War, the accomplishments of the Danish armies were not inconsiderable. The Danes maintained their strongholds in Bremen, Glückstadt, and Krempen throughout the war, and further north they were sufficiently strong to prevent

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426 Lind, 1994, p. 61.
427 Ibid., pp. 60–64.
428 Frost, 2000, pp. 141–142; Lind, 1994, pp. 68–74.

Swedish invasion of Funen or Zealand. In Norway, the native army mustered by the stadholder Hannibal Sehested even managed to transfer the focus of military operations onto enemy territory. In all the separate theatres of war, the hybrid contingents of regular soldiers and peasant insurgents maintained military pressure on the Swedes and greatly increased the 'friction of war' experienced by the occupying enemy forces.[429] The Danish troop strength was temporarily increased with fourteen infantry regiments, fourteen cavalry squadrons, and a number of volunteer companies. While most of these units were demobilised after 1645, the new king, Frederick III, nevertheless maintained three *landsdelsregimenter* in Denmark, three regiments in Norway, plus 2,000 *rostjeneste* cavalrymen and 1,000 recruited soldiers in different parts Denmark and Holstein after 1648.[430] The foundations of that standing army, which Frederick established in connection with the introduction of political absolutism in 1660, were already laid down in the period of the Thirty Years War.

In the late sixteenth century, John III of Sweden had begun to qualify the system of peasant levy by issuing lists of men eligible for military service. The process of compiling these lists at the local level of government was called *utskrivning*, which had the same meaning of 'writing out' as in Denmark. The nominal age range for potential conscripts varied over time from 15 to 40, 50, and even 60, but in practice mostly men aged between 20 and 40 were conscripted.[431] The ratio for conscripts was one in ten, meaning that every tenth man was taken from the lists in each conscription. Initially, demesne tenants were exempted from conscription, but in 1627 Gustaf Adolf included them in the lists as well, with the same ratio of one in ten. In 1635 the ratio was recalibrated into one in fifteen for royal peasants and one in thirty for demesne tenants; the following year the quota was increased to one in ten for

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429 Bäckström, 2018, pp. 332–333.
430 Frost, 2000, p. 142; Lind, 1994, pp. 78, 87.
431 Roberts, 1958, p. 207.

the former and one in twenty for the latter. This ratio remained in effect for the rest of the Thirty Years War.[432]

The gathering of information on potential conscripts was only the first step of conscription. Second step was the actual calling-up, which was announced by the clergy from their pulpits. A conscription commission was then assembled in the locality. It was headed by a conscription commissar, who was either the local castellan or the provincial governor, and its other members included one or more military officers, a law speaker, parish priest, district bailiff, magistrates, and a jury of yeomen. The commissioners inspected conscription lists, issued necessary exemptions, and finally reported back to the government.[433] When the conscripts were mustered as a regiment, for instance the Finnish Savolax infantry regiment under the command of Klas Hastfer in 1630, the names of the soldiers were written down in the muster rolls according to each company.[434] The flow of communication did not end here, as many appeals for exemptions from conscription were issued after the call-ups, some of which still survive in the archives. In May 1636 Jonas Gudmundsson, who had already served as a cavalryman for thirty years and who had lost a son in battle, appealed to the district court that he would be exempted from conscription on account of his infirmity and inability to do any work. At the same session another peasant named Nils pleaded with the court to exempt his son Lars from conscription, as he himself was old and infirm and needed his son to carry on the work at the family farm.[435] A demesne peasant, whose path to exemption would have to go through the manorial overlord, might send his appeal to the very top of the social and political hierarchy. Therefore, when demesne tenant Simon Persson asked for exemption on the grounds of general weakness and disabili-

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432 Frost, 2000, p. 205.

433 Lappalainen, 2001, p. 25; Roberts, 1958, p. 208.

434 KrA/022/1630/21, fols 149–180, Finske 1630 Åhrs Munster Ruller.

435 SRA, Göta Hovrätt. Advokatfiskalens arkiv/E VII AAAC:27/Domboks-sregister/Jönköpings län/Västra härad, 16 May 1635, appeals at Sävsjö ting meeting.

ties that prevented him from holding a weapon, his appeal was received and granted in 1638 by none other than the head of the government, Chancellor Axel Oxenstierna himself.[436]

Conscription produced only infantrymen. Because the needs of the cavalry could not be met by *rusttjänst* alone, it became necessary to expand cavalry service beyond the traditional nobility. Volunteers were enticed to serve in the cavalry in return for *hemman* or homesteads that would provide revenue for the cavalryman during peacetime. The cavalry homesteads were also granted exemptions from *utskrivning*, stock tax, and the peasants' obligation to provide royal servants with means of transportation and billets. These privileges and advantages were so lucrative that many enterprising peasants began to enlist more volunteer cavalrymen to gain access to the *hemman* and the fiscal privileges attached to cavalry service.[437]

The proportion of native conscripts and volunteers in the Swedish armies varied during the period of the Thirty Years War. The Polish War of 1626–1629 was fought predominantly with native conscripts. In 1626 some 8,000 men were conscripted, 13,500 in 1627, 11,000 in 1628, and 8,000 in 1629.[438] In 1628 the strength of the Swedish army in Poland peaked at 33,000 men, half of whom were kept in operational roles and the rest delegated to the various garrisons.[439] The army of 14,000 men that Gustaf Adolf took to Germany in June 1630 consisted almost exclusively of native conscripts and volunteers. However, as there were no further conscriptions in 1630, the reinforcements to Gustaf Adolf's army had to be acquired by recruitment in Germany and Britain. Of the 140,000 men that Gustaf Adolf had in arms in early 1632, only 13,000 (or less than 10 per cent) were Swedes and Finns.[440] This ratio remained the same even when the size of the Swedish forces

436 SRA, Oxenstiernska samlingen Axel Oxenstierna av Södermöre/E 534, year 1638, Axel Oxenstierna's letter to the muster commissars.
437 Roberts, 1958, pp. 215–216.
438 Ibid., p. 210.
439 Gullberg, 2008, p. 57.
440 Roberts, 1958, p. 206.

in Germany drastically shrank to 33,000 in 1635 – only 3,000 Swedes and Finns were then present in the army commanded by Johan Banér.[441] The proportion of native troops again grew in the 1640s. Sweden fought almost exclusively with native troops in the Scanian and Norwegian theatres of Torstensson's War. At the beginning of 1647 the Swedish army in Germany consisted of some 16,000 men, including 6,000 conscripts sent from Sweden and Finland the previous summer. Another 3,800 conscripts were sent to Germany in the summer of 1647. This surge of native troops undoubtedly helped the Swedes to turn the war decidedly in their favour in 1647–1648.[442]

The institutionalisation of conscription coincided with organisational reforms in the Swedish army. It is a well-established part of military history that Gustaf Adolf was greatly impressed by the tactical reforms of Maurice of Nassau and wished to emulate them in Sweden. Before 1617 the basic administrative unit of the Swedish infantry had been the *fänika* or battalion of some 500 men. The battalions could be divided into five tactical companies or combined to form a regiment of four or five battalions.[443] At the outbreak of the Thirty Years War, Gustaf Adolf revamped the old organisation that had been introduced by Erik XIV in the mid-sixteenth century. The new basic tactical unit was to be the squadron that consisted of 408 men plus officers. All infantry squadrons were supplemented by a 'commandeered' contingent of ninety-six separate musketeers. The Swedish squadrons differed from the Dutch battalions by having a higher ratio of pikemen, which gave the Swedish squadrons a more defensive outlook.[444] The new administrative unit was to be the provincial regiment, all of which were based in Sweden and Finland, but in practice many administrative duties were later assumed by the field regiments that could be formed by combining two squadrons. Finally, by putting

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441 Wilson, 2009, p. 574.
442 Mankell, 1865a, p. 209.
443 Roberts, 1958, p. 193.
444 Ibid., pp. 219–220.

together two or more field regiments, Gustaf Adolf could form new kinds of large combat formations known as brigades.[445] The core tactical and administrative unit of the Swedish cavalry had traditionally been the *fana* or banner, but in the 1620s it was being replaced as a tactical unit by the company of 125 riders and in the administrative sphere by the squadron of three to five companies. Soon after landing in Germany in 1630, Gustaf Adolf began to pair up cavalry squadrons to create cavalry regiments of roughly 1,000 riders.[446]

Despite the existence of a system of domestic conscription, Sweden largely fought the Thirty Years War with recruited troops. The methods of recruitment and the military organisation of such contingents usually followed established German principles. There existed five different avenues for bringing recruited troops under Swedish colours. In the first case Swedish colonels and captains raised regiments or companies as subcontractors to the Swedish crown. In 1632, for instance, the Swedish colonel Klas Hastfer recruited 668 German soldiers in Nuremberg. Hastfer already commanded a regiment of conscripted Finns, but the two contingents were kept as separate entities. In practice, Hastfer commanded the Finns as a royal appointee and the Germans as a colonel-proprietor.[447]

According to the second principle, German princes allied with Sweden would raise their own contingents and hand them over to Swedish service. The rapid Swedish conquest of western Germany after the victory at Breitenfeld in 1631 convinced many German princes and knights to side with Gustaf Adolf and raise regional armies for Swedish service. Colonel-proprietors in the service of Sweden's German collaborators would receive Swedish commissions and possibly small advances of money for further recruitment. Perhaps the main attraction for German military entrepre-

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445 Ibid., p. 221.
446 Ibid., p. 223.
447 KrA/0022/1632/29/Rullor 1620–1723/fols 101–124/Rullor på fälthärens infanteri juli 1632; Mankell, 1865b, pp. 151–152.

neurs was the possibility of receiving donations and enfeoffments from territories under Swedish occupation. The attraction of such rewards, however, was greatly diminished after the defeat at Nördlingen in 1634. When much of Germany had reverted to the Habsburgs and their confederates, there was little land left to donate to Sweden's German allies.[448]

The third route to Swedish military service was defeat. According to the established military practice, many enemy prisoners switched sides after lost battles and surrenders of fortified localities. The Swedish field army commanded by Gustaf Adolf, for instance, was larger after the victorious battle at Breitenfeld than before it because so many defeated Imperialists transferred to Swedish service.[449] Not all Imperialists, however, were welcome. When Rhinegrave Otto Ludwig stormed the town of Kirchberg in 1632, he enlisted the 100 German soldiers in the enemy garrison but killed the 147 Italians and Lorrainers: 'The Germanes (we are to know) are every where spared: the delivery of their nation, being the thing that the King professeth to come for, into Germany', William Watts explained this selective policy in his contemporaneous chronicle.[450] In the later stages of the war, the Swedes appear to have abandoned the policy of accepting large contingents of prisoners into their ranks. When a Swedish regiment defeated six companies of Saxons outside Chemnitz in 1640, the Swedes simply imprisoned those Saxons they did not kill.[451] By that point of the Thirty Years War the Swedes were more interested in ransoming prisoners for money than keeping them as military manpower.

The fourth method of gaining recruited troops was the employment of foreign auxiliaries, a method that was characteristic of Sweden but not exclusive to it. Most foreign auxiliaries in Swedish

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448 Wilson, 2009, pp. 483–485.
449 Mankell, 1860, p. 309, 24 October 1631, Johan Adler Salvius to the riksråd.
450 Watts, 1632, p. 74.
451 Lehmann, 2013, p. 125.

service during the Thirty Years War arrived from Britain, particularly from Scotland. The military landscape in Scotland allowed Sweden and other foreign recruiters to tap into an indigenous martial culture and raise 'instant regiments', as characterised by Steve Murdoch and Alexia Grosjean.[452] Hiring Scottish soldiers was an established Swedish practice that went back to the sixteenth century, but the quantity of Scottish soldiers under Swedish colours nevertheless peaked in the early 1630s when there were nearly 10,000 Scots serving in Gustaf Adolf's armies in Germany. The method for raising Scottish contingents was general contracting, under which the Stuart Privy Council granted recruitment licences to named military captains. There also existed some full-time military entrepreneurs such as Sir James Spens, who organised successive large-scale levies in return for fixed rates of payment laid down by the Swedish government.[453]

The final method of recruitment would have involved German general contractors. Duke Bernhard of Saxe-Weimar fitted this role after he had left Swedish employment and set up his own private army in western Germany. The Swedish government made attempts to woo him back, for instance by offering to mediate discussions of provision of French financial aid for the Bernhardine mercenary army.[454] Although Bernhard remained as a French general contractor, after his death in 1639 the Swedish council of state entertained the possibility of employing his successor in a manner akin to 'Mansfelder', meaning that he might cooperate with the Swedish and Hessian armies as an independent military actor.[455] The independence of the Bernhardines, now led by Hans Ludwig Erlach, proved short-lived as they soon secured French employment.[456]

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452 Murdoch & Grosjean, 2014, pp. 11–14.
453 Miller, 2013, pp. 171, 183.
454 SRA RR/B196/fol. 284, 15 October 1638.
455 Svenska riksrådets protokoll, 1892, p. 562, 9 August 1639.
456 Wilson, 2009, p. 617.

Perhaps the closest Swedish equivalent to a general contractor was Lieutenant General Hans Königsmarck, who commanded an operationally independent army in Lower Saxony and Westphalia in the late 1640s. In 1645 Königsmarck had command of 12,000 men in the Archbishopric of Bremen-Verden. He maintained under his personal management thirteen companies of cavalry (1,000 men in total), seven companies of dragoons (700 men), and eight companies of infantry (1,000 men), or three regiments in all. According to a Swedish muster list, this army was not only commanded by Königsmarck but also 'recruited by him'.[457] With the exception of Major General Gustaf Stenbock (and possibly a colonel named Daniel Arndtson), all the regimental commanders in Königsmarck's army were Germans, which for its part enhances the outlook of this army as one that had been put together by a general contractor.[458]

While Königsmarck did not have the financial connections of Wallenstein, the territorial authority of Landgravine Amalia Elisabeth, or the political prestige of Duke Charles IV, he still managed to raise and maintain a formidable army. Königsmarck, of course, did not do this from his own resources but from those of his victims. Contemporaneous documents testify of Königsmarck's brutal efficiency when it came to maintaining his armies on the backs of the local Estates during his first occupation of Bremen-Verden in 1644. Königsmarck demanded eye-watering sums as contributions and took hostages to ensure that the Estates of Bremen-Verden paid to their utmost capability.[459] Money alone, however, did not suffice, as Königsmarck's soldiers requisitioned weapons, clothes, and even footwear from hapless burghers.[460] In addition to extorting fire-ransoms from the Bremener Estates, Königsmarck forcibly billeted his 'Soldatesca' in the peasant communities that dotted the marshlands between the rivers Elbe

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457 Mankell, 1865b, p. 282.
458 Ibid., p. 282.
459 Zetterqvist, 1891, p. 38.
460 Wiedemann, 1866, p. 284.

and Weser.[461] The soldiers then used their billets as bases from which to launch *chevauchées* into the surrounding towns, villages, abbeys, and manorial estates.[462] In 1645 Königsmarck consolidated his extortionist regime in Bremen-Verden by instituting the office of a fiscal steward (*Landdrost*), who was responsible for supervising and facilitating the flow of resources from the local Estates to Königsmarck's war coffers.[463] After the war with Denmark had ended, the Swedish chancellor Axel Oxenstierna found it necessary to remind Königsmarck that Swedish dominion over Bremen-Verden was served best by prioritising the security and interests of the local Estates. The rapacity of general contractors could conflict with the political interests of their employers.[464]

The applicability of Gustaf Adolf's Sweden to the Military Revolution theory is self-evident, as Michael Roberts based the theory on his own extensive knowledge and profound understanding of Sweden and the Thirty Years War. However, the study of the Swedish army in the Thirty Years War and the army's subsequent development in the latter half of the seventeenth century would benefit from further qualifications to Roberts's thesis. To cross-fertilise Roberts's Military Revolution theory with the taxonomy suggested by John Lynn, the Swedish army in the Thirty Years War was not yet a popular-conscript army but a state-commissioned one.[465] Gustaf Adolf and Axel Oxenstierna were better at reining in military entrepreneurs than Ferdinand II and the German Protestant princes, for which reason there never arose any true Swedish Mansfeld or Wallenstein, while the Swedish military

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461 DRA Tyske Kancelli, udenrigske Afdeling/Special Del/Tyskland/ Bremen Stift/AI. Brevvexling mellem Fyrstehusene i Danmark og Bremen Stift/2. Breve fra Domkapitlet i Bremen til Christian III, Frederik II, Christian IV og Frederik III, til sidsævnte ogsaa som Koadjutor og Ærkebiskop 1545–1660, 15 July 1645.

462 Gazette N. 27, 1644, p. 169.

463 Schröder, 1832, p. 895; Zetterqvist, 1891, pp. 187–189.

464 Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 2009, p. 595, 7 March 1646, Axel Oxenstierna to Hans Königsmarck.

465 Lynn, 1996, pp. 516–521.

force in Germany accumulated only few characteristics of a true aggregate-contract army. Be that as it may, the bulk of the Swedish forces in the Thirty Years War consisted of foreign auxiliaries and hired mercenaries instead of native conscripts, a fact that is still lost to some Swedish and Finnish populist conceptions about the war.[466]

As case studies of the Military Revolution and the Thirty Years War, Sweden and Denmark are commensurate in almost all aspects. Both realms waged large-scale war in Europe for many years (a fact often glossed over in the case of Denmark and the Thirty Years War), and both fielded armies that were mixtures of conscripted elements and recruited contingents. In many ways, everything Michael Roberts argued about the Military Revolution based on his expertise about early modern Sweden could have also been repeated in the context of Oldenburg Denmark. The main difference between the two Nordic realms and their armies in the era of the Thirty Years War was the application of later historical terminology relating to state formation. Swedish historians prefer to apply the term *militärstaten*, or 'military state', to the realm ruled by Gustaf Adolf and his seventeenth-century successors, while the Danes generally opt to describe the Oldenburg realm as a *maktstat*, or 'power state'. Both terms broadly refer to a government that has achieved or is trying to achieve complete control over society.[467] The nuanced difference is one of emphasis: Swedish historiography understands the early modern state as something that placed a premium on warfare and military institutions, while Danish historians underline the methods by which the state exercised war and extended its dominion over the society.

Here a third term becomes more illuminating, namely the Anglo-American concept of the fiscal-military state. This emphasises resource flows through the state and differentiates its two organisational parts: the permanent armed forces and the fiscal

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466 Ericson Wolke, Larsson & Villstrand, 2006, p. 402.
467 Rian, 2000, pp. 27–28.

apparatus that maintained them.[468] If one looks at the historical arc of the Nordic regular armies from the Thirty Years War to the final decades of the seventeenth century, it becomes evident that Denmark qualifies more as a fiscal-military state than Sweden. It is true that Sweden employed every available fiscal expedient to finance its hired armies in the Thirty Years War, but the end of the war brought a systemic 'peace crisis', when Sweden suddenly faced great difficulties in paying off its recruited contingents and rewarding the native elites that had formed the officer corps and the administrative staff of the military state. As Michael Roberts himself pointed out, Queen Christina's government did not choose to live on capital but rather attempted to maximise immediate inflows of cash by selling land and sources of revenue.[469] The employment of recruited armies in the Thirty Years War created an economic landscape in which it finally became expedient to implement the *indelningsverk* – effectively a move away from a fiscal-military state towards 'natural economy'.[470]

The maintenance of permanent armed forces put Oldenburg Denmark on a historical trajectory different from Sweden. The Thirty Years War had effectively demolished the supposition that Denmark was a domain state where the king could live off his personal land revenues. The ballooning deficit in 1648–1660 encouraged Frederick III to reshape the Oldenburg realm not only into an absolute monarchy but also into a tax state in which all social strata, including the nobility, contributed to the state's finances by paying taxes.[471] What allowed Frederick to pay for a standing army (including its conscripted elements) was the relative monetisation of the Danish economy. Even though Denmark had lost territories to Sweden in 1645, the Oldenburg monarchy still possessed more permanent resource flows than their Nordic neighbour: a land tax that even included manorial estates from 1662 onwards,

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468 Glete, 2010b, p. 304.
469 Roberts, 1962, p. 39.
470 Villstrand, 2011, p. 193.
471 Frost, 2000, pp. 195–197.

indirect taxes, royal monopolies, licences, and, notably, the Sound Tolls from maritime traffic to and from the Baltic Sea. It was these significant revenues that enabled Denmark to hire and maintain a standing army within the wider institutional framework of a true fiscal-military state: a system that directed local resources to a centralised power that channelled them into complex organisations and instruments of royal power, above all else the standing army.[472]

The distinctiveness of the Danish and Swedish armies of the Thirty Years War lay in the fact that they were both combinations of recruited and conscripted soldiers. The proportions of these two types of soldiers fluctuated in both realms during the war, but it is possible to generalise that conscription was a more prevalent system for raising troops in Sweden than it was in Denmark. Norway provided its own scenario, where recruited troops were always a tiny minority and where the institutional barriers between militia and conscripted regular army dissolved during the Thirty Years War (particularly in 1643–1645). The use of conscripted troops did not change the internal army organisations, which followed the same normative hierarchies and specialisations that were articulated in continental Europe.

Nor did conscription change the programmatic interaction between inputs and outputs. Conscripted soldiers were the same kind of human inputs as recruited ones, and even if their salaries were lower than those of professional soldiers, they would still impose their own outlays on the early modern state in the forms of forfeited civilian labour, tax revenues, and other opportunity costs. In the theatres of war, the outputs brought out from fully or partially conscripted armies were likely comparable to those of recruited armies. As Michael Roberts showed in his biography of Gustaf Adolf, there existed contemporaneous debate over the pros and cons of recruited and conscripted troops, with political theorists such as Lazarus von Schwendi urging for the creation of volunteer/conscripted national armies and some disenchanted

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472 Glete, 2010b, p. 310.

rulers like Christian IV of Denmark dismissing such systems as militarily worthless and troublesome in comparison to paid professionals.[473] Be that as it may, it seems unlikely that the qualitative differences between recruited and conscripted troops were decisive in the Thirty Years War: the Swedish victory at Breitenfeld in 1631 cannot be attributed solely to the recruited mercenaries in Gustaf Adolf's army or the Danish defeat in Torstensson's War in 1643–1645 be blamed on the Danish–Norwegian conscripts alone.

Outputs of the partially conscripted Scandinavian armies merit more consideration outside the actual theatres of war. A social subsystem such as a military organisation consists of relations and communications. To begin with the former, the incorporation of conscripted soldiers into the Scandinavian armies during the Thirty Years War introduced into the military system a group whose relation to the war-making state was not that of employees but of subjects. This obfuscation in the systemic differentiation between the army and society incurred its own cost, as the programme of delivering inputs to the army became an increasingly political issue. The reconfiguration of social relations ran top down. At the upper level the conscription of native troops involved more reciprocal bargaining between the crown and the Estates – in Sweden with the Fourth Estate of yeomen and royal tenants, in Denmark with the noble Estate that represented the disenfranchised demesne peasants. At the grassroots level, conscription reshaped relations internally within soldier-providing household units and externally between the rural communities and the local representatives of the state. This stratum of society–state relations was then carried over into the army, where each conscripted soldier was also a portal for further inputs: his upkeep outside the army was the responsibility of the rural community, and if he died in a campaign, the society had the duty to replace him with another conscript. The input of conscripts imbued the army command with a new kind of awareness regarding the polit-

473 Roberts, 1958, pp. 201–202.

ical and social costs of warfare; the military losses of a conscript army were borne directly by the belligerent realm's own society instead of being absorbed by an external military labour market. Whereas (often foreign) recruited troops could be employed with the expectation that war would eventually pay for itself, inputs of native conscripts would have to be accompanied by appeals to patriotic duty and necessity to defend the common fatherland. War funnelled relations between society and sovereign into the framework of a nation state.

Conscription in Scandinavia during the Thirty Years War raises the systems-theoretical issue of communication. According to systems theory, the fundamental process of constituting a social system is communication, which is then reduced to actions. Niklas Luhmann differentiates communication into the three sections of information, utterance, and expectation. At first, communication arises from information or knowledge, which is then articulated and directed, and finally is expected to bring results or outcomes. This process makes communication self-referential, which ultimately constitutes a system as communication about itself.[474] This coding becomes discernible in the organising of Swedish conscription. First, conscription was decided upon according to the information on potential conscripts. Then the intention to carry out conscription was communicated to the population via the intermediation of state agents (Lutheran priests). The action of conscription was carried out under the auspices of a commission that made decisions on available information and created new communication back to its superiors. The results of the conscription were articulated in the muster rolls for operational regiments and possibly recalibrated at the top of the government. Finally, the communication loop might refer to the originators of conscription in the form of appeals for exemptions or other qualifications. For an early modern institution, Swedish conscription was a remarkably closed system, not at all unlike the modern social subsystems articulated by Luhmann.

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474 Luhmann, 1995, pp. 138–139, 142–143.

Bourbon Army

In its overall outlook, the French army in the Thirty Years War was a professional one, meaning that it consisted primarily of recruited soldiers. The level of professionalism varied greatly within the French army, perhaps even more so than in any other army in the Thirty Years War. The most elite infantry units in the French army were the *gardes françaises* and the *gardes suisses* – with the latter formation consisting exclusively of Swiss recruits. The combined strength of these two formations was 6,000 men, but they were rarely seen in campaigns, as Louis XIII considered them to be part of his own personal entourage. Therefore, they were not deployed to strengthen armies that were not led by the king himself.[475] After these two guard formations the next most prestigious were various other *entretenus* units known as *vieux regiments* and *petits vieux* plus distinguished cavalry formations known as *gendarmes* and *chevaux légers*.[476] Up until the 1630s, when the pressures of war necessitated a drastic extension in the number of field regiments, these *entretenus* units formed the bulk of the French army. Unlike in some other European countries, where certain elite units served as training grounds for officers or even enlisted men, the French *entretenus* units remained enclosed entities so that they might protect their professional complement from any possible dilution by inexperienced recruits. Conversely, the officers and soldiers in the *entretenus* formations were rarely, if ever, distributed to the new field regiments as reinforcements or experienced corps.[477]

As in most other European countries, the basic administrative unit of the French army was the regiment. At the turn of the seventeenth century, the French infantry had been reorganised into permanent and temporary regiments. The permanent regiments consisted of the two *gardes*, five *vieux* regiments, and six *petits vieux* regiments. During times of war this core element of

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475 Parrott, 2001, pp. 45–46.
476 Ibid., pp. 42–43.
477 Ibid., pp. 42–44.

the army was augmented by temporary field regiments that were disbanded after the end of hostilities.[478] What undermined the regiment's relevancy as a combat formation was the wild variation in their actual troop strengths. Whereas elite regiments such as the *gardes françaises* and the *gardes suisses* could maintain their robust complements of 3,000 men, ordinary field regiments might be whittled down to as few as 150 men by the end of a campaign. The actual building blocks of the French army were, therefore, companies of 50–100 men that could be organised more organically into larger formations as military necessities dictated.[479]

The elite contingents included the *gardes écossaises* or Scots Guard. This was a contingent of four companies that were employed for royal protection and ceremonial duties. The Guard was commanded by a Scottish captain, who was not only expected to be a loyal, trustworthy, and socially qualified gentleman but also someone who could take over the responsibility for the daily management of the four companies. This meant arranging billets for the soldiers (as designated by the department of the *fourrier*) and, if necessary, paying the troops from personal resources if royal remittances fell into arrears. The main attractions of this demanding position were social prestige and proximity to the royal person and highest levels of government.[480]

These actual combat formations in the French army were the battalions, which constituted some 500–600 men in linear formations ten rows deep. The French battalion would generally follow the standard European ration between pikemen and musketeers. The centre of a 500-strong battalion would consist of 300 pikemen with 100 musketeers on both flanks.[481] While the reorganisation of modestly sized regiments into more battle-effective battalions

478　Thion, 2013, p. 38.
479　Parrott, 2001, pp. 49–50.
480　BnF, Recueil de pièces, manuscrites et imprimées, relatives au Conseil d'État, à l'office de Chancelier, à la Maison du Roi, à différentes charges, etc./Fr. 16216/Institution de la garde Escossoises du corps du Roy de France, fol. 438, undated.
481　Thion, 2013, p. 45.

made tactical sense, the amalgamation of administrative regiments into combat battalions created disputes over seniority in the chain of command. The overabundance of (often idle) officers in the French regiments did not help the matter, and the disputes over precedence tended to spill over from the battlefields to allocation of winter quarters and issues of supply.[482]

Cavalry was viewed as an elite branch of the armed forces in early seventeenth-century France. Up until 1635 the standing cavalry element in the French army had consisted of 1,500 riders divided into *gendarmes* and *chevaux légers*. The basic administrative cavalry unit was the company of twenty-five to thirty horsemen. In combat, the cavalry companies were mustered together into squadrons of 120–150 riders commanded by a captain.[483] As David Parrott has pointed out, the small numbers of French cavalry were a major problem in the context of the Thirty Years War, in which cavalry began to play an increasingly central role in the relief of sieges, foraging operations and territorial control.[484] Because the *ban et arrière-ban* was manifestly incapable of augmenting the *gendarmes* and *chevaux légers* with any meaningful numbers of support troops, the crown made repeated attempts to raise recruited cavalry regiments. In 1635 the government attempted to organise the cavalry into seventeen regiments. Intransigent opposition from the company commanders, however, prevented the reorganisation from effectively taking place. The following year Cardinal Richelieu dissolved the regiments into smaller squadrons of three companies.[485]

The structural root problems of the cavalry ultimately existed at the company level, where the ill-funded cavalry captains sought to recoup some of their expenses by disbanding their companies at the end of the campaign season, collecting payment for winter quarters, and then rehiring their soldiers again at the start of the

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482 Parrott, 2001, pp. 53, 55.
483 Thion, 2013, pp. 48, 51.
484 Parrott, 2001, p. 60.
485 Thion, 2013, p. 86.

next campaign.[486] By fits and starts, the French central state managed to increase the numbers of cavalry as the war went on, first as squadrons and then in the form of actual regiments. By 1639 all the *chevaux légers* had been organised into regiments, while the proportion of cavalry continued to increase in the armies. The vindication of this policy was the victory over the Spanish at Rocroi in 1643, which would not have been achieved without the successful flanking action by the French cavalry.[487]

Military entrepreneurship remains a problematic issue in the French context of the Thirty Years War. Throughout the war, France admittedly hired companies or even entire regiments of foreign soldiers and incorporated them into its own field armies. The most notable acquisition was the mercenary army of Duke Bernhard of Saxe-Weimar, who held independent command on the French payroll from 1635 until his death in 1639. In return for an annual payment of 4,000,000 livres (and a personal pension of 150,000 livres), Bernhard committed himself to providing Louis XIII with an army of 12,000 infantry and 6,000 cavalry.[488] After Bernhard's death his colonels continued to wage war in French service but under renegotiated contractual terms that were even more favourable to the Bernhardines, as the mercenaries now called themselves.[489] In the early stages of the Thirty Years War, France had also subsidised the mercenary army of Ernst von Mansfeld. However, even though the French planned to send Mansfeld auxiliaries in lieu of monetary subsidies, he was regarded as a proxy agent of indirect warfare rather than a subcontracted military entrepreneur by Louis's ministers.[490]

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486 Parrott, 2001, p. 64.
487 Ibid., p. 65.
488 BnF, Recueil de documents diplomatiques et autres relatifs à l'Angleterre, l'Ecosse, l'Espagne, Mantoue, la Pologne, le Portugal, Saxe-Weimar, le Sant-Siege (1292–1640)/Colb. 295/Traité entre Le Roy tres Chrestien et le Duc Bernard De Weymar/fols 258–262, 17 October 1635.
489 Parrott, 2012, pp. 108–109, 267.
490 Krüssmann, 2010, pp. 489, 493.

In 1640 the Savoyard regent Duchess Christine (sister of Louis XIII) concluded a pact with France that made her a contractor in French employment. According to the stipulations of the pact, Christine maintained all her fortresses and fortified places on behalf of France and also supplied the French field forces with 3,000 infantry and 1,200 cavalry. The French commanders of the joint forces, it was agreed, would only operate under her authority and all orders concerning the establishment of *étapes* or allocation of billets in her dominions would be issued by Duchess Christine or her ministers.[491] Duchess Christine's position as an independent general contractor, however, was undermined by the French demand for contributions from her. In this sense her circumstances as a general contractor differed from those of Ernst von Mansfeld and Bernhard of Saxe-Weimar, who both expected their employer to shoulder the costs of war: Louis would pay them, not vice versa.[492] Later in 1640, Duchess Christine's archenemy Duke Thomas arranged a more straightforward accommodation with France when he agreed to place his fortresses at French disposal in return for a pension of 100,000 livres (which appears to have been reduced to 60,000 livres). The French crown promised him military assistance in case of a Spanish invasion, without demanding any reimbursement from Duke Thomas himself. Duke Thomas also retained the command of his own troops, an arrangement that placed him more firmly than Duchess Christine in the category of a general contractor.[493]

There were also individual German colonels who raised and maintained troops to serve alongside the French army on the Rhine. The most notable of these contractors was Josias von Rantzau, who raised several regiments for French service in 1635–1639. Between 1638 and 1644, Rantzau was integrated into the French

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491 Histoire universelle, 1776, p. 320.
492 Parrott, 2001, p. 299.
493 Traités publics de la royale maison de Savoie, 1836, 471–477, 2 December 1640, treaty between Louis XIII and Duke Thomas; Histoire universelle, 1776, p. 341.

army as a colonel.[494] Swiss troops, who provided manpower for the *gardes suisses* and other *entretenus* units, were also raised by contracts with colonel-proprietors.[495] In 1636 Richelieu and Secretary of War François Sublet de Noyers nevertheless created the office of a separate *commissaire général* to supervise recruited German troops in French service.[496]

French willingness to employ military entrepreneurs was limited to specific allies and to foreign soil. At home the royal government, which was still haunted by memories of the devastating Wars of Religion of the sixteenth century and threatened by the prospect of insurrection by the *princes du sang* and other magnates, regarded all delegation or concession of royal military authority unacceptable.[497] When, in 1625, the Duke of Lesdiguières proposed to raise and maintain an army of 20,000 foot and 4,000 cavalry to be used in northern Italy, the royal government rejected the offer. No similar offer was made by any of the other grandees for the rest of the duration of the Thirty Years War, David Parrott observes.[498]

Categorical French refusal to devolve military authority to domestic general contractors created a dilemma in the context of seventeenth-century warfare, in which no European state, Bourbon France included, could wage large-scale and protracted wars from its own resources alone. The French answer to this dilemma was to maintain a façade of royal monopoly over all organised violence while burdening unit commanders with the expectation of raising and maintaining troops partially or even wholly by their own means. The state, however, made it clear that the colonels and captains raising and maintaining troops did not hold any proprietorship over their units and that they only served at the pleasure and permission of the king.[499] The crown effectively

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494 Parrott, 2001, pp. 300–302.
495 Ibid., pp. 303–304.
496 Ibid., p. 301.
497 Ibid., pp. 289–290.
498 Ibid., pp. 290–291.
499 Parrott, 2012, pp. 267–268.

monopolised all appointments of officers. It also retained the sole right to reform or disband units at will, without providing any compensation for the unit commander.[500]

Despite these severe restrictions to any fiscal or administrative benefits the officers might have gained from raising and maintaining units from their own resources, military commissions were nevertheless much desired. David Parrott explains this enthusiasm for military service from the perspectives of social prestige and noble self-assertion. For the more established *noblesse d'épée*, military service was a necessary rite of passage; for the arrivistes of the service elite it provided means for social assertion.[501] The central state benefited from this non-entrepreneurial system as it shifted many of the burdens for raising troops onto the shoulders of the officer corps. The main problem was that after the initial outlays the officers had little or no interest in maintaining their units beyond a campaign or two. The *entretenus* regiments exempted, most French units of the Thirty Years War were, consequently, short-lived and consisted typically of inexperienced soldiers.[502] A system that treated military service as state employment and remunerated officers more in theory than in practice would inevitably breed resentment. Unsurprisingly, the French military was plagued by graft, venality, fraud, and desertion. Buying commissions from their previous occupants was the rule; officers regularly withheld soldiers' wages for the sake of necessity or personal gain; the central state was defrauded by muster rolls being filled with *passe-volants* or fictitious soldiers.[503]

The quantitative growth of the French army during the Thirty Years War and in the decades that followed has been subject to intense historical debate. David Parrott has estimated that by the time of Richelieu's death in 1642, France fielded in the range of 70,000–80,000 troops, which were lower numbers than some ear-

500 Parrott, 2001, pp. 328–329.
501 Parrott, 2012, pp. 268–269.
502 Parrott, 2001, pp. 352–355.
503 Jones, 1995, pp. 151–152; Parrott, 2010, p. 86.

lier historians had proposed.[504] John Lynn has pointed out the patchy primary source material that makes it difficult to quantify French troop strengths during Mazarin's premiership in the last years of the Thirty Years War. Be that as it may, French troop numbers most likely decreased considerably from this previous level during the Fronde.[505] The resurgence of multifaceted primary source material from the late 1650s onwards has encouraged historians to make more confident claims about the size of the French army during the reign of Louis XIV. In his thesis, André Corvisier postulated that Louis fought wars on the same scale as Revolutionary France did with its *levée en masse* in the late eighteenth century.[506]

The Thirty Years War presented Bourbon France with the challenge of a Military Revolution in the sense that France was suddenly compelled to wage protracted warfare with large armies. By and large, France failed to meet this challenge. On paper at least, the Bourbon state managed to raise several large-scale armies repeatedly during the Thirty Years War, but it faced insurmountable difficulties in maintaining them in the field for any prolonged periods. The resource flows necessary for the upkeep of permanent armed forces might have already existed in Richelieu's France, but their conversion into an effective military institution, let alone a proper fiscal-military state, could not yet be achieved because of several systemic problems in French society. As David Parrott articulated in his withering indictment of Richelieu's army, there was no centralised or coordinated control over the army's recruitment, maintenance, or discipline, but instead a set of arbitrary and factional decisions.[507]

According to John Lynn, sixteenth-century France presented a model case of an aggregate-contract army, while between 1660 and 1740 the French military was the paradigm of a state-commis-

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504 Parrott, 2001, p. 220.
505 Lynn, 1995a, p. 126.
506 Corvisier, 1983, p. 345.
507 Parrott, 2001, p. 547.

sioned one.[508] In this simplified taxonomy, the Thirty Years War appears as a transitory period, during which Richelieu's armies fitted comfortably with neither category. Richelieu's France did not practice military entrepreneurship in the way the Habsburgs and the German princes did, as the royal government was reluctant to grant any autonomy to native colonel-proprietors. One feature of the aggregate-contract army remained the employment of Bernhard of Saxe-Weimar as a general contractor. On the other hand, France did not possess a true state-commissioned army in which officers would have received commissions and troops were raised 'according to rules set by a more effective and intrusive military administration'.[509] Although the Bourbon state handed out commissions to French officers, it did not have in place any consistent system of compensation or supervisory administration. Officers were expected to bear the brunt of costs relating to the recruitment and maintenance of troops without further interference or even visible interest from the state.

The French method of raising armies from the private resources of the native nobility rested on the principle of discontinuity: the Bourbon state did not expect to maintain a standing army but instead assumed that the regiments would be disbanded as soon as their operational existence became a financial liability.[510] Protracted warfare placed pressure on the French crown to tolerate or even expand the venal system, in which public offices were enfeoffed, inherited, and traded as merchandise. A fiscal-military system, in which new public offices were created for the sole purpose of selling them off and in which costly tax-farming brought in only a meagre proportion of revenue, was nothing short of wasteful. For Bourbon France, the Thirty Years War was not an opportunity to develop the army and military administration in a more effective and state-controlled direction but rather a set of

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508 Lynn, 1996, pp. 517–518.
509 Ibid., p. 518.
510 Parrott, 2012, pp. 266–268.

exigencies that had to be met with whatever available ad hoc solutions, many of them self-contradictory and self-defeating.[511]

Perhaps the only 'modernising' aspect of the French army was the central government's readiness to use it in suppression of sedition at home. David Parrott reasserts the entrenched historical view that the burdens of the French war effort during the Thirty Years War destabilised society, as the unpaid and ill-disciplined soldiers became a menace to public order. Law enforcement and military administration were devalued in the eyes of the public; the state's claim for the monopoly of violence was undermined.[512] In the Weberian sense, the armies of Richelieu and Louis XIV appear as tools for attempts to assert state monopoly of violence, a major feature of the Military Revolution. Whether or not the Bourbon state and its army in fact managed to reduce social violence in the longer historical run, as the sociologist Norbert Elias assumed, is not the subject of the present study.[513] It suffices to paraphrase Elias that, as a result of the later reorganisation of the French army by Louis and his ministers of war, the violence inherent in the Bourbon state system was 'put in the barracks', although, as modern sociology prefers to qualify Elias, such 'disappearance' of state violence from society did not necessarily mean a clear-cut division between internal and external security matters.[514] As a tool of domestic coercion, the army of Louis XIV represented continuity rather than change from the era of the Thirty Years War.

Regular Armies and Military Labour Markets

One useful analytical tool for assessing change and decline in regular armies during the Thirty Years War is the evolution of army styles as proposed by John Lynn. As the title of Lynn's article suggests, his taxonomy sees military change as an evolutionary

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511　Cornette, 1994, pp. 705–706.
512　Parrott, 2001, p. 544.
513　Elias, 2012, p. 196.
514　Delmotte & Majastre, 2017, p. 63.

process marked by both surviving past traditions and emerging future trends. Lynn's analysis also concentrates on institutional convergence and divergence and eschews the military-political explanations characteristic of traditional *l'histoire évènementielle*.[515] Following Lynn's taxonomy, the land forces of the Thirty Years War can be identified as either aggregate-contract or state-commissioned armies.

The most distinctive feature of aggregate-contract armies during the Thirty Years War was the general contractors, who raised armies for state powers as independent military entrepreneurs. Unlike middle-ranking state actors such as territorial princes, who also maintained private armies, general contractors usually operated on the basis of extraterritoriality. In sociological terms, such itinerant military entrepreneurs can be described as war-making tourists who used extraterritoriality as means to maintain their own operational freedom and to impose territorial constraints on their state-bound enemies.[516] Other general contractors, most notably Wallenstein, ruled their own fiefdoms in return for out-contracted military services – as did those territorial rulers, such as Charles IV of Lorraine or Amalia Elisabeth of Hesse-Cassel, to whom military entrepreneurship was an attractive or compelling political choice.

General contracting and military entrepreneurship could not have existed without military labour markets, while such markets would not have existed without a widespread preference for paid military service. In terms of modern economics, preference for military service is understood as ordinal utility. In labour relations ordinal utility refers to the order in which the participant in the wage labour market chooses one job opportunity over some other form of employment. This means that for many early modern labour market participants, military service had economic or other incentives that competing job opportunities lacked.[517] As

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515 Lynn, 1996, p. 507.
516 Kristensen, 2008, pp. 250–251.
517 Bäckström, 2020, p. 1.

David Parrott shows in his study of military entrepreneurship, military wage levels were highly competitive during the Thirty Years War, which increased the appeal of military careers. It is also an established fact that military service allowed the soldiers to supplement their income by pillage and robbery.[518]

Besides purely material factors, a military career bestowed some social prestige, especially if one advanced in the military hierarchy. Although it was uncommon for the rank and file to reach command positions, it did nevertheless happen during the Thirty Years War: Jakob Duwall started out in the Swedish army as a musketeer and reached the rank of major general, while the Hessian foot soldier Peter Melander advanced all the way to the level of field marshal and became an imperial count.[519] There were also other non-material reasons for military service, such as religion, patriotism, pursuit of social ideals, and identification with dynastic causes, factors which become apparent when investigating the motives of Scottish soldiers of the Thirty Years War.[520] The utility of military service was countered by opportunity costs and risks. By choosing military careers over other labour opportunities the soldiers forfeited potential advantages of civilian work: stable living conditions, more reliable income, and better personal safety. The risks of soldiering were self-evident: debilitation or death caused by hunger, pestilence, or injury. For many participants in the wage labour market, soldiering in the armies of the Thirty Years War appeared a rational choice fuelled by material and social self-interest. However, not all recruited soldiers ended up in military service willingly. Impressment and forced recruitment, although still marginal phenomena, already occurred during the Thirty Years War – particularly in Habsburg Spain, where

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518 Parrott, 2012, pp. 161–164.
519 Bedürftig, 2006, p. 77; Murdoch & Grosjean, 2004, 'MacDougal, Jacob', https://www.st-andrews.ac.uk/history/ssne/item.php?id=1623 [accessed 15 November 2021].
520 Murdoch & Grosjean, 2014, pp. 27–28, 40–41.

the shortage of military manpower was reaching critical levels in the 1640s.

After the Thirty Years War, the fiscal and social incentives for military service were no longer quite the same for the wage-earning social stratum. The contingencies of the Thirty Years War had allowed the military employers to use various improvised artifices when paying their troops: short-term loans, extraordinary taxation, enfeoffments of land, manipulation of currency, voluntary or involuntary contributions, and outright pillage. The political stabilisation after 1648 did not allow such fiscal caprice and erratic methods of pay, and financing permanent armies became a heavier long-term burden for the emerging territorial power states. One major change occurred in military wages, which decreased drastically in the latter half of the seventeenth century.[521] The pauperisation of the soldier coincided with the general seventeenth-century trend of modest but steady rise in real wages in the civilian labour market.[522] In a purely economic sense, the military profession had lost much of its attractiveness as an alternative to some other form of wage labour. The slump in military wages also diminished the shine and prestige of the military profession, especially under the changed habitational conditions, when soldiers in their barracks were becoming increasingly isolated from the rest of the society. The same ordinal utilities and rational choices that had guided military labour markets during the Thirty Years War no longer applied in the post-Westphalian world.

The existence of early modern military labour markets would also imply the presence of a military division of labour. This concept, which was later picked up by Karl Marx, Émile Durkheim, and modern mainstream economics, was famously articulated by Adam Smith in *The Wealth of Nations* in 1776. Using as his example the different stages of production performed in the manufacturing of pins, Smith argued that the division of labour occasioned 'a proportionable increase of the productive powers

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521 Parrott, 2012, pp. 286–287.
522 Vries, 1976, p. 186.

of labour'.[523] Smith already included the military profession in his schematic for the division of labour. In ancient Greece and Rome, as well as during much of the feudal era, soldiering had not been a profession unto itself but a civic duty among the free social strata, Smith argued. The skills needed for the exercise of arms had been individual skills, often physical characteristics. With the introduction of firearms and the growth in the magnitude of warfare, something approximating economic division of labour had also permeated the military sphere as well. The division of labour, Smith postulated, was necessary for the improvement of increasingly complicated warfare, in which successful military outcomes rested more on the mechanical coordination of large bodies of men than feats of individual valour.[524]

Stratified chains of command with sequential spheres of authority and sets of duties, separation between combat troops and support echelons, operational division between infantry, cavalry, and artillery, and individual specialism in the use of specific arms such as muskets and pikes all reflected military division of labour that already existed before the Thirty Years War – a state of affairs demonstrated by J. R. Hale in his authoritative study of renaissance warfare.[525] The protracted and destructive war nevertheless served as a crucible that put the existing division of military labour into an unprecedently rigorous test. The end results of that ordeal can be best extracted from the pages of Raimondo Montecuccoli's *L'art militair*, the definitive military-scientific treatise of the early eighteenth century. In Montecuccoli's template for an ideal division of military labour, the infantry consisted of musketeers, whose muskets were 'all of the same calibre so that they would not have to change the cartridges', pikemen, and an entirely new kind of foot soldiers – grenadiers – who were used in siege warfare to hurl explosive grenades by hand. Dragoons, who had not existed before the Thirty Years War, were now recog-

523 Smith, 2003, pp. 10–12.
524 Ibid., pp. 886–889.
525 Hale, 1998, pp. 46–74, 127–178.

nised as their own type of mounted infantry that employed lighter and more portable muskets.[526] Montecuccoli divided cavalry into heavy cuirassiers and medium demi-cuirassiers. They were all to be armed with swords and pistols alone, as Montecuccoli admitted the extinction of the mounted lance as a purposeful cavalry weapon. Harquebusiers were still included in the cavalry, but they were now rebranded as carabiniers. The Battle of Lützen, where Wallenstein's imperial cavalry had destroyed entire Swedish brigades with their caracoles, had proved to Montecuccoli the desirability of employing mounted fusiliers armed with light firelock muskets.[527]

Montecuccoli did not propose to alter the existing military hierarchy, but rather presented it in a condensed and compendious manner: armies were commanded by generals, regiments by colonels, and companies by captains. The intermediate ranks, such as lieutenant colonels and majors, were non-crucial to Montecuccoli, who approached military science from the perspective of successful combat only.[528] Another reflection of Montecuccoli's purposive and undeviating thinking was his organisational separation between combat troops and support staff. His schematic for the '*gens qui ne combattent point*' is an articulation of a very tangible division of labour in the never-ending business of war. The support professions consisted of chaplains, physicians, apothecaries, surgeons, artisans, guides, spies, orderlies, pioneers, merchants, builders, sutlers, carpenters, field gendarmerie, masons, bakers, and armourers.[529] All these duties connected specialised sets of military output with specific means of income. Clearly, the Thirty Years War had not changed the fundamental nature of early modern armies as bustling markets for salaried workers, private producers, and military entrepreneurs.

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526 Montecuccoli, 1734, pp. 13–15.
527 Ibid., pp. 15–17.
528 Ibid., p. 6.
529 Ibid., p. 4.

One institution that underwent change during the Thirty Years War and after it was that of the general contractors. General contractors had existed well before the Thirty Years War, but during the war their entrepreneurial operations reached a level of magnitude that was unprecedented before 1618 and not replicated after 1648. Their sudden institutional pre-eminence can be attributed to the Thirty Years War itself: princedoms and territorial states suddenly found themselves engaged in large-scale land warfare without existing armies. Therefore, armies had to be rapidly hired from the military labour market via general contractors, who operated in a similar manner as modern-day workforce agencies. It could be argued that the general contractors' institutional decline after the war was caused by the unappealing antics of their members: the malice of Mansfeld and Brunswick, the shiftiness of Saxe-Weimar, the ruthlessness of Lorraine, the usuriousness of Hesse-Cassel, and the (alleged) treacherousness of Wallenstein. This, however, would be too easy an explanation, as medieval condottieri and other earlier general contractors were never known to have been paragons of fidelity, moderation, and accountability.

From institutional and structural perspectives, the decline and near-disappearance of general contractors after 1648 is best explained by changes in the markets. To put it bluntly, there was no longer demand for private general contractors. The reason behind the market change was the proliferation of standing armies after 1648. When permanent armies, whether recruited or conscripted, had become institutionalised in most parts of western and central Europe, the necessity of hiring private general contractors to raise armies from their own resources disappeared. In the past, it had been cost-effective for many territorial rulers to rent armies instead of owning them, but the increasing assertiveness of emerging power states and the economy of scale inherent in the Military Revolution meant that the transaction costs for maintaining permanent armies became lower than those associated with outsourced recruitment of temporary armies. Military entrepreneurship as a phenomenon did not yet disappear, but it

was relegated to the fields of military procurement and private but transferable proprietorship of standing regiments.[530]

The Thirty Years War did not revolutionise the forms and hierarchies of European armies, but the organisational reforms that were implemented during the war were nevertheless substantial and enduring. At the outbreak of the Thirty Years War in 1618, the *tercio* was still the predominant administrative and tactical formation in Habsburg Spain and among the Catholic armies of the Holy Roman Empire. By the end of the war, however, it had been effectively replaced by the regiment in central Europe and even in the Spanish realm. The *tercios*' tactical and administrative diminution during the Thirty Years War was no Military Revolution in itself; it represented organisational transmutation rather than reversal or termination. The reasons for this military metamorphosis were tactical. The new battlefield realities necessitated the employment of units that could be organised into linear rather than block formations. They were also to be deployed in tactical depth instead of being all thrown into combat straight away.[531] Being smaller units than the *tercios*, although still commanded by colonels, the regiments were more malleable and could either be divided into companies and battalions or combined into brigades that also incorporated cavalry and artillery. The predominance of the regiment over older combat formations such as squadrons occurred elsewhere in Europe as well, with the Dutch Republic and its company-centric army being a qualified exception to this rule. The formations that consolidated their military suitability during the Thirty Years War – companies, battalions, regiments, and brigades – survive today, while the types of units that were already archaic in 1618 – *tercios*, squadrons, and banners – have disappeared.

The army organisations of the Thirty Years War exhibit some of the characteristics of modern subsystems, as defined by systems theory. Army hierarchy and division of military labour,

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530 Parrott, 2012, pp. 324–325.
531 Parrott, 1995, pp. 232–233.

which were increasingly being articulated in normative treatises and documents during the Thirty Years War, testify to a degree of systemic differentiation that bears more resemblance to modern professional armies of territorial nation states than to the prebendal medieval armies that operated as ad hoc mixtures of feudal levies, militias, and mercenaries. The general similarity in weapons, tactics, organisational structure, and the roughly equal operational size of the belligerent armies raises the question of absolute advantage, or one army's ability to carry out military activity more efficiently than other armies.

But how can we differentiate the regular armies of the Thirty Years War from one another in terms of strengths and weaknesses? The answer to this question lies in the varying methods of raising troops. All warfare depends on material inputs such as money, munitions, and supplies, but without human inputs – namely soldiers – there is no army and no military outputs of any kind. Those armies that could provide a steady input of soldiers, like those of the Dutch Republic and Sweden, attained advantageous outputs, while those that had difficulty in maintaining necessary troop levels, like the Spanish and imperial armies, fell short of desired outputs. The Dutch army attracted recruited soldiers by appearing to be a credible, reliable, and consistent wage-payer. The private fiscal buffer provided by the *solliciteurs-militair* undoubtedly contributed to the appeal of the Dutch army as an employer. In the case of Sweden, the absolute advantage was provided by conscription that injected native troops into the Swedish field armies and eased the burden of competing for recruited soldiers in the European military labour market.

What enabled conscription was coding, the reflexive process of communication that ran from the top of the government to the grassroots localities via interlocutors such as clergy and conscription commissions and then reversed back to the decision-making level in the form of conscript data, muster lists, and appeals for qualifications. As Niklas Luhmann argued, systemic self-steering results from such reflexive communication processes – essen-

tially communication about communication.[532] While the qualified emergence of reflexive and self-referencing communication systems in the context of the regular armies of the Thirty Years War lends credence to the assertions of traditional sociology and the tenets of the Military Revolution theory, its manifestations become more normative and more systematically articulated in the field of an institution that regulated and monitored the inputs of the armies: the early modern war commissariat.

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532 Luhmann, 1995, pp. 152–153.

War Commissars

German *Kriegskommissariat*

In military lexicons, war commissariats are traditionally defined as institutions responsible for the control and management of 'economic business' among the troops. This business is usually described as supervision of musters and procurement of provisions.[533] The sociologist Otto Hintze defined the war commissariat very broadly as an 'external organ of state authority'.[534] For analytical purposes, it would be preferrable to find an intermediate level of interpretation. Therefore, the present study understands the war commissariat in socio-economic terms as a mediator between the principal (state) and the agent (armed forces). The war commissariat's general field of work, in systemic and economic terms, would be the inputs rather than outputs of armed forces.

In this chapter, each case study of war commissariats in the Thirty Years War will include a theoretical or conceptual perspective specific to the case. The abovementioned principal–agent problem is best qualified in the case of the Holy Roman Empire that was characterised by the prevalence of military entrepreneurship and presence of general contractors. The Oldenburg state highlights the issues of incumbents' qualifications and separate fields of responsibility in the early modern war commissariat. The availability of biographical data allows us to investigate the Swedish war commissariats as containers of rational organisational

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533 Hirtenfeld, 1852, pp. 324–325.
534 Hintze, 1910, p. 493.

roles and circuits of competence cycles. No other case study offers more illuminating perspectives into institutional decline and the systemic strength of autopoiesis than a comparison between Spanish and Portuguese war commissariats. The myriad war commissariats of Bourbon France elucidate institutional decline and evolution through complexity but also question easy assumptions about systemic specialisation and division of duties. The emerging predominance of civilian–military intendencies in Bourbon France provides a central line of inquiry for modern structuralist philosophy.

Ever since European realms began to employ hired soldiers in large numbers, they also found it necessary to create some institutional framework for supervising out-contracted warfare. The origins of the early modern war commissariat can be traced back to fifteenth-century Italy. There the various city-states and principalities employed mercenary knights or condottieri, whose name derived from the contract (*condotta*) between the mercenary commander and the employing city-state or prince. As the military contracts became longer and more extensive, the nascent state authorities found it necessary to create civilian mechanisms for the supervision of billeting and inspection of musters, pay, weapons, and provisioning.[535]

The recruitment of the German *Landsknechte* in the early sixteenth century also necessitated the employment of specific commissioners to maintain watch over the quality and quantity of mercenaries and their equipment. When Henry VIII sought to hire 8,000 *Landsknechte* in 1544, he sent English commissars (commissioners) to oversee the musters. The commissars, however, were a mixture of soldiers, diplomats, and merchants who had no previous experience of dealing with ruthless *Landsknechte* commanders. The commissars sent to the Low Countries had no power over the mercenaries and faced extorsion and ultimately even threats of violence from the *Landsknechte*.[536] In 1527 Flor-

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535 Mallett, 2003, p. 72.
536 Potter, 2011, pp. 312–316.

entine commissars endured a similar experience with mercenary contingents known as the Black Bands, who openly cheated and threatened the commissars. The impudence of the Black Bands, as well as that of the *Landsknechte*, was based on naked force rather than the rule of law. Imposing state authority over independent-minded and self-guided mercenary corporations remained a challenging task for the sixteenth-century commissars.[537]

Although the corporate identity of autonomous mercenary formations such as the Black Bands and the *Landsknechte* began to erode in the latter half of the sixteenth century, the recruitment of hired soldiers remained an ad hoc enterprise. So too did the employment of commissars, who, in the absence of standing armies, had no function or purpose during times of peace. In the Holy Roman Empire, commissars were brought into existence in tandem with recruited contingents. For instance, when the members of the Bavarian Circle voted to raise 2,100 troops to be used in the ongoing war against the Ottoman sultanate in 1601, they also appointed a war commissar (*Kriegskommissar*) and a paymaster (*Zahlmeister*) to supervise the recruitment efforts.[538] Early modern warfare had not yet reached a level where the state would have become involved in the daily management and inspection of everyday military life. As Zoltán Péter Bagi has shown in his study of Habsburg soldiers in the Long Turkish War (1593–1606), major undertakings in military management such as assignment of billets and procurement of supplies were still organised by the soldiers themselves. The Habsburg campaigns in Hungary in 1593–1606 were consequently plagued by desertion, insubordination, mutiny, plunder, mistreatment of civilians, and embezzlement by unscrupulous military entrepreneurs.[539]

The scope of the commissars' activities grew alongside the establishment of permanent military forces such as the Bavarian *Defensionswerk* of 1601. The instructions issued by Duke

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537 Arfaioli, 2005, pp. 64–65.
538 Heilmann, 1868, p. 784.
539 Bagi, 2015, pp. 396–406.

Maximilian in March 1601 stipulated what weaponry the soldiers should have and how they should exercise their military skills.[540] A year later Maximilian appointed four commissars to oversee the creation of the Bavarian *Defensionswerk* and to inspect that the instructions relating to weapons and drill were being followed.[541]

The rapid escalation of hostilities expanded and consolidated the institution of war commissars in the Holy Roman Empire. Duke Maximilian included places for 'general commissars' in his council of war from at least 1622 onwards. That year he had sent two 'assisting council members' to the Bavarian-occupied Lower Palatinate to inspect the army there, but their commissarial powers were still greatly curtailed by the commanding general Count Tilly's personal aversion to any bureaucratic control over his conduct of military operations.[542] These general war commissars received their direct orders from Maximilian and Tilly. The orders were often of an operational nature, which suggests that the Bavarian general war commissars were situated above the field colonels in the military chain of command. The orders indicate that the general war commissars forwarded their orders to the *Generalwacht-meister*, colonels, and lower-ranking war commissars, which effectively made them mediators or facilitators between the field army and the ducal court in Munich.[543] The supervisory body of the general war commissars, the war chancellery (*Kriegskanzlei*), provided them with information on military, political, and financial affairs.[544] The general war commissars, conversely, reported back to Munich on the amounts of collected contributions and the current balance in the field army's war chest.[545]

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540 Heilmann, 1868, pp. 798–799.
541 Ibid., p. 801.
542 Ibid., pp. 978–979.
543 Albrecht, 1964, pp. 19–21, 7 August 1629, Duke Maximilian to general war commissar Hans Christoph von Ruepp.
544 Albrecht, 1964, pp. 52–54, 27 September 1629, Bavarian war chancellery to general war commissar Hans Christoph von Ruepp.
545 Albrecht, 1964, p. 366, 16 April 1630, Duke Maximilian to the Catholic League Estates.

Below the general war commissars in hierarchy were the ordinary war commissars. Duke Maximilian ordered in 1621 that all Catholic League regiments were to have their own regimental war commissars to oversee the payment of wages, a function formerly carried out by colonels and captains.[546] Maximilian's decision to place the distribution of wages under commissarial control appears to originate from the escalating financial chaos that had resulted from the proliferation of revalued, debased, and counterfeited coins during the so-called *Kipper- und Wipperzeit*, an era of unsanctioned and illicit currency manipulation.[547]

In rebellious Upper Austria, which Duke Maximilian had occupied as collateral to his loans and military assistance to the emperor in 1626, the Bavarian war commissars were instructed to make sure that the estates of the imperial count Franz Khevenhüller remained free and safe from all 'billeting, march-throughs, and disturbances'.[548] The main nexus of commissarial power remained in Munich, where the general commissars oversaw the functioning of the general chancellery.[549] By 1642 the commissars had emerged from their chancellery and joined the Bavarian field army, which now included a general auditor-commissar and his clerk, a representative of the general commissar's chancellery, a field paymaster, a provisions commissar with his own staff, and three war commissars. This development reflects not only the growth of princely power over daily aspects of warfare but also its expansion from an elevated hierarchical position to the grassroots level of warfare.[550]

The process of extending and deepening the early modern state's supervision over conduct of warfare did not, however, proceed without its complications and setbacks, as the war commis-

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546 Duch, 1970, p. 86, 8 February 1621, Duke Maximilian to Tilly.
547 Duch, 1970, pp. 471–474, 10 February 1622, Duke Maximilian to Lord Steward Hans von Zollern.
548 Czerny, 1876, pp. 102–103, 11 September 1626, Duke Maximilian to the war commissars.
549 Heilmann, 1868, pp. 978–979.
550 Ibid., p. 980.

sars themselves could misuse their powers. In 1648, for instance, the Bavarian *Generalcommissarius* Schäffer, whose main duty had been to protect the Bavarian lands from Swedish predations, was accused of misallocating or embezzling 500,000 ducats from the army. Such scandals could not be addressed in the open for the fear of undermining the credibility of the commissarial authorities: 'Nothing is said in public; everything is done in secret. His wife removes what she can from their realty', the Bavarian chancellor reported to Philip IV of Spain on Schäffer's and his wife's desperate attempts to reimburse at least part of the misappropriated funds.[551]

Commissarial institution in Habsburg Austria can be traced back to the Inner Austrian *Hofkriegsrat*, which was established by Ferdinand I in 1556. The general composition of the *Hofkriegsrat* remained the same from 1556 to 1658. The commissarial chancellery (*Kommissariatsamt*) supervised recruitment under the leadership of the *Mustermeister*, the *Proviantmeister* oversaw military provisioning, and the *Kriegszahlmeister*'s chancellery audited pay for the troops. There were also other chancelleries responsible for the inspection of fortifications and bridges.[552] After the outbreak of the war in 1618, war commissars (*Kriegs-Commissaren*) were being sent out from Vienna to carry out supervision and inspection in the field. In the aftermath of the reconquest of Bohemia in 1620, the Habsburg war commissars in Silesia had to deal with a variety of issues: musters, provisions, pay, billets, rapacious soldiers (there often Polish auxiliaries), and monetary confusion that had been caused by both rampant counterfeiting and disastrous Habsburg monetary policies.[553]

When Ferdinand II appointed Wallenstein as the imperial generalissimo in 1625, the commissarial functions of the *Hofkriegsrat*

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551 Fuensanta del Valle, Rayon & Zabalburu, 1885, p. 306, 13 June 1648, Chancellor Kurtz to Philip IV.

552 Regele, 1949, p. 84.

553 Krebs, 1880, pp. 170–183, 24 May 1623, memorandum of the convention of the Silesian princes in Breslau.

were incorporated into the newly established imperial army and subordinated to Wallenstein. All the commissarial responsibilities were consolidated into the office of the high commissar (*Obrist-, Muster-, Zahl- und Quartierkommissar*), then Johann von Aldringen, who was the nominal head of all the commissarial chancelleries. He was entrusted with the reception and redistribution of contributions, insofar as they were not raised independently by individual colonels. To control and audit the flow of contributions, the high commissar would draw up invoices for all collected and redistributed monies.[554] In addition to guarding the war chest (*Feldkriegskasse*) of the imperial army, the high commissar was also expected to supervise all recruitment and musters. As Victor Loewe has pointed out, the high commissar's duties were not clearly delineated, because his office had not yet been established in any firmly institutional way. In practice, much of the collection and redistribution of contributions and allocation of billets was being carried out by the colonels at their own initiative. 'The administration had to adapt to the constantly changing conditions under which the army was to be maintained; it had to find new ways and means of its own to enable the army to exist at all', Loewe concludes.[555]

Outside the hierarchy of the imperial army were the general commissars (*Generalkommissare*). As most of the funds flowing to the imperial army came from the Habsburg hereditary lands (excluding credit and those contributions that were extracted by force from occupied German principalities), Ferdinand II found it necessary to place his own representatives in those territories to control the transfer of funds, supplies, and war matériel and to organise billets where necessary. The role of these general commissars grew more important during Wallenstein's second generalate in 1632–1634, when contributions from Germany dried up and much of the war was conducted in Silesia and Bohemia.[556]

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554 Loewe, 1895, p. 30.
555 Ibid., p. 31.
556 Ibid., pp. 31–32.

Some sense of the general commissars' various duties and challenges can be distilled from the Moravian general commissar Cardinal Franz von Dietrichstein's letter to the *Hofkriegsrat*'s president Count Heinrich von Schlick in June 1634. Dietrichstein warned that the concentration of imperial troops in Silesia and along the Moravian border was exacerbating existing logistical problems. Therefore, he suggested that the imperial *Generalquartiermeister* Angelo Morgante would cooperate with the colonels to distribute the troops into appropriate billets. The imposition of military authority and proper allocation of quarters was a pressing issue, as the in-marching Hungarian soldiers had already threatened the Moravian war commissars with violence. Finally, Dietrichstein informed the *Hofkriegsrat* that he was in the process of forwarding to the imperial army the 17,000 florins plus supplies of gunpowder, match, and saltpetre which the emperor had earlier requested from him.[557]

War commissars supervising musters and the daily management of the regiments were not hierarchically dependent on the general commissars, as war commissars were usually appointed by the army generals. General quartermasters were institutionally almost synonymous with the general commissars, and in the Habsburg hereditary lands they were often one and the same person. Because organising billets and transit of troops were demanding (and, as we have seen, potentially dangerous) tasks, the governments of the hereditary lands typically appointed special commissars to perform those functions. Such special commissars would have been subordinate to the general commissars rather than the generals of the imperial army.[558]

In the individual field armies, the commissarial duties delineated from the field colonel general or *Generalfeldoberst*. The office of the *Generalwachtmeister*, which appears in Johann Jacob von Wallhausen's treatise among other contemporaneous sources, was

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557 Čechová, Janáček & Koči, 1977, p. 298, Cardinal Dietrichstein to Heinrich von Schlick, 19 June 1634.

558 Loewe, 1895, p. 32.

effectively synonymous with the *Generalfeldoberst*.[559] His office was identical with the Spanish *Maestro de Campo General*, who commanded the *tercio*. According to Giorgio Basta, the field colonel's responsibilities were both political and military. In the political field he was responsible for victualling the army, preparing field camps, arranging billets, and maintaining discipline and general order both in the army and in its baggage train (*Tross*). In the military field his main duty was to maintain the army in a state of constant military preparedness and combat effectiveness. This meant the procurement of military intelligence and the maintenance of such disposition of forces that could be instantly turned into a battle order.[560] The commissarial aspects of the field colonel's functions were concentrated in logistics, where one of his duties was to procure victuals either from specialist provisioners (*Proviantierer*) or ordinary merchants (*Kauffleute*). The delivery of the victuals was organised by the *Proviantmeister* and his assistant commissars. Weapons and ammunition could be procured directly by subordinate war commissars from private markets with money provided by the field colonel.[561]

Regimental instructions issued by Ernst von Mansfeld in 1624 offer a perspective into the institutional workings of an independent general contractor's mercenary regiment. The chief officer in Mansfeld's mercenary regiment was the colonel, who was assisted in the field of administration and logistics by the quartermaster and the provost. The former was responsible for organising billets, whether in a camp or in 'towns and villages', while the latter enforced military discipline and supervised victuallers and sutlers.[562] Mansfeld employed no commissars in his regiments for the reallocation of contributions; instead, 'prizes and booties' were first distributed by the provost marshal to the regiments

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559 Wallhausen, 1615, p. 30.
560 Basta, 1617, argumentum.
561 Ibid., pp. 5–6, 8.
562 Count Mansfields Directions of Warre, 1624, pp. 4–5.

and then by the regimental provosts to individual companies.[563] This basic template was being implemented with only slight variations by other mercenary regiments. The Danish pay regulations for Bernhard of Saxe-Weimar's mercenary cavalry regiment from 1627 reveal that the regiment's administrative staff included an *Oberst-vagtmester* or provost, a regimental quartermaster, and an unquantified number of secondary quartermasters. It was essentially identical to Mansfeld's regiments.[564]

The organisational precedents set by the Austrian Habsburgs and the Bavarian duke served as institutional examples for the war commissariats of other German princedoms. The voluminous treatise *Aulico Politica*, which its author Georg Engelhardt von Löhneyss dedicated to Duke Frederick Ulrich of Brunswick-Luneburg, proposed a commissarial hierarchy that ran from the high commissar (*Obristen Kriegs-Commissarien*) down to paymasters (*Zahlmeister*), provisions commissars (*Proviantmeister*), and chief quartermasters (*Obristen Quartiersmeister*). In the manner of the Habsburg and Bavarian commissariats, the main responsibility of *Aulico Politica*'s high commissar was the inspection and supervision of recruitment and musters. Löhneyss envisioned in his treatise a princely council of war (*Kriegsrath*), whose members, including the high commissar, would be appointed by the prince himself. The schematic presented by Löhneyss was essentially a copy of the *Hofkriegsrat*'s hierarchy and the division of duties among the Habsburg war commissars.[565] Löhneyss did not present in his treatise some rigid template that all German princes had to conform to but rather a set of general organisational principles. Individual German princes often modified existing commissarial precedents to suit their own circumstances. Therefore, when Elector John George mustered a Saxon army 20,000 strong

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563 Ibid., p. 6.
564 Kancelliets brevbøger, 1929, p. 216, 20 October 1627.
565 Löhneyss, 1622, p. 636.

in 1620, he did not subject its inspection to an *Obrist Kriegskommissar* but a *Kriegsrath und Generalkommissar*.[566]

In 1650 Ferdinand III reorganised the Habsburg military hierarchy by creating a new *Generalkriegskommissariat* as a separate institution from the *Hofkriegsrat*. The new *Generalkriegskommissariat* was designed to maintain fiscal supervision over the army while facilitating cooperation between itself, the *Hofkriegsrat*, and the *Hofkammer*, the last of which was evolving from a simple treasury into a ministry of economic affairs. In the view of John A. Mears, the *Generalkriegskommissariat* failed to streamline military administration as it merely complicated decision-making by adding yet another layer of intermediates in the already convoluted hierarchy that ran from the emperor to the army.[567]

It is worth considering why Ferdinand III established the *Generalkriegskommissariat* in the first place. One possibility is that he wanted to shift the accumulation of military authority from the general commissars of the hereditary lands to an institution that was more closely aligned with the interests of the Viennese court. Another projected outcome of the new commissariat might have been to prevent the emergence of a single, puissant general contractor such as Wallenstein, who had submerged the war commissariat's supervisory functions into the imperial army. The third and likely possibility was that Ferdinand hoped the reorganisation would enhance the administrative management of the new standing army. In this sense, the establishment of the *Generalkriegskommissariat* can be seen as a method of institutional transition from an aggregate-contract army during the Thirty Years War to the state-commissioned army that persisted until the end of the eighteenth century.[568] The reorganisation of the Habsburg military administration in 1650 is indeed difficult to see as a revolutionary change; rather, it represents a shift of focus, where the Austrian Habsburgs were less pressured into monitoring the activities of

566 Theatrum Europaeum, 1662, p. 305.
567 Mears, 1988, p. 139.
568 Lynn, 1996, pp. 516–519.

military subcontractors or colonel-proprietors and more incentivised to inspect the Habsburg hinterlands, which from now on provided the fiscal, material, and human resources of the new standing army.

Today most military historians associate the *Generalkriegskommissariat* with the institution set up by Elector Frederick William of Brandenburg in 1655. Like most armed German principalities, Brandenburg too had employed war commissars in the Thirty Years War to oversee musters, monitor the payment of salaries and fees, manage the collection and distribution of contributions, and make some effort to protect the electorate's civilian population from excessive burdens of war. The *Generalkriegskommissariat*, which Frederick William created after the Thirty Years War, was designed to operate as an umbrella organisation for the war commissars. Hierarchically, it was subordinated to the electorate's treasury or *Hofkammer*. The *Generalkriegskommissariat* radiated its own control down the military organisation by placing a high war commissar (*Oberkriegskommissar*) in each field army to organise and supervise all commissarial activities. In 1660 Frederick William appointed a *Generalkriegskommissar* to lead the commissariat, which also received its own war chest in 1676.[569] The commissariat soon accumulated a whole array of responsibilities, including tax collection, supervision of trade and manufactures, financing of new enterprises, and colonial ventures. As F. L. Carsten concluded, the sweeping military and financial powers of the *Generalkriegskommissariat* made it the single most important authority of the Hohenzollern state.[570]

The continued military relevance of Saxony after the Thirty Years War has often been eclipsed by the mercurial rise of its neighbour Brandenburg. Be that as it may, Saxony too created a standing army of its own during the reign of Elector John George III in 1680. To establish a standing force of 12,000 recruited soldiers, the 'Saxon Mars', as the martial elector was known, needed an instru-

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569 Hartung, 1922, p. 68.
570 Carsten, 1964, p. 551.

ment for obtaining manpower and permanent funding from the electoral Estates and for supervising finances. This instrument was the *Geheime Kriegsrath-Kollegium*, which was established in 1676. Its institutional predecessor had been the *Kriegs-Kanzlei*, which Elector John George I had set up in 1634–1635 to act as a chancellery for the Saxon *Generalkriegskommissar*. The *Geheime Kriegsrath-Kollegium* was headed by a *Generalissimus* and seconded by three *Generalwachtmeister*, who policed the army.[571] The actual business of the war college was conducted by war commissars, provisions commissars, and even a *Lazarethcommissar* in charge of hospitals and apothecaries. All matters relating to military provisions and remittances of money to the army were handled by the war college and its commissars.[572]

The emergence of early modern war commissariats was discussed in the sociological context by Otto Hintze in 1910. Hintze identified an indisputable connection between early modern state formation and the emergence of war commissariats. The war commissariats, Hintze argued, had been instituted to reign in the system of warfare that had been based on *condottas*, the hiring of contract soldiers, who were 'half military officers, half financial speculators'.[573] To facilitate their supervisory duties, the commissars were organised into a military hierarchy that operated under the direct authority of the field marshal or the supreme general. For Hintze, the benchmark for war commissariats was the *Generalkriegskommissariat* of eighteenth-century Prussia. Hintze understood the Prussian general war commissariat as an institution that disseminated state authority at various levels: the *Generalkriegskommissariat* as a central authority, the *Oberkriegskommissarien* at the provincial level, and individual war commissars at the 'localities', meaning the municipal districts known as *Ämter*.[574] The examples of eighteenth-century Prussia and Bourbon France

571 Poten, 1880, p. 246; Vehse, 1854, pp. 47, 50–51.
572 Hasche, 1783, pp. 486–487.
573 Hintze, 1910, p. 494.
574 Ibid., pp. 494–495.

led Hintze to make his most fundamental argument, which recognised the war commissariats as tools for enforcing 'monarchical discipline and absolutist state authority'.[575]

The institutionalisation of German war commissariats during the epoch of the Thirty Years War does not directly contradict the assertions made by Otto Hintze. While no German principality, even Habsburg Austria, qualified as a true absolutist state during the Thirty Years War, princely power in the Holy Roman Empire was nevertheless of such social depth that any notion of republicanism or rule by the Estates was inapplicable outside a few imperial cities. It is, therefore, not possible to be overly confident in understanding the war commissariats as tools of centralising princely authority in the context of the Holy Roman Empire and its member states. Furthermore, German military entrepreneurs were more independent-minded than those in other belligerent nations, and their ability to manipulate employers in pursuit of their own personal goals was amply manifested by Ernst von Mansfeld, Christian of Brunswick, Charles IV of Lorraine, Bernhard of Saxe-Weimar, and Albrecht von Wallenstein. The necessity to create a supervisory organisation that would have responded to the hierarchy of the military entrepreneurs was evidently there.

This last observation is a key notion in understanding the incentives for establishing war commissariats in Germany and elsewhere in Europe. Otto Hintze, who was writing in the first decade of the twentieth century, approached the problem of commissariats from the perspective of political science and did not include economics in his discussion. However, modern mainstream economics offers us a useful tool for understanding the war commissariats, namely the model of a principal–agent problem. In this model, the principal employs an agent to perform certain agreed services. What problematises the relationship between the principal and the agent is the asymmetry of information: the agent always knows which decision or action they themselves are going to take, but the principal is unable to observe or verify the

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575 Ibid., p. 526.

actions realised by the agent. If the principal cannot monitor the agent, the latter may depart from any contractual obligations simply because they can.[576] Under this schematic, it becomes possible to understand the war commissariats as institutional means for the principal (early modern state) to exert control over the agent (military entrepreneur) and to overcome the problem of asymmetrical information. Subcontracted mass armies simply could not be tethered to the interests of the principal state without the supervisory tool of a war commissariat.

The hierarchisation of the war commissariat, which Otto Hintze identified in his essay, was already discernible in the Austrian war commissariat in the late sixteenth century. The representation and idealisation of the Austrian commissarial model in print media such as Georg Engelhardt von Löhneyss's military-political treatise later promoted the institution of a stratified war commissariat throughout the Holy Roman Empire. As stratified institutions with several supervisory functions, the war commissariats were examples of what Jan Glete called complex organisations in the context of early modern warfare.[577]

The stratification of the German war commissariats also follows to some extent Niklas Luhmann's schematic of social subsystems that have been differentiated from the rest of the society. The German war commissariat of the Thirty Years War was neither a consistently self-reproducing social subsystem, like a modern-day scientific institute, nor a territorially segmented and socially incorporated institution, like the feudal cavalry service. Instead, it vacated an interstitial place between the old feudal order and the subsystematised modern society. The war commissariat of the Thirty Years War was, in many ways, a personalised institution in which patronage and venality played major functions, and not a modern collective agent in the sense of being only 'a sequence of messages' devoid of any personal agency. On the other hand, it was also a hierarchy that concatenated decisions and information

576 Spremann, 1989, p. 6.
577 Glete, 2002, p. 2.

in the manner of modern social subsystems.[578] The war commissariat produced 'military communication' (in Luhmann's sense) to itself in the form of muster rolls, receipts, orders, reports, and appeals. The copious amounts of archival material created, for instance, by the Austrian *Hofkriegsrat* from 1650 onwards, testify to the war commissariats' nature as highways and nexuses of communication. By the early eighteenth century the *Hofkriegsrat* included departments for general military administration, the Military Frontier, artillery, and military justice. The administrative behemoth continued to subdivide into and specialise in chancellery management, economic affairs for Austria, Bohemia, and Hungary, provisions acquisition, finances, and even its own section for the burgeoning archive work.[579] The aggregation of various powers, responsibilities, capabilities, and knowledge in the complex system of the German war commissariat agrees with the general tenets of the Military Revolution theory.

Commissars of the Oldenburg State

The commissarial institution in Denmark developed roughly along the German lines. In 1552 the Danish king Christian III had still delegated the housing, feeding, and upkeep of hired German *Landsknechte* to the local communities – particularly the trade towns or *kjøbsteder*. Instead of dispatching royal commissars to oversee and monitor the maintenance of the troops and their adherence to military contracts, the king asked the towns to send urban deputations to his court to inform him in person of the costs and details relating to the upkeep of the *Landsknechte*.[580] In the absence of any commissarial institution that would have managed the business of transferring salaries from the crown to the hired *Landsknecht* companies, the king ordered his provincial governors (*lensmænd*) to collect the required monies as taxes and

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578 Teubner, 2006, p. 50.
579 AT-OeSta/KA ZSt, Wiener Hofkriegsrat, 1557–1848.
580 Kancelliets brevbøger, 1885–1886, p. 109, 4 January 1552.

then remit them to the royal court.[581] In April 1559 we find the *lensman* of Viborg acting as an improvised war commissar over the garrison of *Landsknechte* in Viborg Castle, where the new king, Frederick II, instructed him to present the Articles of War to the mercenaries and to make sure that they would not mutiny. Frederick also instructed the stadholder and member of the state council (Rigsråd) Mogens Gyldenstjern to appoint one capable *Landsknecht* captain to maintain proper order and discipline over the rest of the garrison.[582] When there was some quarrel between the inhabitants of Dokkedal and the *Landsknechte* billeted in their town, Frederick summoned the *Landsknechte* to Copenhagen, where he would personally inspect them, pay their salaries, and discuss the details of the discord.[583]

Managing the details of military discipline, billets, salaries, and civilian grievances was an overwhelming amount of work for the monarch, stadholder, members of the Rigsråd, or even the provincial governors. The only possible recourse was to appoint specialist war commissars to oversee such matters. In January 1565, for instance, Frederick II instructed Peder Bilde, Sten Rosensparre, and Holger Rosencrantz to inspect troop musters in Malmö and to make sure that the soldiers would not create any 'nuisance' to the city's burghers.[584] Later in the summer Bilde and Rosensparre accompanied the Danish army in its campaign against the Swedes in Scania and Småland. They, together with the commander in chief Daniel Rantzau, reported to Frederick on military events and various issues relating to the condition of the field army – including the mercenaries' unwillingness to accept any reductions in pay.[585] Bilde, Rosensparre, and Rosencrantz all served at the time as provincial governors in either Jutland or Zealand, which

581 Kancelliets brevbøger, 1885–1886, p. 179, 14 August – 7 September 1552.
582 Kancelliets brevbøger, 1887, p. 269, 11 April 1559.
583 Kancelliets brevbøger, 1887, p. 395, 30 April 1560.
584 Kancelliets brevbøger, 1895, p. 551, 21 January 1565.
585 Regesta diplomatica historiae Danicae, 1895, p. 430, 12 July 1565, Daniel Rantzau and the war commissars to Frederick II.

meant that they went to Scania on a special commission from the king.

Gunner Lind described the sixteenth-century *Landsknechte* as 'a fiscal burden and a logistical problem' for the Danish realm. The mercenary *Landsknechte* had little common ground with Danish society, and they had no vested interest in Denmark other than the effective conduct of contracted warfare and procurement of promised pay.[586] The same structural forces that encouraged the principalities of the Holy Roman Empire to develop organisations to supervise and regulate hired mercenaries were also at play in Denmark. The development of a formal commissarial organisation, however, could only happen in the context of the noble-dominated Danish society and would have to reflect the stratification of the noble Estate. Therefore, the formal war commissariat that was employed in the Kalmar War of 1611–1613 was institutionally divided into the Rigsråd aristocracy, whose members were commissars in name only, and more hands-on war commissars, who were members of the provincial nobility (often Scanians and Norwegians).[587] The social differentiation between aristocracy and lower nobility was a structural feature that would endure until the introduction of absolutism in 1660 and in some cases even beyond it.

By the start of the Thirty Years War in 1618, Denmark already possessed an extensive institutional framework for the administration of the army and the supervision of the various military entrepreneurs. Much of the day-to-day military authority rested in the *Generalkrigskommissariat*, a fiscal-military institution subordinated to the treasury. The institution consisted of three general war commissars (*Generalkrigskommissæren*), who presided over Denmark, Holstein-Schleswig, and Holstein-Gottorp, respectively. During times of war, namely in 1625–1629 and 1643–1645, the general commissars assumed full military control over their designated jurisdictions. In practice, they oversaw the flow of

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586 Lind, 2001, pp. 580–581.
587 Lind, 1994, p. 286.

finances from the treasury to the troops, organised watches on the borders and coastal areas, and made strategic decisions relating to matters of defence.[588] There were nevertheless exceptions to this rule. One was the defence of the Danish Isles in 1628–1629, which was delegated to a committee of lower war commissars and officers supervised directly by Christian IV and the Rigsråd.[589] Another was the council of war (*Krigsraad*) that Christian established at Stade in 1627 to oversee the field army's operational activities during his own absence.[590] In 1628 the Rigsråd also pressured Christian into establishing the separate office of a general war treasury commissariat (*Generalkrigszahlkommissariat*) in return for additional taxation from the nobility. The treasury commissariat was set up to supervise the collection of wartime taxation and to channel the funds to the troops in cooperation with the marshal. Paul Douglas Lockhart has rightly identified the establishment of this institution as a major political gain for the aristocracy, as it gave the Rigsråd unprecedented powers over the formulation of defence policies.[591]

The responsibilities of the three general commissars were not separate, as they coalesced in the management of the joint *unionshæren*, a combined body of Danish and Holsteiner army contingents. The Duke of Holstein-Gottorp, it should be noted, was not the Danish king's vassal but his ally. The Duke of Holstein-Gottorp was bound to Denmark by a defensive pact originally concluded in 1533. This pact, which was renewed in 1637, stipulated that during times of war Denmark would provide 3,000 infantry and Holstein-Gottorp another 1,000 foot for a joint army to defend the two Holsteiner duchies against external enemies.[592] The initial manpower for these contingents would be provided

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588 Ibid., pp. 325–326, 333.
589 Lind, 2011, pp. 64–65.
590 Jahn, 1822, p. 261.
591 Bricka & Fridericia, 1889–1891, pp. 157–158, 5 July 1628, declaration of Christian IV; Lockhart, 1996, p. 183.
592 Adelung, 1762, pp. 15, 22.

by the *Ausschuß* militias, but after eight weeks the levies could be replaced by recruited soldiers.[593]

The institution of the land commissariat was not directly subordinated to the general war commissariat but rather was its own separate institution. Whereas the general war commissariat was financially dependent on taxes from Denmark and Norway that were circulated through the royal exchequer, the land commissariat maintained territorial defences and contingents from local sources. In the case of Zealand and Scania, the land commissariat was financed almost exclusively from local tolls and licences. On the island of Funen, the land commissariat received most of its funds from voluntary contributions raised by the local nobility. In Holstein, the *unionshæren* was financed by a range of taxes collected by the land commissariat from the Holsteiner Estates.[594] The institutional nature of the land commissariat evolved over the course of the Thirty Years War. The land commissars had been originally royal administrators (*kongelige embedsmænd*), but in 1645 their status was changed into a permanent representative organ of the noble Estate. The land commissariat, which was always an institution of the nobility, had not been of much assistance to the common war effort in 1625–1629 or 1643–1645. It was pathologically trying to secure tax reliefs, save revenue, and even to accumulate further capital for the land-owning elites. The fact that the nobility contributed to the war effort less than the other social strata did not escape the attention of the non-noble Estates.[595]

Subordinated to the general war commissariat were the regional war commissars. The war commissars were responsible for the practical organising of border patrols and coastal watches, as well as many aspects in the provisioning and billeting of the troops. Robert Monro recalled in his memoires how, during the Kejserkrigen of 1625–1629, the Danish war commissars inspected

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593 Rockstroh, 1909, p. 327.
594 Lind, 1994, p. 328.
595 Jespersen, 1981, pp. 90, 98.

the muster rolls of the recruited Anglo-Scottish regiments and issued royal patents of command to officers. The war commissars were also expected to mediate between the recruited soldiers and the local peasants in matters relating to contributions and billets, a duty they performed with varying degrees of success.[596] Monro related an incident in Zealand, where the Scottish soldiers and local peasants had gotten into a violent argument over the issue of billets. The argument escalated into a riot, and finally the Scots opened fire, killing four of the peasants. Monro blamed this incident on the Danish war commissar, who had failed to inform the peasants of their obligation to house the troops and had not been present to supervise the billeting.[597] Monro lambasted the war commissars: 'And it was pittie, such a King should entertaine so many of this sort of belly-gods, that studied nothing so much, as to fill their own Coffers, and to raise their houses, without any care had of the Publique Weale.'[598] During the Kejserkrigen, the war commissars on the island of Funen were identified specifically as billeting commissars (*kvarterkommissarierne*), whose main responsibility was to find accommodation for the companies. The commissars were also expected to enforce discipline among the billeted soldiers. The central government, however, regulated their actions by designating certain estates that were exempted from billeting.[599]

The war commissars appeared in somewhat different roles during Torstensson's War, when there were fewer supervisory duties relating to recruited foreign regiments. In the Scanian theatre of war, the military-commissarial duties were invested to the governors of Malmö and Kristianstad. They were assisted by two provisions commissars (*proviantkommissær*), whose main responsibility was to collect contributions 'that were deemed necessary for

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596 Monro, 1637, pp. 33–34.
597 Ibid., p. 61.
598 Ibid., p. 62.
599 Kancelliets brevbøger, 1929, pp. 211–212, 219, 236, 17–30 October
       1627.

the army's maintenance'.[600] The proviant commissars' secondary duty was the procurement of weapons and munitions for the Scanian troops.[601] In late 1644 one of the land commissars assumed the role of a proviant commissar in Scania.[602] The war commissars in Jutland and Funen were responsible for organising coastal watches but did not have any direct military authority themselves; all operational decisions in Jutland and Funen were made by Lord Marshal Anders Bille during Torstensson's War. In Zealand the provisional *generallandkommissær* effectively replaced the traditional land commissars as supervisors of matters pertaining to military preparedness. Some of the *generallandkommissær* also doubled as *lensmænd*, which blurred the distinction between military and civilian officials.[603]

After the cessation of hostilities in 1645, Christian IV appointed war commissars to the garrisons and strongholds in Holstein vacated by the Swedes. These commissars were responsible for providing the troops with money and victuals and for organising the collection of contributions from designated districts. They were also to make sure that the communities subjected to the contributions would not shrink from their responsibilities and that the contributions would not end up with the wrong recipients – for instance with the withdrawing Swedes.[604]

After the Thirty Years War, all commissarial duties were placed in the hands of the land commissars. This meant that all sources of military revenue and transactions of army pay were handled and controlled by them. Alongside with this reorganisation, all commissarial activities were subordinated to the lord marshal (*rigsmarsk*), who henceforth commanded both the army officers and the commissars. This reform, however, only applied to Denmark proper and not Norway or the Duchy of Holstein. All

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600 Kancelliets brevbøger, 1968, p. 115, 8 September 1644.
601 Kancelliets brevbøger, 1968, p. 138, 22 October 1644.
602 Persson, 2007, p. 287.
603 Lind, 1994, pp. 333–335.
604 Gazette N. 142, 1645, p. 1019.

military authority in Norway remained with the stadholder, while the commissarial apparatus in Holstein was trimmed down to just one war commissar and his assistants.[605]

During the Thirty Years War, the general war commissariat and the land commissars had responded to the institutional demands created by the employment of professional armies recruited on an ad hoc basis. One key institutional response to the realities of early seventeenth-century warfare was the maintenance of regionally separate war commissariats in different parts of the conglomerate Oldenburg realm. Tentative attempts to create a standing army consisting at least partly of native conscripts required new commissarial approaches from the Oldenburg state in the aftermath of the Thirty Years War. Two main trends emerged after 1648. One was the increased bureaucratisation of the war commissariat into a fiscal-military institution that carried on its work even during times of peace. Another was the subordination of native noble privileges to the needs of the Oldenburg state and its army, whose senior leadership consisted largely of foreign military professionals from the German duchies.[606]

The most profound reform after the Thirty Years War was the integration of the war commissars into the collegial system. By making commissarial activities, foremostly the monitoring of the army's internal functions and the control of resource flows between civilian society and the army, one facet of daily government functions, the Oldenburg state removed the previous necessity to seek compromises with the native noble Estate on issues of war finance and troop mobilisation. The ultimate war commissar of the Oldenburg state was now the monarch himself, who could claim the monopoly of organised violence along two bureaucratic chains of command, one military and one administrative. The nobility that had previously exercised great authority over military resource flows via the land commissariats, was not excluded from the new order but rather incorporated into it as a service elite. A position

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605 Lind, 2011, p. 86.
606 Kyhl, 1975; Kyhl, 1976.

in the commissarial hierarchy was no lesser source of pedigree, authority, prestige, or salary than an officer's rank in the army – a fact that was spelled out in the tables of ranks promulgated by the government between 1671 and 1693. Conversely the commissarial bureaucracy elevated commoners into the ranks of the nobility if their position in the administrative hierarchy called for it. The imposition of institutionalised state control over all aspects of the army and the reconfiguration of the native knightly nobility into a service elite, a process rightly identified by Robert I. Frost as a Danish Military Revolution, can be traced back to the difficult contingencies presented by the Thirty Years War to Denmark and Christian IV.[607]

Gunner Lind has proposed an extended taxonomy of early modern war commissariats based on the model originally developed by Otto Hintze. The supervisory commissars managed the payment and provisioning of armies, while also supervising aspects of military discipline. The proconsular commissars were administrators and representatives of the centralised state, and their activities later expanded into the fiscal-military administration of the Prussian-style general war commissariats.[608] In Hintze's schematic, the two types of commissars were merged together in the institution of the 'land commissars', who mediated between the aims of the central government and the interests of the grassroots communalities.[609] According to Lind, the proconsular commissars were eventually transformed into subordinate commissars, who were integrated into the armed forces as a support branch. The emergence of the subordinate commissars, effectively officers incorporated into the military hierarchy, corresponded with the institutional decline of the military entrepreneurs.[610] In his analysis of the Danish war commissariat, Lind identifies the supervisory commissars as the dominant type during the Thirty Years

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607 Frost, 2000, pp. 197–198.
608 Lind, 2011, p. 68.
609 Hintze, 1910, p. 526.
610 Lind, 2011, p. 68.

War, with some instances of subordinate commissars emerging as specialists already before 1648. The proconsular commissars, Lind argues, only made a fleeting appearance during the Second Northern War in 1655–1660 and made no lasting impact on later military-administrative arrangements.[611]

Gunner Lind's assessment of the Danish war commissariats appears reasonable, but it requires some further qualification in the context of the Thirty Years War. During Torstensson's War in particular, the categories of different war commissariats intertwined in a manner that defies neat taxonomies. While most Danish war commissars and general war commissars fell clearly into the supervisory category, the civilian land commissars continued to play a major institutional role by overseeing military remittances from the local provincial treasuries. Jurisdictional walls began to crumble as land commissars swiftly assumed the responsibilities of proviant commissars, while the *generallandkommissær*, who could also double as provincial governors, took over from the land commissars some of their traditional duties pertaining to the maintenance of military preparedness. Towards the end of Torstensson's War in 1645, this institutional enmeshment functioned as a true proconsular commissariat, when its reach did not only include the civilian and military hierarchies emanating from the central government, but also the local administrations and their interest groups.

The extensive and permeating network of commissarial offices connected the interests of the state and society in a shared pursuit of defending the realm and its provinces. Stefan Persson has described the war-making aspects of the Oldenburg state in 1643–1645 as a dialectical structure: a kind of dualism between centralising aims and negotiatory methods, with the war commissariat acting as a mediating force between state and society.[612] The high level of influence the Oldenburg state managed to exert over the wider society via its rambling commissarial apparatus cer-

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611 Ibid., p. 91.
612 Persson, 2007, p. 405.

tainly supports the tenets of the Military Revolution theory, but it also casts some doubts over the assumption of 'modernisation' as a driving force behind the transformation of war and the emergence of the power state and its monopoly of organised violence.

Instead of any modernising teleology, we can find in the Danish war commissariat entrenched privileges and deep-seated particularism. The war commissariats in Denmark, Holstein, Scania, and Norway were dominated by the local elites, who also manned the land commissariats, provincial governorships, and the central administrations. As Gunner Lind has argued, the main default line in the war commissariat ran between the Rigsråd aristocrats and the provincial nobility. The gap between the two strata of nobility further widened during the Thirty Years War, when the economic inequality within the noble Estate grew dramatically.[613] Because of its noble predominance, the Danish war commissariat did not harbour Weberian dialectics between the 'cultivated man', whose position derived from access to noble prebends and privileges, and the meritocratic 'specialist', whose claim to administrative authority rested on extensive education and refined skills.[614] At the intermediate level of the Oldenburg fiscal-military state, the agents of the Military Revolution were first and foremost members of the old feudal elites.

The major transition occurring in the Danish war commissariat during the seventeenth century was the shift from commissarial committee work to a hierarchical system that was integrated into the armed forces' chain of command. After 1660, regional military commands were headed by officers, and the war commissars were subordinated to them. Although war commissars still derived from the noble stratum, they were of lesser institutional status than their superiors in the military chain of command. This process, which Gunner Lind calls the 'militarisation' of the war commissariat, can also be seen in the light of Niklas Luhmann's

613 Lind, 1994, pp. 286, 393.
614 Weber, 1978, pp. 1000–1002.

systems theory.[615] For much of the Thirty Years War, the Danish war commissariat functioned as a set of regional committees. This system corresponds with Luhmann's schematic of a premodern society that was regionally segmented into separate spheres of authority. In the aftermath of the constitutional strife that characterised the years 1645–1648, the war commissariat became more subordinated to the lord marshal and the army's chain of command. In this development we find similarities with Luhmann's proposition that the regionally segmented feudal order was replaced by a hierarchical Estate society in the early modern era. The war commissariat's emergence as a container for various specialist skills, capabilities, knowledge, and forms of communication corresponds with Luhmann's thesis of the modern society as an aggregation of various specialised and self-referencing subsystems.[616]

Swedish War Commissars

Swedish war commissariats emerged simultaneously with their Danish counterparts during the First Northern War in 1563–1570. Three war commissars can be identified in the Swedish military expedition to Norway in 1567. Their main duty was most likely the collection and redistribution of contributions.[617] Another likely field of work was the administration of military justice, but unlike their Danish colleagues, the Swedish war commissars would not have had to spend time perusing the contractual obligations of hired *Landsknechte,* as the Swedish troops in the Norwegian campaign consisted of native militiamen, conscripts. According to royal instructions from 1618, the muster commissars were to separate able-bodied men from those who were too old or too infirm to serve as soldiers. The muster commissars double-checked the muster rolls against the lists of designated conscripts

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615 Lind, 1994, p. 370.
616 Luhmann, 2013, pp. 1–167.
617 Anrep, 1858, p. 102; Anrep, 1862a, p. 685; Anrep, 1862b, p. 572.

and recorded ages, places of dwelling, and other characteristics such as profession or social status. Because many peasants, such as demesne tenants, were exempted from military service, the qualifications for exemption would also have to be identified and monitored by the muster commissars. The musters of volunteer cavalrymen also involved a screening process to remove those unfit for service as well as inspection of the required trappings, such as adequate horses, body armour, pistols, and swords. All the monies paid to the soldiers at the musters was to be audited, approved, and recorded by the muster commissars.[618]

During the successive wars against Poland–Lithuania between 1617 and 1629, the commissarial office became hierarchically aligned with the stadholders and subcontracted provisioners, therefore inhabiting an intermediate position between the army and the central government in Stockholm.[619] The main challenge for the war commissars in this period was the de-monetisation of the Swedish war economy following the Knäred Peace (1613), under which Sweden agreed to ransom the Danish-held port of Älvsborg for the eye-watering sum of 1,000,000 thalers. The resulting scarcity of cash meant that the soldiers in Swedish service often had to be paid in kind, typically in portable foodstuffs. Subsequently, the Swedish war commissars would be preoccupied with procuring provisions from whatever authority or administrative organ happened to be nearby – stadholders, castellans, bailiffs, or private subcontractors.[620]

The early years of Gustaf Adolf's reign also saw the introduction of new military-administrative offices. The lord armourer (*rikstygmästare*) oversaw the procurement and maintenance of royal ordnance, with special focus on the inspection of foundries and factories that produced artillery and ammunition.[621] The lord

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618 Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 1888b, pp. 113–115, 4 February 1618, Gustaf Adolf's memorial to Axel Oxenstierna, Bror Andersson, and Herman Wrangel.

619 Korhonen, 1939, p. 77.

620 Ibid., pp. 76–77.

621 Edén, 1902, pp. 271–272.

armourer cooperated closely with the treasury, often comparing procurement contracts with actual deliveries and schedules.[622] Gustaf Adolf also created the offices of *generalproviantmästaren* and *generalvaktmästaren* above the existing war commissars. The former office corresponded with the Habsburg *Proviantmeister*, while the latter was similar to the lord provosts and intendents of military justice of other European armies.[623]

The reign of Gustaf Adolf also saw an expansion in the scope of activities undertaken by commissars in the theatres of war. The wide range of duties delegated to Erik Andersson, the war commissar in Livonia in 1628–1629, was staggering: he was to make sure that the private loans made to the crown by Governor General Jacob De la Gardie matched the defrayments from the treasury, to inspect fortifications and troops, to supervise the maintenance of the military hospital, to oversee the shipyards in Riga, to arrange the payment of soldiers' wages, and to try to raise loans and contributions in Livonia, Riga, Narva, and Reval.[624]

The instructions that Andersson received from Gustaf Adolf in connection with his German war commissariat in 1630 were even more all-encompassing. Andersson was to take responsibility over all aspects of military economy (*krigsstat*) in Pomerania and Mecklenburg. Gustaf Adolf listed six areas that fell within Andersson's economic purview: money, food, artillery, river vessels, billeting, and fortifications.[625] The king also expected Andersson to inspect and review troops, particularly reinforcements as they arrived in Germany. Vigilant Andersson indeed discovered a case in which a company commander had drawn salaries for non-existent soldiers – a common scam among military proprietors. The fraudulent captain had also expropriated food and other necessities appointed to the non-existent soldiers and then sold the goods for personal profit. Andersson reported the malprac-

622 Ibid., p. 273.
623 Ibid., p. 274.
624 Korhonen, 1953, p. 185.
625 Ibid., p. 270.

tices to Gustaf Adolf and ended his letter with a lively allegory: 'A mouse has ruled over Your Majesty's pantry, as often happens when no cats are at home.'[626] The war commissar was to be the cat in this parable.

The Swedish commissarial institution remained limited and thin throughout the Thirty Years War. Many administrative and logistical functions that were performed by war commissars in other militaries were carried out by operational commanders in the Swedish armies. Andersson himself criticised the practice (introduced by high commander Johan Banér) in which operational colonels organised the recruitment for their regiments and controlled the collection and reallocation of contributions. These practices had led to a proliferation of under-strength regiments and excessive extractions from civilian communities, Andersson complained to Chancellor Axel Oxenstierna in 1632.[627] James Turner, who had himself served under Swedish colours in 1633–1639, identified another problem in the multiplication of under-strength regiments, namely the growth in the proportion of officers versus soldiers, which made the Swedish armies top-heavy.[628]

Johan Banér nevertheless continued to develop the field administration of the Swedish armies in a direction that more resembled the operational management of Mansfeld's mercenary host than the bureaucratic remote control of the imperial army. One casualty of Banér's reforms was the office of the field colonel general, which became redundant. According to Turner, the Swedish armies were subordinated to a single 'Commander in chief of an Army', a position that had been held by Banér, Lennart Torstensson, and Carl Gustaf Wrangel. These field marshals had been seconded in command by generals. The Swedes had dispensed with the separate 'Marshal of the Camp' or field colonel general and fused his functions with that of the commander in chief. The concentration of operational and logistical command in the hands

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626 Ibid., p. 277.
627 Ibid., p. 331.
628 Turner, 1683, pp. 199–200.

of a single field marshal was a recent development that had only taken place during the Thirty Years War: 'A Felt-marshals absolute command of an Army, as I said before, is of no old date, for in my time *Ilo* was Felt-marshal to *Wallenstein*, *Gustavus Horne* to the King of *Sweden*, *Kniphausin* to the Duke of *Lunenburg*', Turner reminisced in his treatise.[629]

Whereas the general war commissariat became an entrenched institution in many armies during the Thirty Years War, the Swedish general war commissariat in Germany existed sporadically in varying locations and with vacillating aims. By late 1630, Gustaf Adolf's main field army in Pomerania was already accompanied by the general war commissar (*generalkommissarie*) Joachim von Mitzlaff, who helped the king to organise billets and to collect and reallocate contributions.[630] After the king's death in 1632, Mitzlaff became an outright nuisance. He quarrelled with operational commanders and even incited mutiny among the German officers.[631] Mitzlaff was discharged in 1634, after which he found new employment with Duke William of Weimar.[632]

When Erik Andersson was appointed as the general commissar of Lower Saxony in 1634, he was issued with an ill-defined set of duties. His main task was to 'conserve and improve' the condition of the field army and its support areas. Other duties involved the setting up of magazines, recruitment efforts, and the collection of contributions in a manner that would not excessively burden the civilian population. Andersson's most dubious task was to supervise that military plans would be drawn in accordance with the 'general interest'.[633] The substance of this instruction remained unclear. Andersson was prohibited from entering councils of war

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629 Ibid., p. 247.
630 Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 1897, p. 27, 20 January 1631, Gustaf Adolf's memorial.
631 Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 1897, pp. 248–278, undated 1635, Gustaf Horn's account of his strife with Joachim von Mitzlaff.
632 Engerisser, 2007, pp. 302–303.
633 Korhonen, 1953, p. 419.

uninvited, which meant that as a general war commissar he did not outrank the generals. Arvi Korhonen inferred convincingly that the instructions complicated Andersson's position: he was expected to keep an eye on the expediency of military operations, but if there were any disagreements over military conduct, the fault would be his alone.[634] Andersson resolved this conundrum by assuming an operationally active role instead of just remaining as an administrator. This decision cost him his life: Andersson was killed while leading an assault against the outworks of Minden in October 1634.

Erik Andersson's death and the collapse of the Swedish military position in Germany following the disastrous defeat at Nördlingen in November 1634 left the general war commissariat in a shambles. Andersson's immediate successor was Alexander Erskine, the resident Swedish diplomat in Erfurt. In December 1635 we find Erskine helping Johan Banér to organise winter quarters for reinforcements from Prussia, but otherwise Erskine's activities as a general war commissar remain unclear.[635] In late May/early June 1636 Banér was complaining to Oxenstierna how the army's finances were in disarray because of Erskine's cavalier attitude towards instructions, record-keeping, and maintenance of receipts.[636] In August Oxenstierna nevertheless dispatched missives to Erskine instructing him of certain exemptions from contributions and billeting granted to the Duke of Mecklenburg.[637] By November 1636 Erskine was no longer with the army, and Banér had no idea where he was or how he might be found. 'The army is now divested of general commissars, provisions masters, and

634   Ibid., pp. 419–420.

635   Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 1898, p. 269, 29 December 1635, Johan Banér to Axel Oxenstierna.

636   Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 1898, p. 338, May–June 1636, Johan Banér to Axel Oxenstierna.

637   SRA, Alexander Erskeins samling/E 3588/fol. 9, 16 August 1636, Axel Oxenstierna to Alexander Erskine.

other such necessary officials [*ministris*],' Banér lamented to the chancellor.[638]

After the low point of Alexander Erskine's tenure, the general war commissariat in Germany was staffed by more competent incumbents. It was initially expedient to maintain the general war commissar in Pomerania, which remained the only area of solid Swedish support in the years following the disaster at Nördlingen.[639] In the Duchy of Pomerania, one general war commissar would cooperate with civilian officials, who inventoried the duchy's existing arsenals and dispatched the accumulated archive materials to Stockholm. Meanwhile, another general war commissar was appointed to the main field army (*huvudarmé*) under Johan Banér's command.[640]

This reorganisation of the general war commissariat in Germany coincided with the implementation of the new form of government that was drawn up by Axel Oxenstierna in 1634. This essentially reorganised the Swedish government on a collegial basis. The army was subordinated to the war college (*krigsråd*), which was headed by the lord marshal (*riksmarsk*). The executive board of the college consisted of field marshals, castellans, and the lord armourer (*rikstygmästare*). Their extensive purview included the inspection of all troops, the inventorying of weapons and ammunition, the oversight of conscription, recruitment, and musters, and the maintenance of castles and fortifications. The board was assisted in its demanding field of work by secretaries, notaries, and copyists, who kept protocols of meetings and drew up official documents. The final word on all fiscal decisions rested, logically enough, with the treasury (*Rentekammer*).[641] The war college (soon renamed as *krigskollegium*) had a difficult start,

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638 Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 1898, p. 348, 19 November 1636, Johan Banér to Axel Oxenstierna.

639 Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 1898, p. 523, 6 May 1638, Johan Banér to Axel Oxenstierna.

640 SRA, RR/B194/fol. 560, 7 June 1638.

641 Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 1888a, pp. 259–260, 29 July 1634, Form of Government.

and it was not until 1636 that it began to have any real effect over its myriad responsibilities. It was also from 1636 onwards that it started to effectively function as an appellate court for the supervision of military justice in the regiments and the handling of high-profile court cases.[642]

The most profound aspect of the form of government was the institutionalised separation between military and civilian spheres of authority. The new provincial governors (*landshövdingen*) were prohibited from assuming command over military forces, while military officers were denied any reason to meddle with civilian administration – especially its finances.[643] Interestingly enough, the provincial governors were to assume the roles of war commissars (*Krigs-Commissarius*) in home territory. The governors were instructed to provide council to field commanders, muster troops, and to arrange billets and provisions.[644] The form of government, however, made no reference to the general war commissars or any other war commissars in Germany. The Swedish war commissariat remained a practical arrangement rather than a formalised institution.

The last decade of the Thirty Years War saw an increase in the number of Swedish general commissars. In late 1638 the Stockholm government sent the diplomat Lars Grubbe to assist Johan Banér as a general commissar. One of Grubbe's chief duties was to inspect and compile muster rolls, which he was expected to send to Stockholm twice a year (every first day of May and November).[645] Later, Christian Lehmann's Saxon chronicle identifies a Swedish general commissar (*General-kriegs-Commißarius*) in Erfurt and a treasurer (*Caßirer*) in Chemnitz in 1643. The latter issued missives from Chemnitz ordering all dues, sales taxes, licences, and tolls formerly belonging to the Duke of Saxony to be delivered to

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642 Odhner, 1865, pp. 147–148.
643 Rikskansleren Axel Oxenstiernas skrifter och brefvexling, 1888a, pp. 272–273, 29 July 1634, Form of Government.
644 Ibid., p. 279.
645 SRA, RR/B195/fol. 1094, 8 December 1638.

the Swedish war coffers. The revenues were then sent to Erfurt, where the general commissar redistributed them to the Swedish regiments.[646] The general commissar in Erfurt also collected contributions to the Swedish 'Kriegs Cassa' from the neighbouring German princedoms, such as Anhalt.[647]

After the Thirty Years War, the Swedish war commissariat became more institutionalised within the structures of the domestic government. Yet another major war with Denmark in 1656 necessitated the establishment of a general commissariat on home territory to oversee the recruitment of certain specialist troops such as dragoons. Other war commissars operating under the direct authority of the *krigskollegium* supervised the maintenance of fortifications, magazines, and ammunition stores.[648] In the Danish theatre of war, the Swedes divided the occupied territories into logistical quarters supervised by war commissars. Each war commissar was responsible for extracting resources and revenue from his assigned quarter for the maintenance of the Swedish field army. The collected contributions were no longer simple fire-ransoms extorted from villages and towns in piecemeal fashion but instead official Danish revenues and regal rights that were redirected to the Swedish war commissars. This was essentially the same system of contribution collection that the Swedes had employed in occupied Saxony in the 1640s, but on a larger scale and in a more systematised form.[649]

The institutional arc of the Swedish war commissariat questions the applicability of the Military Revolution theory to the Thirty Years War, which is somewhat surprising given the centrality of early modern Sweden behind the historical thought of Michael Roberts. But as far as the Swedish war commissariat is concerned, the evidence supporting the emergence of effective and extensive

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646 Lehmann, 2013, pp. 147–149.
647 Krauze, 1866, pp. 216–217, 30 August 1643, general commissar Peter Brandt to Prince Augustus of Anhalt-Plötzkau.
648 Carlbom, 1905, pp. 78–79.
649 Englund, 2000, pp. 524–525.

state control over the armed forces during the Thirty Years War is simply not there. The Swedish war commissariat may have developed simultaneously with its continental counterparts in the mid-sixteenth century, but its scope of activities remained limited up until the outbreak of the Thirty Years War. Even then, Sweden was a latecomer to the development of general war commissariats, which only appeared in Gustaf Adolf's armies in 1630.

Jan Glete has identified early modern military organisations as social containers of technical, commercial, and administrative competencies. He also argued that early modern Sweden enjoyed an advantage over other contemporaneous realms in bureaucratic skills relating to tax collection, recruitment of soldiers, and procurement of military supplies.[650] The inconsistent performance of the Swedish war commissariat in the Thirty Years War, however, questions some of Glete's assertions. The main challenge to the Swedish war commissariat in Germany was commissarial competence. Modern economics identify core competencies as the true competitive advantages for any firm. Competencies are understood as aggregations of assets, skills, and knowledge that require focus for competitive effectiveness. The process of utilising competencies is known as a competence cycle. First, the organisation needs to identify its core competencies that are then translated into new processes, products, and services. This translation then allows the organisation to learn from the competence cycle by a systematic review and to develop or acquire new competencies. These new competencies are then identified, and the competence cycle starts all over again.[651]

The competence cycle of the Swedish war commissariat was woefully dysfunctional during the Thirty Years War. There was some rudimentary understanding about the expected core competencies for war commissars (administrative experience, fiscal innovation, military authority, access to private resources), but these competencies were not identified or realised in any

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650 Glete, 2002, pp. 58–59, 210.
651 Tidd, 2006, pp. 6–7.

systematic or consistent manner. Erik Andersson, who was in many ways an exemplary war commissar, eventually got lost in the competence cycle when he began to assume operational functions instead of developing his core competencies as a general war commissar in the field of fiscal administration. The choice of the diplomat Alexander Erskine as his successor testifies of the Swedish military state's failure to identify and apply core competencies for the war commissariat's benefit. Erskine was not only an incompetent general war commissar, but even a detrimental one, as his desertion left the Swedish field army without any commissarial functions. Later Swedish war commissars in Germany were more competent, but their employment hardly led to any translation of core competencies into new commissarial capabilities and skills. To put it bluntly, the Swedish war commissariat of the Thirty Years War cannot be regarded as a consistent social container of technical, commercial, administrative, military, or any other competencies.

The Swedish war commissariat of the Thirty Years War was problematic in the context of organisational hierarchy as well. In the idealised Weberian model of rational organisation, organisational roles are not intermingled but instead distributed in a logical way – in other words, divided in a manner that makes their every holder a specialist in their own field of functions and 'executive powers'. In addition to this, the roles are organised hierarchically so that the specialists occupy lower hierarchical positions, while the controllers and supervisors stand at the top of the hierarchy. This hierarchical and differentiated entity then carries out its 'organised action'.[652] However, as Zygmunt Bauman has pointed out, such an idealised arrangement of roles is not always attainable in modern organisations, let alone in premodern ones.[653] Contrary to the expectations of Weberian sociology, Swedish general war commissars operated in Germany without clearly defined powers and duties, often occupying multiple specialist roles themselves.

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652 Weber, 1978, p. 48.
653 Bauman & May, 2001, p. 50.

The nature of the Swedish war commissariat changed with the introduction of royal absolutism and the implementation of the *indelningsverk* during the reign of Charles XI. War commissars ceased to be intermediates between overseas field armies and the central government in Stockholm and instead became personal agents of the monarch.[654] Such subordination of the war commissariat to the personal rule of an absolute monarch undermines the notion of the Swedish war commissariat as a true social subsystem as defined by Niklas Luhmann. It also questions the possibility that the war commissariat could have ever completed any competence cycles while being tethered to the will of the monarch. Michael Roberts himself argued that the combination of the *indelningsverk* and the king's personal rule 'preserved Sweden from the possibility of anything resembling the Great Elector's *Generalkriegskommissariat*, with all the social and constitutional consequences that flowed from it'.[655]

Michael Roberts's argument is essentially true, but this development also undermined the concept of Carolean Sweden as a true 'power state' in which state authority was embedded in impersonal administrative structures, as proposed by Michael Mann.[656] The appearance of the war commissariat as a royal domain instead of an administrative automaton that could continue to function predictably even in the monarch's absence does not agree with the institutional and constitutional assumptions of the Military Revolution theory, which sees the period 1560–1660 as a mediator between the medieval society of feudal domains and the modern bureaucratic-territorial state. The institutional arc of the Swedish war commissariat from the Thirty Years War to the age of absolutism was one of stultification rather than progressive change. In this sense, paradoxically enough, the Swedish war commissariat in the *stormaktstiden* (Age of Greatness) of Charles XI and XII

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654 Starbäck & Bäckström, 1886, p. 794.
655 Roberts, 1965, p. 168.
656 Mann, 1988, pp. 5–9.

offers one of the least convincing case studies to support the Military Revolution theory.

Comisarios in Spain and Portugal

In the sixteenth century, Habsburg Spain had managed to develop robust and extensive administrative tools for regulating military procurement, recruitment, and transfer of resources. In 1544 Francisco Duarte was appointed by Charles V as the 'inspector [*veedor*] and general commissar [*comisario general*] of His Majesty's armadas and armies'.[657] The Viceroy of Naples employed war commissars in 1565–1566 to muster German mercenaries and to see that they were dismissed at the end of the campaign season.[658] Between 1567 and 1581 the royal commissariat in Seville controlled provisioning of the Mediterranean galley fleet, North African garrisons, transatlantic fleets, and even an army of 35,000 men that was being mustered in Castile for the invasion of Portugal.[659] The logistics of the Portuguese invasion force were initially supposed to be controlled by a single provisioner-commissar general (*Proveedor y Comisario General*), whose purview would have included both the army and the armada. The number of commissarial duties invested in a single office, however, proved to be unpractical, and in 1580 the office was divided into two commissariats for the navy and army, respectively.[660] The disposition to concentrate many commissarial duties into single hands nevertheless continued until the very eve of the Thirty Years War. In November 1617 Count Osuña, the Viceroy of Naples, recommended to Philip III that his own secretary should be made into the 'Commissar General and Superintendent of the royal facto-

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657 Fagel, 2001, p. 369.
658 Miraflóres & Salva, 1857, p. 67, 16 January 1566, Philip II to Viceroy Pedro Afán de Ribera.
659 Thompson, 1992, p. 13.
660 Miraflóres & Salva, 1859, p. 388, 20 April 1580, Philip II to the Duke of Alba.

ries, fortifications, castles, towers, bridges, roads, and other royal works in this kingdom [Naples]'.[661]

From the 1590s onwards, the central government in Madrid began to devolve commissarial functions to non-state agents. The refeudalisation of the Spanish military in the 1630s shifted much of the responsibility for administering and inspecting troops to the landed elites and urban communities. In Castile, royal inspection of musters was being carried out by the traditional judges (*oidores*) and commissioners (*consejeros*) on an ad hoc basis.[662] Perhaps the most profound means of military-administrative devolution was the *asiento*, in which the crown contracted out procurement and administration to private agents. This solution emerged from pragmatism rather than principle: Spanish premier Olivares himself admitted that he would prefer to maintain procurement and inspection in royal hands, but only if the necessary costs could be anticipated and the responsible ministers would be up to their tasks. Real-life experience, however, had shown that contracting out such duties was a safer bet.[663] Although the employment of *asientos* meant that military entrepreneurs would be monitoring other military entrepreneurs, Olivares retained measure of control over commissarial functions by making sure that the fiscal-administrative *asientos* would be granted to a limited and experienced group of established military entrepreneurs, often Genoese financiers and Portuguese contractors.[664]

Subcontracted war commissars acted as intermediaries between other military entrepreneurs and the Habsburg central government, which consisted of councils (*consejos*) and their subcommittees or *juntas*. Established by Philip II, the conciliar government was headed by the council of state (*Consejo Real*), which had no president but was convened by the king himself.[665]

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661 Pidal, Miraflóres & Salva, 1865, p. 142, 14 October 1617, Count Oñate to Philip III.
662 Thompson, 1992, p. 7.
663 Ibid., p. 21.
664 Ibid., p. 22.
665 Lynch, 1969, p. 17.

Subordinated to the council of state were all other councils, including the council of war (*Consejo Guerra*) and the treasury (*Hacienda*), which together saw to the needs of the military: the former provided the army with men and military justice, the latter with money and matériel. What complicated this division of duties from a military-administrative perspective was the fact that receipts and expenditures were audited by the accounts office (*Contaduría Mayor de Cuentas*), which was part of the council of state. Credit contracts were ultimately scrutinised and inspected by the council of state itself, which meant that commissarial duties were spread between the council of state, its accounts office, the council of war, and the treasury. The already complex conciliar administration was made a veritable maze by the fact that all the councils had their various *juntas* to oversee specific jurisdictions and areas of policymaking. There was nevertheless some hierarchical order to this chaos, as all members of the council of state belonged to the council of war as well.[666]

Because most of Spain's armies were raised and maintained outside the realm's Castilian heartlands, most of the practical commissarial functions too were performed beyond the conciliar government and its *juntas*. Wherever they were stationed, the Spanish *tercios* were administratively compact enough to be self-policing in a manner similar to the German *Landsknechte* of the sixteenth century. A quartermaster (*furriel mayor*) was responsible for securing billets for the army, although the actual distribution of the quarters fell to the responsibility of the sergeant major. The same division of duties also applied to the procurement and distribution of provisions, clothing, and munitions. Royal officers, or rather officials of the local Spanish sub-administration, designated and authorised the allocation of billets and deliveries of supplies. A captain provost (*capitán barrachel*) operated in the capacity of a military police officer and maintained discipline during marches and in billets. He also supervised the civilian baggage train and its sutlers, who might be tempted to cheat the soldiers

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666 Stradling, 1988, pp. 27–28.

with immoderate prices or tampered weights.[667] Military justice in the *tercios* was delivered by the *auditores*, who answered to the army's auditor general.[668]

The *Maestro de Campo General* commanding the *tercio* was expected to keep records of his troops strengths and to report casualties, deserters, and stragglers to whichever officer happened to act as an inspector general (*veedor general*) in the surrounding district.[669] One Spanish peculiarity was the office of the general commissar of the cavalry. The cavalry commissar was an operational rank between the cavalry general and the captains. It was he who issued orders and instructions to the company commanders and reported back to the general on the outcome of the cavalry actions. He also adjudicated over the company commanders and issued possible reprimands or punishments to the cavalry officers.[670]

Commissarial powers in the Army of Flanders, Spain's main military tool in the Thirty Years War, were distributed among several officers and institutions. Regionally, the governors and castellans of fortified localities exercised commissarial authority over their jurisdictions. Institutionally, the closest equivalent to a general war commissariat was the Military Superintendency of Flanders (*Superintendente de la Gente de Guerra de Flandes*), whose leader was also the governor of Bruges.[671] The captain general had his own general staff, which included a secretary of state and war – a civilian administrator at the head of a group of bureaucrats, who effectively ran the captain general's field chancellery.[672] From 1631 onwards there was also the governor of arms (*Gobernador de las Armas*), whose initial duty was operational coordination between infantry and cavalry. In the 1640s his office was trans-

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667 Albi de la Cuesta, 2019, p. 90.
668 Ibid., p. 218.
669 Clonard, 1853, p. 426.
670 Basta, 1616, pp. 5–7.
671 González de León, 2009, pp. 28–29.
672 Ibid., pp. 31–32.

formed into that of the army's treasurer, which further muddled his ill-defined responsibilities.

A decree on new contributions paid by various officeholders in Brabant in 1631 reveals some of the lower commissarial posts beneath the superintendency and the captain general's staff. There was the paymaster general (*pagador general*), accountants for army and artillery (*Cótadors de l'exercito & artillerie*), inspector general of victuals (*Proveedor general de Viures*), a trustee for cash remittances (*Depositaire general*), accounts clerk (*Contador de la Sala de cuentas*), accounts supervisor (*Advocat Fiscal de la Sala*), officers of the inspector general (*Officiaux Majors de la Veedorie*), paymasters, accountants, and secretaries of war, regular and provisional muster commissars (*commissaires ordinaires & extraordinaires des monstres*), artillery commissar (*commissaire ordinaire de l'Artillerie*), and various auditors and secretaries forming a sub-intendency of military justice (*Surintendancy de la Justice militaire*).[673]

Finally, even the mighty captain general had his own royal supervisors, the inspector general (*Veedor General*) and the superintendent of military justice (*Superintendente de la Justicia Militar*). The former inspected the army's expenditure, while the latter was to supervise military justice in consultation with the captain general. Although both officers were nominally independent and answerable only to the king himself, in practice their authority became dependent on the amicability and cooperation of the captain general, as Fernando González de León has pointed out. Because the captain general was also the governor general and the de facto ruler of Spanish Flanders, the ultimate commissarial authority in the Army of Flanders rested in him.[674]

Smaller Spanish armies and expeditionary forces tended to have their own ad hoc war commissariats. The Spanish invasion force of the Lower Palatinate in 1622 was accompanied by a *comisario general*, who resided in the Spanish garrison at Meisen-

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673 Mercure François, 1633, pp. 605–606.
674 González de León, 2009, p. 32.

heim.[675] A special inspector (*veedor*) in Oppenheim was responsible for assigning billets to the Spanish troops operating in the Palatinate.[676] The salaries of the Spanish armies in Germany and Bohemia were audited by a royal inspector general, who was also a member of the *Consejo Guerra*.[677] The Spanish–Portuguese armada, which was sent to recover Pernambuco in 1625, included an inspector general of the armada and ground forces (*Veedor general de armada y ejército de tierra*), a general provisioner (*Proveedor general*), two muster commissars (one of whom doubled as an accountant), and three ordinary war commissars. The expedition was also accompanied by an auditor general, his five assisting auditors, and a fiscal representative of the *Hacienda*.[678]

The Neapolitan contingents that fought at Nördlingen in 1634 were supervised by their own *comisario general*, one Alvaro de Quiñones, whose personal valour in battle was said to have greatly contributed to the Spanish-Imperialist victory over the Swedes.[679] In Naples itself there also existed the office of *General comisario de campaña*, whose task was to fight the troublesome bandits of that realm.[680] Franche-Comté fell under the commissarial jurisdiction of the Milanese governor. In 1646 the new governor of Milan, the Duke of Frías, placed several war commissars along the Spanish Road from Naples to Franche-Comté to organise troop movements and billets and to set up magazines for provisions. Frías also appointed a new commissar general to supervise the administration of the logistical line from Italy to Franche-Comté.[681]

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675   Miraflóres & Salva, 1869, p. 184, 11 May 1622, extension to the armistice in the Palatinate.
676   Miraflóres & Salva, 1869, p. 162, 13 April 1622, Pablo de Bahe to Gonzalo Fernandez de Córdoba.
677   Miraflóres & Salva, 1869, p. 177, 30 April 1622, grants to the tercios in Bohemia by Count Oñate.
678   Miraflóres & Salva, 1870, pp. 106–109, year 1625, ministers and officials of the armada and the army.
679   Miraflóres & Salva, 1853, p. 463, the viceroys of Naples.
680   Ibid., pp. 197, 201.
681   Gazette N. 52, 1646, pp. 344–345.

The establishment of a native army in breakaway Portugal in 1640 also necessitated the creation of an executive administration to oversee recruitment and provisioning of the new armed forces. The council of war (*Conselho da Guerra*) appointed officers for both army and navy, supervised fortifications, arsenals, foundries, and military hospitals, and generally coordinated the Portuguese war effort. Its ten permanent members were all men of military experience, although members of the council of state (*Conselho da Estado*) also had the right to attend its meetings (which they rarely did). Subordinate to the council of war was a subcommittee called *Junta da Fronteira*, which was responsible for the supply and defence of frontier regions.[682]

The main field of work for the council of war was the supervision and regulation of the new standing army. In 1644, therefore, the councillors reminded King João IV of the necessity of drawing up military ordinances (*ordenanças*), without which 'no army can be well governed or disciplined'.[683] Fernando Dores Costa has indeed argued that the council of war had a central role in the articulation of the ordinances, and that instead of being merely an advisory body to the king, the council actually made executive decisions regarding the inspection and surveillance of military organisation and justice.[684] Perhaps inevitably, the council of war engaged in jurisdictional disputes with other councils and agencies, namely the Colonial Council (*Conselho Ultramarino*), which governed all overseas colonies and the maritime forces, and the Supreme Court (*Desembargo do Paço*), which nominated all higher magistrates, resolved disputes and appeals, and regulated privileges.[685]

The council of war enjoyed a mostly frictionless relationship with the *Junta dos Três Estados*, a conciliar subcommittee, which fixed and reallocated war taxation and audited military finances.

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682 Godinho, 1964, p. 390; Tengwall, 2010, pp. 144–145.
683 Costa, 2009, p. 384.
684 Ibid., p. 385.
685 Costa, 2009, p. 393; Godinho, 1964, p. 391.

The reason behind this, Costa suggests, was the reluctance of the council's military men to become too deeply involved in the complicated minutiae of fiscal administration.[686] The tacit separation of military and fiscal administration, which prevailed until the end of the Portuguese War of Restauration in 1668, was a different institutional path to the one which in northern Europe led to the emergence of fiscal-military agglomerations such as the Prussian general war commissariat.

The authority of the council was mediated to the armies by provincial army secretaries (*Secretario do Exercito*), who could be assisted by special officials appointed and paid by the council of war.[687] The heavy lifting of commissarial work at grassroots level was carried out by the war commissars (*Commissario*), who accompanied the troops on campaigns and kept book of the debts accumulated by billeting and requisitions. The war commissars also controlled all remittances of money to the troops; no salaries were to be paid to the soldiers unless they had first been sanctioned by the regimental war commissar.[688] Some of the war commissars had special fields of responsibility. The artillery commissar (*Commissaire général de l'artillerie*), for instance, was responsible for transporting the Portuguese artillery to the front, for which he was authorised to requisition oxen from the frontier provinces.[689]

If, as Fernando Dores Costa has argued, the composition and functions of the *Conselho da Guerra* imitated the Austrian *Hofkriegsrat*, so too were the practical duties of the Portuguese *Commissario* roughly the same as the work of the German *Kriegs-Commissarien* of the Thirty Years War.[690] The main difference, perhaps, was the Portuguese war commissars' preoccupation with keeping book of accumulated billeting and procurement debts instead of collecting and reallotting contributions, which were

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686 Costa, 2009, p. 393.
687 Chaby, 1869, p. 64, 22 April 1644, Council of War protocol.
688 Chaby, 1869, p. 169, 14 July 1647, decree by the Council of War.
689 Gazette N. 4, 1648, p. 29.
690 Costa, 2009, p. 381.

tasks that busied their German counterparts. This modest divergence in commissarial activities can be explained by the fact that the Portuguese fought most of their land war on domestic soil, while the German armies of the Thirty Years War often fed off enemy territories (or preyed on neutral princedoms).

The commissarial activities in the Spanish armies remained a mixture of ad hoc solutions and established institutions for much of the reigns of Philip IV and his successor, Charles II. Sometimes militias and fortifications were assigned to specific commissars, sometimes there was considerable overlap and obfuscation of institutional boundaries.[691] Much of commissarial work involved supervision against possible contractual violations by provisioners of bread and other military subcontractors. Sporadic attempts to reduce transaction costs by eliminating layers of subcontracting ended in failure. The 'business of war' that had taken root during the Thirty Years War proved difficult to expel from the Spanish military structures.[692] The restless reorganisation of war commissariats and secretariats continued well into the eighteenth century. As José María de Francisco Olmos has asserted, the increasing influence and administrative encroachment of the *Hacienda* over the other secretariats remained the main institutional trend despite other administrative vagaries.[693]

Habsburg Spain had been an early forerunner in the institutionalisation of commissarial activities in the sixteenth century, but by the outbreak of the Thirty Years War commissarial functions had been outsourced to private agents, devolved to self-policing *tercios*, or distributed among several competing administrative institutions. The war commissariat in Habsburg Spain therefore provides a revealing case study of organisational decline. Modern economics defines organisational decline as a reduction in the number of resources that are controlled by an organisation. Economics identifies three models of decline. The first is a life

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691 Clonard, 1856, p. 419; López, 2007, p. 239; Maffi, 2010, p. 175.
692 Storrs, 2006, pp. 53–54.
693 Francisco Olmos, 1997, p. 15.

cycle model, which suggests that organisations follow a biological arc from birth and youth to maturity, old age, and finally demise. The passage of time, therefore, is the ultimate source of organisational decline. The environmental model argues that the decline of an organisation results from its failure to adapt to external environmental factors. The market for a company, for instance, might shrink, or the demand for products and services can change or shift focus. The internal causes model indicates that the reason for an organisation's decline is its failure to renew itself and its continued reliance on outdated strategies and practices that are no longer effective or productive.[694]

It is difficult to attribute the decline of the Spanish war commissariat to its life cycle, as the war commissariat was still in its institutional infancy in other European realms during the Thirty Years War. The reasons for its decline, therefore, must be sought in environmental and internal factors. Starting with the latter model, the Spanish war commissariat's ability to renew itself seemed modest. Some proactive Spanish governors, such as the Duke of Frías in Milan, could reinvigorate the local commissariat by appointing enthusiastic war commissars and matching specific functions with special offices, but most of the reforms in the Spanish war commissariat were implemented in a belated manner and as ad hoc solutions rather than carefully planned and consistent policies. The sharp end of the Spanish stick, the famed Army of Flanders, was stuck in its old ways of running the fiscal-military administration as a patchwork of various out-contracting artifices, and its war commissariat degraded in tandem with the rest of the army throughout the reigns of Philip IV and Charles II.

The environmental model links organisational decline with economic decline, the great historiographical theme of seventeenth-century Spain. The debate over the reasons and dimensions of the Spanish crisis has produced an impressive number of monographs and articles, but the consensus remains that Habsburg Spain did indeed experience severe economic and social

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694 Juneja, 2020.

decline in the seventeenth century. In the present context it suffices to repeat the argument made by J. H. Elliott that the Castilian heartland of Habsburg Spain underwent a crisis of population, productivity, and dwindling overseas wealth.[695] Increasingly limited access to human and fiscal resources would have presented a major organisational challenge to the Spanish war commissariat. War commissariats may have served as social containers of specialist skills when it came to the extraction and distribution of existing resources, but their incumbents had no institutional competence for promoting agricultural production, creating new sources of revenue, or controlling demographic trends. Given the existing environmental challenges, it made institutional sense to divide the functions of the war commissariat between the council of war and its institutional successors, who oversaw recruitment, and the *Hacienda*, whose skills and capabilities were better attuned to the management of economic and demographic factors. In the terms of modern economics, the Spanish war commissariat lost the control of its resources to more purposeful and better-focused organisations.

The concept of organisational decline did not apply to the Portuguese war commissariat, whose institutional arc from the Thirty Years War to the end of the seventeenth century followed the sociological trajectory proposed by Max Weber and Niklas Luhmann. The Portuguese war commissariat was both hierarchical and specialised. Its chain of command ran from the council of war and its specialist subcommittees to the provincial secretaries and finally the executive war commissars themselves, whose duties were focused on the control and recording of the army's money flows.

The functional narrowness of the Portuguese war commissariat, which indeed set it apart from the more rambling war commissariats elsewhere in Europe, connects with the concept of differentiation in Luhmann's theory of social subsystems.[696] The war

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695 Elliott, 1961, p. 70.
696 Baraldi, Corsi & Esposito, 2021, pp. 61–62.

commissariat, which limited its functions to logistical duties and did not assume operational responsibilities, was not only internally differentiated from its environment, the war-making Portuguese realm, but also from its surrounding system, the wider fiscal-military administration consisting of specialist subcommittees. This differentiation meant that the war commissariat dealt with issues of remittances and money flows from a narrow perspective that differed from those of other fiscal-military institutions such as the *Junta dos Três Estados*. The constraints imposed on the war commissars by the council of war also integrated the commissariat into the fiscal-military subsystem more firmly than occurred elsewhere in contemporaneous Europe. This differentiation did not necessarily make the Portuguese war commissariat more efficient than its corresponding institutions elsewhere, but it did focus its institutional rationale, which is a key characteristic behind Weberian sociology, most state formation theories, and indeed the thesis about an early modern Military Revolution.

French *Commissaires* and *Intendants*

The origins of the French war commissariat can be traced back to the reign of John II, whose 1357 ordinance appointed twelve royal commissioners to supervise the payment of salaries to recruited *gens de guerre*. Another charter by John conceded auditorial powers to special *surindentants*, who would monitor that the military subsidies granted by the Estates were used properly. The formation of standing *compagnies d'ordonnance* to be financed by 'a perpetual *taille*' in 1439 necessitated the establishment of new kinds of *commissaires de la guerre et lieutenants des monstres*, who were given permanent administrative positions to muster and police the archers, crossbowmen, and mounted gendarmerie who constituted the nucleus of the *compagnies*.[697] The sixteenth century saw a diversification of the French war commissariat into *commissaires ordinaires*, *commissaires des conduites de la gendarme-*

697 Milot, 1968, pp. 382–384.

rie, and *commissaires aux revues*, who had varying jurisdictions in monitoring musters, supervising fiscal transactions, and policing the troops on marches and in billets.[698]

The number of different war commissars increased during the French Wars of Religion (1562–1594), when they were employed by all the belligerents – the royal government, the Catholic League, and the Huguenots. In 1565 a royal ordnance created fifty new war commissars to police the troops on marches and to control the distribution of supplies and salaries. When these commissars resided in towns or cities, they enjoyed the powers of a royal governor. These commissars were later all ennobled and nominated as *contrôles de la gendarmerie*.[699] A *commissaire général de vivres* and his assistants were responsible for establishing depots and contracting out deliveries of bread and provisions from private suppliers.[700] The Huguenot army also had its own war commissars, who organised billets and negotiated deliveries of bread and fodder from private *munitionaires*.[701] Furthermore, given the centrality of appropriating royal revenues in the Huguenot war effort, it seems unavoidable that at least some of those Huguenot noblemen, whose private retinues made up the confederated army, would have acted in commissarial capacities when redirecting sequestrated funds and resources for military use.[702] The Huguenots were not the only party expropriating royal revenue: the retinues of Catholic League notables and provincial potentates were all able to usurp the regional machineries of fiscal government.[703] Technically, such usurpations were commissarial in nature, although the beneficiary of this kind of renegade revenue collection was not the Valois state.

The sixteenth-century war commissariats were itinerant by nature: the war commissars had no fixed precincts but rather

698 Ibid., p. 385.
699 Hardy, 1880, pp. 42–44.
700 Woods, 1996, p. 243.
701 Hardy, 1880, pp. 58–59.
702 Parrott, 2012, pp. 87–88.
703 Carroll, 1998, pp. 70–71.

intervened in military affairs in varying localities according to the prevailing circumstances. This system was reformed in 1595, when a royal edict created twenty-four residential *commissaires provinciaux*, who had fixed jurisdictions in *places* along the French frontiers. The *commissaires provinciaux* were directly subordinated to the *Grand Connétable* of France.[704] This was the highest military-administrative position in the French military hierarchy below the monarch himself. The office, which had existed since the Middle Ages, was held by the Duke of Luynes in 1621 and the Duke of Lesdiguières in 1622–1626. When Lesdiguières died in 1626, Louis XIII did not appoint any successor to him, and the office was abolished as a potential threat to the monarchy and its claim for the monopoly of violence.[705] The abolition of the office of the *Grand Connétable* meant that there was no longer any intermediate command echelon between the central government and the field armies.

According to Hervé Drévillon, the main beneficiary of the abolition was the *secrétaire d'État* in charge of military affairs. This office had existed since 1570, but its powers had not been clearly delineated, and its authority had often been contested by the *Grand Connétable* in particular.[706] David Parrott counters this assertion with a more nuanced view of the secretaries of war. While the abolition of the *Grand Connétable* admittedly removed one interloper from the business of the secretaries of war, they were still forced to cope with other administrative rivals, namely the *secrétaires* responsible for individual provinces, the minister of finance, and the powerful *secrétaire des affaires étrangères* or foreign secretary. In short, the secretaries of war enjoyed wide administrative powers over the main body of the royal army, but when smaller or separate detachments were deployed in home provinces, administrative authority over them moved from the secretary of war to the secretaries of the provinces. In a similar way, the foreign sec-

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704 Milot, 1968, p. 386.
705 Parrott, 2001, pp. 9, 372.
706 Drévillon, 2014, pp. 32–33.

retary claimed administrative powers over French armies fighting or serving abroad.[707]

The secretaries of war were not in sole command of the royal army corps, either. The fiscal aspects of the army were administered by *intendants* subordinated to the minister of finance. At a lower level, the day-to-day practicalities of fiscal administration were handled by the *trésories* and *contrôleurs des guerres*. They were essentially financial speculators, who were primarily interested in extracting profit from their venal offices. The judicial administration of the army belonged to the *prévôts* and *commissaires des guerres*. The *prévôts* remained outside direct ministerial control and responded either to the military tribunal of the *connétablie et maréchaussée* or senior commanders known as *colonels généraux*. The jurisdiction of the *prévôts* was contested rather than complemented by the *commissaires des guerres*, who had powers over individual units or specific military areas. The central government sought to ameliorate jurisdictional overlap and conflicts of authority by appointing to the army *intendants de la justice*, who generally mediated judicial processes rather than imposed their will on the army. These *intendants*, however, were appointed by the royal chancellor and were not directly associated with the secretary of war. Like most other *intendants*, they too suffered from conflicting jurisdictions between the chancellor and the secretaries of the various provinces.[708]

In theory, the provisioning of the army was carried out by the central state. An ordinance from 1557 had decreed than an *ancien conseiller du roi* would control the provisioning of the army. In 1635 Richelieu effectively assumed this role when he appointed himself as the *surintendant des vivres*.[709] In reality, however, the provisioning of the army was handled by the *munitionaires*. It was the responsibility of the provincial authorities, the *trésories* and *intendants*, to coordinate and supervise the efforts of the subcon-

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707 Parrott, 2001, pp. 370–373.
708 Ibid., pp. 373–381.
709 Ibid., p. 381.

tractors, who often resorted to corruption to maximise the profits from their contracts.[710] In 1643 the central government decreed the institution of the *intendants* to be general and permanent, which effectively marginalised the *trésories*.[711] The field of work of the *intendants* differed between *pays d'états* and *pays d'élections*. In the former provinces, many of which had been incorporated into the realm relatively late, the *intendants* could find themselves administrating a province with very wide territorial limits and opaque jurisdictions. In the latter, the *intendants* worked within fixed and defined fiscal districts.[712]

The main military-administrative duty of the *intendants* was to oversee the maintenance and operation of *étapes* or supply depots. According to the system of *étapes*, first introduced during the reign of Francis I in 1549 and then further elaborated in the Code Michau of 1629, certain towns along predetermined military routes were required to store provisions and fodder that could be purchased by the arriving troops.[713] The *étapes* were financed by a general tax that was often imposed over entire frontier provinces. While the *intendants* enjoyed political and social superiority over the *trésories*, in practice they left the actual administration of the *étapes* to the latter officials.[714] The provisioning of gunpowder, match, and ammunition was controlled by the *grand maître de l'artillerie* and his immediate subordinates, who included a second in command or a lieutenant, an *intendant*, a comptroller (*Contrerolleur*), a treasurer (*Thersorier*), a chief provisioner of victuals (*munitionaire*), and various commissars.[715] In principle, the holders of this prestigious office would have found themselves in conflict with Richelieu, who was keen to divert artillery and munitions to the navy and coastal defences. In practice, the army's artillery was consistently neglected, as the *grand maître*

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710 Ibid., p. 382–383.
711 Drévillon, 2014, p. 33.
712 Ibid., pp. 33, 35.
713 Nolan, 2008, p. 138; Thion, 2013, p. 68.
714 Parrott, 2001, pp. 270–271, 383.
715 Simonne, 1623, p. 295.

de l'artillerie was from 1634 onwards Richelieu's supple cousin Charles de La Meilleraye.[716] Again, in theory, the distribution of munitions from the magazines was contracted out to provincial military entrepreneurs, but in practice this distribution and allocation was handled by local governors and officers.[717]

Secrétaires and *intendants* operated at the military-political level of government decision-making, while the French field armies had their own administrative support institutions that followed the broad principles of other contemporaneous armies. The supreme commander of the army corps was the *lieutenant-général*, in some sources identified as the *Capitaine General*, who 'governed an army and the machinery of war'.[718] His immediate subordinate was the *maréchal de camp general*, who was responsible for quartering the army in camps or billets. In the absence of the lieutenant general, the *maréchal de camp* would assume command of the army corps.[719] The *mestres de camp*, who commanded regiments, were essentially French equivalents of the Spanish *Maestros de Campo General* and the German field colonels. As such, their duties involved not only the maintenance of the regiment in camps and billets but also its supervision during marches, which meant control of the baggage train and reconnaissance units.[720] The *mestres de camp* were seconded by sergeant majors. All victuals and ammunition passed through the sergeant's hands to the company commanders, and he was also responsible for communicating the *mestre*'s orders down the chain of command, 'since the *Maistre de Camp* relies on him in everything and everywhere, both in the campaign and in the garrison'.[721] It was also the sergeant major who compiled and maintained muster rolls for the

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716 Parrott, 2001, p. 67.
717 Ibid., pp. 387–389.
718 Parrott, 2001, p. xii; Simonne, 1623, p. 304.
719 Parrott, 2001, p. xiii; Simonne, 1623, p. 279.
720 Parrott, 2001, p. xiii; Simonne, 1623, pp. 286–287.
721 Simonne, 1623, p. 68.

regiment. These rolls were then checked and signed by either the war commissar or the cashier (*Tresorier*).[722]

The French war commissariat responsible for mustering and paying the troops was chaotic, venal, and ill-functioning. The conduit of salaries was overseen by two commissarial offices, the *commissaires des guerres* subordinated to the secretary of war, and the *contrôleurs des guerres* working with the hierarchy of the treasury. In theory, the *commissaires* were attached to field armies as inspectors of musters and pay, while the *contrôleurs*, acting as government-level supervisors, would have compiled troop reports, which the *commissaires* could then compare against the muster rolls provided by the sergeant majors.[723] But, as David Parrott has argued, in practice the two commissarial hierarchies were overlapping and in no way mutually complementary. One reason behind this redundancy was the fact that the *commissaires*, like the *contrôleurs*, had territorial jurisdictions instead of spheres of authority attached to specific army corps. The exception to this rule were the *commissaires à la conduit*, who had been permanently attached to certain prestigious regiments.[724] The *commissaires pour les subsistances*, whose main tasks were to collect direct taxes known as *subsistances* and to allocate troops to billets, were so powerfully established in their localities that the local *intendants* were subordinated to them.[725] In practice, client connection to powerful officeholders at the centre of royal government provided more administrative authority than formal titles in the tangled jurisdictional web of the French war commissariat.[726]

Traditional historiography maintains that the *intendants* emerged as effective agents of government authority in the French provinces during the reign of Louis XIV. Their loyalty and relative efficiency rested on the fact that they were established as a

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722 Praissac, 1638, p. 161.
723 Fortmann & Gongora, 2000, pp. 81–82.
724 Parrott, 2001, p. 379; Rowlands, 2002, p. 79.
725 Parrott, 2001, pp. 424–432.
726 Ibid., p. 391.

permanent institution yet were all at risk of being recalled by the government at any moment.[727] Later research has brought more nuances to the larger picture about the *intendants*. Roland Mousnier connected the institutional emergence of the *intendants* after 1642 with the government's necessity to move tax collection from the hands of ineffective or untrustworthy fiscal officers to more reliable royal servants.[728] In the view of William Beik, the *intendants* appear as isolated and beleaguered agents who resorted to brute force or appeals to local elites in their difficult task of executing royal edicts in the provinces.[729] More recent historiography admits that as direct agents of the *contrôleur général* of finances, the *intendants* resorted more to negotiation and compromise than coercion when dealing with the local interest groups.[730] Be that as it may, their duties in the military sphere included most commissarial aspects other than the inspection and tallying of musters, which remained the purview of the war commissars. It was the *intendants* who organised *étapes* and prepared avenues of advance, and it was they who policed the communities and organised the extraction of resources for the armies' use. In terms of their core functions, the French *intendants* shared many similarities with the general war commissariats of the Holy Roman Empire.

The myriad commissarial offices – different *commissaires*, *secrétaires*, *trésories*, *prévôts*, *contrôleurs*, and *intendants* – might suggest that the French war commissariat was a highly complex and specialised organisation, perhaps even the first true example of the kind of subsystems that constitute the matrix of modern, differentiated, efficient, and flexible society. However, as David Parrott has shown, such an assumption would be erroneous. Commissarial positions were usually created as responses to specific circumstances and contingencies and in a way that would not threaten the vested interests of other officeholders or necessitate

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727 Lough, 1964, p. 235.
728 Mousnier, 1970.
729 Beik, 1997, p. 15.
730 Drévillon, 2014, pp. 537–539.

any radical institutional restructuring. As with any other royal offices in Bourbon France, commissarial positions were sometimes created for venal purposes alone – to simply raise money by selling offices.[731]

The same economical concept of organisational decline that was manifest in the war commissariat of Habsburg Spain can also be applied to Bourbon France, but with some major qualifications. The institution that usurped resources and powers from the French war commissariat was not the treasury or army command but that of the *intendants*. A Marxist view offered by Perry Andersson suggests that the commissariats and intendencies became a venue for dialectical class struggle between the parvenu nobility in service of absolutist royal power and the traditional *officier* stratum, whose foci of power remained in the regional parliaments outside Paris.[732] According to this interpretation, the decline of the French war commissariat, still very much dominated by particularism and regional interests in the era of the Thirty Years War, would have been a historical inevitability in the teleological process that shifted control over the means of production from the old feudal elites to the emerging bourgeois class and its modern state. The Marxist view, however, does not explain why the control of military resources was largely shifted from the war commissars to the regional *intendants* instead of fiscal administration or the armed forces, as happened in many other European realms.

Perhaps the reason for the administrative usurpation is not to be found in the decay of the French war commissariat but rather in the institutional rationale of the *intendants*. As recent historiography reminds us, the *intendants* constituted an exceptional administration in early modern Europe. Unlike other contemporaneous royal officers, the *intendants* were not selected on the basis of venal practices but were instead commissioned by contracts. Their commissions could be revoked by the monarch at any moment, and once the contract ran out, the state could offer

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731 Parrott, 2001, p. 408.
732 Andersson, 1984, p. 96.

the *intendants* other commissioned assignments. Max Weber's definition of 'modern bureaucracy' (activities assigned as official duties, stably distributed and strictly delineated coercive authority, and regular and continuous fulfilment of duties by qualified personnel) applies in full to the French *intendants*.[733] Yu Sasaki has indeed compared the *intendants* to modern-day consultants, who are contracted to provide expert advice to clients.[734]

Because the *intendants* were commissioned by reason of their expertise, and because they represented unmediated royal power in the localities, they qualify as perfect examples of complex organisations – social containers for administrative, operational, and technical experience. Resources concentrated in centrally controlled and commissioned complex organisations, Jan Glete asserted, have great potential to transform state and society, which, to some extent, the Bourbon monarchy wished to do.[735] From the perspective of Weberian sociology, which emphasises bureaucratic rationalisation as a key characteristic behind the emergence of the modern state, it was purposeful for the absolutist Bourbon regime to place fiscal-military resources, competencies, and powers in the hands of the *intendants*, who projected direct royal power into localities and institutions that had been traditionally dominated by the *officier* stratum and their particularism.

The causes for the French war commissariat's decline, therefore, would have to be understood according to the environmental model of explanation. According to this line of reasoning, the traditional war commissariat dominated by venal *officiers* no longer reflected or served the recalibrated aims of the absolutist Bourbon state. Their inputs failed to translate into desired outputs. The administrative expansion of the intendency into a tool of surveillance and policing also aligns with Michael Roberts's contention that the end result of the Military Revolution was manifested in

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733 Weber, 1978, p. 956.
734 Sasaki, 2021, p. 264.
735 Glete, 2002, pp. 4–5.

the ascendancy of "mass armies, strict discipline, the control of the state, [and] the submergence of the individual".[736] The emergence of the *intendants* as a civilian–military administration, a development that was set in motion during the Thirty Years War, contributed in a wide sociological sense to the process that Michel Foucault identified as the policing of society. For Foucault this did not only mean the act of physical law enforcement, a mission that had been carried out by the *maréchaussée* since the fifteenth century (often regulating restless or unemployed mercenaries), but also the management, regulation, and disciplining of grain distribution, hygiene, medicine, sanitation, mores, sexuality, and even knowledge.[737] The *intendants* applied permeating rather than blunt power, typically by unifying control procedures, interpreting ordinances or laws, and by favouring amenable subordinate officers among the police authorities.[738] The development of the *intendants* and the Foucauldian police indicates how the coercive aspects inherent to the Military Revolution theory – the absolute increase in the size of military institutions and the relative growth in state control of violence – gradually penetrated society as regulatory practices and disciplinary mechanisms.[739]

Repartition System of the Dutch Republic

Before the rebellion in 1568, the military system in the Low Countries was based on the employment of hired *Landsknechte*. Therefore, the early war commissars in the Low Countries were also identical to those in the Holy Roman Empire. Whoever originally commissioned the recruitment of the *Landsknechte*, be it governors general, stadholders, or provincial Estates, also employed muster commissioners to inspect recruits and their equipment and to enter the recruited soldiers' names, weaponry, and pay into

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736 Roberts, 1995, p. 29.
737 Marinkovic & Ristic, 2019, p. 355.
738 Kaplan, 2015, pp. 18–19.
739 Marinkovic & Ristic, 2019, p. 360.

the muster rolls.[740] Over time, the war against Spain shaped the commissarial system of the rebellious Dutch provinces in distinctive and new ways, but the muster commissars continued to exist throughout the Thirty Years War. They recorded troop strengths at musters before and after campaigns. The records were then sent to provincial authorities, who would inspect them for any possible discrepancies and adjust the *soldijordonnanties* or government promissory notes on payment.[741] The chief commissarial office in the early stages of the Eighty Years War had been the *superintendent-generaal van de vivres*, but this position was discontinued in the 1580s due to excessive amount of fiscal and logistical duties.[742]

The articles of surrender of the Dutch defence force in Breda in 1625 reveal something about the operational compliment of Dutch commissars and other fiscal-military administrators in garrisons. The articles identified muster commissars, clerks, an auditor for the council of war, provosts, scribes, munitions commissars, and 'officers of contributions', the last of which appears to refer to conventional war commissars.[743] In 1629 the Dutch auxiliary troops in Glückstadt, a Danish stronghold on the Elbe, had their own war commissar, who distributed pay and financed fortification construction – or at least attempted to do so with the limited funds at his disposal.[744]

In the field armies, the highest-ranking military administrators were the provost marshals, whose chief responsibility was to deliver military justice. They also supervised the collection of victuals, especially cattle.[745] In the spirit of Dutch cleanliness, the provost marshal was expected to make sure that the remains of

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740 Nimwegen & Sicking, 2019, p. 164.
741 Nimwegen & Prud'Homme van Reine, 2019b, p. 360.
742 't Hart, 2014, p. 185.
743 Mercure François, 1625, p. 820.
744 Nijenhuis et al., Resolutiën Staten-Generaal, 28 April 1629, https://resources.huygens.knaw.nl/besluitenstatengeneraal1576-1630/BesluitenStaten-generaal1626-1651/silva/sg/1629/04/28 [accessed 22 November 2021].
745 Hexham, 1637b, p. 1.

slaughtered cattle and 'all other Garbage and filth' were properly buried, 'and that in all things else the quarter be kept sweet, and the places adioyning cleane'.[746] The lord marshal kept order in the baggage train of each regiment; in the Dutch military order, civilians and sutlers were attached to specific regiments, which they trailed during marches. The army's quarters and marches were arranged by the quartermaster general, whose orders were carried out by ordinary quartermasters in each regiment.[747] Another key administrator on the marches was the wagon master, who ensured that the wagons were properly loaded and maintained in their right place behind the troops and the artillery train.[748]

The chief logistical officer of the army was the commissar general of victuals. He managed the transportation, redistribution, and possible storing of all victuals. The commissar general drew up lists of 'all the Bakers, Millers, Butchers in the Armie, and of all others that are to be used in the Provision of Victuals'. He also adjudicated over the redistribution of prizes taken at sea and captured on land. It was indeed a Dutch peculiarity that the powers of the commissar general were not limited to land but also included maritime operations.[749] Other senior administrative officers in the army were the general of the ordnance and the commissar of ammunition and materials. The former oversaw all artillery and its ammunition, and it was also he who directed siege operations through a subhierarchy of lieutenants of ordnance, controllers of artillery, gunners, armourers, siege engineers, and sappers.[750] The last of these distributed ammunition and siege tools to the regiments when ordered to do so by the general of the ordnance, who was expected to keep track of the expenditure of gunpowder and ammunition so that the stocks could be replenished in a timely and sufficient manner.[751] The baking and distribution of bread for

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746 Ibid., p. 1.
747 Ibid., p. 2.
748 Nimwegen & Prud'Homme van Reine, 2019a, p. 312.
749 Hexham, 1637b, p. 3.
750 Ibid., p. 9.
751 Ibid., pp. 9–10.

the army's needs was the responsibility of the victuals clerk, who was a government official and not a soldier.[752] At the basic tactical level, the most important military administrator was the company clerk, who maintained accurate muster rolls, delivered pay to soldiers, and drew up necessary receipts for the company captain.[753]

Unlike many other early modern states, the Dutch Republic did not have a centralised general war commissariat that would have overseen the collection and transfer of resources from the civilian society to military use. The reason for the absence of a German-style *Generalkriegskommissariat* was the fact that the Dutch Republic was not one state but a union of seven states or provinces. Before resources could be collected and forwarded to the armed forces, the Dutch provinces had to agree on the proportional basis according to which they would contribute to the war effort, as the resources available for the seven provinces simply were not commensurate. The population of Holland, for instance, was 675,000 in 1622, whereas the population of Friesland was less than 150,000.[754] It was simply not reasonable that provinces of such differing sizes would contribute to the armed forces in an equal measure.

The repartition system, which the Dutch Republic had begun to implement from 1588 onwards, addressed this dilemma by creating a distribution formula according to which the provinces contributed to the upkeep of the armed forces. The system did not create seven separate provincial armies, but it did allow the provinces to exercise a degree of military authority as paymasters for the troops.[755] The repartition system did not represent harmonious coexistence but was rather based on constant tension between the provinces and the council of state, to which the States-General had delegated the supervision of national defence. In 1596 the council of state had proposed the devolution of payment to treas-

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752 Nimwegen & Prud'Homme van Reine, 2019a, p. 315.
753 Hexham, 1637a, pp. 5–6.
754 Israel, 1998, p. 335.
755 Nimwegen, 2010, p. 23.

urers under the supervision of a commissariat appointed by the States-General. The provinces, which feared losing control over the armed forces, rejected this suggestion. The opposite to the council's proposition – the maintenance of repartitioned troops within each province – was also an unpractical resolution, as the military contingencies often necessitated the dispersal of the troops outside their home provinces.[756] In practice, it seems, the provinces preferred to reinforce with repartitioned troops those armies that happened to be stationed nearest to them, as the representatives of Gelderland insisted on doing in 1629.[757]

Perhaps the main reason preventing the council of state from assuming the role of general war commissariat was its administrative inadequacy. The stadholders and the twelve councillors were assisted by a staff of just twenty officials, the most important among them being the secretary, treasurer general, and receiver general. Two fiscal administrators and a secretary could hardly comprise a functioning general war commissariat. The most practical way of administering the repartitioned army was, therefore, the devolution of administrative tasks to the Delegated States (*Gedeputeerde Staten*), who performed the role of executive governments in the provinces. Under this bureaucratic devolution, the armed forces were administered by commissars working for the Delegated States of the seven provinces instead of the central government.[758] A war commissariat split seven ways might seem like a military-administrative nightmare, but in reality the brunt of the administration was being borne by one province, Holland, which alone paid for more than half of the troops.[759] The closest Dutch equivalent to a general war commissariat during the

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756 Ibid., pp. 49–50.
757 Nijenhuis et al., Resolutiën Staten-Generaal, 8 May 1629, https://resources.huygens.knaw.nl/besluitenstatengeneraal1576-1630/BesluitenStaten-generaal1626-1651/silva/sg/1629/05/08 [accessed 21 November 2021].
758 Nimwegen, 2010, pp. 70, 48.
759 Ibid., p. 70.

Thirty Years War, one could therefore argue, were the commissars working for the Delegated Council of Holland.

The repartition system did not operate as an automaton that provided the Dutch armies with pre-agreed resource flows. Instead, the council of state had to annually petition each province to release the necessary funds. As Olaf van Nimwegen points out, these petitions, the so-called 'State of War' (*Staat van Oorlog*), did not constitute an annual budget for military expenditure.[760] The State of War was merely an overview of the apportioned military costs, and it could not be altered without the consent of all seven provinces.[761] In practice, the council of state could find itself making repeated appeals to provinces to release the necessary defence funds. In May 1629, for instance, the council of state had to remind the Delegated States of Holland and Zeeland to pay their missing shares of the fortification construction at Bergen op Zoom and Steenbergen that had been carried out in the previous year.[762] Military expenditure in the State of War was differentiated between ordinary and extraordinary outlays. The former stayed relatively the same from one year to the next and were generally voted through with little discussion. The latter required more deliberation and were aimed at providing resources for specific military contingencies.[763]

Its large share of the repartition quota placed much of the fiscal-administrative responsibility on the institutions of Holland. The fiscal administration there was headed by the receiver general, who operated from The Hague. The receiver general was responsible for collecting taxes on houses and land, which amounted to one fifth of all ordinary taxation. His subordinates, the nine municipal receivers working in their local *comptoirs*, brought in

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760 Ibid., p. 71.

761 Ibid., p. 71.

762 Nijenhuis et al., Resolutiën Staten-Generaal, 11 May 1629, https://resources.huygens.knaw.nl/besluitenstatengeneraal1576-1630/BesluitenStaten-generaal1626-1651/silva/sg/1629/05/11 [accessed 21 November 2021].

763 't Hart, 2014, p. 155.

indirect taxes such as sales taxes and fees on judicial processes.[764] The States of Holland supervised the proceeding by elucidating jurisdictional boundaries between the municipal *comptoirs* and the receiver general and by monitoring that the payment of military salaries was delegated to sanctioned *solliciteurs-militair* and no one else.[765] In the background of this institutional division was close cooperation between local elites and the provincial government. Burgomasters, militia captains, and other leading citizens participated in the collection of direct taxation, while the collection of excises was auctioned off to a broad group of tax-farmers. As Marjolein 't Hart argues, these practical arrangements prevented the emergence of venal elites and restrained popular tax revolts.[766]

The end of the Eighty Years War/Thirty Years War in 1648 brought about reforms in the Dutch fiscal-military system. The first major reform was the downscaling of the armed forces, which the Dutch Republic had already initiated before the end of the war. In 1643 the council of state employed special commissars to supervise this reduction of the army. The commissars accumulated lists of soldiers to be retained in service and settled remaining arrears for those soldiers who were to be dismissed.[767] The two decades following the Peace of Westphalia marked an era of relative dormancy for the Dutch army, as the focus of warfare had shifted to the seas in the first two Anglo-Dutch wars (1652–1654 and 1665–1667). The second major reform occurred in 1671, when the States-General approved a new hierarchy of military ranks. Among them was the position of commissar general of cavalry, who was equal with the sergeant major of the infantry. Both the commissarial title and similarity with the sergeant major suggest an institutional dimension that included administrative

764 Nimwegen, 2010, p. 73.
765 Generaale Index 1628–1643, O, 5 August 1643.
766 't Hart, 2014, p. 159.
767 Nimwegen & Prud'Homme van Reine, 2019b, p. 377.

and logistical functions alongside with operational duties.[768] The States-General also created the office of *provediteurs-generaal*, whose main duty was to supply the field armies with bread. Other *provediteurs* were contracted for specific items, such as horse fodder or means of transportation. The *provediteurs* enjoyed tax exemptions and government guarantees for assistance and military protection; these perks attracted affluent entrepreneurs into the fiscal-military administration.[769]

As Jan Glete lamented, traditional historical sociology has not helped to explain the military-institutional development of the Dutch Republic but has rather hindered the formation of qualified and thoughtful organisational analysis. Historical sociology has compared the consensual body politic of the Dutch Republic and its non-centralised system of military administration unfavourably with the absolutist regimes, whose coercive fiscal-military states were allegedly more efficient and successful in their conduct of wars. However, careful investigation of the Dutch fiscal-military machinery reveals a state that raised more resources for warfare than its seventeenth-century competitors and which used those resources effectively to raise and maintain standing armed forces.[770]

The structure that allowed the Dutch Republic to maintain its fiscal-military administration on diffuse and consensual basis was the public debt, a fiscal innovation that, according to some historians, was the most profound legacy of the Military Revolution.[771] As Brian M. Downing observes, public debt allowed the States-General to channel private capital into its war effort without having to resort to tax-farming or the construction of coercive fiscal-military bureaucracies – such as the general war commissariats that were found in many other European realms.[772] There

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768 Nimwegen, 2010, p. 317.
769 't Hart, 2014, p. 185.
770 Glete, 2002, pp. 143, 172.
771 Brewer, 1989.
772 Downing, 1992, p. 220.

were, of course, limits to what a war-making state might achieve through public debt. In the early eighteenth century, the Dutch public debt became a liability, as it grew to a magnitude that was nearly impossible to serve despite increased extraordinary war taxation and reduction in the size of the armed forces. Eventually, the province of Holland, the fiscal-military backbone of the Dutch Republic, was no longer able to increase its public debt or impose extraordinary taxation. 'The lesson to other countries was that wealth and riches alone did not guarantee state power,' Augustus J. Veenendaal concludes.[773]

The power of the Dutch state, or rather states, was realised in the practical dimension of fiscal-military administration by the executive governments of the Delegated States and their specialist war commissars. The system, in which the Delegated States financed warfare and mustered troops via public–private partnership between *solliciteurs*, *comptoirs*, and specialist war commissars, corresponds perfectly with those sociological models that collate modern bureaucratic efficiency with aggregations of expertise and resources, delineated and consistent administrative functions, institutional reproduction, competence cycles, and subsystemic matrixes. Even hierarchisation of military-administrative functions, a concept that has perhaps been excessively emphasised by traditional Weberian sociology, can be identified in the seventeenth-century Dutch Republic, although not as a single chain command running from an all-permeating power state down to the war commissars, but rather as parallel strings of regulatory answerabilities imposed collectively by the member states of the Republic. The management of the fiscal-military bureaucracy by the council of state, in which all member states of the Republic participated, and through the repartition system, which distributed military burdens among all the provinces, even appears to vindicate the polemical assertion by Karl Marx that 'the

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773 Veenendaal Jr., 2002, p. 128.

executive of the modern state is but a committee for managing the common affairs of the whole bourgeoisie.[774]

The commissarial functions of the Dutch fiscal-military administration were at their most consensual and devolved during the Thirty Years War. The two decades following the Peace of Westphalia saw a shift from land warfare to naval combat, the administrative arrangements for latter falling outside the scope of present inquiry. The reign of William III as an unprecedently powerful stadholder witnessed increased military-administrative hierarchisation and centralisation when the new stadholder concentrated executive commissarial powers into his own hands, those of his close associates, and the freshly constituted institution of the *provediteurs*. Even then, however, the overall picture departed drastically from the examples of absolutist power states elsewhere in Europe, as the Dutch military administration did not develop a general war commissariat to oversee the coercive transfer of resources from civil society to the armed forces.

Reliance on partnership between the war-making state and the private provisioners – *provediteurs* and *solliciteurs* – remained the institutional basis of all military-administrative arrangements well into the late eighteenth century. The Dutch public–private arrangement in fiscal-military administration was a careful trade-off between efficiency and resilience. On the one hand, the reliance on private cashiers and provisioners would have increased some of the transaction costs relating to mustering and maintaining armies, but on the other, the private financiers and suppliers provided the Dutch Republic with fiscal and material buffers that could be called into action at short notice and with little or no immediate burden to the states' own resources. Outsourcing deliveries of pay and provisions made further sense because the size of the Dutch army fluctuated throughout the Thirty Years War and even more so in the decades that followed the peace with

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774 Marx, [1848] 2001, 'Bourgeois and Proletarians', in Manifesto of the Communist Party. https://www.marxists.org/archive/marx/works/1848/communist-manifesto/ch01.htm.

Spain. These vagaries impacted commissarial activities as well: when there were fewer contracts for pay and provisions in force, there was also less need for substantial and permanent supervisory organisations such as war commissariats or intendencies. Systems theory in fact recognises that the rationality of organisations is not ultimately based on abstract correlations but on historical situations and contingencies. This same logic applies to economies of scale that do not derive from the organisation's size alone, but also from the time dimension.[775] In terms of modern managerial studies, the main reason for the Dutch Republic to outsource deliveries of pay and procurement of provisions – and to maintain a commissarial administration that was short in hierarchy and thin on the ground – would have been flexibility. Much like modern-day companies that seek outside options in their design of supply chains, it saved the Dutch Republic from committing its own administrative resources while allowing it to tap into the competencies and capital of private partners.[776]

War Commissariats as Systems of Communication

In his study of social self-production, Alain Touraine defined modern-day organisations as 'decision-making units' that utilise authoritative and allocative resources within discursively mobilised forms of information.[777] Touraine's definition of an organisation, which resembles in many ways Niklas Luhmann's schematic for social subsystems, highlights some of the central characteristics and shortfalls of the kinds of war commissariats that first emerged during the Thirty Years War and rose to military-administrative pre-eminence over the course of the latter half of the seventeenth century. Such war commissariats that existed before the Thirty Years War, or came to be in the early stages of the war, were

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775 Luhmann, 2018, p. 254.
776 Mangan, Lalwani & Butcher, 2008, pp. 28, 48.
777 Touraine, 1977, p. 238.

already allocative organisations. War commissars sanctioned the transfer of resources from the society to the armies as intermediates between the principals (early modern states) and the agents (military entrepreneurs). Because most armies of the Thirty Years War were based on military entrepreneurship, they needed the complex organisation – the war commissariat – to align themselves with the interests of the state. With the growth in the scale of warfare and demand for resources, the war commissariats began to expand their authoritative dimension as decision-making units. As a result, the emerging general war commissariats became involved in the collection and, in the case of the Prussian *Generalkriegskommissariat*, even in the production of resources.

These increasingly assertive general war commissariats resembled Niklas Luhmann's social subsystems in the sense that while they extracted resources from the surrounding environment, those resources did not become part of the system's own operation. Commissariats transferred rather than appropriated resources. There were, nevertheless, certain early modern qualifications to the war commissariats' nature as differentiated subsystems, as the commissars could (and would) direct some of the collected resources for themselves as fees, salaries, enfeoffments, or in the form of outright pilferage. Venality and graft were present in the early modern war commissariats to an extent that would be unacceptable in modern-day subsystems and their organisations. Another major qualification is the fact that distinction in early modern societies was based more on privilege than merit. Commissarial offices could be enfeoffed, sold, or inherited rather than assigned because of specialist skills or general competence. Filling commissarial ranks with impotent dilettantes or disinterested opportunists would have disrupted competence cycles, which in its turn would have slowed down or even hindered organisational learning curves. One effective method for improving the coherence and continuity of the logic of organisational self-correction would have been the harmonisation of technical positions with social status through a table of ranks, but this measure was not

implemented in the investigated realms until after the Thirty Years War.

The war commissariats' expanding powers were reflected in their increased internal hierarchisation. Starting with Max Weber, sociology has seen accumulated hierarchisation as one of the key signatures of modern state formation. According to Weber, modern-day rational bureaucracy is organised into a hierarchy, where the controllers hold managerial and supervisory positions while the specialists subordinated to them carry out executive actions at the grassroots level.[778] This logic of organisation can be identified in the war commissariats of the Thirty Years War that were being arranged into chains of commands in which the general war commissars controlled the commissariats as military-administrative institutions differentiated from the field armies and the treasuries. Below them, managerial duties were delegated to specialist war commissars, who were typically attached to field armies or assigned to perform their duties within specific jurisdictional districts or spheres of responsibility. In the schematic of Luhmann's subsystems, differentiation between leadership and execution is a natural organisational reaction to risk. The task of leadership would be to weigh up opportunities against risks and to create acceptable preconditions for organisational decision-making at the executive stratum. In practice, the managerial leadership level would have to try to identify potential risks and to 'absorb uncertainty'. Its task would not be to simply avoid risks but to learn how to cope with them and to integrate them into operational practices.[779]

To absorb uncertainty, an organisation and its leadership must manage information. Modern-day information management of a subsystem consists of various actions. A successful business organisation first captures, stores, and manages customer information. That information can then be archived, retrieved,

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778 Weber, 1978, p. 48.
779 Luhmann, 1993, p. 199.

reported, or destroyed.[780] The operation of the early modern war commissariat featured this same life cycle of a modern information system. Commissarial officials gathered, inspected, and forwarded various muster rolls, inventories, protocols, reports, account books, and receipts. This accumulated information was then reported, archived, and retrieved inside the war commissariat's own information subsystem and, if necessary, forwarded to the highest levels of fiscal-military decision-making, where it would be discussed in councils and committees. In this way, the war commissariat engaged in what Luhmann understood as 'self-description': simplified semantics that made it possible in the system to communicate about the system. The war commissariat ultimately existed as communication about itself.[781]

We can observe this self-description by reading the correspondence of the Swedish war commissar Erik Andersson. In a letter addressed to Chancellor Axel Oxenstierna, dated 9 April 1632, Andersson laments the confusion and disorder prevailing in the Archbishopric of Magdeburg. Regulations and orders issued by the Swedish government had been implemented only partially if at all. Military-administrative authority no longer rested with the stewards (*Ståthållaren*) or representatives of the fiscal administration but with lowly lieutenant colonels and captains, who were doing as they pleased. General Johan Banér had done his best to delegate all recruitment and supervision of musters to full-rank colonels but had failed to foresee the problems resulting from such devolution of powers. There is confusion about who had ordered what and how the chain of command operated. Many of the hastily recruited companies and regiments were badly under-strength. Methods of recruitment were also unsound, as some colonels and other officers pressed local peasants and burghers into military service. Promissory notes issued by the treasury were being 'reinterpreted' by the muster officers in an unheard-of way. Anyone challenging the authority or demands of the unruly officers faced

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780 Cox, 2014, p. 30.
781 Baraldi, Corsi & Esposito, 2021, p. 209.

the danger of arbitrary military justice.[782] In his letter Andersson also addresses the communication flow inside the commissarial hierarchy: correspondence between Andersson, Oxernstierna, and Gustaf Adolf was being disrupted because the messengers had either been killed or had intentionally 'thrown the letters away as acts of mischief'.[783]

A systems-theoretical reading of Erik Andersson's letter shows him engaging in subsystemic self-description of the Swedish war commissariat. In his letter Andersson addresses the two key characteristics of the Luhmannian subsystem: the internal hierarchy and subsystemic differentiation. Autocratic colonels, lieutenant colonels, and captains confused the chain of command that ran from Stockholm to the armies in Germany via local stewards and fiscal officers. Soldiers had also crossed the boundaries between differentiated subsystems by usurping powers that would normally belong to the treasury and its representatives. Redress concerning unsound methods of recruitment, misuse of promissory notes, and corruption of military justice are all subsystemic commissarial shoptalk that would not concern civilian administrators in Sweden or even ordinary soldiers in Germany. All this is self-descriptive communication by the system about the system itself. Finally, in his complaints concerning disrupted or mismanaged messenger services between himself and the military-political leadership, Andersson engages in metalevel discussion about the technicalities of commissarial communication impacting the operability of commissarial communication. On the other hand, disputes and ambiguities over organisational hierarchies and systemic boundaries, themes that can be identified in Andersson's letter, testify that the commissarial institutions of the Thirty Years War did not yet qualify as fully differentiated and clearly hierarchised self-producing subsystems as they are understood in the context of modern-day systems theory.

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782 Mankell, 1860, p. 410, 9 April 1632, Erik Andersson to Axel Oxenstierna.
783 Ibid., p. 411.

Modern systems theory recognises organisations as systems that are constituted through rules of admission. An organisation has a limited number of members who all have specified roles within the organisation. The main function of an organisation is to concatenate decision-making by programmes, hierarchical channels of communication, and individual persons. These three decision premises constitute the structure of expectation that allows the organisation to operate. In this structure, every position is assigned with a task (programme), belongs to a certain department (channel of hierarchical communication), and is occupied by a person. Ideally, these decision premises allow the organisation to anticipate and mitigate contingencies by chaining new decisions to earlier ones.[784]

Although the early modern war commissariat was already taking the shape of a modern, rationally oriented organisation, it fell short of fully qualifying to this idealised systems-theoretical form. Firstly, the war commissariats that operated during the Thirty Years War did not yet have clearly formulated, consistent, and institutionalised programmes to guide their decision-making. The instructions they happened to receive from higher up in the military-political hierarchy often reflected the current interests of the military leaders and the mutable contingencies of war. Sometimes the instructions would constitute micromanagement, such as when Cardinal Richelieu gave his *grand maître de l'artillerie* Charles de La Meilleraye instructions about where to deploy individual batteries (their cannon, ammunition, and artillery officers) and telling him which batteries to keep in reserve.[785] In the same spirit, Wallenstein sent to his *Proviantmeister* Alexander Haugwitz an itemised memorandum about how he should deliver what provisions, where, and when, and how to inform other decision-mak-

784 Baraldi, Corsi & Esposito, 2021, pp. 163–165.
785 Avenel, 1867, pp. 393–394, 19 June 1639, Richelieu's memorandum to Charles de La Meilleraye.

ers in the loop of his proceedings.[786] Most of the time, however, the war commissars would have to operate without such meticulous instructions. In the absence of formal commissarial ordinances, unless one wishes to qualify the published military treatises as such, the war commissars would have to make executive decisions based on their own experience and judgement alone. The two systemic decision premises, programme and person, were often one and the same in the early modern war commissariat.

The increased hierarchisation of the war commissariats has already been established, but its commissarial aspect necessitates more qualification in the dimension of decision premises. An effective military hierarchy consists of a single chain of command that also doubles as a channel of communication. The war commissariats of the Thirty Years War were not yet arranged into such a uniform hierarchy. In some realms, most conspicuously in Bourbon France and Habsburg Spain, the war commissariats consisted of multiple offices without clearly delineated responsibilities and with systemic deficiencies in their ability to conduct lateral communication with one another. At times, commissarial hierarchies could be veritably non-existent, as happened when general war commissars, such as the Finnish-Swedish Erik Andersson, found themselves operating alone without commissarial subordinates. In the worst cases, all commissarial positions fell vacant for one reason or another.

The institutional trend to unify commissarial and military hierarchies into a single chain of command already existed during the Thirty Years War, and it was best manifested in the Danish resolution to operate two parallel military and commissarial hierarchies. Ultimately, these coextending and complex hierarchies were united into a single chain of command, a trend that was observable in most European realms towards the end of the seventeenth century. By that time, most war commissariats were being controlled directly by army commands, lord marshals, min-

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786 Hallwich, 1879, pp. 299–300, 2 May 1633, Wallenstein's memorandum to Alexander Haugwitz.

isters of war, or even heads of state. In defiance of Otto Hintze's assertion that the war commissariat was a tool of the absolutist power state, in the Dutch Republic its ultimate arbitrator was the collective body politic of the States-General, a non-absolutist form of government that devolved much of its military-administrative functions to private agents. Within the limits of these major qualifications, the institutionalisation of stratified war commissariats that allowed early modern states to extend governmental supervision to the grassroots level of warfare was nevertheless one of the major changes inherent in the Military Revolution to emerge as a result of the Thirty Years War.

Military Revolution or Military Evolution?

The present investigation has considered two paths of European military-institutional development in the epoch of the Thirty Years War: change and decline. The hypothesis is that the Thirty Years War served as a catalyst or at least a seedbed for these two trajectories of institutional development in the Holy Roman Empire, France, Spain, Portugal, Denmark, Sweden, and the Dutch Republic. Starting with change, which in this study has been defined as alteration or modification of an existing institution, the key organisational characteristics are those borrowed from traditional sociology and mainstream economics: complexification, stratification, and specialisation. One conspicuous trend can be identified from this perspective: aggregations of complexification and sophistication were prominent in war commissariats and regular armies, while being tenuous or even non-existent in militias and cavalry services. This trend also corresponded with institutional age. Regular armies and war commissariats, in which complexification, specialisation, and stratification had advanced furthest, were recent or at least newly reformed institutions, while cavalry service and militias were more dated and disordered. This finding aligns with traditional sociology that proposes increased institutional refinement in tandem with modern state formation. The case studies of regular armies and war commissariats from the epoch of the Thirty Years War lend strong support for contemporary systems theory and its assertions.

   Decline has been defined in this study as an institutional arc of development that leads to marginalisation or non-existence. Main-

stream economics and management studies help in understanding and articulating the kind of decline that occurred in European military institutions during and after the Thirty Years War. The organisational cycles, environmental forces, and internal institutional contradictions that fuelled decline differed among military institutions in various European realms, but the one dominant trend in institutional decline was the decreased ability of certain institutions to extract and employ resources from the surrounding society. Some institutions were nevertheless able to reverse the degrading trend and reinvent themselves in altered structural contexts to find new functions or purposes. In the end, military-institutional decline was opposed to change as understood by sociology and systems theory. Decline resulted from stagnation, rigidity, inertia, unsophistication, and impotence, which are all antithetical to the characteristics of systems theory.

The mechanisms at work behind both institutional change and decline suggest an evolutionary model of organisational development. In economic terms it meant that those institutions that could subdivide operational functions, reduce transaction costs, garner resources, and facilitate information flows between agents and managers were more likely to survive and continue their institutional development than those that could not. The Thirty Years War and its aftermath witnessed some institutional extinction, particularly among the cavalry service institutions, and institutional lineages from one preceding institution to its successor, as can be identified in the evolution of regular armies from aggregate-contract armies to state-commissioned ones. Some of the militias transformed from extemporaneous levies to permanent reserves, while others continued their long-term marginalisation into military insignificance. War commissariats generally evolved by expanding the scope of their existing activities, responsibilities, and powers. However, even war commissariats were not safe from institutional inertia and lethargic learning cycles that did little to enhance their nature as complex organisations and aggregations of institutional competencies. Adaptation and specialisation

seemed to encourage institutional survival, while immutability and dormancy exposed institutions to necrosis.

While the dynamics of institutional change and decline suggest an evolutionary way of development, it would be excessive to dismiss the Military Revolution theory and replace it with a teleological concept of Military Evolution. What was revolutionary about Michael Roberts's original theory was not the technical mechanism of military change but rather its hypothesis in the larger context of European state formation. Although many military historians still like to understand otherwise, the original Military Revolution did not argue that the technological and tactical changes between 1560 and 1660 were revolutionary by themselves. Instead, Roberts proposed that the wider outcomes of such technical changes – the growth in magnitude, professionalism, complexity, and state authority in warfare – constituted a revolutionary development in European state formation. Military-institutional change and decline in the epoch of the Thirty Years War should be evaluated using this same metric.

By that metric, both institutional change and decline promoted state monopoly of organised violence over private control of the means of warfare. The rapid marginalisation and even disappearance of cavalry services reflected the erosion of the prebendal system of knight's service and its replacement with a fiscal-military model in which the elites served the early modern state by providing officers and revenue instead of personal mounted service. Among the militias, this trend can be identified in the general push to expand the traditional boundaries of militia service and to turn the militias into potential manpower pools for standing armies or even into actual strategic reserves. Increased state involvement in warfare caused regular armies to shift from contractual army systems to ones in which troops were raised via state commissions. One distinctive feature of this development was the disappearance of powerful general contractors after the Thirty Years War. The formation of standing armies, a process which was already well under way during the Thirty Years War, increased the military participation ratio and served as another metric indicating grow-

ing state encroachment into both the armed forces and the wider society around them.

These parallel institutional trends coalesced in the emergence of the war commissariats, whose very existence indicated growing state influence over all aspects of warfare. The war commissariats existed to reduce the cost of transactions, to overcome the principal–agent problem inherent in existing contractual forms of warfare, and to increase the state's absolute and relative control over the society's resources. The war commissariats' development into more stratified, complex, and specialised general war commissariats testified to the irrevocable institutionalisation of the early modern state's claim for the monopoly of violence. The general war commissariats also displayed many of the characteristics of differentiated and hierarchical modern subsystems, as articulated by systems theory. The convergence of various military-institutional traditions into a state-controlled, complex system of organisations is, essentially, what Michael Roberts originally argued in the Military Revolution theory.

Finally, we should consider the role of the Thirty Years War in these institutional developments. This investigation has revealed that war can indeed serve as catalyst for institutional change and decline in such ways that are measurable with the analytical tools of sociology and economics. Students of the Thirty Years War have, with evident justification, concentrated their analysis on the war's political, religious, demographic, and constitutional outcomes. These are the areas in which historians have identified change and decline caused by the war. Elsewhere, the proponents and critics of the Military Revolution theory have articulated military change and decline in the period 1618–1648 in distinctively technical and quantitative terms. They have discussed tactics and military formations and debated whether Swedish-style brigades were superior to the Spanish *tercios*. Other major issues of contention have been army sizes and the implicit argument of the Military Revolution theory that the early modern state had acquired the monopoly of organised violence and direct control over the resources needed for warfare by the mid-seventeenth century.

An investigation of military-institutional change and decline provides a new way to understand the structural outcomes and lasting legacies of the Thirty Years War. The war shifted not only the frontiers and power relations of early modern states but also boundaries, jurisdictions, and resources between institutions. As with the belligerent territorial realms and principalities, there were winners and losers among the institutions as well. Some institutions became ascendant, while others were trodden down. The deciding factor between survival and demise was the individual institution's ability to use complexity, specialisation, and systemic differentiation to secure the conversion of inputs into outputs. Outputs that served the interests of the war-making early modern state enhanced institutional standing and possibly led to expansion and proliferation of powers; underperformance and failure, meanwhile, eroded an institution's right to consume inputs, meaning those fiscal, material, and human resources that were being provided to the military institution by the wider society.

An institutional approach to the history of the Thirty Years War also provides a qualified and nuanced way of understanding the Military Revolution theory. While the dynamics of military-institutional change and decline followed an evolutionary process of selection, the larger outcome of institutional development supported the central argument of the Military Revolution theory: the drastic and decisive growth in the influence of the early modern state. The Thirty Years War was a significant conjuncture in the emergence of the fiscal-military power state, but not its own military revolution. Institutional change and decline driven by the Thirty Years War occurred as a series of disruptive developments that combined characteristics of both Military Revolution and Military Evolution. The processual interplay of institutional stasis and war-imposed action can best be attributed to the theoretical model of punctuated equilibrium, which proposes to identify several minor military revolutions instead of one all-encompassing one. Placing institutional change and decline in this theoretical framework is perhaps the most relevant way to study the Thirty Years War in the context of the Military Revolution.

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Index

Introductory Note

References such as '178–79' indicate (not necessarily continuous) discussion of a topic across a range of pages. Wherever possible in the case of topics with many references, these have either been divided into sub-topics or only the most significant discussions of the topic are listed. Because the entire work is about the 'Thirty Years War', the use of this term (and certain others which occur constantly throughout the book) as an entry point has been restricted. Information will be found under the corresponding detailed topics.

Military Revolution and the Thirty Years War 1618–1648 investigates change and decline in military institutions during a period of protracted and destructive European warfare. Conceptual background is provided by the Military Revolution thesis, which argues that changes in military technology and tactics drove revolutionary transformation in the way states organised and waged war in the early modern era. This transformation of military institutions became evident during the Thirty Years War. The outcome of the Military Revolution was the centralised fiscal-military state that possessed a strong claim to the monopoly of violence within its territorial boundaries.

The book examines how the Thirty Years War accelerated and even initiated transformation in four military institutions that defined land warfare: feudal cavalry services, militias, regular armies, and war commissariats. The regional scope of the investigation covers the Holy Roman Empire, France, Spain, Portugal, Sweden, Denmark, and the Dutch Republic. The book combines military-historical inquiry with sociology and economics and argues that the Military Revolution of the Thirty Years War stimulated institutions capable of increased complexification and specialisation while curtailing those that were locked in stasis and immutability. The institutional legacy of the Thirty Years War was the emergence of complex military organisations that are characteristic to the modern society.

Instead of concentrating on military technicalities and the wider process of early modern state formation, this book proposes an alternative way of viewing early modern military transformations from the perspectives of institutions and systems and offers a novel way of conceptualising early modern military history.

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