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Environments of War

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Environments of War

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How to “Ravage” a Country: Destruction, Conservation, and Assessment of Natural Environments in Early Modern Military Thought

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This article examines the practice of “ravaging” the countryside as a part of Early Modern military thought. It analyses the arguments for destroying or conserving cultivated natural environments and how they were integrated into the emerging theoretical framework on war in the seventeenth and eighteenth centuries. I argue that depriving the enemy of local natural resources by consuming or destroying them was an extreme form of exercising control over an area which was used to exert control over both the supplies for an enemy army and the use of land by the local population. To legitimize this practice, specific arguments were used: destruction was meant to “shorten” a war, and gradually use of this tactic was confined to the home country and defense against enemy invasions. In addition, it was important which resources were targeted: while the destruction of forage and harvests was seen as a form of short-term damage, cutting down trees counted as a form of lasting damage that was undesirable. Some authors of works on military strategy started to argue that devastating the land in the enemy’s country was unpractical, and that (forced) contributions from locals were far more useful. Thus, while authors of works on military strategy did make arguments against “scorched earth” warfare and the “ravaging” of the countryside, they did so purely out of practical considerations which rested on notions of utility, rather than out of any humanitarian considerations.

Keywords: early modern period, environment, warfare, military thought, wartime destruction

During the winter months of 1688 and 1689, much of the land in the territory of the Electoral Palatinate was in flames. After the devastation of the Thirty Years’ War and the Dutch War earlier in the century, the border region along the Rhine again had become a major gateway for French troops traveling towards the German Empire at the outbreak of the Nine Years’ War. The roots of this conflict lay not only in the events leading to the Glorious Revolution in 1688, but also in King Louis XIV’s fear that a strong Habsburg Empire might be able to contest the territorial gains that he had achieved during the Reunions.¹

1 Lynn, *Wars of Louis XIV*, 191–193; Wilson, *German armies*, 88–89.

As the bulk of the German armies was still fighting the Ottoman Empire in the Great Turkish War, Louis XIV’s forces met with little resistance when occupying a large part of the Palatinate. Important cities and fortresses of the area, like Heidelberg (the seat of the Elector of the Palatinate), Mannheim, Worms, Kaiserslautern, and Speyer, surrendered within weeks.² But the French did not enjoy a quick and decisive victory. German princes continued to put up resistance. They soon opposed the French troops, together with the forces of the Habsburg Emperor Leopold I. After the Glorious Revolution, the Generalstaaten and England under William of Orange also joined the conflict. In the autumn of 1688, the Minister of War François Michel Le Tellier, Marquis de Louvois, and the king’s consultant Jules-Louis Bolé, Marquis de Chamlay suggested to put the Palatinate and other occupied areas to the torch after having collected large amounts of contributions. By demolishing major cities and strongholds in the region, Louvois hoped to slow down any progress of German forces against French borders.³ At its core, this was a defensive strategy. The act became known as the infamous “devastation of the Palatinate,” as it was characterized in various pamphlets which were intended to foment a sense of scandal. The destruction of the Palatinate became a media event.⁴

The French army was not the first and not the last to use this tactic.⁵ Nevertheless, the “burning of the Palatinate” was a prominent example of a tactic put to use in the seventeenth and eighteenth centuries that has been called “scorched earth warfare.”⁶ Both major cities but the surrounding countryside suffered as a consequence of efforts to transform the region into a “logistic obstacle.”⁷ In this article, my intention is to demonstrate that this devastation was not simply an act of desperation, but rather was a tactic which drew on an element of Early Modern military thought.

2 Lynn, *Wars of Louis XIV*, 193–194; Dotzauer, *Rheinland-Pfalz*, 164–66.

3 Lynn, *Wars of Louis XIV*, 194–95; Dotzauer, *Rheinland-Pfalz*, 167–68; Lynn, “A Brutal Necessity,” 79–83.

4 On this see Dosquet, “Die Verwüstung der Pfalz,” 333–69; Wrede, *Reich und seine Feinde*, 400–3; Bothe, “Von Mordbrennern,” 11–47.

5 In addition to the references to warfare in Antiquity used by Early Modern authors (for instance the scorched earth warfare that Caesar attributes to Vercingetorix in his “*Commentarii de bello Gallico*”), there are numerous mentions of other instances of such conduct. Frank Tallett, for example, listed the deliberate destruction wrought by Maurice of Nassau or the Elizabethan generals in Ireland in the 1590s as scorched earth warfare and a practice of warfare that targeted the economic resources of an enemy. Tallett, *War and Society*, 58–59.

6 As described by Lynn, *Wars of Louis XIV*, 195.

7 *Ibid.*

Most handbooks and memoirs concerning the art of war included examples of when and how to “ravage” a country. These reflections also underline that this type of “scorched earth warfare” not only targeted towns and villages by burning down buildings and driving off or killing their inhabitants, but also targeted the cultivated nature of the countryside. By consuming or destroying forage and crop yields, this tactic of attrition was used, as Lisa Brady has noted in the case of the American Civil War, to sever the connection between the rural civilian population, the enemy army and the land on which both depended for sustenance on the other.⁸ It was thought to be possible to starve out an enemy and to exercise control over the enemy’s use of land in a radical way: by destroying it.

Examining this aspect of Early Modern military tactics and its consequences for the natural environment as a part of military knowledge, I aim to contribute to fields of research for environmental historians and historians of warfare. As a synthesis, this environmental history of warfare focuses not only on the environmental impact of war, but also, as Richard Tucker has pointed out, on the ecological settings of war through history.⁹ As J. R. McNeill has observed in a study on the history of woods and warfare, scorched earth tactics like destroying natural resources are “as old as war itself,” and Emmanuel Kreike underlined the importance of environmental warfare as a colonial war practice in the nineteenth and twentieth centuries.¹⁰ An examination of this form of warfare as a part of the emerging theoretical framework on war in the seventeenth and eighteenth centuries furthers an understanding of environmental warfare as a special field of military knowledge.

The article consists of three sections. Initially, I sketch an episode of the devastation of the Palatinate with a focus on the local consequences of this type of warfare to highlight its impact on civilian use of land. The efforts of the French armies were intended to ensure not only the demolition of fortifications and towns, but also the consumption of as much forage as possible. This deprived enemy troops and the local population of a vital natural resource. I then analyze the idea of “ravaging” a region in Early Modern military thought as a legitimate

8 Brady, “The Wilderness of War,” 172–79; Brady, “Devouring the Land,” 49–52.

9 Tucker, “The Impact of Warfare,” 15–16; Tucker, “War and the Environment,” 319–20.

10 McNeill, “Woods and Warfare,” 401. In an extreme form, Emmanuel Kreike called this environmental warfare a form of “ecocide,” citing the example of Dutch colonial warfare in the nineteenth century. However, while Early Modern environmental warfare targeted civilians, it was never comparable to an effort systematically to eradicate an entire population or people. See Kreike, “Genocide,” 297–300.

modus operandi that was addressed in certain contexts. Finally, I briefly examine the idea of protecting the countryside during wartime, as violence against the rural population and their local resources was also connected to ideas of “just war” and legitimate versus illegitimate conduct of warfare. This protection, as I will argue, was meant to ensure the effectiveness of one’s own army and did not entail the idea of a humanization of warfare; rather, in the discourse of military thought and theory, utilitarian arguments prevailed.

The Hunger for Forage: The Case of Baden-Baden 1689

Fernand Braudel once called the times before the nineteenth century and the beginning of the consumption of large amounts of fossil fuels the “Old Biological Regime.”¹¹ One key implication of this term is its focus on energy production: Before large amounts of energy began to be drawn from the use of fossil fuels (an “underground forest,” as Rolf-Peter Sieferle has put it),¹² the “Old Biological Regime” was mainly bound to organic sources of energy. Wood for fires and food for both man and animals alike were subject to the biological laws of fertility and plant growth. John Landers has described this configuration as an “organic economy,” its limitations having a direct impact on the military logistics of pre-industrial Western societies. As Landers suggests, the dependence of this “organic economy” on large rural areas meant that military forces could only advance if armies and military administrations were able to make use of local agricultural resources. Depriving an enemy of this resource, thus, was often the only way to win a war.¹³

This perspective proves exceptionally interesting if one considers the ways in which Early Modern armies ensured their mobility. Often, it has been noted that winter campaigns were uncommon in Early Modern Europe and that warfare was typically bound to the seasons, just like agriculture. If military operations dragged on into the harsh winter months,¹⁴ this was considered especially

11 Braudel, *Civilization and Capitalism*, 70–72. On the use of this concept, see Marks, “The (Modern) World since 1500,” 58.

12 Sieferle, *Der unterirdische Wald*.

13 Landers, *The Field and the Forge*, 70–71; 202–3; 225–26.

14 It should be noted that Early Modern Warfare took place in a special phase of climate history, the Little Ice Age. Especially low temperatures and wet and unstable summers further contributed to the famines during wartime. As John Lynn has noted, during the Nine Years’ War, France suffered one of the worst agricultural disasters on record in 1694 and 1695, and this dramatically slowed the French war efforts, see Lynn, *Wars of Louis XIV*, 241–53. For a concise summary of the concept of the Little Ice Age and

problematic. One of the main reasons for this limitation was the dependency on forage. Grass growth determined the point of time armies could leave their winter quarters. Without this “fuel,” no army could be expected to move anywhere. The cavalry needed a daily portion of forage to feed their horses, as did all the other animals used in convoys for supplies or to transport baggage and heavy and expensive siege weapons, which were very important in an age of fortress warfare.¹⁵

As John Lynn has argued, drawing on the example of the French Army, a force of about 60,000 soldiers could easily muster about 40,000 horses, 20,000 for the cavalry and another 20,000 used for logistical tasks. As the amount of forage for troops in winter quarters was quantified in *Réglements*, it is possible to estimate at least the amounts of dry forage that a body of troops like this would consume on a daily basis. The *Réglement* of the French Army in November 1665, for example, prescribed a ration of 20 pounds of hay for each horse. For the cavalry alone this would have meant that about 200 tons of dry forage were needed to sustain about 20,000 horses, if these estimates are accurate.¹⁶ The problem with forage was that it effectively could not be procured from distant regions via carts, as this again would require the use of horses, which would also need to be fed. Dried forage was vital for troops in their winter quarters, but the same problems arose as in the case of fresh forage. Furthermore, it proved complicated to dry fresh forage in the field, as it rotted very quickly. Thus, the *subsistance militaire* was divided into food for soldiers and food for animals.

This tactic sheds some light on the core problem of logistics that was connected to military tactics in the Early Modern era. Military strategy and military organization changed between the Thirty Years' War and the French Revolution. This can only be briefly covered here: out of the mercenary armies of the early seventeenth century emerged more or less permanent forces with an aristocratic officer class more closely bound to the military hierarchy and the authority of the sovereign; soldiers were gradually subjected to harsher forms of drills, as the ideal tactic of linear warfare of the early eighteenth century to maximize firepower demanded even greater discipline; the ever-present army

the research of leading climate historians Christian Pfister, Hubert Horace Lamb and Rüdiger Glaser, see Behringer, *Kulturgeschichte des Klimas*, 119–22.

15 Tallett, *War and Society*, 32–33 and 54.

16 See Lynn, *Giant*, 127–28. Lynn also estimates a total sum of 400 tons of dry forage for 40,000 horses or even 1,000 tons of green forage, see Lynn, “Food, Funds, and Fortresses,” 141. However, it is important to note that not all animals used for supply runs belonged to the armies. Rather, animals for carting food and other supplies were often requisitioned from the local rural population.

“tails,” still known in the early seventeenth century, consisting of the women and children of mercenaries who occasionally even outnumbered the armed forces, declined in the late seventeenth century as the supply of soldiers increasingly became a matter of a military administration. At the same time, European armies experienced a dramatic growth, fostered by changes in recruiting and supply practices.¹⁷

The supply of troops underwent a major transformation since the end of the Thirty Years’ War.¹⁸ As for the French example, the growth of the army was to a large part only possible because of reforms under Le Tellier and his son Louvois. These reforms were reactions to the increasing problem of providing adequate supplies for a large force without actually having the funds to purchase food for the troops directly. By institutionalizing the establishment of magazines using private contractors, the French administration tried to improve army supply and reduce damage dealt to the home country. In theory, food could then be carted from the magazines towards the field of operations.¹⁹

In contrast to these obvious changes, however, there remained certain key problems of Early Modern warfare. Often, forage had to be obtained in the field as a local resource, either by requisition or by purchase.²⁰ “Foraging” was the most basic daily routine for armies.²¹ However, concentrating large quantities of dried forage in magazines could also become a major advantage, as this would allow an army to take to the fields early. Under Le Tellier and his son Louvois, this became one of the key factors in the quick successes of the French army during the Dutch War, as the troops could draw on substantial stocks of hay and

17 For a concise overview of military tactics from the seventeenth to the eighteenth centuries see, for instance, Lynn, *Women, Armies, and Warfare*, 2–14; Tallett, *War and Society*; Wilson, “Warfare in the Old Regime;” Duffy, *Military Experience*.

18 On the French case see Lynn, *Giant*, 108–14. On the connection between warfare and the emerging state during the Early Modern period, see for example Tilly, “War Making and State Making,” 181–86; for a critical view of the notion of a dominant “fiscal military state,” see Parrott, *The Business of War*, 310–27. Parrott emphasizes the role of private contractors as suppliers of European armies.

19 See Parrott, *Business*, 310; Creveld, *Supplying War*, 17–22. However, Creveld is very critical concerning the actual use of magazines, arguing that most of the time they actually were used to supply troops in garrison, not operating armies. John Lynn argues against this thesis, and he points out that supply for soldiers indeed was normally procured via the magazine system, whereas fodder was mostly requisitioned locally. Lynn, “Logistics,” 15–21.

20 On this difference, see Lynn, “Logistics,” 19–20.

21 On the importance and complexities of foraging, see Lund, *War for the Every Day*, 65–69.

straw that had been established at major fortresses along the Rhine. The river was used to transport the enormous quantities of forage.²²

This shows two main factors that also played a key role during the devastation of the Palatinate. First, forage was one of the main resources that an army needed to keep itself mobile, and it was also a resource of which one could deprive one's enemy only by consuming or destroying it. As it was a local resource, the availability of which was bound to its own growth time, keeping an enemy away from forage could potentially slow down his operations. Also, a considerable advantage was to be obtained if one could concentrate large amounts of dried forage in magazines. This concentration of forage could be achieved by drawing on contributions from the enemy territory, which were to be paid both in money and "*in natura*."²³ It became common practice to obtain these "contributions" as a mixture of taxes and extortion not only for the French, but for all European armies after the Thirty Years' War, and this remained common practice until the end of the eighteenth century. This method of sustaining an army in enemy territory was a vital part of financing warfare, and levying contributions was legitimate in terms of military law. The collection of this "war tax" was relatively orderly most of the time, as commanders even worked together with the civil administration of occupied regions to raise the required sums or the required amounts of foodstuffs and fodder. So-called contributions were often seen, in comparison to pillaging and looting, as a lesser evil. If a town or region failed to pay, however, armies could burn villages and towns as a form of rightful punishment.²⁴

Yet, the burning of the Palatinate in the winter months of 1688 and 1689 was not done as punishment for failure to pay the increasing sums demanded by French intendants. Instead, this common practice provided the pretext for a plan that had been designed very early on.

The example of the fate of Baden-Baden, a small county south of the Electoral Palatinate which also was partly occupied by French forces and compelled to make contributions (as were most territories on the Upper Rhine),

22 Lynn, "Food, Funds, and Fortresses," 148.

23 Lynn, "Logistics," 143–46.

24 Redlich, *De Praeda Militari*, 44–46 and 66–71. Redlich, however, draws a sharp line between the seventeenth and the eighteenth centuries, describing the former as a century of pillaging and the latter as the century of a rather orderly system of contributions. On the cooperation of local elites with enemy forces in collecting contributions to mitigate possible negative consequences for the territory, see Carl, "Restricted Violence," 122–25.

sheds light on what this practice meant for civilian populations.²⁵ Demands were being made not only for considerable sums of money, but also for forage to supply French troops in their winter quarters. For the territory of Baden-Baden, these demands were sent by Jacques La Grange, who had been the intendant of Alsace since 1674 and had served in the Nine Years’ War as the intendant of Alsace, Brisgau, and the French army in Germany.²⁶

In a letter to the Baden-Baden officials written on February 7, 1689, he elaborated on the consequences the county would face if his demands were not met. “I have heard that of the 20,000 rations of forage, which have been imposed on you for our part of the contribution, you have only paid 600 so far.”²⁷ If this did not change quickly, he threatened to “burn without consideration.”²⁸ Eleven days later, La Grange issued yet another official letter to levy new contributions, demanding 1,500 sacks of oats for the cavalry.²⁹

While it was a common practice to draw upon enemy resources to sustain one’s own army, especially during winter, the motive in early 1689 was not only subsistence. As John Lynn has pointed out, there had been plans to demolish not only fortifications, but also towns on the Upper Rhine as early as the end of October 1688. In a letter to Louvois, Chamlay suggested completely destroying the town of Mannheim. In a letter from Louvois to the Lieutenant General Joseph de Montclar written on December 18, the Minister of War ordered Montclar to destroy all settlements along the Neckar completely so that German troops would find neither food nor forage.³⁰ This included consuming or destroying forage before retreating to the left side of the Rhine, as Montclar wrote in an order concerning the French officer Peyssonel in 1688: his troops should consume all forage if possible and burn the rest.³¹ It is not unlikely that this is the context in which the repeated demands for new deliveries of substantial amounts of forage from the county of Baden-Baden to Strasbourg is to be seen: as an attempt to consume the fuel available and establish a logistical obstacle for the German forces.

25 Wunder, “Zerstörungswut oder militärische Logik,” 25–26.

26 See Vetter, “Anhang,” in *Das Schloß gesprengt, die Stadt verbrannt*, 158.

27 Generallandesarchiv Karlsruhe (GLAK), 48/3384, letter from La Grange to the Baden-Baden councilors, February 7, 1689.

28 Ibid.

29 GLAK 48/3384, letter from La Grange to all officials of the county of Baden-Baden, February 18, 1689.

30 Lynn, *Wars of Louis XIV*, 196.

31 Lynn, *Giant*, 129.

This tactic seemed to work, as reports by Baden-Baden councilors to Count Hermann of Baden-Baden in Regensburg suggest.³² In a report dated to January 24, 1689, an official wrote about destruction around the town of Pforzheim, but also about raiding parties that took forage and grains. The “conservation of the country” was at risk, as many of the subjects had already fled the surrounding countryside.³³ To ease the burden of contributions, especially that of providing forage, a letter directly addressed to La Grange himself³⁴ tried to dissuade the French official from demanding copious amounts of hay and straw: “The supply of grains and forages is absolutely impossible, as it is completely consumed by the billeting and continued passages of the royal troops.”³⁵ According to the letter, the financial and ecological limits of the small territory had been reached, and during winter it was simply not possible to grow more forage.

One could contend that these sources are not entirely reliable, since the councilors and officials may have exaggerated the situation in Baden-Baden to persuade the French to relieve the burdens of war or to persuade Hermann of Baden-Baden to force the Reichstag in Regensburg to respond to the French more quickly. However, another document supports the conclusion that the description of the situation given by the councilors in their reports was accurate. In a record dated March 24, 1689, several Baden-Baden officials discussed the next response to the growing French threat.³⁶ Even though the governor of Strasbourg Count Chamilly had given an order allowing the contribution in forage to be paid in money, the councilors found this obligation impossible to meet. In addition, the document illustrates the growing sufferings endured by the civilian population and the damage done to their methods of land use. Again, they wrote that “a large share of fruits and forage” had already been consumed “*in natura*,” and soon there would be nothing left. Many subjects, they contended, had fled the territory because of famine, and the lack of forage had

32 Hermann of Baden-Baden was the Uncle of the well-known General and ruling Count of Baden-Baden Ludwig Wilhelm of Baden-Baden. Hermann of Baden-Baden was Principalcommissarius at the Reichstag in Regensburg as of 1688. In this position, he seems to have been interested in the development of the new war against Louis XIV, and he received continuous reports about the developments in the county. See Kleinschmidt, “Hermann, Markgraf von Baden,” 120–22.

33 GLAK 48/3384, report of officials of the County Baden-Baden to Count Hermann of Baden-Baden, January 24, 1689.

34 This letter is only preserved as a copy without signature; in his answers, La Grange addressed a “madame.”

35 GLAK 48/3384, copy of a letter to La Grange.

36 GLAK 48/3384, concept of several officials and councilors of the County of Baden-Baden, March 24, 1689.

led to the slaughter of a large part of the remaining cattle.³⁷ As the subjects had neither grain nor forage left, they could hardly sell them to meet the demands in money.

While this kind of shortage was common if an enemy army was present in a territory, the authors linked it to the tactic of consuming everything so that German commanders would find nothing with which to feed their troops and mounts, even though this hardly made any sense to them. As they wrote, the French insisted on their demands “even though the German troops quartered in this county do not get their supplies from our land...”³⁸ Thus, the shortage was to some degree artificial and intentional, a tool of war meant to constrain German forces.

This brief example shows the importance of a local resource like forage in keeping an army supplied, a resource that was “natural” because it followed its own biological mechanisms and rhythms.³⁹ While military organization and tactics gradually changed during the seventeenth and eighteenth centuries, this factor remained a critical logistical problem that was examined in writings on military theory. If all dried forage had been consumed in a region during winter, there was simply no other solution than to wait for fresh grass to grow again or to engage in large-scale logistics operation, procuring large quantities of hay and straw via rivers. Also, this understanding of the importance of forage and the shortage of it in a given territory clarifies the meaning of the term “logistic obstacle.” By consuming (or destroying) this necessary fuel, the army directly impacted the use of local land, the inhabitants of which needed forage, for example, to keep cattle. This shortage, together with the burning of villages and all sorts of violence against the civilian population, drove the subjects from the territory. This in turn meant that in some areas, there was nobody left to cultivate the land so it would again yield grains or forage, thus making it difficult to supply an army in the region.⁴⁰ This impact on land use by a large military force was not always accidental, nor was it always a result of faulty organization. Rather, sometimes it was used as a way of depriving an enemy of supplies. This warfare

37 Ibid.

38 Ibid.

39 For a theoretical approach on defining nature as a problematic notion in historical research see Schatzki, “Nature and Technology in History,” 85–86.

40 The idea of the population as a work force that ensured the “fertility” of the land and thus provided the essentials for supplying an army was common in Early Modern military theory. See for example Santa Cruz de Marcenado, *Reflexions*, vol. 12, 7.

of attrition, which has been seen as characteristic of the wars under Louis XIV,⁴¹ was widely discussed in contemporary military thought, both before and after the reign of the sun king.

“Ravaging” a Country as a Part of Military Thought

The devastation of the Palatinate also became a topic in Early Modern military theory. One example is Hanns Friedrich von Flemings’ “Der vollkommene Teutsche Soldat,” an encyclopedic effort to summarize the state of the art of war in the early eighteenth century. The author placed particular emphasis on the wars of Louis XIV and the destruction wreaked in the course of these wars. This included burning down houses, poisoning wells, and desecrating graves, actions that were seen as a violation of the “divine law or the law of nations.”⁴² Flemings’ accusations repeat claims found in leaflets in which the French conduct of war was presented as scandalous. However, it is telling that he used this example in a chapter in which he discussed the theory of a “just war” and laws during wartime in general. In this context (of course from a German perspective), French actions served as an example of misconduct.

Flemings’ compilation also shows the specific nature of military discourse of the period. In the appendix, he included a list of examples of “soldiers who distinguished themselves both by sword and scholarship.”⁴³ The list was meant to illustrate one of Flemings’ key points, which he made clear on various occasions in his work: officers should educate themselves to master the art of war.

This points towards an emerging new ideal of educated officers and the idea that war itself could be controlled and systematized by reducing it to certain basic principles. As Azar Gat and other scholars of the “military enlightenment” wrote, military thought did not remain untouched by processes and currents in the general spirit of the age, which has been dubbed (at least by its European heirs) the “Enlightenment” and the “Age of Reason.”⁴⁴ The doctrine of natural law combined with a general search for rules and principles in the arts, together with the “gospel of Newtonian science,”⁴⁵ created a particular intellectual atmosphere.

41 Lynn, “Food, Funds, and Fortresses,” 137–38.

42 Fleming, *Teutsche Soldat*, 95.

43 *Ibid.*, 698.

44 In general, see Cassirer, *Die Philosophie der Aufklärung*; Hazard, *Die Herrschaft der Vernunft*; Koselleck, *Kritik und Krise*; Gay, *The Enlightenment*.

45 Gat, *Origins*, 26.

However, many modern scholars of the Enlightenment argue that this cannot be summed up as a “revolution” or the personal project of few “enlightened” thinkers, but rather as a large-scale process of losing and questioning traditional orders and thus a resulting concentration of communication.⁴⁶

The study of these general principles of warfare and sharing them with young officers and interested amateurs alike were key factors in the establishment of “military science” and a “military enlightenment.”⁴⁷ Ever since Niccolò Machiavelli’s “Dell’Arte della Guerra” (1521), a new genre of printed texts emerged that focused on how to wage war, primarily drawing on examples borrowed from Ancient authors like Vegetius, Caesar, and Onasander.⁴⁸ It has been argued that the influence of Antiquity on military treatises remained very high until the end of the eighteenth century, with most authors following technically outdated formations and ideals of warfare, with only few exceptions.⁴⁹ While it is indeed true that Ancient authors, primarily Vegetius but also Caesar’s “De Bello Gallico,” were frequently referenced in nearly all works on the art of war of the period, it is also important to consider the changes to the discourse on military theory during the late seventeenth and eighteenth centuries. Gradually, writings about European warfare came to adopt a more skeptical perspective that emphasized the experiences of the authors and made references to recent events, especially after the Seven Years’ War, while occasionally drawing on the authorities of Antiquity.⁵⁰ As a genre, writings on the Art of War tried to give the reader examples of the best practices in nearly every field of military life, making the knowledge of the Ancients and the knowledge of great commanders available, but also commenting on it in an increasingly reflective manner.

Despite Flemings’ harsh judgment concerning the destruction wreaked by the French, there indeed was a place in this discourse for the planned devastation of a country by an army through the destruction of forage and harvests. Thus, the French officials drew on an idea that was already present in military thought and remained part of it even after the Nine Years’ War. A French example that was written before the outbreak of the Nine Years’ War and was broadly published and read illustrates this.

46 Fulda, “Gab es ‘die Aufklärung,’” 22–25; Bödecker, “Aufklärung als Kommunikationsprozess,” 91–92; Füssel, “Aufklärung,” 280; Pečar and Tricoire, *Falsche Freunde*, 11–27.

47 Gat, *Origins*, 25–27; Hohrath, “Spätbarocke Kriegspraxis,” 28–29; Hohrath, “Die Beherrschung des Krieges,” 373–79.

48 Gat, *Origins*, 1–9.

49 Beatrice Heuser, *Den Krieg denken*, 99–107; Creveld, *The Art of War*, 73.

50 Neill, “Ancestral Voices,” 516–20.

Henri II, the duke of Rohan, was one of the most reputable French authors on military theory of the seventeenth century. Born in 1579 to an old and powerful protestant family, de Rohan served in campaigns against Spanish forces in Flanders under King Henry IV. Due to his close relationship to the king, Rohan could hope to rise rapidly into the highest circles of power. However, the assassination of Henry IV in 1610 shattered his hopes, and soon he found himself the leader of protestant resistance in France and in opposition to the ruling Marie de' Medici and Louis XIII. In the following uprising of the Huguenots, Henri de Rohan played a key role in repeatedly defeating larger royalist forces until the peace of Alès in 1629. He was then ordered by Louis XIII to become his ambassador in the Swiss *Eidgenossenschaft*. There, he fought a campaign in Valtellina in an offshoot of the Thirty Years' War. He was mortally wounded at the siege of Rheinfelden in 1638, where he had fought in the army of Bernhard of Saxe-Weimar.⁵¹

In 1636, Henri de Rohan published a translated extract from Julius Caesar's "De Bello Gallico," "Le Parfait Capitaine." Combined with this however, Rohan published his own "Traité particulier de la Guerre" in which he sought to adjust the "good maxims" of the Ancients to the new art of war.⁵² In his treatise, he wrote that he wanted to show that "despite the difference in our arms to those of the Ancients, we should not ignore their orders."⁵³ The reference to Antiquity was his main source on which he drew for illustrations.

However, Henri de Rohan was also a practitioner of warfare in the early seventeenth century, which bore witness to the rising importance of siege warfare. In the chapter dedicated to defending a country against enemies, he addressed the question of the proportion of fortresses to an army in the field to defend a territory. At this point, he also wrote about the tactic of wearing out an enemy by entrenching large garrisons in strong fortresses. He warned that this would threaten the land itself, as it would be desolated by the besieging armies. Without a force to counter the besiegers, "you put the means to keep an army in the field at risk; and the damage to two or three harvests will put your neck in the noose."⁵⁴

Nonetheless, a few pages later, Henri de Rohan explicitly suggests laying waste to the lands. If a territory is attacked by a larger force, there is only one

51 See Hubler, "Rohan, Henri de."

52 This part was also copied and translated into German. See Rohan, *Erfabrner Capitain*.

53 Rohan, *Parfait Capitaine*, preface.

54 *Ibid.*, 357.

option: “consume the enemy [*consommer l’enemy*]⁵⁵ and cut off his food supply: “In this case, it is necessary to leave the country and burn all sustenance which you cannot contain in your fortresses, and also all towns and villages that you cannot defend: because it is better to defend oneself in a ruined land than to conserve it for the enemy.”⁵⁶ According to his reasoning as a practitioner of warfare during the Thirty Years’ War, destroying forage and harvests and displacing the local population (even if it were one’s “own” population) were legitimate means of starving out an enemy, justified by the reference to the common good.

Henri de Rohan’s works were widely published and translated, and many authors of the later seventeenth and eighteenth century alluded to his “*Le Parfaict Capitaine*” as an influential treaty on warfare, mainly a work which offered a better understanding of warfare in Antiquity.⁵⁷ This does not mean, however, that Rohan was the inventor of this tactic, nor was he the only author suggesting its use. In fact, other contemporary authors had similar views. Many quoted the famous Roman author Vegetius as the main Antique authority on warfare:⁵⁸ in his general rules of war he wrote that “everything that is of use for you harms your enemy; everything that is of use for him is harmful to you.”⁵⁹ According to this logic, it was “a great deed to fight your enemy with hunger rather than with the sword.”⁶⁰ This, together with Henri de Rohan’s work, shows that laying waste to a region and destroying or consuming forage and food were well-established elements of military strategy before the Nine Years’ War.

Perhaps more surprising is the fact that many authors still supported this tactic after the Nine Years’ War, partly drawing on their experiences in that conflict. Even though the reputation of Louis XIV suffered because of the burning of the Palatinate, which also failed to bring the war to a quick end, the approach of devastating a region which should be defended remained part of various treatises.

55 Ibid., 360.

56 Ibid., 361.

57 Even in 1773, the German officer and influential military writer Ferdinand Friedrich von Nicolai mentioned de Rohan’s work and recommended it because it offered a more nuanced understanding of Caesar’s approach to warfare. Nicolai, *Grundriss*, 263.

58 Heuser, *Krieg denken*, 98–107. Heuser, however, sees the references to Ancient authors like Vegetius as nearly absolute until the end of the eighteenth century. For a critical perspective, see Neill, “Ancestral Voices,” 516–20.

59 Vegetius, *Abriß des Militärwesens*, 175.

60 Ibid., 179.

One telling example is that of the French nobleman and officer Antoine de Pas, Marquis de Feuquières. Born in 1648, Feuquières served in nearly all the wars of Louis XIV. During the Nine Years' War, he commanded a regiment and contributed to the French victory at Neerwinden in 1693.⁶¹ He was also one of the French officers who led raids deep into German territory, demanding large sums of contributions. After the Nine Years' War, Feuquières fell from Louis' grace, and the War of Spanish Succession was launched without him as a member of the king's army.⁶² During this time, he wrote his memoirs, in which he commented (often in a harshly critical manner) on many operations that had been led by French and German officers.

His work was published in 1711, the year of his death, and it instantly became a popular lecture as the various reprints and translations into English and German suggest. Again, in his chapter dealing with defensive wars, Feuquières concerned himself with the possibilities of waging war against an enemy that had invaded a territory by surprise. It was "very difficult to prescribe, by general maxims, how to wage this war."⁶³ But as a general maxim, Feuquières again suggested that the countryside should not be spared: "The rural countryside should not be conserved. It is imperative that one take everything possible into the best fortresses and consume, even by fire, all grains and forage which one cannot take to a safe place, as to diminish the subsistence of the enemy army."⁶⁴ Local resources that were not controlled by one's own troops were a threat to the region and to one's own army. Thus, if necessary, they were to be destroyed. The phrase "even by fire" suggests that simply burning everything was a matter of last resort, however. Preferably, forage and grains were to be consumed.

Even after considerable time, this rationale of disrupting land use to deplete local natural resources was an element in the discourse of military theory. The time of the great encyclopedias, which were meant to gather and systematize all forms of knowledge for the use of mankind (most prominently, the "Encyclopédie" of Denis Diderot and Jean-Baptiste le Rond d'Alembert) also saw a fair share of efforts to put together encyclopedias and dictionaries specializing in military knowledge.⁶⁵ One of the best-known examples is the "Dictionnaire Militaire"

61 "Feuquières, Antoine de Pas, marquis de," 662.

62 Ibid.

63 Feuquières, *Memoires*, 2.

64 Ibid., 3.

65 Hohrath, "Die Beherrschung des Krieges," 373; on encyclopedias in general, see Schneider and Zedelmaier, "Wissensapparate," 349–50.

by German officer and engineer Jacob von Eggers. Eggers was born in 1708 and was active in the Swedish service, where he received an education in military engineering and the building of fortifications. In 1737, he joined the army of Saxony. During the War of the Austrian Succession, Eggers fought on the side of the Saxon army, securing river crossings by building field fortifications. After the war, Eggers was promoted to serve as the head of the Saxon corps of engineers. He became the educator of the princes of Saxony and was admitted to the Swedish Academy of Sciences. In 1751, he published his “Dictionnaire Militaire.” Until his death in 1773, Eggers was mainly the commanding officer of the city of Gdańsk (Danzig), where he built up an impressive library specializing in military science.⁶⁶

Eggers was the prototype of the “enlightened” officer: well-educated (partly due to his specialization in military engineering) but also with experience in the field. His efforts as a military writer and collector of books on military science make him one “of the educated officers of the eighteenth century who laid the foundation for the rationalization of warfare,” as Daniel Hohrath puts it.⁶⁷ Still, in his dictionary there is an entry for “to ravage [*ravagiren*]: “ravage, is the act of troops ravaging a province or region where they cannot hold out against an enemy by burning and pillaging and taking everything with them if possible.”⁶⁸ In his entry concerning the “le plat pais” (the rural countryside), Eggers noted that it was common to lay waste to most of these kinds of lands due to problems with discipline or due to enemy raids.⁶⁹ It is striking that for Eggers, the option of “ravaging” a country was not bound to war on friendly territory, but yet was a defensive measure that deserved to be mentioned in his dictionary, thus making this tactic a codified part of military knowledge. However, the idea of desolating an area to gain advantages remained an element of military knowledge that was repeatedly mentioned in writings on the subject until the end of the eighteenth century.⁷⁰

The destruction of the countryside was justified as a defensive measure that was meant to ultimately protect the “common good,” even though nearly all of the authors in question mentioned this tactic in reference to friendly territory. If an enemy army would otherwise use a resource to its own benefit, it was better

66 Hohrath, “Jacob von Eggers,” 99–101.

67 Ibid.

68 von Eggers, *Ritter-Lexicon*, vol. 2, 559.

69 Ibid, 23.

70 See for instance Bessel, *Entwurf*, 9.

to destroy it and to deprive him of this opportunity. Thus, exercising control over the use of local resources was the main motive. What is important in the case of each of these examples is the way in which military land use and civilian land use were related to each other. To all military writers, the primary focus lay on the use of the rural countryside for the armies. Food and especially forage were broadly mentioned as targets along villages, resources that could be of direct use to anyone controlling a territory. By consuming or destroying as much as possible, one could at least keep the enemy at a safe distance while harming him indirectly due to the lack of supplies. Also, the use of fortresses as key factors of resource mobilization becomes clear. This tactic was related to the fact that campaigns were fought following the seasons. Depriving an enemy of sustenance was confined locally and possibly lasted until the following spring, but this meant that it lasted until the next campaign. Thus, it could be used to exert at least some degree of control over the movement of the enemy army and its use of local resources. If a region simply could not sustain an army any longer, it was unlikely that the region would be the next theatre of operations. The displacement of the local population could worsen the situation, as locals were needed to cultivate the land and to harvest grains and forage.⁷¹ However, there also were instances of authors arguing against the idea of devastating the land. Their arguments reveal the utilitarian point of view that was prevalent in military theory regarding the destruction of the rural countryside and natural resources.

Conserving Local Resources as Military Rationality

In fact, there was a prominent reference in one of the most important texts on international law to both the destruction and the conservation of local, natural resources. The Dutch jurist Hugo Grotius, who is often considered one of the founders of international law and the law of war, also dealt with the damage done to the countryside during conflicts. In his “*De Iure Belli ac Pacis*” from 1625, Grotius made a considerable contribution to the discussion of the theory of a “just war” and “just warfare,” drawing on scholastic and humanist traditions. Devised by St. Augustine of Hippo in the fifth century and St. Thomas Aquinas in the thirteenth century, the theory of “just” war

71 On this contemporary emphasis on the local population as an important element in the provision of resources for armies operating in an area, see for instance Santa Cruz, *Reflections*, vol. 12, 7.

played a vital role as a background for international laws of war for the whole Early Modern period. While the area of the *jus ad bellum* addressed the causes to declare war, the category of *jus in bellum* regulated the conduct of warfare. The theory of just causes for war, however, outlawed wars of aggression or out of motives like greed, expansion, and the like and emphasized that war was to be used as a means of reestablishing order against a perpetrator.

While this setting of laws and rules worked well as legitimization for campaigns against non-Christian enemies and “outlaws” (like bands of criminals or marauders),⁷² this focus on just causes was subjected to scrutiny by Gentili and Grotius. The question of what was, precisely, a “just” cause for war had become problematic. The notion of sovereignty proposed by Hobbes and Bodin meant that the emerging state was regarded as the only legitimate actor that could rightfully set rules and use force to establish them. Thus, conflict between two states posed a problem, as both parties claimed to have “just” causes for their military actions. In this problematic setting, Gentili and later Grotius emphasized the *ius in bellum* as regulation of the conduct of warfare; while war was accepted as a way of settling disputes between two sovereigns, the notion of *ius in bellum* at least offered some hope of mitigating its worst effects.⁷³

In this context, Grotius addressed the question of damage done to cultivated natural resources.⁷⁴ In the twelfth chapter of the third book in “De Iure Belli ac Pacis,” he explicitly wrote about the importance of moderation when it came to efforts to “desolate or ravage the enemy country.”⁷⁵ Firstly, Grotius noted that the destruction of the “fruits of the land” was not necessarily an illegitimate tactic. As he explained, destroying land and the goods of an enemy was not unjust if the destruction was necessary. Alluding to Ancient authorities like Polybius and Onasander, he stated: “A general will remember to desolate an enemy’s land and to burn it to devastate it; because if the enemy is lacking the fruits of the land and money, the war will be halted [...] So desolation is permitted if it can force the enemy to make peace quickly.”⁷⁶ But as he mentioned, this kind of desolation happened “commonly out of wrath and resentment or out of the desire for bounty”⁷⁷ rather than for strategic reasons.

72 Bennett, “Legality and legitimacy,” 265–70; Tuck, *The Rights of War and Peace*, 78–79.

73 Schröder, “Sine fide nulla pax,” 37–38; Schröder, “Natural Law,” 204–18; Pröve, “Vom ius ad bellum zum ius in bello,” 264–68.

74 See also the remarks of Stone, “The Environment in Wartime,” 16–18.

75 Grotius, *Drey Bücher von Kriegs= und Friedens=Rechten*, 168.

76 Ibid., 169–70.

77 Ibid., 170.

However, Grotius also explicitly stated that there were indeed limits on the justifications for attacking natural resources. Referring again to writers of Antiquity like Plato, he illustrated that devastating a country was not necessary in most cases. If an army had already occupied an enemy territory so that the enemy “cannot use the fruits of it,”⁷⁸ this was a reason for sparing the countryside. Furthermore, Grotius mentioned “divine law,” which compelled armies attacking cities to use only the “wild trees” for earthworks and to spare the “fertile trees,” because “the trees cannot rise up against us and give battle.”⁷⁹ Quoting the Jewish philosopher Philo of Alexandria, Grotius wanted to spare “fertile fields” for the same reasons: “Why do you want to vent your anger on inanimate things, which are themselves gentle by nature, and bear fruits?”⁸⁰

The example of Grotius shows two important arguments that provide some theoretical context for the deliberate destruction of the countryside as part of military campaigns and strategy in the seventeenth and eighteenth centuries. On the one hand, Grotius argued that special necessities could arise in warfare that made destroying forage or harvests a viable tactical option. On the other, however, this argument of necessity meant that any act of destruction that was “unnecessary and useless” was illegitimate. If the enemy could not reasonably be expected to gain any use from the resources because he had no control over them, then there was no legitimate reason to destroy them. Interesting is the specific mention of fruit-bearing trees, which are used as an example. With this reference to Ancient authors, Grotius condemned the useless destruction of resources that needed a lot of time to regrow, meaning that destroying them was not simply a matter of gaining an advantage during a war, but was also a means of inflicting damage that was out of proportion.

Several military writers brought up this argument of utility, especially since the beginning of the eighteenth century. One example is the well-known French military writer Jean Charles, Chevalier de Folard. Born in 1669 to a clerical noble family in Avignon, Folard received his education at a Jesuit college. His first experience of the military was under the command of Duras in the fall campaign of 1688, precisely in the context of the Nine Years’ War and the destruction of the Palatinate. Later, he fought under the Swedish king Charles XII, where he started to develop his own system of military thought during his time at Stockholm. As an expert on classical Roman and Greek warfare, Folard

78 Ibid.

79 Ibid.

80 Ibid., 171.

tried to draw on Antiquity while at the same time presenting a new system of military theory derived from Classical sources. In his “Nouvelles Découvertes sur la guerre, dans une dissertation sur Polybe” and his “Histoire de Polybe,” he made contributions to many spheres of Early Modern military thought, one of the most controversial being the idea of using the formation of columns as a form of attack.⁸¹

Despite his sometimes seemingly eccentric ideas, he was not an “armchair general.” He had served in the French and Swedish armies and had participated in several campaigns. In his “Histoire de Polybe,” Folard commented on contemporary examples of warfare. In fact, other authors repeatedly quote him not for his disputed ideas concerning column tactics but for his original thoughts on war in mountains, the “coup d’oeil” in warfare, and for his critical approach, which emphasized the search for general principals in war.⁸² He also wrote on the question of destroying forage and harvests.

While he at one point explicitly quoted Vegetius with reference to his maxim of starving an enemy by burning forage as “admirable,”⁸³ he later criticized this practice. While devastating one’s own territory seemed like a necessary evil, Folard deemed destroying enemy territory as unnecessary and ineffective. Here, he quoted Raimondo Montecuccoli, one of the most important Habsburg generals of the seventeenth century:⁸⁴ “The raids of armies or a large part of troops into enemy territory do not yield any advantage if they are not part of a considerable operation: because nothing is better suited to ruin an army. This kind of enterprise, which consists solely in ravaging and doing damage far away from a border, is hardly useful [...] If we have no other intent than to destroy a certain portion of land, one deprives oneself of contributions one could collect. [...] These kinds of invasions are not useful except for during the time of the harvest, and this is precisely the time which should be chosen [...]”⁸⁵

81 Gat, *Origins*, 28; Chagniot, *Chevalier de Folard*, 13–29.

82 See for example Töllner, *Bildung*, 118; Zanthier, *Versuch über die Märsche*, 110; Pirscher, *Coup d’oeil*, 18. Frederic the Great and Maurice de Saxe both took interest in Folards writings as well, see Starkey, *War*, 36–37.

83 Folard, *Histoire*, vol. 4, 148.

84 Montecuccoli, *Kriegs-Nachrichten*, 214. Montecuccoli played a major role in the Imperial army of the seventeenth century and fought in the Thirty Years’ War, the Nordic War, and the Dutch War; also, he was one of the most important generals to fight in the wars against the Ottoman Empire. His treatise on warfare became a reference work in the eighteenth century. On Montecuccoli, see Gat, *Origins*, 13–24.

85 Folard, *Histoire*, vol. 5, 237.

These remarks show that the decision to burn forage and harvests or at least to consume them to gain an advantage implicitly included civil land use, as his suggestion concerning the proper season for an attack suggests. However, two factors made this tactic unfavorable. First, the advantage gained by destroying forage only lasted for a short while, and it furthermore only worked at the expense of the rural population. It was not necessarily compassion for the fate of displaced and impoverished peasants that made Folard disdain this tactic; rather, he argued from an utilitarian perspective. Exploiting the population by demanding contributions (which, as pointed out before, were also paid *in natura*) promised far greater incomes in the end. Remarks that went into detail concerning compassion for the local population or, simply, addressed humanitarian concerns were not decisive. Rather, this emphasis on the importance of conserving natural resources and sparing the local population originated in a military rationality that emphasized the role of the enemy countryside as an economic factor.

This economic argument, which rested on the idea of necessity and the proportionality of force, was raised in works by other authors.⁸⁶ The idea that enemy territory should be conserved not only as a possible territorial gain after the war but also as a possible theatre of operations for future campaigns is echoed in several writings, but it was always part of the effort to ensure military effectiveness. As such, it can be seen as analogous to the shift from irregular looting to the rather orderly process of collecting contributions and the efforts to outlaw looting in general in order to avoid driving off the local population, which proved vital as a workforce for any army in a region.

However, it is important to note that the authors of works on military theory saw looting and ravaging the lands as concepts that were related but not essentially the same. Ravaging the land meant targeting the enemy's rural infrastructure and local resources in a planned and orderly fashion, while looting was the outright loss of all discipline. In practice, of course, the two could not be so clearly or easily separated. As John Lynn has put it, it was scarcely possible to order a soldier to burn down a farm and at the same time prevent him from simply taking everything that was inside or abusing the inhabitants.⁸⁷ The option of destroying a region that could not be protected against an enemy remained a discussed and viable option until the end of the eighteenth century,⁸⁸ but it

86 For instance, see Santa Cruz, *Reflexions*, vol. 4, 164 and 173, and vol. 12, 7.

87 As noted by Lynn, *Wars of Louis XIV*, 198.

88 For instance, see Bessel, *Entwurf*, 9 or Burtenbach, *Betrachtungen*, 14, although von Burtenbach is critical of the burning of the Palatinate.

slowly came under scrutiny after the Seven Years’ War, as two final examples illustrate.

When the English officer and engineer Henry Lloyd issued his “Military Memoirs” in 1781, he also touched on the subject of conserving enemy territory. Lloyd, who has come to be known as one of the most important military theorists of the second half of the eighteenth century alongside the French officer Guibert, had a long history of military service. Born presumably in 1720, Lloyd got his education at the Oxford Jesus College, where he acquired a high degree of skill in geometry and cartography.⁸⁹ Having left England in 1741, Lloyd served with the French during the War of the Austrian Succession. After having caught the attention of Maurice de Saxe during the battle of Fontenoy (1745), Lloyd was recommended to different generals as a skilled engineer and officer, and he served in Prussian, French, Austrian, and Russian armies before returning to England.

His “The History of the Late War in Germany,” in which he described his experiences and the general setting of the Seven Years’ War, became widely known and read. In his “Military Memoirs,” this experienced and educated soldier also wrote about the habit of detaching forces from the main army to raid a country: “To force the enemy to battle, or to the clearing of the land, one naturally has to put the whole force to use together, and one may not occupy oneself with detachments, raids, or similar: because this weakens the army; the detachments risk being cut off, and they devastate the country that one has to preserve if one wants to stay there.”⁹⁰ In this rather general remark, which made no direct mention of the old practice of burning forage, Lloyd emphasized the later use of a region by one’s own army as an argument against devastating an area by detaching too many troops. However, his formulation “if you want to stay there” suggests that this was generally bound to strategic plans rather than to moral imperatives. Few authors identified the “ravaging” of a countryside as something that was generally unwanted and morally deplorable.

One of the authors who commented on this practice in a critical manner was the French lieutenant-colonel Paul-Gédéon Joly de Maizeroy. He was a recognized student of warfare in Antiquity and due to this was admitted to the French Royal Academy of *belles-lettres*. But he also became known as a military writer himself, having published his “Cours de tactique” in 1766, which was reprinted twice

89 Speelman, *Henry Lloyd*, 5–7; Starkey, *War*, 56–63.

90 Henry Lloyd, *Abhandlung über die allgemeinen Grundsätze*, 120.

and translated into German in 1767. In 1777, he completed his work on tactics with his “*Théorie de la Guerre*.”⁹¹ In this, he scorned the light cavalry and troops of the “small war,” such as Hussars, Croats, and Pandures, who were employed excessively during the Seven Years’ War by both the Austrian and the Prussian armies. His disdain for these kinds of troops was prompted in part by the fact that the “small war” waged by raiding parties of light troops basically consisted of forays in the course of which these troops “ravaged” the areas.⁹² For Paul-Gédéon Joly de Maizeroy, though, this constituted a considerable disadvantage for both armies and was a feature of a “barbaric” way of war: “and this apparent advantage can even turn against him, if one abandons the devastated land. In general, this barbaric manner of waging war is detrimental to both parties.”⁹³ He had moral disdain for the practice of “ravaging” a country as barbaric, and this sentiment explains in part his criticism of the widespread use of light troops.

The practice of laying waste to the countryside was often summed up with the term “ravaging” or “ravager,” but the explicit mentioning of burning forage or harvests gradually declined in the writings by military theorists until the end of the eighteenth century, which could be interpreted as a form of marginalization in the discourse. Still, even if the tactic of destroying villages and local resources and the pillaging and displacement of the population gradually became something the authors were more inclined to discourage, the reasons for this were almost always utilitarian. In their writings, they rarely expressed pity for suffering peasants. Rather, it was important to point out that one’s own army might suffer dire consequences if lands were made “sterile” and “unfertile” by war.

Conclusion

The tactic of depriving an enemy of local natural resources by consuming or destroying them was part of Early Modern military thought. This tactic was intended not simply to reduce or eliminate supplies for the enemy army. Rather, it also targeted local populations and their use of land as a way of creating artificial shortages of food and forage. When and how to “rave” a country was discussed in various texts that dealt with the theory of how to wage war in the

91 Gat, *Origins*, 39.

92 Carl, “Restricted Violence,” 125–28; Martin Rink, “Die noch ungezähmte Bellona,” 168–87.

93 Maizeroy, *Théorie*, 291.

seventeenth and eighteenth centuries. In this discourse, four factors stand out as main motives and categories of thought.

First, in order for efforts to destroy forage and harvests and “ruin” a country to be seen as legitimate, they had to be presented as necessary. This notion of necessity was often based on Ancient axioms of warfare or arguments in favor of “shortening” a war. Second, however, it seems to have been extremely important where this tactic was used. Military thinkers explicitly wrote about this tactic of “scorched earth warfare” in the context of enemy invasions that were unforeseen or simply overwhelming. In these cases, desolating one’s own country was discussed as a defensive method to starve out an enemy. Paradoxically, these same thinkers tended to suggest that enemy territory should be treated carefully, as it was more practical to extort contributions, a perspective that somewhat economized military land use. Third, to some degree the authors explicitly assessed which resources should be targeted and why. “Devastating” the countryside meant that not only villages were burned, but also forage and harvests, which were seen as directly useful for the enemy troops. However, as Grotius suggested, there were limits to this logic. Trees, for example, were never mentioned in the context of “ravaging” a country and starving out an enemy. Forage could be grown again for subsequent campaigns, but cutting down useful trees was seen as a form of lasting damage.⁹⁴ Fourth, the factors of duration and effectiveness played a role in the reflections of the authors. Some of them considered the usefulness of “devastation” by raiding parties as minimal and something that did not last long enough to be worthwhile. In addition, again the practice of extorting contributions promised a more effective source of income in the end. These arguments of utility were used to criticize the tactic of “scorched earth warfare” and the “ravaging” of the countryside, while the authors on military theory seldom touched on humanitarian concerns.

While I have focused in this article on ideas and categories prevalent in military thought, it is also important to consider that the practical side of warfare often followed its own rationalities. Often, the devastation of the countryside was not the effect of a conscious decision by generals or officers, but a consequence of mismanagement and logistical shortages. Even in the middle of the eighteenth century, these kinds of problems could lead to armies doing substantial damage to the countryside, as the aftermath of the Battle of Warburg

94 It is important to note, however, that this sentiment explicitly was bound to the notion of “fertile” and “useful” trees. If trees and forests could constitute a tactical disadvantage, many authors did not hesitate to recommend that they be destroyed. For example, see Folard, *Histoire*, vol. 3, 287.

on July 31, 1760 illustrates. There, the British army remained in the area for nearly three months, and it used anything and everything that could be burnt as fuel, including fruit-bearing trees, hedges, and even wooden statues of saints.⁹⁵ In order to explore further the effects of Early Modern armies on the natural environment in wartime, case studies for regions that frequently became the theatre of war could prove exceptionally fruitful.

In the end, this poses the critical question of the place of military theory in relation to military practice and, on a larger scale, in relation to warfare and the environment as a whole. While military theory certainly provided a framework for discussion of scorched earth tactics, an explicit reference to theoretical texts is hard to grasp in military practice itself: French officials did not quote de Rohan every time they ordered the destruction of villages and forage. However, even if works on military theory presented idealized versions of how their authors thought war should be waged, they often included examples of contemporary warfare. While military theory certainly does not reflect military practice itself, it forms a special discourse in which these practices are described and situated in an argumentative context. Thus, the treatises make it possible to analyze the special discourse on war and the systems and categories in which military knowledge was conceived and presented. As far as the relationship between warfare and the environment is concerned, this means that violence against the natural environment was a defining part of Early Modern military knowledge, and even at the end of the eighteenth century it had not vanished from the discussions. Rather, it remained embedded in contemporary conceptions of “just” war and the “right” and “rational” conduct of operations.

When Carl von Clausewitz, sometimes regarded as the “prophet” of modern warfare, worked on his influential opus magnum “On War,” he drew on a vast body of works by military theorists like Feuquières, authors whose writings were available to him in the Prussian royal library.⁹⁶ It would certainly be an exaggeration to draw a clear line from Clausewitz to Agent Orange. But the Early Modern military theory on which Clausewitz at least partially relied reminds us just how deeply embedded environmental warfare was in military thought well before the armies of the post-industrial age developed their now infamous capabilities of mass destruction.

95 Petersen, “Feuer und Eis,” 72–74.

96 Heuser, *Strategy before Clausewitz*, 186–87.

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