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Banner With the Lion of St. Mark (banner) Italy, Venice, 1675.
Cleveland Museum of Art Gift of Mr. and Mrs. John L. Severance1916.1807.

Swiss Cavalry from c.1400 to 1799

by Jürg Gassmann

Abstract. In the military historiography of the Late Middle Ages, the Swiss are iconic for their heavy infantry, so powerful it supposedly obviated the need for cavalry. However, the Swiss were keenly aware of the importance of mounted fighters to warfare and of their own inability to field effective battlefield cavalry in sufficient numbers. In some instances, the Swiss were unable to exploit opportunities, in others, the dearth of cavalry contributed to a battlefield defeat. The Swiss, collectively and as individual cantons, constantly sought ways to remedy the deficiency by securing allied support or, less successfully, raising their own. Even though the nature of the mounted fighting man changed fundamentally during the period under review, from the elite knight to just another branch of the land forces, the Swiss were never able to solve the conundrum. This chapter reviews the importance of battlefield cavalry in the military history of Switzerland and their successes and failures in addressing the issue, thus illustrating the organisational infrastructure required for raising and maintaining an effective force. Ultimately, it will be shown, the root of the problem lay not in the availability of mounts or similar factors, but in the Swiss Confederacy's lack of centralised military structures and the political inability or unwillingness of its constituents to adapt their military constitutions – the very factors that produced the vaunted heavy infantry.

Keywords. Switzerland, Military History, Mediaeval Military History, Cavalry, Berne

On 15th September 1972, military Switzerland bade good-bye to its cavalry, the last armed forces in Europe to do so. The event drew a line under a relationship that had been fraught until the cavalry came under the purview of the Federal military authorities with the centralised military organisation of 1850.[1]

In the military history of the Late Middle Ages to Napoleon, the Swiss are

1 Brunner, Rosemarie, *Die Abschaffung der Schweizer Kavallerie 1945-1972*, licentiate thesis in history Zurich University 2014, < https://www.alexandria.ch/permalink/41BIGINST/kqb8rv/alma9925904898101791 >; the new federal military organisation was the occasion for Louis Rilliet de Constant, *Vues sur la cavalerie Suisse* (Berne, J. Dalp, 1851).

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renowned for their infantry, especially the heavy infantry *Reisläufer* from the time of the Burgundian Wars in the 1470s to the Italian Wars in the early sixteenth century. Swiss cavalry is hardly ever mentioned, and it is not unusual to find the statement that the Swiss expertise in heavy infantry obviated the need for an effective cavalry.

This chapter will show that the Swiss were only too keenly aware of the need for a combined arms capability, and of the essential role of cavalry in that paradigm. And yet, military Switzerland consistently fell short of that ambition. We shall discuss why that was so, and how the Swiss sought to remedy the problem. Due to space limitations, I shall concentrate on the military challenges facing the Swiss and on the political constraints they imposed on themselves, leaving aside details of tactics or equipment. Also, each of the Swiss cantons was different, there was no common solution; again, due to constraints, I have focused our largest canton, Berne.

Heavy Cavalry, Light Cavalry

Cavalry are usually classified into heavy cavalry, with at least some armour and fighting with a heavy sabre (e.g. cuirassiers) or heavy lance; light cavalry, unarmoured and armed with a light sabre or light lance (e.g. hussars or lancers); and light horse, who moved mounted and used a carbine to fight on foot.

The ideal-typical application of heavy cavalry is on the battlefield, allowing commanders to project and rapidly concentrate force at a point of their choosing in order to create, exploit, or deny opportunities. Such cavalry might be despatched to disrupt an infantry advance or a cavalry charge, disable field artillery, exploit disarray in an opposing formation, or pursue and harry a fleeing enemy.[2] Until the advent of viable battlefield vehicles in the early twentieth century, horse-mounted troops remained the only tool available to commanders for that purpose, even as the greater range, precision, and firing cadence of infantry long arms shifted the confrontational advantage to the infantry.

To be effective in this function, heavy cavalry must operate in large numbers, at least several hundred – Guderian's adage *nicht kleckern, sondern klotzen*

2 Rilliet de Constant, *Cavalerie Suisse*, p. 6; Anonymous, *De l'arme de la cavalerie en Suisse* (Geneva, J.-J. Paschoud, 1824), p. 2.

applies.[3] This in turn means that they must train in these large formations, so that both the horses and the troopers internalise the formations and evolutions to the point of automaticity, and are capable of performing them under fire. These skills can only be acquired in a military setting, where the men and horses can be exposed to the sight, sound, and smell of rifle fire and artillery, they cannot be trained in a civilian setting.[4]

Light cavalry's job, by contrast, is primarily reconnaissance and liaison – they are the commander's eyes and ears.[5] They operate in small units, a troop of twenty, and aim to remain undetected. When they fight, it is in the nature of skirmishing and with the intent of extricating themselves; the intelligence they have gathered is useless to the commander unless they return to him to report. Both the training and skills required of the light cavalry trooper are therefore different from that of his heavy cavalry counterpart – large unit formation training is less relevant, but individual resourcefulness, daring, and horsemanship are crucial, all skills a trooper might bring from civilian life.[6]

Medieval cavalry is regularly understood as knightly cavalry; however, regularly only a small proportion were actually noble, most of the fighters were sergeants, i.e. commoners. Still, it was the feudal nobility who bore the responsibility for raising, equipping, and training both the riders and the horses in their entourage. Also, knightly cavalry adapted their armour, arms, tactics and sometimes their horses to the job they were given; for a light cavalry assignment like reconnaissance or escort, they might mount their courser instead of their destrier, and leave behind their full plate, closed helmet, and heavy lance in favour of a mail haubergeon, open helmet, and crossbow or light lance.[7]

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3 Guderian's adage can be loosely translated as "Don't spray, punch." Translations are mine unless otherwise noted.

4 *L'arme de la cavalerie*, pp. 13-15; in Berne, cavalry exercises were often performed on foot, to prevent injury to the horses – Emanuel von Rodt, *Geschichte des Bernerischen Kriegswesens*, 3 vols (Berne, Jenni, 1831 (vols. 1 and 2) / 1834 (vol. 3)), pp. 3:311-14.

5 *L'arme de la cavalerie*, pp. 4-6.

6 *L'arme de la cavalerie*, pp. 22-28, 39-40; the government's inspector in 1767 found Berne's *Dragoner* training "in all respects wholly inadequate": von Rodt, *Bernerisches Kriegswesen*, pp. 3:314-19.

7 Michael Prestwich, « *Miles in armis strenuus*: The Knight at War » in *Medieval Warfare 1000-1300*, John France (ed. – London/New York NY, Routledge, 2006), 185-204, at pp. 185-89 (= *Transactions of the Royal Historical Society* 6 (1995), 201-220, at pp. 201-05) ; Hans Delbrück, *Das Mittelalter: Von Karl dem Großen zum späten Mittelalter* (1907, re-

While the functional distinction applies throughout the period of this chapter, the organisational separation, i.e. dedicated mounted units raised, equipped, trained, and used in combat as either heavy or light cavalry, developed gradually and can be applied with a modicum of reliability only from the eighteenth century. I here use "heavy" and "light" cavalry in this functional sense, not the organisational sense. In the Swiss nomenclature, *Dragoner* means light cavalry.

Practical Issues in Raising Cavalry

The minimum viable complement of heavy cavalry appears to be 500. Keeping 500 horses stabled, bedded, fed, watered – and mucked out – on a daily basis is already a logistical challenge.

Horse conformation varies widely, each requiring a different type of saddle, and a well-fitting saddle is essential to maintaining a horse in useful condition.[8] The saddle at the same time is the most sophisticated and expensive piece of equine kit. The modern cavalry solution was to task remount depots with supplying a standardised horse,[9] and mass-purchase a standardised saddle that fit most of these standardised horses (even if the saddle was not ideal for the rider – but riders are cheaper and more easily replaced than horses). For most of the historical period, the solution was to oblige the rider to supply the kit[10] – a policy that limited the available recruits to individuals who could afford it.

One reason sometimes given for the lack of a Swiss cavalry is that the terrain is supposedly not conducive to raising horses.[11] This is quite simply wrong, as is also borne out by the record. The *cavalli della Madonna*, bred at the monastery of Einsiedeln from about the eleventh century, were highly regarded into Northern Italy.[12] In early modern times, Switzerland regularly exported horses to surrounding princes.[13] In the late nineteenth and twentieth centuries, the Swiss Army

print Hamburg, Nikol, 2000), pp. 355-62.

8 Rilliet de Constant, *Cavalerie Suisse*, p. 55.

9 Advocated for the new Swiss cavalry by Rilliet de Constant, *Cavalerie Suisse*, pp. *16-19*.

10 Von Rodt, *Bernerisches Kriegswesen*, pp. 3:252-55.

11 See e.g. references with Jürg Stüssi, *Das Schweizer Militärwesen des 17. Jahrhunderts in ausländischer Sicht*, Diss. Zurich 1982 (Zurich, ADAG, 1982), p. 63.

12 Thomas Frei, « Einsiedeln als Pferdezentrum der Innerschweiz », *Schwyzer Hefte* 103 (2015), 15-26, at p. 21.

13 A Berne mandate from 1586 (*Die Rechtsquellen des Kantons Bern; Erster Teil: Stadt-*

supplied its cavalry with *Freiberger* or *franche-montagne* horses, an indigenous breed of medium-blood all-round workhorses named after the "free mountains" region of the Jura, where herds roamed (and still roam) freely.[14]

Training of a modern cavalry horse would start at age 4½. The horse would arrive completely untrained and be in a specialised training setting for half a year, then integrated into the unit for a year of on-the-job training in the formation evolutions essential to modern cavalry battlefield tactics. Only then would the horse be considered fully trained. The typical service life for a military horse is to about age fifteen;[15] it could still be ridden for many more years, but would not be up to the rigours of campaign. Conversely, illness and injuries were liable to cut short service life. Assuming an effective service life of seven years, the remount service for a unit of 500 horses would have to graduate 70 to 75 trained horses each year.[16]

Habituating a horse to saddle and rider and to the rider's aids is a time-consuming and sensitive affair. Inexpert handling can delay the horse's education or ruin it completely. Six months is already a very short time to bring a horse from unbroken to trained to move in formation, so the training has to be efficient, focused, and expert.[17]

I have here used data from modern cavalry organisation and training, for two reasons: Firstly, for most of the historical period, we simply lack the data, and

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rechte; Elfter Band: Das Stadtrecht von Bern XI; Wehrwesen, Hermann Rennefahrt (ed. – Aarau, Sauerländer, 1975), no. 157, pp. 295-96) restricted the export of horses to nearby Burgundy and France in view of the brewing crisis.

14 *Freiberger* still form the mainstay of the modern Swiss Army's *train*.

15 Friedrich von Krane, *Anleitung zur Ausbildung der Cavallerie-Remonten* (Berlin, Mittler, 1870), pp. 250, 676, 679, 685. For a discussion on size, conformation, etc. see Jürg Gassmann, « Combat Training for Horse and Rider in the Early Middle Ages », *Acta Periodica Duellatorum* 6.1 (2018), 63-98, at pp. 65-73. Berne did not have an explicit guidance on horse height - von Rodt, *Bernerisches Kriegswesen*, pp. 3:253-54.

16 Gassmann, « Combat Training », p. 73; Rilliet de Constant, *Cavalerie Suisse*, p. 17, estimates a service life of eight years not ten, which would correspondingly increase the load on the remount service.

17 E.g. von Krane, at that time colonel of the Prussian cavalry and commanding a cavalry corps during the 1870-71 war, warns against allocating the remount training as a last-in-the-pecking-order job; it should be given to the most qualified officer, supported by the best riders among the senior NCOs and troopers, and prioritised over mundane tasks: von Krane, *Cavallerie-Remonten*; pp. 659-69; Rilliet de Constant, *Cavalerie Suisse*, pp. 25-33; *L'arme de la cavalerie*, pp. 25-28.

where we have data, it cannot be generalised. But secondly, and even though we lack the data, the realities of handling horses still applied. At no time in history was it possible to take random 500 individuals, random 500 horses, and random 500 saddles, and assemble a functioning cavalry regiment. The organisation, training, logistics, and infrastructure required to produce viable battlefield cavalry need to be borne in mind at all times.[18]

Political and Military Constitution of the Swiss Confederacy

The Old Swiss Confederacy is a complicated structure, and there is room here for only a rough sketch; it coalesced slowly from 1291 (or 1307) from an odd amalgam of cities and incorporated valleys. By 1513, the Confederacy numbered thirteen cantons (*Orte*) as full members,[19] and no more full members were admitted until Switzerland's forcible reorganisation by Napoleon. Each canton considered itself "sovereign" within the Holy Roman Empire (HRE). There was no single unifying treaty, and the sole common institution was the *Tagsatzung*, a congress of ambassadors from the cantons.[20]

The Confederacy additionally included associate members, allied with one or more of the Thirteen;[21] they participated in the *Tagsatzung* meetings, but did not have a vote. Lastly, there were the subject territories, administered by one or more of the full members, who shared in their lucrative exploitation.[22]

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18 As anyone who has done it can readily attest, if assembling, accommodating, feeding, and watering a hundred people is already a daunting exercise, doing the same for even ten horses and their riders is by order of magnitude more so.

19 Initially Uri, Schwyz, and Unterwalden, and then in order of accession Lucerne, Zurich, Glarus, Zug, Berne, Fribourg, Solothurn, Schaffhausen, Basle, and Appenzell. For the development of Swiss constitutional arrangements from founding to 1799 and the Confederacy's relationship with the HRE, see the short tract by Hans Conrad Peyer, *Verfassungsgeschichte der alten Schweiz* (Zurich, Schulthess, 1980).

20 Thomas Maissen, *Geschichte der Schweiz*, Baden, hier+jetzt, 2010, pp. 22–9; Peyer, *Verfassungsgeschichte*, pp. 21–36; Jürg Gassmann, « A Well Regulated Militia: Political and Military Organisation in Pre-Napoleonic Switzerland (1550-1799) », *Acta Periodica Duellatorum* 4.1 (2016), 23-52, at pp. 24–5.

21 Maissen, *Geschichte,* pp. 16–55; Peyer, *Verfassungsgeschichte*, pp. 36–9. Prior to 1500, the main associates were the Grisons (itself a complicated confederacy including the Prince-Bishop of Chur), Valais (a confederacy of rural estates), and the Prince-Abbey of St Gall, occupying the north-western half of the modern canton.

22 Peyer, *Verfassungsgeschichte*, pp. 60-61.

Up to the Reformation, the Confederates had sought to maintain a balance between city cantons and rural, *Landsgemeinde* cantons. The Reformation 1517 brought a further major split. Zurich had its own reformer Huldrych Zwingli and became Protestant in 1525. Shaken by a religious scandal, Berne followed in 1528, along with Basle City, Schaffhausen, and half of Appenzell; Glarus was mixed. Geneva, with its own reformer John Calvin, was at the time only an associate member. The subject territories generally followed their controlling cantons, in accordance with the principle *cuius regio, eius religio*.[23]

During the sixteenth and seventeenth centuries, the cantons turned inward, focussing on implementing absolutist regimes in their territories. The *Tagsatzung* continued to meet and function, but unified action was difficult.[24]

All the Swiss cantons were republican, governed by councils made up of guild masters, the local petty nobility, the *grande bourgeoisie*, or the patriciate; the rural cantons elected their executive in *Landsgemeinde* assemblies.[25] For their armed forces, they all relied on a militia composed of the free men between the ages of around 16 and 60; their service obligation was initially rooted in the feudal *ius armorum et sequelae*, and so hedged with feudal law restrictions on the freedom of action of the authorities. Progressively, however, the authorities transformed it into the obligation of an absolutistic subject, regulated by top-down mandates.[26] The transformation did meet with resistance, but the authorities pursued it circumspectly and with determination.

The focus of the cantons' efforts was on the infantry. All free men were obliged to hold a certain complement of aggressive and defensive arms, recorded in periodically updated muster rolls (*Mannschaftsrödel*) and regularly inspected (*Harnischschau*).[27] The quality of arms and training differed widely between the cantons, but the Swiss mercenary business meant that the Swiss benefited from

23 Peyer, *Verfassungsgeschichte*, pp. 84-92; Maissen, *Geschichte*, pp. 82-88.

24 Peyer, *Verfassungsgeschichte*, pp. 61, 104-05.

25 Peyer, *Verfassungsgeschichte*, pp. 48-55.

26 Stüssi, *Militärwesen*, pp. 110-11; Gassmann, « Militia », pp. 26-30 and 35-42; E. A. Gessler, « Basler Wehr- und Waffenwesen im 16. Jahrhundert », *Neujahrsblatt der Gesellschaft zur Beförderung des Guten und Gemeinnützigen* 116 (1938), p. 8; Peyer, *Verfassungsgeschichte*, pp. 64-68.

27 Regula Schmid, « The armour of the common soldier in the late middle ages: Harnischrödel as sources for the history of urban martial culture », *Acta Periodica Duellatorum* 5.1 (2017), pp. 7-24; Gassmann, « Militia », pp. 26-27.

veteran officers and other ranks returning from foreign service, where they had experienced intensive training and even seen combat.[28]

Cavalry Engagements in Swiss Battles: Old Zurich War to Marignano

The cantons' initial motivation for allying themselves should be seen as a coldly calculated exercise in economy of enemies, allowing each canton to focus on its key objectives. Occasionally, these objectives clashed; in 1440, Zurich was hoping to secure a vital stepping-stone on the road to the Grisons passes, as an alternative to the Gotthard pass, which was controlled by Confederates Uri, Schwyz, and Unterwalden. Schwyz schemed to deny Zurich the prize, so Zurich attacked Schwyz, leading to the Old Zurich War. Since Zurich had attacked a Confederate, all Confederates were obliged to side with Schwyz. Zurich in turn sought help from an old antagonist of the Confederacy, Habsburg, which still harboured ambitions to regain a foothold in its ancestral lands.[29]

Upon commencement of hostilities, the Habsburg Holy Roman Emperor Frederick III sent Zurich a complement of 500 knights under the Swabian knight and military entrepreneur Hans von Rechberg, under the overall command of Thüring von Hallwil. At the battle at St. Jakob an der Sihl on 22nd July 1443, Rechberg advised the Zurich infantry to withdraw to the city, with the cavalry covering the retreat, but the Zurich troops preferred to stand. Rechberg rode out to harry the attackers, instructing the infantry commander to secure the cavalry's fall-back position, where he might be able to rally and disrupt the Confederates' advance. However, the Zurich infantry, by now drunk and unruly, failed to do so, leaving it to be occupied by the Confederates. Trapped in the open, many of the knights had to abandon their horses and seek safety with the infantry; retreat turned into rout, and Zurich barely managed to hold the city gate. Rudolf Stüssi, Zurich's powerful burgomaster, was killed.

Stüssi's death and Habsburg's moves to exercise more control after this careless waste of the valuable cavalry led to a reconsideration among the Zurich elite; Zurich's new leadership terminated the alliance with Habsburg, and sought an armistice with the Confederates.[30]

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28 Gassmann, « Militia », pp. 28-30.

29 Maissen, *Geschichte*, pp. 51-53.

30 Johann von Klingenberg, *Klingenberger Chronik*, Anton Henne (ed. – Gotha, F.A. Per-

The next examples are from the Burgundian War against Charles the Bold. In preparation for the war, the French King Louis XI had brokered an unlikely alliance between the Swiss and Emperor Frederick III, and Habsburg provided the Swiss with a small complement of cavalry. The battle of Grandson on 2nd March 1476 developed out of a chance encounter between the respective vanguards. The Swiss were able to take advantage of the Burgundians' confusion in deployment and routed the Burgundian forces, capturing Charles' entire baggage and siege trains. But the Swiss had insufficient cavalry to mount a pursuit, leaving the Burgundian forces essentially intact, only to return two months later after resupplying in Lausanne.[31]

The background to the next and decisive battle was Charles' siege of Murten or Morat, recently captured by Berne and now ably defended by the Bernese knight Adrian von Bubenberg; the battle on 22nd June 1476 resulted from Swiss efforts to relieve the town. Habsburg increased its support, supplying a string of experienced senior officers, including the commander in chief, the Württemberg knight Wilhelm Herter von Hertneck, as well as roughly 1,100 Lorraine knights under Count Oswald von Thierstein.[32] The cavalry, supplemented by a few Bernese and allied knights, flanked the field fortification guarding the camp and cleared it of its Burgundian defenders. This opened the way for the Swiss to surprise and annihilate the inexplicably unprepared Burgundians. A sally by the Morat garrison into the Burgundians' rear compounded the disaster.[33]

The final example is Marignano; in the early stages of Francis I's Italian campaign, which put an end to the Swiss' protectorate over Milan, a daring French raid led by the Chevalier de Bayard on 12th August 1515 surprised and captured the 500-strong Milanese cavalry under Prospero Colonna at Villafranca.[34] Without cavalry of their own, the Swiss at the battle of Marignano on 12-13th September had no cavalry to tackle Francis' devastating field artillery, nor to disrupt the

thes, 1861), pp. 313, 316–9; despite being an exceptionally brutal war, the final peace settlement brokered by Berne broadly saw a return to the *status quo ante* and Zurich resuming it place in the Confederacy – Maissen, *Geschichte*, pp. 52-53.

31 Albert Sennhauser, *Hauptmann und Führung im Schweizerkrieg des Mittelalters* (Zurich, Fretz und Wasmuth, 1965), pp. 113–14; Stüssi, *Militärwesen*, p. 63; Maissen, *Geschichte*, pp. 59-60; Delbrück, *Mittelalter*, pp. 710–15.

32 Von Rodt, *Bernerisches Kriegswesen*, p. 1:40.

33 Delbrück, *Mittelalter*, pp. 697–99, 719–29; Maissen, *Geschichte*, pp. 59-60.

34 Von Rodt, *Bernerisches Kriegswesen*, p. 1:220.

Fig. 1. Battle of Grandson, Habsbourg Knight at the Centre. From the *Eidgenössische Chronik* by Diebold Schilling of Lucerne (Luzerner Schillling). Luzern, Korporation

Luzern, S 23 fol. (e-codices, unifr.ch/en/list/one/kol/S0023-2), pp. 200-201 (https://blog.nationalmuseum.ch/app/uploads/2020/06/grandson-schilling-header.jpg CC BY-NC.

threatened Venetian cavalry flanking attack on the second day of the battle, which eventually persuaded the Swiss to withdraw.[35]

Swiss Cavalry during the Late Middle and Early Modern Ages

Between the thirteenth and the fifteenth century, rural and city-resident petty nobility was still common in Switzerland, both autonomous as well as acting as mediators of rule for the cities and the bishoprics or large abbeys. Berne pursued a deliberate policy of securing alliances (*Burgrechte*) with the regional petty nobility,[36] referred to as *Twingherren*, and inherited another complement of knights when it acquired the Habsburg Aargau in 1415.[37] As the cantons, both city and rural, consolidated their power and bureaucratised the administration of their fiefs, now increasingly seen as territories, autonomous knights lost their traditional roles and sources of income. Furthermore, the Old Zurich War brought indiscriminate devastation of the countryside, compelling formerly autonomous rural knights to seek mediatisation for protection. By the second half of the fifteenth century, the autonomous petty nobility had died out or was mediatised and absorbed into the governing patriciates and guild councils.

Mounted individuals are occasionally mentioned in Swiss sources, usually from among this elite, as one would expect for knightly cavalry. In Zurich, one must assume that the *Constaffel*, the association of city-resident knights who shared power with the guilds, fought as knights, as did the Basle *Hohe Stube*.[38] But detailed records are scarce, unlike for the infantry; an organised assembly of mounted fighters constituting battlefield cavalry is not evident.

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35 Sennhauser, *Hauptmann und Führung*, pp. 120–1; Maissen, *Geschichte*, p. 72.

36 See e.g. an example from 1488 in Berne: *Die Rechtsquellen des Kantons Bern; Erster Teil: Stadtrechte; Vierter Band, erste Hälfte: Das Stadtrecht von Bern IV*, Hermann Rennefahrt (ed. – Aarau, Sauerländer, 1955), no. 182 c), p. 620. Von Rodt, *Bernerisches Kriegswesen*, pp. 1:36-40.

37 These alliances were usually lopsided in favour of Berne, but also protected the nobility from being absorbed by powerful dynasts: von Rodt, *Bernerisches Kriegswesen*, pp. 1:9–11.

38 For Basle Gessler, « Basler Wehrwesen », p. 8 – the *Auszugs*- or *Reisrodel* from the sixteenth century show infantry and in some actions artillery, but no cavalry (*ibid*., pp. 37-46); the evidence for the Zurich *Constaffel* is ambiguous, suggesting that the obligation to serve mounted may have been a function of census or nobility, not of association with the *Constaffel* - Martin Illi, *Die Constaffel* (Zurich, Verlag NZZ, 2003), pp. 23-24. Also *L'arme de la cavalerie*, pp. 36-38.

Fig. 2 The *Twingherr* Petermann von Wabern. Diebold Schilling der Ältere, *Amtliche Berner Chronik*, vol. 3, Burgerbibliothek Bern, Mss.h.h.I.3 (1478/83), S.490 (e-codices). CC BY-NC

Mounted individuals were also needed for light cavalry roles, e.g. for reconnaissance or to protect logistics. The Bernese *Twingherrenstreit* of 1469–71 incidentally illustrates the point. The dispute arose because the knights (among them Adrian von Bubenberg, one of the heroes of the Battle of Morat five years later) insisted on their privileges, which Berne's leading *Burger*, themselves commoners and thus superseded in protocol by their own vassals, found intolerable. In the ensuing stand-off, the common-born privy councillors argued that it had been the

commoner infantry who had won Berne's signal victories in the field, to which the knights replied that their protection of the logistics and lines of communication had made those successes possible at all.[39]

A Confederate Solution – The Defensionale *of Wil and its Successors*

While the cantons do not seem to have been too concerned about their lack of cavalry in the sixteenth century, the seventeenth century – and especially the outbreak of the 1618-1648 Thirty Years' War – focussed the Swiss' attention.[40]

Pretty much every neighbour of the Confederacy was actively engaged in the war, and belligerents took shortcuts from one theatre to the other through Swiss territory. The most serious confrontation was in the Grisons; the Grisons-controlled Veltlin (Valtellina) was the only overland link between Habsburg's Imperial armies in Germany, with their insatiable demands for pay, and the supply of South American gold via Habsburg Spain and Lombardy.[41]

The *Tagsatzung* protocols deplore these violations of Swiss neutrality, and show the Swiss' frustration about their inability to deter incursions. An expert whitepaper commissioned by the *Tagsatzung* and deliberated in April 1629 argued that a force of at least 1,500 horse was required for effective protection. An initial step should envisage contracting for 400 cuirassiers and 200 mounted arquebusiers in Germany, but before that was implemented, the cantonal governments should identify suitable cavalry commandants and determine how many troopers could be raised locally.[42] Due to "*allerlei Bedenken*" (a variety of concerns), the idea of a joint Swiss purchase was abandoned at the meeting in May that year, and instead the cantons advised to hold ready such mounted contingents as they had available – probably knowing full well that few if any such

39 Von Rodt, *Bernerisches Kriegswesen*, pp. 1:39–40, 200; Sennhauser, *Hauptmann und Führung*, pp. 31-32.

40 Peyer, *Verfassungsgeschichte*, pp. 93-96.

41 Stüssi, *Militärwesen*, pp. 103-05.

42 *Die Eidgenössischen Abschiede aus dem Zeitraume zwischen 1618 und 1648*, Vol. 5 Part 2 (2 vols.), J. Vogel / D. A. Fechter (eds. – Basle, Schulze, 1875), pp. 576-577; details pp. 2,236-2,239. Zurich seems to have implemented the preparatory step, as in January 1630 the colonel they had appointed asked whether he was still needed, and if so whether the promised budget for two squadron commanders could please be allocated – *Eidgenössische Abschiede* 5.2, p. 615.

contingents existed.[43] A February 1635 *Tagsatzung* advised the cantons to check with innkeepers, millers, butchers, reeves and villages about suitable horses and equipment.[44]

It is not too hard to discern the *Tagsatzung*'s *Bedenken* – mercenaries, especially cavalry, were expensive, all the more so at the time.[45] Moreover, even if the cost and the cost-sharing were agreed, where would they be cantoned once hired, and who would bear those costs? A facility would have to be able to accommodate at least 500; spreading them out among the Confederates would defeat the purpose of having an effective rapid reaction force.[46] If the costs were to be shared, would the contributors accept the responsibility and pay in time? Even worse, these would be standing troops, a feature alien to the cantons' military constitutions.[47] Would the mercenaries obey the *Tagsatzung*, or would they constitute a fifth column for their polity of origin,[48] or could the host canton instrumentalise them for their own gain – or could they even, as numerous Italian *condottieri* had done, go rogue and seek to capture one of the cantons?

A *Defensionale* was finally agreed at a January 1647 marathon council of war held in Wil,[49] under the impression of the Swedish army under Wrangel capturing Bregenz, just across the Rhine. It required each canton and territory immediately to send 50 foot to the Thurgau, to dissuade Wrangel from attempting to cross the Rhine. Should the situation escalate, 12,000 infantry and 50 guns could be called up, and additionally twice that number held in reserve. Each canton, participating

43 *Eidgenössische Abschiede* 5.2, p. 615.

44 *Eidgenössische Abschiede* 5.2, p. 919. On the military role of innkeepers and butchers Sennhauser, *Hauptmann und Führung*, pp. 142-45.

45 A memorandum agreed in August 1626 between Berne and Zurich called for the creation of a standing joint force of 9,000 foot and 600 horse; but since new taxes would have to be raised to defray the costs, which was politically difficult given the rise in the cost of living, the proposal was shelved – *Eidgenössische Abschiede* 5.2, pp. 470-71. In the discussions about a *Defensionale*, a *Tagsatzung* protocol from May 1639 reflects broad agreement and impatience about implementing such a framework for a joint Swiss force, but for reasons of cost this should include only infantry, no cavalry – *Eidgenössische Abschiede* 5.2, p. 1132.

46 Berne and Zurich in January 1634 debated whether they should ask the Duke of Württemberg to garrison a joint cavalry regiment, to be raised in Germany – *Eidgenössische Abschiede* 5.2, p. 812.

47 Stüssi, *Militärwesen*, pp. 129-31.

48 The political meddling of the Habsburg knights sent to "help" Zurich in the Old Zurich War (fn 29-30 above) had not been forgotten.

49 Gassmann, « Militia », p. 31.

associate member, and subject territory's contribution obligation was stated in numbers of infantry and artillery, and an additional obligation to supply three troopers for every 100 infantry.

It is questionable how realistic this last provision was, even for this very low number; for the infantry and artillery, the text details the unit structure, senior officers and staffs, armaments, ammunition, supplies, transports, auxiliary engineers, mustering places, etc. The injunction on troopers is a brief sentence toward the end of the document, without any details, coupled with a somewhat desperate appeal to Zurich and Berne to please consider sending additional cavalry.[50] In any event, the *Defensionale* of Wil was never activated, but it served as precedent and template for later assistance among the Confederates.

The *Defensionale* of 1668, in reaction to the French occupation of the hitherto Spanish Habsburg Franche-Comté of Burgundy, drew largely on the *Defensionale* of Wil, with numerous additions and amendments.[51] As in 1647, the cavalry obligation was first set at three per hundred infantry, but in 1674 amended to three heavy cavalry plus three *Dragoner*.[52] Again, it does not further elaborate on the mounted element. The *Defensionale* of 1668, like the one of 1647, is in its origins a reaction to a specific threat, but its amendments and supplementary regulations show that it was also an embryonic effort at a Confederate military constitution. At the same time, the later addenda to the *Defensionale* already manifest objections from the Catholic cantons.

50 *Eidgenössische Abschiede* 5.2, pp. 2,255-2,260. Maissen wrote a detailed analysis of the implementation of the *Defensionale* of 1668 in the Grisons, where the allocations of responsibilities for providing the infantry, the officers, etc. among the various Grisons polities were negotiated and precisely regulated; cavalry is not mentioned. It does not seem to have been expected, either; there was correspondence with the *Tagsatzung* about whether the infantry allocation was fair, but again nothing about the cavalry – Felix Maissen, « Das eidgenössische Defensionale und die Drei Bünde 1668 », *Bündner Monatsblatt* 1-2 (1961), pp. 4-18.

51 Peyer, *Verfassungsgeschichte,* pp. 96-97.

52 *Die Eidgenössischen Abschiede aus dem Zeitraume zwischen 1649 und 1680*, Vol. 6 Part 1 (2 vols.), J. A. Pupikofer / J. Kaiser (eds. – Frauenfeld, Huber, 1867), pp. 1,675-1698; three troopers: on p. 1,678, paragraph 15; additional three dragoons: on p. 1,690. A Berne missive to its *Venner* Sigismund von Erlach of 30th March 1668 instructed him to make available *eine schöne anzahl* (a goodly number) in response to the requirements of the *Defensionale* and to take the dispositions he saw fit (*Rechtsquellen Bern XI*, no. 74, p. 122).

Failure of the Defensionale *Effort*

The issue festered without resolution. The War of the Spanish Succession prompted another effort at a redaction of the *Defensionale*; on the outbreak of the war in late 1702, the belligerents were facing each other around Basle. A Swiss council of war sat between early October and mid-November.[53] Some Confederate infantry contingents were called up and sent – Basle, Zurich and the Protestant cantons referred to the principles of the *Defensionale* of Wil and urged a new compact, but this time, not even formalistic unity was achieved. Schwyz for instance formally rejected the *Defensionale*, and argued it was sending troops on the basis of its obligation of succour under the terms of the Confederation treaties.[54] No further attempt was made to agree a centralised military organisation until the Federal Constitution of 1848.

The seventeenth century also manifested a growing chasm between the military capabilities of Zurich and Berne (the two main Protestant cantons and also the most populous members of the Confederacy) and the smaller and rural cantons, among these all the Catholic cantons. Berne and Zurich adopted firearms for their infantry, while the smaller cantons mostly still relied on the traditional pikes and halberds. In the First Villmergen War in 1656, the carelessness of Berne and Zurich led to a Catholic victory, but the writing was on the wall.[55]

Both Berne and Zurich continued to modernise their military organisation and their armaments, and that included efforts to create a modern, militia element of regular cavalry. In this, the Catholic cantons clearly lagged – a secret 1695 conference in great detail reviewed the Catholic military capabilities and the preparations for the anticipated next war against the Protestants (the eventual Second Villmergen War, 1712). The conference urged the cantons to come up with at least some *Dragoner*, but acknowledged that they did not have much to offer in terms of cavalry.[56]

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53 *Die Eidgenössischen Abschiede aus dem Zeitraume zwischen 1681 und 1712*, Vol. 6 Part 2 (2 vols.), M. Kothing / J. B. Kälin (eds. – Einsiedeln, Wyß Eberle, 1882), pp. 1,031-1,034.

54 *Eidgenössische Abschiede* 6.2, p. 1,035; Peyer, *Verfassungsgeschichte*, pp. 97-104.

55 Von Rodt, *Bernerisches Kriegswesen*, pp. 3:212-18; Gassmann, « Militia », pp. 31-33; Peyer, *Verfassungsgeschichte*, p. 128.

56 *Eidgenössische Abschiede* 6.2, pp. 592-598; reference to *Dragoner* on p. 594. The proposition is not that the Catholic cantons somehow failed in cavalry because they were Catholic; Berne and Zurich succeeded because they were the largest and possibly because they

I shall here review in more detail the development in Berne. Berne was in several respects untypical for the Confederates in general, but it did manage, to a greater extent than its co-confederates, to raise a credible cavalry. How it got there, and the pitfalls on the way, is instructive.[57]

Berne, the Quartier *System, and Cantonal Cavalry*

At the beginning of the sixteenth century, Berne was already the largest member of the Confederacy, covering more or less the modern canton as well as the western half of the modern canton of Aargau. In 1536, Berne on its own (without Confederate participation) conquered a swathe of the Duchy of Savoy, comprising the modern canton of Vaud and substantial territories south of Lake Geneva as well.[58] So while Confederate diplomacy assured that there were no external threats to the Confederacy, Berne faced the constant prospect of Savoyard retribution.

This did indeed materialise in 1589, and while Berne mobilised a large army, it had to settle for the loss of the territories south of Lake Geneva (the Vaud remained with Berne). The Bernese ruling patriciate was thorough in its *post mortem*; change was needed.

The military constitution still rested on feudal foundations; for the infantry, this meant that call-ups obliged the various estates to provide a number of fighters, but the authorities had no control over who was sent. The debacle of 1589, it was found, was due to the raised troops consisting of staid farmers and burghers who definitely did not want to be there.[59] Also, the units were assembled by and under their feudal banners, and they argued about their feudal-era prerogatives of precedence; constituting regiments in accordance with the principles of modern warfare, as was practiced in the principalities surrounding Switzerland and as

were the best organised. Other, smaller Protestant cantons did no better than the Catholic ones.

57 I am here relying on von Rodt; throughout the roughly 500 years under review, Berne tinkered constantly with its military organisation, so the following paragraphs should be understood as an effort to distil the broad-brush trends only.

58 Von Rodt, *Bernerisches Kriegswesen*, pp. 2:39-40.

59 Berne had also hired 400 mercenary cavalry, but terminated the contract at the first inklings of a peace settlement with Savoy due to the costs. When the settlement fell through, Berne was not able to re-hire the cavalry in time to stave off its defeat – von Rodt, *Bernerisches Kriegswesen*, pp. 2:56-57.

the Swiss officers with foreign service experience were familiar with, was not possible.

Berne in 1592 at first attempted a radical reform, converting the free citizen's infantry service obligation into an annual tax, and using the revenue to raise a professional military. This proposal received a dusty answer from the populace, so the patricians moved more cautiously. The feudally-based service obligation was retained but tiered, allowing the authorities to designate a select levy of young, unmarried men, who would be mobilised preferentially. Also, call-ups were now arranged around geographically designated districts (*Quartiere*),[60] each with its own new regimental colours. The feudal estates comprised in this district were (reluctantly) permitted to bring their accustomed banners as well. After a generation, the old banners had vanished, and the "new" colours stood for modern regiments.[61]

True to the feudal foundations of service, mustering cavalry followed a different route altogether. The military organisation of the cavalry in the Vaud under Savoyard rule had been along traditional feudal lines, relying on the local nobility. Berne did not change that; each Vaudois baron was obliged to muster with a defined number of lances, with five mounted fighters to each lance. However, the period of service as well was defined in accordance with feudal precedent, differing from baron to baron. In the war of 1589, Berne found that many barons had sold fiefs, mostly to Berne, and had so reduced their cavalry obligation; also, the duration of the war exceeded their feudal law-defined commitment, and so the mounted troops melted away as the campaign progressed.[62]

The Bernese authorities sought alternatives; instructions to the officials

60 The *Quartier* system was an innovation pioneered by Maurice of Orange in the Spanish-Dutch War, first adopted by Zurich – Gassmann, « Militia », p. 28; Peyer, *Verfassungsgeschichte*, pp. 94-95, 128-29.

61 A 1595 call-up instruction in Berne's German-speaking districts is typical (*Rechtsquellen Bern XI*, No. 40, pp. 63-65); in para 5 *in fine*/p. 64 a plea to leave the traditional banners behind; and in para 7/pp. 64-65, they are asked *bey den unseren zu*^{o} *statt und land zu*^{o} *umbfragen, wer lustig were, unß umb gebürliche besoldung zu*^{o} *pferd ze dienen, also dz er mit voller rüstunge von kneüw auf biß über den kopf uff, darnach mit einem gu*^{o}*ten seytenwehr und einer feüwrbüchsen an sattelbogen bewehret seye* [to enquire with our [people] in town and country who would be keen to serve us mounted for appropriate pay, so that he may be equipped with full armour from knee to head, also with a good sidearm and a firearm at the saddle arch].

62 Von Rodt, *Bernerisches Kriegswesen*, pp. 2:39-46.

charged with infantry recruitment at the local level from the early seventeenth century enjoined the raising of a certain number of heavy and light cavalry troopers as well, but von Rodt doubts these instructions were effective, since the contemporaneous records from the *Tagsatzung* make no mention of such units.[63] Another deficit noted by the Bernese patricians was that they had in their midst no senior officers with active cavalry experience gained in foreign service who could evaluate hired mercenaries or lead the cavalry element, unlike for the infantry; during the Thirty Years' War, a deliberate policy was instituted to place individuals in Swedish cavalry service.[64] Still, until at least the middle of the seventeenth century, the Vaudois barons remained Berne's only reliable reservoir of cavalry, unsatisfactory as that was.[65]

With the Peace of Westphalia 1648, external threats diminished. Neither the suppression of the Peasants' Revolt in 1653 nor the First Villmergen War 1656 saw much need for cavalry. By the end of the seventeenth century, the Vaudois vassal cavalry was increasingly depleted by the decay of feudal institutions and by more and more of the barons transitioning into feudal service-exempt Bernese military or public administrative functions.[66]

In Berne's German-speaking lands, feudal and census-based obligations to muster as heavy cavalry troopers remained,[67] but the government's cavalry administrators complained that the cost to the individual of maintaining the heavy cavalry equipment – a steel cuirass and further armour, including barding – meant

63 See above, fn 43-45.

64 Von Rodt, *Bernerisches Kriegswesen*, pp. 2:105-06; conscious of the advanced military know-how transfer Berne wanted, the Swedes sought to obtain a *quid pro quo* in terms of infantry mercenary hiring. Senior officers' lack of understanding for the cavalry are reiterated in 1851 by Rilliet de Constant, *Cavalerie Suisse*, p. 7.

65 Von Rodt, *Bernerisches Kriegswesen*, pp. 3:69-73; Stüssi, *Militärwesen*, p. 63; See e.g. *Rechtsquellen Bern XI*, no. 60 of 4th September 1634, p. 105; all governors were instructed to ready their effectives for mobilisation, and to institute mounted patrols; regarding the cavalry it was instructed: *Alle uns mit kriegsdienst und reißpflicht zu^o pferd zu^o gethane vassallen und lechenlüt des Welschlands sollen sich mit werschaften pferden und notwendiger kriegsbereitschaft versechen* [All our vassals and liege men in the French-speaking lands [= the Vaud] obliged to perform war service and campaign duty mounted shall equip themselves with strong horses and necessary preparation].

66 Von Rodt, *Bernerisches Kriegswesen*, pp. 3:69-72 – of the 207 effectives in the feudal *livre noir* in 1627, by 1786 only 122 were left.

67 However, the authorities had no luck in enforcing them – von Rodt, *Bernerisches Kriegswesen*, pp. 3:69.

Fig. 3. Cavalerie Vaudoise / Cuirassier. 1741
Albert von Escher (1833-1905), *Kavallerie-Regimenter verschiedener Kantone*, 1890-1900. Collotype on paper. Landesmuseum Zürich. Inventory Nos. LM-64847.1 and LM-64847.5. Courtesy of Swiss National Museum. https://sammlung.nationalmuseum.ch

that the equipment produced at the periodic manoeuvres was often sub-standard. The men with a high enough census to qualify were typically advanced in age, disinterested in serving, and unfit, nor were their mounts up to the job.[68] A further element of the cavalry was a corps of volunteers, but the administration had even less control over their effectives or equipment.[69]

68 Von Rodt, *Bernerisches Kriegswesen*, pp. 3:74; regarding arms and armour *ibid*., pp. 3:252-62.

69 Initially raised in the mid-seventeenth century and at that point a welcome and strong addition to the mounted troops, but progressively less reliable – von Rodt, *Bernerisches Krieg-*

The officials argued for a shift in emphasis to militia *Dragoner*, where they could rely on younger, hardier, and more adventurous recruits, and where the horses were both capable of taking the lighter loads and of accomplishing the less specialised tasks of the light cavalry. The officers commanding the cavalry reported improvements in the service's effectiveness during manoeuvres, and so Berne progressively reduced the number of heavy cavalry.[70] After 1701, only a complement of about fifty cuirassiers remained, raised from the capital's patriciate – von Rodt wryly notes that there is no record of these having assembled after 1655.[71]

A further military reform in the mid-eighteenth century did away with all mounted units except the militia *Dragoner,* organised in four regiments raised in the same districts as the infantry and kitted out with standardised equipment from Berne's efficient arsenal system. The numbers were still small – von Rodt calculates that the Bernese army, fully mobilised, in 1786 numbered around 78,000, of which the *Dragoner* comprised only about 1,000.[72]

A glance at the structure of Switzerland's militia cavalry after WW II illustrates the organisational challenges of the service: Recruits had to buy their own horse, from the Army's stud, the cost subsidised to 50% by the Army. To qualify for the cavalry, they had to satisfy the Army that they had both the means and the facilities to maintain the horse, and the Army inspected every prospective recruit's stable. After basic training, troopers and their horses were called up annually for refresher courses for the next ten years, an Army veterinary inspecting the horse when it reported for service. The trooper was obliged to join the local cavalry association and attend its events – essentially continuing education in horsemanship – in between services. This effectively limited the reservoir of troopers to families with livery yards or tillage-oriented farms, or the wealthy.[73]

swesen, pp. 3:65-68, 74.

70 Von Rodt, *Bernerisches Kriegswesen*, pp. 3:74-81.

71 Von Rodt, *Bernerisches Kriegswesen*, pp. 3:62-63, 81-82.

72 Von Rodt, *Bernerisches Kriegswesen*, pp. 3:188-89; the total population of Berne was approximately 400,000.

73 Brunner, *Kavallerie*, pp. 77-81. It also ensured that the cavalry was the most conservative and socially stratified of the services.

Fig. 4 – Berne *Dragoner*, 1779
Courtesy of Swiss National Museum, inv. LM-91321.23

Summary and Conclusion

An argument that appears again and again is the cost of the cavalry, but while it was certainly a factor, it does not seem persuasive that it was the decisive one.[74] The cantons, even the smaller ones, spent generously on maintaining their artillery. Had the will been there, some of the budget could surely have been diverted to maintaining at least light cavalry, as some cantons, and the Federal Army, eventually managed.

This brief overview shows that cavalry are a profoundly political service;[75] it was the Confederates' unwillingness to deal with the issue of the effective control of the cavalry rather than costs that prevented a joint effort even during such time of crisis as the Thirty Years' War. The Confederates managed to present a united front for the *Defensionale* of Wil 1647 (which did not deal with issues of command), for the Treaties of Westphalia the following year, and in the Peasants' Revolt 1653. But already a few years later in 1656, the main Protestant and Catholic cantons clashed in the First Villmergen War; they did so again in the Second Villmergen War in 1712, and again in the largely unbloody *Sonderbundskrieg* of 1847. This led to the formation of Switzerland under a federal constitution the following year, and with it a federal military (though cavalry and infantry units continued to be raised on a cantonal basis).

In addition to these political hurdles, the organisational hurdles were formidable. Even the two largest, richest, and most powerful cantons, Berne and Zurich, both of them Protestant and with established institutions for military cooperation, could not implement the joint hiring of one regiment of cavalry; for its cantonment, they were obliged to look outside of Switzerland, with a neighbouring prince.

One reason lay in the exclusive reliance on militia. The cantons had instituted arsenals, but there were no barracks. Soldiers kept their uniform and weapons (and horse) at home, as they still do, and appeared at call-ups ready kitted out. Only once Berne and Zurich had introduced the *Quartier* organisation were they able to organise regular militia cavalry units.

These considerations point to a further factor; as Swiss observers themselves commented, a key Swiss deficit was the absence of high nobility, understood as an

74 So also *L'arme de la cavalerie*, p. 39.

75 And remained so into the modern cavalry: Brunner, *Kavallerie*, e.g. p. 29.

Fig. 5 – Manoeuvre Camp of the Basle Free Company, 1791
Colourised etching, 1791
Courtesy Swiss National Museum, inv. LM-44771

essential element in assuring heavy cavalry.[76] The Bernese experience in the Vaud certainly supports this hypothesis. For over a century, Berne drew on the princely feudal structures inherited from the Dukes of Savoy, but Berne's republican nature meant that these feudal structures could not be kept "alive," as the dukes would have done by awarding new fiefs or promoting successors for extinguished family lines.[77] Switzerland also lacked the magnificent stud complexes constructed in the surrounding geography, where princes did not shy to hire Leonardo da Vinci, and the master was not averse to putting his mind to the commissions. These were the

76 Stüssi, *Militärwesen*, pp. 62-63.

77 Not specifically on this point, but generally on the late mediaeval Savoyard cavalry Roberto Biolzi, « De l'écuyer au prince: le cheval de guerre en Savoie à la fin du moyen âge », in *Le cheval dans la culture médiévale*, B. Andenmatten, A. Paravicini Bagliani, E. Pibiri (eds. – Florence, SISMEL, 2015), pp. 89-116.

impressive apex of an extensive system for supplying the princely household with top-quality, heavy cavalry-capable and trained mounts.[78]

Switzerland offers a counter to the proposition that changes in military technology force changes in society. It is very clear from the *Tagsatzung* protocols in the early phases of the Thirty Years' War that the cantons knew very well what it took to field a modern seventeenth century army, and that they simply lacked the cavalry. A century earlier, these same cantons had been on the same stage a force to be reckoned with, even a driving force.

Now, the focus of their ambitions regarding military effectiveness was to credibly project and in fact enforce their chosen policy of armed neutrality in order to demonstrate to the surrounding belligerents that Swiss territory was neither hostile nor a power vacuum they, for their own protection, needed to fill. For all the distrust and scheming between the Confederates, in this they were agreed, and this they willingly supported with blood and treasure, at least until unity began to fray in the eighteenth century.

Having effective cavalry to hand would have made the military solution simpler, but they were not minded to compromise their principles of governance to that end. If trouble was brewing, they rushed their hastily called-up infantry and artillery to contain the imminent threat – this they were well organised to do.[79] As Stüssi shows, their diplomacy leveraged their geographic advantages – Switzerland's location was strategic, and an attack by one of its powerful neighbours would invariably have brought its other neighbours to offer support in defence.[80] They also deliberately projected and cultivated an image of military prowess and determination, freely allowing tourists to view their arsenals, their fortifications, and their troops' training events. The entirely desired conclusion by foreign observers was that even if conquering Switzerland was possible, holding the territory in the face of an armed and warlike populace was not.[81]

78 See e.g. Sarah G. Duncan, « Stable Design and Horse Management at the Italian Renaissance Court », in *Animals and Courts*, Mark Hengerer and Nadir Weber (eds. – Berlin/Boston MA, de Gruyter Oldenbourg, 2020), pp. 129-52; Juan Aranda Doncel and José Martínez Millán (eds.), *Las cabellerizas reales y el mundo del caballo* (Cordoba, UAM/Córdoba Ecuestre, 2016).

79 Stüssi, *Militärwesen*, pp. 111-13.

80 Conversely, of course, an open alliance with one of the neighbours would inevitably have invited a pre-emptive invasion from others.

81 Stüssi, *Militärwesen*, pp. 137-39.

The ruling strata in all cantons were careful to maintain military control. This obviously applied against their citizens, whom they increasingly saw as subjects. Armed and militarily proficient though the common man was, the ruling strata ensured that the command and leadership expertise as well as the heavy weapons remained in the rulers' control. They also did not want to rely on a Praetorian Guard, too conscious of the historical precedent of Guard commanders replacing their commander in chief. Rather than invite in a powerful arm that they did not properly know how to use and therefore could not control, they preferred to do without.

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