



# STRATEGY AND STRUCTURES ALONG THE ROMAN FRONTIER

HARRY VAN ENCKEVORT, MARK DRIESSEN, ERIK GRAAFSTAL,  
TOM HAZENBERG, TATIANA IVLEVA AND CAROL VAN DRIEL-MURRAY (EDS)

**LIMES XXV** VOLUME 2



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# Roman troops in high mountains

The challenge of establishing Roman hegemony in the Poenine Alps

## Romain Andenmatten

Office cantonal d'Archéologie  
/ RAMHA association,  
Route de la Piscine 10C,  
CH-1950 Sion, Switzerland,  
romain.andenmatten@admin.  
vs.ch / info@ramha.ch

## Tristan Allegro / Gwenaël Bertocco

Institut d'Archéologie et  
des Sciences de l'Antiquité,  
Université de Lausanne,  
Bâtiment Anthropole,  
CH-1015 Lausanne,  
Switzerland, tristan.allegro@  
unil.ch / tallegro97@gmail.com  
/ gwenael.bertocco@unil.ch /  
gwenael.bertocco@gmail.com

## Alessandra Armirotti

Regione autonoma Valle  
d'Aosta, Soprintendenza per  
i beni e le attività culturali  
Valle d'Aosta, Piazza Roncas,  
12, 11100 Aosta, Italy,  
a.armirotti@regione.vda.it

## Fabien Langenegger

Office du patrimoine et de  
l'archéologie de Neuchâtel-  
section Archéologie,  
Laténium, Parc et musée  
d'archéologie, Espace Paul  
Vouga, CH-2068 Hauterive,  
Switzerland/Suisse, fabien.  
langenegger@ne.ch

## Michel Aberson

Institut d'Archéologie et  
des Sciences de l'Antiquité,  
Université de Lausanne,  
Bâtiment Anthropole,  
CH-1015 Lausanne, Suisse,  
michel.aberson@unil.ch

Romain Andenmatten, Tristan Allegro, Alessandra Armirotti, Gwenaël Bertocco, Fabien Langenegger and Michel Aberson

## The project

The RAMHA and 'Siti d'alta quota' project has been conducted since 2018 through a partnership between the Archaeological Structure of the Superintendence for Cultural Heritage and Activities of the Valle d'Aosta (Italy) and the RAMHA's scientific team from Valais (Switzerland, Armirotti 2019, 46). The two teams set up a multidisciplinary investigation methodology developed by the RAMHA team, which was perfected over the years. Currently, 25 similar sites between the altitudes of 2385 m and 3059 m above sea level have been identified between the Valle d'Aosta and the Valais. These high mountain sites have similar general characteristics in terms of altitude, topography, type of remains, location near or on transit paths and natural defences with a large field of vision (fig. 1).

## Sites and methodologies

In Valle d'Aosta, the first investigations started as early as 1970 on the Mont Tantané site, after which other sites were identified and some have been the subject of limited fieldwork by superintendence, while at the same time others have been explored by amateurs without authorisation (Armirotti *et al.* 2023, 10). On the Valais side, research started in 2006, on the Mur (dit) d'Hannibal site, and have then been pursued until today with the RAMHA team, which is also focused on other sites from 2016 onwards. The first constraint is ethical, by carrying out operations on sites which are not in imminent danger. Our aim is to study these sites through limited investigations in order to understand the context while preserving most of their substance as archaeological reserve (Andenmatten 2020, 135-138). A second constraint is the repeated reoccupation of the site and the stratigraphy characterised by strong erosion and weak to non-existent sedimentary deposits. Therefore, excavations rarely allow a relative chronology of the structures to be established. Finally, small material remains are not preserved in moraines that have had their fine matrices washed out.

The positive aspects of high-altitude environment are the good preservation of metal objects and perishable material. Furthermore, the fact that extensive occupations



Figure 1. Col d'Annibal, 2995 to 3059 m. In the foreground, part of the wall quite well-preserved, which continues on the ridge and blocks the access to the pass. In the background, wide field of view. Picture taken towards the south. (© R. Andenmatten/RAMHA, 2016).

at these altitudes were necessarily seasonal and often linked to specific events makes it possible to consider the occupation's layers within the structures as 'almost' closed ensembles. An observation that also emerged is the systematic old wood effect that occurs in  $^{14}\text{C}$  dating on selected charcoal in contrast to plant macroremains. Discrepancies sometimes reach more than a century in the same structure, forcing a reflection on the use of charcoal  $^{14}\text{C}$  dating and the need to consider these only as *terminus post quem*.

### Catalogue of sites

Of the 25 sites recorded (fig. 2), 16 have undergone varying degrees of fieldwork, (prospection and/or fieldwork Andenmatten 2020), 12 probably belong to the same phenomenon dated between the late Republican and early Augustan periods and four are currently of an uncertain date in the La Tène or Roman period (Plan de Tcholeire, Bonhomme du Tsapi, Mont de la Tza) or are in the process of being dated (Pas de Lona). Among these 16 sites, seven, located on both sides of the Col du Grand St-Bernard (except the Col Pierrey), are equipped with fortifications (enclosure or barricade wall).

### Equipment on a regional scale

A particularity of the archaeological material briefly described in this article is that it is composed of objects from Roman and La Tène traditions (fig. 3), which are associated and found on the same site, in the same occupation's layer (Andenmatten 2020). Among the *militaria*, offensive throwing weapons with no visible signs of use are the most represented (5 arrowheads, 4 points [known as] *Numantia* type, 16 lead slingshots, more than 1000 slingstones). Offensive infantry weapons and defensive weaponry are less frequent (one scabbard bridge, two spear-butts, three possible shield nails, a shield edging, two scales of armour and part of a helmet crest holder). They are all dated from the 1<sup>st</sup> century BC.

Among the remaining findings, two categories of objects can be directly associated with military equipment from the second half of the 1<sup>st</sup> century BC. These are belt elements and hobnails. Although the debate on the dating of the hobnails remains open, the observation of diameters seems to allow us to propose a *terminus ante quem* of 16/15 BC for nails with a diameter larger than 15 mm; similarly, cross trademarks would tend to disappear at this time (Volken *et al.* 2011, 338-340; Istenic 2019 276-279;

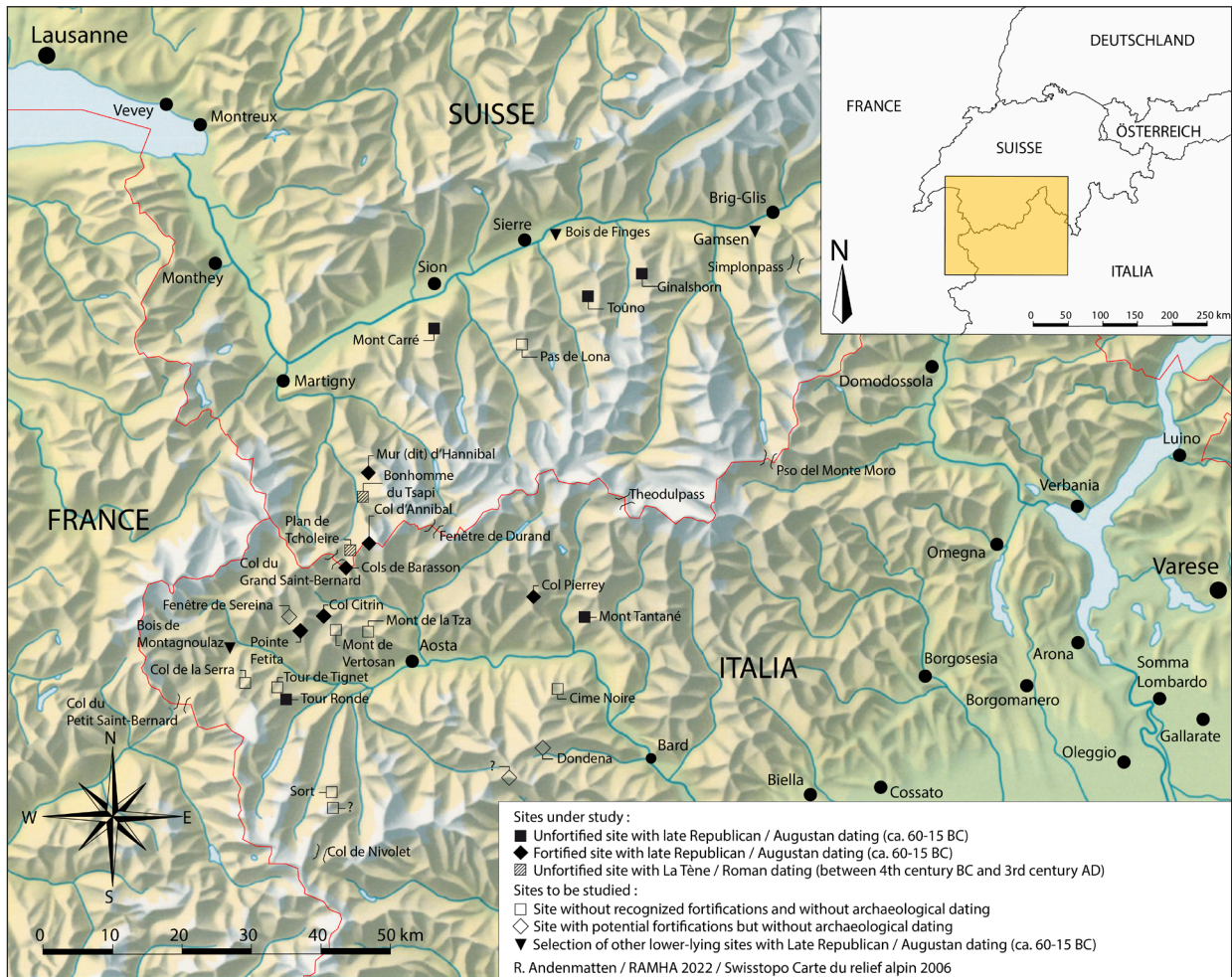


Figure 2. Location of sites under study and to be studied (© R. Andenmatten/RAMHA, 2022).

Martin-Kilcher 2021, 179 and 184-185). Furthermore, one can highlight the number of hobnails found, which vary greatly depending on the site.

Almost all the brooches found (9 out of 11) are made of iron and of the regional La Tène finale pattern, except one Roman bronze hinge brooch (Alésia type) and an iron brooch with a globe which comes from the Middle Rhine area (Schulze-Forster 2002, 28-30). With four blue-green glass beads and a belt ring with a button, these are the three types of elements, found on these high-altitude sites, whose best parallels are located in the Middle Rhine (Schade-Lindig 2020, 63-68; Schäfer 2020, 114-115; Schallmayer 2020, 263-285). Three iron rings with *intaglio* of Roman tradition, which is a male ornament frequently occurring in contexts where a Roman military presence or, at least links with the Roman army, is assumed (e.g. in Switzerland: Rageth 2006, 124; Demierre 2009, 310-312), were also found.

Among the tools and utensils, iron sewing needles are the most frequent with 4 specimens. The spindle

and weight, both made of soapstone, are probably tools used for maintenance or repair work, to ensure a certain amount of autonomy for the occupants of the sites. Whole functional tools are scarce (a fire shovel, a hatchet-hammer and a billhook). The former can also be a casual weapon. They are difficult to date precisely, although their presence between the late Republican and Augustan periods is plausible. On the other hand, fragments or parts of tools are more frequent but these elements are only a testament of activity. They do not possess characteristics that would allow a further interpretation.

The numismatic study has not yet been completed and the coins are presented as preliminary result. Three republican Roman coins were found, including one with a 36 BC *terminus post quem*. Numerous indigenous (so-called) 'Valaisan' coins from La Tène D2b were also collected (Geiser 1984, 55-125; 2009, 213-223). If these coins do not definitely indicate the presence of people from the Valaisan's Celtic tribes on the site, they could,

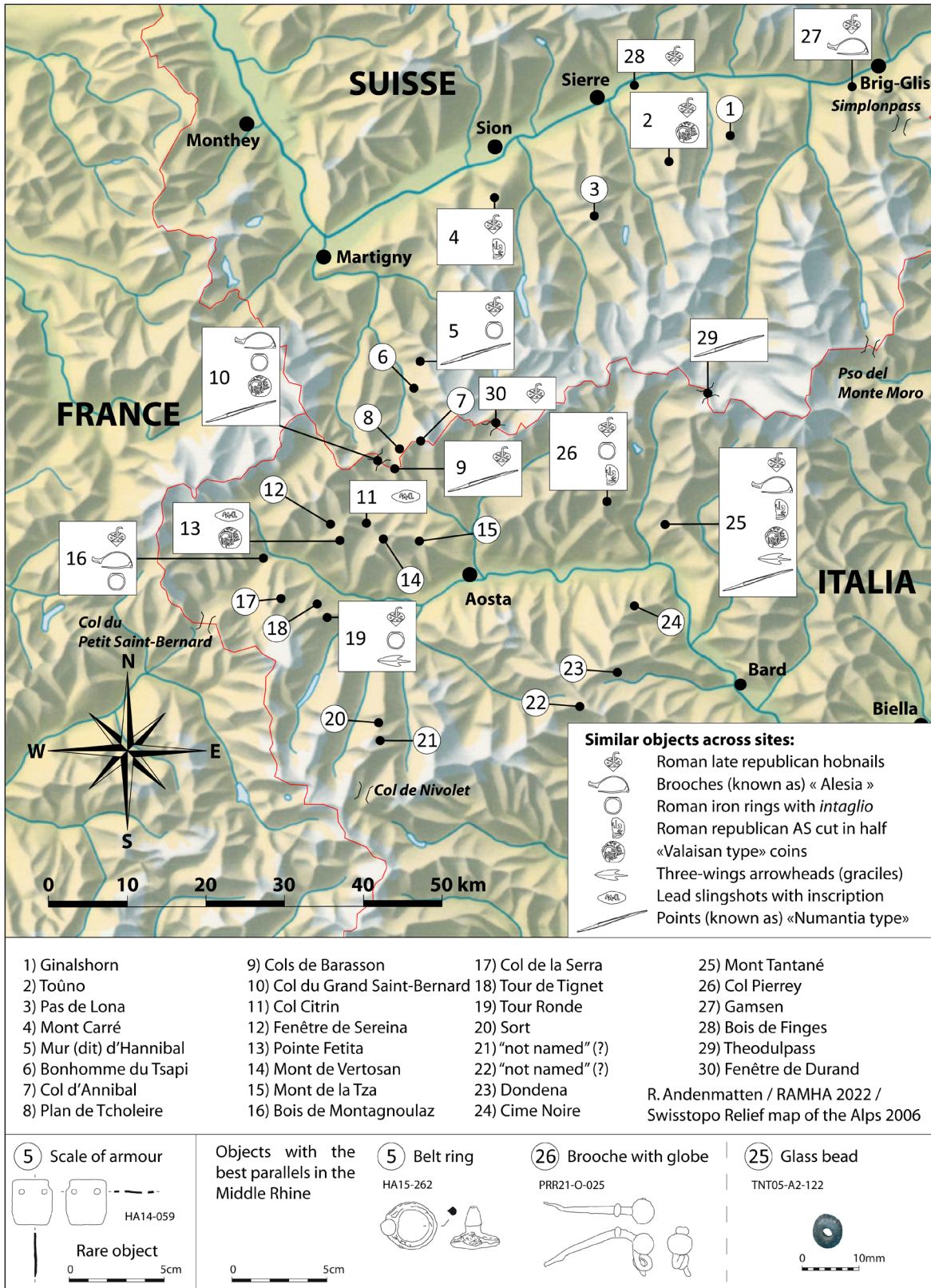


Figure 3. A selection of characteristic objects that can be found on different sites of the corpus (© R. Andenmatten/ RAMHA 2022).

in contrast, be an indication of a possible transit through Valais by those who occupied those sites.

Ceramic material is poorly represented on all sites studied, with the exception of Mont Tantané. This result clearly depends on the methodological choices made. Pottery sherds reveal the repetition of associations of categories and productions that mirror the picture offered by the regional contexts of the late Republican and early Augustan periods located at lower altitudes. Alongside the rare importations of Italic tradition, mostly intended for the consumption and service of food and drink, regional products used for food preparation and cooking are very well represented. Among the fine tableware are very rare fragments of black-glazed pottery, *terra sigillata* and thin-walled ceramics.

As far as materials are concerned, it is impossible to enter into quantitative reflections due to the seasonal and event-related nature of the studied sites, but also due to limited amount of investigations conducted with the exception of the Mont Tantané site. Here, only the qualitative aspect, in terms of presence/absence, can be taken into consideration. The latter must, however, be treated carefully, as in the context of these short-term occupations, logistical constraints limit the amount of material that can be transported to higher altitudes and, as far as possible, only a small part of it, is left *in situ* at the time of abandonment. Archaeologists are therefore only left with material whose loss is tolerated or unavoidable, rubbish, or parts of objects that can no longer be repaired, as well as rare forgetfulness or voluntary deposits. The latter, however, remain difficult to characterise with certainty.

### **When were the locations occupied?**

The observation of the *post* and *ante quem* dates offered by the material helps to provide an answer. The sites taken as a whole can therefore be attributed to a chronological span between 60 and 15 BC, a timeframe that also includes dating obtained on almost all the studied contexts (fig. 4). In addition, some objects do, however, testify to later passages on these emplacements, which have long retained their interest in their function as passageways and observation points for traders, travellers, shepherds, soldiers and hunters. Complementary absolute dating will be necessary to assess the occupations chronologically more precisely, while only dendrochronology, and possibly dendro-anthracology, will perhaps be able to answer the difficult question of the contemporaneity or succession of use of the different sites. It is necessary to ask whether we are dealing with a succession of isolated events or a large-scale territorial control network with a succession of phases, or a mix of the two.

### **Who occupied the sites?**

None of the locations have returned a stratigraphic deposit that would allow us to clarify whether the successive occupations identified can be attributed to different

groups of people. The recurring presence of weapons and other military-related objects on all the sites allows us to deploy the hypothesis that they may have been occupied by troops in the service of Rome. The presence of elements of exogenous origin could also be read in this sense. The pottery can't help to answer the question in the absence of chemical analyses, because of the technical and morphological homogeneity of the pottery from Valle d'Aosta and Valais. Lastly, the absence of elements that would affirm a sure and exclusive indigenous presence as well as any evidence for conflict on the various sites identified is highlighted.

A presence of Alpine, German or even more distant auxiliary contingents can instead be suggested and will be re-evaluated in a broader regional framework. The considerable homogeneity in the organisation of the sites and the repetition of the same number of habitation structures could depend on the presence on these sites of troops with a common organisational base, perhaps benefiting from the same type of training. One would almost be tempted to propose different military corps on the different positions: infantry, archers, slingers. However, although the concept of task-forces already existed in Antiquity, an overly restrictive view of the phenomenon must be advanced with caution.

### **What types of organisation and for which functions?**

An attempt of categorisation of the explored sites has already been suggested (Andenmatten & Aberson 2019, 220; Andenmatten 2020, 159-160). Regarding the general characteristics, some sites would be in the category of fortified enclosures. There are also barricade walls at crossing points and unfortified settlements. However, it is not yet possible to explain the variety of locations that could depend on a variety of occupants, missions, chronologies or the morphology of the sites that did not require fortifications (naturally defended location).

Altitudes, as well as the 'tactical' locations of the sites, have been considered as criteria to evoke a manoeuvre of penetration into the territory of Valle d'Aosta conducted from several directions. All these variants have been and still are the subject of reflection, but only the exploration of further locations will allow us to implement our global understanding of the phenomenon. The preliminary resumption of the study of the early settlements at the Plan de Jupiter site, on the Col du Grand Saint-Bernard, carried out on the basis of the published material, also enable us possible to consider the presence of Roman soldiers between 60 and 15 BC in this place, which logically seems to be impossible to exclude from the list of sites already identified (Deschler-Erb 2008, 257-309; Frumusca 2008, 329-354; Geiser 2008, 109-118; Rey-Vodoz 2008, 311-328). The Bois de Montagnoulaz site, on the easiest road to

Group	Dating corresponding to a group of sites (without indication = BC)	Terminus post quem on the basis of the coins (BC)	Archaeological site	Date from historical events according to written sources (without indication = BC)	slingshot without inscription	slingshot with moulded inscription (■ officer's name)	catapult tip, large pyramid	arrowhead with cannon shaft, with 1 single-sided pin	Hobnails with a diameter > 1.5 cm	Hinge brooch (Alesia type)	javelin tip or pilum with 1 unilateral pin	branded slingshot	slingshot with only the name of the legion	three-wings arrowhead (gracile)	Hobnails with a diameter < or = 1.5 cm	Hinge brooch (Aucissa type)	three-wings arrowhead (foliated)	pyramid (or turret-shaped) pilum ferrule	Type of occupation	V = clothing accessories		
A	100-70																					
		92 Carceres al Viejo / E		75	X														Roman military camp			
		77 Valencia / E			X														city, battlefield			
B	60-40		80/72 Caminreal / E		X														city, battlefield			
			54 Alesia / F		52	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	oppidum, Roman siege
			Uxellodunum / F		51	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	oppidum, Roman siege
			Limburg, Gelefenberg / D		55-53	X		●	●	●	●	●	●	●	●	●	●	●	●	●	●	oppidum, Roman siege
			La Cloche (near Marseille) / F		49	X		●	●	●	●	●	●	●	●	●	●	●	●	●	●	Roman military camps
			Osuna / E		46/45	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	oppidum, battlefield
			Munda / E		45	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	oppidum, Roman siege
			Mutina / I		43	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	oppidum, Roman siege
			Pausa / I		41	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	city, battlefield
		C	40-20		Lyon, "Cybèle" hor. 1+2 / F		post 43		■	●	●	●	●	●	●	●	●	●	●	●	●	●
	near Agen / F				38	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	oppidum, battlefield	
	45 Andagoste / E				36/33 ?	X		●	●	●	●	●	●	●	●	●	●	●	●	●	oppidum, battlefield	
	56/46 Grad near Reka / S				35 ?	X		●	●	●	●	●	●	●	●	●	●	●	●	●	altitude site above a road	
	C / I / D																					
D	20 BC - 10 AD		Stie-Croix, Col des Étroits / CH		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	altitude site above a road	
			Avise and La Salle, Punta Felita / I		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	high mountain fortified camp	
			Avise, Col Citrin / I		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	blocking site	
			La Magdeleine, Mont Tantané / I		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	unfortified high mountain camp	
			Liddes, Mur (dt) d'Hannibal / CH		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	high mountain fortified camp	
			Nus, Col Pierrey / I		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	high mountain fortified camp	
			Bourg-St-Pierre, St-Rhémy-en-Bosses and St-Oyen, Cols de Barasson / CH and I		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	blocking site	
			Bourg-St-Pierre, Plan de Tcholeire		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	short-term camp	
			Avise, Tour Ronde / I		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	unfortified high mountain camp	
			Nendaz, Mont Caré / CH		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	unfortified high mountain camp	
			Amnivers, Le Toulou / CH		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	unfortified high mountain camp	
			Bourg-St-Pierre, Bonhomme du Tsap / CH		35-25 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	unfortified high mountain camp	
			dd 29-26 Bourg-St-Pierre and Éroubles, Col d'Armbhal / CH and I		29-25	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	unfortified high mountain camp
			55-46/45 Bivio, Seppinerpass / CH			X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	blocking site
			Riom-Parsonz, Crap Ses-Schiucht / CH			X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Roman military camp
	31 Schamis, Eiberkopf / CH			X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	unfortified high mountain camp		
E	20 BC - 10 AD		19/18 Oberammergau, Döttenbichl / D		15 ?	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	sanctuary? battlefield	
			17 Dangstetten / D			X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	Roman military camp	
			Lyon, "Cybèle" hor. 3 / F			X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	colonia	
			dd 11-8/7 Oberaden / D			X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Roman military camp
			Hallert / D			X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Roman military camp
	1 Kalkriese / D			9 AD	X	■	●	●	●	●	●	●	●	●	●	●	●	●	●	●	battlefield	

dd = dendrochronological dating

Figure 4. Summary of weapons and clothing accessories characteristic of dated sites and parallels in the Central Alps region, with *terminus post quem* of the coins, based on Martin-Kilcher 2011, 54; 2015, 244; the Döttenbichl site from Zanier 2016; sites under study, implemented or updated based on Andenmatten 2020, 160 (© R. Andenmatten/RAMHA, T. Allegro/RAMHA 2022).



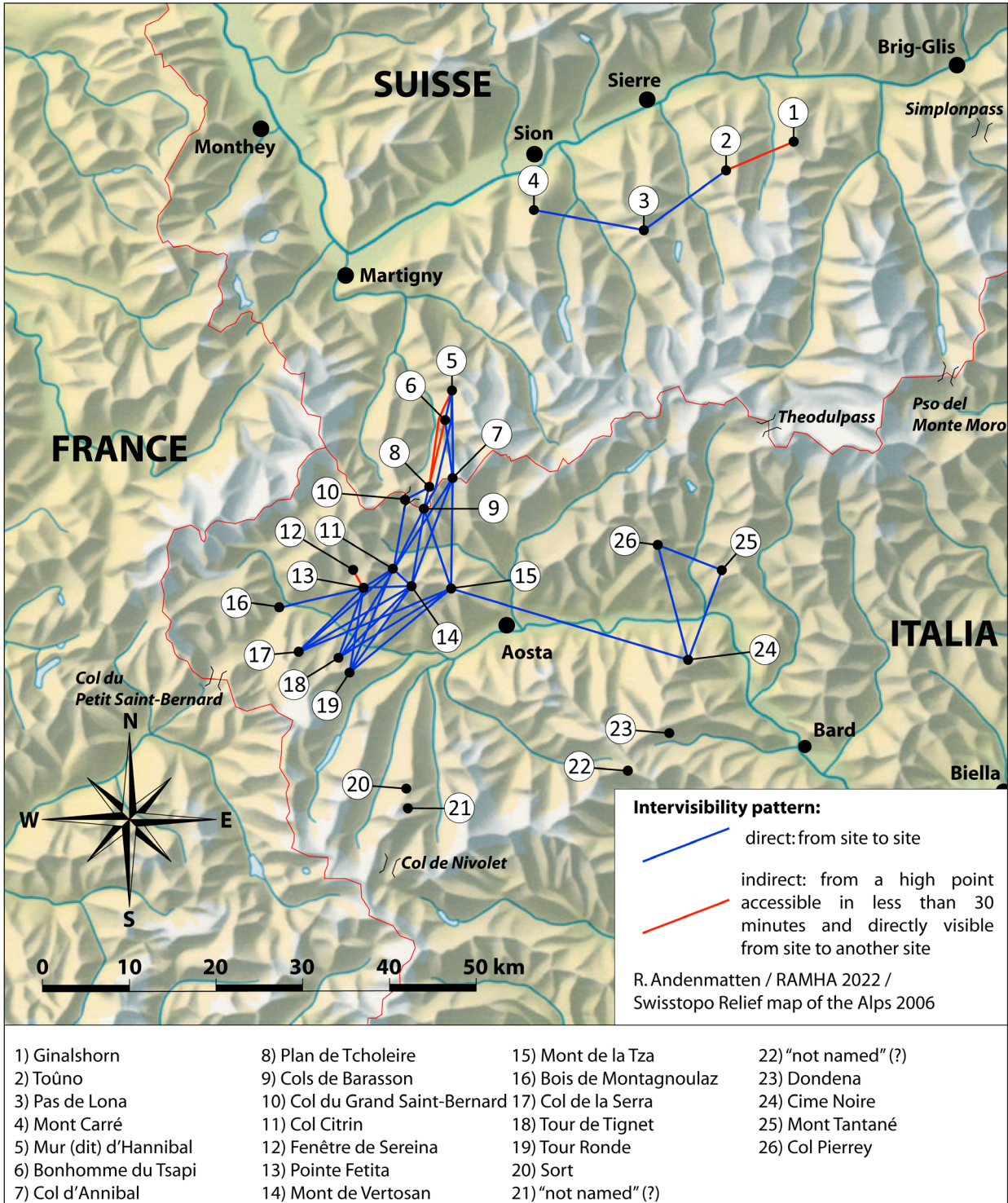


Figure 5. Direct and indirect intervisual links between the sites of the corpus (© R. Andenmatten, 2022).

the Col du Petit Saint-Bernard would also fit in very well (Framarin *et al.* 2011; Armitotti & Framarin 2012).

Indeed, the currently available dates are still too wide to attempt an association of several sites to a single known or unknown event (except dendrochronological dating on the Col d'Annibal: 29-26 BC), and only the evidence of identical material allows us to assume this. The majority of the sites explored could therefore have been occupied or frequented by Roman troops between 35 and 25 BC, during a period of instability and almost permanent conflict between Rome and the *Salassi*. Indeed, these events alone provide a plausible explanation for such a deployment of forces in the high mountains (Andenmatten & Aberson 2019, 221-223). The blockade put in place by C. Antistius Vetus in 35-34 BC around the territory of the *Salassi* is one of the events taken into consideration, but the operations of M. Valerius Messala Corvinus between 30 and 28 BC or of Terentius Varro in 25 BC, the tactical details of which we don't know much about, may equally have required such infrastructure (Aberson & Andenmatten 2021, 74-79). A division between many of these events or the attribution of some sites to events not handed down by the sources remain two plausible possibilities. Certainly, the intervisibility between many of the sites studied is an aspect to be emphasised (fig. 5); contacts between different sites were therefore possible, as was any long-distance communication via multiple sites. The sites in the Grand Saint-Bernard sector could therefore have transmitted a simple message as far as the sites near the Petit Saint-Bernard, some 30 km away, via only two intermediaries. Sites such as Mont-Carré, Toûno or Ginalshorn could in this context be useful as waypoints when moving via lateral valley side passes from Grand Saint-Bernard region in the direction of the Theodulpas, which leads from Valais to Valtournenche. It is therefore plausible to consider the high altitude sites as part of one or more tactical territorial control network occupied by Roman troops during the turbulent decades that led to the entry of the Valle d'Aosta into the *Imperium Romanum*, between 35 and 25 BC, probably following the integration of the Central and Lower Valais (Andenmatten & Aberson 2019, 223-226; Aberson & Andenmatten 2021).

### A new reading of events

The comprehensive studies, which started just over a decade ago on high-altitude sites in Valle d'Aosta and Valais, are far from over and should continue over the next years with fieldwork, but also with specialised studies, new absolute dates and with the reassessment of data from previous investigations, with the aim of publishing a collection of volumes dedicated to the research conducted on the Mur (dit) d'Hannibal and related sites. One of the points of interest of these activities is to have questioned

some of the old interpretative hypotheses put forward and sometimes accepted without careful critical reflection. The new proposed interpretation therefore sees in the populations of the Central and Lower Valais (*Seduni*, *Veragri* and *Nantuates*) not so much the forces opposing Rome, which in the traditional Swiss historiography would have resisted until 16/15 BC, but more probably some of the groups that took part, or whose territories were used as a base, in the operations aimed at subjugating the *Salassi*; it was certainly, partly from their territory, at least from 35 BC, that these manoeuvres were conducted. The so-called 'villaggi dei *Salassi*', considered until today to be the refuge of the natives in the face of Rome's military advance, would therefore seem, in the light of the new data that have emerged, to be more like the offensive support and fortification points used by the occupiers during the *Salassi* quagmire.

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### Bibliography

- Aberson, M. & R. Andenmatten, 2021: L'entrée du Valais dans l'imperium Romanum. Indices archéologiques et témoignages historiques, in: G.L. Gregori & R. Dell'Era (eds), *I Romani nelle Alpi. Storia, epigrafia e archeologia di una presenza. Atti del Convegno internazionale (Losanna, 13-15 maggio 2019)*, Rome, 67-104.
- Andenmatten, R., 2020: Autour du Mur (dit) d'Hannibal. Appréhender un "dispositif militaire" du premier siècle av. J.-C. dans les Alpes pennines (Valais, Suisse et Vallée d'Aoste, Italie), *Treballs d'Arqueologia* 24, 133-164.
- Andenmatten, R. & M. Aberson, 2019: Passer, occuper ou contrôler les Alpes poenines à la transition entre l'âge du Fer et l'époque romaine, *Bulletin d'Études Préhistoriques et Archéologiques Alpines* 29/30, 219-227.
- Armirotti, A. & P. Framarin, 2012: Frequentazione e insediamenti d'altura in età romana. Aggiornamenti e nuovi dati dai siti della Valle d'Aosta, in: S. Armanini, A. Braganti, A. De Guili & E. Poletti Ecclesia (eds), *Inter Alpes. Insediamenti in area alpina tra preistoria ed età romana. Atti del Convegno in occasione dei quarant'anni del Gruppo Archeologico Mergozzo (23 ottobre 2010)*, Mergozzo, 147-160.
- Armirotti, A., 2019: Il progetto Siti d'alta quota. Un approccio preliminare, *Bollettino Soprintendenza per i beni e le attività culturali* 15, 46.

- Armirotti, A., R. Andenmatten, T. Allegro & G. Bertocco, 2023: Caratterizzare una rete di siti di alta montagna di età tardo-repubblicana/augustea tra Valle d'Aosta (IT) e Vallese (CH). Metodo, risultati limitati, interpretazioni e prospettive, in: D. E. Angelucci, E. Croce, M. Migliavacca & F. Saggiaro (eds), *Montagne e Archeologie*, Sesto Fiorentino, 9-30.
- Demierre, M., 2009: St-Croix VD, Col des Étroits, Passage d'Entre Roches, *Annuaire d'Archéologie Suisse* 92, 310-312.
- Deschler-Erb, E., 2008: Instrumentum et militaria du Grand Saint-Bernard, in: L. Appolonia, F. Wibl  & P. Framarin (eds), *Alpis poenina, Grand-Saint-Bernard. Une voie   travers les Alpes. S minaire de cl ture (Fort de Bard, 11-12 avril 2008)*, Aosta, 257-309.
- Framarin, P., C. De Davide & D. Wicks, 2011: Indagini preliminari al Bois-de-Montagnoulaz nel comune di Pr -Saint-Didier, *Bollettino Soprintendenza per i beni e le attivit  culturali* 8, 74-82.
- Frumusa, G., 2008: Le gemme et gli anelli della Collezione del Museo del Gran San Bernardo, in: L. Appolonia, F. Wibl  & P. Framarin (eds), *Alpis poenina, Grand-Saint-Bernard. Une voie   travers les Alpes. S minaire de cl ture (Fort de Bard, 11-12 avril 2008)*, Aosta, 329-354.
- Geiser, A., 1984: Un monnayage celtique en Valais. Les monnaies de V ragres, *Revue Suisse de Numismatique* 63, 55-89.
- Geiser, A., 2008: Les monnaies gauloises recueillies au Plan-de-Jupiter. Des d p ts lat niens tardifs?, in: L. Appolonia, F. Wibl  & P. Framarin (eds), *Alpis poenina, Grand-Saint-Bernard. Une voie   travers les Alpes. S minaire de cl ture (Fort de Bard, 11-12 avril 2008)*, Aosta, 109-118.
- Geiser, A., 2009: Les monnaies des s pultures s dunes (fouilles r centes), in: P. Curdy, F. Mari thoz, L. Pernet & A. Rast-Eicher (eds), *Rituels fun raires chez les S dunes. Les n cropoles du second  ge du Fer en Valais central (IV<sup>e</sup>-I<sup>er</sup> si cle av. J.-C.)*, Lausanne (Cahiers d'Arch logie Romande 112 / Archeologia Vallesiana 3), 213-223.
- Istenic, J., 2019: Caligati in the eastern hinterland of Aquileia up to the Early Augustan period, in: H. Dolenz & K. Strobel (eds), *Chronologie und vergleichende Chronologien zum Ausgang der R mischen Republik und zur Fr hen Kaiserzeit. Tagungsband des internationalen Kolloquiums anl sslich 70 Jahre Arch logische Ausgrabungen auf dem Magdalensberg. Zugleich Festgabe f r Eleni Schindler Kaudelka*, Klagenfurt am W rthersee, 271-296.
- Langenegger, F., 2021:  tude dendrochronologique et xylogologique, *col d'Annibal (VS)*, (unpublished).
- Martin-Kilcher, S., 2011: R mer und gentes Alpinae im Konflikt. Arch logische und historische Zeugnisse des 1. Jahrhunderts v. Chr., in: G. Moosbauer & R. Wiegels (Hrsg.), *Fines imperii – imperium sine fine? R mische Okkupations- und Grenzpolitik im fr hen Principat. Beitr ge zum Kongress ‘Fines imperii – imperium sine fine?’ in Osnabr ck vom 14. bis 18. September 2009*, Rahden (Osnabr cker Forschungen zu Altertum und Antike-Rezeption 14), 27-62.
- Martin-Kilcher, S., 2015: Arch logische Spuren der r mischen Okkupation zwischen Alpen und Hochrhein und die st dtische Besiedlung der civitas Helvetiorum im 1. Jh. v. Chr., in: G.A. Lehmann & R. Wiegels (Hrsg.), * ber die Alpen und  ber den Rhein... Beitr ge zu den Anf ngen und zum Verlauf der r mischen Expansion nach Mitteleuropa*, G ttingen (Abhandlungen der Akademie der Wissenschaften zu G ttingen Neue Folge 37), 235-281.
- Martin-Kilcher, S., 2021: La pr sence romaine dans les Alpes au premier si cle avant J.-C. L'apport des donn es arch ologiques, in: G.L. Gregori & R. Dell'Era (eds), *I Romani nelle Alpi. Storia, epigrafia e archeologia di una presenza. Atti del Convegno internazionale (Losanna, 13-15 maggio 2019)*, Rome, 158-186.
- Paccolat, O. & F. Maret, 2015: *Projet Interreg 2013-2015. Prospections Valais-Vall e d'Aoste (2013-2014). Voie du Grand St-Bernard, Cols de Barasson, Cols Ferret, Fen tre de Durand* (unpublished).
- Paccolat, O., Ph. Curdy, E. Deschler-Erb, M.-A. Haldimann & L. Tori, 2019: *L'habitat alpin de Gamsen (Valais, Suisse). Le mobilier arch logique*, Lausanne (Cahiers d'Arch logie Romande 180/181/182).
- Providoli, S., 2015: Zwischen Steinbeil und Konservend chse, in: S. Provioli, Ph. Curdy & P. Elsig (eds), *400 Jahre im Gletschereis. Der Theodulpass bei Zermatt und sein ‘S ldner’*, Baden (Reihe Geschichtsmuseum Wallis 13), 43-104.
- Rageth, J., 2006: Zeugnisse des Alpenfeldzuges des Kaiser Augustus von 15 v. Chr. aus dem b ndnerischen Oberhalbstein, *Helvetica Archaeologica* 148, 118-134.
- Rey-Vodoz, V., 2008: Les fibules du Grand Saint-Bernard, in: L. Appolonia, F. Wibl  & P. Framarin (eds), *Alpis poenina, Grand-Saint-Bernard. Une voie   travers les Alpes. S minaire de cl ture (Fort de Bard, 11-12 avril 2008)*, Aosta, 311-328.
- Schade-Lindig, S., 2020: Eine l ndliche Siedlung der ausgehenden Lat nezeit und milit rische Anlagen r mischer Zeitstellung, in: S. Schade-Lindig (Hrsg.), *Arch logie am Greifenberg bei Limburg a.d. Lahn. Spuren von der Jungsteinzeit bis zur R mische Republik*, Darmstadt (hessenArch logie Sonderband 4), 50-105.
- Sch fer, A., 2020: Kleinfunde aus Metall und Glas, in: S. Schade-Lindig (Hrsg.), *Arch logie am Greifenberg bei Limburg a.d. Lahn. Spuren von der Jungsteinzeit bis*

- zur *Römische Republik*, Darmstadt (hessenArchäologie Sonderband 4), 106-123.
- Schallmayer, E., 2020: Caesar in "Germanien". Die spätlatènezeitliche Siedlung und die römischen Militärlager im historischen Kontext, in: S. Schadelindig (Hrsg.), *Archäologie am Greifenberg bei Limburg a. d. Lahn. Spuren von der Jungsteinzeit bis zur Römische Republik*, Darmstadt (hessenArchäologie Sonderband 4), 250-292.
- Schulze-Forster, J., 2002: *Die Latènezeitlichen Funde vom Dünsberg*, Marburg.
- Volken, M., O. Paccolat & S. Volken, 2011: Les clous de chaussures du site de Pfyngut. Les bases d'une typochronologie, in: O. Paccolat (ed.), *PFYN/FINGES, évolution d'un terroir de la plaine du Rhône. Le site archéologique de "Pfyngut" (Valais, Suisse)*, Lausanne (Cahiers d'Archéologie Romande 121), 315-387.
- Zanier, W., 2016: *Der Spätlatène- und Frühkaiserzeitliche Opferplatz auf dem Döttenbichl südlich von Oberammergau*, München (Münchner Beiträge zur Vor- und Frühgeschichte 62).