Introduction

In the spring of 1214, not far from the castle of Pergine in Valsugana in the Italian central Alps, the making of a new landscape was underway. Settlers were colonising the upper valley of the Fersina River, deforesting wide tracts of land and creating new arable lands where new farmsteads could be founded. The clearing of woodlands to make space for fields, here as elsewhere, was no extraordinary in this period. Such an 'assault on wilderness' became itself the very symbol for the economic and demographical development of medieval Europe from the 10th–11th centuries onward. But as typical as it might sound, this was not a smooth process; it was indeed a major ecological project with profound social and political implications.

The facts of the Fersina Valley emerge from three documents drafted in a short period of time between the spring and autumn of 1214 CE can be seen as paradigmatic. In May, some villagers of Viarago and Portolo, two hamlets located along the Fersina stream not far from the Pergine castle, took an oath to expel the settlers from the locality of Mala (Belloni 2004, n. 38). This place was located upstream of their villages within an area that these communities had managed and protected as common woodlands. Clearly, the forest was under threat, as made explicit by the Latin term used to define the colons, called runcatores, namely 'those who assart' or 'deforest'. Through this decision, the representatives of the two village communities were not alone, as the oath was sworn in conjunction with the bishop of Trento and the lords of the castle of Pergine. This document shows the principal political actors of the local medieval society -villagers, castle elites and the bishop - acting in coordination to defend the status quo by preventing some farmers from settling in the woods around the villages of the upper Fersina valley. But two other documents written later that year suggest this 'social block' was not exactly as monolithic as it may appear. When in October 1214 the ratification of the original agreement was emitted by the episcopal chancellery, the bishop and the lords of the Pergine castles committed themselves to expel the settlers under penalty of a considerable fine in Veronese currency (Belloni 2004, n. 41). Then, in November, the same lords of Pergine reinstated the commitment of respecting the decision not only to expel the already settled farmers but also to impede any future settlement of runcatores (Belloni 2004, n. 42). Such a commitment 'to respect the decision' unmasked a crucial aspect, which is to say that the lords of Pergine were the real promoters of the upper Fersina valley colonisation, as in fact we are informed by later

documentation. By settling new farmers in the commonly sourced forest of the village communities, they expanded their revenue sources and enlarged their political influence over a previously unsettled area.

The documents of 1214 demonstrate that the two village communities were politically strong enough to mark a sensational legal victory over the attempted erosion of their common rights. Unfortunately, silence falls on this story after October 1214 and eventually we are not informed on whether the expulsion of the runcatores from Mala effectively occurred. What we know much better from the landscape of this valley is that the colonisation of the Fersina valley, coordinated by the lords of Pergine never stopped: within a few generations, a mosaic of farmsteads run by newly immigrated German-speaking tenants turned a common woodland into a densely inhabited valley: the Fernstal, or Valley of the 'Mocheni', as this ethnic minority was locally named (Figure 1.1). In the long run, the communities of Viarago and Portolo were defeated inexorably. The story of the Fersina Valley shows that the making of the medieval landscape was a political and ecological process involving different social actors with competing interests and 'worldviews'. Here and in other areas of Trentino, it was a story of winners and losers; it is a story that has left extraordinary material traces that need to be addressed by adopting a political ecological lens (Robbins 2020, vii).

This volume discusses the archaeology of the medieval landscapes of eastern Trentino in the Italian Alps from this perspective. It presents archaeological, historical, and ecological evidence of two alpine valleys, Valsugana and Val di Cembra, over a long period of time covering the period spanning 500-1500 CE. It aims to discuss the evolution of these spaces -and their materiality- in the medieval period, and as such, it is organised around three core ideas. The first is to show that despite deepseated and common-sense stereotypes describing Alpine landscapes as traditional, conservative and immutable, this landscape has been dramatically dynamic, changing and mobile throughout the Middle Ages; secondly, it aims to demonstrate that the medieval period represented a fundamental turning point in the shaping of this area and that the medieval 'heritage' here is still a fundamental component of the contemporary landscape. Thirdly, it seeks to demonstrate that the formation (and transformation) of the medieval landscapes was rarely a smooth and accommodating ecological process developed by cooperative societies adapting to the environment in which they lived, but more often a rugged and conflicting struggle involving local and supra-regional political

¹ The Latin root of the term is *runca*, which is the hoe used to clear the forest.



Figure 1.1. The castle of Pergine with the Val dei Mocheni in the background.

actors. Overall, these medieval landscapes demonstrate the interconnectivity that these two valleys established with the outside world(s), and show how this interconnectivity was essential to the outside world itself. In other words, this volume aims to disentangle the vivacity, complexity, and originality which shaped the elaboration of the medieval landscapes of eastern Trentino.

The Medieval Alps stems from the APSAT² project, a seminal research project which, from 2008 to 2012, has intensively analysed the historic landscapes of the Province of Trento from archaeological, historical and geographical perspectives. This research involved more than 70 scholars from the universities of Trento, Padua and Venice (IUAV), the Museum of Buonconsiglio in Trento and the Museum 'Usi e Costumi della Gente Trentina' of San Michele all'Adige, as well as the Bruno Kessler Foundation of Trento, a leading institution in the application of cutting-edge technologies in cultural heritage. It represents a massive scholarly effort which produced, among other things, the publication of tens of scientific papers and twelve monographic volumes, and several dissemination events including conferences, workshops and summer schools.

Inspired by complex systems' theory and cultural ecology (Brogiolo 2012), the theoretical and methodological frameworks of the APSAT project were specifically crafted to delve into critical topics employing a comprehensive cross-referencing analysis of archival

sources, archaeological evidence, and remote sensing within selected case study areas in the province of Trento. These lines of inquiry included the study of mining areas, upland pastures, fortified medieval and religious sites, agrarian landscapes, and terrace systems, to name a few (see for example Brogiolo et al. 2012; Angelucci et al. 2013; Brogiolo 2013; Casagrande 2013; Possenti et al. 2013; Bazzanella and Kezich 2013). The objective of this strategy consisted of the development of detailed analyses within several case study areas (usually, selected valley contexts) in order to create more general interpretative models applicable to Trentino as a whole or usable as comparative studies within the Alpine region (and beyond). The many published works I have quickly recalled above -and which I shall refer to many times throughout this book-demonstrate the original outcomes of such an approach. As part of the APSAT project and the research activities it stimulated, my work particularly deepened some specific topics (and methods) that will be fully addressed in the following chapters: among others, possibly the more relevant aspects I addressed are (i) the impact of the late Antique and early medieval climate deterioration and natural hazards on coeval settlements and landscapes, (ii) the spatial and diachronic development of medieval and post-medieval agrarian spaces, and (iii) the diffusion of the medieval castles in the landscape.

Overtly processual in its theoretical premises (Brogiolo 2012), the APSAT project and most of the research activities stemming from this research have been inspired by cultural (and historical) ecology. These works have emphatically stressed the complex and creative adaptations that human

 $^{^{\}overline{2}}$ APSAT is the acronym of 'Ambiente e Paesaggi dei siti d'Altura trentini', i.e. 'Environment and Landscapes of Trentino hilltop-sites'.

societies adopted and developed in living and shaping the Trentino Alpine landscapes, and still stand fundamental, especially in clearing the field from any deterministic interpretation on the one hand and escaping from ahistorical or atemporal traps on the other. My goal is to stress that as important as this approach may be, it can be enriched with new, diverse ideas. For example, to view ecological adaptation as a process collectively embraced and agreed upon by an entire society poses the risk of overlooking essential components involved in this process, such as structural inequality, inescapable power relationships, uneven access to resources and clashing ideologies and 'worldviews', or 'their views of their world' (Johnson 2010, 83). The political ecology approach which I adopt in this book stresses exactly this concept, which is to say that the materiality of the medieval landscapes of eastern Trentino must be understood from both a political and ecological perspectives. This approach on the construction, preservation and deconstruction of historic landscapes considers the landscape as not only the 'outcome' of demographic, economic or environmental processes, but also as the product of political negotiation and struggle. There is still much to do in order to better frame this deeply interconnected physical, ecological and political web made of women and men, children and the elderly, rich and poor, the powerful and the dispossessed, waters, open fields and terraces, forests and mines, masonry-built fortifications, sheep and goats, horses and bacteria, temperatures and rainfall rates, floods and landslides, roads and tracks, commons rights and elite privileges, and so forth. Interestingly, eastern Trentino offers the possibility to deepen this perspective, and I believe that -in a region where political (and ethnical) confrontation in an Alpine ecological setting has been immortalised by the extraordinary The Hidden Frontier by John Cole and Eric Wolf (1974)- archaeologists cannot escape this perspective. Ultimately, I hope my effort in this direction has proven successful.

Moreover, there are two other essential objectives set by this book. First and foremost, because of the -very limited, and at the same time very limiting- structure of the archaeological dataset available for this part of the Trentino Alps, I hope that this work, rather than marking an ending point, will serve as a springboard for future research. However obvious and possibly rhetorical this may sound, I hope I will be able to discuss this idea throughout the volume offering solid evidence and introducing engaging questions for future works. I do believe eastern Trentino offers unique opportunities for the development of multiple research strands and will try to demonstrate that there is plenty of room for landscape archaeology -and medieval archaeology in particular- to develop such lines of enquiry further. An additional goal of this work is to stimulate further dialogue with other ongoing or future research projects devoted to the medieval rural worlds. In particular, I hope that the theoretical framework adopted here, as well as the methodology applied, will serve to boost the debate on the shaping of medieval landscapes from a European scope. I will return to this several times in the last section of the book and in the conclusions. Before I move on to

the introduction of this book's structure, I need to clarify a particularly critical point which I believe deserves specific clarification. In fact, some substantial paragraphs of *The Medieval Alps* deal with the Roman period. There are a number of reasons for such a choice.

First of all, the Roman period marks a turning point in the historical trajectory of this area -and, in general, for the Alpine Arc as a whole. In fact, it is since this period that these valley systems are, for the first time, politically and economically integrated into the broader political structures of a super-regional state. Since then, these valleys 'lost their innocence' at least from a formal administrative perspective. As such, the political and institutional interconnectivity of eastern Trentino to the outside world -a key-aspect of the configuration of these valleys in the Middle Ages- must be traced back to the Roman period. A second reason, again political in nature, is linked to the long-lasting impact produced by the Roman administrative frameworks in the medieval settings of this mountainous area. The leading role of urban-based institutions and social elites in medieval eastern Trentino still represents a clear heritage of the Roman past because it was since then (1st century BC) that the two municipia of Trento and Feltre started shaping the political contours of this area. The territorial administrative units marking the political scopes of medieval public powers -the dioceses and the comitati- represent, respectively, unaltered Roman administrative boundaries and new, disruptive reshaping of the same districts defined during the central Middle Ages. A third reason, more archaeological in nature, concerns the definition of settlement networks and landuse strategies inaugurated in the Roman period. New, valley-bottom nucleated villages seem to form in the first centuries of the first millennium as a consequence of the progressive abandonment of older hilltop sites that were occupied throughout the Bronze Age and the Iron Age. Collaterally, more intensive agrarian exploitation has been suggested for this Alpine sector, to such an extent that the continuation of the social and economic 'structures' of the Roman period into the Medieval period has been depicted as a smooth and rather ineffectual transition (e.g. Cavada 2004). A hypothesis, this one, which will be fully evaluated in the following chapters. I feel somewhat confident in saying that Italian medieval archaeology is rather obsessed with the issue of the continuity or discontinuity of the Roman world into the Middle Ages, and in this perspective, this work is no exception.

As far as the structure of this book is concerned, the volume is arranged into three parts.

The first section covers Chapters 2 and 3. Chapter 2 provides a geographical and historical frame of eastern Trentino, introducing critical aspects of this area from Antiquity to the late Middle Ages. Such aspects encompass the function of Valsugana and Val di Cembra as strategic corridors for intra- and extra-Alpine mobility, the role played by the urban contexts of Trento and Feltre in the formation of historical administrative and political

frameworks gravitating on eastern Trentino, and the formation of new aggregative sites of the medieval periods, the parish churches and castles. Chapter 3 offers a more detailed survey of the archaeological datasets available for the study area again between the Roman period and the later Middle Ages. It first reflects on 'structural' issues associated with the quality of such datasets, derived in most parts from old and occasional discoveries, and introduces the 'archaeological' background on which has been developed most of the interpretative analysis discussed in the following chapters.

The second section, more methodological in nature, focuses on the acquisition of fresh data particularly through remote sensing analysis and fieldwork. This section is opened by Chapter 4, a slim chapter which outlines the methods adopted by this study as part of the APSAT project. In particular, the chapter addresses issues in archaeological visibility and discusses the methodological procedures employed in remote sensing analysis and GIS data management. Chapter 5 illustrates the results achieved by means of the analysis of aerial photographs, in particular of stereoscopic flights and near-infrared orthophotos, and Chapter 6 discusses the strategic role that LiDAR DTM analysis has represented in this research. Overall, these two chapters show what can be achieved through a systematic application of remote-sensing sources and offer a critical assessment of the obtained results.

The fresh evidence presented in these chapters is widely discussed in the third part of the book. Here, I mainly address three main topics. In Chapter 7, I outline a general interpretative model for the evolution of the medieval field systems in Valsugana. By collating remote sensing results, historic maps, archival information, place names and spatial analysis, I attempt to disentangle the complex -and creative- transformation of these agrarian landscapes from the Middle Ages up to the 21st century. In Chapter 8, this effort is then used retrospectively to discuss more specific topics relating to Roman and medieval agriculture, land use patterns and environmental degradation. Climate change and disasters are particularly addressed regarding the transitional period corresponding to the 5th-7th centuries CE; it is here where I most directly deal with the aforementioned issue of the 'continuity' and 'discontinuity' between the Roman world and the Middle Ages. In Chapter 9, I closely analyse the impact of the foundation of the medieval castles and address the formation of 'landscapes of power' in the study area between the 12th and 14th centuries. Arguing that this period represents a profound turning point in the economic, social and ecological trajectory of eastern Trentino, it is in this Chapter that I advocate that the use of a political ecology approach is essential in the understanding of such a relevant (and disruptive) process. Finally, in the Conclusions (Chapter 10), I return to the aspects that I find most relevant in my study and offer some suggestions for further research in what I believe represents a crucial geographical sector to investigate and characterise the transformation of the Alpine landscapes in (at least) the last two millennia.