

LITERARY GEOGRAPHIES

Mapping the Grand Tour Travel Writings: a GIS-Based Inventorying and Spatial Analysis for Digital Humanities in Trentino- Alto Adige, Italy (XVI-XIX c.)

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Abstract:

Literary GIS has emerged as a new pioneering approach, a field of study in literary geography that aims at bridging texts with places/spaces through the digitisation of literary works. It aims for a better understanding of the text/place/space nexus, including landscape and territorial history, using quantitative and comparative approaches and strategies of dissemination. This paper provides an early-stage report on the development of a literary GIS of Trentino-Alto Adige (Italy) based on Grand Tour travel writings from the sixteenth to the nineteenth century. These texts, including reports and some early examples of tourist guides, represent valuable sources of information about the people, the spaces described, and the cultures within which the writings were framed. The specific case study of Trentino-Alto Adige has been selected because the area was one of the most important gateways for travellers coming from Northern Europe who intended to visit Italy. As a first step, over 250 passages from travel writings were collected, digitised and georeferenced. The paper presents the sources, as well as the developed inventory sheets and the GIS structures. The result is a comprehensive geodatabase that can be used for micro and macro analysis, in terms of: identification of historical routes and citation clusters; spatial comparisons of the different sites cited in the literary passages; also analysing and mapping references to textual elements that refer to landscapes, societies and cultures. In the next phase, the geodatabase will first be enriched with additional authors, then published online, in order to develop a Literary Atlas of Grand Tour travellers in Trentino-Alto Adige and to facilitate literary, geographical and historical research on the corpus, on local landscapes and societies of the past and on travels' attitude and praxis.

Keywords: literary geography; literary GIS; Grand Tour; travel literature; historical geography; literary sources.

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Introduction: Literary GIS as a point of contact between geosciences and literature

Literary geography is a complex of methodologies and objectives that approaches literary works and their relationship with space, in an ‘endless story of encounters and mutual exchange’ (Marengo 2016: 13). The value of literary works as heuristic tools has been recognised since the very first attempts to establish geography as a science in the late nineteenth century (Scaramellini 1985; Lévy 2006; Gavinelli 2007; Brosseau 2017; Gabellieri 2019a: 11-23).

Amidst all literary works and genres, special attention has been devoted to travel literature, or literature *odeporica*, as a source for the understanding of landscapes and societies of the past. Despite the numerous critical studies already published at the international level (*inter alia*, Chevalier 2001; Scaramellini 2008; Gregory et al. 2009; Gephardt 2016; Brosseau 2017), travel literature is still worth examining in more detail because of its vastness and heterogeneity. The discussion of the treatment of travel literature as a documentary source for geography has a long history. Whether reports are edited with a scientific, descriptive, or exploratory purpose, or simply to tell a story, the act of travelling presupposes real contact with the territory, as well as an attempt to interpret and represent facts (sometimes transfiguring them) and geographical elements that belong to the concrete real world (Percy 1983: 78; White 1987; Tinguely 2006). In addition, it has been noted that, in some cases, external observers tend to notice facts and elements more effectively than the local people, who are accustomed to them (Balzaratti 2019; Piana, Watkins and Balzaratti 2018). Such informative potential makes travel reports ‘enticing to the attention of the geographer’ (Scaramellini 1985: 52).

Nevertheless, to decode the information from the sources and to avoid relying on positivist models of analysis, it is necessary that the approach adopted be methodologically critical. According to different scholars, travel literature has been interpreted as a straightforward expression of the cultural history and mentality of the authors’ original societies (De Seta 1982), as an indicator of their academic, popular or practical geographical knowledge (Scaramellini 2008) or as a direct source of clear information on the territories of the past.

The non-transparent nature of the sources imposes the need to develop exploratory critical-analytical studies focusing on some areas or on sample texts, in order to carry out in-depth studies and to derive interpretative insights. In this respect, the question is still open on how to inventory and systematically classify the sources in order to highlight the

narrations of geographical and historical interest and to improve their identification, decoding, and communication.

In this regard, the use of GIS software for managing, analysing and sharing geographic data is now a common practice for disciplines that deal with themes such as space, landscape and territory from many different perspectives. In such a diverse and sometimes blurred area of study, there have been several attempts to process data collected from literary works: the definition ‘Literary GIS’ proposed by Cooper and Gregory (2011) has been adopted for projects that are grounded in interdisciplinary approaches, where geographers, literary critics and historians collaborate to implement territorial information systems in the study of literary works and *corpus*es of literary studies, with different aims: a better understanding of the relationship between territories and narrated spaces (Alves and Quiroz 2015); a spatial-quantitative analysis of literary *topoi* and adjectives (Donaldson, Gregory and Taylor 2017); a comparison with other geohistorical sources (Alves and Quiroz 2013); the designing of itineraries of touristic interest that may combine scientific dissemination and promotion of the territory (Gabellieri 2019a).

Following the international focus on the new potential offered by digital tools in the field of spatial analysis of literary works – which represents a major focal point of research within the Digital Humanities (Moretti 1998; Harris, Corrigan and Bodenhamer 2010; Travis 2015; Cooper, Donaldson and Murrieta-Flores 2016; Murrieta-Flores, Donaldson and Gregory 2017; Taylor et al. 2018) – this paper applies previously implemented methods to a new case study. It represents the first stage of a project for a Literary GIS of travel literature and a geodatabase, in which excerpts of odeporic literature relating to the Province of Trento-Alto Adige are collected, ordered according to their authors, and geo-localised on the sites which they narrate and describe.

Sources and methodology

The context of production: Grand Tour and Trentino

Analysing the long history of *ante litteram* tourism from Northern Europe to the Italian peninsula, Gilles Bertrand (2004: 38-39) proposes a periodisation marked by three consecutive phases. Throughout the Middle Ages, Rome was the destination of religious pilgrimage in different forms: pilgrims were eager to see the centre of Christianity, admire its relics, and visit the basilicas; often they wished to obtain an audience at the papal court. Since the late seventeenth century, however, sacred journeys were gradually replaced by secular forms of travel. Used for the first time by Richard Lassels in his *Voyage to Italy* (1670), the expression ‘Grand Tour’ became so successful that, for over three centuries, it was used to designate the tour of the most remarkable cities and places in the Italian peninsula. First-hand knowledge of classical culture, as the cradle of the Renaissance, was considered a necessary step in the educational path of every upper class northern European (Black 2003; Brilli 2006). Since travellers could often rely on a solid network of personal international relationships, as well as on accommodation and transportation facilities

(Grendi 1999), over time the journey to Italy became a crystallized practice, with its own rituals and some fixed stages: Rome, Florence, Venice and Genoa were the hubs of the Grand Tour, whereas the rest of the Peninsula remained just transit territory for a very long time.

The second phase started at the end of the Napoleonic wars. Owing to the construction of new railways and roads, improvements in transports and travel safety led to a significant increase in the number of travellers. In addition, due to the spread of romantic aesthetics and to a renewed interest in mountainous regions, travel destinations started to include areas that had so far been neglected.

Between the sixteenth and the nineteenth centuries, the Episcopal Principality of Trento, which formed part of the Hapsburg Empire, was one of the major transit corridors for the flow of travellers going from Northern European countries to the most famous cities of central Italy (Black 2003) (Figure 1). Despite all the different religious, cultural, and socioeconomic reasons behind the tour, the act of travelling always qualified as the acquisition of knowledge that sparked and satisfied the travellers' encyclopaedic curiosity, as well as nurturing their critical thinking. The outcome was a dense production of *ante litteram* tourist guides, memorials and reports of personal experiences, ranging from private letters to literary masterpieces.

Notwithstanding its crucial position, in most of the related literary production, references to Trentino-Alto Adige are quite limited, both in number and extent. For many people, the Adige Valley was only a place to pass through on the long way to Rome, or on their way back to the north. It is no coincidence that travel practices in marginal areas such as the Alpine valleys have been defined by Attilio Brilli (1988) as the *Petit Tour*. However, because of the limited number of descriptions made by different authors in a wide range of time, this area represents an interesting case study for developing a project based on the digitization and georeferencing of odeporic literature. As a matter of fact, although several references to the Adige Valley can be found in a large collection of literary texts or private documents (both published and unpublished) that report impressions, news, and events recorded by travellers in their journeys from Germany through the Italian territory, their number is modest if compared to the more famous centres of attraction, such as Rome or Florence.

Sources

Far from being a homogeneous whole, the literary *corpus* includes at least three types of texts: reports originally written as private letters to be shared with family or acquaintances; diaries or travel journals annotated for strictly private purposes; fictional or factual writings intended for publication (Black 2003: 17; Thompson 2012). These categories must be borne in mind when analysing the information contained in the texts. Historical, literary, and geographical critics agree that a distinction should be maintained between texts written for personal or limited use and those intended for publication (Chard 1999; Black 2003: 18-19), also taking into account external and internal criteria of textual construction. The

former criteria include factors such as: aesthetic canons; market conventions and public expectations; the literary tradition of the genre, namely suggestions from previous influential authors. On the other hand, the internal analysis criteria depend on the authors' personal *weltanschauung*, especially their aesthetic, artistic and ideological inclinations, along with their scientific and cultural background (Scaramellini 1985: 62-65; Black 2003: 18-19). A philological reconstruction of the creation of each text is fundamental to assess their informative content and for a better understanding of the author's cultural environment (Scaramellini 1985: 56).

The bibliography has been assembled also with an educational purpose, since the students attending the courses of University of Trento were involved in bibliographic information retrieval and tracing texts of interest in local libraries. As a number of scholars have pointed out (Fremont 2005; Gavinelli 2007; Hones 2010), the ability of reading and critically comparing literary texts of the past to the present world is a very powerful tool to encourage younger generations to reflect on the changes that have taken place in their territory, not only shaping the landscapes but also affecting travel practices in different forms. In fact, the scope of application of literary works to geographic education can prove to be broad, featuring notions of interculturality, civic education and interdisciplinary aspects.

Following this approach, which combines research on a local scale and teaching, an initial *corpus* has been established which includes, at the time of writing, seventeen documents produced between the sixteenth and the nineteenth century. As a first step in building a broader research project, texts have been selected using a comprehensive approach, in the attempt to collect as many document types as possible within an extended temporal scale. This choice allowed us to assemble a first heterogeneous body for the development and assessment of an inventory as well as a mapping method. Consequently, we have addressed every possible type of odepórica literature (publications, guides, correspondences), in several languages (mainly English, French and German) by many authors (famous writers, poets, and intellectuals, along with lesser known aristocrats or merchants) sourced from local libraries and also on the web (because of 2020 Springtime Italian lockdown limitations). However, each of the selected texts includes geographical information on Trentino, in the form of territorial, landscape or social description by a person who visited the place.

The collection of sources has been facilitated by the consultation of available existing studies that allowed us to compile an overview of the travellers' textual production in Trentino-Alto Adige. These studies include: the repertoire of travel literature in the Trentino-Tyrolean territory from 1400 to 1700 (Osti 2017); some analytical papers on the Grand Tour travellers (Andreotti 1994; Brillì 1988; Ronchini 2014; Dai Prà 2019); and general reviews on international travel writers (Brothers and Gergits 1966; Ingamells 1997; Speake 2003).

Sourced documents have been partially transcribed by the authors of this paper, especially those text passages which refer to landscapes and to social and cultural information about well-defined and easily recognisable sites of Trentino.



Figure 1. Historical map showing the borders and the main routes to Italy in 1863. The area of the current Trentino-Alto Adige territory is highlighted by a red circle. Source: Vuillemin, A., 'Nouvelle Carte Illustrée de l'Italie', in Vuillemin 1864: 9.

The geodatabase building

Currently under development, the dataset has been built through the selection of specific passages in travel reports, private correspondence and tourist guidebooks (written between the sixteenth and the nineteenth centuries), where the areas described or mentioned are topographically identifiable at a local scale. Displaying the text in the original language – whenever possible – the passages have been transcribed along with pieces of information that can help to identify them historically and bibliographically.

In order to manage the data, catalogue sheets have been produced as an inventory and consultation tool allowing the reader to decipher the particular content of the text through additional key information (Table 1). Each sheet is structured as follows: in addition to the textual excerpt, specific fields are devoted to the author's name, the referenced literary work, eventual subsequent editions or translations, the year of

publication, the year in which the travel took place (if mentioned in the text or if the information can be derived from archival documents), the toponym of the described area (location, city or specific building) and the nature of the object (for instance a river, a building, a bridge, etc.) or the space (for instance a town, a valley, etc.) described. An additional field has been included to qualify the nature of the text, since the definition ‘*odeporic* literature’ encompasses a wide array of texts with different characteristics and purposes. According to the taxonomy proposed by Scaramellini (1985), the text types are presented as ‘Tourist guide’, ‘Travel report’, ‘Travel report for publication’, ‘Private Correspondence’, ‘Magazine or newspaper article’.

Table 1. Structure and fields of the inventory sheet detailing the geographical descriptions from the *odeporic* works on Trentino-Alto Adige.

Sheet field	Content	Example
Id	Unique identification code	196
Autore	Author’s name and surname	Inglis, Henry David
Opera	Bibliographic details of the original volume from which the passage has been transcribed	Inglis, Henry David, <i>The Tyrol; with a glance at Bavaria</i> , London, Whittaker, 1837
Data_v	Date of the narrated travel (if it can be deduced with certainty from the text itself or from the author’s biography)	1830
Data_p	Date of publication of the volume/text	1837
Origine	Author’s country of origin	United Kingdom
Tipo	Text type	Published travel report
Test or	Passage transcribed from the original text	Trent is one of the most bustling noisy towns I was ever in; and though under the especial surveillance of the clergy, who, with great slouched hats, swarm in every direction, is full of carousing, quarrel, drunkenness, and immorality of every description. I scarcely could command an hour's sleep, any one of the three nights I slept in Trent. What a contrast between Trent, and Inspruck or Botzen! — the streets in constant commotion till late in the evening; mirth and pleasure awake till near midnight, and then the reign of dissipation and intemperance. Everywhere in Trent, one perceives traces of its antiquity; it has least the modern air of any place I am acquainted with; and as little as most towns, any attractions excepting those

		which its history and antiquities confer upon it.
TO_pp	Pages of the original text from which the passage has been transcribed	309-310
Ed	Bibliographic details of any subsequent editions or translations into Italian of the original piece	
Test_tr	Italian text transcribed from the translation or from the later edition	
TT_pp	Pages of translation or of the later edition from which the passage has been transcribed	
Local	Name of the area at various scales (building, city, location) described and narrated in the text	Trento
Form	Nature of the object of the text description	City

Throughout the inventorying work, a series of epistemological and methodological problems have emerged concerning the process of finding and selecting the material, as well as its localisation. The odeporic works produced by Grand Tour travellers in Trentino-Alto Adige form a wide and partly still unexplored documentary *corpus*. Therefore, the construction and expansion of the dataset needs to be done by stages, gradually adding new material, relying in particular on bibliographical reviews and on the different summary works that have already been published. Another problem was that of finding the bibliographic material, either in its original version or translated into Italian: the absence of several volumes in local libraries and sometimes of digital versions available online inevitably resulted in a slowing down of the work. In some cases, adding a certain text to the dataset only became possible recently.

The choice of the passages to be included in the dataset is probably the phase of data processing where the researcher's discretion is highest. Preference has been generally given to those passages that contain descriptions of geographical elements within large scale areas, taken from different angles: landscape, territorial, social, cultural, environmental, and political. Style and historical accuracy were not the focus at this stage. In some instances, the descriptions concern specific monuments, buildings or neighbourhoods; in others, they are made on an urban scale, collecting on one page various kinds of information and general comments about the city; in still other cases, the narration depicts long travel paths or general elements that might have stood out during transit from one site to another.

Sometimes, recognising a place has been extremely easy, thanks to precise toponymic or descriptive references. In other cases, determining which area was being represented required a direct comparison in the field, or the consultation of historical cartographies to identify historical elements that were no longer present, carried out manually.

As a means of applying the topographical approach to literary sources, the sheet functions therefore as a methodological basis for the creation of a database within a comprehensive project of digitization and georeferencing.

In the subsequent stage, the record was geolocated using the tools of the Qgis software. To achieve this, the OpenStreetMap layer was used as background, accessible remotely via the Qgis OpenLayers plugin. Another plugin, GeoSearch, enabled us to quickly locate the geographical coordinates by entering the relevant postal address. In some cases, however, we preferred to locate the site manually.

To integrate the geolocalised vector feature to each record, point geometry was chosen over polygonal or polylineal geometries. While this allowed us to locate the topographic information as precisely as possible, it posed some problems with those texts that refer to extended areas, such as the descriptions of urban centres or at valley scale. Since a homogeneous vector format has been used, we endeavoured to avoid any location bias by positioning the location at the exact centre of the area, be it a city or a route. Each located point feature has a unique code, which refers to a single record of the corresponding dataset. A simple Join operation in Qgis between the csv format dataset and the point vector shapefile allowed the construction of the geolocated database.

At the moment, the result is a geodatabase including over 250 records, each of which corresponds to a specific element in the Trentino-Alto Adige region that has been associated with an excerpt from a work of *odeporic* literature (Figures 2 and 3). The geodatabase represents a powerful multipurpose consultation tool: it can be used for quick keyword queries within text fields; to compare descriptions of the same local site in different texts; to elaborate spatial query analysis; to visualise the travellers' routes and the geographical aggregation clusters from a specific citation; and to share with the general public through web-based tools.

Discussion

The collected sources reveal a space that is at the same time material, cultural, and relationally vibrant. Behind the different stylistic, psychological, and narrative elements through which the travel reports are expressed, social practices, economic activities, urban and rural landscapes emerge subjectively in the way travellers perceived them. Unsurprisingly, *odeporic* literature has drawn the attention not only of literary disciplines, but also of scholars from other fields concerned with the study of territory, such as historical geography, historical ecology and the history of scientific and geographical thought (Papotti 2003; Piana et al. 2012). This kind of interdisciplinarity, however, requires the adoption of a pragmatic approach to the text that may help to distinguish formal canons and the diverse informative content by using the analytical tools of historical and literary geography, which subject data collection methods to scrutiny while filtering external judgement criteria.

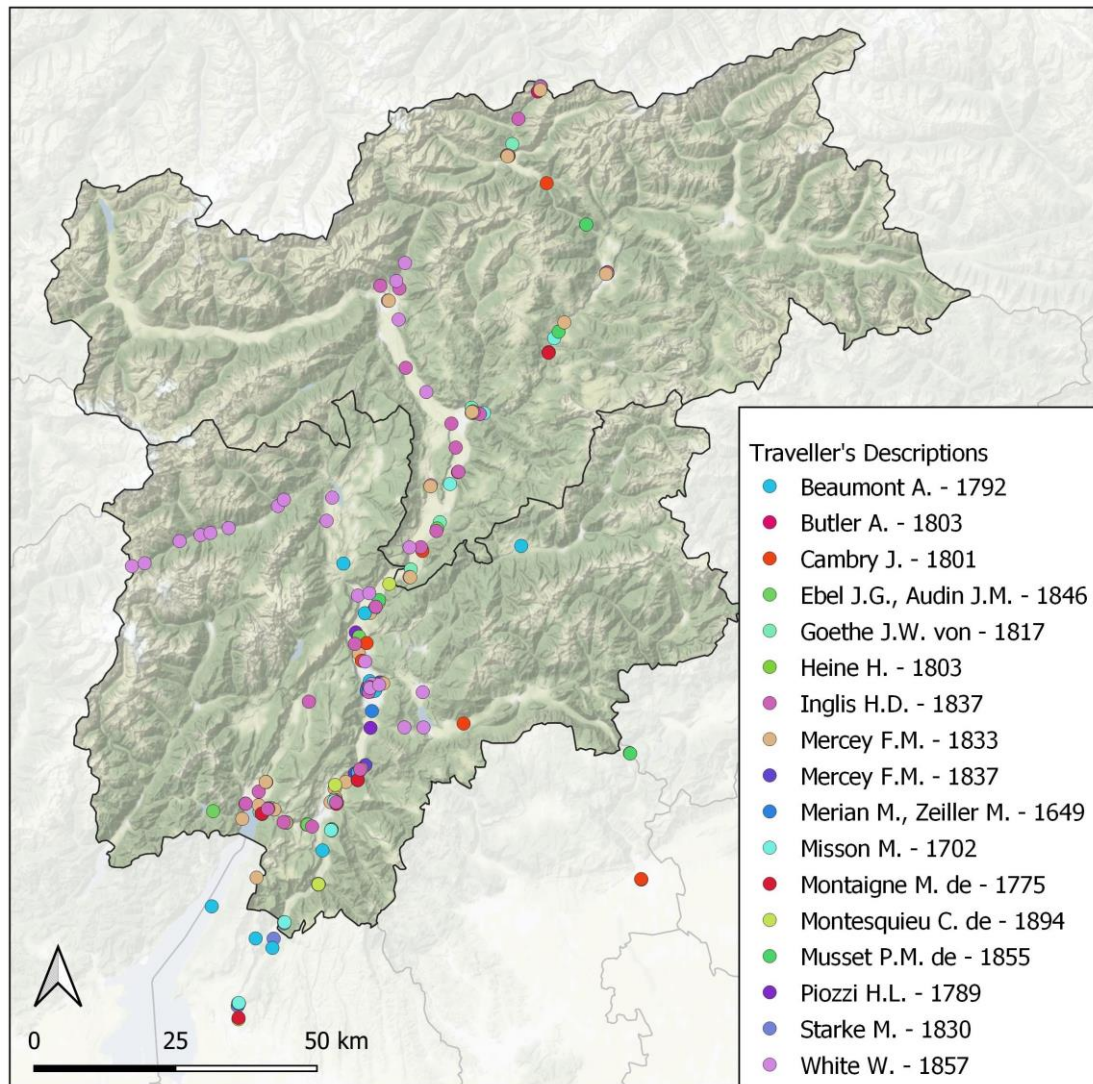


Figure 2. Map of collected, digitised and georeferenced travellers' writings citations in Trentino-Alto Adige (XVI-XIX c.).

Thanks to the geodatabase, the references can be read and evaluated with a multiscale approach that has the advantage of combining macro and micro mapping (Cooper and Gregory 2011: 105). On the one hand, the macro level allows us to identify the areas of interest, the travellers' journeys across those areas, and the aggregation clusters on the whole territory of the description. On the other hand, the topographical scale approach provides a precise identification of the area covered by the description on a specific date. This type of localisation presents two advantages, the first being the possibility of comparative reading of texts extracted from different works, which enables users to assess potential concordances or discrepancies in form and content, thus identifying any possible differences of narrative *topoi*. The second advantage is that the evaluation of real-world references extracted from literary works can be achieved through mutual comparison and by comparing the reference with other sources, such as historical cartography, archive texts and evidence resulting from fieldwork (Piana et al. 2012).

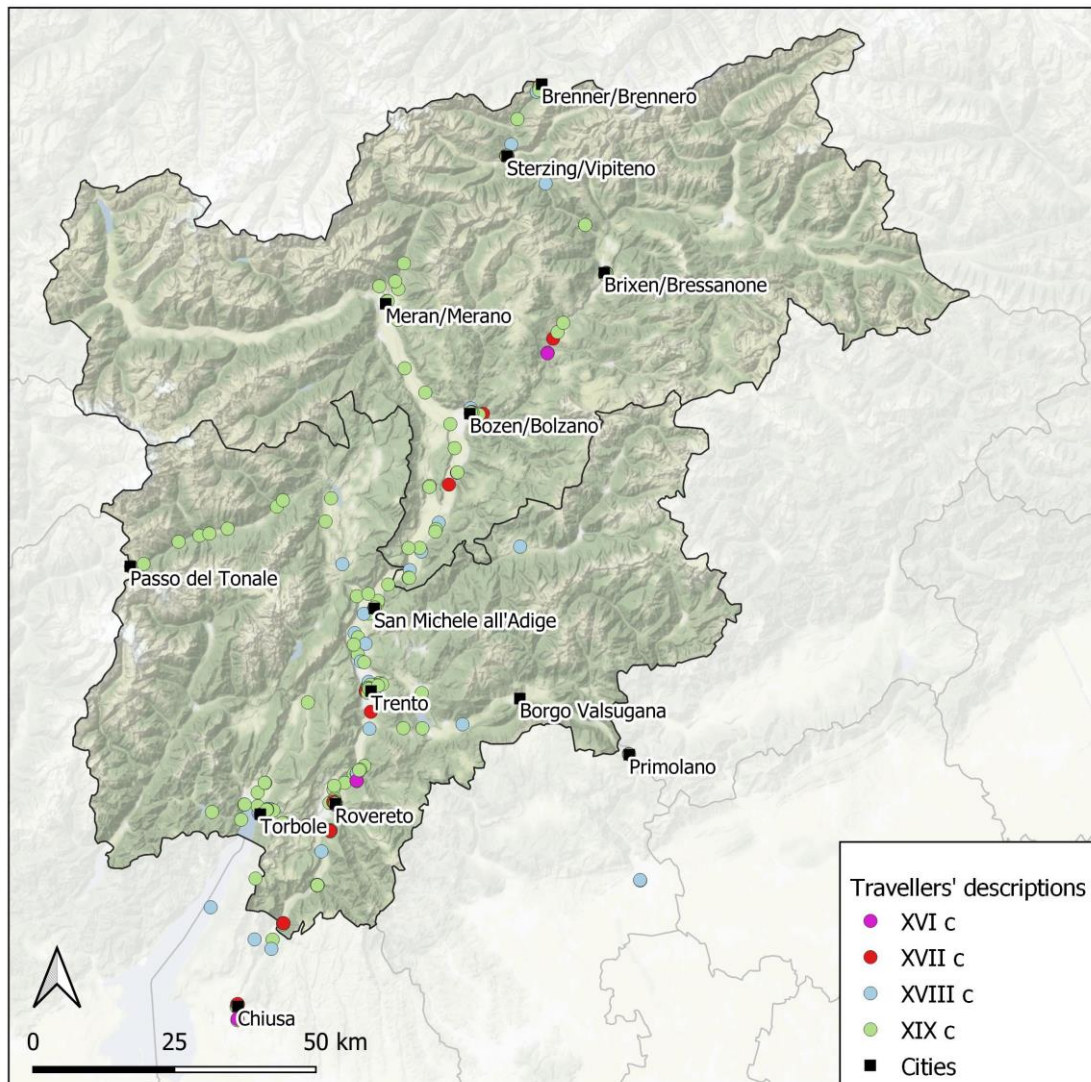


Figure 3. Map of collected, digitised and georeferenced travellers' writings citations in Trentino-Alto Adige, classified by centuries (XVI-XIX c.).

Below are some considerations, organised into four topic sections, that have been prompted by the cross-examination of the texts so far collected. Further expansions of the dataset may allow a broadening of the range of interpretative hypotheses. In the case of original texts in a foreign language (Italian, French, German), English translations have been provided.

A well-trodden path

While passing across Trentino-Alto Adige on their way to Rome or back to their homeland, Grand Tour travellers seemed to be little impressed by the region, which they considered merely as borderland, a poorly civilized territory almost completely lacking in classical art and relegated to the margins of history (with the exception of the famous Council of

Trent). The local morphology forced them to take detours along the Isarco and the Adige rivers: once getting past the Brenner pass, nearly all travellers mention Bressanone / Brixen, Bolzano, Trento, Rovereto, and Forte della Chiusa, the latter situated on the border with the Republic of Venice. Occasionally, smaller villages are mentioned as resting stops, such as Vipiteno / Sterzing, Salorno, Lavis, Mori, and Avio.

The journey along the valley could be made by carriage (Butler 1803; Goethe 1817; Heine 1830; Musset 1855; White 1856), on horseback (Inglis 1837: 317), or using rafts for transporting luggage and people, as in the case of Michel de Montaigne (1775, travel in 1580) and Hester Piozzi (1789). Until the nineteenth century, the valley floor remained the most walked route. The only detours were taken by Albanis Beaumont (1792), who visited the Val di Non, and by Jaques Cambry (1801, travel in 1788), who reached Trento from East, starting from Bassano del Grappa through the Valsugana.

In the nineteenth century, new locations, such as Merano and Lake Garda, attracted the travellers' interest. The former is linked to the memory of Andreas Hofer, head of the Tyrolean Insurgency against the Napoleonic troops in 1809, whose name became popular in Europe after both the Habsburg nationalist propaganda and the English romantic poets celebrated him as a hero (Séwillia 1991). Lake Garda, already renowned for its soothing climate, owes its international fame to Goethe's *Italianische Reise* (Dai Prà 2019), where the German poet talks enthusiastically about the lakeside town charm of Torbole and Riva, thus contributing, through his art, to spreading the high repute of Lake Garda among the European educated classes. Following the publication of the work, between 1816 and 1817, Riva became an obligatory stop for every cultured traveller, such as the French Frederic Mercey (1833) and the Scottish Henry Inglis (1837). In the second half of the nineteenth century, new pioneering paths were undertaken: an example is the route taken by Walter White, author of *On foot through Tyrol* (1856), who crosses the Tonale Pass and reaches Trento from the West.

However, as shown in Figure 4, most travellers followed the same route through the valley floor of the Adige valley. Many of the passages mentioned in their writings are located near the major cities, notably Trento, which attracted travellers particularly because of its function as capital of the Episcopal Principality and city of the Council.

The evolution of perception

According to Cesare de Seta (1982), travel literature should be read as an expression of the cultural history and mentality of the authors' original societies rather than as a proper source for the study of the local environment. Although the elements described in the literary passages are often the same, the collected sources reflect a wide diversity in the writers' perceptions of the local socio-cultural phenomena and landscape features: descriptions as interpretations tend to change over time and according to the author's origin. The most paradigmatic example is the feeling evoked by the mountain ranges surrounding the Adige valley, which are an essential feature of the local landscape. Indeed, as highlighted by historians (Bainbridge 2020), the perception of those mountains

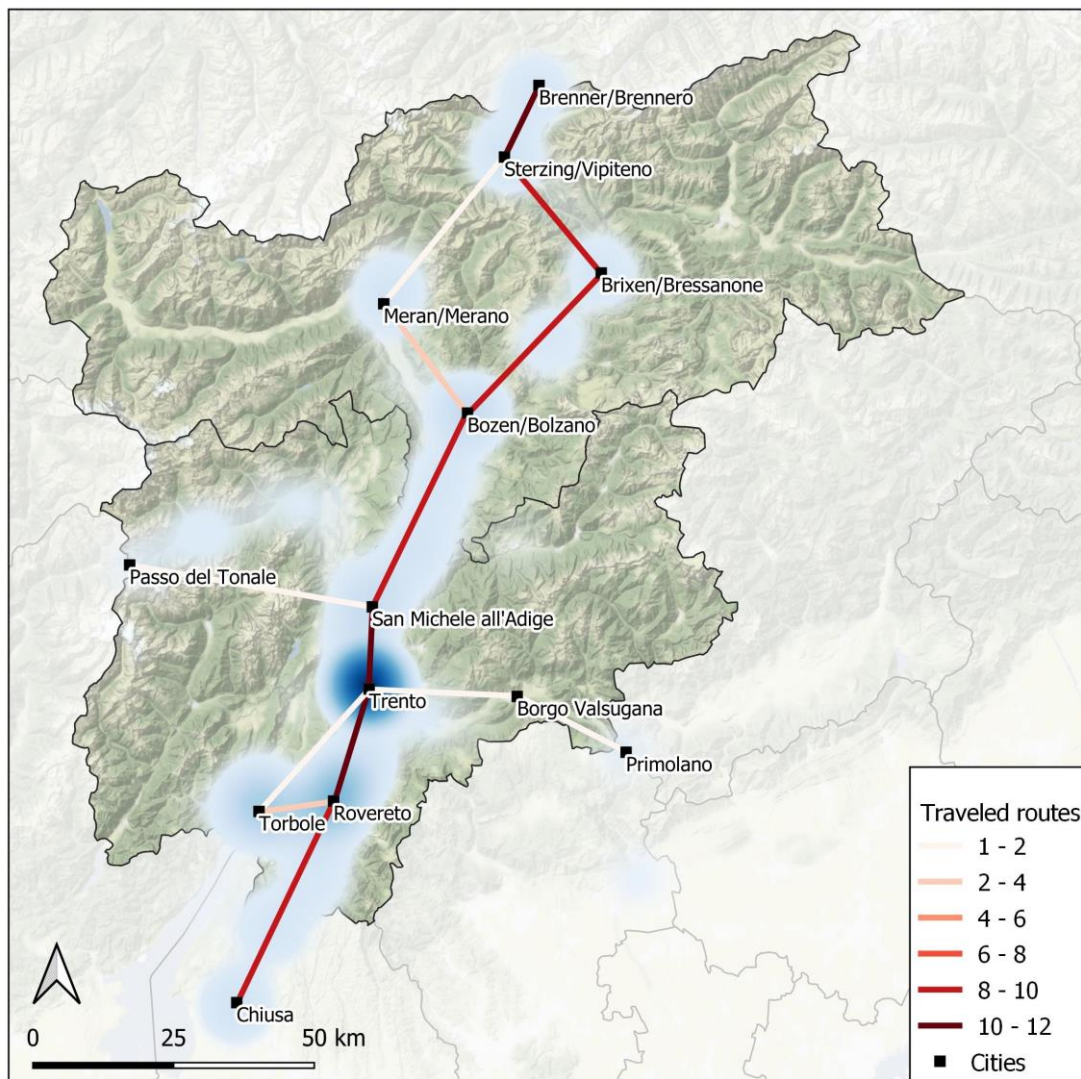


Figure 4. Map of the travellers' main routes in Trentino-Alto Adige. The different colours correspond to the number of collected travellers' writings describing the specific path. The heatmap shows the clusters of collected, digitised and georeferenced writings citations (XVI-XIX c.).

underwent an evolution during Romanticism. While for a long time they had been described as 'wicked' (Montesquieu 1894: 131, who travels in 1718), 'huge and tremendous' (Beumont 1792: 25) or even 'boring' (Cambry 1801: 252, travel in 1788), with the spread of romantic aesthetics travellers begin to feel 'the horror which constitutes beauty in a rocky country' (Piozzi 1789, n.p.). By the mid-nineteenth century, all writers describe 'those scenes of rock, wood, and water, that make the mountain land wondrous' (White 1856: 165). This change of adjectives in early-nineteenth century writings confirms the hypothesis of an evolution in the perception of mountainous landscapes explored in other case studies such as the Lake District (Donaldson, Gregory, Taylor and 2017).

Differences in the perception of the landscape do not depend only on the passing of time but can also be found in the conflicting narratives of contemporary travellers, as in the case of two accounts about the city of Rovereto. Rapidly growing thanks to silk manufacture (Gabellieri 2019b), in the nineteenth century this industrial town sparked opposite responses in two of the travel writers above mentioned: the French Mercey and the Scottish Inglis. The former claims that ‘the whole of Rovereto’s offered nothing remarkable’ and complains about the excessive noise emanating from the factories (Mercey 1833: 257), whereas the latter states: ‘the more I looked at Rovereto, the more I was pleased with it: even its bustle was pleasing; it was the bustle of business and prosperity’ (Inglis 1837: 316).

The gap resulting from material and cultural boundaries between territories (Papotti 2003) is a recurring theme in the reports of travellers who looked forward to approaching Italy. In their writings, the figurative location of the cultural border between German-speaking areas and Italy varied considerably from one author to the other, not necessarily reflecting the historical reality. Usually, the cultural and ethnic boundary between areas was made to correspond with the linguistic one. While Misson (1702: 148) identifies Trento as the watershed between the two cultures, according to Montesquieu (1894: 131, travel in 1728) and Goethe (1816, travel in 1786, cited in Zaniboni 1907: 27), surprisingly enough, the change of language occurs in Rovereto, which they considered to be the first Italian city. Half a century later, Heinrich Heine (1830) and Mercey signal ‘the transition from a German nuance to the Italian accent’ (Mercey 1833: 200) in Bolzano. For David Inglis (1837: 308) and Ebel and Audin (1846: 569), a few years later, the Italian language replaces the German one in Salorno (Figure 5).

Natural and human risk

Analysing a series of reports by nineteenth century English travellers on the crossing of the Magra river in Liguria, Ross Balzaretto (2019) has shown that risk is a recurring *topos* in travel literature and its description has always had a significant impact on the writers’ perception of environmental problems. Even in Trentino, reports and guidebooks largely focus on the hazards that may befall travellers along the way, with the twofold aim of adding picturesque details to the stories and advising caution to future wayfarers (Figure 6).

A constant of all descriptions of Trento is the reference to ‘the fast and destructive waters of Adige’ (Ebel and Audin 1846: 569) and Fersina, two watercourses that were eventually dammed and regulated in the mid-nineteenth century (Dai Prà 2013). Floods not only represented a great danger for locals, since ‘the river often overflows, and the raging torrents of Levis and Fersina tumble sometimes from the mountains with such a terrible impetuosity that they drive large rocks before them, rolling them down to the city’ (Misson 1702: 148); they were also a hindrance for visitors. Musset tells of a time when he remained stuck in Trento for over a week due to a flood that was blocking the road. When he finally left the town, moving south, ‘an actual lake appeared before our eyes. To the

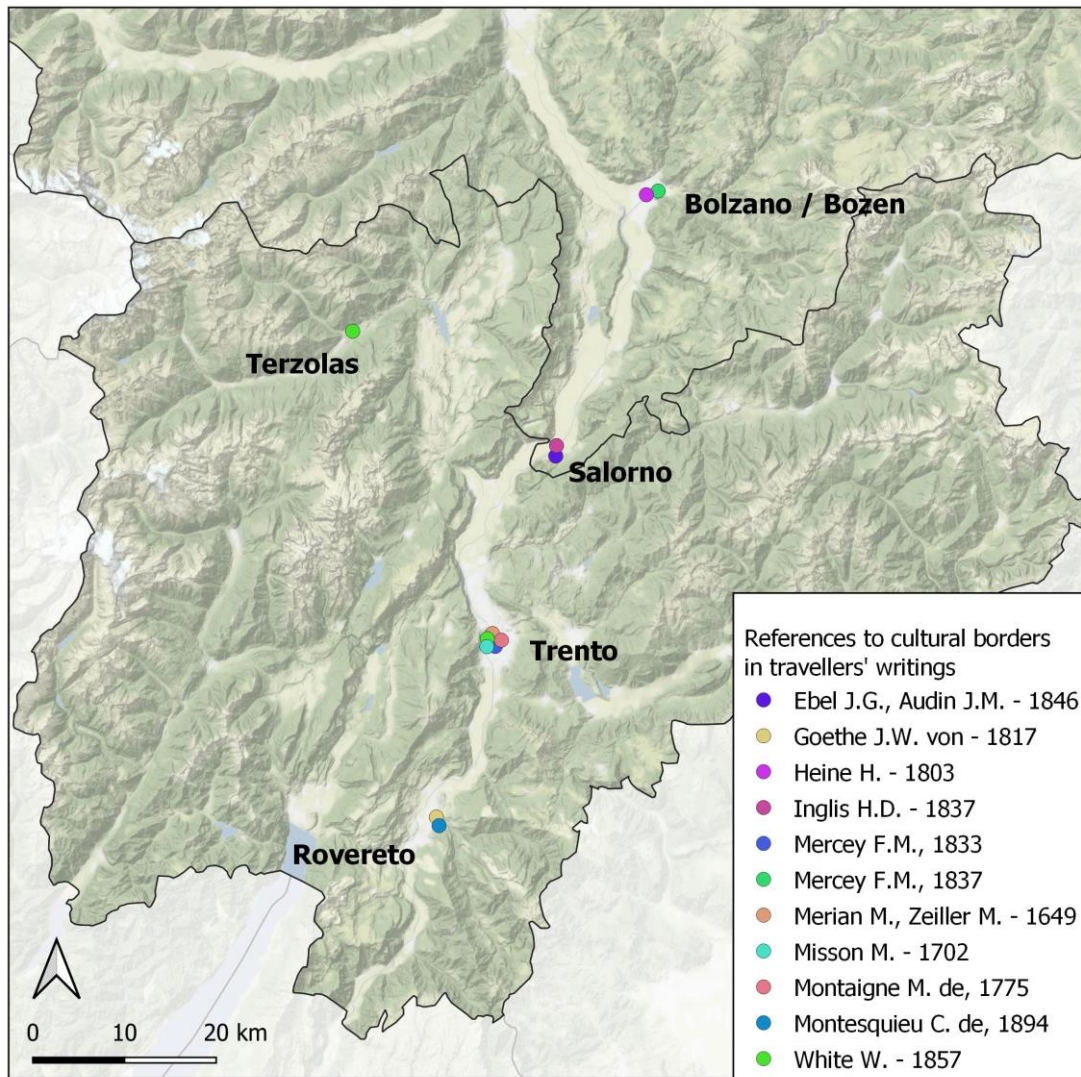


Figure 5. Map of collected, digitised and georeferenced travellers' citations related to cultural borders in Trentino-Alto Adige (XVI-XIX c.).

right and to the left of where the path once was, you could see trees and the tips of a few vines emerging from water. The coachman whipped his horses and resolutely drove the carriage into the lake' (Musset 1855: 465-66). Wanting to escape this regular threat, local communities resorted to the construction of 'banks, to shelter themselves from approaching destruction' (Beaumont 1792: 31); such efforts were mostly judged 'a weak barrier to the ravages of the elements' (Cambry 1801: 251, travel in 1788).

At least until the eighteenth century, besides floods, trips were also jeopardised by landslides over the roads (Misson 1702: 146). Yet another threat, less frequently mentioned than the hydrogeological risks, was malarial fever, cases of which were still reported in the 1850s (White 1856: 180) as the result of the numerous wetlands produced by periodic floods 'that formed large swamps extending along the two banks of the river over a very vast area' (Mercey 1835: 91).

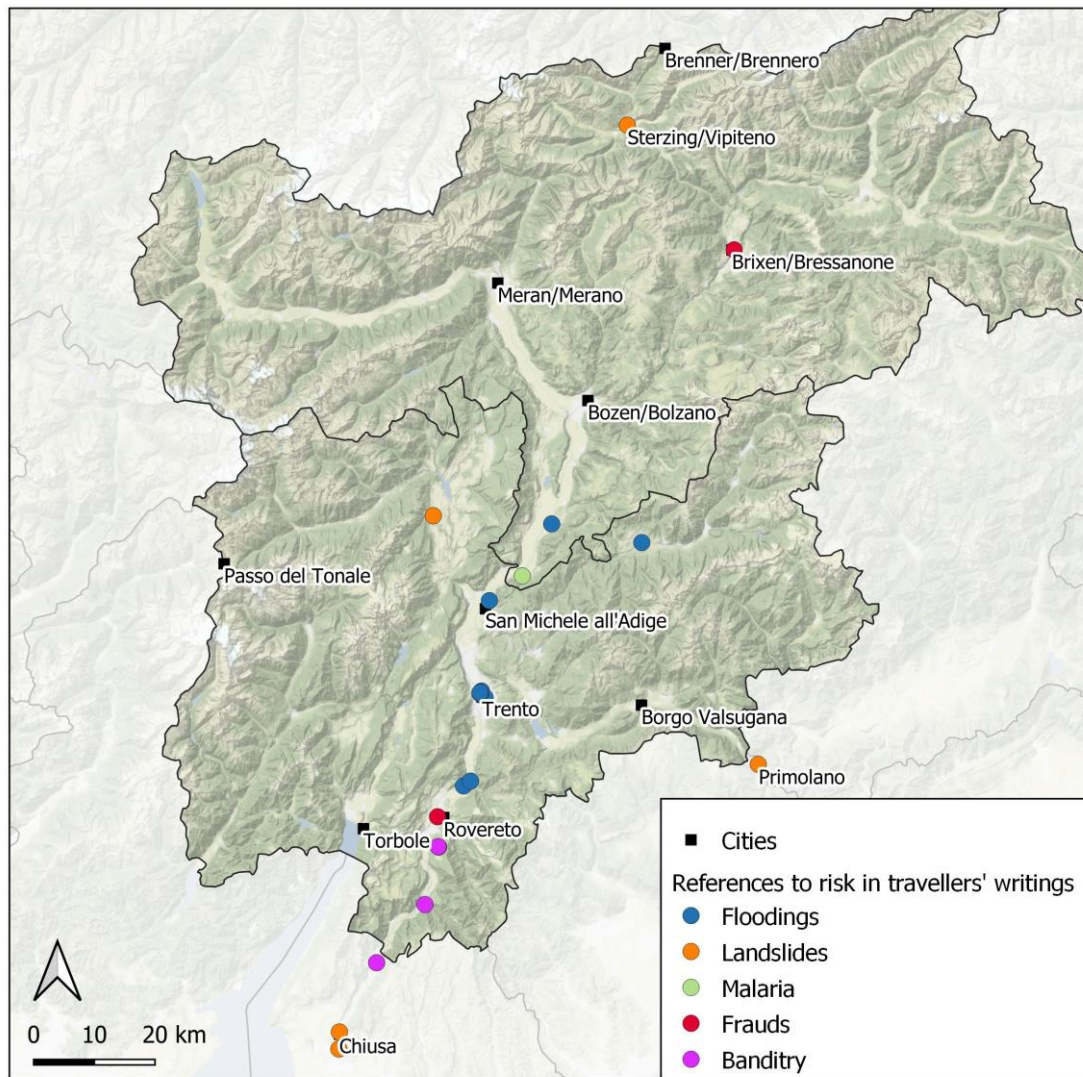


Figure 6. Map of collected, digitised and georeferenced travellers' writing citations related to environmental and human risks in Trentino-Alto Adige (XVI-XIX c.).

Alongside the natural dangers that travellers might face along the way, authors have described other threats of human origin. One is the presence of bandits, which are mentioned throughout the entirety of the seventeenth and eighteenth centuries, especially in the areas of Passo della Chiusa and Slavini di Marco (Misson 1702: 153; Beaumont 1789: 31). Another concerns hoteliers and guides, who were frequently said to be the more dishonest the further one moved south (Inglis 1837: 310; Musset 1855: 463-64). Although some of these claims of fraudulence surely depend on the long-held stereotypes that portrayed Italians as tricksters, it is not difficult to imagine that, because of the increasing flow of travellers in the region, hotel and transport infrastructures were not the only growing networks: in a context of widespread poverty such as that in Trentino, the people who became accustomed to deal with wealthy travellers did not always do so with the best intentions. Nevertheless, acts of hostility towards foreigners are rarely reported, except for

the case of Jacques Cambry, who denounces a widespread anti-French attitude (Cambry 1801: 253, travel in 1788). Such details are all the more interesting since reconstructing travellers' daily activities from other sources is quite difficult, especially in relation to human risks (Grendi 1999; Bertrand 2004). With regard to environmental risk, the texts highlight the high hydrogeological instability that has characterised and still characterises the area, as well as confirming the seasonality of calamitous events demonstrated by other sources (Dai Prà 2013; Balzaretto 2019).

The rural landscape

While in the rest of Italy urban environments were the centre of literary attention, in Trentino it was the rural areas which aroused greater interest. That was due mainly to the travellers' constant search for clues that they were close to the peninsula, indications which they could find by observing the agricultural landscape and the changing types of crops (Figure 7).

The most praised were the rich crops cultivated on the valley floor:

'From Venice to Trentino and as far as Trento, the whole country is full of mulberry trees, even up in the mountains of Trentino, which are rocky. Mulberries grow wonderfully in the hills and valleys, and the entire land is extremely fertile. You can see, in the same field, sweetcorn and other crops, the vineyards on top of cherry trees, elms, ash trees, walnut trees, and mulberry trees everywhere'. (Montesquieu 1894: 131)

This description from the early eighteenth century is substantiated by other evidence of mulberry and olive tree cultivation: 'the country is well cultivated, and covered with a variety of fruit and olive-trees, which serves to support the vines, in greater abundance here [...] the mulberry tree in particular is remarkable for its size' (Beaumont 1792: 30).

In the authors' vivid depiction of the landscape, readers can commonly find some recurring images, including the cultivation of the vineyards 'married' to trees and, more generally, descriptions of the intensively cultivated valley floor (Heine 1830: 42-43; Starke 1830: 185-86, travel in 1818). Such descriptions offer a very interesting representation of the complex, highly productive agricultural system of the region as it has been identified in the history of the local rural landscape (Dai Prà 2013; Gabellieri 2019b). Even Goethe pays tribute to the beauty of the 'regular thicket of vineyards, maize, mulberry-trees, apples, pears, quinces, and walnuts' (Goethe 1816, travel in 1786, cited in Zaniboni 1907: 14). The German poet also cites another landscape feature, now disappeared: 'For about a league the journey lies between low walls above which the grape-espaliers are visible. Other walls, which are not high enough, have been eked out with stones, thorns, etc., to prevent passengers from plucking off the grapes.' (Goethe 1816, travel in 1786, cited in Zaniboni, 1907: 22). Located between Trento and Rovereto (Figure 7A), these dry stone walls were built to safeguard the valuable crops, not from theft, but from the damage caused by wild

grazing animals; they could be found throughout the valley floor, from Trento to Rovereto (Ebel and Audin 1846: 570):

Small dry stonewalls border [the road] on both sides. In this country, surrounding every estate and branching out from the cities like rays of light radiating from a fireplace, these walls stretch in the countryside as far as the eye can see, thus driving the wayfarer into despair, for he is obliged to follow, under a scorching sun, the innumerable detours of the labyrinths that they form. (Mercey 1835: 88)

In contrast to the greenery of the valley floor, the mountains are ‘horribly naked and covered with snow for seven months of the year [...] burnt and yellowed by the sun, and from a certain distance they look most barren and bleak’ (Mercey 1833: 253). In general, the agro-forestry-pastoral system of the high reliefs is absent in the writers’ descriptions, for two main reasons: on the one hand, to emphasise specific local features as opposed to the more mountainous region of North Tyrol; on the other, simply because travellers hardly ever strayed away from the valley roads. In contrast, many interesting references to various valuable fruit trees can be found in the reports, which allow a mapping of the distribution of some crops. Mulberries and vines are widespread in the southern part of the region (Figures 7B and 7A), as confirmed by numerous historical sources. More surprising is the identification of olive trees, welcomed by travellers as the first sign that they were approaching Italian territory: nowadays, as far as northern Italy is concerned, such trees are cultivated only in the vicinity of Lake Garda. However, the presence of olive groves is recorded near Bolzano and, even more unusually, in the Isarco valley (Cambry 1801: 253, travel in 1788), where such cultivations are not likely to grow at all (which raises the question of whether Cambry’s descriptions are reliable).

Conclusions and future perspectives

Although the application of geospatial technologies to work in the humanities is still at an early stage, implementing GIS applications can increase the understanding of the relationship between space, landscape and literature (Murrieta-Flores, Donaldson and Gregory 2017; Donaldson et al. 2017; Taylor et al. 2018), as ‘digital space provides an open-ended environment for both the marriage of texts and maps and the presentation of a range of textual sources’ (Cooper and Gregory 2011: 105).

In the study presented here, GIS software has been used to efficiently organise the excerpts selected from travel literature and to facilitate their comparison with other documents relating to the sites represented. Thanks to the software, it was possible to associate every literary passage with the geolocation to which it refers, by integrating each point vector layer with a table of records that includes *inter* and *intra* textual information, such as the author, the date of travel and publication, the transcription of the excerpt as well as the toponyms and geographical indications contained therein. The result is a

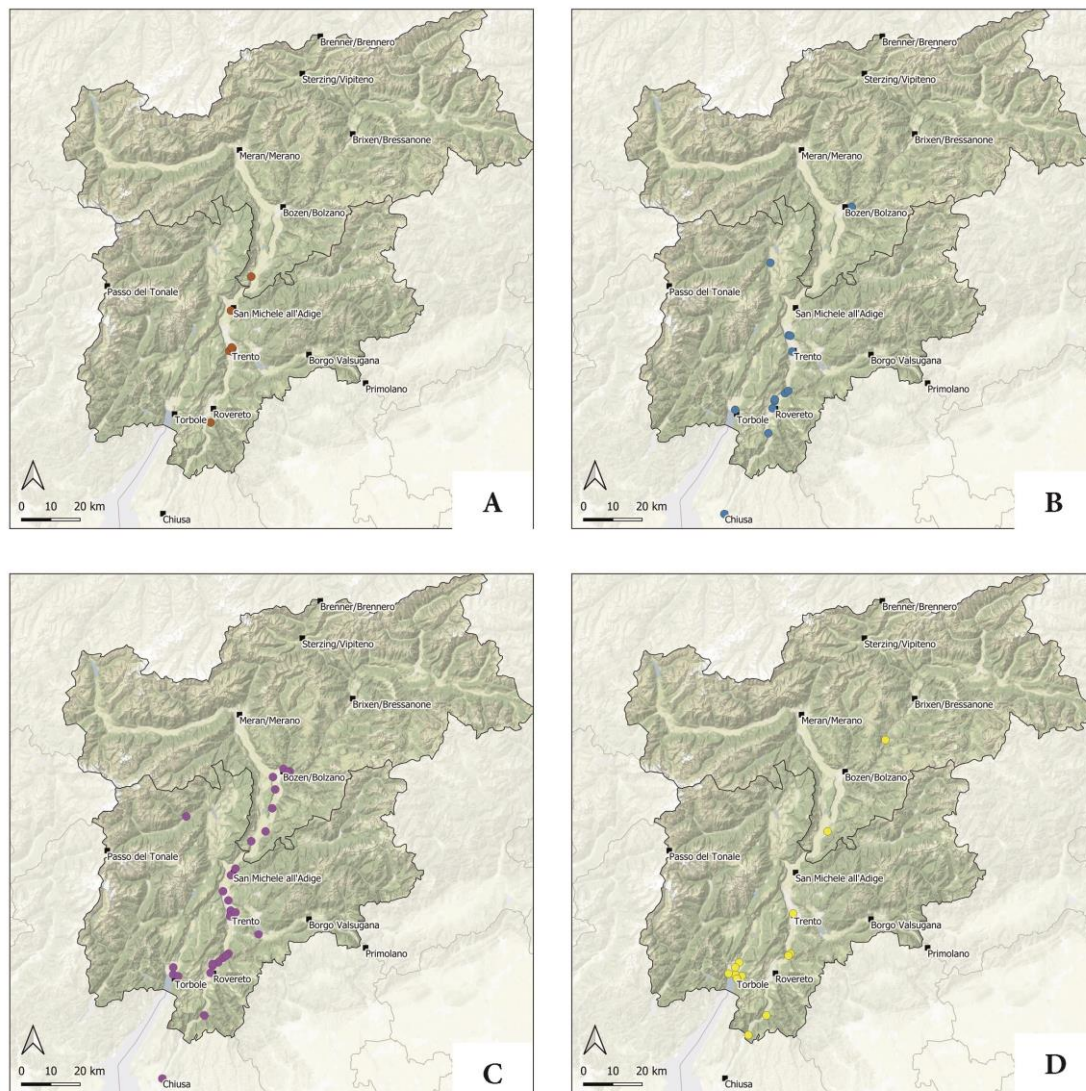


Figure 7. Maps of collected, digitised and georeferenced travel writing citations related to agricultural landscape features in Trentino-Alto Adige (XVI-XIX c.): A: stone walls; B: mulberry trees; C: vineyards; D: olive trees.

searchable dataset in the form of a territorial information system that displays travel itineraries and enables users to consult the travellers' descriptions of the different sites.

Although the use of point elements in the digitization and mapping process has recently been criticized (Murrieta-Flores, Donaldson and Gregory 2017), even taking into account a certain degree of unavoidable imprecision, we have chosen to use this format because it allows the topographical location of the description while facilitating the comparison between different texts that refer to the same area; besides, it provides an easy and intuitive connection with the corresponding inventory sheet.

Geographic information systems are an effective tool for inventorying digital bibliographic archives, as they allow researchers to use localisation and a cartographic interface to identify all sources associated with a specific part of the geographical space.

Such systems present many advantages. Firstly, passages from two texts describing the same site are immediately identifiable, which can improve comparative reading. Secondly, cross-analysis can be extended to other types of resources, such as cartographic-historical, documentary, and field sources. Lastly, mapping the references enables users also to visualise and appreciate on a smaller scale the itineraries of the travellers.

Among the many projects that have paved the way for this type of geo-localised indexing of documents, the Perseus Project stands out as the one which allowed the digitisation and geo-referencing on toponymic basis of nineteenth-century documents from the London archive Edwin C. Bolles (Gregory, Kemp and Mostern 2003). More recent projects have focussed on creating digital literary atlases, such as the English Lake District mapping and the Literary Atlas of Europe, produced by the ETH centre in Zurich. These projects have shown how GIS and spatial analyses can help researchers investigate the relationship between text and space, while promoting their use to a larger audience (Cooper and Gregory 2011; Gregory et al. 2015).

Our database therefore represents only a starting point. On the basis of these basic maps and using density smoothing techniques and ‘mood maps’, in the wake of what was produced in the pioneering study on the English Lake District (Cooper, Gregory 2011), it will be possible to create even more analytical cartographic representations. Furthermore, if the study was to be extended to a wider range of travellers with different backgrounds and knowledge, the wealth of indications of geo-historical interest and the comparative range would most certainly increase.

Structured as a geolocated database and potentially shareable via webGIS and GIScloud platforms (Grava 2016), this documentary *corpus* could represent a powerful tool not only for the inventorying of literary sources, but also for those who are interested in sharing data and results with scholars of various other disciplines and especially with the general public. In fact, we must not forget that literature can act as driving force in the teaching of geography, for the enhancement of the local heritage, and for the development of tourism (Persi and Dai Prà 2001; Cooper and Gregory 2011). The ultimate long-term objective is the construction and online publication of a digital literary atlas of the Grand Tour in the Trentino-Alto Adige region, in the form of an open access webGIS, with the hope that it may become instrumental in bringing to light the cultural heritage of odeporic literature produced in over four centuries of travelling across the peninsula.

Paragraphs credits

The article has been developed with common research and in collaboration with both authors. However, Elena Dai Prà is the main author of paragraphs 2.1, 2.2, 3.1 and 4, Nicola Gabellieri of paragraphs 1, 2.3, 3.2, 3.3, 3.4, 3.5 and of figures 2, 3, 4, 5, 6 and 7.

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Works Cited

- Alves, D. and Queiroz, A.I. (2013) 'Studying Urban Space and Literary Representations Using GIS: Lisbon, Portugal, 1852–2009.' *Social Science History*, 37(4), pp. 457-481.
- Alves, D. and Queiroz, A.I. (2015) 'Exploring literary landscapes: From texts to spatiotemporal analysis through collaborative work and GIS.' *International Journal of Humanities and Arts Computing*, 9(1), pp. 57-73.
- Andreotti, G. (1994) 'La geografia culturale e il tema del paesaggio.' In Zerbi, M.C. (ed) *Il paesaggio tra ricerca e progetto*. Turin: Giappichelli, pp. 63-85.
- Bainbridge, S. (2020) *Mountaineering and British Romanticism: The Literary Cultures of Climbing, 1770-1836*. New York: Oxford University Press.
- Balzaretti, R. (2011) 'Victorian Travellers, Apennine Landscapes and the Development of Cultural Heritage in Eastern Liguria, c.1875-1914.' *History*, 96, pp. 436-458.
- Balzaretti, R. (2019) 'Crossing the River Magra in the 'Land of Broken Bridges': Risk in Early Nineteenth-Century Travel Narratives.' *Journal of Risk Research*, 22(9), pp. 1101-1115.
- Beaumont, A. (1792) *Travels through the Rhaetian alps in the year XDCCLXXXVI from Italy to Germany, through Tyrol*. London: Clarke.
- Bertrand, G. (2004) 'Le voyage en Italie au XVIIIe siècle: problématiques et perspectives.' *Bulletin de l'AHMUF*, 27, pp. 27-45.
- Black, J. (2003) *Italy and the Grand Tour*. New Haven and London: Yale University Press.
- Brilli, A. (1988) *Il 'Petit Tour': itinerari minori del viaggio in Italia*. Milan: Silvana editoriale.
- Brilli, A. (2006) *Il viaggio in Italia. Storia di una grande tradizione culturale*. Bologna: Il Mulino.
- Brousseau, M. (2017) 'In, Of, Out, With, and Through: New Perspectives in Literary Geography.' In Tally, R.T. (ed) *The Routledge Handbook of Literature and Space*. Abingdon and New York: Routledge, pp. 9-27.
- Brothers, B. and Gergits J. (1966) *British Travel Writers, 1837-1875, Dictionary of Literary Biography*. Detroit and London: Gale Research.
- Butler, A. (1803) *Travels through France & Italy, and part of Austrian, French, & Dutch Netherlands, during the years 1745 and 1746*. Edimburg: Keating, Brown, and Keating.
- Cambry, J. (1801) *Voyage pittoresque en Suisse et en Italie*. vol. II. Paris: Chez H. J. Jansen.
- Chard, C. (1999) *Pleasure and Guilt on the Grand Tour. Travel writing and imaginative geography 1600–1830*. Manchester: Manchester University Press.
- Chevalier, M. (2001) *Géographie et Littérature*. Paris: Société de Géographie.

- Cooper, D. and Gregory, I. (2011) 'Mapping the English Lake District: a literary GIS', *Transactions of the Institute of British Geographers*, 36, pp. 89-109.
- Cooper, D., Donaldson, C. and Murrieta-Flores, P. (eds) (2016). *Literary Mapping in the Digital Age*. Abingdon and New York: Routledge.
- Dai Prà, E. (ed) (2013) *APSAT 9. Cartografia storica e paesaggi in Trentino*. Mantova: SAP.
- Dai Prà, E. (2019) 'Il Viaggio in Italia di Goethe: ontologia del paesaggio nel solco della tradizione speculativa geografica (e non solo) tedesca?' In Salvadori, F. (ed) *L'apporto della Geografia tra rivoluzioni e riforme*. Rome: A.Ge.I., pp. 617-620.
- De Seta, C. (1982) 'Presentazione.' In De Seta, C. (ed) *Storia d'Italia*. Vol. 5. *Il paesaggio*. Turin: Einaudi, pp. XXIII-XXXIII.
- Donaldson, C., Gregory, I.N. and Taylor, J.E. (2017) 'Locating the beautiful, picturesque, sublime and majestic: spatially analysing the application of aesthetic terminology in descriptions of the English Lake District.' *Journal of Historical Geography*, 56, pp. 43-60.
- Ebel, J.G. and Audin, J.M.V. (1846) *Manuel du Voyageur en Suisse et en Tyrol*. Paris: Maison.
- Frémont, A., (2005) *Aimez-vous la géographie*. Paris: Flammarion.
- Gabellieri, N. (2019a) *Geografia letteraria dei paesaggi marginali: la Toscana rurale in Carlo Cassola*. Sesto Fiorentino: All'Insegna del Giglio.
- Gabellieri, N. (2019b) 'Il paesaggio scomparso della gelsicoltura in Vallagarina: un approccio geografico-storico a fonti integrate.' *Geostorie*, XXVII(1), pp. 57-78.
- Gavinelli, D. (2007) 'Geografia e Letteratura.' In Casari, M. and Gavinelli, D. (eds) *La letteratura contemporanea nella didattica della geografia e della storia*. Milano: Cuem, pp. 5-14.
- Gephardt, K. (2016) *The Idea of Europe in British Travel Narratives, 1789-1914*. London and New York: Routledge.
- Goethe, J.W. von (1816) *Italienische Reise*. Stuttgart und Tübingen.
- Grava, M. (2016) 'Imágenes estupidas versus imágenes inteligentes. Empleo de WebGIS y Cloud service para la publicación de geo-datos.' *Revista Uruguaya de Historia Económica*, VI(9), pp. 73-80.
- Gregory, D., Johnston, R., Pratt, G., Watts M. and Whatmore, S. (2009) *The Dictionary of Human Geography*. Chichester: Wiley-Blackwell.
- Gregory, I., Kemp, K. and Mostern, R. (2003) 'Geographical Information and Historical Research: Current Progress and Future Directions.' *Humanities and Computing*, 13, pp. 7-22.
- Gregory, I., Donaldson, C., Murrieta-Flores, P. and Rayson, P. (2015) 'Geoparsing, GIS, and textual analysis: current developments in spatial humanities research.' *International journal of Humanities and Arts Computing*, 9(1), pp. 1-14.
- Grendi, E. (1999) 'Dal Grand Tour a la passione mediterranea.' *Quaderni storici*, 100(1), pp. 121-133.
- Harris, T., Corrigan, J. and Bodenhamer, D. (2010) 'Challenges for the Spatial Humanities: Toward a Research Agenda.' In Bodenhamer, D., Corrigan, J. and Harris, T. (eds) *The Spatial Humanities: GIS and the Future of Humanities Scholarship*. Bloomington: Indiana University Press, pp. 167-176.
- Heine, H. (1830) *Reisebilder. Tableaux de voyage*. Hamburg: Hoffmann und Campe.

- Hones, S. (2010), 'Teaching and Learning Guide For: Text as It Happens.' *Geography Compass*, 4(1), pp. 61-66.
- Ingamells, J. (1997) *A dictionary of British and Irish travelers in Italy 1701-1800*. New Haven and London: Yale University Press.
- Inglis, H.D. (1837) *The Tyrol; with a glance at Bavaria*. III ed., London: Whittaker.
- Lassels, R. (1670) *Voyage of Italy, or a Compleat Journey through Italy*. Paris.
- Lévy, B. (2006) 'Géographie et littérature: une synthèse historique.' *Le Globe*, 146, pp. 25-52.
- Marengo, M. (2016) *Geografia e letteratura. Piccolo manuale d'uso*. Bologna: Patron.
- Mercey, F.M. (1833) *Le Tyrol et le Nord de l'Italie*, vol. II. Paris: Bohaire.
- Mercey, F.M. (1835) *Tyrol. Trente*. Paris: Chez Desenne.
- Misson, M. (1702) *Nouveau voyage d'Italie, avec un mémoire contenant des avis utiles à ceux qui voudront faire le mesme voyage*, La Haye: H. van Bulderen.
- Montaigne, M. de (1775) *Journal du voyage de Michel de Montaigne en Italie, par la Suisse et l'Allemagne en 1580 & 1581*. Paris: Chez Le Jay.
- Montesquieu, C. (1894) *Voyages de Montesquieu*. Bordeaux : Gounuillhou.
- Moretti, F. (1998) *Atlas of the European Novel 1800 – 1900*. London: Verso.
- Musset, P.M. de (1855) *Voyage pittoresque en Italie, Partie Settentrionale*. Paris: Belin-Leprieur et Morizot.
- Murrieta-Flores, P., Donaldson C. and Gregory I. (2017) 'GIS and Literary History: Advancing Digital Humanities research through the Spatial Analysis of historical travel writing and topographical literature.' *Digital Humanities Quarterly*, 11(1), [Online] [Accessed 03 June 2013] <http://www.digitalhumanities.org/dhq/vol/11/1/000283/000283.html>.
- Osti, G. (2017) *Attraverso la regione Trentino-Tirolese nel Seicento*. Rovereto: Osiride.
- Papotti, D. (2003) 'Attività odepórica ed impulso scrittórico: la prospettiva geografica sulla relazione di viaggio.' *Annali d'Italianistica*, 21, pp. 393-407.
- Percy, G.A (1983) *Travel Literature and the Evolution of the Novel*. Lexington: The University Press of Kentucky.
- Persi, P. and Dai Prà, E. (2001) "L'aiuola che ci fa..." *Una geografia per i parchi letterari*. Urbino: Urbino University Press.
- Piana, P., Balzaretti, R., Moreno D. and Watkins, C. (2012) 'Topographical Art and Landscape History: Elizabeth Fanshawe in Early Nineteenth-Century Liguria.' *Landscape History*, 33, pp. 65-81.
- Piana, P., Watkins, C. and Balzaretti, R. (2018) 'Travel, Modernity and Rural Landscapes in Nineteenth-Century Liguria.' *Rural History*, 29(2), pp. 167-193.
- Piozzi, H.L. (1789) *Observations and Reflections Made in the Course of a Journey through France, Italy, and Germany*. vol. II. Dublin: Chamberlaine.
- Ronchini, M. (2014) 'Il paesaggio rurale dei viaggiatori in Trentino.' In De Bertolini A. (ed) *Terre coltivate. Storia dei paesaggi agrari del Trentino*. Trento: Fondazione Museo Storico del Trentino, pp. 84-98.

- Scaramellini, G. (1985) 'Raffigurazione dello spazio e conoscenza geografica: i resoconti di viaggio.' In Bianchi E. (ed) *Geografie private. I resoconti di viaggio come letture del territorio*, Milan: Unicopli, pp. 27-123.
- Scaramellini, G. (2008) *Paesaggi di carta, paesaggi di parola. Luoghi e ambienti geografici nei resoconti di viaggio (secoli XVIII-XIX)*. Turin: Giappichelli.
- Sévillia, J. (1991) *Le Chouan du Tyrol : Andreas Hofer contre Napoléon*. Paris: Perrin.
- Speake, J. (ed) (2003) *Literature of travel and exploration. An encyclopedia*. Abingdon and New York: Routledge.
- Starke, M. (1830) *Guide classique du voyageur en Italie*. Paris: Chez Audin.
- Taylor, J., Donaldson, C., Gregory, I. and Butler J.O. (2018) 'Mapping Digitally, Mapping Deep: Exploring Digital Literary Geographies.' *Literary Geographies*, 4(1), pp. 10-19.
- Thompson, C. (2012) *Travel Writing*. Abingdon and New York: Routledge.
- Tinguely, F. (2006) 'Forme et signification dans la littérature de voyage.' *Le Globe*, 146, pp. 53-64.
- Travis, C (2015) *Abstract machine: humanities GIS*. Redlands: Esri Press.
- Vuillemin, A. (1864) *Atlas illustre de geographie commerciale et industrielle*. Paris: Francois Delarue, Bulla Freres.
- White, H. (1987) *The Content of the Form: Narrative Discourse and Historical Representation*. Baltimora: John Hopkins University Press.
- White, W. (1856) *On foot through Tyrol, in the summer of 1855*. London: Chapman and Hall.
- Zaniboni, E. (1907) *L'Italia alla fine del Secolo XVIII nel "Viaggio" e nelle altre opere di J.W. Goethe, Il Trentino*. Napoli: Ricciardi.