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A Literary GIS of Trentino:
Opportunities for Territorial Enhancement from Geographic Research and Literature

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ABSTRACT

This contribution deals with a project that is currently being developed, which aims at creating a Literary GIS that will collect excerpts from literary works describing travelling experiences in the territory of the Province of Trento. The application of Geographic Information Systems (GIS) technologies to literary and geo-historical research has established itself as one of the most dynamic fields of development of Digital Humanities. However, in Italy, the use of GIS is still limited. The cataloguing, transcription and mapping of extracts from texts written by travellers who have crossed the Adige Valley and described it between the 17th and the 20th century will enable the development of a specific database and the integration of geolocation data using GIS software. The selected passages, ranging from travel reports to the first *ante litteram* tourist guides, can offer a series of clues on the social, environmental, landscape-related and territorial context of the past centuries; they also allow us to reflect on the perception and subsequent narration of the visited areas by foreign travellers. At the same time, the database can become the foundation of several activities of public dissemination, both in the field of education and in that of tourism enhancement. A web-GIS database could support the creation of literary and cultural itineraries, following the footsteps of famous writers and rediscovering their narration of past landscapes in Trentino.

KEY WORDS

Literary GIS; travel literature; historical geography; literary geography; cultural tourism

1. INTRODUCTION:

The use of literary sources in geography and historical geography dates to the dawn of the discipline ([19]). As early as in 1844, in his work *Cosmos: essai d'une description physique du monde*, Alexandre von Humboldt acknowledged literature as a privileged *medium* to discover the traces and the spirit of the relationship between men and space ([18]). Such field of investigation, generically defined as "literary geographies", has progressively established itself since the 1960s, especially thanks to geographic studies addressing the creation and the nature of the concept of region. Literary descriptions were seen as a crucial instrument in the representation of geographic uniqueness and of the original historical traits of given territories (the so-called *genius loci*).

In the last decades, mostly because of the opposite and converging "cultural turn" in geographical studies and "spatial turn" in literature, the field of literary geographies has grown, investigating a series of different yet intertwined objects. *Inter alia*, we recall the use of texts as geohistorical sources, which, combined with other forms of documentation, support research of past landscapes and territories; literary representations as indicators of their authors' perception of geographical objects; the construction of images and territorial stereotypes that serve as literary *topoi*; the role of landscape, territory and place in many literary plots ([1] [14] [3] [21] [13]).

In this context, travel literature, which includes travel reports, travellers' private diaries, current or *ante litteram* tourist guides, travel novels, and even some ethnographic and demological pieces, qualifies as a porous yet well-defined line of research, which deserves to be considered for its heuristic potential in the study of past geographies ([28]).

Since the 1990s, said studies have found new areas of application in the fields of "public" and "applied"

geography, in several initiatives that were aimed at spreading the knowledge of territories and landscapes and at enhancing them. Literary parks, cultural itineraries and landscape observatories have used literary narrations to increase the territorial awareness of local inhabitants, to encourage the rediscovery of areas that were only marginally affected by tourist flows, or to add value to already well-established tourist destinations ([26] [21]).

2. FROM GEOGRAPHIC INFORMATION SYSTEMS TO LITERARY GIS

Since the 1990s, Geographic Information Systems (GIS) have progressively asserted themselves as one of the most effective instruments for data management and analysis in all disciplines interested in studying spatial and territorial phenomena ([31] [9]). A GIS is a set of tools that are used to collect, store, analyse and visualise spatial data for scientific, management and information purposes ([4]). Starting from a software environment that enables the elaboration of data that are organised into Data Management Systems (DBMS) information structures, a geodatabase can be created, i.e. a database in which spatial and geographic data are stored, managed and interrogated. It can host different types of spatial data, such as vectors and rasters with alphanumeric attributes and geographic coordinates ([5]). The set of instruments, structures, human resources and procedures that enable the acquisition, analysis and consultation of data has been defined as Territorial Information System (TIS) ([22]).

TIS have been applied to all fields concerned with the study, management and control of a territory. However, since the arrival of 2.0 web forms, researchers have started to also consider their communicative potential. Indeed, they put their efforts into identifying "forms of communication increasing the dissemination of research contents and enabling an opening towards new scientific horizons" ([12]). Joe Smith has highlighted the usefulness of Digital Geography, conceived as a set of practices «that might dramatically improve the conditions for the conduct, reception and debate of our geographical work» ([29]). Geographic Information Systems can represent an effective tool to inventory digital bibliographic archives and make them accessible; researchers and the general public would be able to use location and a cartographic interface to identify all sources linked to a given portion of space.

Especially in geohistorical, historical and archaeological research, the application of the GIS software has long been destined mainly to the digitalisation and analysis of cartographic and aero-photogrammetric sources, or as a tool for managing land surveys ([65]). The focus on textual sources has been far more limited, mostly because many disciplines, such as literature and cultural geography, do not often rely on quantitative and topographically located data as are those processed by GIS. Only since the 2000s, and particularly thanks to the epistemological proposals by Moretti and to the experiments carried out in the Anglo-Saxon world, have literary studies started to consider GIS as a heuristic instrument ([23] [24]). These preliminary ideas have recently been extended to interdisciplinary pioneer projects that envisage the application of territorial information systems to literature, within a heterogeneous field that has been defined as Literary GIS ([8]). The project "Mapping the Lakes: A Literary GIS" is an example; it has led to structuring a geodatabase that collects numerous historical travel reports describing the Lake District, a mountainous region in north-western England, traditionally associated with English literature and art. Such database has allowed researchers to explore and experience the imaginary and affective geographies of English writers and readers, thanks to the digitalization and analysis of *corpora* of several pieces of work ([7] [18]). Similar experiences involves the "The digital Periegesis" project, that aims to map and analyse ancient Greek sources as the works of Pausania of Magnesia in order to identify itineraries and networks, as well as the works of Rachele Sprugnoli on computational methods and technologies applied to the treatment of historical travel texts in Italy.

Despite the rapid spread of Literary GIS and the increase of similar initiatives, this line of research is still largely unexplored in Italy.

3. THE CREATION OF A LITERARY GIS IN TRENTINO

The paper presents a project for the implementation of a literary GIS that will collect reports by travellers who have visited the Trentino region between the 17th century and the beginning of the 20th century. Such time frame has been selected because it corresponds with the spread of *ante litteram* forms of travel and tourism (mostly linked to the Grand Tour) which saw the production of both published and unpublished memoirs. These are strongly linked to the representation of society, landscape and territory. The choice of the territorial case study also responds to precise motivations: the Adige Valley has long been one of the main gateways to

the Italian Peninsula for numerous north-European travellers who wanted to visit Italy's major cities for religious or cultural purposes ([1] [2] [27]). Such flow has led to the production of a large literary *corpus*, which includes diaries, mail correspondence, reports, travel guides. These texts highlight new elements of the alpine geography of the past, while reflecting the interpreting categories, the expectations and perception of the travellers themselves ([28]).

In order to implement a few of the methodological proposals put forward in the Anglo-Saxon environment, some texts were chosen, digitalised and transcribed.

In this first stage of the project a number of 12 texts (produced between the 16th and the 19th century) has been selected. In order to develop the methodology, the research involved edited books available in the local libraries, addressing writers of different language (English, French and German) and texts produced for different purposes (travel accounts for
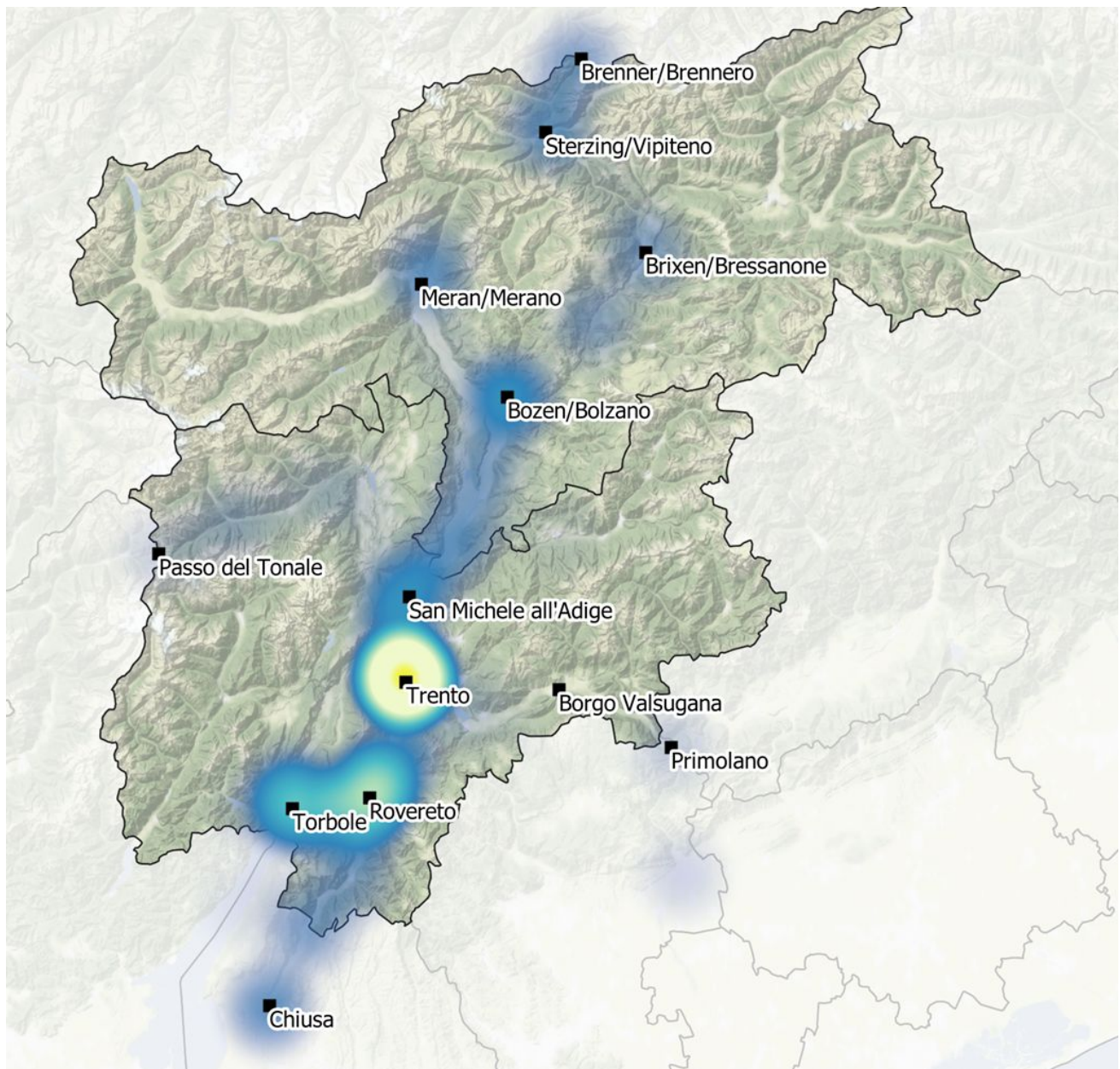

Figure 1. Density map made with the QGIS software representing the descriptions of landscapes and territories recorded in the geodatabase on travel literature in Trentino

publishing, private travel accounts that have been published later, tourist guides).

The selection of texts with descriptions of landscapes and territories that could be located led to the creation

of a digitised cataloguing system.

Useful information for the bibliographical, historical and geographic identification of said texts was included: the author's name, the title, the date of publication, the time of travel, the author's origin, the type of text (report, diary, letter, guide), a transcription of the text in its original language and – where necessary – its Italian translation, toponyms. Subsequently, each item in the dataset was geolocated in a GIS environment and linked to the centroid of the area described in the text. Geolocalization has been made manually, on the basis of mentioned place names and described areas. Such operation inevitably entails a certain degree of approximation, given the different nature of the descriptions, whose objects can be both well-defined territorial elements, like a building, and larger portions of space, like a valley.

The result is a geodatabase through which it is possible to: visualise the most described areas and the routes followed by travellers; identify different narrations of the same sites to compare them; carry out queries using given key words such as adjectives related to perception (e.g. "sublime or divine", which are reading categories that have captured a lot of attention in literary sciences) and specific material elements of territory and landscape (urban elements, cultivation practices, viability and hospitality structures).

For instance, Figure 1 represents a density map of the different punctual elements recorded in the dataset. The image clearly represents the routes narrated by travellers; these moved from the Brenner Pass to the Padan Plain (*Pianura Padana*), mostly crossing the bottom of the valleys. Many descriptions are located in Trento, or in Torbole or Riva, on Lake Garda. This testifies the success that this area had and the interest it sparked in German travellers such as Goethe.

4. FROM LITERARY GIS TO TOURISM ENHANCEMENT: POSSIBLE IMPLEMENTATIONS

Several decades after the creation of the first "Literary parks", stating that literary sources can be a crucial instrument for the enhancement of certain territories in terms of tourism seems tautological. Literary parks, just like cultural routes, have been created with the aim of encouraging the discovery of more or less well-known landscapes. This can be achieved by supporting the fruition and interpretation of such landscapes through the descriptions by famous or lesser-known authors who have written about them in the past ([26] [13]). In this respect, literary works become a narrative plot that should attract and guide visitors, while also promoting "green" and sustainable cultural tourism. However, as mere storytelling does not suffice, focusing on critical and conscious interpretations of local space, its transformation and its cultural values is fundamental ([21]).

In this context, the project aims to use travel literature of the past as a key to access and read the territory of Trentino. The works by authors who wrote about this area will become a *medium* to highlight relevant aspects of local culture and history, following two directions. On the one hand, the aim is to safeguard the works and ideas of poets and writers who are physically linked to a place; on the other hand, the work wants to promote and enhance local material and immaterial cultural heritage, thanks to the creation of cultural theme-based routes.

Accordingly, a location-based database for the production of cartography, to be accessed through webGIS ([15]), can be a powerful tool for highlighting cultural and environmental resources and improving the fruition of a given territory ([25]). By locating the descriptions of landscapes, cultural tourism routes can be established, in order to facilitate the recognition and interpretation of territorial heritage and perpetuate the value intellectuals of the past attributed to certain places. This is the case of a cultural itinerary dedicated to Goethe, who, as Dai Prà writes, "leads us […] in his journey towards the concept of landscape as an image and representation that is capable of reconciling the mind's different skills through a sort of superior contemplation and pleasure, which will make him write at the beginning of his work: 'Et in Arcadia ego' (I have been to the land of happiness and beauty, too)" ([10]).

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