

## **Towards a GIS-Analysis of Literary Cultures: The Making of Slovenian Ethnoscape through Literature**

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Literary studies, being a humanities' discipline undergoing the “spatial turn” (see Dović, Habjan & Juvan 2013), has in recent decades focused on the meaning of place in literature and, conversely, the importance of literary life and texts for the making and meaning of place. As Sarah Luria puts it: “An interest in the role of place in the life of literature, and the role of literature in the production of place is one of the exciting points of convergence between geography and the humanities ... geography can help us understand literature and literature can help us understand geography” (Luria 2011: 67). In so doing, literary studies has begun to collaborate more closely with social (human) geography and contemporary technologies of mapmaking based on geographic information systems (GIS). The project *Space of Slovenian Literary Culture* (2011 – 2014) which I have the privilege to lead is the first in Slovenia to connect literary studies and geography in a transdisciplinary research. Our project group is joining the emerging field of “geohumanities” which opens up a “zone of creative interaction between geography and the humanities” and requires “a transdisciplinary perspective and a combination of methodologies” (Dear, Ketchum, Luria & Richardson 2011: 1–3). Specifically, the project *Space of Slovenian Literary Culture* partakes in spatial sociology of media and culture (e.g., Döring & Thielmann 2009) and “geohistory”; the latter “relies heavily on geographic information systems (HGIS) to combine space and time for a collaborative research and scholarship” (Richardson 2011: 209). In this light, our project revisits the good old “literary geography,” which has been in use since the early twentieth century. Using the GIS, we study the development of mutual influences between the geospace populated by ethnic Slovenians and literature in Slovenian language from the end of the eighteenth to the middle of the twentieth century. How have the physical,

anthropogenic, and social features of space (relief and natural borders, regional typologies, traffic routes, population density, patterns of settlement, economic and cultural development, and linguistic map with dialects) historically molded the structures of literary life? How has literature textually represented, invested with meaning, and valued the space in which it exists? How has literary culture worked upon social understanding of space and shaped it through its cultural practices, media, and institutions? How have different group identities, especially national, referenced spaces in literature? How have spatial givens shaped the socialization of literary culture's actors? Moreover, how have these people in the course of their lives, and their social networks linked different places, including those lying beyond the Slovenian ethnic borders?

Until the end of WW I, the predominantly mountainous and multiethnic territory populated by Slovenian-speaking people comprised the historical lands Carniola, Carinthia, Lower Styria, Pannonia (Prekmurje), northern Istria with Trieste, and the county of Gorizia. Linking the Mediterranean to the Central and South-Eastern Europe, they belonged to Austrian, Hungarian, and Venetian rulers for centuries (see, e. g., Juvan 2004). The Slovenian lands, situated at the intersection of Slavic, Germanic, Ugro-Finnic, and Romance populations, lacked larger centers and well-developed institutions that would focus on the history, language, sciences, and arts of their territory. Due to the density of geophysical borders (Alpine mountain ranges, the abundance of streams and rivers), the territory lacked social and cultural coherence. As a result, the Slovenian language existed in over forty dialects and a couple of separate literary traditions for centuries. The upper classes spoke and wrote mainly German, Italian or Latin. From the *Freising Folia* (972–1039) to the first printed book in Slovenian (Primus Trubar's *Catechismus* of 1550) there remained only fragments of the vernacular writing. In the second half of the sixteenth century, Trubar and other Lutherans introduced Slovenian vernacular in schools. Moreover, they worked out a comprehensive repertoire of religious printings and grammatical work in Slovenian, including Jurij Dalmatin's translation of the *Bible* and Adam Bohorič's Latin-written grammar of Slovenian language, both published in 1584. However, with the counter-reformation's repression of (Lutheran) printing, the vernacular letters largely disappeared from the public. The exception was the religious genres of poetry, passion play, and rhetorical prose which flourished in the

baroque (e. g., Janez Svetokriški's volumes of exemplary sermons *Sacrum promptuarium* of 1691–1707). Educated elites were often bilingual. Until the mid-nineteenth century, when public use of Slovenian became a sign of nationalist political commitment, even scholars celebrating their homeland wrote in Latin or German (e. g., Janez V. Valvasor's polymath work *Die Ehre des Herzogthums Crain* of 1689).

Since the late eighteenth century, the emerging aesthetic literature in Slovenian intentionally attempted to set up the discursive cohesion within the literate population, which had been traditionally conscious only of its regional, provincial identities. Before their broader social diffusion that began only in the 1850s, efforts of “culture planning” (Even-Zohar 2008) were limited to narrow circles of the intelligentsia, especially the clerics. The Catholic Church was nearly the only institution that preserved supra-dialectal registers of Slovenian, but these served exclusively religious purposes. Thus it is not surprising that in the early periods of the “national awakening” (from 1760s to 1840s), it was, above all, the clergy that tried to spread ethnic self-consciousness among the population. Priests and monks endeavored to standardize the literary language with grammars and dictionaries. They were also among the first Slovenian poets, writers and translators.

In the nineteenth-century national revival, literature seemed – in addition to pedagogical, scholarly, and philological work – the most reliable strategy for shaping national consciousness. Like many other peripheral nations, Slovenians did not dispose of their state power or political institutions nor did they control the cultural and media infrastructure for practicing a fully differentiated public discourse. Literature, with its stylistic diversity, rhetorical powers, and aesthetic appeal, therefore, appeared to be a proper shortcut to cultural emancipation of the nation. The national movement gained momentum in the revolutionary year of 1848, with an explicitly political program (*Zedinjena Slovenija*, ‘United Slovenia’). It demanded, in the framework of the Habsburg monarchy, to establish an autonomous cultural and administrative entity, a delimited and cohesive social space called Slovenia. It is either by exploiting and, potentially, conquering the existing public institutions and print media of the Habsburg Empire or by forming their independent Slovenian counterparts that public discourse in standard

Slovenian could become dominant on the territory of Slovenian lands in the second half of the century.

From the perspective of current contextual methods in literary studies, the project *Space of Slovenian Literary Culture* conceives of literature as a complex system. Texts and meanings, as elements of discourse, are entangled with realities, actors, media, producers, and institutions of a special social field, called “literary culture” (Juvan 2011: 19–45; Perenič 2010). To summarize and continue the historical outline above, literary culture in the Slovenian language emerged in the second half of the eighteenth century. Aimed at offering the aesthetic enjoyment and national self-confirmation, it partly drew on the existing forms and linguistic registers of religious literature. Crucial for its post-enlightenment aesthetic and national character, however, was the adoption of the ideas, patterns, and strategies from pan-European cultural nationalism. In permanent exchange with European core literatures and semi-peripheral systems of Central European and Slavic literatures, Slovenian verbal art achieved a full-fledged genre, stylistic, institutional, and media differentiation by the turn of the twentieth century. Through the processes of nationalization and aesthetic autonomization of literature which shaped the literary landscapes of much of nineteenth-century European peripheries, multilingual and functionally heterogeneous letters in Slovenian lands under the Habsburg crown morphed into “nationally” Slovenian art form which was considered to be legitimately expressed only in standard Slovenian (see Juvan 2011: 28–32; 2012: 295–346). This ideological operation entailed material restructuring not only of the literary field *per se* but also of its overall environment. As a result, the changes *in* the space in literature and the space *of* literature became powerful factors in the formation of the Slovenian nation.

Following the incentives of the protagonists of the spatial turn, such as Michel Foucault, Henri Lefebvre, Edward Soja, Fredric Jameson, or David Harvey (more on this see Döring & Thielmann 2008; Juvan 2014a), we assume that the space of Slovenian literary culture is multi-layered and ontologically diverse. It lies in a fluid environment constantly reshaped by forces of the natural-physical given and the socio-culturally produced, and permanently cognitively (re-)assessed through mental representations. Literary texts, with its imagined worlds, are among the most important providers of spatial representations that cognitively organize and give meaning to actual spaces.

Further, space has a temporal dimension that comprises the coexistence of asynchronous processes. Geographical space doubtless influences literature. By virtue of literature's social existence, it may facilitate and engender or hinder and discourage developmental possibilities (e.g., technologically progressive transportation increases the possibility of cultural transfer). However, literature, too, has a reverse influence on space, by means of its material and socio-institutional reach as well as by textual structures and imagination. Literature is an agency that affects the social formation, production, imagination, and conceptualization of space. Without literature, there would be no theater, public libraries, reading societies, national halls, and other essentials that established a number of settlements as regional or national centers, imbuing them with representative functions, prestige, sociability, and cultured way of life. Without France Prešeren's romantic poetry, the Savica would remain simply another waterfall and would not figure as a symbol of national character. Similarly, without Srečko Kosovel's modernist poems, the Kras region would have no poetic value in the collective memory (see Škulj 2012).

At the end of the twentieth century and in the wake of the spatial turn, thematic maps sparked the interest of historians and literary scholars. Maps represent not only geospaces existing independently of them, but also their cognitive measurement, segmentation, and appropriation (see, e. g., Piatti 2008: 32–52, 65–121; Stockhammer 2007: 8, 11–58; Tally 2013: 20–26; Westphal 2011: 57–63). So it does not come as a surprise that cognitive psychology uses the metaphor of mapping to describe the different domains of thought. The expression “mapping” spread through the humanities with the assistance of postmodern theory (Jameson 1991). Speaking about “the centrality of the *map* as an analytical focus and inspiration,” Michael Dear recalls Denis Cosgrove's “comment on the ‘startling explosion’ of interest in cartography, the cartographic trope and the map within the humanities and cultural studies” (Dear 2011: 7). Maps for studying literature have for the entire twentieth century been aids for visualizing the findings of literary studies. In his efforts to follow the paradigm of natural sciences, Franco Moretti (1999, 2005) was among the first literary scholars to call anew for literary geography and to use thematic maps as an analytic tool. In his explorations of the European novel, he maps spaces depicted in literary texts (literary geography has recently developed markedly in this direction; e.g., Piatti 2008), but also spaces in which literature lives. The mapping of

data, such as the settings of British romances or historical novels, number and distribution of libraries and the profile of their collections, is not merely an illustration of literary history, but a way to visualize and analyze patterns that lead us to determine the laws of literary processes in a way of hard sciences.

The map is becoming a more potent medium thanks to the recent development of satellite navigation technology and GIS. In comparison with traditional maps, which are finished products and thus static, two-dimensional, limited to a single scale and a set of homogeneous data, GIS-mapping excels in complexity, dynamism, inclusiveness, and interactivity. GIS has the capacity of bringing together large amounts of data that pertain to heterogeneous ontologies or temporalities, but are unambiguously attached to single spatial identifiers. In the present-day Geographic Information Science (GISci), “geographic information is defined simply as any data or information that has a geographic reference” (Kemp 2010: 31). Assigning a geographic reference to data makes possible “to compare that characteristic, event, phenomenon, etc. with others that exist or have existed in the same geographic space. What were previously seemingly unrelated facts become integrated and correlated [through a spatial analysis]” (Kemp 2010: 32). Moreover, GIS presents these data in variable scales and – above all – enables their numerical analysis in the forms of tables, graphs, and so on. As the editors of *The Spatial Humanities* put it: “Not only does GIS bring impressive computing power to this task, but is capable of integrating data from different formats by virtue of their shared geography.” (Bodenhamer, Corrigan & Harris 2010: vii).

Nevertheless, similarly to historians, literary scholars are often skeptical about using technology and computing. These seem to lead astray from the very essence of the humanist thought, which is the capacity of the knowing subject to understand the object of study as the expression of the other. Instead of the text-based subject-to-subject historical hermeneutics of singularity, GIS demands a different mode of knowing. On the one hand, reminding of the humanities’ “thick descriptions” (Bodenhamer, Corrigan & Harris 2010: xi), GIS allows for a hermeneutics of singularity because it “embraces multiplicity, simultaneity, complexity, and subjectivity” in a “reflexive epistemology that integrates the multiple voices, views, and memories of our past” (Bodenhamer 2010: 28–29). On the other hand, GIS entails a spatial analysis of big data sets in terms of

quantities that establish patterns of spatiotemporal distributions. Characteristic of natural and social sciences, the latter mode of knowing is perhaps the main obstacle that prevents traditionally educated humanists from making use of GIS. Douglas Richardson argues against the prejudice that modern digital technology is reductionist *per se*, claiming that “historians are starting to understand key aspects of GIS, such as its ability to integrate, analyze, and visualize large amounts of both spatial and temporal data, from multiple disciplines and sources, and its ability to move across multiple scales, both spatially and temporally” (Richardson 2011: 209–210).

In our research, we have spatially referenced multiple historical data from the territory of today’s Republic of Slovenia and adjacent areas (i.e., nearby Italian, Austrian, Hungarian, and South Slavic urban centers; Central and Western European centers to which Slovenian writers, critics, editors, and others gravitated). Using GIS, we have analyzed biographical information about significant literary actors, facts on the development of the print media, literary societies, and cultural institutions, places represented in historical novels, and memorials that posthumously venerate writers and their work. By quantitative spatial analysis of the data obtained from encyclopedic reference works and selected with respect to the literary canon, we have attempted to research the history of interactions between geospaces and literature. Taking into account that Slovenian literary culture formed on a multicultural and multilingual territory, we considered data from 1780 to 1941: from the beginnings of artistic literature in Slovenian to the beginning of WW II. In data-mining we consulted encyclopedic works (e.g., *Slovenski biografski leksikon*, *Enciklopedija Slovenije*, *Primorski slovenski biografski leksikon*, *Wikipedia*), synthetic literary histories (e.g., Slodnjak, Pogačnik and Zadavec), reference notes in the *Zbrana dela slovenskih pesnikov in pisateljev* (Collected works of Slovenian poets and prose writers), guidebooks for literary history tours, regional compilations of information, and other reference works.

Four categories of literary-historical facts have been entered into Excel tables and equipped with geo-references:

1. *Biographical trajectories* of writers, critics, essayists, editors, literary historians, cultural patrons, publishers, and other actors of the literary field (see Table 1);

2. *Media and institutional infrastructure*: newspapers, almanacs, literary and cultural reviews, book series (see Table 2), printers and publishing houses, literary societies, reading rooms, theaters and national halls (see Table 3);
3. *Spaces represented in literature*: settings of historical novels (see Table 4);
4. *Memorials and toponyms* referring to Slovenian writers, such as statues, busts, author's houses, or street names (see Table 5).

The Excel tables for inputting data in GIS are flexible enough to absorb new information at a later date. For the purpose of the project, only select categories of facts have been systematically completed—those that are most frequently accessible in the sources mentioned above. Students of the Slovenian department of the Ljubljana University have helped to collect the data, whereas the project group verified and uniformly organized the information gathered. Categories indicated by grey rows in the tables below required location information given in geographic and Gauss-Krüger coordinates.

**[Enter Tables 1–5 here]**

In sum, 323 personalities, 100 periodicals, 58 reading societies, 40 printers and publishers, 26 theaters and national halls, 48 historical novels and 1.676 memorials have been mapped and analyzed according to categories from the tables above. All databases were united into a uniform relational database organized according to unambiguous spatial identifiers. The research team has analyzed spatial-historical information in a series of thematic maps, graphs, tables, and extensive interpretation. Until the moment of writing the present article, only some aspects have been tackled (on which more below). On the other hand, the same database serves as a source for a powerful interface enabling on-line searching, analyzing, and interactive mapping of data.

The development of the on-line data mapping application has stemmed primarily from a desire to surface the collected data to the web. During this process, it has become clear that the current state of the web front-end technologies allow for a solution that would let users to map the data by themselves using a simple interface in their web browsers (see Figure 1).

**[Enter Figure 1 here]**

As the base of the application, we have used the available Google maps engine (<https://developers.google.com/maps/>). We developed on it a set of interfaces that connect to the database and allow users to select, display, and explore the data. With the help of the collected inputs, we have defined generic data structures that can be displayed on the map. For example, the data structure for personalities (Table 1) defines the data as a set of attributes (facets) that can be assigned to a given personality. The facets can be further divided into the following groups:

1. Geospatial data (e.g., places of birth, death, work, etc.)
2. Temporal data (e.g., dates of birth, death, year of the first published book, etc.)
3. Classification data (e.g., gender, ethnicity, occupation, etc.)

Geospatial attributes define the data points that are displayed on the map whereas the temporal and classification attributes are used to query and filter the displayed database entries. It is worth noting that geospatial attributes usually (but not always) occur in pairs with temporal attributes, for example, place of birth with the date of birth.

Classification attributes can be single or multi-valued. When creating a database query (or filter), we always combine the different attributes using the Boolean AND. When combining values within the given multi-valued attribute, we let the user choose between the Boolean OR and Boolean AND. Database queries are two-part:

1. The part that filters and provides the entry counts for sub-facets based on the selected values (facets are interrelated through entries and each set of selected values corresponds to the sub-set of facets and their values which users can use to further narrow their search).
2. The part that filters and returns the actual database entries (e.g., personalities, institutions, etc.).

To facilitate the responsiveness of the interface which in turn enhances the feeling of the live filtering and exploration of data, we had to ensure quick response times (under 0.5s) from our data store for any given query. We were able to do so by using (open source) real-time search and analytics engine Elasticsearch (<http://www.elasticsearch.org/>).

To overcome the usual mapping problems with displaying a large number of data points on a single map and accounting for the fact that multiple entries can occur on a

single location, we have used the heat map as a primary display type. Furthermore, by applying the heat map we enable users to look for the patterns in data as opposed just to look at the data.

In contrast to the curated thematic maps created by the traditional GIS tools, this approach does not present well-thought-out and crafted narratives as those created by the mapping and domain experts. What it does offer, though, is a tool that enables non-GIS experts (and to a certain extent even non-domain experts) to engage with the data in an interactive way and look for data patterns which may call for interpretation.

In addition to the dynamic and interactive spatial visualization of data, a significant advantage of GIS is the possibility of spatial-historical statistical analyses. With them, it is possible to discern relevant correlations between literary-historical data and the countable facts of human geography (e.g., demographic and economic pieces of information). The project team has written a number of articles that interpret results of spatial analyses from the intersecting point of view of literary criticism and geography. Commentaries, graphs, tables, and GIS-generated static maps will be in open access on the ZRC SAZU Literary Institute website by the end of 2014 ([www.pslk.zrc-sazu.si](http://www.pslk.zrc-sazu.si)).

In the final part of the paper, I will briefly report on the initial findings of the project *Space of Slovenian Literary Culture* (see also Juvan 2014a: 90–93). The 323 persons that we selected for the analysis (taking into account the established canon and a balanced representation of gender, epochs and genres, regions and lands, and the roles in literary life) represent roughly 60% of the estimated total number of writers, critics, publishers, literary scholars, and others that were active in Slovenian literary culture from the enlightenment to the beginning of the WW II. Geospatial factors play an important role in shaping their life trajectories. The protagonists of Slovenian literary culture were mainly born in villages, towns, and other settlements across Carniola, since it was the only historical land where ethnic Slovenians represented the majority (see Map 1).

**[Enter Map 1 here]**

**[Enter Map 2 here]**

Map 2, representing the places where the actors of the literary field were dying shows a more imbalanced distribution, with concentrations in few bigger cities. Authors and other literary personalities, who were born in “provincial” villages scattered across

Slovenian lands, often ended their lives in regional or national urban centers, especially in Ljubljana, the cultural capital (Perenič 2013; 2014a). The dynamics of literary life thus conforms to the general and long-term demographic trends, such as the concentration of populace in a few larger cities and several smaller towns (Perko 1998: 283–285). Given the fact that until the second half of the twentieth century women had hardly any access to high education or influential positions in the social fields of politics, religion, science, and culture, it is understandable that only 10% of the considered authors are women. Almost 40% of authors were born in relatively well-off peasant families, what corresponds to the predominantly agrarian population of the Slovenian lands and peasantry as the traditional social bearer of Slovenian language and dialects. The share of authors who finished secondary schools, high schools, or university is almost 50%. Significant is also their vertical mobility: 66% of them advanced to the stratum of intelligentsia (Perenič 2014a).

A more developed literary production and commercially sufficient consumption of literature in Slovenian were hampered by overall demography, such as small populace (1,101,854 in 1857, 1,267,888 in 1900), its multiethnic composition (Slovenian, German, Italian, Croatian, and Hungarian languages or dialects), and high degrees of illiteracy (above 90% at the end of the eighteenth century, 60% in 1870, and 15% around 1900; see Perko 1998: 277–279, 292–293). These demographical givens, the preponderance of peasantry, and a limited number of middle-sized cities prevented the Slovenian literary repertoire from greater aesthetic and more radical ideological diversification, while forcing the educated elites, including literati, to take on a number of socially important positions at a time, and, consequently, to refrain from their professionalization as writers (Juvan 2014a: 92).

With their relief, natural and administrative boundaries, settlement network, traffic routes, demography, and economy, geospaces also influenced the reach and allocation of the print media and literary institutions. Geo-referenced data about 40 publishing-printing establishments, which allowed the spread of print culture in Slovenian territory, show that 75% of them were located in Ljubljana, the main city of Carniola, and only 14% in the border towns of Klagenfurt and Gorizia. Due to their embeddedness in the Habsburg monarchy, printing and publishing in the Slovenian territory represented a multilingual

milieu. Moreover, because modern publishing and bookselling only gradually evolved into independent business and because Carniolian printers and booksellers came from other countries, this activity had a cosmopolitan touch. Nonetheless, publishing houses played a key role in building the infrastructure conditions for the development of Slovenian literary culture: over 75% of them were established after 1840 (Škulj 2014), that is, in the period during which cultural nationalism escalated, overwhelming broader social circles.

Further, the prevalence of thematically heterogeneous newspapers and literary periodicals in the Slovenian language supports Benedict Anderson's theory, according to which the national community is imagined mostly via newspapers and literary works such as novels (Habjan & Koron 2014). By far the most frequent place of publication is Ljubljana, the center of the Slovenian cultural space. Periodicals flourished in the decades preceding and following 1900 (Habjan & Koron 2014), what corresponds to the modern differentiation of literary repertoire and the forming of a fully stratified ("complete") Slovenian society.

To cite another analysis, the map of reading societies – which, in the mid-nineteenth century, rooted the national movement and language in the cultural life of the inhabitants of bigger villages, municipality seats, market towns, and urban centers – shows greater density of reading clubs in the vicinity of Slovenian ethnic borders (see Map 3). The average size of a settlement with a reading centre in Carniola was 1,383 people, whereas in the Littoral region, situated next to Italian lands, it was only 1,173 inhabitants (Perenič 2012; 2014b).

**[Enter Map 3 here]**

In conclusion, let me summarize my spatial analysis of theaters and national halls (Juvan 2014b). Theatre – as a venue, medium, institution and/or performing company – is a major form of mediation and public life of drama, one of the three literary kinds.

Theater practices in the Slovenian ethnic territory had, from the middle ages to the end of the seventeenth century, a nomadic and imported character. In other cases they belonged to folklore, sporadically partook religious life or entertainment of the upper class. As in other parts of Austrian empire, first theater venues were appearing since the eighteenth century. The golden age of building theaters was, as elsewhere in Europe, that of the rise

of bourgeois middle-class culture (more than a half of the 26 theater buildings were constructed in the long nineteenth century, from 1850 to 1919). These houses spatially anchored the performing practices, enabling their continuity, autonomy, and an even geographical distribution among regions and urban centers. Analysis of data on 26 theater buildings, eight national homes, and seven dramatic societies shows how the original and translated theater production in Slovenian language in the nineteenth century gradually occupied the existing theater venues in urban settlements, while giving life to new edifices intended to symbolically represent the idea of the nation and imaginatively to enhance its social cohesion (see Graph 1).

**[Enter Graph 1 here]**

Major towns in Carinthia, Styria, Carniola, and the Littoral constructed their public dramatic and/or musical theaters in the eighteenth and early nineteenth centuries (see Table 6, Map 4). Theater culture, whose intention was the aesthetic enjoyment of middle-class and educated audience, initially adopted cultured languages of the time – in Carniola, Carinthia, and Styria it was mainly German and Italian in the Slovenian Littoral. The Estates Theatre in Ljubljana and few others, from 1789 onward regularly opened doors for Slovenian performances. The driving force of these efforts was the educated circles of the early national revival.

**[Enter Table 6 and Map 4 here]**

In the aftermath of the Spring of Nations, amateur performances in the mother tongue abounded on smaller stages in towns, market towns, and villages. Such shows constituted an essential component of reading societies, which – in addition to newspapers and literature in Slovenian language – established the imagined community. However, the extensive network of over 50 reading societies, covering almost the entire territory populated by Slovenians, could not meet the aspirations of literati for the artistically ambitious and professional “national theatre.” As a reaction, in the 1860s dramatic societies aiming to advance the idea of a more centralized and aesthetically prestigious theater institution (called *narodno gledališče*) emerged in the regional capitals of Ljubljana, Maribor, Celje, Ptuj, and Trieste (see Map 5). With the help of these societies, the Slovenian theater companies gradually occupied the existing German-language city theaters towards the end of the nineteenth century (e.g., in Maribor, Celje, and Ptuj).

**[Enter Map 5 here]**

On the other hand, they settled in more representative edifices that had been intentionally built to house them. In addition to “national homes” (*Narodni dom*) in which theater still accompanied nationalist sociability and amateur culture (Novo Mesto, Celje, Maribor, Ljubljana, Kranj, Trieste), dramatic theaters dubbed *narodno gledališče* took roots in Ljubljana, Maribor, and Trieste. Such theaters together with “national homes” spatially symbolized the cultural capital of the people (see Maps 5 and 6; Graph 1). Professional theater companies came into being after 1919 with the creation of the new state of South Slavs. Although they frequently flattered with popular tastes of petty-bourgeois audience, theaters in the inter-war period finally distinguished themselves from amateur endeavors in rural areas, smaller settlements, and working-class environments.

**[Enter Map 6 here]**

The above studies show that it is not only Slovenian literature that was partially dependent on geospatial conditions, but that, conversely, the literary culture – with its practices, institutions, media, and memorials – also shaped geospaces and imbued them with social functions. For example, the foundation of the Slovenian National Theater in Ljubljana in 1919, marking the bourgeois high-cultural distinction and national consciousness of the local intelligentsia, symbolically displayed the prestige of the city that became the “national capital” (see Dolgan 2012). Last but not least, over 1.600 memorials and toponyms that, growing since the mid-nineteenth century, venerate Slovenian literary authors (mainly those canonized) form an imaginary network of material landmarks through which the Slovenian ethnoscape became visible to everybody (Dović 2012; 2013; 2014; see Map 7).

**[Enter Map 7 here]****Works Cited**

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## Appendix: Figures, tables, graphs, maps

Figure 1: Screen capture of the on-line mapping application

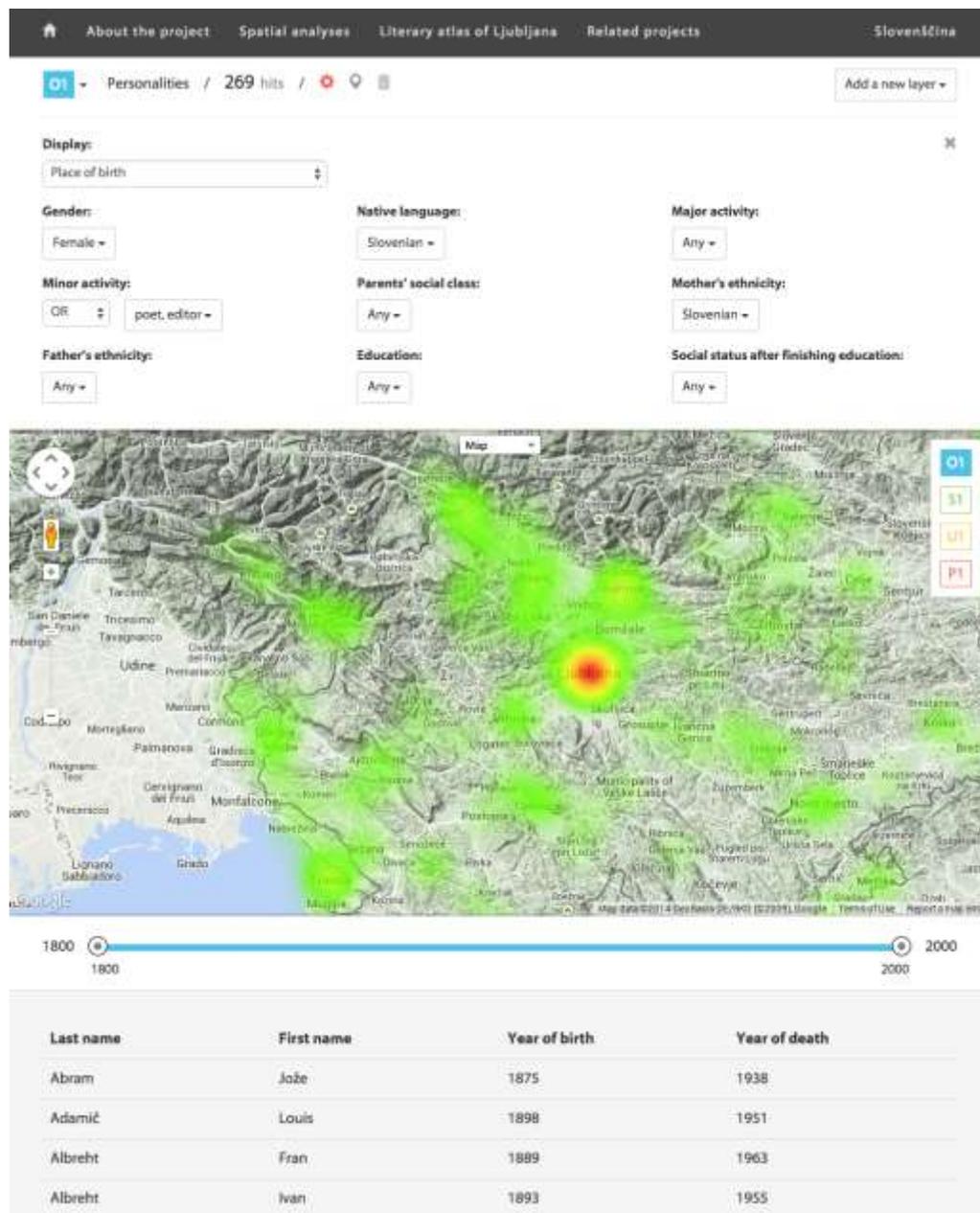


Table 1: Structure of PERSONALITIES entries

1. Identification number
2. Surname
3. Name
4. Additional names (e.g., pseudonyms)
5. Major activity: poet, prose writer, dramatist, non-fiction writer, author for children, critic,

translator, editor, publisher/printer, literary scholar
6. Minor activity
7. Date of birth
8. Date of death
9. Place of birth (hospital, mother's residence at the time of birth)
10. Place of death
11. Burial place
12. Sex
13. Parents' social class
14. Mother's ethnicity
15. Father's ethnicity
16. Native language
17. Name of secondary school
18. Place of secondary school
19. Name of higher school/university
20. Discipline(s) studied
21. Place of higher school/university
22. Education attained
23. Occupations(s)
24. Places of work
25. Social status after finishing education
26. Political positions or activity
27. Personal connections in literature
28. Personal connections in other fields
29. Languages of texts published
30. Year of the first published book
31. Place of the first published book
32. Place of residence at the time of the first book publication
33. Year of first appearance in a serial publication
34. Place of first appearance in a serial publication
35. Place of residence at the time of the first publication in a periodical
36. Year of last book publication (during the lifetime)
37. Place of last book publication (during the lifetime)
38. Place of residence at the time of the last book publication
39. Place of publication of the majority of author's works
40. Journals in which the author was publishing
41. Publishing houses in which the author was publishing
42. Memorials connected with this person
43. Sources

*Table 2: Structure of PERIODICALS entries*

1. Identification number
2. Title
3. Subtitle, additional or changed titles
4. Type of publication: newspaper / newspaper not in Slovenian / émigré newspaper / journal / almanac / book series
5. Language(s)
6. Dominant thematic: literary / cultural and artistic / professional and scholarly / informative / educational and(or) entertaining / other
7. Place of publication
8. First year of publication
9. Last year of publication

10. Prevailing frequency: daily / weekly / monthly /annual / other
11. Editor-in-chief
12. Editors
13. Publisher
14. Circulation
15. Number of volumes (only for almanacs and book series)
16. Readership
17. Intended public: local / regional / national / international / émigré
18. Sources

*Table 3: Structure of INSTITUTIONS entries*

1. Identification number
2. Name/title
3. Other names
4. Type of the institution: printers and publishers / reading societies / theaters / national halls
5. Locations(s)
6. The most permanent location
7. Date of founding
8. Date of closing
9. Connections with other institutions
10. Sources

*Table 4: Structure of LITERARY SPACES entries (Slovenian historical novel)*

1. Identification number
2. Surname and name of text's author
3. Title of the text
4. Year manuscript was completed
5. Year of publication
6. Place of publication
7. Genre
8. Geographic names in Slovenia in the text (arranged by frequency)
9. Geographic references (Slovenian) of fictional settings
10. Predominant spaces depicted
11. Geographic names outside of Slovenia

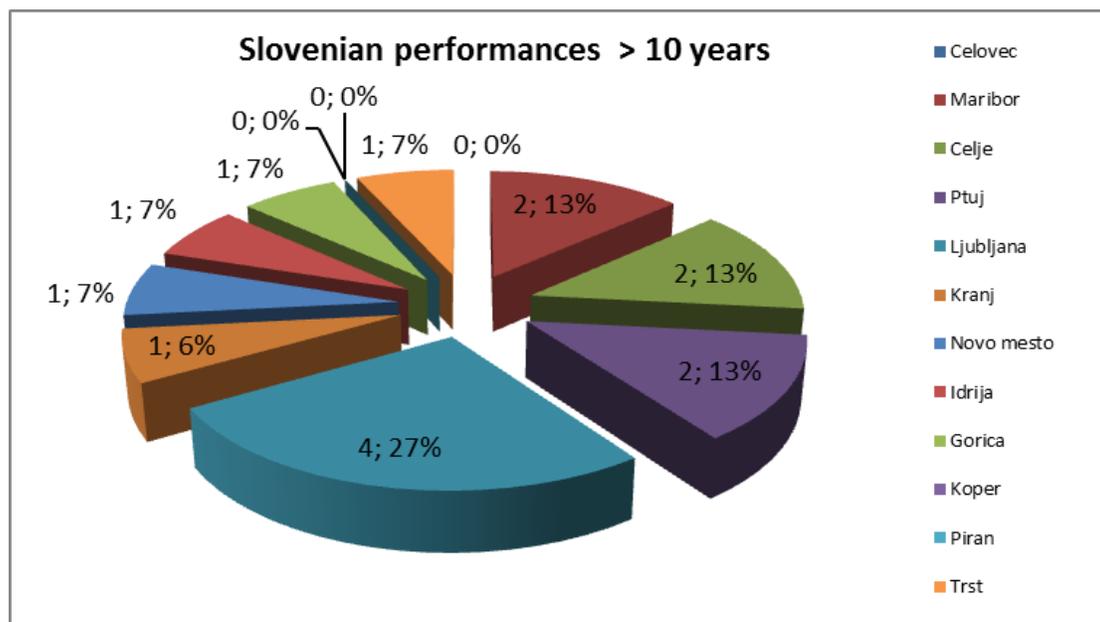
*Table 5: Structure of MEMORIALS entries*

1. Identification number
2. Name and surname of the dedicatee
3. Name/title of the memorial
4. Type of the monument: open air statue / open air bust / statue of a literary character / memorial (house, room, plate, etc.) / name of institution / name of location
5. Year of unveiling
6. Location
7. Text on the monument
8. Initiators
9. Authors of the memorial
10. Sources

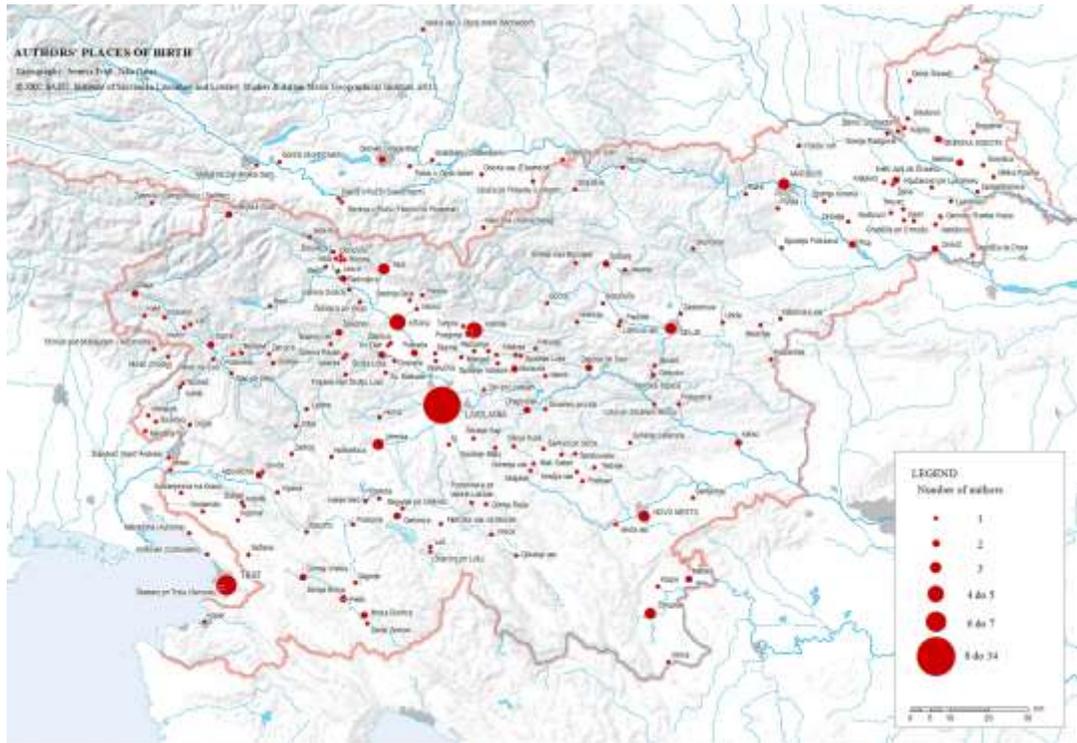
Table 6: Settlements with theater buildings

Settlements	Number of theater buildings – period of construction					Number of national homes	More than 10 years of Slovenian theater performances
	All	1400-1700	1700-1800	1800-1850	1850-1920		
Celovec / Klagenfurt	1	0	1	0	0	0	0
Maribor	4	0	1	1	2	1	2
Celje	2	0	0	1	1	1	2
Ptuj	2	0	1	0	1	1	2
Ljubljana	5	0	1	0	4	1	4
Kranj	1	0	0	0	1	1	1
Idrija	1	0	1	0	0	0	1
Novo mesto	1	0	0	0	1	1	1
Gorica / Gorizia	2	0	1	0	1	1	1
Koper	3	2	1	0	0	0	0
Piran	1	0	0	0	1	0	0
Trst / Trieste	3	0	1	0	2	1	1
<b>Total</b>	<b>26</b>	<b>2</b>	<b>8</b>	<b>2</b>	<b>14</b>	<b>8</b>	<b>15</b>

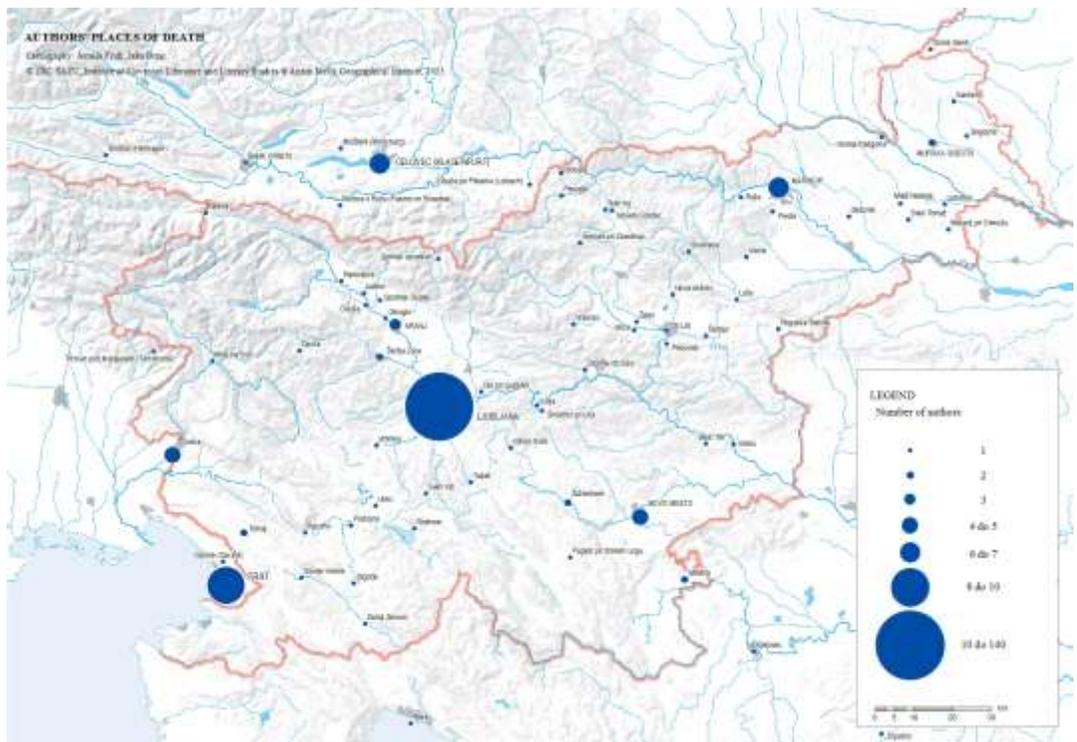
Graph 1: Settlements with Slovenian performances in more than 10 years (their shares in the total number of theaters)



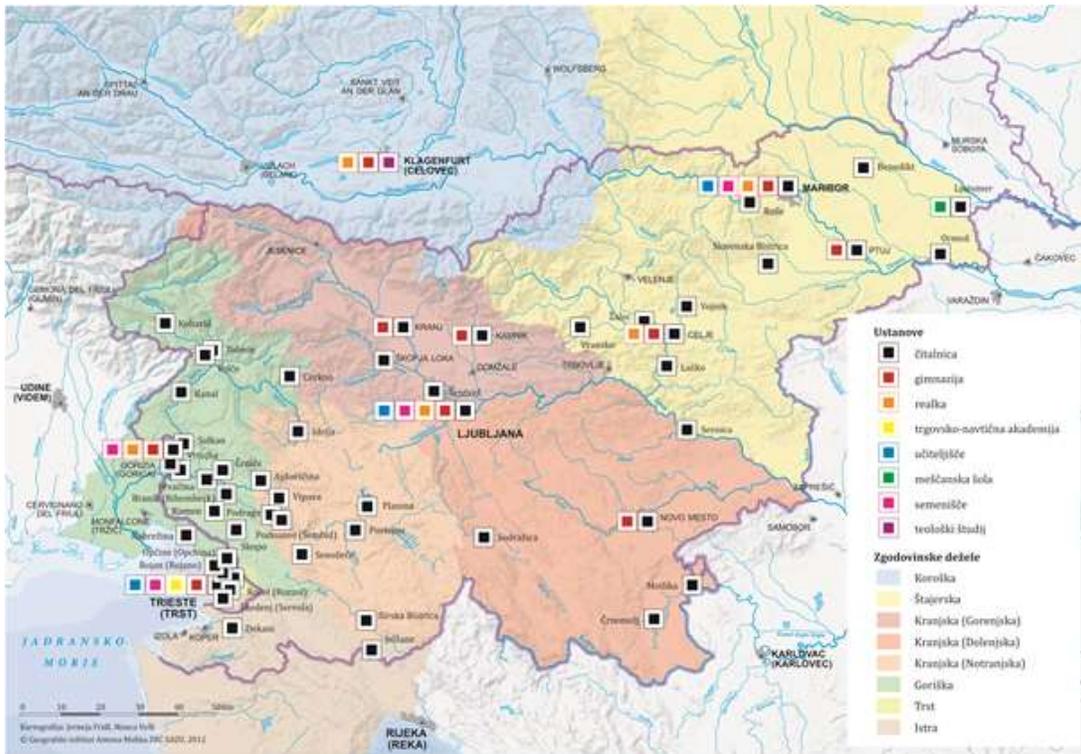
Map 1: Author's places of birth



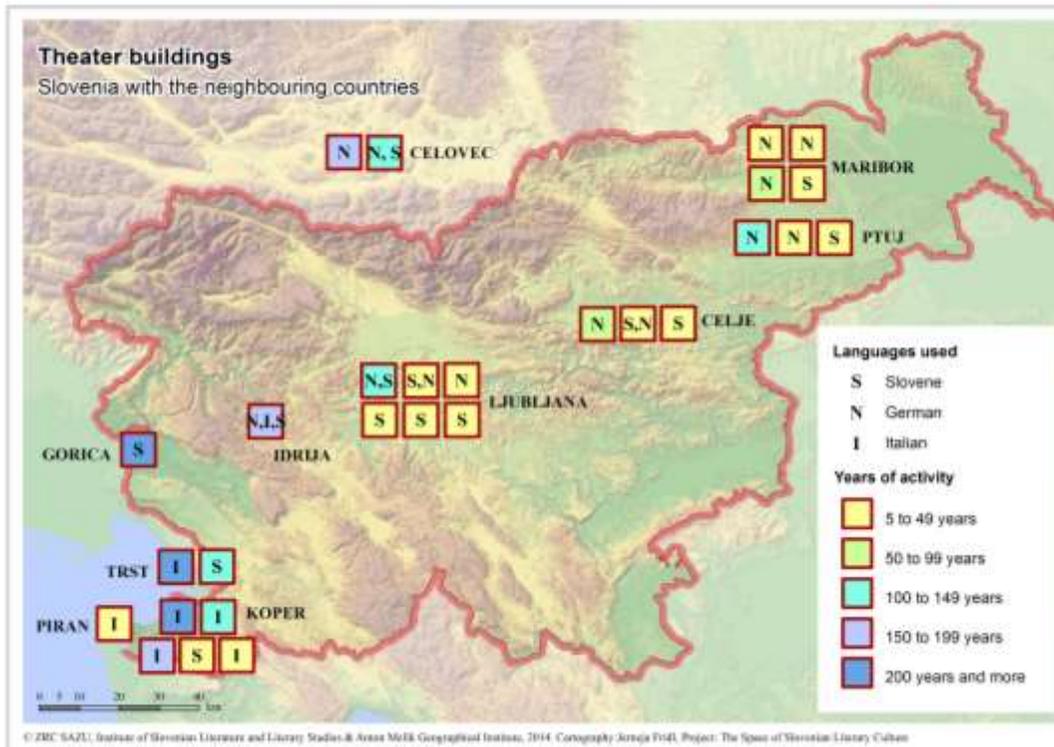
Map 2: Author's places of death



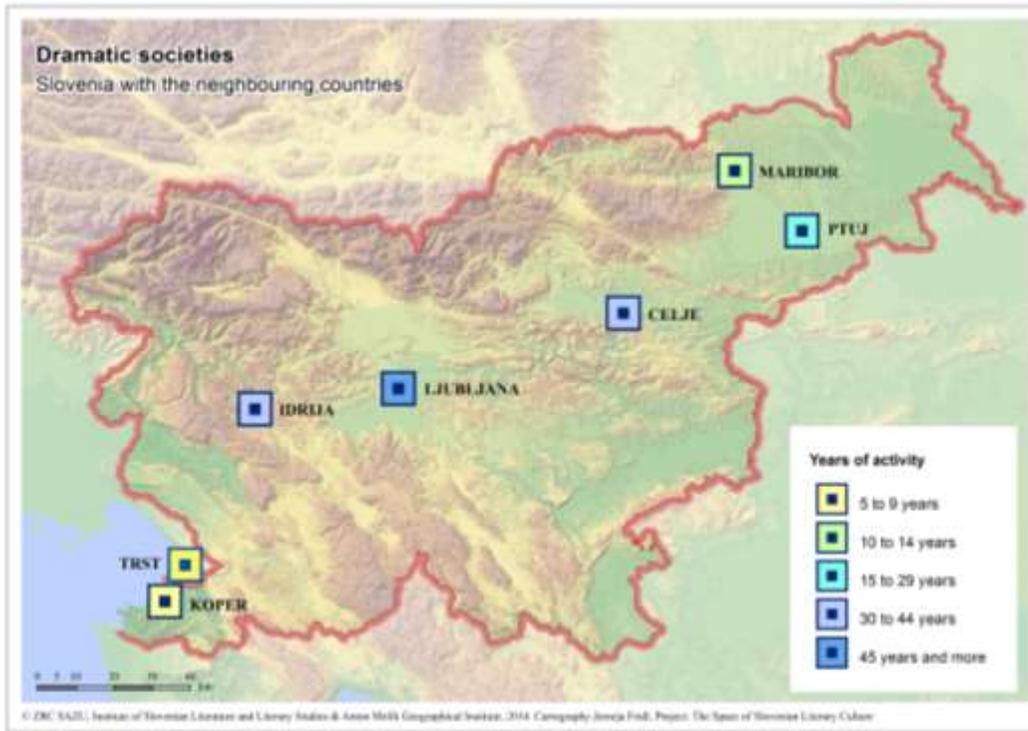
Map 3: Reading societies



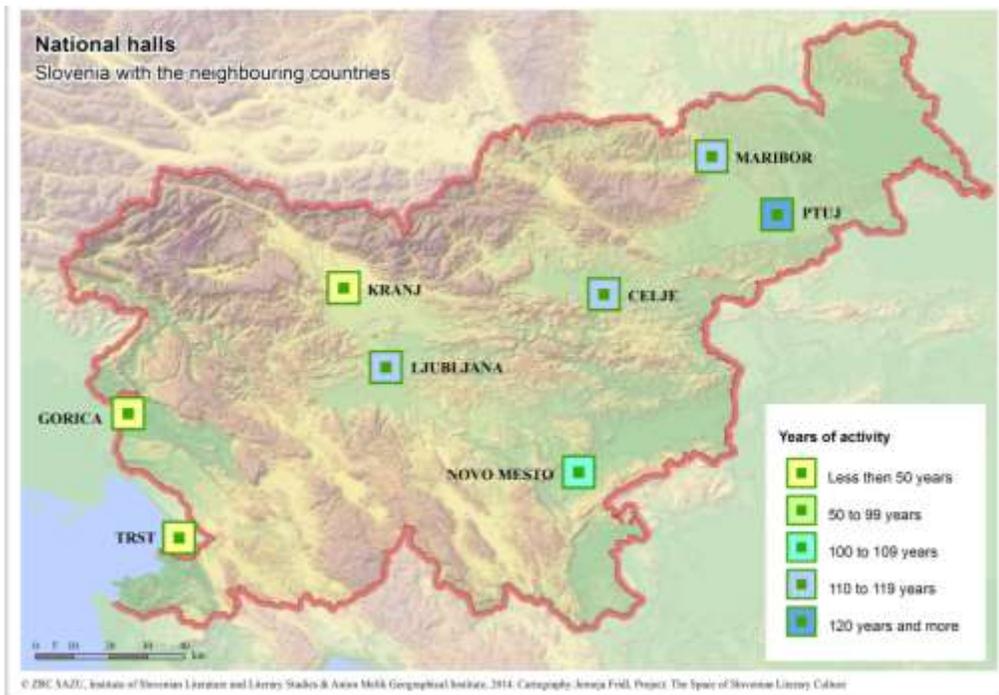
Map 4: Theater buildings



Map 5: Dramatic societies



Map 6: National halls



Map 7: Full-length statues and busts of Slovenian writers in public space

