

Exploring the Role of Literatura.lv in Enhancing Knowledge through Digital Humanities

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Abstract. This paper explores the significance of Literatura.lv, a digital resource dedicated to Latvian literature, within the broader Digital Humanities (DH) framework. The platform leverages advanced tools, including Geographic Information Systems (GIS) and sophisticated search functionalities, to enhance the accessibility and analysis of Latvian literary data. It also integrates with international platforms like Wikidata, fostering interoperability and data reuse. The paper considers the challenges and opportunities in sustaining such a comprehensive digital archive, its role as a digital encyclopaedia, and its relevance to the Baltic region's digital studies landscape.

Keywords: digital literary platforms, literary metadata curation, GIS mapping of literary biographies.

1. Introduction

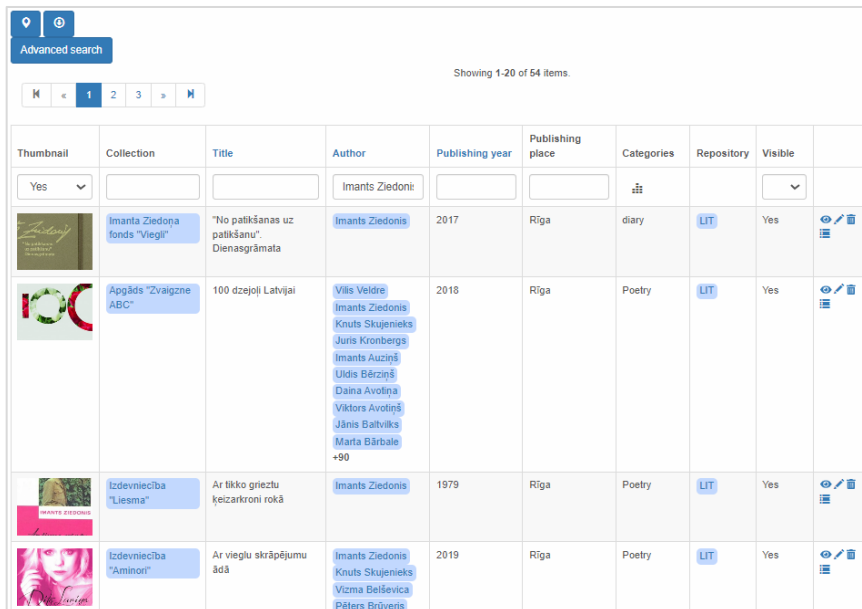
In the evolving field of Digital Humanities, Literatura.lv stands as a vital resource for preserving, researching, and exploring Latvia's literary heritage. Launched in 2015 by the Institute of Literature, Folklore, and Art (ILFA) at the University of Latvia, Literatura.lv serves as a comprehensive digital encyclopaedia of Latvian literature, providing access to a vast repository of biographical and bibliographical data. Literatura.lv has become a widely used source of data and information and an indispensable tool for the academic community (Eglāja-Kristsons, 2022; Eglāja-Kristsons and Graudiņa, 2024). It serves scholars, educators, and students by providing a reliable and comprehensive resource for research and education. The platform's extensive database supports various academic disciplines, including literary history, cultural studies, and digital humanities. By making detailed information about Latvian literature readily accessible, Literatura.lv enhances the depth and quality of scholarly research. In addition to its value for historical research, Literatura.lv supports contemporary literary studies by documenting and promoting the works of modern authors. This ongoing commitment to capturing the evolving literary landscape ensures the platform remains relevant and valuable for researchers, educators and society. The

platform's design and implementation highlight its alignment with critical trends in Digital Humanities, particularly in using advanced search functionalities and GIS tools. This paper examines Literatura.lv's role within digital humanities, focusing on how it serves as both a scholarly resource and a public digital archive. It also discusses the challenges and opportunities it faces in sustaining its growth and relevance within the broader digital studies landscape of the Baltic region.

2. Technological framework of Literatura.lv

Literatura.lv is a digital encyclopaedia and a comprehensive knowledge hub. It boasts over 6,200 biographical entries, 63,000 works, 4,000 organisations (encompassing not only creative industries but also schools, museums, periodicals, publishing houses, and a diverse spectrum of other organisations), and 290 awards (including the most important national and international awards, literary awards, honorary titles, and the most significant literary prizes).

This vast database is organised into carefully structured metadata fields that allow users to access and explore detailed information about Latvian literature. Following an event-based biographical model, Literatura.lv effectively documents literary histories, linking individuals with events, organisations, and scholarly output, aligning with best data structuring practices in Digital Humanities (Hyvönen et al., 2018). Additionally, Literatura.lv provides an Application Programming Interface (API) that enables other platforms or researchers to directly query the database, facilitating integration with other Digital Humanities datasets. This interoperability enhances the dataset's accessibility and broadens its potential for comparative research and cross-platform collaboration.







Thumbnail	Collection	Title	Author	Publishing year	Publishing place	Categories	Repository	Visible
	Imants Ziedoņa fonds "Vieglī"	"No patikšanas uz patikšanu". Dienasgrāmata	Imants Ziedonis	2017	Rīga	diary	LIT	Yes
	Apģāds "Zvaigzne ABC"	100 dzejoļi Latvijai	Vilis Veldre Imants Ziedonis Knuts Skujenieks Juris Kronbergs Imants Āuziņš Uldis Bērziņš Daina Avotņņa Viktors Avotiņš Jānis Baltviķis Marta Bārbale +90	2018	Rīga	Poetry	LIT	Yes
	Izdevniecība "Liesma"	Ar tikko grieztu ķeizarkroni rokā	Imants Ziedonis	1979	Rīga	Poetry	LIT	Yes
	Izdevniecība "Aminor"	Ar vieglu skrāpējumu ādā	Imants Ziedonis Knuts Skujenieks Vizma Beļševica Pēters Brūveris	2019	Rīga	Poetry	LIT	Yes

Fig. 1. Imants Ziedonis' Literary Works in the Admin Interface

Literatura.lv is actively working toward implementing Linked Open Data (LOD) principles to enhance interoperability and data enrichment by linking its resources to external databases, such as the Virtual International Authority File (VIAF), Wikidata, and other scholarly and cultural repositories. Since the beginning of 2023, Literatura.lv has also become one of the identifiers in the Wikidata repository¹ as the primary informational source for Latvian writers, literary works, literary awards and any organisations connected with writers and literature, providing a wide range of information about magazines, publishers, museums, schools writers graduated from. By adopting LOD, Literatura.lv aims to integrate Latvian literary and cultural data more deeply into the global knowledge network, facilitating data reuse and access across digital humanities projects worldwide. This transition enables seamless connections between Literatura.lv's biographical entries and related resources, such as the "Latvian Prose Counter"², an interactive website developed by the National Library of Latvia. The site allows users to explore various quantitative aspects of 19th and 20th-century Latvian prose fiction, including counting, analysing, and visualising lexical and syntactical features of novels and stories, as well as examining publication statistics. Data on authors and literary works that make up the Latvian Prose Corpus are collected in collaboration with the researchers of Literatura.lv, demonstrating how LOD principles can support data sharing and enrich scholarly tools for literary analysis.

Furthermore, Google Analytics reports for Literatura.lv offer insights into user behaviour, engagement, traffic sources, and content preferences. The platform attracted approximately 248,000 users in 2023. Although the average engagement time per session is 1 minute and 37 seconds, indicating room for improvement in retaining users longer, the site's strong appeal is evident. Organic search remains the leading traffic source, driving 381,000 sessions, underscoring the importance of effective search engine optimization (SEO) through targeted keywords and optimised content.

Literatura.lv offers user-friendly search and filtering capabilities designed to support various research needs. The platform's interface allows users to perform both simple and advanced searches, utilising multiple data fields to filter results by different criteria. The primary search tool, which works on the principle of keywords, is also associated with searching for selected individuals. It allows users to enter any keyword, such as a person's name, occupation, place of residence, etc., that can help them find the information needed quickly. This quick search feature looks for results in the entire database and across all sections and collections. The output of the search provides a list of entries containing the requested word, each of which shows the entry's title and its first phrases.

The original interface offers more advanced searching options, supported by a structured dataset organized into seven interlinked menus: Persons, Works, Organisations, Awards, Audio, Exhibitions, and Library, with four of these featuring advanced data filtering. Two additional sections relevant to data searches, Map and Anniversaries, are accessible separately. To achieve this, clear hierarchies and relationships between data entities are established using entity-relationship models or linked data principles, ensuring that each element – such as an author, a work, or a location – is stored as an independent yet interconnected entity.

¹ https://www.wikidata.org/wiki/Wikidata:Property_proposal/literatura.lv_ID

² <https://proza.lnb.lv/en/>

“Persons” can be sorted by name, place, year of birth, and affiliation to various organisations. For example, suppose the user wants to find all writers born in the 20th century related to Bauska. In that case, he or she can select the city in the “place” filter, the time in the “year of birth” filter, and the literary role in the “occupation” filter. This leads to 14 results, which can be sorted alphabetically by the time the entries are updated. The database is regularly updated to ensure the information is current and accurate, with new entries added and existing ones reviewed and revised as necessary.

The “Works” section contains filters such as author, title, year of publication, genre, type of publication, and type of work. For example, the user can search for all poetry translations published in books and literary collections in the last 30 years by selecting the relevant publishing period, genre, type of publication, and type of work.

“Awards” can be selected by name and category; they belong to a specific period of history that is limited in time and space (awards in the inter-war period of the Republic of Latvia, exile awards, foreign awards, etc.). They include a broad spectrum of awards, not specifically the achievements in the field of literature.

The “Audio” collection is searchable by title and narrator. However, its content may be easily overlooked because the collection is newly established and consists of only about 150 units.

In the “Map” section, it is possible to see all the places linked to the biographies of persons related to Latvian literature. One of its standout features is integrating the Geographic Information System (GIS) and mapping tools, allowing users to visualise the geographical context of literary events and biographies. Separate maps can also be found in each person's profile, covering places related to the particular literary figure's private life and professional activities. Users can also view maps that locate the settings of some literary works, adding a spatial dimension to their literary exploration.

A recent innovation, introduced at the request of website users, is the “Anniversaries” section. It lists literary figures born on the day the database is accessed and has a search filter that allows users to select individuals by their date of birth on any day of the year.

The advanced search and filtering functions in the public version of the website are tailored to different audiences, thus facilitating the comprehensibility of the data. To create the conditions for conducting a wide range and volume of research in a large data set, the digital platform for the humanities and arts Humma.lv has been created, where, for the first time, all data in the digital resources of the ILFA is accessible publicly in one place. According to database developers Reinsone and Laime (2024), the resource is primarily oriented towards the needs of researchers and students, with detailed search and data filtering functionality and the ability to download datasets, including text corpora. The data of Literatura.lv integrated into the database can be operated with more advanced and detailed search tools.

Building on this, it's important to note that the Literatura.lv database is constantly growing, meaning its information is never complete. The database is continuously expanded and updated to ensure accuracy and relevance. Updates are managed by a dedicated team at ILFA, who regularly review entries, incorporate new data, and refine metadata based on user feedback and research findings. New entries are added systematically, following standardised metadata protocols to maintain consistency and quality. This evolving nature, combined with its interdisciplinary focus, makes it a valuable resource not only for literature students but also for researchers in fields such as the history of bookkeeping, cultural history, social history, genealogy, and family

history. This ongoing commitment to growth ensures that *Literatura.lv* remains a comprehensive and reliable resource, meeting the evolving needs of both scholars and the general public.

Literatura.lv enriches the global data ecosystem, offering structured and reliable information about Latvian literary figures, works, and awards, thereby supporting principles of interoperability and sustainability crucial to Digital Humanities projects. Furthermore, *Literatura.lv* is integrated with other digital data sets managed by ILFA, ensuring that data across different projects is standardised and reusable. This integration further strengthens its interoperability, especially as *Literatura.lv* connects with global platforms like Wikidata, positioning it within the broader international digital humanities ecosystem (Bizer et al., 2009).

3. Digital approach to contextualize Latvian literature

In the realm of Digital Humanities, *Literatura.lv* exemplifies the importance of digital resources in democratising access to national literary heritage. As Sabharwal (2015) argues, digital archives and encyclopaedias preserve and transform information accessibility. *Literatura.lv* follows this principle by providing an open, comprehensive encyclopaedia of Latvian literature accessible to both scholarly and public audiences.

One of the most notable tools in *Literatura.lv* is its Geographic Information System (GIS) integration, which allows users to visualise the spatial relationships between literary figures and their environments. This feature is precious for exploring how geographic context influences literary production, contributing to the growing field of spatial humanities (Bodenhamer et al., 2010). For instance, users can view maps that chart the places significant to an author's life and work, adding a spatial dimension to literary analysis (Eversone and Oga, 2022). To illustrate, by selecting the profile of the poet Imants Ziedonis, users can trace the map across the world, highlighting specific places linked to his biography and literary output. This spatial visualisation allows researchers to analyse how geographic context influenced his works, providing a deeper understanding of his literary contributions within the cultural landscape. Moreover, in a collaboration with the Latvian National Library part of the "Corpus of Early Latvian Novels" (*LatSenRom*) (Eglāja-Kristsons, Baklāne, Saulespurēns) is integrated into *Literatura.lv* offering to map literary texts (Kārkla and Eglāja-Kristsons, 2022).

Another notable feature of *Literatura.lv* is its "Affinities" section, a metadata field highlighting the various relationships and connections between literary figures. This platform aspect leverages network analysis, a critical method in Digital Humanities, allowing users to explore the broader context of a person's life and work. By examining familial, social, and professional relationships, *Literatura.lv* facilitates a deeper understanding of how these connections shape literary production, influence creative output, and contribute to the development of literary movements. The "Affinities" feature in *Literatura.lv* is particularly valuable in three primary contexts: familial, social, and professional. The platform provides a framework to trace familial relationships that have influenced the creative processes of Latvian literary figures. For instance, studying family ties between writers, poets, and public intellectuals offers insights into how literary traditions are passed down through generations. Strong familial networks often

Showing 1-59 of 59 items.

#	Location	Date	Type	Type of place	
	<input type="text"/>		<input type="text"/>	<input type="text" value="v"/>	
1	Birutas (<i>"Birutas", Ragaciems, Lapmežciema pagasts, Tukuma novads, LV-3118</i>)	03.05.1933	Birth time/place	Farmstead	
2	Dzirnakmeņi (<i>"Dzirnakmeņi", Krimuldas pagasts, Siguldas novads, LV-2142</i>)	1975	Museums	Farmstead	
3	Rīga (<i>Rīga</i>)	27.02.2013 - 1993	Participation in organisations	City	
4	Ragaciema kapi (<i>Niedru iela 29, Ragaciems, Lapmežciema pagasts, Tukuma novads, LV-3118</i>)	(Not set)	Buried	Cemetery	
5	Povarskaya 25A, Maskava (<i>Povarskaya 25A, Moscow, Russia, 121069</i>)	1964	Education	Building, house	

Fig. 2. List of places linked to Imants Ziedonis' biography in the admin interface

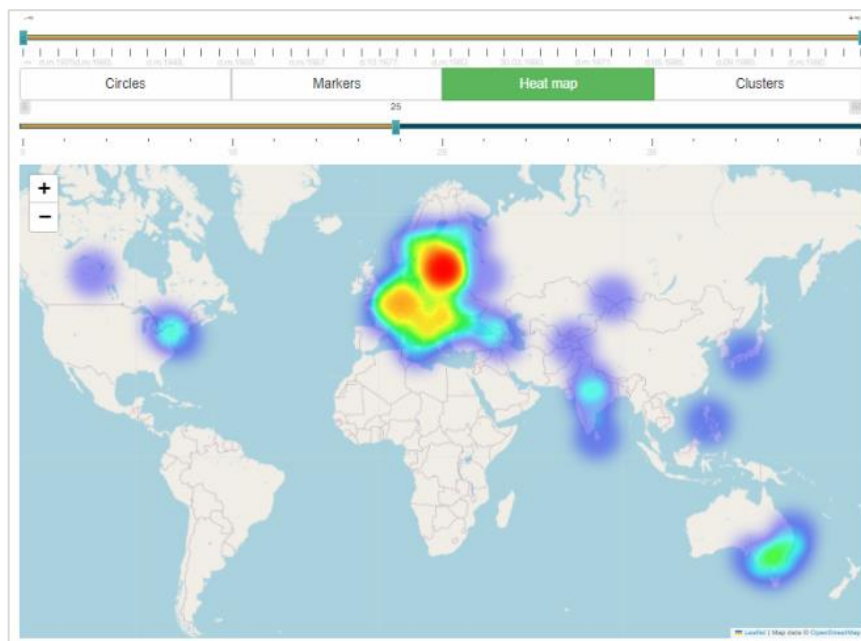


Fig. 3. Heat map of places linked to Imants Ziedonis' biography in the admin Interface

foster collaborative work or shape a writer's thematic focus. This echoes the findings in family studies in literary production, where familial bonds can shape creative legacies. Another layer of Affinities addresses the social circles that individuals were part of, showing how friendships and associations within literary groups contributed to the

development of literary styles and movements. Literatura.lv allows users to map these social networks, providing insights into how peer influences, literary salons, and intellectual clubs shaped the course of Latvian literature. Social network analysis (SNA), as applied in digital archives like Literatura.lv, illuminates the role of collective agency in literary production. This feature of Literatura.lv aligns with broader trends in Latvian Digital Humanities, where network analysis is applied to explore cultural and literary connections (Rašmane and Goldberga, 2017) (Kalniņš, 2024). By visually mapping relationships between individuals, Literatura.lv enables users to engage with Latvian literature through a dynamic, interconnected lens. The Affinities metadata field offers researchers a tool for exploring the relational aspects of literary production, revealing the often-hidden networks of collaboration and influence that underpin the literary canon.

The ability to link biographical, bibliographical, and organisational data with historical events, movements, and geographical locations allows Literatura.lv to contextualise Latvian literature within broader historical frameworks. To balance accessibility with scholarly rigour Literatura.lv offers meticulously curated data fields supporting detailed research and public engagement. Sustaining a digital resource like Literatura.lv requires constant innovation and adaptation. As Nielsen (2012) discusses, digital resources must evolve to remain relevant, incorporating new technologies while ensuring long-term data preservation. As noted earlier, Literatura.lv addresses this challenge by integrating with Humma.lv, a research database that expands its functionalities for academic research. This allows the platform to offer more advanced search tools and downloadable datasets, making it a critical resource for interdisciplinary research.

The challenge remains to ensure long-term funding and maintain the platform's technological infrastructure. Still, Literatura.lv's collaborative model with other ILFA digital resources and its international partnerships with platforms like Wikidata place it in a solid position to continue growing.

In addition, Literatura.lv has the potential to leverage new research methodologies, such as data mining and large-scale text analysis. As Kirschenbaum (2007) suggests, digital archives offer unprecedented opportunities to uncover new patterns in literary and cultural data, and Literatura.lv is well-positioned to contribute to these developments.

4. Conclusion: the role of Literatura.lv in Baltic digital humanities

One of Literatura.lv's key roles within Digital Humanities is contributing to public humanities. The platform's accessibility across devices and multilingual metadata fields (available in Latvian and English) ensures it reaches local and international audiences. Digital platforms that engage the public are vital in democratising knowledge and making scholarly resources accessible to broader audiences. Through educational collaborations, Literatura.lv also promotes digital literacy, particularly in younger generations. Its role as an open digital encyclopaedia makes it an essential tool for educators and students exploring Latvian literature in academic and informal learning contexts.

In the broader Baltic context, Literatura.lv stands out for its innovative approach to Digital Humanities, particularly in how it integrates advanced digital tools and methodologies. Compared to digital initiatives in Lithuania and Estonia, Literatura.lv

offers a unique combination of features that enhance its role in the region. In Lithuania, as noted by Kelpšienė (2018), the digitization of heritage and scientific data faces significant challenges such as decentralisation of national activities, low levels of standardisation, and weak interinstitutional cooperation. These issues often lead to difficulties in achieving effective data interoperability. However, tools like Saltiniai.info, an interactive database for learning the Lithuanian language, literature, and history; Lituanistika.lt, an international research database offering bibliographic records, abstracts, and full-text documents on Lithuania's history, society, culture, nation, and language; and the Lithuanian Writers' Union's website (Rasytojai.lt), which provides detailed articles about Lithuanian writers, are helping address these challenges. In Estonia, the field of digital humanities is developing rapidly, and projects like the “Estonian Writers' Online Dictionary” (sisu.ut.ee/ewod) and the “Database of Estonian Writers” (estlit.ee/writers) offer valuable resources for the study of national literature. However, as with many digital humanities initiatives, the broader landscape in Estonia faces challenges such as insufficient long-term maintenance, which can result in broken hyperlinks and outdated content (Sun and Wu, 2022). These challenges highlight the need for sustained human and financial resources to ensure digital projects remain functional, up-to-date, and relevant. As a pioneering platform in the Baltics regarding (meta)data amount of a literary field, Literatura.lv exemplifies the transformative power of digital encyclopaedias and archives. Its use of advanced search functionalities and GIS integration aligns it with global best practices in DH, making it a valuable resource for both researchers and the public. Literatura.lv not only preserves Latvia's rich literary heritage but also places it within a global context, enabling new ways of understanding and researching literature. The platform's ability to evolve and its commitment to sustainability ensures that it will continue to play a vital role in studying Latvian literature and cultural history. By embracing new technologies and fostering interdisciplinary collaboration, Literatura.lv contributes significantly to the broader digital humanities landscape within the Baltic region and globally.

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