

**THE LINKED DATA COLLECTION “RAINIS UN ASPAZIJA” (*RunA*):
NEW RESEARCH OPPORTUNITIES
(EXAMPLE – CORRESPONDENCE BETWEEN RAINIS AND ASPAZIJA
DURING HIS TIME IN PANEVĒŽYS PRISON)**

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Abstract

The research aims at examining the epistolary exchange between Latvian writers Rainis and Aspazija available in the *Rainis un Aspazija (RunA)* linked open data collection and dating back to the period Rainis was in Panevėžys Prison (1897); and at exploring the opportunities the collection offers in revealing links between objects, persons, events, and thus, at gaining a broader perspective on the historical context of the time. The collection, as a visual and content resource, thanks to the linked data environment created therein, reveals a wide range of cultural and historical material about both writers, and marks out the context of the time, the most important events, people, places, etc. The collection, with the help of linked data, publishes open, structured data regarding its objects, entities and respective links between the same. The article also analyses the issue of how important a role the interpretation of this type of structured data has in literary research and how it helps contemporary researchers in analysing a literary work or any literary research material (letters, working notes, documents, etc.).

Keywords: *Rainis, Aspazija, Panevėžys, letters, linked data.*

The *Rainis un Aspazija (RunA)* linked open data collection enters the Latvian literary research environment inviting a new and different view of a literary work and its author, namely, by encouraging a new interpretation of interlinked information. This is the first collection of its kind in the Latvian memory-institution environment that discovers values from memory institutions and private repositories as an

interlinked web collection. Earlier studies on the *RunA* collection and linked data have focused on the structured framework of the collection from the viewpoint of computer-science and library-science specialists. This article inspects the collection from the perspective of literary scholars and collection users. The article mainly aims at showcasing the role of linked open data in the analysis of a literary text and at determining how the modern reader can shape their own reading paradigms and directions.

The *RunA* collection exposes the literary heritage of Rainis and Aspazija and its diversity. It includes first editions of all Rainis' and Aspazija's works and their annotations, correspondence of both writers with scholarly commentaries, archival documents, photographs, posters, cartoons, video and other materials. Letters can be viewed in their original form, as well as in translation and with scholarly commentaries. Representatives of a number of institutions have contributed to the creation of the collection – the National Library of Latvia (NLL), National Archive of Latvia, Association of Memorial Museums, Literature and Music Museum, the Institute of Literature, Folklore and Art of the University of Latvia.

The collection can be used by researchers and students of humanities, as well as all admirers of Rainis' and Aspazija's works. The platform that stores the collection links the poets' legacy with scholarly commentaries, thus contextualising the people, events, places, etc. mentioned in the documents. *It offers possibilities that have not been used in Latvia before to discover and to expose values from memory institutions and private repositories as an interlinked web collection. The collection was created with three main aims in mind. The first is to develop a novel resource for digital humanities to include as many types of digital objects as possible. The second one is to test in practice co-operation capabilities with other memory institutions the Institute of Literature, Folklore and Art of the University of Latvia, the and the Literature and Music Museum. The third one is to publish corresponding NLL bibliographic, authority and other metadata on the Web as Linked Data* [Goldberga, Kreislere, Rašmane, Stūrmane, Salna 2018].

The National Library of Latvia, in partnership with the Faculty of Humanities of the University of Latvia, is implementing the *Rainis and Aspazija Collection (RunA)* section of the project "Latvian Memory Institution Data in the Digital Space: Connecting Cultural Heritage" ("Latvijas atmiņas institūciju dati digitālajā telpā: vienojot kultūras mantojumu", Nr. lzp-2019/1-0365). Based on the experience and knowledge gained in previous projects and using controlled vocabularies and other structured data sets created by the NLL, the project explores the opportunities for semantic cooperation among Latvian memory institutions in the field of cultural heritage, with the aim of improving the quality of digital services. The project is currently implemented by the teaching staff of the Department of Latvian and Baltic Studies of the UL Faculty of Humanities and the students of the master's study

programme in Baltic Philology. The students contribute by annotating letters using a special annotation tool, thus adding new, explanatory information to the collection and expanding the linked data environment.

One of the keywords characterising the collection and its most important structural element is Linked Data. *Linked Data is simply about using the Web to create typed links between data from different sources. Technically, Linked Data refers to data published on the Web in such a way that it is machine-readable, its meaning is explicitly defined, it is linked to other external data sets, and can in turn be linked to and from external data sets* [Bizer, Heath, Berners-Lee 2009]. Data can be fed into the Web in a variety of ways, such as a document (e. g., in *pdf* format), a spreadsheet or a presentation, etc. However, such forms of data publishing make the entries static and cut off. It is difficult to see links to other documents or presentations, because each such document is like a separate data set. Linked data is the application of web-based principles to data sharing. With the help of linked data, it is possible to 'construct' transitions within one document to other documents, images, websites, diagrams, that is, to unlimited amounts and types of data, which will help reveal more information about the specific document the user is working with. Linked data is a way of publishing structured, computer-readable information about objects, their properties and their interrelationships on the Web.

We will examine the structure of the *RunA* collection and the opportunities it offers. In addition to the works and materials of both authors already mentioned (letters, photographs, documents, videos, etc.), the collection also includes a **map** showing the countries that Rainis and Aspazija visited and lived in, individually or together. The search engine allows users to specify the period of interest, and depending on this, the countries where the authors spent time are selected. The *Darbi un notikumi* (Works and Events) section displays the works written by both writers on a timeline and sorts biographical events in the writers' lives. Another section is the *laika joslas rīks* (time zone tool) which, depending on the time period selected, displays the people who were in contact with the writers during the specified period, places visited and works created, or the periodicals in which they were published. In turn, each of these objects includes more extensive information about the specific person, place or work. For example, biographical information about the person Dora Stučka (Rainis' sister) can be found: spelling forms for her name in other languages and links where more information about her can be found (VIAF, *Wikipedia*, *literatura.lv*, etc.). Other types of reference to Dora Stučka in the collection have also been listed. It is the same with expanded information about places and works, links to other websites and references have been specified. In this way, a collection user can easily and quickly obtain additional information about the specific object – both general information and all references to mentions in the collection itself.

Keyword searching in the collection is based on two principles – a specific name can be searched as an object or as an entity. If the sought-for word is selected as an object, all documents with the specified word in the title are displayed. *An entity is something that exists apart from other things, having its own independent existence* [Cambridge Dictionary 2021]. An entity can be anything (object, being, phenomenon or concept) that can be independently named and identified; it can be concrete or abstract, real or imagined. *The entities are the key objects of interest to users in a particular domain. Each entity can be described by its primary characteristics, called attributes. The attributes of the entity serve also as the means by which users formulate queries and interpret responses when seeking information about a particular entity. The relationships explain the connections between and among entities* [Galeffi 2016]. All the texts included in the collection (biographies of Rainis and Aspazija, descriptions of the works of both poets, published letters) are annotated, marking the entities, identifying and classifying them. The entities possess attributes that allow them to be divided into classes. The *RunA* collection uses such entity classes as: Person, Institution, Place, Time, Concept, Job, Event, Buildings and Edifices. If a case of entity-based search, the word is displayed as belonging to a specific entity class – institution, job, person, etc. A separate page is created for each entity, where the forms of various names of the entity are saved in a structured manner, including its names in different languages, as well as links to external information sources, such as the Latvian National Encyclopaedia, *Wikidata*, *Wikipedia*.

The collection's functionality and development is directly related to the document annotation process. All the texts included in the collection (biographies of Rainis and Aspazija, descriptions of the works of both poets, published letters (1894 to 1897)) have been annotated, indicating the entities, identifying and classifying them. The annotations form a data set that allows both *RunA* collection objects and entities, as well as the entities mentioned in the text, to be linked with data located in external Web information sources [Goldberga 2020]. As can be seen, the texts of annotations and letters in many places are coloured and there is a listing of coloured objects at the side. Moving the cursor over these objects offers a more comprehensive insight, links to other resources, references in other texts, reference forms, thus enabling users to see what other objects (people, places, works, etc.) this particular object is linked to in the data network. During the annotation process, specific text objects or entities – date, place, work, person, concept – are explained and identified. This helps create a system that combines several classes of entities (person, place, institution, time, event, work, etc.), which in turn includes entities corresponding to a specific class. This enables arranging the persons mentioned in the letters – who are not always referred to by a name or a family name, rather by particular forms of endearment or family relationship – by linking them to a specific entity, where

all possible mentions of that person are stored. Thus, annotation is an additional text objects research task, which allows gaining both a more comprehensive understanding of the people, places and works mentioned in the text, and a broader view of their links with other objects. Two levels of data storing – annotations and entities – provide researchers with diversified means of data mapping from text marking to entity identification [Rašmane, Goldberga 2020].

As mentioned above, the data network established by the collection is an important representation of the data's mutual links. The data network visually depicts the interlinking between the collection's objects and entities. This is the means by which a collection user can identify the link of an object or entity of interest to other objects or entities.

The collection has two types of networking – a network of objects and a network of entities. The object data network is only for annotated text files, i. e. its destinations are text documents (objects) and the links are the entities they have in common. The entity data network displays entities as node points, while the links between them represent text documents (objects), where trunked entities are mentioned. By clicking on the link, the system immediately finds all the documents where both entities are mentioned.

The article further on demonstrates what information the study of a short period Rainis and Aspazija spent in Panevėžys (the city is located in Lithuania, near the Latvian border) may yield.

The review of the life and works of Rainis and Aspazija can be started by getting acquainted with their biographies in Latvian and English. The collection includes Rainis' biography by Gundega Grīnuma and Aspazija's biography by Ausma Cimdiņa, whose texts are colour-coded for the purposes of annotation, thus indicating various aspects of each poet's life and work.

The image shows a digital text interface for a biography of Rainis. The text is color-coded and includes a search tool overlay. The search tool shows the following results:

- Normalizēta Rīgas izmeklēšanas cietums
- Klase: Iestāde
- Entity: Rīgas izmeklēšanas cietums

On the right side, there is a list of entities:

- Latvija
- Šveice
- A. Gulbja grāmatu apgāds
- Nacionālais teātris
- Krievija
- Itālija
- Francija
- Austrija
- Vācija
- Beļģija
- Polija
- Baltkrievija
- Ēģipte
- Zviedrija
- Norvēģija
- Palestīna
- Sofoklis, ap 496-406 p.m.ē.
- dzejnieks
- Dunavas pagasts
- Tadenava
- Varslavāni
- Randene (viensēta)
- Spēlēju, dancju

Figure 1. Biography of Rainis. Available: <https://runa.lnb.lv/objects/779211/>

From the biographies, it is possible to move to the data network, where Rainis' biography, being centred, branches out in all directions. Currently, it is not possible to get directly from the network to an entity, nevertheless, the network clearly and aesthetically displays how multifaceted Rainis' life and work are. Correspondingly, the objects referenced in the data collection are displayed on the right side of the text of Rainis' biography. The list includes a reference to *Panevėžys*. Gundega Grīnuma writes: "In March, (coloured yellow, clicking on the word 'March', we see the standard form – *March 1897*, class – *Date*, the entity *March 1897*), he starts working as a lawyer in Panevėžys (coloured light green, clicking on it displays the standard form *in Panevėžys*, class – *City/Town*, entity – *Panevėžys*), at the end of May, (coloured yellow, 1897) is arrested on charges of defaming a lawyer in *Dienas Lapa* ("Daily News") and finds himself in the local prison (coloured brown, standard form *Panevėžys Prison*, class – *Institution*, entity *Panevėžys Prison*). A month later (coloured green, standard form *June 1897*) Rainis, along with other *jaunstrāvnieceki* (New Wave, a pre-independence national movement), is accused of anti-state activities and transferred to Liepāja Prison (coloured brown, standard form *Liepāja Prison*), then to Rīga Prison (coloured brown, *Rīga Remand Prison*)." It can be seen that dates and names are mentioned, as well as indicators as to the class to which the object belongs and the official name of the entity. This saves the volume of the text, specifies the dates, places, and names, for instance, the entities of the Panevėžys time mentioned here are – March 1897, Panevėžys, Panevėžys Prison, June 1897.

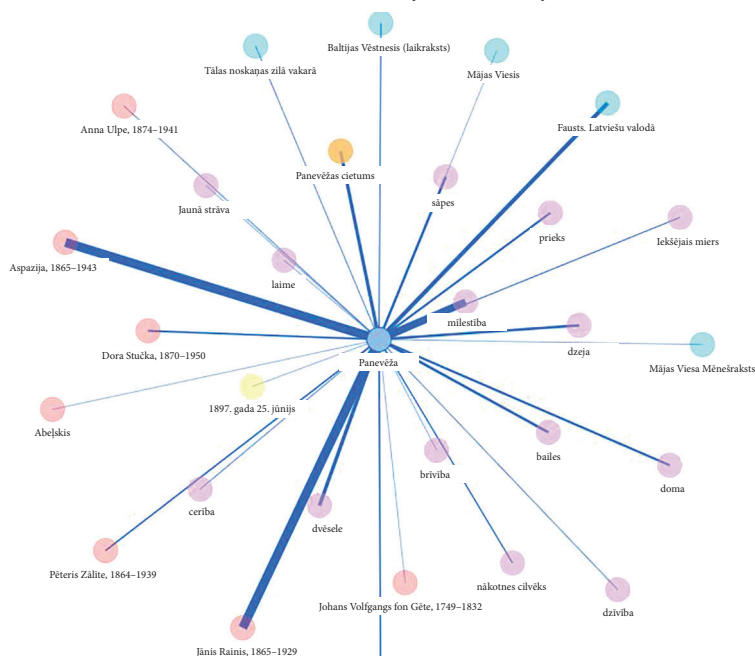


Figure 2. Data network for Panevėžys. Available: <https://runa.lnb.lv/entities/1435/network/>

Aspazija's biography does not mention the Panevėžys period in the life of both writers, but her letters to Rainis in Panevėžys Prison appear in the data network. A challenge for the future will be to synchronise the biographical data and entities in both texts.

When searching by the word *Panevėžys* in the object section, two types of documents appear, one of which is a photograph – Rainis' residence in Panevėžys. There is a description of the object: "Exterior of the building in Panevėžys, where the poet and playwright Rainis (real name Jānis Pliekšāns) lived in the spring of 1897, working as a lawyer in the Panevėžys County Court. Rainis rented an apartment in the market square, on the second level of the Abeļskis building". The date of the photograph has been specified as being between 1897 and 1930, the original is in the Latvian National Archives and the Latvian State Archive of Audiovisual Documents. The link <http://dom.lndb.lv/data/obj/729092> provides metadata – more detailed information about the photograph, for example, that it is not protected by copyright. However, it must be acknowledged that the building in Panevėžys has survived and has a memorial plaque, photographs of which should have been obtained and included in the list of objects.

The second group consists of a set of letters and notes that Rainis and Aspazija exchanged during his time in prison. Rainis planned to work as a lawyer in Panevėžys and Aspazija accompanied him. Aspazija (Johanna Emilija Lizete Rozenberga) divorced her first husband Vilhelms Maksis Valters on 12 February 1897. They married in 1886, but after bringing his wife's family home to ruin, Valters emigrated to the USA in 1892 and as his wife did not accompany him, they never met again. She first used the pseudonym *Aspazija* in 1887 when publishing a poem. She met Rainis (real name Jānis Pliekšāns) in 1894. Rainis and Aspazija were married on 21 December 1897. As a result of his political activities, Rainis was exiled to Slobodsky in central Russia, but Aspazija accompanied him. In Panevėžys, they lived as an unmarried couple, she could only visit Rainis in prison on Sundays and communication between the two was based on official and unofficial correspondence in German (so that prison staff could read the texts).

The largest set of objects in the *Panevėžys* section comprises letters. Handwritten letters, transcripts of German text and translations into Latvian are published here. The researcher thus has an opportunity to check the handwritten text and the accuracy of its transcription. The letters have been translated by Beata Paškēviča, and the author of the comments is Jānis Zālītis. This information is important, because it is critical for researchers to know how much they can rely on translators or authors of comments. In this case, Jānis Zālītis is one of today's foremost authorities on Rainis, and Beata Paškēviča is a well-known translator. The name and surname of

the editor – Sandra Zobena – are also mentioned. This is followed by a description of the letter and an indication of the original's location – the Association of Memorial Museums, where most of Rainis' and Aspazija's letters are held. A link to the object is displayed. The Panevėžys-period letters of Aspazija and Rainis have been fortunately commented on within the framework of one of the Association of Memorial Museums projects and can also be found on their website. The comments indicate problems in deciphering the text, for example, in Aspazija's letter of 13 June (25 June) 1897, the word *zemenītes* (little strawberries) is commented on: In the original letter, the word is illegible (*Erchens*) and could also be translated as *zirniši* (*Erbsen* – little peas)". Consistent with the Baltic climate, strawberries are more likely to be cooked in June than garden peas. Aspazija took food to Rainis in prison every day.

The comments to the letters take notice of various events, persons, and proposed literary works. For example, in the aforementioned Aspazija's letter, the word 'sister' is commented on: "On 12 (24) June, Aspazija, Rainis' mother and sister Dora were unexpectedly granted permission to meet with the arrested person." The main issues covered in the letters include the translation of Goethe's tragedy *Faust* (Rainis continues this work in prison, Aspazija reads through the manuscripts, texts are exchanged back and forth), Henrik Ibsen's play *Peer Gynt* (Rainis is reading it), the planned novel/publicistic essay *Nākotnes cilvēks* ("Future Man") and Rainis' family. This can also be seen in the comments. Aspazija writes: "I have enclosed some notes for you with my thoughts about Future man", comment: "*Future Man* – Rainis' notes on the proposed (initially – in collaboration with Aspazija) novel (long poem, psychological essay, extended diary, etc.) on new age ideas, morality, art media, in terms of the concept of a new type of personality 'a contemporary Faust'. (For more detail, see Rainis' notes, RKR, 24; Viese S. *Jaunais Rainis* ("The Young Rainis"), 1982, pp. 97–230; Samsons V. *Dzejas Olimpā un... uz barikādēm*, ("Poetry on Olympus and... on the barricades"), 1985, pp. 100–140)."

Another example from Rainis is around June 5, 1797. Rainis reads H. Ibsen's play (*I am also half through with "Peer Gynt"*), comment: "Rainis talks about H. Ibsen's play "Peer Gynt" and its evaluation in the book by the German literary scholar and writer L. Andreas-Salome "*Henrik Ibsen's Frauen-Gestalten noch seinen sechs Familien-Dramen*" (Berlin, 1892); a book with the poet's notes and underlines is kept in his personal library; 77419. He also mentioned "*Peer Gynt*" in the notes of the diary of that time (RKR, 24, p. 188). Later, after 1905, working on the materials of the historical epic, Rainis especially noted H. Ibsen's symbolic depiction of "Peer Gynt" as corresponding to the depiction of the people's terrible suffering. " (<https://runa.lnb.lv/objects/62683/>)

To the right of each letter, there are objects that contain references, such as, in this letter (from Rainis to Aspazija during his time in Panevėžys prison around 5 (17) June 1897):

Aspazija, 1865–1943; Jānis Rainis, 1865–1929; Faust. In Latvian; Panevėžys; love; June 5, 1897 (v.s.); Peer Gynt; Henrik Ibsen, 1828–1906; inner peace; joy.

The screenshot shows a digital archive interface. The main content area displays a letter in Latvian. The text is as follows:

Dein Großliebingskäfchen.

Nu esmu atkal viens, mīļputniņ, bet tā man ir tāda laba, mierīga vienatne, esmu tik priecīgs, un man netrūkst nekā, mans mīļais zelta kukaiņiņš jau vienmēr ir pie manis, es to jūtu, sāk rastiēt tieša vīpa klātbūtnē. Tu, mana mīļā, mana mīļā, cik laba Tu esi. Lai arī nāktu simtreiz tik jauni, mana mīļā ir te un mani tur. Es negribu vairs krist. Es negribu izsamst, Tu pazīsti manu sīktumu, es spēju daudz izturēt, ne aci nepamirkšķinot. Vīpi neredzēs mani saraujamies, es to pārvarēšu. Sorīt es turpinu. Vakar pastrādāju tikai mazliet, no „Fausta” 20 pantus. Arī šodien negrib tā īsti laibi veļķēties, tikai arī traucēts.

Grūbu šodien strādāt lielākoties pie „Fausta”, vēl ir gandrīz 7 lappuses un tikai 5 dienas, jo vajadzētu gan lau desmitos izsīstīt, vismaz vienpadsmitos no rīta. Un vēl ir tik daudz, ko uzlabot. Kā mēs ar to darīsim, manu mīļo zelta mīļputniņ? Esmu Tev novīlējis labu rītu, arī vakaros es vienmēr atvados no sava amatistkukaiņiņa. Mēģini visur uzrakstīt labojumus un tad atiesi to man šūrp, es tad izmēģināšu savu laimi. Šviedien varbūt atnes līdzī projektus, un pirmdien Tu tos saņemsi no manis atpakaļ. Mēģināšu rakstīt pasakdrojumus bez latviska teksta, jo pastāvīgi skraidīt pie prokurora arī nav visai patīkami.

Patlaban skatu cauri mīļmūliņai, zaļzalkukaiņai tulkojumū.¹

Arī stenogrāfiju, milulit, atnūti šūrp; ja es to iemācīšos, tad tikai šēit. Arī „Pēru Gintu” esmu pusi izlasījis, bet es nesaprotu gandrīz nekā. Pasakdrojumus, ka viss nozīmījot vienīgi norvēģu tautu un nevīs individuāli, ir gan kristiet nodelēdēs, bet tam jānāk no Bīsmā un tas vēl jāsavieno galvenokārt ar visām divālnībām.² Vismazāk es saprotu to, kāds sakars būtu egoismam ar juceklīgu fantāziju. Izstrīzāmā abas līnijas iet nesaisīti blakus viena otrai. Dažas atsevišķas vietas izstrīzāmā ir skaistas, bet bieži vien tas rada pretīgumu. Tu taču esi to izlasījis?

The sidebar on the right contains the following information:

OBJEKTI, KUROS IR NORĀDE

- Aspazija, 1865-1943
- Jānis Rainis, 1865-1929
- Fausts, Latviešu valodā
- Panevėža
- mīlestība
- 1897. gada 5. jūnijs (v.s.)
- Peers Gints
- Henriks Ibsens, 1828-1906
- iekšējais miers
- prieks

Figure 3. Letter from Rainis to Aspazija during his time in Panevėžys prison around 5 (17) June 1897.

Available: <https://runa.lnb.lv/objects/62683/>

Clicking on the name *Aspazija*, one can see her photograph, find out the spelling of her real name, surname and pseudonym in Latvian, as well as in Russian, English, German; there is a short reference to *Vikipēdija* (Latvian Wikipedia) as to who she is (why not to Ausma Cimdiņa’s biography, which can be found in the data set?), one finds 205 references to her name in the data set, as well as a link to the portal *literatura.lv* with the description of Aspazija’s biography and works, as well as other links: ISNI, VIAF, ALEPH AUT, LV Wikipedia, EN Wikipedia, Wikidata, Wikimedia Commons, *Zudusī Latvija*, *Nekropole*, RU Wikipedia, DE Wikipedia.

Another word is *prieks* (joy); it can be found in Rainis’ and Aspazija’s letters alongside its Latvian synonym *liksme*, and its translations into other languages – Eng., – *joy*, Ger. – *Freude*, Rus. Радость, Eng. *happiness*. The available photograph is not related to Rainis and Aspazija, search links and mentions of *prieks* displayed in the data set of the Panevėžys period, feature *prieks* nine times, but twice in Grīnuma’s biography, in Latvian and English. The references to the concept’s source are followed by a timeline which displays the number of mentions. Here the project’s potential for researchers can be seen, it will be possible to locate specific concepts, people or literary works, etc. within the entire data set, to understand in which time periods particular issues were of interest to Rainis and Aspazija. The researcher will no longer have to read the 30 volumes of Rainis’ Collected Works to discover when he mentioned *Ibsen* or *love*; thus, research opportunities will be enhanced.

On the other hand, searching for data by the entity *Panevėžys*, reveals that the prison is an institution and, that using the term *Panevėžys Prison* correctly in Latvian, Lithuanian and English, the site of the prison can be viewed on *Google Maps*. The data network shows that in Rainis' life, Panevėžys Prison is related to Panevėžys, Liepāja Prison (Rainis was transferred there), two works – the *Mājas Viesa Mēnešraksts* ("House Guest Monthly") magazine (Rainis participated in a discussion on Goethe's tragedy *Faust*) and the Latvian translation of *Faust*, six concepts (love, joy, Future Man, soul, poetry, pain) and six persons (it is not clear though, why all the persons mentioned in the letters are not displayed, for example, Goethe is in the network, but Ibsen is not). All the letters, where Panevėžys Prison or one of its forms is mentioned, are indicated (for example, *cietumiņš* (diminutive form of prison), *there, here, I came through the gate*, etc.).

In the further development of the dataset, up-to-date information and references to more recent research on Rainis' and Aspazija's life and works should be added to the data sources; e. g., in the annotation *Goethe. Faust: a tragedy (1898)* ("Gēte. Fausts: traģēdija" (1898)) by Astrīda Cīrulle it is emphasized: *His [Rainis'] translation of Faust is still alive today. Indicative of that is the international conference devoted to the centenary of the translation*. The conference took place in 1997, but while in 1999, the conference proceedings "Rainis and Goethe: centenary of translation" (*Rainis un Gēte: tulkojuma simtgade*) were published, they are not referred to in the dataset.

Panevėžys is also connected with another entity – *Panevėžys, Brīvības laukums 1*, which is the present-day address of Rainis' and Aspazija's residence. The *laukums* (square) can be seen on *Google Maps*, its name in Lithuanian, at present and in the Soviet period (why is its 19th century name not mentioned?) – *Laisvės aikštė 1; Elektros gatvė 1*. We discover that the address is only mentioned in Jānis Zālītis' comment to Rainis' letter of 31 May (12 June) 1897, it is the first letter Rainis wrote to Aspazija, because it is the day he was arrested, and there are extensive comments here, including on Rainis' place of residence: "As early as on 5 (17) February, having paid the state fee of 40 roubles, he received a certificate on the right to "conduct private lawsuits in the district of the Panevėžys County Court". On the same day, a five-room apartment was rented at the market square, on the second level of the Abeļskis building, and on 20 March (1 April) 1897, Rainis and Aspazija travelled to Panevėžys." Another entity is the Panevėžys Magistrate's Court precinct, which is also mentioned in the comments to Rainis' first letter. Neither address has a data network, even though both Aspazija and Rainis stayed in the apartment, as well as did Rainis' mother and sister when they visited.

The Panevėžys period can be searched for with the help of two other tools: *Darbi un notikumi* (Works and Events) and *Laika josla* (Time Zone). The *Events* mention that Rainis was a lawyer in Panevėžys in 1897 and was arrested for belonging to the

jaunstrāvnieki (New Wave, a socio-political movement with a social democratic leaning), whereas the fact that Aspazija was in Panevėžys is not mentioned; but in the Time Zone tool, Aspazija's places of residence are detailed, whereas Rainis was not present at that time in Lithuania or Panevėžys, but translated Goethe's *Faust*. Evidently both tools are still under construction.

The developers of the *RunA* collection have to focus more on the collection user. The project is aimed at a broad spectrum of readers – web users who enjoy browsing the Internet. Though the reliability of sources does not concern many groups of the NLL readers, the dataset can also be used by pupils and students to get to know Rainis and Aspazija as persons and as writers, and thus, besides the wikilinks, the references to other, scholarly sources should be provided in the collection, since schools and universities do not consider *Wikipedia* to be a representative and scientific source. The dataset has a great potential as a supporter of researchers and facilitator of new research given that researchers are mostly the ones interested in the works, documents and images of Rainis and Aspazija as well as the use of semantic relations of entities and networks in research.

Photographs, visualisations of links and networks are a significant part of the dataset. The use and analysis of images poses different questions: *How does the visual genre used affect the research? In other words, how does the medium shape the inquiry and the message? What kinds of stories can images tell? When does image-ing become theorizing? What relationships are possible between visual images and words?* [Weber 2007: 51]. Data visualisations are well-developed but images of entity objects are left isolated; they lack a clear narrative as to why an image has been added or what message a text or an image is meant to convey.

Thinking about the development of this collection and other similar digital datasets in the future, cooperation between experts (in terms of content and technical development) is important in order to make such kind of linked data collections more purposeful and practical for a variety of users – the general public and academic researchers.

As can be seen, the *RunA* offers an extensive collection of data regarding Rainis' and Aspazija's life, works, immediate contemporaries, and provides references to the concepts mentioned in the correspondence and works of both writers. While the amount of information is extensive and useful for students, researchers, and other interested parties, it is important to determine the role of linked data in the field of research, such as the analysis of a writer's creative heritage or a specific literary work. Undeniably, the linked data helps to spotlight the key points relevant for the analysis faster – persons, places, organizations, etc., but it is only the first step in the research. As political scientist Henrik Skaug Sætra points out in his study of the relationship between science and data, science is an art form – it is not only

technical, but also creative, and it requires creativity and ingenuity that only man can provide. Though the scholar does not reject the role of data in research, he claims that the interpretation of information and causal relationships cannot be explained by data [Sættra 2018: 520]. A research professor of cognitive science Margaret Boden, analysing the concept of creativity, suggests that *there are three types of creativity, in that it either consist of – combining known concepts in unknown ways, exploring the adjustment of the constellation of existing structures or transforming the space in which known structures exist* [Boden 1998: 348]. It follows that creativity is based on knowledge and structures, without which transformation or experimentation would not be possible. The data set is important for the development of new and creative interpretations and new directions of research, which are an integral part of the research process.

The *Rainis un Aspazija* data collection is still at an early stage since the vision for it is diverse and multifaceted. Digital humanist Anda Baklāne emphasizes: *If a traditional text is rigid, linear and limited, it has a defined point of beginning and ending, then on the Web we are dealing with a network where we are free to choose the direction to head to further* [Baklāne 2020: 185–186]. The reader can choose whether to explore the biography of Rainis and Aspazija or to pursue a deeper study of works of both authors but either path can lead to learning about some other person, geographic location, concept or author. Thus, the reader himself becomes the story's creator. The aforementioned examples reveal what and how a modern reader can learn by reading a literary text and using the opportunities offered by linked open data, which allows to determine the connection between objects, persons, events, etc. with the help of various tools, and thus build a pathway from a literary work, letters, diaries, etc. to other related objects, events, places, etc. Hence, the modern reader forms his own reading paradigm and directions.

The work invested in creating the *RunA* collection is a major contribution to the Latvian literary research. Such new approach to research of writers and their works helps to bridge the traditional and modern and amplifies the opportunities for text analysis, reader's participation as well as expands the scope of potential directions searches.

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