

## The Slovenian Digital Humanities Landscape – A Brief Overview

by Jurij Hadalin

When thinking of a status quo in the field of Digital Humanities in Slovenia (in wider humanist professional circles still an unknown term) one can see a remarkable progress on the one side, but also gets the feeling that its penetration into scholarly and student circles remains remarkably low and at times even painful. The level of the reception of new methods and tools can be described with an anecdote that occurred a few months ago in the process of submitting project proposals for grants to the Slovenian Research Agency. One research proposal was based on an application of computer linguistic methodology to the collection of digitised stenographical minutes of the Slovenian Parliament. The aim of the project was to ensure a computer readable and advanced tagged corpus, which would allow excerpting shapes of the main problems of the Slovenian society in the last 35 years. The project was prepared in a cooperation of historians and linguists from the Jozef Stefan Institute<sup>1</sup> (the biggest and most influential Slovene technical research institution). A digitally mature, but methodologically very conservative historian of the younger generation was listening to the conversation and said in pejorative tone that this meant turning history into „html history“. Especially because almost all mentioned material was already digitised and available in PDF format. At that point no one even bothered to point out that we are talking about „xml history“ and the fact that OCR is not the same as computer readable. Not to mention that a „find“ button, although helpful, is not exactly at the peak of new technology.

But such technical „mumbo-jumbo“ should not and in fact does not bother the huge majority of the researchers who use many different digital resources daily, mostly online. Since I am here to describe not only a current state of art, but also to give a short review of the last 20 years of Slovenian Digital Humanities, I should mention that our

state was founded almost exactly 23 years ago. We celebrated the 20th anniversary of modern Internet in Slovenia last November. 21 years ago the first Slovenian server started to operate at the afore-mentioned Jozef Stefan Institute<sup>2</sup>, thus enabling to spread the activities of the Academic and Research Network of Slovenia (Arnes), which is the main public institution that provides network services to organizations in the field of research, education and culture.<sup>3</sup> Today's average rate of regular internet users in Slovenia in the age group from 10 to 74 years is around 70 per cent.<sup>4</sup> In the beginnings of the computer era it was of course much lower, but it seems that Slovenians are getting attracted to the new media regardless of age - it only depends on the digital contents that a respectful organization is willing to share. And here we come to the slippery parquet of politics which dominates some aspects of Slovenian public life, since several aspects of our history are still the issues of daily politics and thus public interest. At the Institute of Contemporary History, we offer a wide range of digital contents, but only one was constantly in the centre of public interest – a database named „Smrtne žrtve med prebivalstvom na območju Republike Slovenije med drugo svetovno vojno in neposredno po njej“.<sup>5</sup> On the other hand a platform called „Videolectures“ was developed at Jozef Stefan Institute, publishing scholarly lectures in a video format which was met with instant success in Slovenia and abroad.<sup>6</sup>

As in other parts of Europe, first serious attempts to include com-

<sup>2</sup>Mineva 20 let od spletnega strežnika s prvimi slovenskimi stranmi: Prvi interaktivni multimedijški portal, MMC RTV Slovenija, <<http://www.rtvlo.si/znanost-in-tehnologija/mineva-20-let-od-spletnega-streznika-s-prvimi-slovenskimi-stranmi/323599>> (25.07.2014).

<sup>3</sup>ARNES homepage, <<http://www.arnes.si/en.html>> (25.07.2014).

<sup>4</sup>RIS – Raba Interneta v Sloveniji, <[http://www.ris.org/c/1184/Uporabniki\\_interneta/?preid=656](http://www.ris.org/c/1184/Uporabniki_interneta/?preid=656)> (25.07.2014).

<sup>5</sup>Tadeja Tominšek Cehulic, Mojca Šorn, Marta Rendla, Dunja Dobaja, Smrtne žrtve med prebivalstvom na območju Republike Slovenije med drugo svetovno vojno in neposredno po njej (Death Toll in the Population on the Territory of the Republic of Slovenia during WWII and Immediately Afterwards), <<http://www.sistory.si/zrtve/>> (25.07.2014).

<sup>6</sup>Videolectures.net. Exchange ideas and share knowledge, <<http://videolectures.net/>> (25.07.2014).

<sup>1</sup>JSI – Institut „Jozef Stefan“, <<http://www.ijs.si/ijsw/JSI>> (25.07.2014).

puter methods in the scientific research in non-technical disciplines were used in the Social Sciences, which remain a very important player to this day. Early beginnings of the Slovenian Data Archive „*Archive of Social Science Data*“<sup>7</sup> (established in 1997) can be traced in the first attempt to measure public opinion in the socialist world in 1968 at today's Faculty of Social Sciences in Ljubljana. A still existing longitudinal study of Slovenian public opinion provided a vast quantity of raw data, which is now also an important source for historians. Early and rather widespread use of computing methods can also be seen as the reason for starting the only informatics graduate and master university program in the non-technical disciplines in Slovenia today, namely Social Informatics at the above mentioned faculty.<sup>8</sup>

Digital Humanities showed on the horizon later, at the beginning of the 1990s. Some pioneers/computer enthusiasts started to think about the use of newly available methods, most remarkably in the field of ethnology.<sup>9</sup> The other discipline which grasped new ideas quickly was literary history. The loudest voice in the first years belonged to Miran Hladnik from the Faculty of Arts in Ljubljana, who has been introducing Digital Humanities in curricula since 2009, which is probably the only serious attempt at such action in Slovenia until now. In his wiki on Digital Humanities Hladnik names most of the researchers in Slovenia that identify themselves as digital humanists. The number, although maybe not complete (I miss a few names), does not reach more than 30 persons.<sup>10</sup> Slovenia may be a small country where everyone is familiar with his neighbours and colleagues, but taking into account the number of events, meetings and agendas that I attended,

<sup>7</sup>Arhiv družboslovnih podatkov, <<http://www.adp.fdv.uni-lj.si>> (25.07.2014). Slovenia is also a CEESDA member, with Archive of Social Sciences Data as partner.

<sup>8</sup>Monika Kalin Golob / Anton Grizold (eds.), Fakulteta za družbene vede: 50 let znanosti o družbi. Založba FDV, Ljubljana:2011, <<http://www.fdv.uni-lj.si/docs/50-let/50-let-znanosti-o-druzbi.pdf?sfvrsn=4>> (25.07.2014).

<sup>9</sup>See bibliography of Jurij Fikfak.

<sup>10</sup>Miran Hladnik, Digitalna humanistika na Slovenskem – Wikiverza (13. 12. 2013), <[http://sl.wikiversity.org/wiki/Digitalna\\_humanistika\\_na\\_Slovenskem](http://sl.wikiversity.org/wiki/Digitalna_humanistika_na_Slovenskem)> (25.07.2014).

the circle of researchers seriously involved in the Digital Humanities is, indeed, rather „intimate“. Luckily the number of users of digitised and Digital Humanities material is increasing rapidly and thus incensing the interest of researchers and enthusiasts, and allows a more steady production. Literary historians at the Research Centre of the Slovenian Academy of Sciences and Art (SRC SASA)<sup>11</sup> are heavily responsible for the usage of new methods, since they started to publish online critical editions of older literary works, introducing the TEI standard (Text Encoding Initiative) in Slovenia for the first time. In cooperation with the linguist Tomaž Erjavec and the literary comparatist Jan Jona Javoršek from Jozef Stefan Institute, many smaller, but groundbreaking projects emerged and are still growing. One of the best known results is the digital edition of the Slovenian biographical lexicon.<sup>12</sup> Even the merit for the introduction of the term Digital Humanities in the Slovenian language goes, according to Miran Hladnik, to the member of the literary historian/linguist club Matija Ogrin, who introduced the term in a foreword to a book of proceedings from the „Scientific Editions and Electronic Media“ conference in 2005.<sup>13</sup> Together with Tomaž Erjavec he also received a Google Digital Humanities Research Award for his work on critical editions in 2010.<sup>14</sup>

As is seen in the European Digital Humanities community, also in Slovenia groundbreaking work was done by the linguists. Slovenia is not a member of CLARIN at the moment, although this research infrastructure is enlisted in the Slovenian Research Infrastructure Development Plan 2011–2020.<sup>15</sup> Slovenian CLARIN was left out of financ-

<sup>11</sup>Institute of Slovenian Literature and Literary Studies, <<http://isllv.zrc-sazu.si/en/predstavitev#v>> (25.07.2014).

<sup>12</sup>Now merged into a new project, called Slovenian biography portal, <<http://www.slovenska-biografija.si/>> (25.07.2014).

<sup>13</sup>Matija Ogrin, Uvod. O znanstvenih izdajah in digitalni humanistiki. Ljubljana 2005, <[http://nl.ijs.si/e-zrc/bib/eziss-Ogrin\\_Matija.pdf](http://nl.ijs.si/e-zrc/bib/eziss-Ogrin_Matija.pdf)> (25.07.2014).

<sup>14</sup>Matija Ogrin, Biography, <<http://isllv.zrc-sazu.si/en/sodelavci/matija-ogrin-en#v>> (25.07.2014).

<sup>15</sup>Nacrt razvoja raziskovalnih infrastruktur 2011–2020, <<http://www.arhiv.mvzt.gov.si/fileadmin/mvzt.gov.si/pageuploads/pdf/znanost/RISS/NRRI.pdf>> (25.07.2014).

ing at the beginning, but financial support was promised for the near future. A series of projects was done in the last 20 years in this field. The most useful project, which has been funded for the past 15 years by different research projects, is a text corpus of written and spoken Slovenian language which is now embedded under the name „GigaFida“ into the web portal *Slovenscina.eu*.<sup>16</sup> The Slovenian language has around two million speakers and it is necessary to keep up with the technical development to ensure the future use of this language, which could eventually be extinct in the digital environment. One of the motors of the Slovene digital linguistic community, Simon Krek, once plastically described how lagging behind digital standards of bigger languages could affect the Slovenian language in the future: Our fancy new talking refrigerators simply would not want to speak Slovenian.

Speaking of text corpora and their use we should mention the fact that the awareness of the existence of copyright and its management came to the Slovenian research and cultural heritage circles very late. But while the use of copyrighted material to produce the corpora did not raise any problems, the newly introduced right of a person to be forgotten and the very strict policy on the protection of sensitive personal data hindered the use of corpora, since the Information Commissioners Office issued an Act that forbade searching for personal names.<sup>17</sup> The Act was focused on the corpus „Nova beseda“<sup>18</sup>, which is part of the activities of the Fran Ramovš Institute of the Slovenian Language at SRC SASA.<sup>19</sup> Insensible provisions which gave the creators a lot of headache were later annulled and today the base is searchable for names and their collocations (surnames) without restrictions.

<sup>16</sup>Slovenscina.eu homepage, <<http://eng.slovenscina.eu/>> (25.07.2014).

<sup>17</sup>Odlomba Informacijskega pooblaščenca Republike Slovenije št. 0612-63/2012/5 z dne 05.07.2012, <[http://www.lenartkucic.net/wp-content/uploads/2012/07/Institut\\_za\\_slovenski\\_jezik-Odlomba\\_ZIN-anonim.pdf](http://www.lenartkucic.net/wp-content/uploads/2012/07/Institut_za_slovenski_jezik-Odlomba_ZIN-anonim.pdf)> (25.07.2014).

<sup>18</sup>Fran Ramovš Institute of Slovenian Language ZRC SAZU Corpus Laboratory Nova beseda, <[http://bos.zrc-sazu.si/a\\_beseda.html](http://bos.zrc-sazu.si/a_beseda.html)> (25.07.2014).

<sup>19</sup>Inštitut za slovenski jezik Frana Ramovša, <<http://isjfr.zrc-sazu.si/en/predstavitve#v>> (25.07.2014).

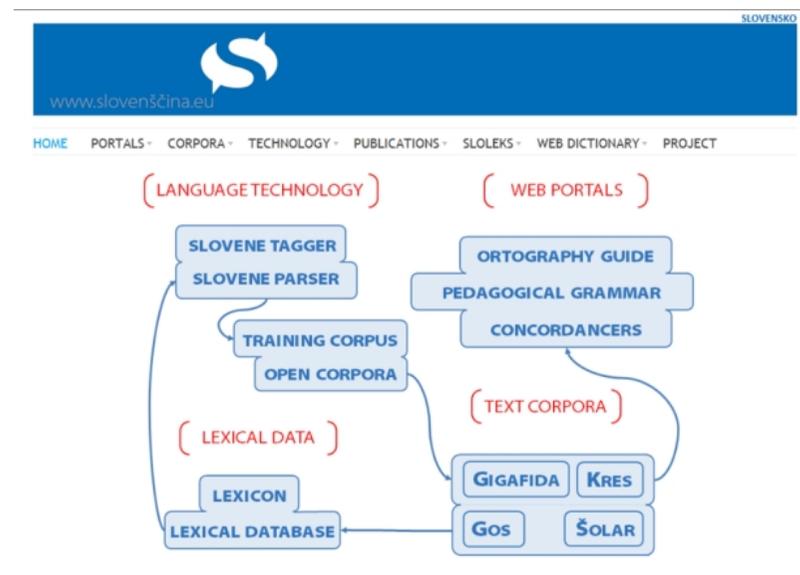


Fig. 1: Screenshot of the Slovenscina Portal: <http://slovenscina.eu>, 21.06.2014

An even wider debate on Digital Humanities began in the second half of 2013 not in scientific or specialized journals, but in the daily newspapers. Since the middle of the 19th century the position of the Slovenian language was calm, when the Alphabet Dispute from the early days of national romanticism<sup>20</sup> ended with the quick victory of Gaj's Latin alphabet. In 2013 a new dispute arose concerning the making of the new dictionary of Slovenian written language. The Slovenian government finances only one group of linguists at the Fran Ramovš Institute, whose methodology is conservative and tends to perfect accuracy, but is also much slower when trying to catch the rapid

<sup>20</sup>Slovenska abecedna vojna, <[http://sl.wikipedia.org/wiki/Slovenska\\_abecedna\\_vojna](http://sl.wikipedia.org/wiki/Slovenska_abecedna_vojna)> (25.07.2014).

changes in the Slovenian language, spoken or written. A rival group, inspired by Digital Humanities methodology, proposed to consider making new vocabulary in a modern way, using digital methods, tools and even crowdsourcing. Following this way, new vocabulary could be better adapted to the present reality and would be – by the way – much cheaper to make. Even more important was that the rival group, gathered around the Institute Trojina<sup>21</sup>, opposed the restrictive use of data for the dictionary project and demanded open access to all data. Dictionaries/vocabularies made at the Scientific Research Centre of the Slovenian Academy of Sciences and Arts (SRC SASA) are usually first published as printed volumes and are offered in digital form later. Even access to the latest online version of the vocabulary project is still restricted.<sup>22</sup> The same problem applies to the fact that the methodology is also used in the process of updating the grammar.<sup>23</sup> The dispute is still unresolved, although even the minister of culture gave a clear signal that efforts should be conjoined<sup>24</sup>, awaiting new financial schemes for the research programs in 2015. A „war“, as the minister said, put changes in methodology into the very centre of the public sphere. Interestingly, the conservative approach was usually more likely to be defended by journalists and established researchers.<sup>25</sup>

Considering the very vivid Digital Humanities scene in some dis-

<sup>21</sup>Trojina, Institute for Applied Slovene Studies, <<http://www.trojina.si/en>> (25.07.2014).

<sup>22</sup>Inštitut za slovenski jezik Frana Ramovša ZRC SAZU. Slovar slovenskega knjižnega jezika, <<http://bos.zrc-sazu.si/sskj.html#naslovnica>> (25.07.2014).

<sup>23</sup>Simon Krek, Slovenski pravopis: Ali je pilot v letalu? <[http://www.simonkrek.si/blog/blog\\_pilot.html](http://www.simonkrek.si/blog/blog_pilot.html)> (25.07.2014).

<sup>24</sup>Maja Megla / Uroš Grilc, Kritično razpravo jemljem zelo resno. Delo, Sobotna priloga, 16.11.2013, <<http://www.delo.si/zgodbe/sobotnapriloga/uros-grilc-kriticno-javno-razpravo-jemljem-zelo-zares.html>> (25.07.2014).

<sup>25</sup>„The work (of Zavod Trojina) bears a stamp of effort to replace the content credibility with the technological approaches.“ In: Ada Vidovic Muha, Slovenscina na preizkusnji slovaropisja in univerze. Delo, Književni listi, 09.12.2013, <<http://www.delo.si/kultura/knjizevni-listi/slovenscina-na-preizkusnji-slovaropisja-in-univerze.html>> (25.07.2014). The last critical reflection was published in the leading Slovenian daily newspaper Delo. Simon Krek, Papirnata slovenscina. Delo, Književni listi, 07.02.2014, <<http://www.delo.si/mnenja/gostujoce-pero/papirnata-slovenscina.html>> (25.07.2014).

ciplines and some efforts in the others, a very typical differentiation is showing in the Slovenian Digital Agenda. Namely, research and higher education is under the aegis of one ministry, while the cultural sphere (libraries, archives etc. – ergo cultural heritage) belongs to another ministry's field of duties. Cultural heritage, which is essential for research in the humanities, was mostly digitised in vast quantities by the network of public libraries, led by the National and University Library (NUL) in Ljubljana.<sup>26</sup> NUL is also a partner in Europeana and has established a digital library „dLib“<sup>27</sup>, which is a central point for digitised material in Slovenia and entrance point into the Europeana network. Regional libraries are publishing materials important for local studies in the *Kamra.si* platform.<sup>28</sup> The needs of the research community are not always on top of the digitisation agenda, and a centralized platform for scholarly print, mostly journals, has not been established at a national level, although some efforts were made in 2012 when the ministries were merged for a short time.<sup>29</sup> Copyrighted material is a very problematic field, since the use of Creative Commons licensing is rare, collecting permissions for digital reuse non existing and online publishing still seen as second grade in much of the humanist research community. It is still common to hold back the publication of PDF versions of journals for at least three years to keep traditional audiences, since the number of subscribers to printed publications is decreasing - sometimes also due to availability of digital resources online. The official policy of the funding body for scholarly periodicals, the Slovenian Research Agency, is to finance only periodicals whose publishers give a digital copy of a journal to the repository of the National and University Library, but these can be withheld from public use. Some attempts at publishing digital schol-

<sup>26</sup>Narodna in univerzitetna knjižnica, Ljubljana, <<https://www.nuk.uni-lj.si/>> (25.07.2014).

<sup>27</sup>dLib.si. Digitalna knjižnica Slovenije, <<http://www.dlib.si/>> (25.07.2014).

<sup>28</sup>Kamra.si. Digitalizirana kulturna dediščina slovenskih pokrajin, <<http://www.kamra.si/>> (25.07.2014).

<sup>29</sup>A project website announces a 404 failure two years after its establishment, <[http://www.jakrs.si/portals\\_znanstvenih\\_in\\_literarnih\\_revij/](http://www.jakrs.si/portals_znanstvenih_in_literarnih_revij/)> (25.07.2014).

arly publications in the up-to-date manner using an Open Journals platform were made in the last two years by the publishing house of SRC SASA. In 2014 the publishing department of Ljubljana's Academy of Arts started with an online collection of 12 digital editions of scientific journals using a translated version of the Open Journal System.<sup>30</sup> Some researchers tried to promote their work also by guerrilla projects of republishing their older works in digital formats on popular commercial platforms<sup>31</sup>, while some maintain small digital libraries in very different technological quality, comparing the TEI based *eZMono* project<sup>32</sup> with the technologically less advanced Digital Library of the Educational Research Institute.<sup>33</sup>

A well maintained bibliographical service is extremely important for Digital Humanities activities. In Slovenia, it is provided by the public Institute Izum from Maribor. The *Cobiss* platform is a user friendly, multitasking and centralized bibliographical catalogue. It was also one of the most successful Slovenian exports, since the *Cobiss* platform is also used in Bulgaria, Bosnia and Herzegovina, Montenegro, Macedonia, Serbia, Kosovo and Albania.

The joint *Cobiss.net* platform enables parallel browsing through all catalogues of partner countries. *Cobiss* is also a vantage point for *SICRIS*<sup>34</sup>, a platform for gathering information on researchers and their publications. The System is managed by Izum and the Slovenian Research Agency. A very interesting project emerged from the *SICRIS* data called *ScienceAtlas*, which is a web portal exploring the scientific community in Slovenia. *ScienceAtlas* integrates data about researchers,

<sup>30</sup>ZRC založba, <<http://zalozba.zrc-sazu.si/#v>> (25.07.2014) and Revije Filozofske fakultete Univerze v Ljubljani. At: <http://revije.ff.uni-lj.si/> (21.06.2014).

<sup>31</sup>See works of Andrej Pleterski in iTunes store, <<https://itunes.apple.com/be/artist/andrej-pleterski/id497687122?mt=11>> (25.07.2014).

<sup>32</sup>eZMono: Elektronske znanstvene monografije, <<http://ezb.ijs.si/fedora/get/ezmono:ezmono/VIEW/>> (25.07.2014).

<sup>33</sup>Digitalna knjižnica. Digitalna, netiskana uredniško-izdajateljska platforma, <<http://www.pei.si/Sifranti/StaticPage.aspx?id=27>> (25.07.2014).

<sup>34</sup>Slovenian current research information system, <<http://www.sicris.si/default.aspx?lang=eng>> (25.07.2014).



Fig. 2: Screenshot <http://www.cobiss.net/>, 21.06.2014

projects and organizations from different sources and provides tools for visualizing collaboration and competences of the researchers.<sup>35</sup> A specialized citation index for historiography and related disciplines was established in 2007, named HIC (History citation index), since national humanities rarely enter into global citations indexes. The HIC provides a good database for future bibliographic references.<sup>36</sup>

The Slovenian Research Infrastructure Development Plan 2011–2020<sup>37</sup> provides (besides the unfinanced CLARIN) only one ESFRI project in the humanities, namely DARIAH. Another important initiative in this field, the Europeana project, is not directly a part of the plan, since

<sup>35</sup>Atlas slovenske znanosti, <<http://scienceatlas.si/>> (25.07.2014).

<sup>36</sup>Zgodovinarski indeks citiranosti – ZIC, <<http://www.sistory.si/zic>> (25.07.2014).

<sup>37</sup>Nacrt razvoja raziskovalnih infrastruktur 2011–2020, <<http://www.arhiv.mvzt.gov.si/fileadmin/mvzt.gov.si/pageuploads/pdf/znanost/RISS/NRRI.pdf>> (25.07.2014).

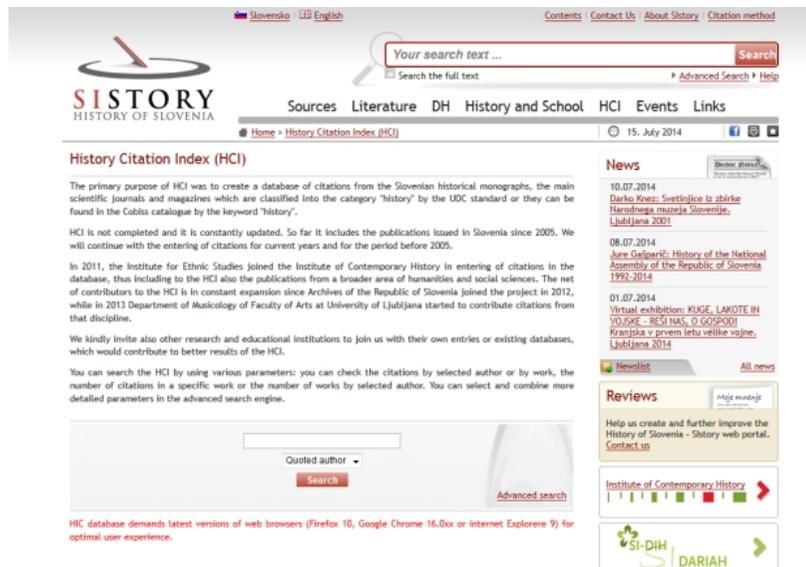


Fig. 3: Screenshot <http://www.sistory.si/>, 21.06.2014

it covers a field which is in the domain of the Ministry of Culture, thus leaving Slovenia outside the Europeana Cloud.<sup>38</sup> The Slovenian DARIAH branch develops as a collaboration of the two leading institutions in the field of Digital Humanities, SRC SASA and the Institute of Contemporary History (ICH). When the national DARIAH project SIDIH (Slovenian Digital Infrastructure for Humanities and Arts)<sup>39</sup> was planned, the question of relatively unorganized and technically very unevenly developed repositories and collections emerged. A serious question of compatibility was solved by introducing a web browser, which is based on relatively simple architecture using the OAI-PMH harvester for metadata, which are harvested in an adapted

<sup>38</sup>Europeana professional: Partners of the Europeana cloud <<http://pro.europeana.eu/web/europeana-cloud/project-partners?sessionId=372BC45D577DCEf273451FD9438A3903>> (25.07.2014).

<sup>39</sup>SIDIH – Digitalna infrastruktura za humanistiko in umetnost. Portal contains also an indefinite list of existing Slovenian DH projects, <<http://www.sidih.si/>> (25.07.2014).

Dublin core metadata scheme. The problem of unorthodox or even nonexisting metadata, nothing unusual in the wave of hurried digitalisation typical for the first decade of the new millennium, was a bit simplified and the main activities of SIDIH-DARIAH were pointed to raise the awareness of the research community on metadata production, copyright issues and other neuralgic legal matter. SIDIH in its current shape functions as a hub for researchers who would like to obtain more information on the current trends in Digital Humanities<sup>40</sup> and a web browser through contents (digital or only metadata on analogue objects). Knowing that a serious use of Digital Humanities tools for a wider scholarly public is only possible with large quantities of contents and that these contents are either scholarly related or in the cultural heritage domain, one of the objectives of the Slovenian DARIAH is to connect as many different repositories as possible, regardless of their official origin. It currently comprises materials from the collections of SRC SASA (18 research institutes/mostly from the humanities) and their portal @rzenal<sup>41</sup>, ethnological collections from the Faculty of Arts from Ljubljana University<sup>42</sup> and historiographical contents from the central portal for historians *History of Slovenia – Sistory* from the Institute of Contemporary History. In this year first contents from the collections of the National Museum of Slovenia will be also searchable through SIDIH, while some contents from the national and regional archives are already available through cooperation with the ICH.

I would like to finish this brief overview by emphasizing the possibilities Digital Humanities open up for historians. The central hub for „digital history“ is since 2007 the web portal *History of Slovenia – Sistory*<sup>43</sup>, accessible in Slovenian and English versions. Until that

<sup>40</sup>Another important hub is also the Slovenian Open Access portal. Open Access Slovenia, <<http://www.openaccess.si/>> (25.07.2014).

<sup>41</sup>@rzenal – Virtualna zakladnica nacionalne dediščine ZRC SAZU, <<http://www.arzenal.si/>> (25.07.2014).

<sup>42</sup>EtnoInfoLab, <<http://www.etnoinfofolab.org/>> (25.07.2014).

<sup>43</sup>Zgodovina Slovenije – Sistory, <<http://www.sistory.si/>> (25.07.2014).

moment historians did not have much influenced the development of Digital Humanities, although some excursions, using statistical software and databases as primary research method, can be detected<sup>44</sup>, the latest one by Miha Serucnik in his PhD on Grape phylloxera in Slovenian territory in the 19th Century.<sup>45</sup>

Although the portal bears a rather restrictive name, Slovenian history is not something that can exist in a closed circuit. Special care is given to the accessibility of materials that are essential for the whole research community of the once common Yugoslav or Austro-Hungarian state. A series of stenographical minutes from the Slovenian parliament/socialist assembly can be found on the portal, combined with stenographical minutes from the parliament and senate of the Yugoslav kingdom and post-war assemblies of the second Yugoslav state. The same can be said for official gazettes. A vast digital library, comprising most of Slovenian historiographical periodicals and many older and current scholarly monographs, is available to researchers who got used to the instant availability very quickly. The estimated number of visitors in the last year, considering some problems when the new European legislation on internet privacy was applied<sup>46</sup>, is around

---

<sup>44</sup>I am aware of that fact only because of long fruitful conversations with colleague Andrej Studen, who wrote his PhD thesis on living conditions in Ljubljana with help of a friend, who modified videostore management system software for that purpose in early 1990's. Andrej Studen, *Stanovati v Ljubljani*, Studia Humanitatis, Ljubljana 1995. He also pointed out on earlier use of computing methods in the work of Jasna Fischer on social and political history of labour movement in Ljubljana in 19th Century. Jasna Fischer, *Cas vesolniga socialnega punta se bliža: socialna in politična zgodovina delavskega gibanja v Ljubljani od zacetkov do leta 1889*, Krt – Knjižnica revolucionarne teorije, Ljubljana 1985. There are probably some other „apocryphal“ stories on use of the computing tools in Slovenian historiography in the „ancient times“ with which I am not familiar.

<sup>45</sup>Miha Serucnik, *Trtna uš, ta strašno drobna pošast*, Založba ZRC, Ljubljana 2011. He also described his methods in an article on use of MS Access databases as a historian's tool. Miha Serucnik, *Accessove podatkovne zbirke kot zgodovinarjevo orodje*. *Historicni seminar 9*, Založba ZRC, Ljubljana 2011, <<http://hs.zrc-sazu.si/eknjiga/HS9.pdf>> (25.07.2014).

<sup>46</sup>UKAZ o razglasitvi Zakona o elektronskih komunikacijah (ZEKom-1), Uradni list Republike Slovenije, 109/2012, 31.12.2012, <<https://www.uradni-list.si/1/content?id=111442>> (25.07.2014).

90.000. That clearly shows that digitised history is interesting to a very wide audience of professional researchers and enthusiasts. The *SISTORY* portal comprises not only textual files and databases, but also helps to present archive materials, unpublished manuscripts, video recordings of lectures and scientific conferences, and virtual exhibitions by joining the efforts of many different institutions. But while the digital library was an instant success, possessing a large quantity of materials with organized metadata and solved legal issues (with collected permissions and licensed under OA standards using CC licenses), a question arises: How to use these materials in new ways? A wide network of partners helped the ICH Research Infrastructure team to detect some very interesting collections, and a collection of photographs from the Ljubljana Historical Archive<sup>47</sup> served as a base for the Augmented Reality mobile application *ZgoLJ* (acronym for *Zgodovina Ljubljane – History of Ljubljana*), which enables a virtual tour on three different augmented reality platforms through the Ljubljana historical centre, showing old photographs, architectural plans and description for each building, even for the ones which do not exist anymore.<sup>48</sup> The project platform was later reused in the town of Murska Sobota. A publication of the xml schemes/project documentation in a special Digital Humanities section of *SISTORY* a few months ago created a fuss among usual users, who did not quite understand the intention, taking us back to the whining in the first paragraph of this essay.<sup>49</sup>

---

<sup>47</sup>Zgodovinski arhiv Ljubljana, <<http://www.zal.si>> (25.07.2014).

<sup>48</sup>Andrej Pancur, *ZgoLJ – Zgodovina Ljubljane*, <<http://prezi.com/h-uwi9kqlvyd/copy-of-zgolj-zgodovina-ljubljane/>> (25.07.2014).

<sup>49</sup>DH on *SISTORY* – History of Slovenia portal, <<http://www.sistory.si/publikacije/?menu=28>> (25.07.2014).



Fig. 4: Screenshots from: „ZgoLJ“ (acronym for Zgodovina Ljubljane – History of Ljubljana), an Augmented Reality mobile application

But nevertheless progress is underway full throttle, starting with the project of digitising and creating an openly accessible database of population censuses. The first published census originates from Ljubljana and was made in 1830. Shortly after the first modern population census from 1869 was digitised and transcribed, followed by the census from 1931<sup>50</sup>, censuses from other Slovenian towns (Novo Mesto, Izola) were added into a database which allows browsing as well as exporting data and represents the starting point for planned longitudinal studies. Scanned census questionnaires are attached to the database, thus allowing comparisons with the transcription, which is going to be useful regarding the fact that some data will be gained by crowdsourcing, relying on the help of students of history from the Faculty of Arts at Ljubljana University. The project is going to evolve over the next years and its final goal is to connect as much computer readable data from population censuses and other preserved historical

<sup>50</sup>As the last one available for publication considering current personal data protection legislation.

public records as possible, creating a semantic database.<sup>51</sup> Work on that particular project showed also a growing need to produce a historical topography index with GIS coordinates for the abovementioned project, which is slowly coming into focus, and also a quantity of other different subprojects. These efforts interlink with some other activities which are taking place in the Slovenian research community, since a research project entitled „Historical Topography of Slovenia from the Middle Ages to the 19th Century“ is currently taking place at the Milko Kos Historical Institute at SRC SASA, using digital technologies to achieve that goal.<sup>52</sup> The know-how from the population censuses project was used to digitise and publish a collection of primary school datasheets from the Yugoslav part of Slovenia in the interwar period (1928–1941). The material is extremely valuable because of the statistic data and many pictorial appendixes. It represents a basic source for researchers in the history of education. Publishing it online with indexed metadata on the name and place of each school allows researchers to use them with ease. Added value on that base represents geographical encoding via <http://geonames.org> and <http://dbpedia.org> which helps to visualize metadata and links them to the semantic web. The collection will be openly accessible in the coming months.<sup>53</sup>

Knowing the level of penetration of Digital Humanities in scholarly activities in other European countries I can conclude with a statement that Slovenia is on the one hand still a virgin territory, but on the other hand, taking into account the number of active humanities scholars, above mentioned achievements do not exactly reflect that fact. Yet it is still not timely to say that Digital Humanities as a field has established its rightful position. Coming generations are definitely more

<sup>51</sup>Ljubljana Historical Archive: Population censuses in Slovenia 1830–1931, <http://www.sistory.si/publikacije/?menu=435> (25.07.2014).

<sup>52</sup>Slovenian Place Names in Time and Space (Historical Topography of Slovenia from the Middle Ages to the 19th Century) – fundamental research project, <http://zimk.zrc-sazu.si/en/programi-in-projekti/slovenian-place-names-in-time-and-space-historical-topography-of-slovenia-from#v> (25.07.2014).

<sup>53</sup>Zemljevid krajev s seznama šol popisanih v šolskih listih v letih 1928–1941, <http://www.sistory.si/SISTORY.ID:20868> (27.07.2014).

digitally mature and should not be afraid of new challenges. For now, preciously rare students at the MA and PhD level are more deeply involved into introducing new techniques and methodologies into our scholarly work.