

## **EVI-LINHD, A VIRTUAL RESEARCH ENVIRONMENT FOR DIGITAL SCHOLARLY EDITING**

Elena González-Blanco (LINHD-UNED), Gimena del Río (CONICET/LINHD-UNED), Juan José Escribano (LINHD-UNED), Clara I. Martínez Cantón (LINHD-UNED) and Álvaro del Olmo (LINHD-UNED).

Digital Humanities, as a scientific field, can be seen as a boundary discipline that requires cooperation and common agreements and views among many scientific communities (del Río Riande, 2016). There are some tools that facilitate communication and understandings across different areas and even projects. These are what in sociology have been called as boundary objects, described by Star & Griesemer in this way:

Boundary objects are objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. They are weakly structured in common use, and become strongly structured in individual- site use. (1989: 393)

This concept is crucial when talking about collaborative and interdisciplinary labour.

Virtual Research Environments (VREs) have become central boundary objects for digital humanists community, as they help global, interdisciplinary and networked research taking of profit of the changes in “data production, curation and (re-)use, by new scientific methods, by changes in technology supply” (Voss and Procter, 2009: 174-190). DH Centers, labs or less formal structures such as associations benefit from many kind of VREs, as they facilitate researchers and users a place to develop, store, share and preserve their work, making it more visible. The implementation of each of these VREs is different, as Carusi and Reimer (2010) have stated, but there are some common guidelines and standards generally shared (as an example, see the Centernet map and guidelines of TGIR Huma-Num 2015).

This poster presents the structure and design of the VRE of LINHD, the Digital Innovation Lab at UNED (<http://linhd.uned.es>) and the first Digital Humanities Center in Spain. It focuses on the possibilities of a collaborative environment focused on a very realistic type of research: a non-English speaker, relatively new in DH

technologies, which is keen on working in his project with his team, but has not a uniform team of researchers (that means, they have different levels of understanding DH technologies)

Taking into account the language barrier that English may suppose for a Spanish-speaker scholar or student and the distance they may encounter with the data and organization of the interface (in terms of computational knowledge) while facing a scholarly digital edition or collection, LINHD's VRE comes as a solution for the virtual research community interested in scholarly digital work.

The main aims of EVI are:

- Promoting digital scholarly editions in Spain, as well as the humanist training in the field of Digital Humanities through the use of standards (such as TEI-XML), distinguishing the three fundamental processes involved in the development a complete digital edition: text tagging, analysis, text processing, and finally visualization and digital publication.

- Managing through digital tools and databases text collections that contain tagged texts (displaying different visualization possibilities) and link with other non-text content (such as images or multimedia content) labeled with metadata

- Enabling recovery to such content.

- Providing the humanist researcher the building of digital repositories in the cloud using technologies of the semantic web and linked data (LOD) allowing standardization of content and interoperability with other projects, resources and databases.

In this sense, our project dialogues and aims to join the landscape of other VREs devoted to digital edition, such as [Textgrid](#), [e-laborate](#), [ourSpaces](#), etc. and, in a further stage, to build a complete virtual environment to collect and classify data, tools and projects, work and publish them and share the results. Therefore, the key of our VRE is the combination of different open-source software that will enable users to complete the whole process of developing a digital editorial project. The environment is, up-to-now, divided into three parts:

1) A repository of data to (projects, tools, etc.) with permanent identifiers in which the information will be indexed through a semantic structured ontology of metadata and controlled vocabularies (inspired in LINDAT, Isidore and Huni)<sup>1</sup>.

2) A working space based on the possibilities of eXistDB to work on text encoding, storing and querying, plus some publishing tools (pre-defined stylesheets and some other open-source projects, such as Sade, Versioning machine, etc.).

3) A collaborative cloud workspace which integrates a wiki, a file archiving system and a publishing space for each team.

The impact of EVI-LINHD resides in building a very useful tool for the development of the humanities studies within a digital society. It aims to facilitate the change of the traditional editor's job to a virtual environment where accessibility, dissemination and visualization possibilities of the cultural object greatly increase the prospects of their study. A platform of this kind, pioneer in the Spanish-speaking community, will also facilitate the interoperability of our projects in international groups and networks working on similar topics.

EVILINHD is a powerful cloud-based platform that will offer researchers a space to manage their projects from the beginning to their publication and dissemination period, all through a single interface, which is thought and designed as the key for the success of such a project: the researcher user.

### **Bibliographical references**

BOOT, Peter. "Some digital editions and some remaining challenges." (2012). In <http://www.janusdigital.es/articulo.htm?id=7> (accessed 29-11-2015).

CANDELA, L. Virtual Research Environments. GRDI2020. <http://www.grdi2020.eu/Repository/FileScaricati/eb0e8fea-c496-45b7-a0c5-831b90fe0045.pdf> (accessed 28-10-2015).

---

<sup>1</sup> The ourSpaces Virtual Research Environment project have worked in this sense developing an extensible ontological framework for capturing the provenance of the research process that they describe in Edwards, Pignotti et al., 2014.

- CARUSI, A. & T. REIMER, "Virtual Research Environment Collaborative Landscape Study. A JISC funded project" (January 2010), Oxford e-Research Centre, University of Oxford and Centre for e-Research, King's College London <https://www.jisc.ac.uk/rd/projects/virtual-research-environments> (accessed 28-10-2015).
- DEL RÍO RIANDE, Gimena, "Humanidades Digitales. Construcciones locales en contextos globales" (22-03-2016). SEDICIBlog. <http://sedici.unlp.edu.ar/blog/2016/03/22/humanidades-digitales-construcciones-locales-en-contextos-globales/> (accessed 28-03-2016).
- EDWARDS, Peter, et al. "Lessons learnt from the deployment of a semantic virtual research environment." *Web Semantics: Science, Services and Agents on the World Wide Web* 27 (2014): 70-77. <http://www.sciencedirect.com/science/article/pii/S1570826814000560> (accessed 28-04-2016).
- LLEWELLYN SMITH, C., BORYSIEWICZ, L., CASSELTON, L., CONWAY, G., HASSAN, M., LEACH, M., et al. (2011). *Knowledge, Networks and Nations: Global Scientific Collaboration in the 21st Century*. London: The Royal Society.
- SCHLITZ, Stephanie A., and Garrick S. Bodine. "The TEIViewer: Facilitating the transition from XML to web display." *Literary and linguistic computing* 24.3 (2009): 339-346.
- STAR, Susan Leigh, and James R. Griesemer. "Institutional ecology, translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39." *Social studies of science* 19.3 (1989): 387-420.
- TGIR Huma-Num, *Le guide des bonnes pratiques numériques* (2011). <http://www.huma-num.fr/ressources/guide-des-bonnes-pratiques-numeriques> (version of 13-1-2015). (accessed 28-10-2015).
- VOSS, A & PROCTER, R. (2009) "Virtual research environments in scholarly work and communications", *Library Hi Tech*, Vol. 27 Iss: 2, pp.174 – 190.