Introduction

The Visualisation Training School took place at the Chiostrino Artificio in Como, from the 10th to the 14th of July 2017. During the week an interdisciplinary group composed by scholars in the humanities and information design researchers worked together with the aim of addressing specific issues related to the design of visual interfaces to support humanistic inquiry processes in the specific case of the Republic of Letters. The formers were mostly members of the Action plus few selected acquaintances; the latters were part members of the Action and mostly members of the DensityDesign Research Lab.

As described in the welcome package of the event, the organisers identified five different areas where the expertise related to the field of visualisation and the humanistic knowledge could play together: the explorations of (1) “intersecting correspondences”, of (2) “correspondences over itineraries”, of (3) “visualisation with memory” and the conception of interfaces for (4) a “digital critical editions platform” and for an innovative (5) “virtual research environment”.

Trying to maintain a balance between the two knowledges, the organisers created five groups, one for each area and, depending on the specificity of their topic, they have been asked for different grade of completion. The first three groups especially were expected to return advanced – partially operative – proof of concepts, ready to be polished and potentially exploited for grant proposals. The last two groups were expected to experiment more deeply and to come up with more unexpected ideas that, even if not implemented in any fashion yet, could advance new concepts, with the aim of pushing the research towards unexplored territories.
Project descriptions

Group 1: Intersecting correspondences

The group one focussed on the representation of intersections between correspondences – from two up to five of them simultaneously – making use of different sets of data related to the Foundation of the Royal Society and the correspondence of Gottfried Wilhelm (von) Leibniz.

The group spent the week in devising different approaches for accessing and visualising the data, in a way that is both innovative and automated, and/or encapsulated within a digital application.

Starting from the topic of intersecting correspondences, different sub areas of exploration have been identified and for each of them the group came up with a suitable visual solution, listed as following:

1. the entry point named “sunburst view” very useful as an introduction to the available informations,
2. the “polygonal view” aimed at the visual representation of intersection between multiple and different correspondences – the researcher could select from three up to five –,
3. the “scatterplottish view” conceived for providing a more detailed view on the intersections between two chosen correspondences and
4. the “letter pathways view” suitable for representing the flows of letter exchanges between one selected historical figure and all of its contacts. For the sake of maintaining an intelligible output, the group decided to split up the correspondence pathways of one specific individual depending on the roles it covered: as sender – including double authorship of a letter and ghostwriting – as intermediary and as recipient – even of indirect correspondence.

Day to day presentation
Final report
The group two explored strategies for analysing the correspondence of a particular individual in relation with its physical itinerary during her life, considering Jan Amos Comenius as a use case. This group also aimed at devising a new digital tool and releasing an advanced proof of concept able to answer the main research questions – better declined in their final report.

The final outcome featured two parallel views on the life and letter exchanges of Comenius. In the former, the itinerary is represented as a matrix with time on the horizontal axis and the list of visited places on the vertical one, facilitating the reading of the temporal dimension in comparison to the geographical one; points in time and space –x and y axis– are connected through a line representing an abstraction of the life itinerary of the individual and on the same points letters are displayed as sized color-coded circles – red for sent letters, blue for received ones, with dimension corresponding to the amount of letters. The abstraction of the space involved in the matrix visualisation could be intended as a necessary transformation useful to display a high amount of information in the same context without compromising the easy of use of the tool.

A real geographical map showing the real extent of the itinerary represents the second parallel view, placed just beside the matrix to help in finding a balance between the two observable dimensions.
Group three focussed on “visualisations with memories” and was involved in the exploration of possible new means of expressing the temporal dimension of correspondences over diverse kinds of representations, including geographical and hierarchical forms. Whilst dynamic visualisations can achieve this, they do not usually retain traces of past frames and they miss frame-by-frame impressions. The team worked on the case study of Desiderius Erasmus, whose correspondence dataset appeared as representative of those contained in EMLO. This project involved the use of colour-scales and signifiers as well as a further categorisation and placement of letter-signifiers within different shaped areas. Thanks to these choices and a map-based visualisation capable of representing multiple combinations of data by means of filtering and clustering the displayed information depending on the zoom, it has been possible to compare cities or historical figures under perspectives tailored to highlight certain aspects instead of others.

Day to day presentation
Final report
The group four worked on a conceptual enhancement of EMLO, a digital repository of metadata regarding correspondences from the Early Modern period. Currently the platform hosts a multitude of items but the way in which it is structured doesn’t allow for an intensive use by scholars; some functions and tools are considered to be now missing.

The group focussed on the general overview of the whole content, with graphical signifiers describing the form of the available items (metadata, full letters, collections and even existing collections not available on EMLO). Furthermore, the platform assists the researcher in her explorative process, fostering her understanding and going from a distant reading of all the material to a close reading of the most interesting piece of material.

The group envisioned the possibility to have a sort of notebook where to inject part of the browsed material and store comments and notes about it; a sort of repository of thoughts raised by the consecutive explorations of the researcher. This solution allows for a smooth merge of the digital tools with the research processes of scholars, opening new possibilities to exploit the advantages of embracing a digital-driven analyses instead of the classical “physical” approach.

Day to day presentation
Final report
The group five had a more experimental and broad approach. They pursued the aim of getting to the most fresh idea of a VRE rather than focussing on concrete solutions.

The work is strongly based on metaphors, intended as a tool to push further the boundaries of knowledge. Moving from the metaphor of the “universe of knowledge” they quite soon bumped into the “multiverse of knowledge”, where several universes came into place, everyone with its laws and logics. The idea is to base the whole VRE on top of this metaphor and take advantage of its intrinsic logics to shape the content/data about the Republic of Letters. Indeed, since known by historical sources, there are different voices about the matter and while some may think there have been even multiple Republic of Letters, some other might say there have been none.

This circumstance suits well to the metaphor of the multiverse, where same elements could have instances in more than a singular universe and are free to follow different rules/laws according to the space in which they are acting.

The group did not propose any proof of concept or any pragmatical solution regarding the implementation of the “multiverse of knowledge” (again, it was not in the scope) and it considered the use of Linked Open Data and Artificial Intelligence.

This kind of experimentations are good exercises for opening the mind and bringing into the scene those ideas which would have been otherwise hardly considered. Even if the implementation of the project would find many technical obstacle, causing it to get reduced (or even abandoned) the intrinsic value of the changes of perspectives on the phenomenon should be considered as an innovative contribution to the field of study.
Remarks

In the final report the groups draw some consideration about the format of the design sprint. It has become clear during the design sprint that delivering something polished was not possible, and so the members find it reasonable to leave multiple pathways open for further research and development. Despite the fact that hasn’t been possible to transform the projects into working deliverables, spending a whole week together working on a specific issue has been considered extremely useful by all the groups.

The sprint proved to be a fertile terrain where participants could perform a deep exchange of the language and the practical knowledge they apply everyday in their own field of study. Considering the deep multidisciplinary perspective of the Digital Humanities, the design sprint constituted a fundamental preliminary step, indispensable for any further collaboration.

During the COST action two design sprints have been organized. The performance of those scholars who participated to both has been – predictably - deeper and more productive. The week helped them in bringing the exchange of knowledge with other disciplines to a higher level, enabling the people to define, isolate and address specific research questions in a way that has been both faster and more effective. They were more likely to identify and experiment different solutions in order to pick what they judged as the best ones.

We clearly saw – ex-post - the value of building a “chain” of sprints, especially when there is the possibility to design and plan the relations between the different “rings”. Despite not having the chance to design in advance all the cascade, the participants individually built on top of the previous knowledge quite easily and took advance of participating in the two events.

Milano, 2nd October 2017