Towards better VREs: key concepts and basic challenges

Simone Zenzaro (University of Lausanne)

VREs are complex artifacts both with regard to their implementation and their subsequent use. While we are only scratching the surface of what is possible to achieve with them, such complexity has brought to light some aspects that should be addressed in order to further their future development. To that purpose, we should take into account three key concepts: **continuous maintenance**, **effectiveness** and **interlinking**.

Usually VREs tends to be considered *finished* after their release. VREs should instead embrace the possibility of **continuous update** and **maintenance**, as is the case with traditional and digital editions. The ever changing nature of such kind of VREs will require a well defined approach to versioning and referencing within the VRE.

With regard to **effectiveness**, in the recent past IT methods and tools have been adopted hastily, to the detriment of a necessary theoretical reflection. This approach has resulted in a fragmentation of tools that are not very keen on dialoguing with each other. Focusing on the technology has another drawback: obsolescence. A possible solution would be the creation of an ontology of the fundamental concepts of a VRE, untied to specific technologies, in order to improve the development of better tools that, in turn, will help the production of better VREs.

One last aspect to emphasize is the **interlinking** potential of VREs. The interconnection is transversal to VREs and concerns both the integration of different media (images, audio, text, video) and of information sources scattered over the Internet. The challenge, therefore, arises not only with regards to interoperability but also to effective presentation and navigation of such data.

In this paper I will briefly introduce the very concept of VRE and then move to analyse the concepts exposed above, also to show that, since these aspects are connected one to each other, they should be addressed simultaneously.