

## Chapter 10

# Learning by Building in SL: A Reflection on an Interdisciplinary and International Experience

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### ABSTRACT

*This chapter will report on, and critically assess the outcome of a two year-long experimental educational project using Second Life (SL) as a teaching and learning platform. The project's main goal was to investigate the added value of a multi-user environment in a multi-disciplinary and international context for learning about history, archaeology, acquiring a scientific approach and methodology to historical reconstruction and 3D visualization, as well as the skills to use different media technologies for communication and collaboration. This chapter will describe educational facilities and resources as well as heritage visualization projects built in the Digital Humanities Island in SL, where the collaboration between King's College London and the University of Pisa took place.*

### INTRODUCTION

In July 2007, following a highly successful one-year Erasmus studentship of Marco Bani<sup>1</sup> (a student from the Digital Humanities degree at the University of Pisa) to the Centre for Computing in the Humanities (CCH) at King's College, Hugh

Denard, one of Bani's tutors at King's, submitted a proposal to the Director of CCH to start a collaboration with the Digital Humanities program of the University of Pisa (DH-Pisa).

The proposal was to jointly develop a "Digital Humanities" Island in Second Life (SL), to create a focus for a strategic relationship between CCH and DH-Pisa involving teaching, research and conferences to generate economies, synergies

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and opportunities by sharing costs, expertise, resources and contacts.

“Digital Humanities” Island, jointly hosted and developed by CCH and DH-Pisa, had the potential to be the basis for a wider international collaboration around shared sets of resources.

Given that both institutions offer modules in visualization for the humanities, this was also seen as an opportunity to develop a shared syllabus and associated teaching and learning resources, with a view to develop possible future collaborative initiatives in this area including internships.

A further aim was to develop joint cultural heritage projects, with DH-Pisa providing access to contacts, resources and authorizations necessary to undertake cultural heritage sites in Italy, and CCH securing additional cultural heritage visualization skills, equipment and methodologies. Projects envisaged included the complex in which “The Leaning Tower of Pisa” is situated, the Roman theatre at Lucca, and the historic, medieval walls of Pisa.

CCH and DH-Pisa also wished to study, collaboratively, the methodological implications of the Second Life platform in relation to current developments and debates, especially *The London Charter for the Computer-based Visualization of Cultural Heritage* (The London Charter, 2006). In particular, it was interesting to identify specific issues and opportunities that the SL platform raises regarding London Charter implementation, and to explore questions such as, for instance, whether a more or less fixed set of visualization and documentation conventions for humanities and cultural heritage uses of SL would be desirable, or whether a variety of approaches should be allowed to emerge in tandem with the technology as it evolves. A collaboration would allow researchers in both institutions to draw on their teaching and learning activities, developing and observing a wider range of case studies with student groups, and to provide a well-defined research agenda and set of approaches according to which participation by other humanities and

cultural heritage researchers in SL, including the EPOCH network of excellence (<http://www.epoch-net.org/>), could be encouraged.

Between 2007 and 2010, King’s and Pisa made notable advances in realizing each of these objectives. Together, they established “Digital Humanities Island” (DHI), complete with welcome center, teaching, learning and display spaces and interactive guide, and successfully hosted a number of virtual exhibitions and “mixed-reality” live events there; in 2007-2008, they created several proof-of-concept cultural heritage visualizations in SL including of Galileo Galilei’s Laboratory and the Leaning Tower of Pisa; in 2008-2009, they carried out a successful teaching and learning collaboration on ancient maritime archaeology; and in 2009, they secured funding for, and completed, a project on applying the London Charter (discussed below) within SL.

At the time of writing, we at Pisa and King’s find ourselves, on the one hand pressed for the resources that would enable us further to evolve our shared teaching and learning activities, but also, on the other hand, poised to leverage our work in SL into real-life installations and planning consultations in both Pisa and London. The story of our collaboration thus far is one that encompasses ideals and errors, hopes and frustrations, achievements and, today, a renewed and revised sense of possibilities. This chapter will give an account of these pedagogical experiments and reflect upon what they have taught us about the use of virtual worlds in humanities teaching and learning.

## **HUMANITIES VISUALIZATION AND VIRTUAL WORLDS**

The University of Pisa offers a degree in Digital Humanities, an interdisciplinary study program in which students receive a solid education in humanities together with the technological skills and methodologies to master the tools for processing cultural contents in different digital forms. Most

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