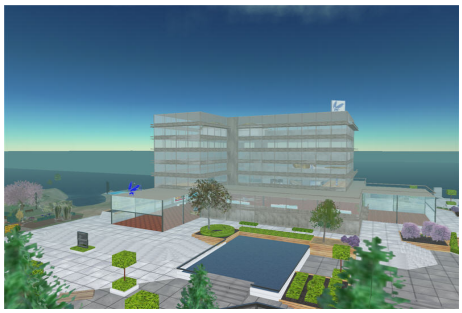
8.4 development(s) – the metaverse revisited

When creating presence in Second Life, as discussed in section 1.4, our initial targets were

initial target(s)

- build initial (throwaway) prototype
- explore content creation technology
- create tutorial(s) for content contribution
- analyse technological requirements

After this first meeting, we put an announcement on some student mailinglists, and two and a half months later we were online, with a virtual campus, that contains a lecture room, a telehub from which teleports are possible to other places in the building, billboards containing snapshots of our university's website from which the visitors can access the actual website, as well as a botanical garden mimicking the VU Hortus, and even a white-walled experimentation room suggesting a 'real' scientific laboratory. All building and scripting were done by a group of four students, from all faculties involved, with a weekly walkthrough in our 'builders-meeting' to re-assess our goals and solve technical and design issues.



(a) outside view

(b) inside view

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As can be seen in the figure above, the overall style is realistic, although not in all detail. Most important was to create a visual impression of resemblance and to offer the opportunity to present relevant infomation in easily accessible, yet immersive, ways. Cf. Remediation. Our virtual campus, as depicted above, is meant to serve as an *information portal* and as a *meeting ground*, where students, staff and visitors can meet and communicate, as well as a place were teachers and researchers can conduct experiments aimed at discovering new ways of teaching and doing research.

In VUSL, we looked at the shift of culture that made the growth of Second Life possible, and the background against which (the phenomenon of) Second Life could be understood. In particular, we asked ourselves why earlier attempts at introcing (3D) virtual environments failed, and observed that: in less than a

decade after the publication of William Gibson's novel *Neuromancer*, the *metaverse* was realized, albeit in a primitive way, through the introduction of VRML[1], introduced at the Int. Web Conference of 1992. Cf. Cyberspace. The German company *blaxxun*[2], named after the virtual environment in Neil Stephenson's *Snowcrash*, was one of the first to offer a 3D community platform, soon to be followed by *AlphaWorld*[3], already mentioned in the introduction, which offered a more rich repertoire of avatar gestures as well as limited in-game building facilities. However, somehow 3D virtual communities never seemed to realize their initial promises. Furthermore the adoption of VRML as a 3D interface to the Web never really took off.

The history of Second Life is extensively descibed in the official Second Life guide, SecondLife. Beginning 2004, almost out of the blue, Second Life appeared with a high adoption and low churn rate, now counting, March 2007, over 4 million inhabitants. Considering the cost of ownership of land, which easily amounts to 200 euro per month rent after an initial investment of 1500 euro for a single piece of land measuring 65,536 square meters, the adoption of Second Life by individuals as well as companies such as ABN-AMRO, Philips and institutions such as Harvard is surprising.

What is the secret of the success of Second Life?, we asked in VUSL, and we immediately confessed: *We don't know!* But in comparison to other platforms for immersive worlds, including MMORPGs such as *World of Warcraft*[4] and *Everquest*[5], Second Life seems to offer an optimal combination of avatar modification options, gesture animations, in-game construction tools, and facilities for communication and social networking, such as chatting and instant messaging. Incorporating elements of community formation, commonly denoted as Web 2.0, and exemplified in MySpace, YouTube and Flickr, the immersive appearance, perhaps also the built-in physics and the inclusion of elementary economic principles, seem to be the prime distinguishing factors responsible for the success of Second Life. In addition, the possibility of recording collaborative enacted stories, Stories, using built-in *machinima*[6] certainly also contributes to its appeal.

What has been characterized as a shift of culture, from a media consumer culture to a participatory culture, Participatory, where users also actively contribute content, (*was*) for our institution one of the decisive reasons to create a presence in Second Life, to build a virtual platform that may embody our so-called *community of learners*, where both staff and students cooperate in contributing content, content related to our sciences, that is. Basically following up on companies like Nike, ING and ABN-AMRO, from which we, incidentally, borrowed the island on which we built our virtual campus.

The 1st of March 2007, we went live. In the evening there was a news item on national televison, RTL4 news, featuring the students showing the virtual campus

[1] www.web3d.org
[2] www.blaxxun.com
[3] www.activeworlds.com/worlds/alphaworld
[4] www.worldofwarcraft.com
[5] everquest.station.sony.com
[6] www.machinima.org

and our project leader explaining the reasoning behind our presence in Second Life and how to give a course in the virtual classroom. A similar item appeared at AT5, local Amsterdam television, and various newspapers, among which Parool, Telegraaf and Volkskrant, spent a multiple-column article to report on our efforts. As a note, not surprisingly, all items focused on what we have characterized as the naive interpretation of our efforts, exemplifying the old credo *the medium is the message*. To be clear, as will be discussed below, our intention was not to provide a virtual replica, nor to provide an analogon of the Open University, in Second Life. After the news broadcasts, the number of visitors increased dramatically, having stayed at a modest below 100 during the day. In the evening, however, just after the news items on the national television, the number of visitors increased rapidly. Since at the time we did have only one island, it appeared to be very difficult to separate internal experimental activities from visitors just asking for additional information, and to exclude potentially malicious visitors. In that evening, we were even surprised by the invasion of an army of Mario Brothers. Hilarious and non-harmful. But enough reason to sit back and limit access to our campus for students and staff only the day after our open day. A few days later, after the first turbulent days following the TV broadcasts, we re-opened our virtual campus to allow visitors to walk/fly around, and enjoy our news items and informative videos.

The first idea that comes to mind, naturally, is to use Second Life to offer courses online. But, although we did have plans to give lectures (college) on law, probably including the enactment of a particular case, we did consider this approach as rather naive, and frankly I see no reason to include what may be considered an outdated paradigm of learning in our virtual campus, where there might be more appealing alternatives. Similarly, using the virtual laboratory for experiments might not be the best way to offer courses, although, again, we do intend to provide a model of a living cell, allowing students to study the structure, functionality and behavior of organic cells in virtual space.

Considering the success of our multi-disciplinary building team, it seems more worthwhile to take the cooperative effort of building as a model, and switch to a paradigm of learning in which in-game exploration and building plays an important role. As we observed in section 3.4, gaming may provide a form of *active learning*, that is allowing the gamer to

active learning

- experience the world in new ways
- form new affiliations
- preparate for future learning

This is due to intense involvement or immersion in the game environment, which even encourages *critical learning* or as we characterized it, following VideoGame, *situated cognition in a semiotic domain*, that is a *world of meaning*. What is this *world of meaning* that a game exemplifies, and how is it related to the more general notion(s) of *immersion* and *flow*?

We explored the use of 3D desktop VR for presenting artworks in context, using 3D not to contruct a replica of physical space, but as a means to allow

immersive access to both (representations of) artworks and information about these artworks. In Dossier, we wrote: *the* abramovic *dossier presents itself as a digital archive in 3D space, containing information about the artworks of the performance artist Marina Abramovic by presenting media content and relational structures, serving as an information source for museum curators to conserve and install the artworks.* As a follow-up on the *abramovic* dossier, the 2005 Casus group developed a digital dossier for the artist Jeffrey Shaw[7]. One interesting aspect of the dossier for Shaw is the availability of a tool environment to learn about the construction and de-construction of the Revolution[8] installation and to experiment with the exhibition space parameters of the artwork, such as the lighting conditions, and the color and texture of the walls and the floor. In Dossier we further observed that with the Casus 2005 group there was, interestingly, a strong resistance against using 3D for the concept graph navigation mechanism. So we explored a mixed approach, using 2D for the concept graph, and 3D only for the representation of the Revolution installation. Nevertheless, although the dossier for Shaw does realize many of the goals set for the next generation dossier, see section 10.2, it did fail in providing an immersive application. It did not achieve a natural transition between browsing the concept space and inspecting/experiencing the media recordings of the artwork, thus disrupting the natural flow of attention ...

[7] www.few.vu.nl/∼casus05
[8] www.medienkunstnetz.de/works/revolution