

POLITECNICO DI TORINO
SECOND SCHOOL OF ARCHITECTURE
Master of Science in Architecture
Honors theses

Architecture and 3d Online Virtual Worlds

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The thesis explore the multiple aspect concerning the use of 3d online virtual worlds in architectural field through three fundamental questions:

- Is the use of 3d online virtual worlds an advantage or an opportunity for architecture?
- What is the role of the architecture in the project of the virtual space?
- What kind of architecture is it?



A space with different characteristic, compared to the physics reality, need new paradigms

The first step of the study was the cataloguing and analysis of the 3d virtual worlds, now present online, oriented to produce an up-to-date database and a set of standard capable to measure utility and potency in comparison to the architectural's requirements. Inside the huge mass of 3d virtual worlds today present online we focused the attention on Second Life because of its diffusion, feature and tools present which represent the ideal platform for the development of this research.

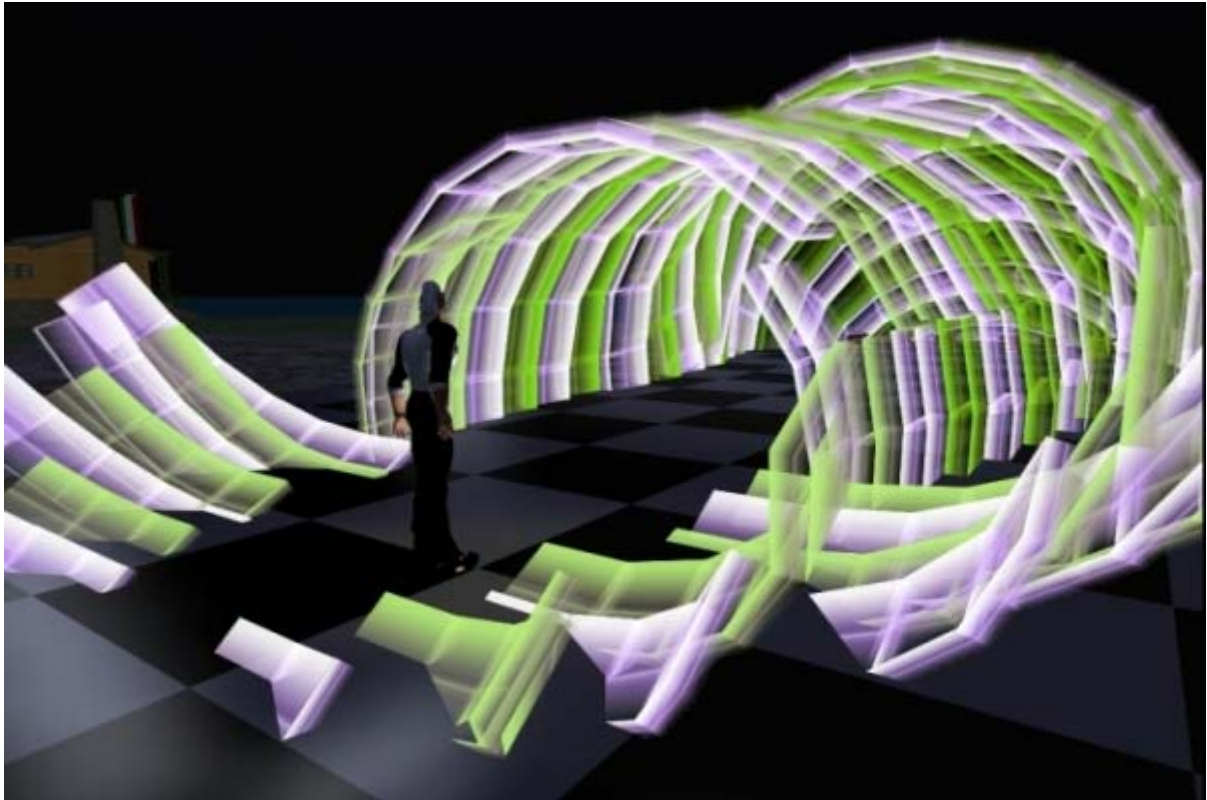
The research go on analysing the state of the art in the project of the space inside Second Life (photorealistic architecture, interactive architecture, reproductions of real architecture, etc...) finalize to identify its characteristic and peculiarity as well as drawin a possible way to follow in the project of the online virtual worlds.

Start from this base we tried to identify the possible application in the project of the real space, in which the use of 3d virtual worlds represent not just a representative tool more efficient compared to the traditional tool used in architecture, but also a out-and-out aid tool for the design. Then, the attention was moved on the project of the virtual space detecting the characteristic of function, component, structure and behaviour for an architecture born to exist just in a digital space (avataarchitecture).



SL represent a new tool for the project of real space (Scope Cleaver, Bartlett House)

Finally our research was focused on the development of a virtual architectural project able to synthesize previous considerations on the relationship between architecture and virtual worlds. Building an organism able to adapt to social-spatial communicative contest and able to detect qualitative and quantitative inside variations. Social relationship inside an adaptive architecture start dimensional and qualitative changing (adapting) in the structure in the bases of the communicative social-spatial contest inside the building able to guarantee and encourage social relationship.



Working in a virtual world mean design buildings and organize spaces for avatar

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