

## **Plannin and exploring a 4d landscape**

by Elena Masala

Tutor: Luca Caneparo

Co-tutor: Antonio De Rossi

Prefigurative ability, a peculiarity of multi-disciplinary architectural planning, takes an increasing important rule in decision making. This ability is today supported by many kinds of graphic tools, some manuals, some others derived from computer science, which can simulate a high visual realism. Often ignored in the architectural world, I want to demonstrate the application potentiality of this instrument on a vast area.

The chosen tool lays on the higher levels of the market and it is able to visualize in real time a virtual navigation inside the territory, the plan and the landscaping impact.

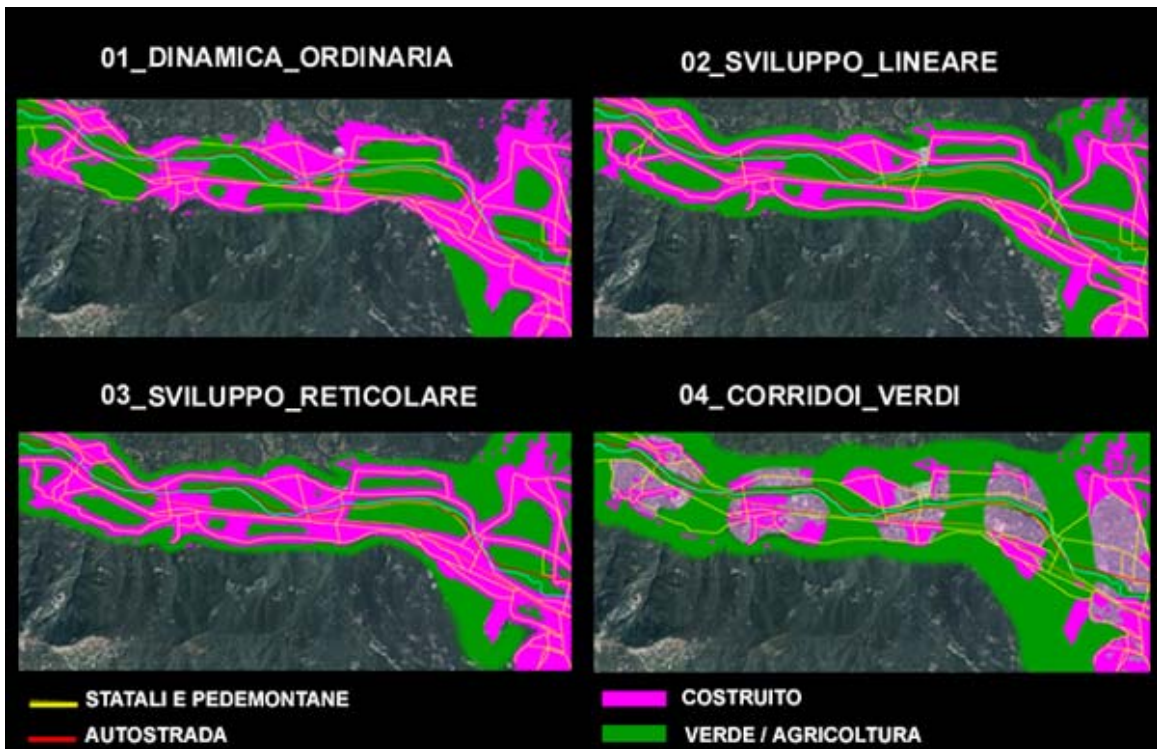
Through altimetrical data computing, satellitic orto-photos and GIS (Geographic Information System) datas, it is been possible to minimize man operation in modelling morphology. So we can get a model so precis that we can use it as a planning data.

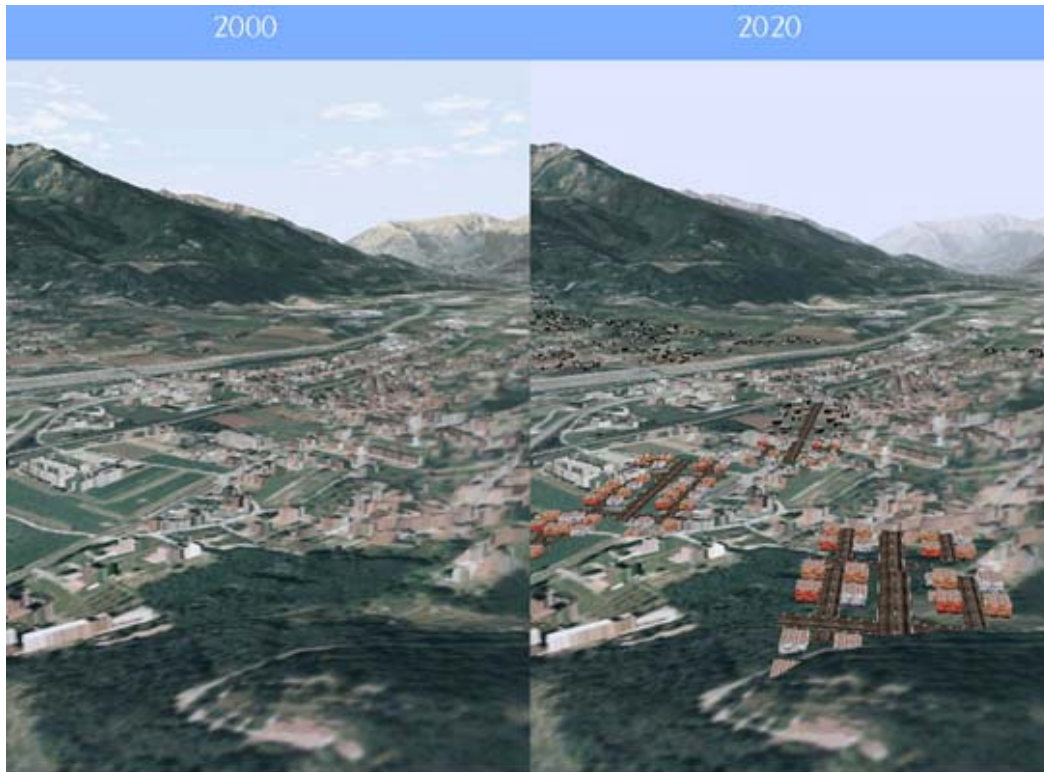


In this way I could examine a particular area, stressed by many interventions not at all adequate to the landscape and the environment and destined to new important realizations (such as Winter Olympic Games "Torino 2006" and high speed train): the "Val di Susa". Crossed by big road axes , highway, railways and Dora Riparia torrent, this valley is like a long corridor compressed along its infrastructures.

Object of an uncontrolled growth between '60s and '70s and directed to communication development during '80s and '90s, this valley has today the necessity of re-programming its own future looking for a competitive and sustainable growth in a landscape quality logic. Combining the use of this software package with another one of territory growth simulation (through cellular automata technology), I could give to the volumetric tridimensionality also a fourth temporal dimension.

This means that I built four meta-planning sceneries for the year 2020. For this purpose I used four extremed development logics: ordinary dynamic, linear and reticular growth and green corridors. So, I get four different sceneries, not realistic but a didactic and cognitive guide for planning process.





Through the deep readability of this virtual product we can have a transparent tool for the communication. This kind of visualization becomes not the end but the means of concerted planning, like a comparing place between different sciences.

For further information, e-mail address: [elena.masala@libero.it](mailto:elena.masala@libero.it)