

Modelling & mapping



URBAN SPACE TOOLKIT

MODELLING & MAPPING

Modeling is a method of cognition, consisting in the creation and study of models. This tool is often used for making models of the city spaces. If team works with the city context (makes a project related to urban space or a task about it) it can be also good for a deep understanding of space to use such an exercise. So modelling means creating a reduced model of something.

MAIN STAGES OF MODELLING

1. statement of the problem (for example, number of urban places in city)
2. model development, analysis and investigation of the problem (create a model on base of city mapped social researches)
3. computer experiment (creating 3D map)
4. analysis of simulation results

AREAS OF APPLICATION

By area of application models can be **educational**. For example, visual aids, training programs, various simulators. Experienced models are reduced or enlarged copies of a projected object. They are also called full-scale and are used to study the object and predict its future characteristics: the model of the ship is tested in the basin to determine the stability of the vessel during rolling.

Scientific and technical models create for research processes and phenomena: an electron accelerator, a device simulating a lightning bolt, a test bench for a TV.

Gaming: military, economic, sports, business games.

Simulation models do not simply reflect reality with some degree of accuracy, but imitate it. The experiment is either repeated many times in order to study and evaluate the consequences of any actions on the real situation, or is carried out simultaneously with many other similar objects, but delivered in different conditions. A similar method of choosing the right solution is called trial and error.

MAPPING

It can look like a real map. For example, maps with illustrations of air pollution, green zones or planning system of the city in general. This map could be used for finding solutions of different problems. But on the other hand "mapping" tool is also a type of systematization for a lot of information in a working process.

At the stage of model development, an information model is constructed, that is, the formation of the idea of the elements that make up the original object.

If the results of modeling are confirmed and can serve as the basis for forecasting behavior of the objects under study, it is said that the model is adequate to the object. The degree of adequacy depends on the purpose and the modeling criteria.