



Parametric design to foster cross-border governance

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Introduction

Conceptual model

Cross border region between Switzerland and Italy

Creativity





Informal planning

is a **set of** instruments and procedures do not underlie the fixed procedures of planning law so that they can be designed **flexibly** and matched to the conditions according to the occasion, the topic, or the constellation **stakeholders**. Informal planning is not regulated (in its accuracy) as much formal planning. Informal planning is **indispensable for** the preparation of **formal** planning as well as for many others.

Source: Scholl B. - "Formal and informal instruments and procedures", 2016.



**Interdisciplinary
and multilevel
approach**

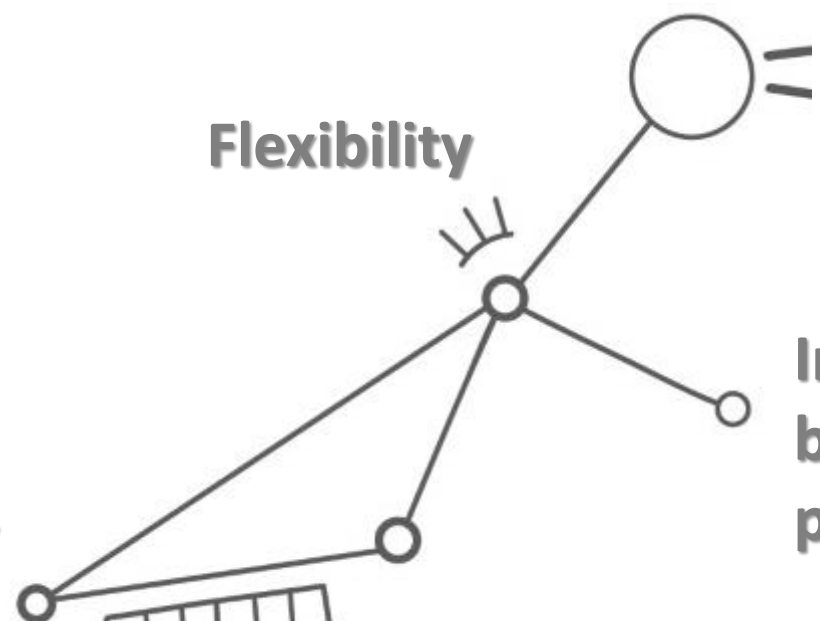
Flexibility



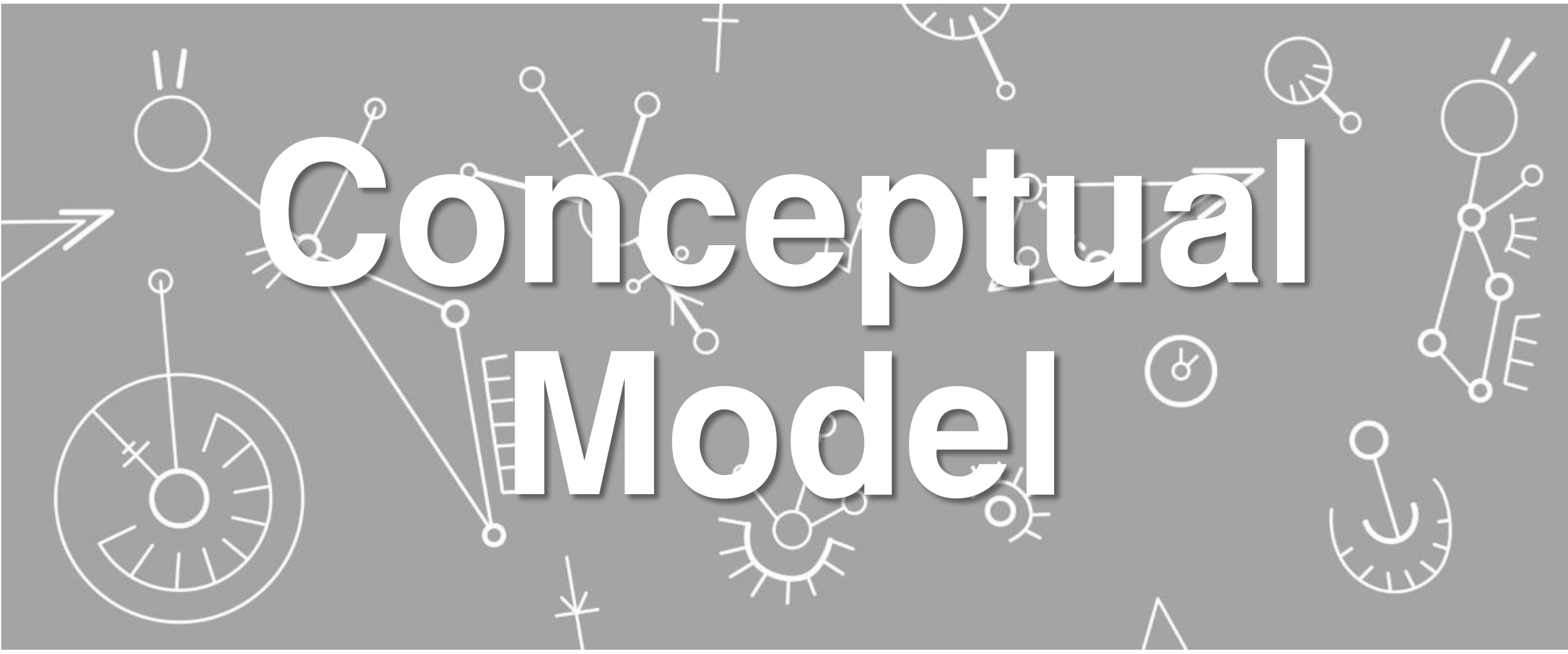
**Integration
with new
technologies**

**Compliance with
cross-border
governance**

**Included in a
broader planning
process**



Conceptual Model



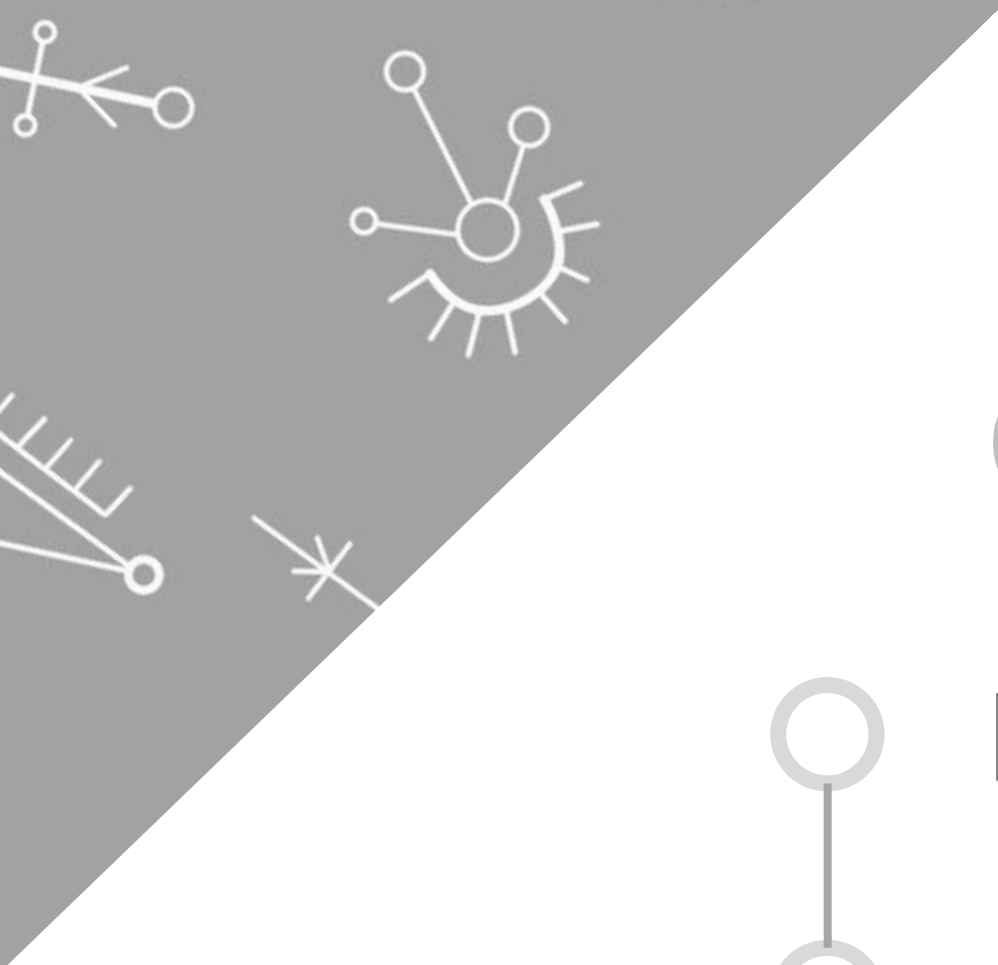


Conceptual model

is **not a phase** of the process but the set of procedures necessary to coordinate a participatory planning process.

In accordance with Tolk's interpretation, conceptual modeling is not a limited activity in the initialisation phase of a simulation system, but a perpetually reoccurring **process** that drives the design of **experimentation**, the providing of necessary **data**, the **evaluation** and presentation of **results**, and many **more activities** conducted within the life cycle of the system.

Source: VV.AA. "Conceptual Modeling: Definition, Purpose, and Benefits", 2015.



Conceptual Model



Parametric Design

Communication forms

Conceptual Model

Parametric Design & Communication forms


Increasing the level of engagement of the stakeholders.

Creating territorial processes in the immediate and medium to long term.

Allows the governance but to go beyond the existing administrative limits.

Understand problems and make shared decisions.





Parametric Design

Evaluating
design alternatives
and their effects
on the area

Systematise rules
and a large amount
of data from
different disciplines

Coordinate the
territorial
transformations

Captures the
attention

NO barriers

Connects and
involves people

Create new
networks and
strengthen
existing ones



Communication forms



Cross border region between Switzerland and Italy

Source: Municipality of Chiasso



**The border has
always been
permeable.**

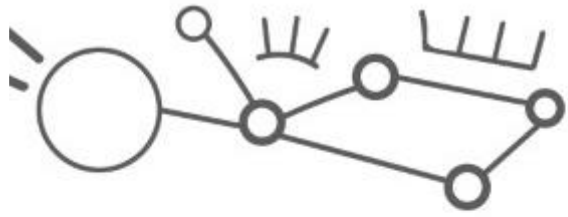
The absence of a language
barrier favours this.



Main **problems:**

absence of a strategic vision
use of sprawl

congestion on the roads
environmental and acoustic pollution

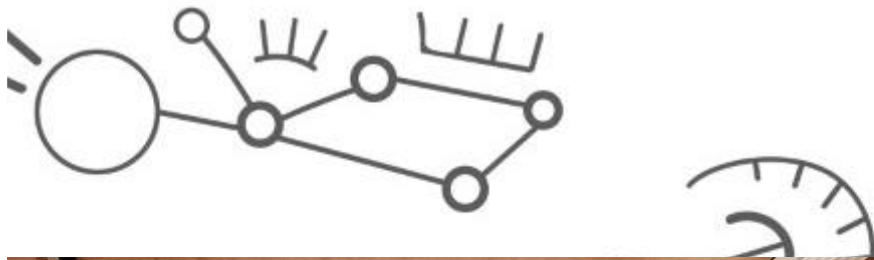


Informal Planning

Cross-border governance

Bottom-up approach

Micro region



Source: SUPSI University, New campus in Mendrisio

The first test

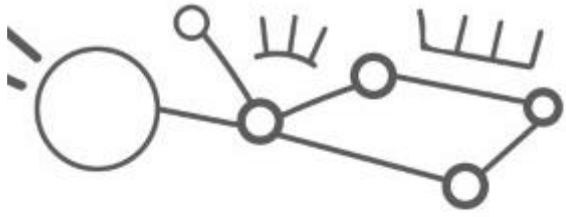
RULES

- students divided into five groups
- each group play a different role.

FEATURES

- multilevel approaches
- interdisciplinary approaches
- different methods of representation
- communication plan

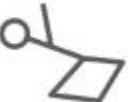
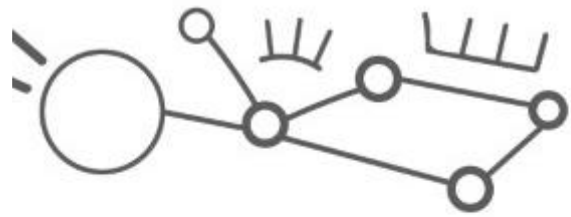




Source: A.Rollandi, The first results of test



The analysis showed that **parametric design** helped the actors to better understand the projects and to argue clearly their needs and ideas. Furthermore, this tool allows to overcome the existing **administrative limits**.



Conceptual model

The aim of the research is to create a conceptual model recognized by the institutions.

A tool in compliance with cross-border **governance**, different scales of intervention and **informal** tools. Finally, tools must favor **bottom-up** approaches.



Thank you

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