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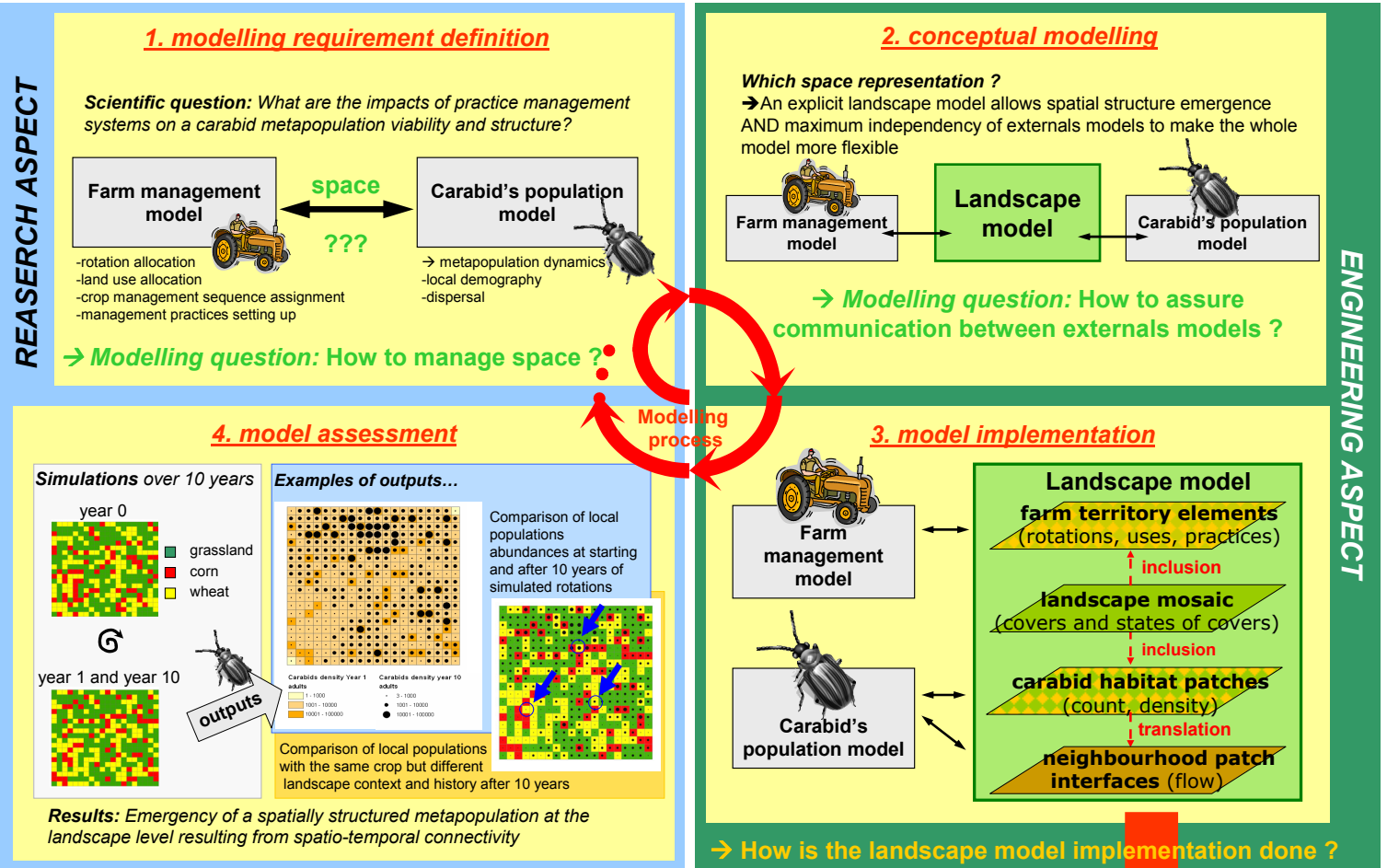
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Layers dependencies specifications in the APILand simulation approach: an application to the coupling of a farm model and a carabid model



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APILand : Application Programming Interface Landscape

What is APILand ?

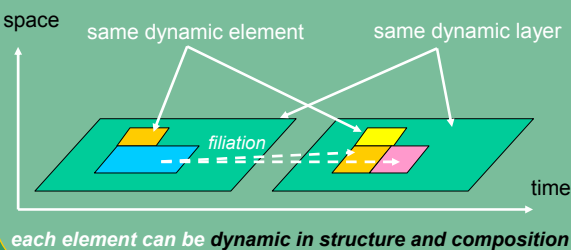
technical aspects

- Library 100% pure JAVA™ → toolbox, reusability
- Oriented-object modelling → flexibility, UML
- Designs patterns → designing good practices

useful to manage dynamic landscape elements

- Different aspects of the same object
- 2D Spatio-temporal or spatio-dynamical objects
- Historical objects
- Dealing with different scales
- Dynamic and thematic layers

What is a dynamic layer ?



What is a spatial link ?

3 types have been identified

1. The « **sharing** » is used when external models have the same representation of what is the Landscape
2. The « **translation** » is used when a layer comes up from another one. It can be :
 - a treatment (ex: vector to raster conversion),
 - an analysis (ex: heterogeneity),
 - a filtering,
 - ...
3. The « **inclusion** » is used when the specification of a thematic layer is an extension of another one

→ Through combinations of dynamic layers and spatial links, APILand permits to JAVA™ programmers to easily and quickly develop landscape simulators