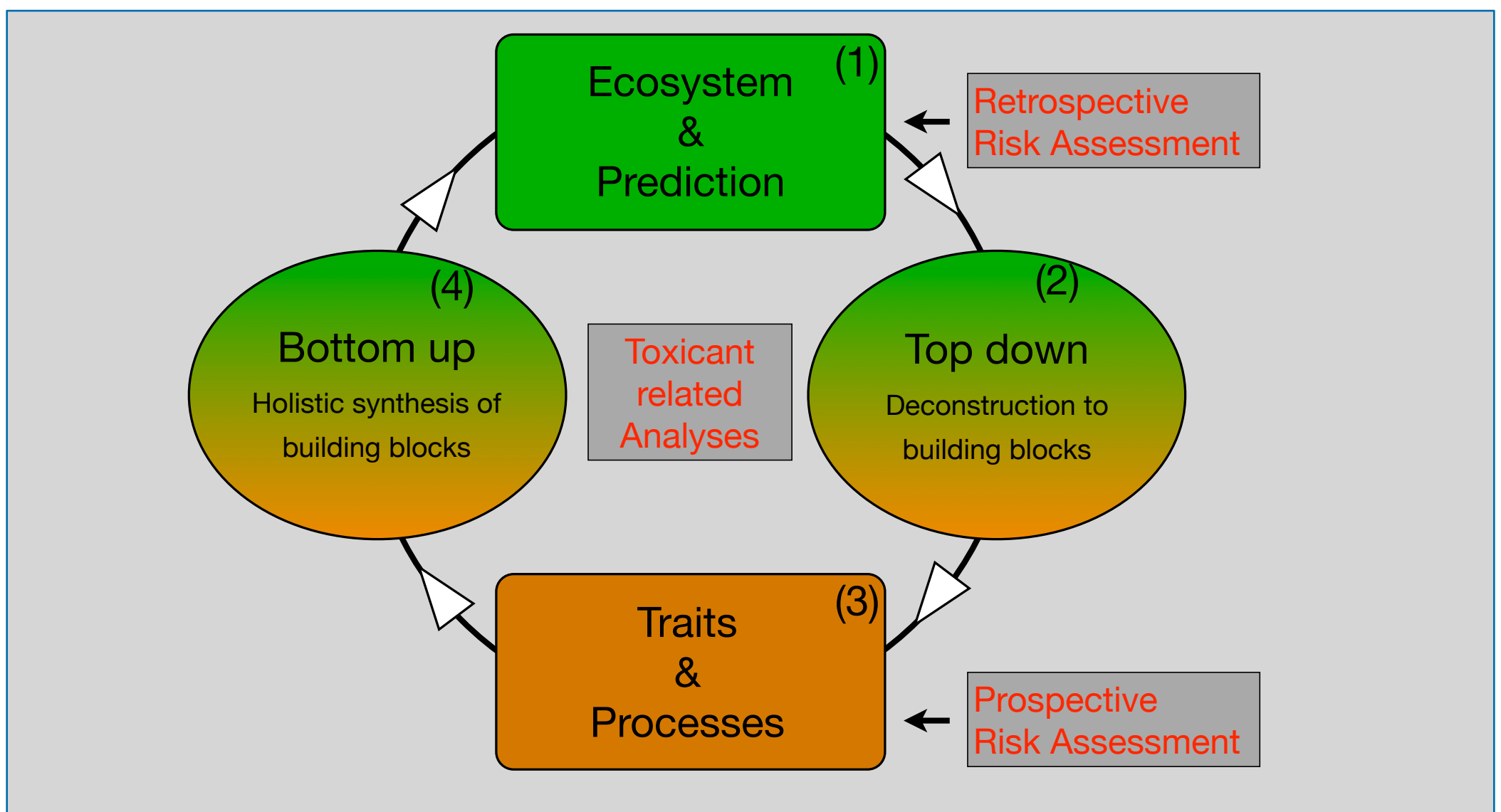


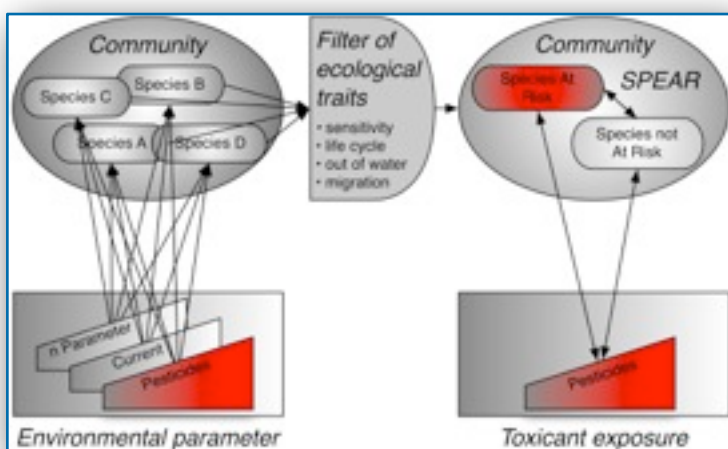
Assess ecological risks of toxicants with the UP-DOWN risk assessment approach

Matthias Liess

- Retrospective risk assessment identifies relevant traits and processes in ecosystems related to toxicant vulnerability in a top down approach.
- Prospective risk assessment applies these building blocks to predict ecosystem effects of toxicants in a bottom up approach.
- Starting from ecosystem effects enables to identify field relevant processes; Effect predictions can be validated with ecosystem effects.

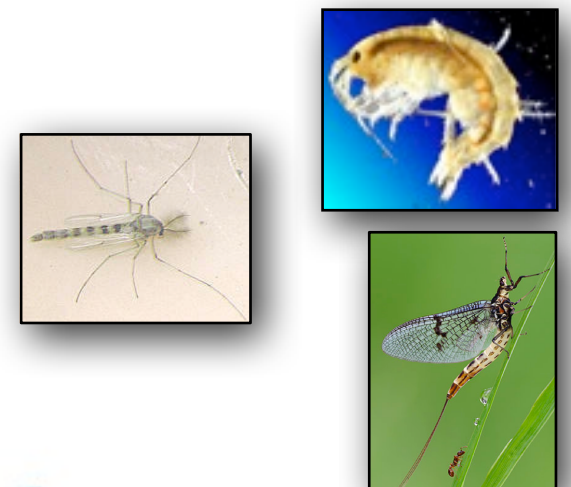


Example of bottom up prediction:
SPEAR approach



Examples of relevant building blocks:

- Migration
- Life cycle
- Sensitivity



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