Vario-scale geo-information

User committee Meeting
June 19, 2013
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Enabling new technology

Introduction

- Vario-scale: 2D space + 1D scale = 3D
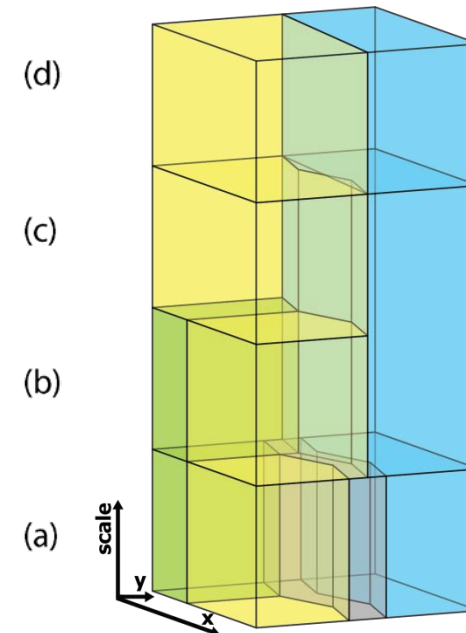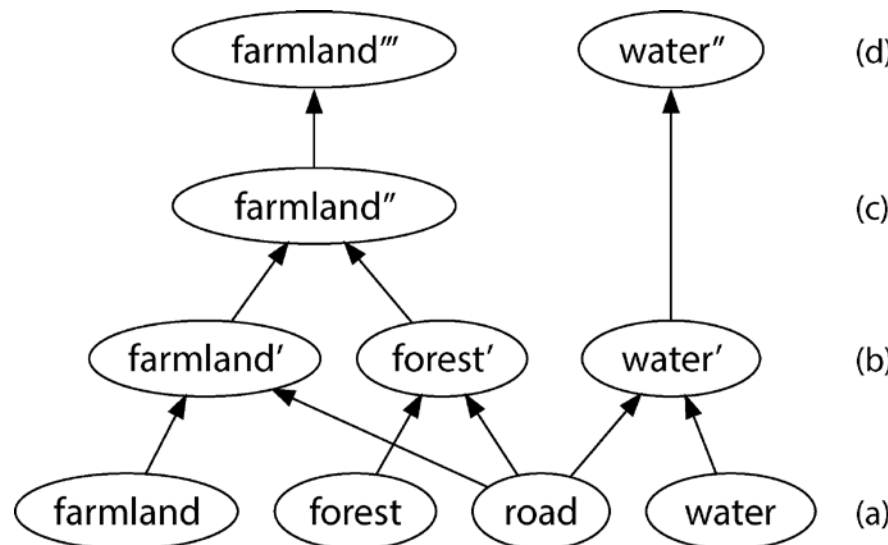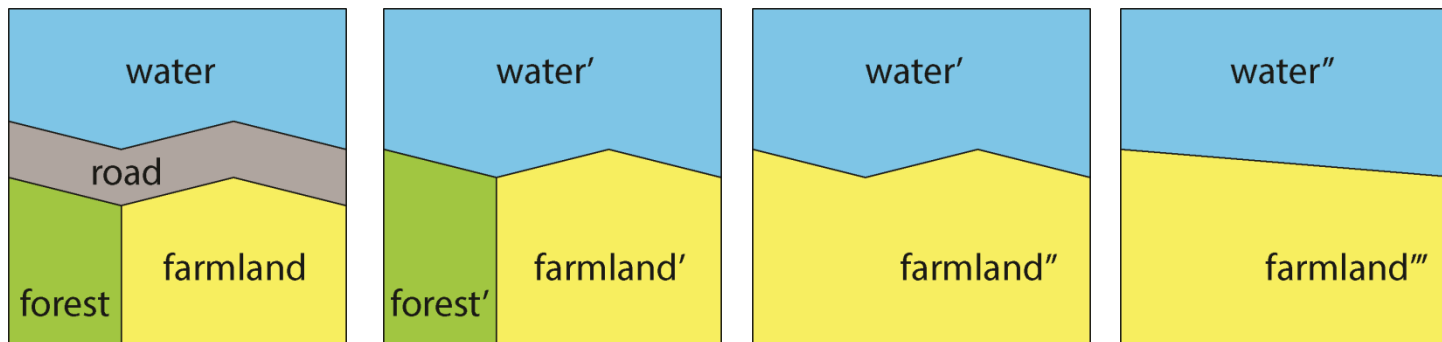
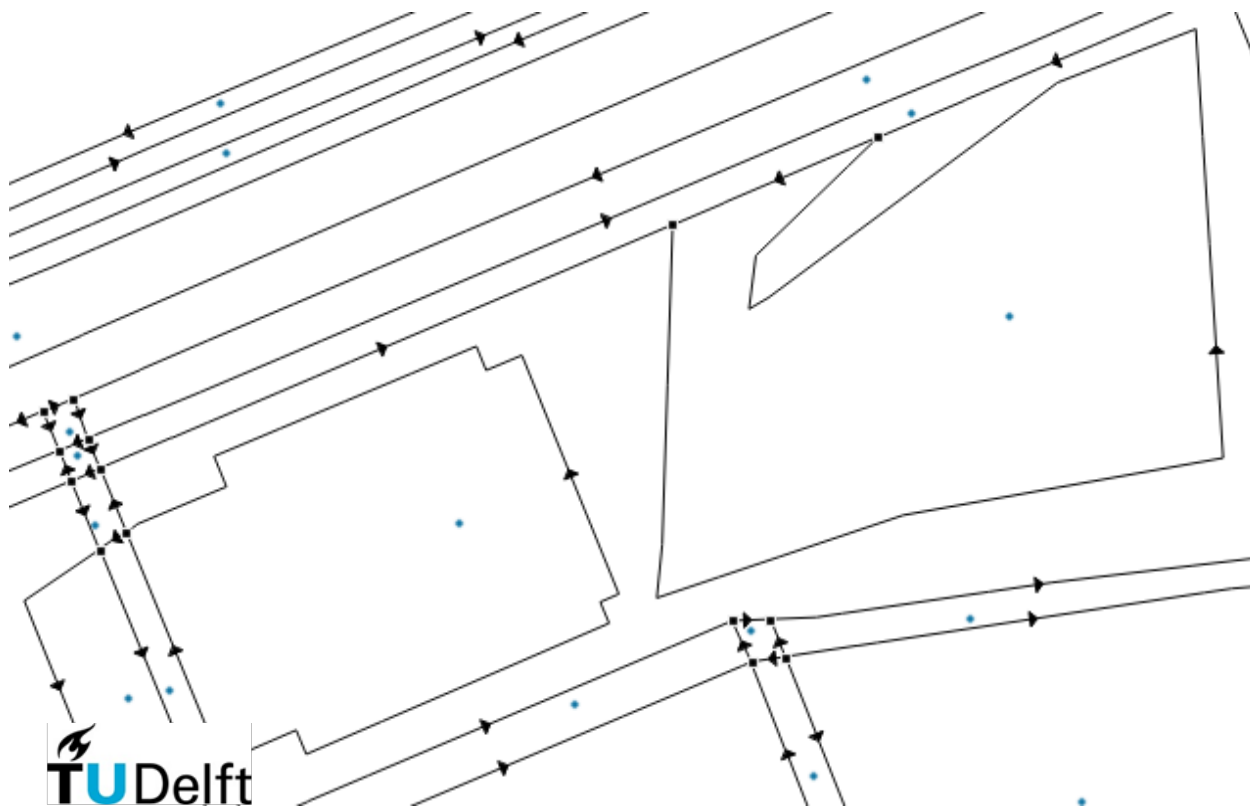# Main Remarks User Committee 19-9-12

- Test with real data

- Meaningful map generalization is critical

- Updates are important for practice

Results - Martijn

- EdgeCrack: build large topology structure →
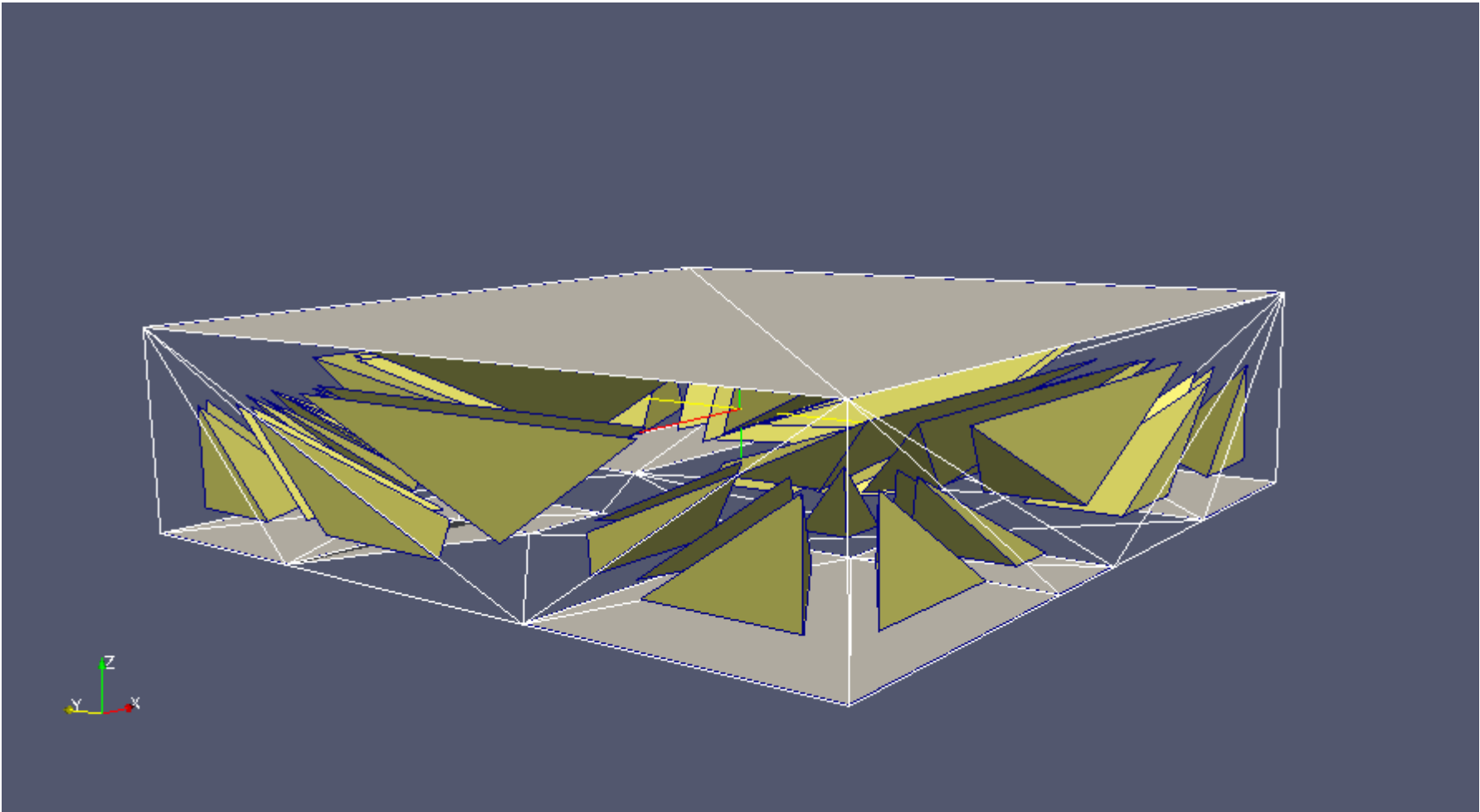 Top10NL
  Presented at UDMS conference, London

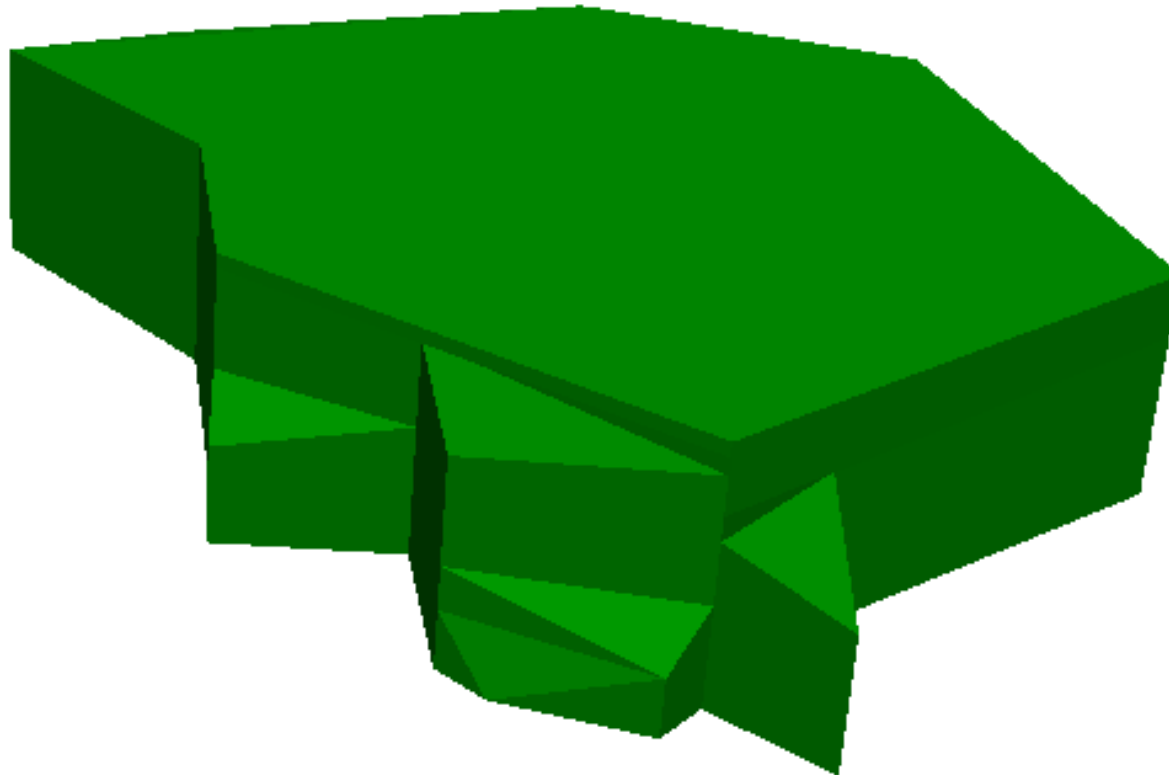| Topology	
Nodes	7 887 686
Edges	13 040 554
Faces	**5 298 197**

TUDelft

Results - Martijn

- Smooth typification → Artificial test data
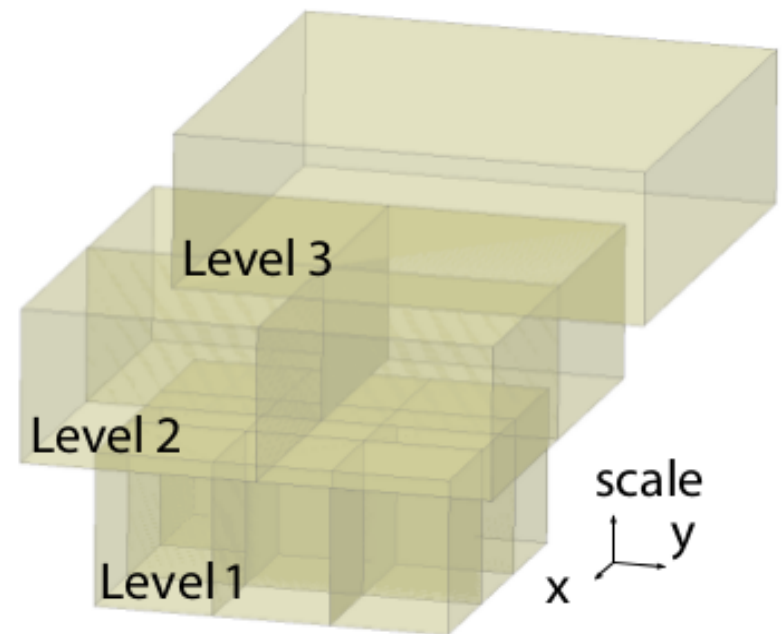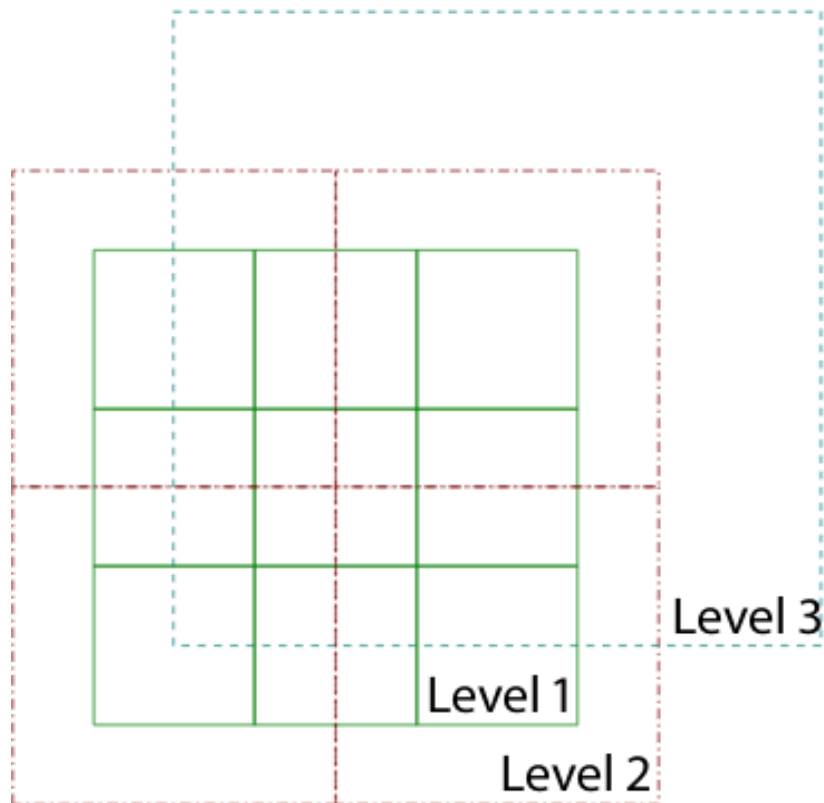
Results - Martijn

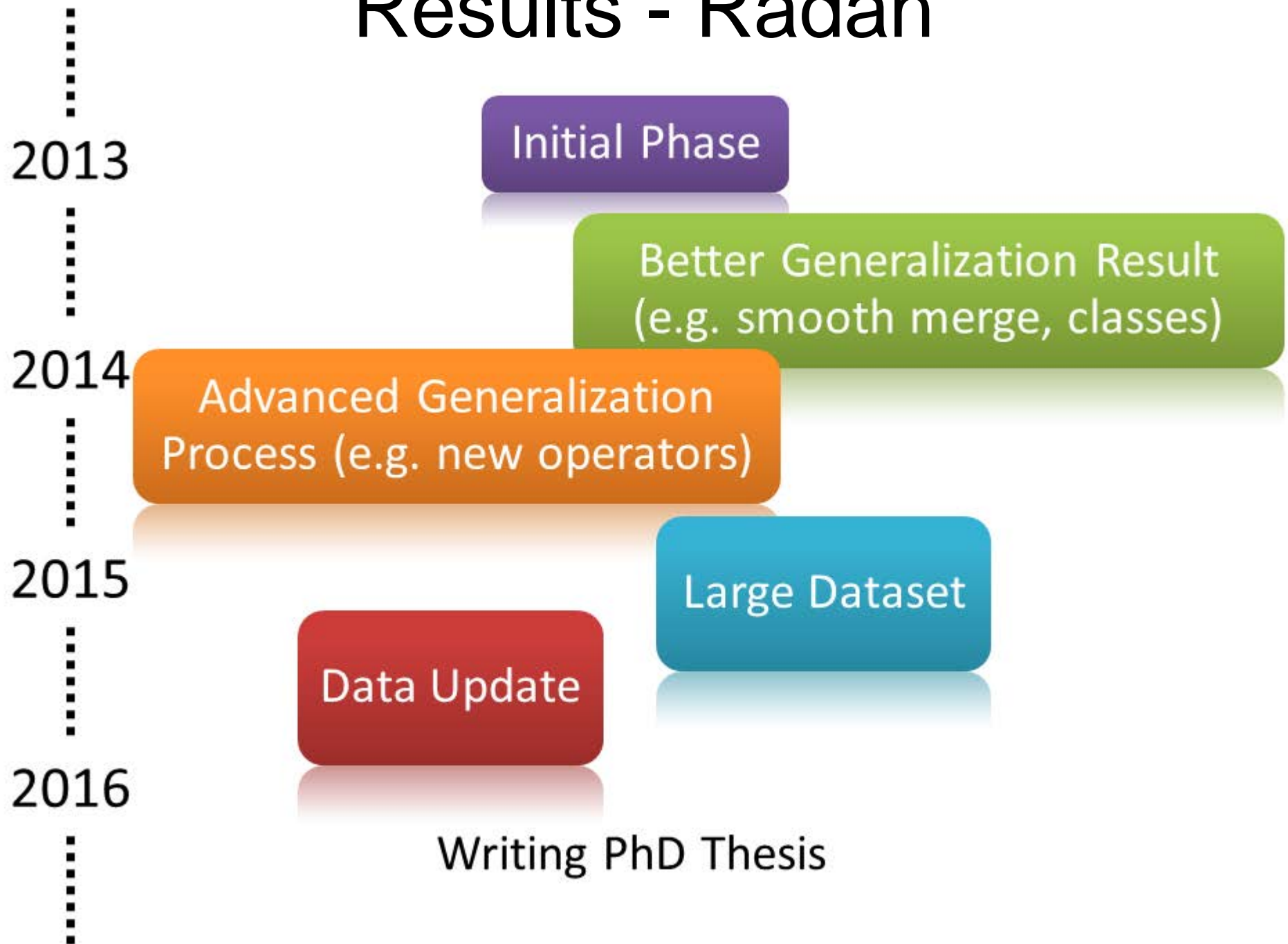- Smooth line simplification → Atkis data

Work in progress - Martijn

- Processing large input into vario-scale

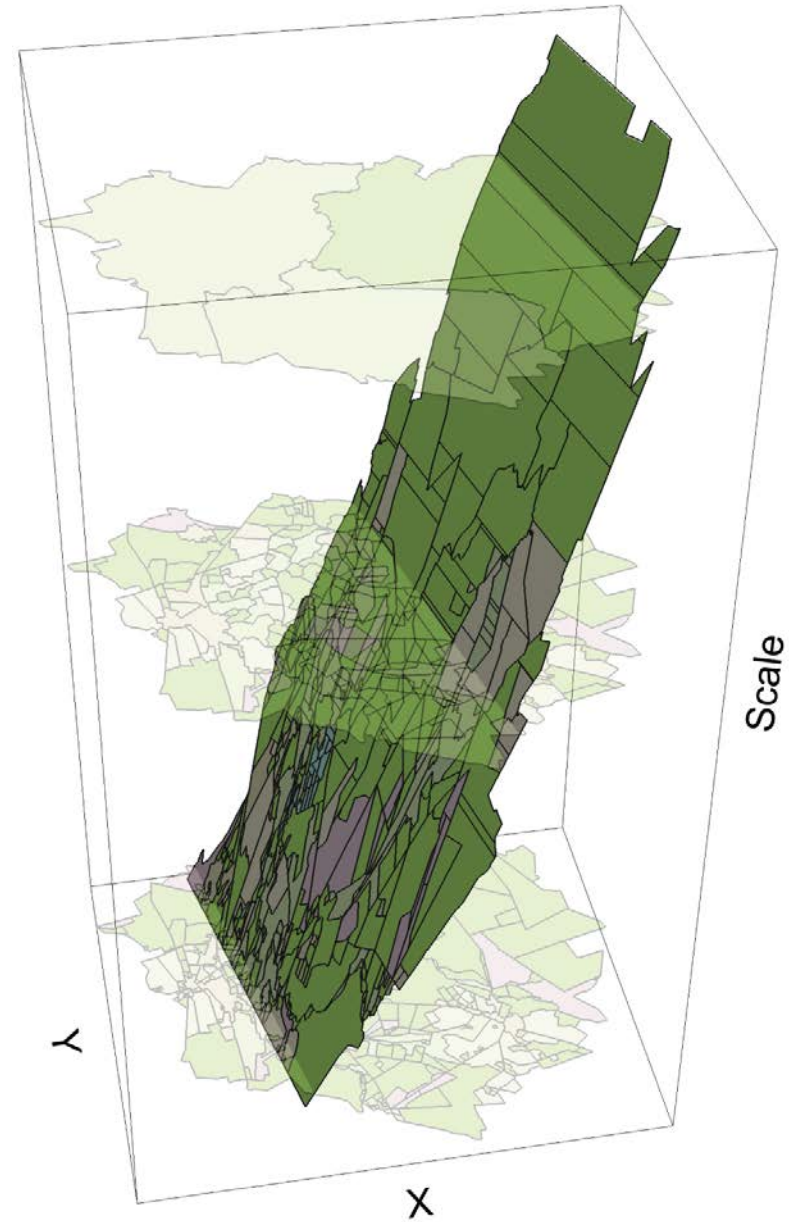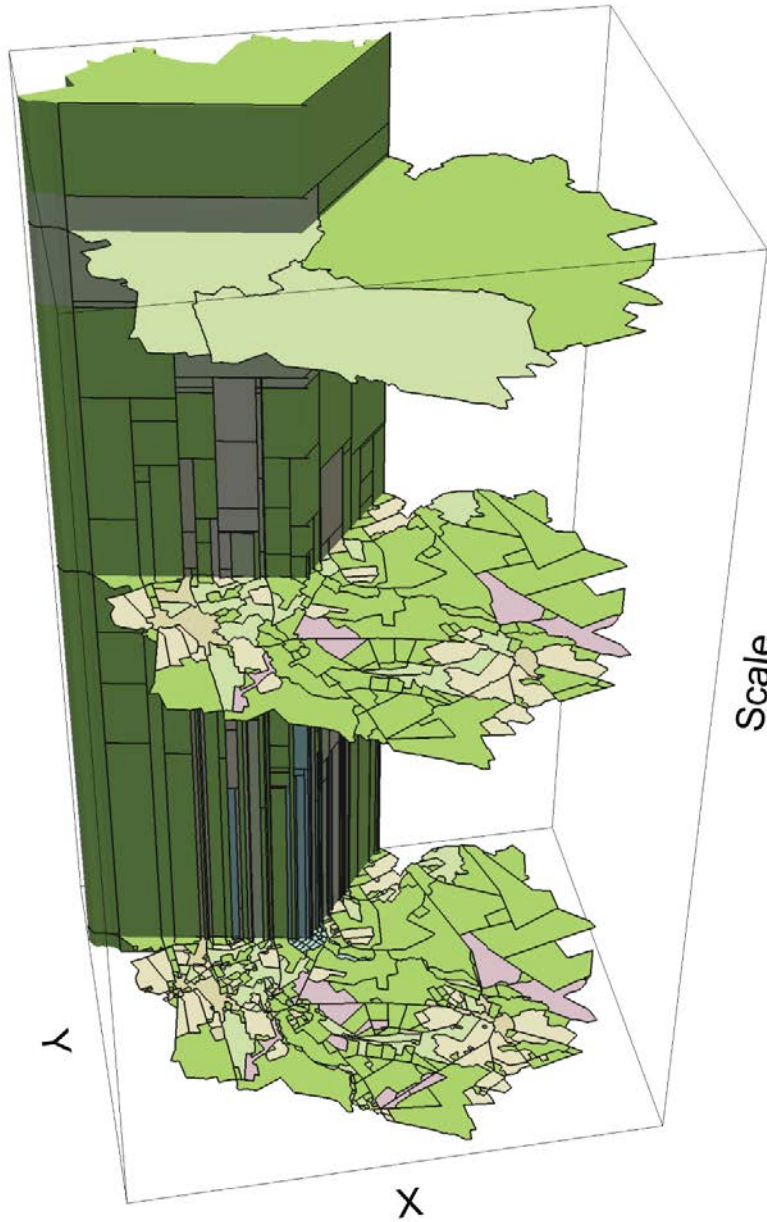 Sketched work flow using fieldtree, now implementing
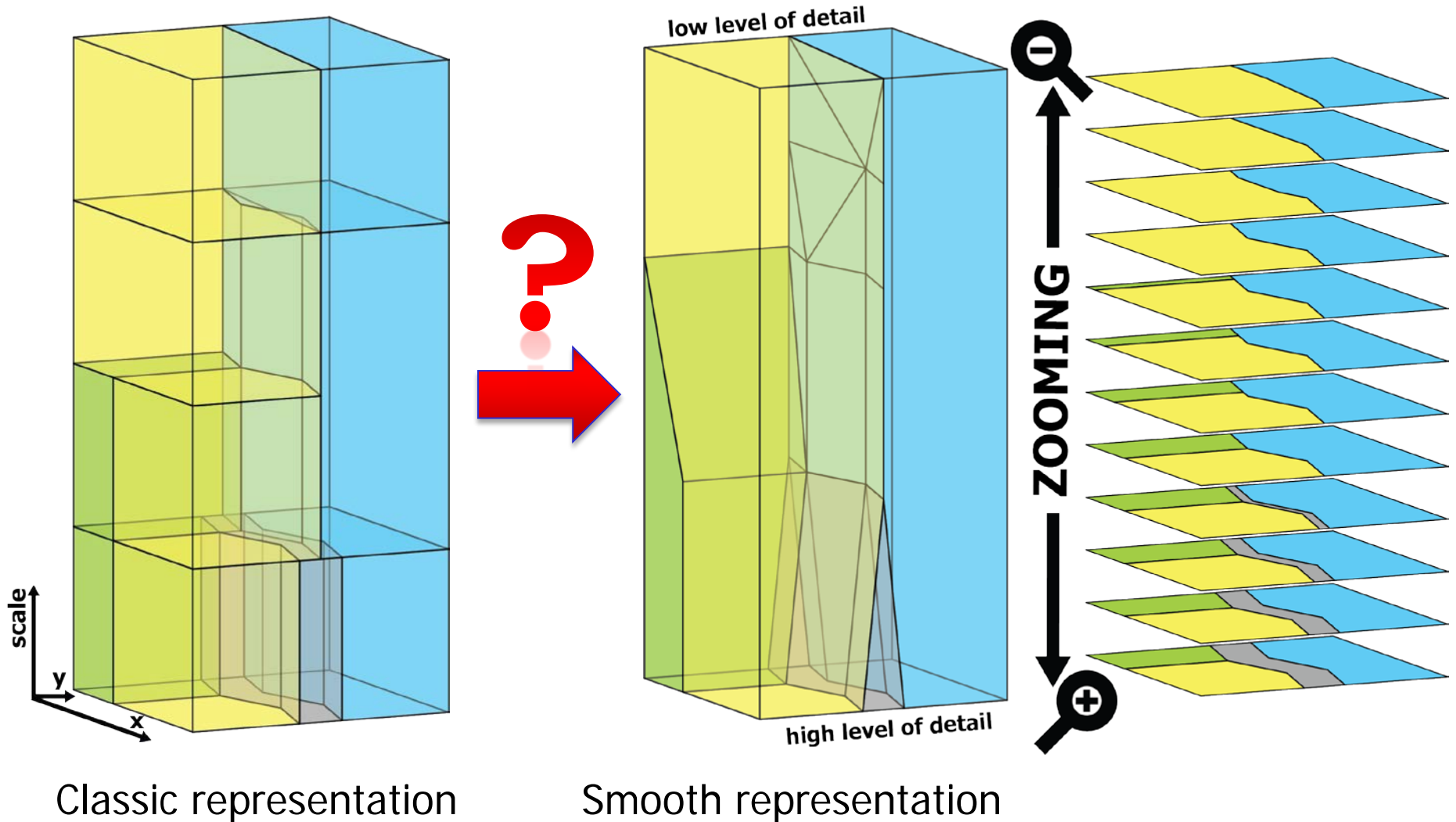
Results - Radan

Results - Radan

- Experiment with real data and mixed-scale (Atkis)

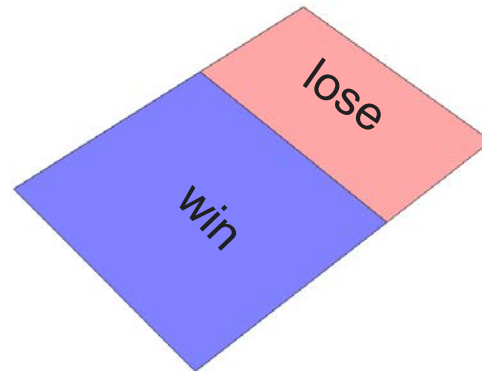# Work in progress - Radan

- Smooth merge operation (gradual transition)

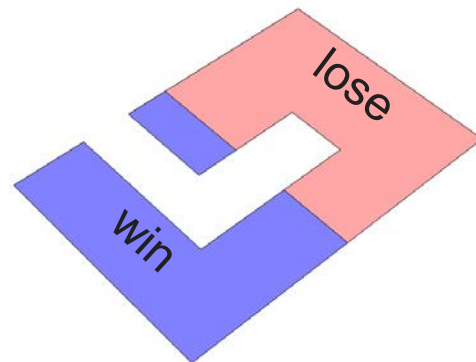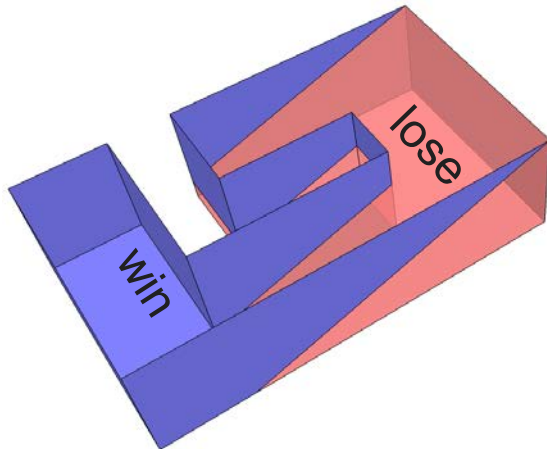Classic representation   Smooth representation

Work in progress - Radan

- Smooth merge operation- Simple flat plane
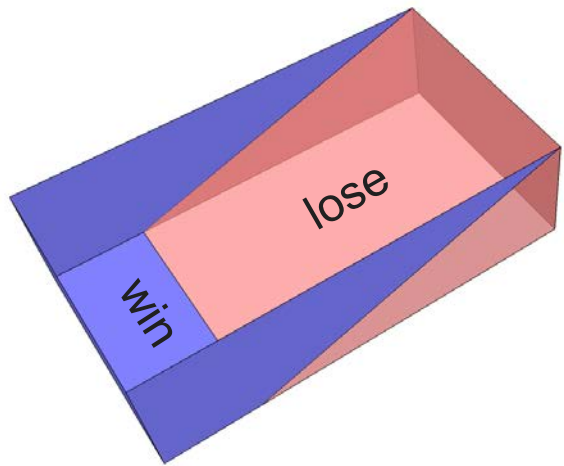
A arbitrary slice of simple object

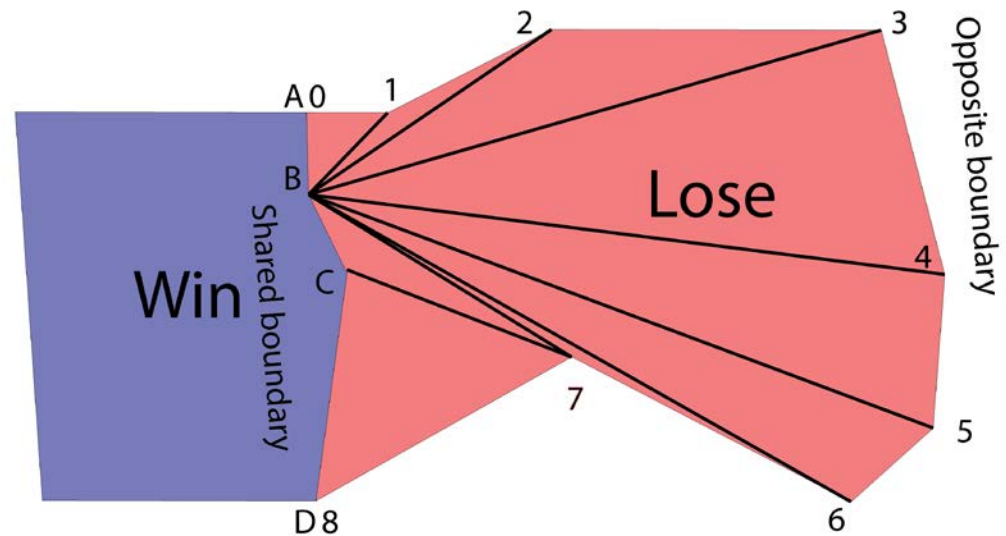A arbitrary slice of object where multi-parts could happen

PROBLEMS: Multi-parts, one directions, no solution for more shared boundaries

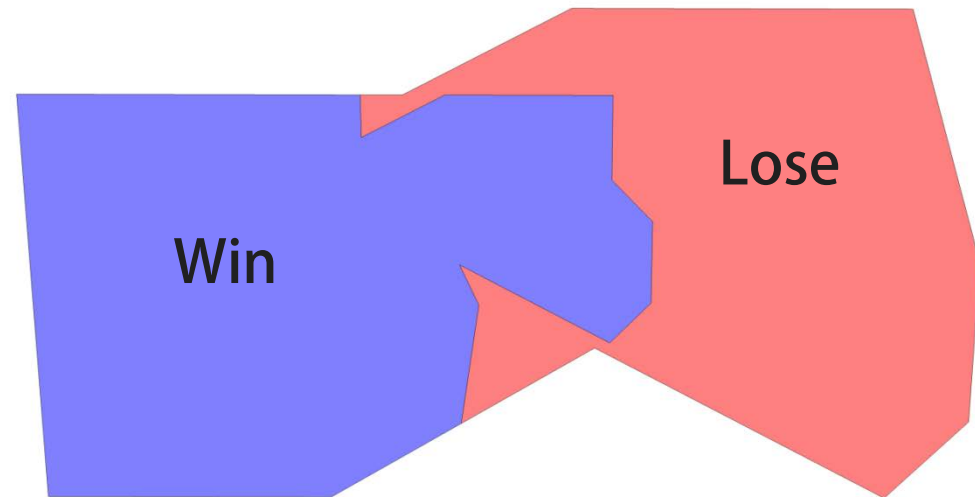**NEXT:** Smooth merge operation based on triangulation ("Zipper")

Work in progress - Radan

- Smooth merge operation- "Zipper"

Correct triangulation

A arbitrary slice of object
in smooth representation

Remarks User Committee

- Test with real data
  - → Atkis: 3D space-scale partition
  - → Top10NL: road, water, terrain
  - → BGT: constrained tGAP?

- Meaningful generalization is critical
  - → plan Radan

- Updates are important
  - → plan Radan

Better Generalization Result
(e.g. smooth merge, classes)

Advanced Generalization
Process (e.g. new operators)

Data Update

TUDelft

Future Plans

- Progressive transfer – Martijn / Chinese Postdoc (Lina Huang)

- Road network connectivity – Martijn / Radan

- Smooth operations – Radan

- Investigate storage: nD data structures – Martijn / Ken

- Mixed scale maps – Martijn / Lund University