



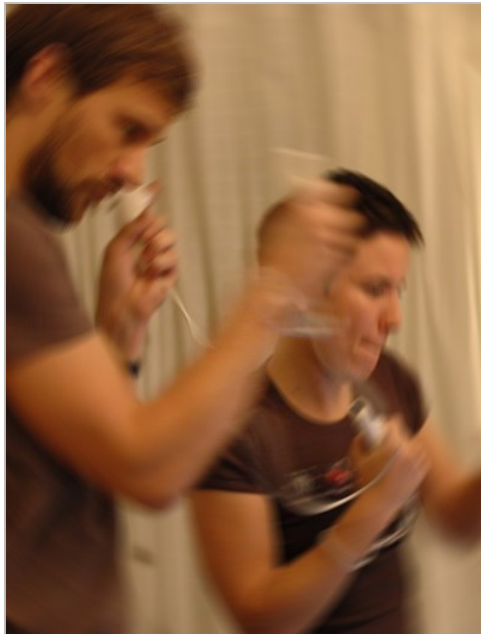
Learning to Understand Geodesign by Playing Geogames

07/06/2013 ESRI EdUC

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Research group for Computing in the Cultural Sciences

A simple idea



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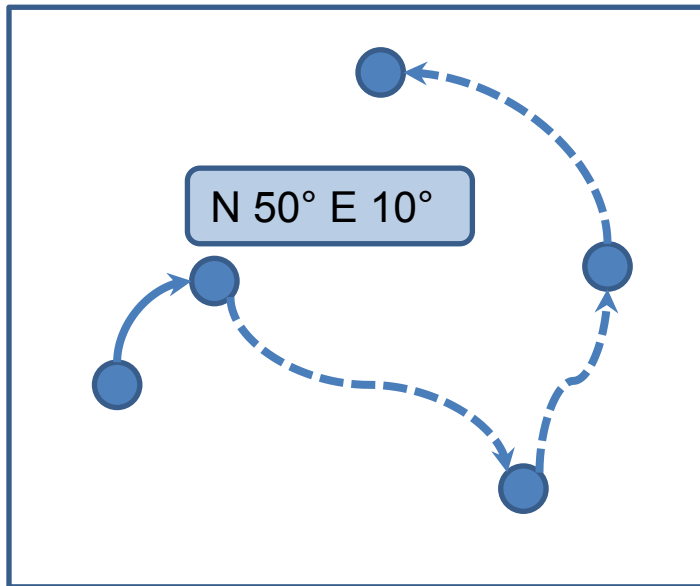
indoor / motion



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outdoor / locomotion

Beyond Geocaching, beyond GeoTicTacToe



Multicache



Geogame

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Geogames in Education

- University of Bamberg
 - Research group on Computing in the Cultural Sciences
 - designs and studies Geogames since 2004
- Research focus
 - interaction of game mechanics and learning
 - Geography and biology education



core team



external members



∴

many students

Geodesign reading game



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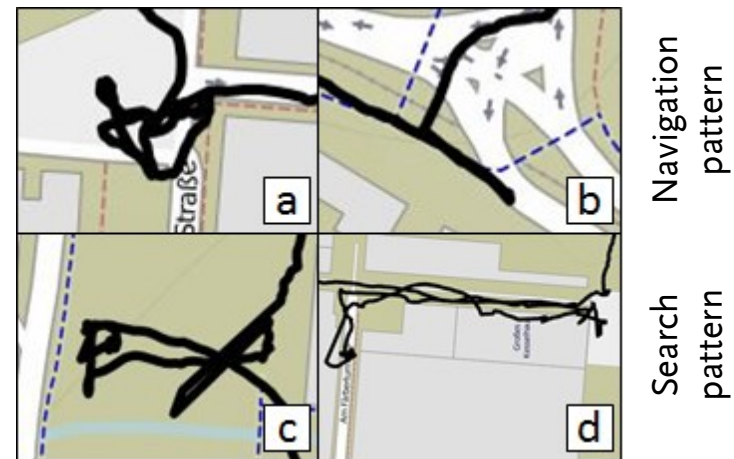
Reading historical
and contemporary
urban designs

Geogames and Geodesign

Geogames		Steinitz et al. 2003	
Exploration games	Learning to use a spatial design	How should the state of the landscape be described ...?	representation
	How do I move from A to B? What is the best place for activity X?	How does the landscape operate?	process
Evaluation games	Learning to evaluate a design	Is the current landscape working well?	evaluation
	How do I feel about place A? What would I need there?	How might the landscape be altered ...?	change

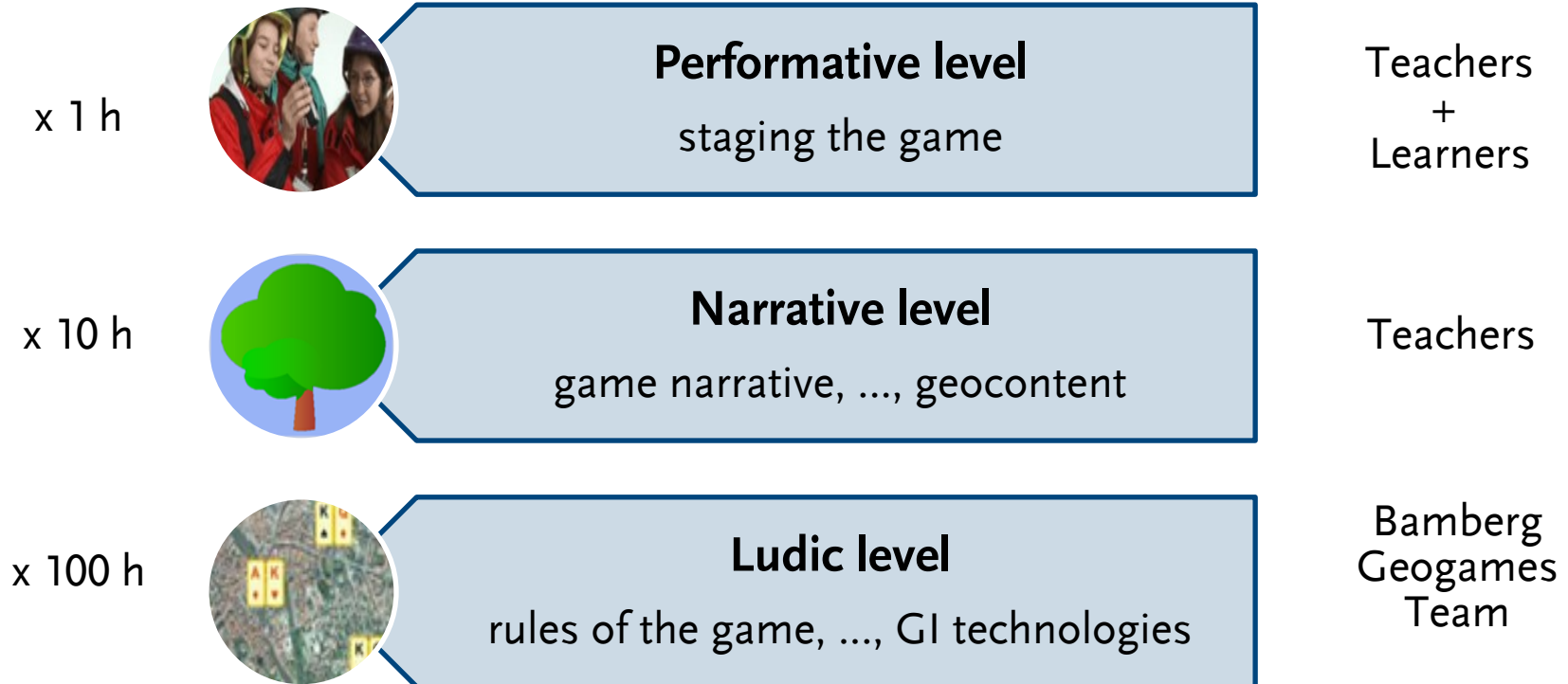
Lessons learned (1): Spatial choices

- Motivation
 - Positively affected by perceived choice
 - Negatively affected by pressure/tension
- Mobility
 - Search pattern vs. navigation pattern
 - Risk of taking wrong decisions vs. game fun



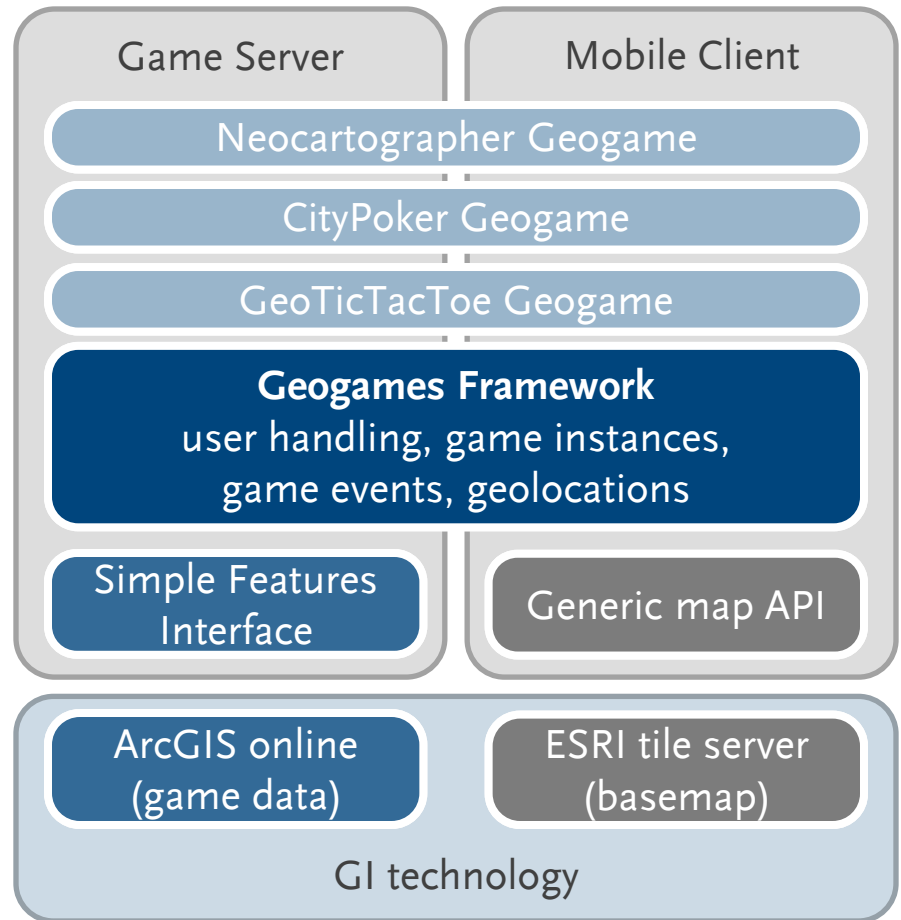
Spatial choices in an educational Geogame.
 Kremer, Schlieder, Feulner, Ohl (2013)

Lessons learned (2): Managing complexity



Architecture

- Geogame Engine
 - Game Server (Java)
 - Game Client (Android)
- GI technology
 - ESRI basemap
 - ArcGIS online
- Next Steps
 - Game data editor
 - more games: data collection, simulation game, GeoDesign



We need assistance

- We offer
 - Geogame Android App
 - Hosting game sessions
 - Implementation of new game ideas
 - ...
- Contact
 - <http://geogames-team.org/>
 - geogames@uni-bamberg.de



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Play Geogames here at the EdUC!