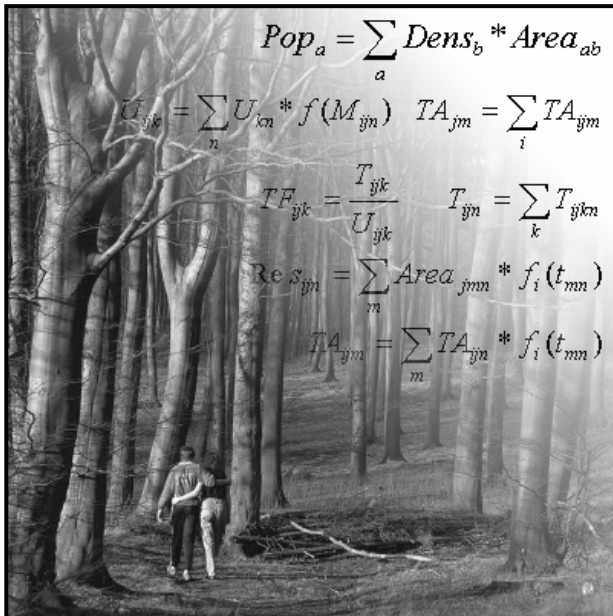




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An empirical study of recreational route choices

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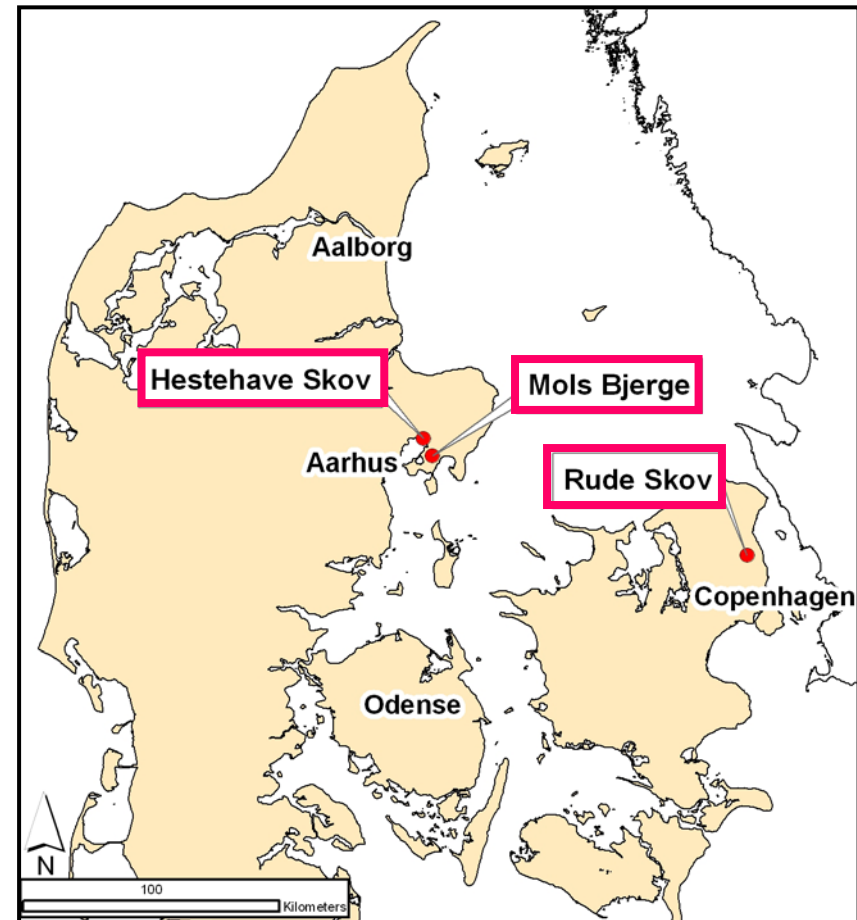
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Recreational route choices

– Introduction to the presentation

Scope... bounding conditions

- What is meant by way-finding behavior?
 - Application of fixed routes vs. browsing behaviors
 - On- vs. off-piste behaviors
- What is the environmental setting?
 - The study is performed at three locations in Denmark, which – on a global scale – must be seen as highly populated, almost peri-urban...





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Recreational route choices

– Introduction to the presentation

Program

- Introduction: Why is investigation of way finding behavior interesting?
- Background and hypothesis: What can be the motivation behind people's application of different way finding behaviors?
- Methods: Introduction to the fieldwork and questionnaire.
- Results: Who applies which behaviors... and why?
- Perspectives...



Introduction



Why is investigation of way finding behavior interesting?

- From a management point of view:
 - Facility setting
 - Wildlife disturbance
 - Information strategy: Signs, maps etc.
- From a (agent-based) simulation point of view:
 - Towards a behavior typology
- Looking for generic knowledge:
 - How do people find their way through known and unknown environments
 - How do people learn and store spatial information about the environment
 - How is local knowledge put together into entire mental maps
 - How is spatial knowledge stored as mental maps applied when pursuing recreational requirements



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Background and hypothesis

What can be the motivation behind people's application of different way finding behaviors?

- Different activities pursued
- Level of knowledge/familiarity of the location

... which again can be influenced by the required travel distance.



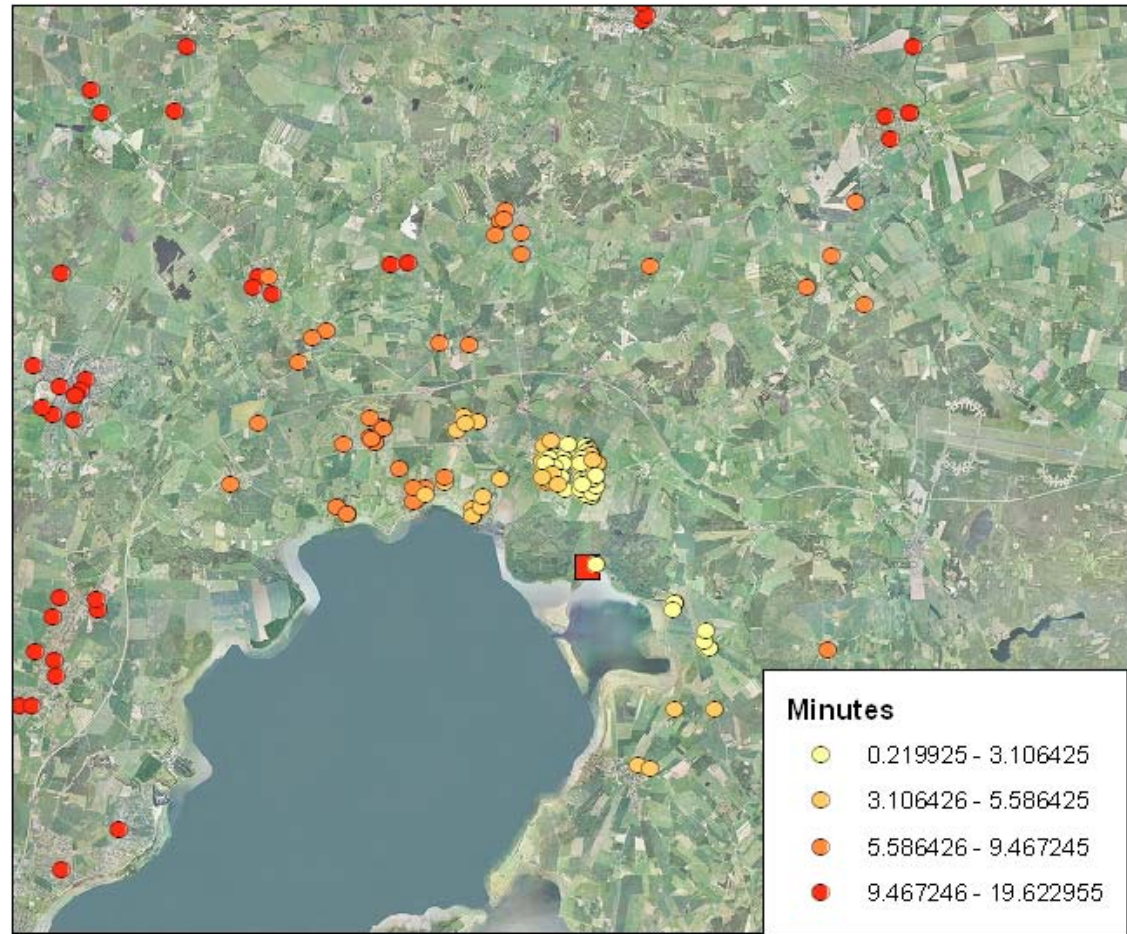


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Methods and field work

Introduction to questionnaire

- Locations and schedule
 - Three locations (Hestehaven, Mols Bjerger and Rude Skov)
 - 5-8 weekends in 2005-2006 (2007 is in process)
- Responses (682, 483 geo-codable)





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Methods and field work

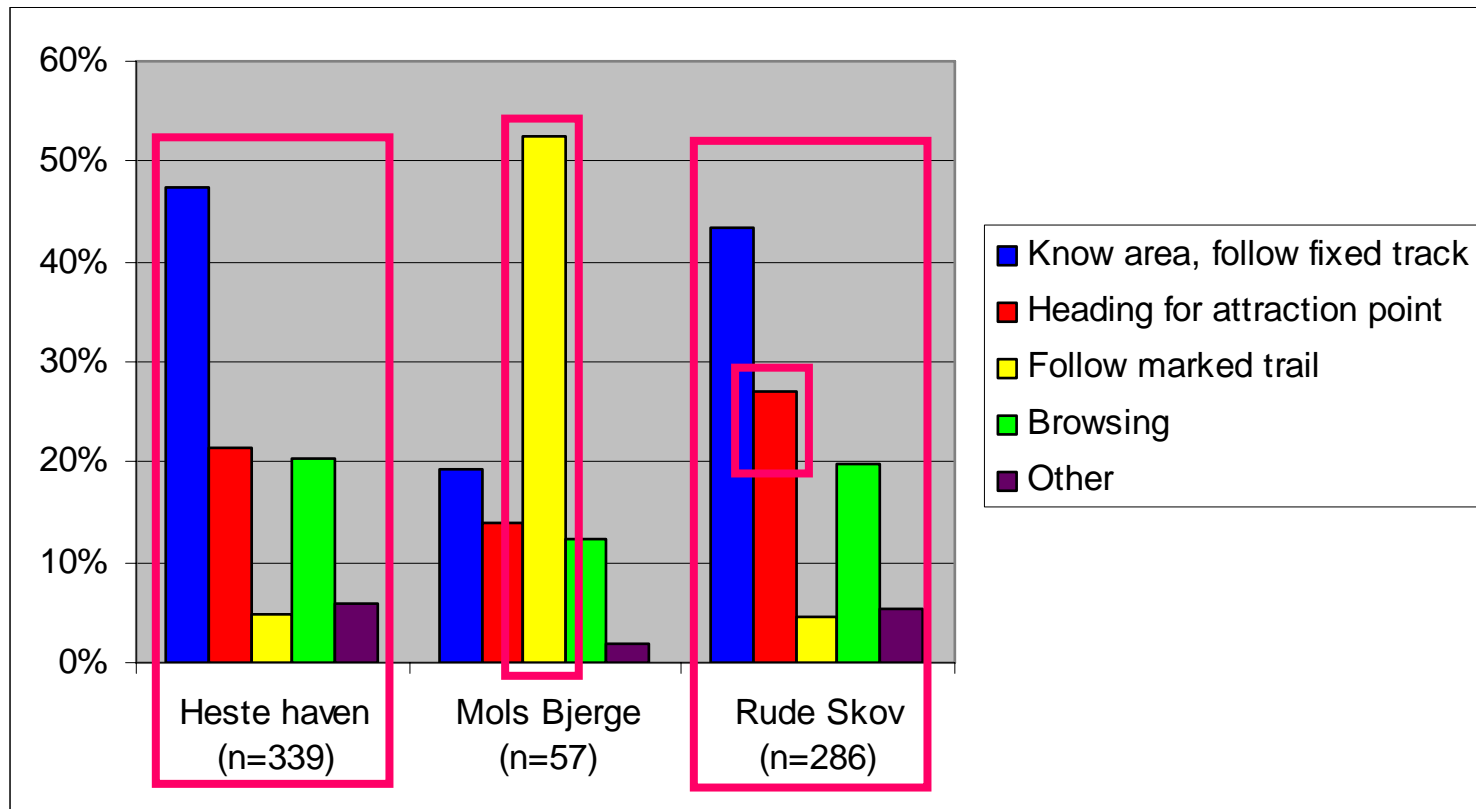
Two focal questions of the questionnaire:

- How did you mainly choose your route today?
 - I knew the area, followed a fixed route
 - I was heading for a specified target
 - I followed a marked trail
 - I browsed my way through
- Did you go outside the trail network. If so..
 - To what extent
 - Why did you leave the trail
 - How did you choose the point where you left the trail



Results:

- Differences between localities in way finding strategy





Results:

- Transportation time

Median transport time from home to location (minutes)

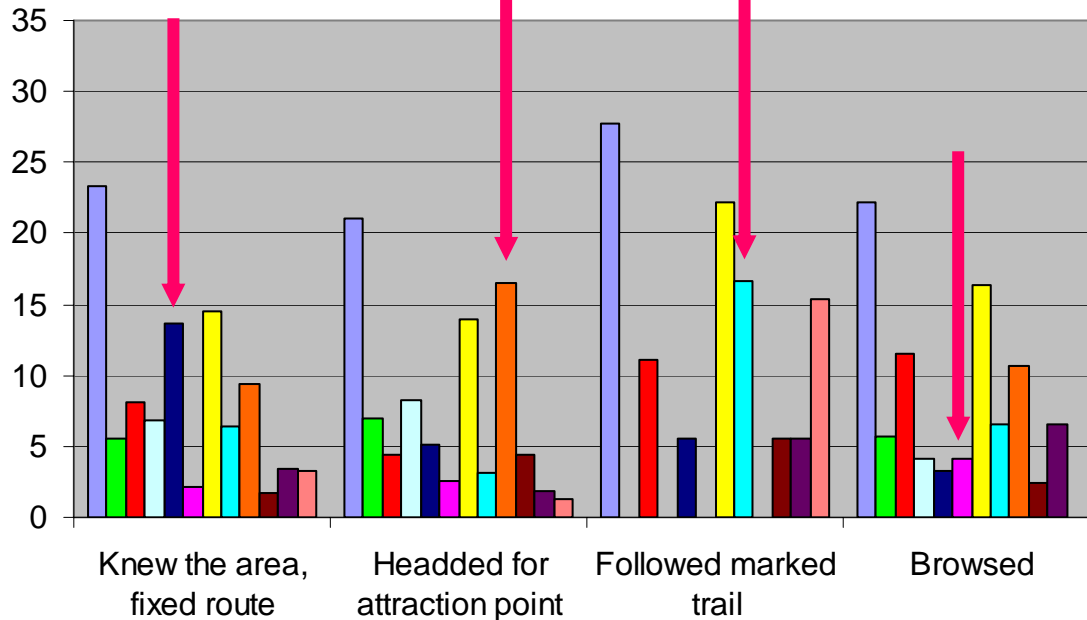
| Route strategy | | Hestehaven | | Rude skov | | Mols Bjerge | |
|----------------|-------------------------------------|-------------|------------|-------------|------------|--------------|-----------|
| | | Median | n | Median | n | Median | n |
| 1 | Knew the area, followed fixed route | 6.87 | 133 | 5.79 | 81 | 7.46 | 10 |
| 2 | Headed for attraction point | 9.12 | 55 | 6.06 | 54 | 35.93 | 5 |
| 3 | Followed marked trail | 27.57 | 10 | 10.96 | 9 | 33.1 | 23 |
| 4 | Browsed | 13.27 | 44 | 7.44 | 35 | 29.03 | 6 |
| 5 | Other reason | 7.72 | 11 | 5.09 | 7 | n/a | 0 |
| | | | | | | | |
| All | | 9.11 | | 6.18 | | 28.71 | |
| n | | | 253 | | 186 | | 44 |

Results:

- Way finding behavior and type activities

Rude Skov
n = 286

% of responses
(more than one choice possible)

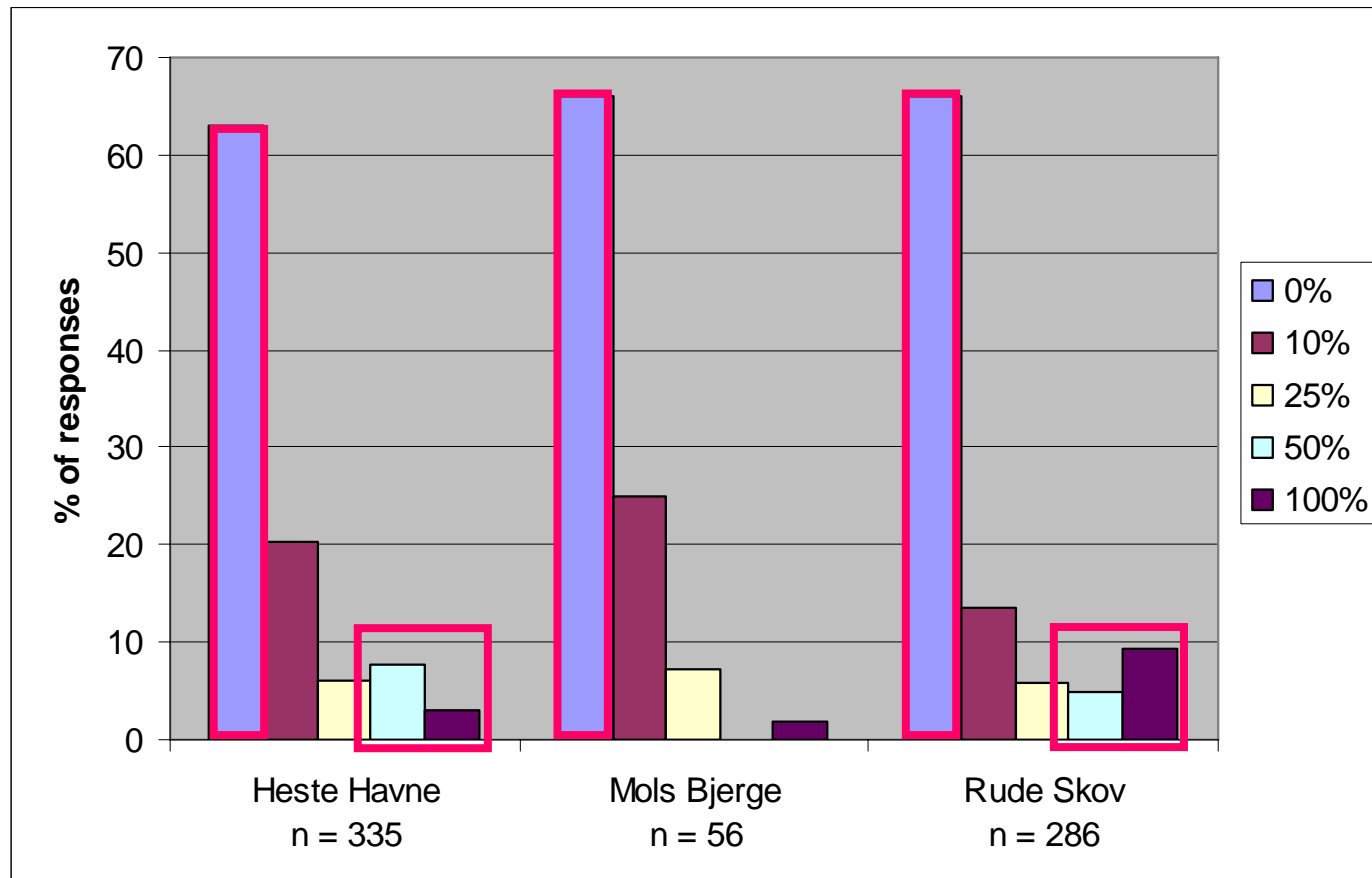


- Experienced nature
- Studied nature
- Observed animals
- Observed birds
- Ran
- Walked the dog
- Walked
- Mountain biked
- Biked
- Played
- Picked berries and flowers
- Photographed

Results:

- Off-piste behavior and activities

Proportional time spend away from the trail

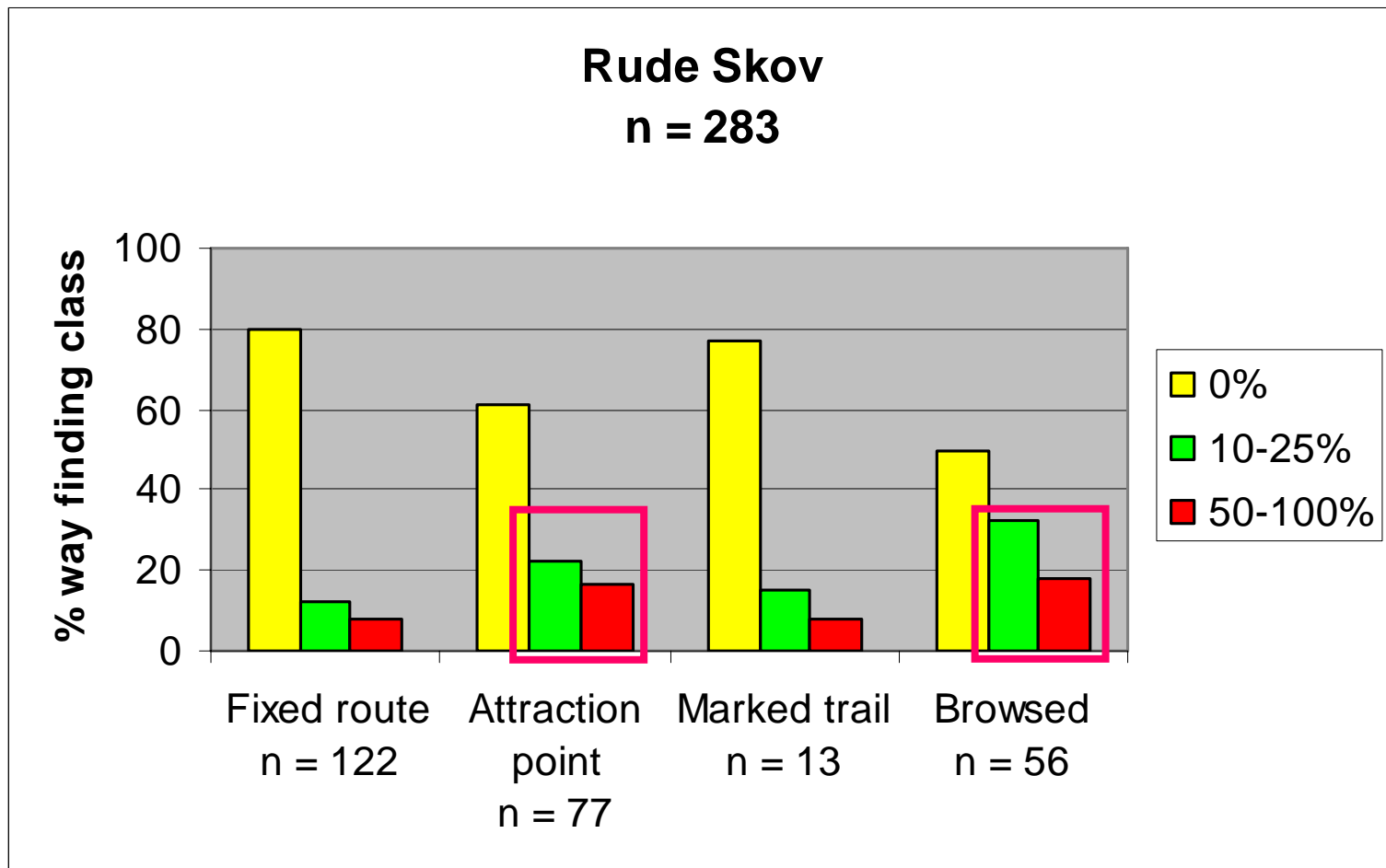




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Results:

Relation between way-finding and off-piste behavior



Perspectives....



Where do visitors actually go? Application of revealing techniques involving data from e.g. GPS and sketch maps.

How are spatial choices made during browsing behaviors: Application of e.g. Conjoint Stated Preference investigations.





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Brief conclusions....

Way finding behaviors differ between locations

The intuitively expected relation between activity classes and way finding behavior have to be further analyzed

Investigation of way finding behavior can contribute to knowledge visitors' preferences in relation to the facility and path network setting

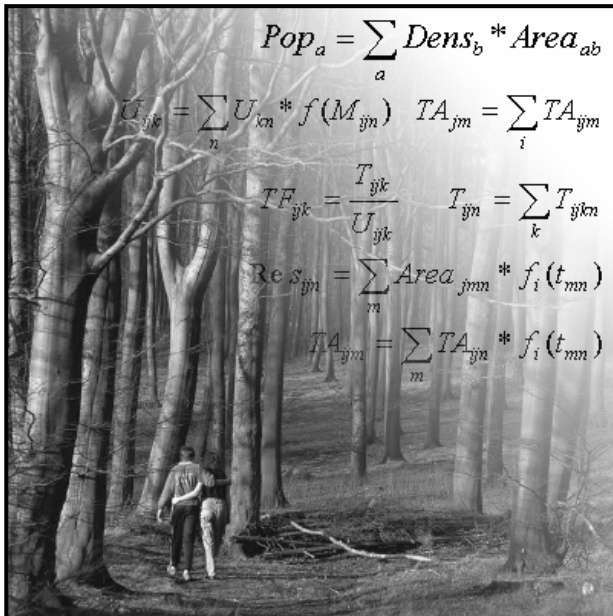
In relation to (agent-based) simulations establishment of typologies of way finding is needed



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An empirical and simulation study of recreational route choices

That was it....
Thank you for your attention



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