Complex Choice

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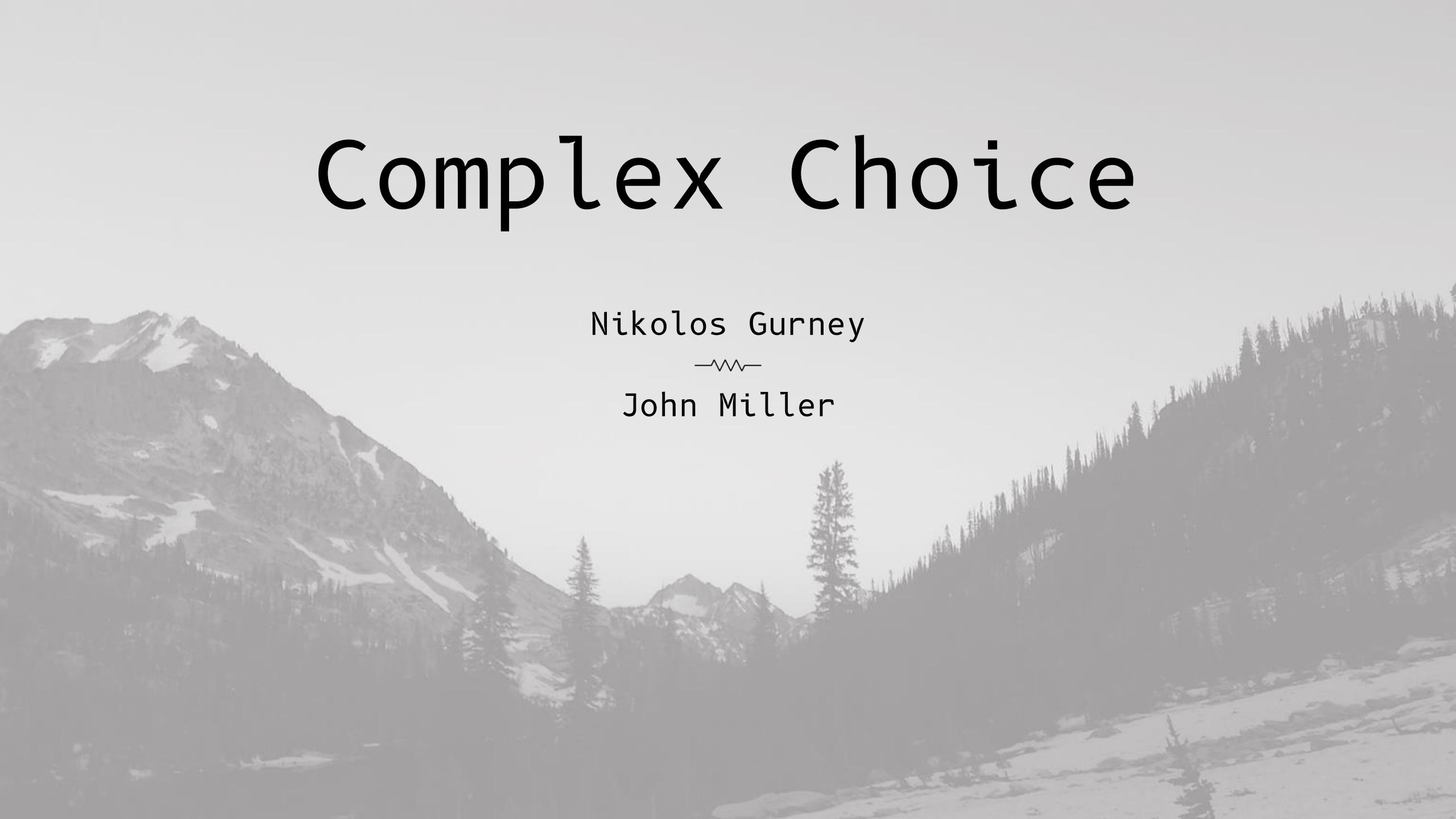


How do adaptive agents, i.e. people, accomplish complex choices?

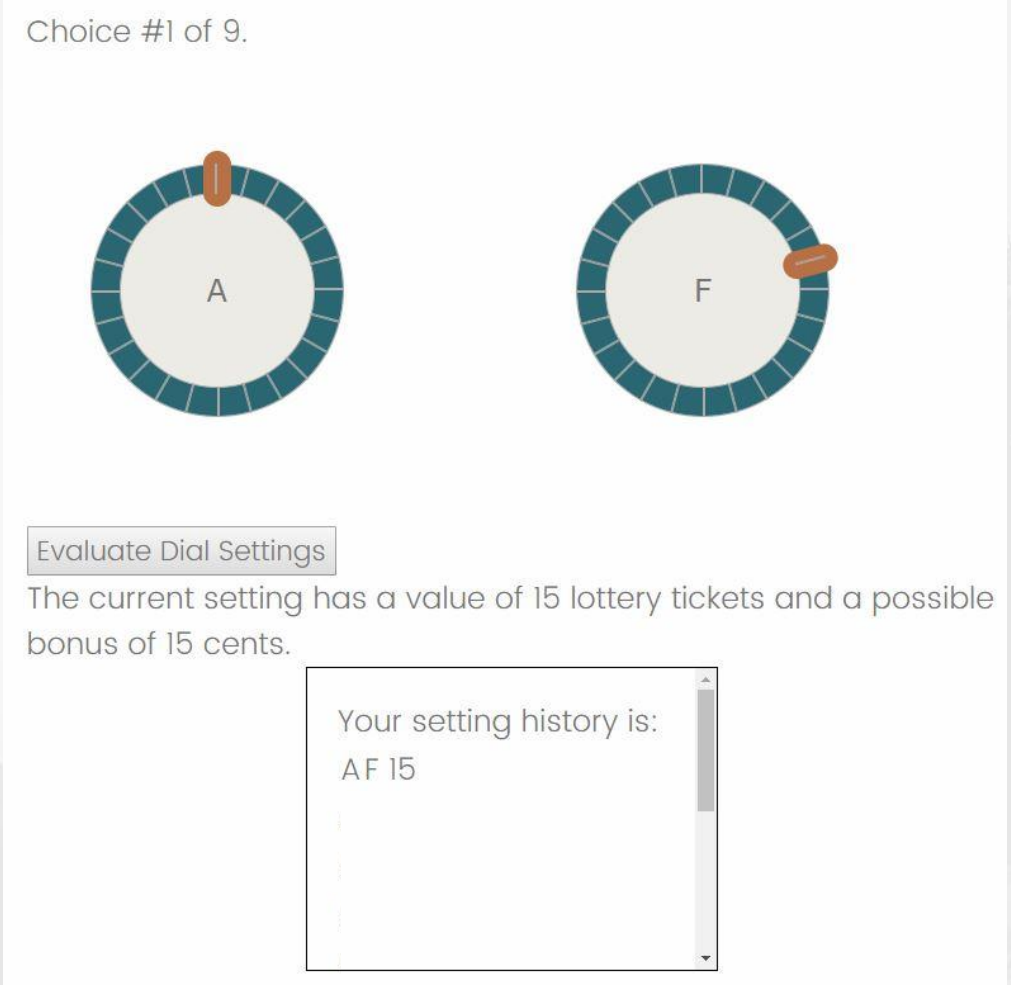
Rugged Landscapes Metaphor

- Introduced [in biology] by Wright in 1932
  - Used to visualize the fitness value of interacting genetic traits
  - Fitness = height on a landscape
  - Evolution moves toward higher ground
- Ruggedness of landscape is key: More rugged implies more complexity
- Search is on a foggy landscape: No overall map, only local information
- General result: More complex landscapes are more difficult to search

The Experiment

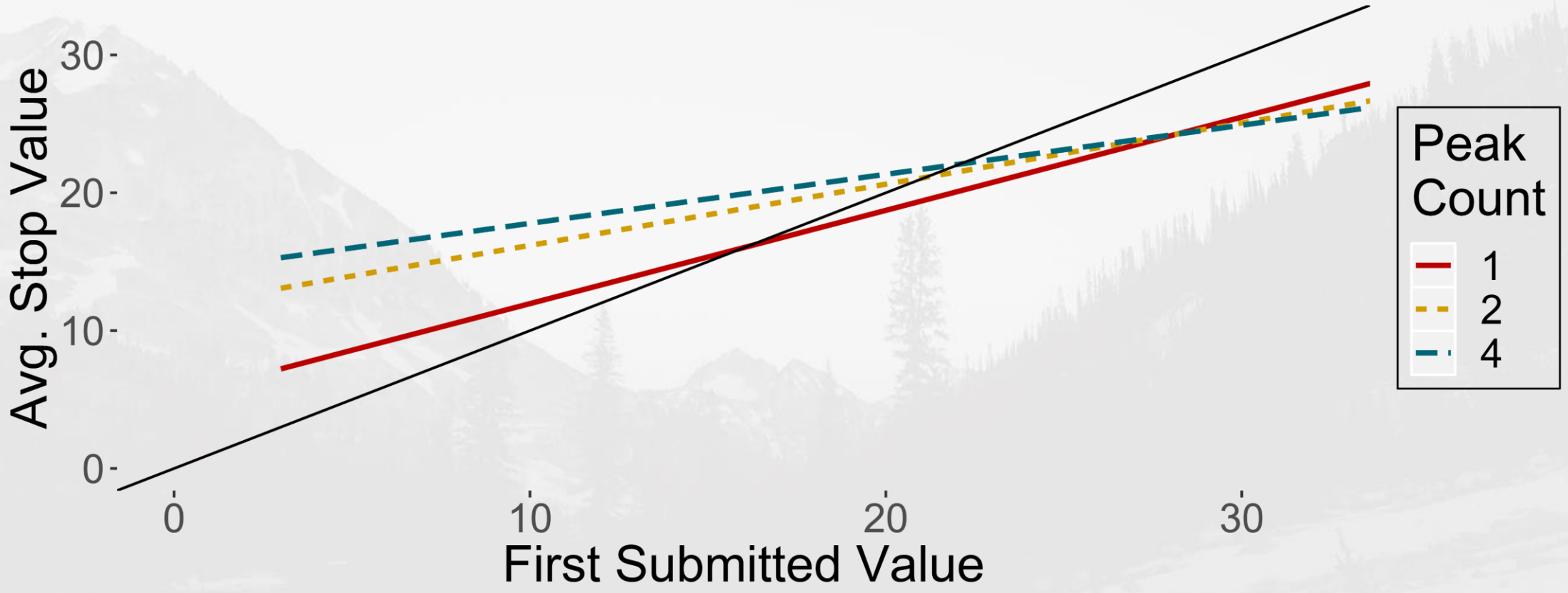
Interface

- Two tunable dials
  - A-X settings on each
- Can query the system for each setting´s payoff
  - Must query at least once
  - No limit on number of queries
- Full search history is always available
- Final query is submitted as landscape choice

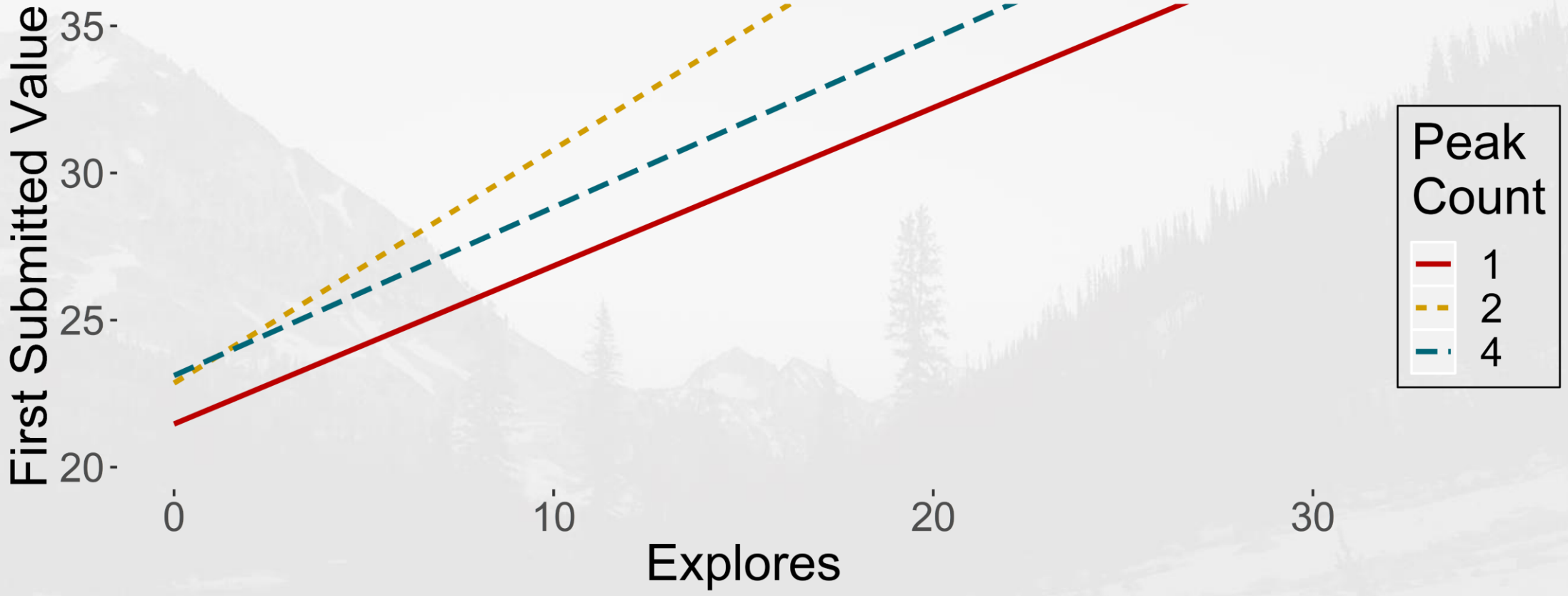


Experimental Results

Participants Anchor on Their First Submitted Value



Landscape and Exploration Predict Participants´ Anchors



Thanks!

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