

# PROPOSAL FOR AN EXPERIMENT

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Tony Marley are planning an experiment to test random utility (and other hypotheses) in multiple domains. We are currently at the brainstorming stage and would like reactions and feedback.

Given our research question, it is very important to observe choice probabilities on choice sets of different sizes (binary, ternary and  $n$ -ary choice). Our current focus is testing random utility and other behavioural conditions for *population* rather than *individual* choice probabilities.

There would be about 20 *master sets* of five objects each. Each master set would be a collection of similar objects from some domain — see list of possible domains below. Choice sets are subsets, with at least two elements, of some master set. Each participant would see only one subset from each master set, and hence various subsets from different domains, and different participants would see different choice sets from the same master set. For a master set of size five, there are 26 subsets of cardinality greater than or equal to two, and many (40?) participants would see (and choose from) each subset.

Some possible domains

- (1) Perception (i.e. the sub-field of Psychology with that name)
  - (a) Judging areas of rectangles (possible context effects)
- (2) Aesthetic judgement (choice of favourite)
  - (a) Unfamiliar art forms (e.g. Australian aboriginal art to Canadians, Canadian first nations art to Australians)
  - (b) Book descriptions (from Amazon or dust jacket)
  - (c) Film descriptions (from DVD cover, film catalogue)
  - (d) Exotic travel destinations
- (3) Consumer choice
  - (a) Objects with attributes (e.g. mobile phones)
  - (b) Transportation choice
- (4) Policy options
  - (a) Environment

Some of the issues we have questions about:

- (1) relevance of testing axioms with observed *population* choice probabilities
- (2) feasibility and suitability of Pure Profile and Mechanical Turk (Amazon).
- (3) design issues
- (4) legal issues (copyright)

- (5) academic ethics approval
- (6) appropriate domains, ideas for different domains