



## Multiple Hypotheses Generation

1. Crisply define the issue, activity, or behavior that is subject to examination.
2. Establish the lead hypothesis for explaining this issue, activity, or behavior.
  - The lead hypothesis could be the one you were given, the most obvious explanation, or the conventional wisdom.
3. Critically examine the lead hypothesis by identifying and listing its key components.
  - Use the journalist's classic list of Who, What, When, Where, Why and How to evaluate all critical dimensions of the lead hypothesis.
  - Some of these questions may not be appropriate for the particular issue, activity, or behavior you are examining.
4. Generate plausible alternative explanations for each key component.
  - Once this process is complete, you should have lists of alternative explanations for several components of the lead hypothesis.
  - Strive to keep the alternative explanations on each list mutually exclusive.
5. Identify all the possible permutations that could be generated using these lists (see Figure 1).
6. Discard any permutation that simply makes no sense.
7. Evaluate the credibility of the remaining hypotheses by challenging the key assumptions of each component.
  - Some of these assumptions may be testable themselves.
  - Assign a "credibility score" for each hypothesis, e.g. using a 1 to 5 point scale.
8. Resort the remaining hypotheses, listing them from most to least credible.
9. Select from the top of the list those alternative hypotheses most deserving of attention (and inclusion in the Analysis of Competing Hypotheses matrix, if appropriate).

# Figure 1. Generating Permutations

