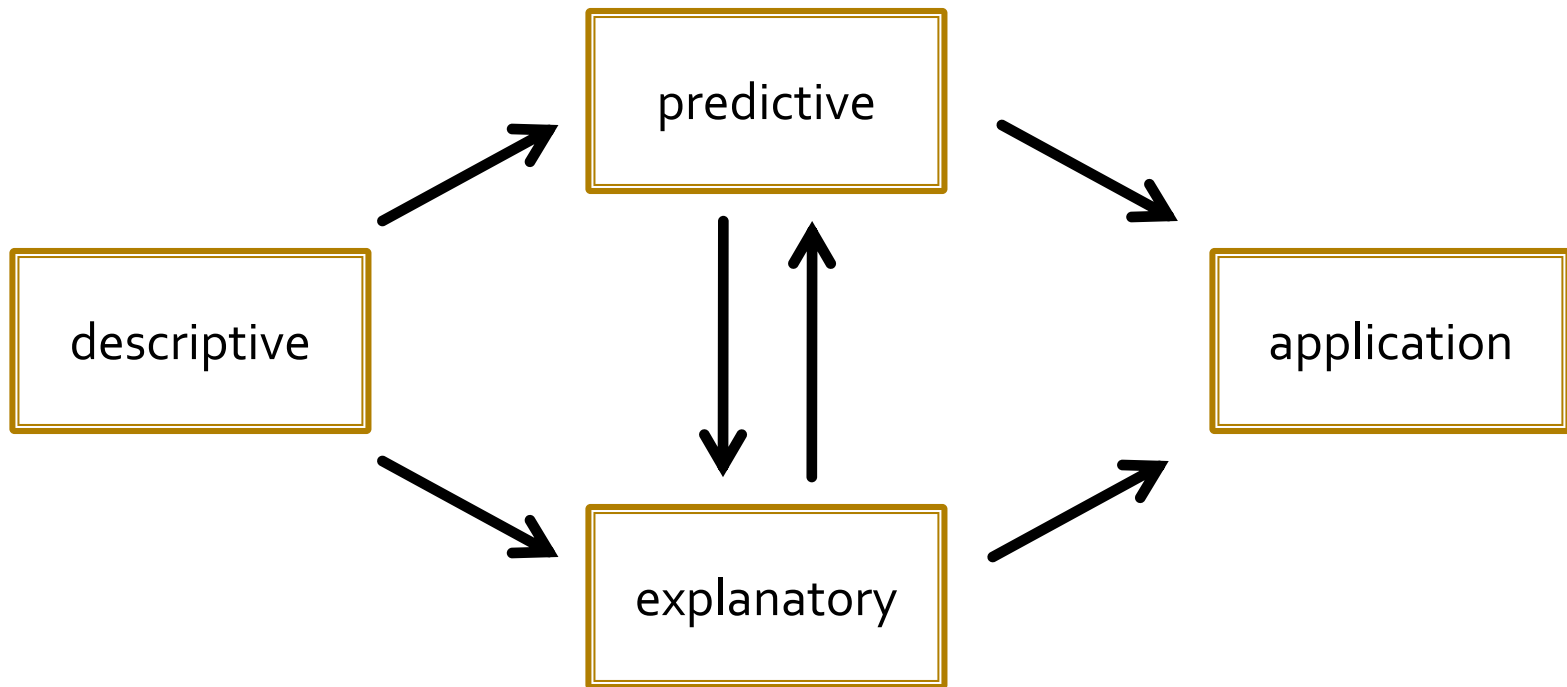


Assertions

- Phenomenological / Descriptive (*what* happens *when*)
 - e.g., “people respond more quickly and accurately when the stimulus is near to the correct button”
- Theoretical / Explanatory (*why* what happens *when*)
 - e.g., “people respond more quickly and accurately when the stimulus is near to the correct button, *because* people have an innate tendency to respond in the direction of stimulation”
- note the hierarchical relationship

“Phases” of Psychological Research



Basic Forms of Logic

Modus Tollens

if P, then Q

not Q

therefore, not P

falsification

if theory correct, then certain data

did not get the predicted data

therefore, theory is not correct

Attributes of Empirical Science

- 1a) only addresses answerable questions
- 1b) produces tentative, falsifiable conclusions
- 2a) uses systematic observation & experimentation
- 2b) requires objectivity & replicability
- 3) assumes (some form of) determinism

Determinism

- “weak” determinism
 - *all events have antecedent causes*
- “probabilistic” or “stochastic” determinism
 - *if all relevant antecedents are known,
then the distribution of future events can be known*
- “strong” determinism
 - *if all relevant antecedents are known,
then the future event can be known (in advance)*