DEDUCTIVE ARGUMENTS

deductively invalid
premises are true
(inductively strong not by virtue of its logical form, but when certain conditions are satisfied)

INDUCTIVE ARGUMENTS

can not be offered as a proof
can not guarantee their conclusions
conclusions are probable
conclusions are based on the noted relationships
"scientific method"
the conclusion always stretches beyond the premises
require inductive leap
conclusions can be strong and plausible

Logical Relationships

SIMILARITIES:
strong (inductive strength)
relevant,
numerous
nonmetaphorical

DIFFERENCES:
minor
irrelevant
few

Arguments from Analogy

Literal: fundamental similarities

Metaphorical: fundamental differences

Fallacy: tu quoque ("you are another")

NSTANCES, PARTICULARITIES, NARROW EXPERIENCES, SAMPLING OF A CLASS, STATISTICAL DATA

Arguments from Examples
(Inductive Generalizations: Universal and Statistical Syllogisms)

Fallacy: ad hominem ("directed to a man")

Fallacy: gambler's fallacy

ARE NOT CERTAIN
COINCIDENTAL /CHRONOLOGICAL
NECESSARY/ SUFFICIENT

Mill s Method of Agreement
different circumstances
similar result
shared element=cause
necessary condition for the effect

Mill s Method of Difference
similar circumstances
different result
not shared element=cause
sufficient condition for the effect

Causal Arguments

Fallacy: post hoc ("after that")