Inductive Reasoning:

Inductive Arguments: do not guarantee their conclusions

Inductive Reasoning: extrapolates on what we know. Using current knowledge ton arrive st conclusions which are not deductively implied by the premises.

- Strength in inductive arguments is a matter of degree and requires a judgment call

Four Inductive Arguments:

1. Inductive Generalization.
- X % of observed F's are G
- It is probable, therefore that X% of all F's are G.
- Criteria: sample representative enough and is sample large enough?
- Ex: 45% of men thought Trudeau is good job. It is probable that 45% of all Ottawa men like Trudeau.
- Ex: 500/2000 library goers were randomly selected and asked if they prefer fiction or non-fiction.358/500 said fiction. Therefore, most people prefer fiction.

2. Statistical Syllogism:
- Z% of F's are G
- X is an F
- Therefore, it is probable to the degree Z that X is G.
- Ex: John has IQ 153. He will do very well on the law school exam.
- Ex: Fewer than 2% of people who work in TO live in markham. Allen who works in Toronto doesn't live in markham.

3. Induction by Confirmation
- H -> O
- O
- It is probable that H

Two things to watch for:
i.) inductive argument is based on hypothesis. Therefore, it is only probable that the conclusion will follow. The premise don't guarantee the conclusion.
ii.) We need more than one instance to confirm our hypothesis.

4. Analogical Reasoning:
- "Three strikes out"
- Analogies help us understand how things in the world work, especially unfamiliar things.
- Every Analogy has a subject case. The subject case is about which we are drawing the conclusion in the analogical argument. Always found in conclusion.
- Analogue case is what we are familiar with.
- Target Feature is feature of subject case.

Two kinds of analogous statements:
i.) Analogy by property:
- thing attributed to a thing (good, bad, spoiled)

ii.) Analogy by Relation
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