

Midterm Essay Notes

Chosen Question

- (2) *What are the key differences between inferences at different rungs of Pearl's ladder of causation? Explain with reference to examples.*

General To-Do

- ☐ Read The book of why 'Ladder of causation'
- ☐ Find & read the relevant chapters of *Pearl, J., Causality*
- ☐ Source the mathematics Pearl claims differentiates his rungs
- ☐ Read some criticisms of Pearls rungs

Essay Outline

0. *Introduction*

- 0.1 Outline my Argument

1. *Definitions*

- 1.1 Define each rung of Pearl's Ladder with my clarifications and an example for each.
1.2 Explain the structure (hierarchical) and where different animal/human reasonings reside.

2. *Mathematics*

3. *Criticisms of Mathematics*

Foundational Thesis

Claim: Pearl can prove his three rungs are mathematically distinct. (find quote)
Response: 1. Examine the details of his mathematical foundations 2. *Questions:* 1. Does mathematical distinction necessarily imply that his classes are foundational. - what is their predictive power? - Are there alternative taxonomies/theories that are plausible? - Is the taxonomy true to the mathematical model