

# Games and Information

## Problems Sets

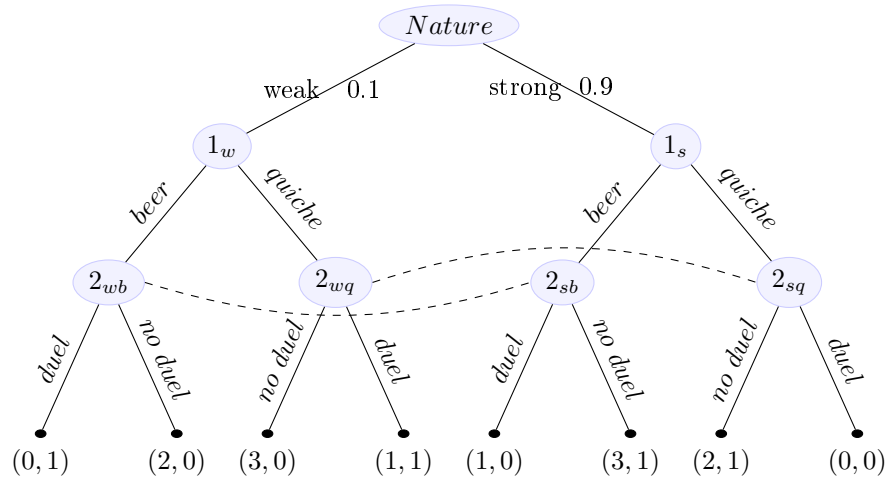
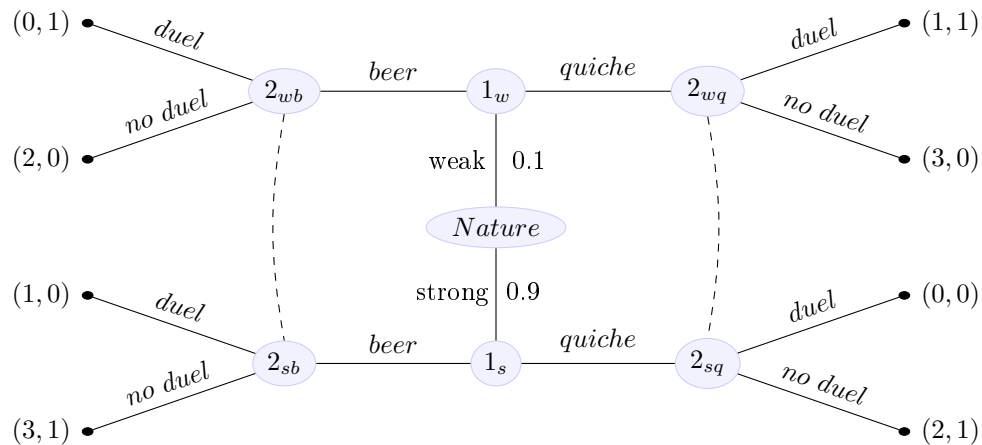
Summer Semester 2025

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### Problem Set 5

#### Exercise 9

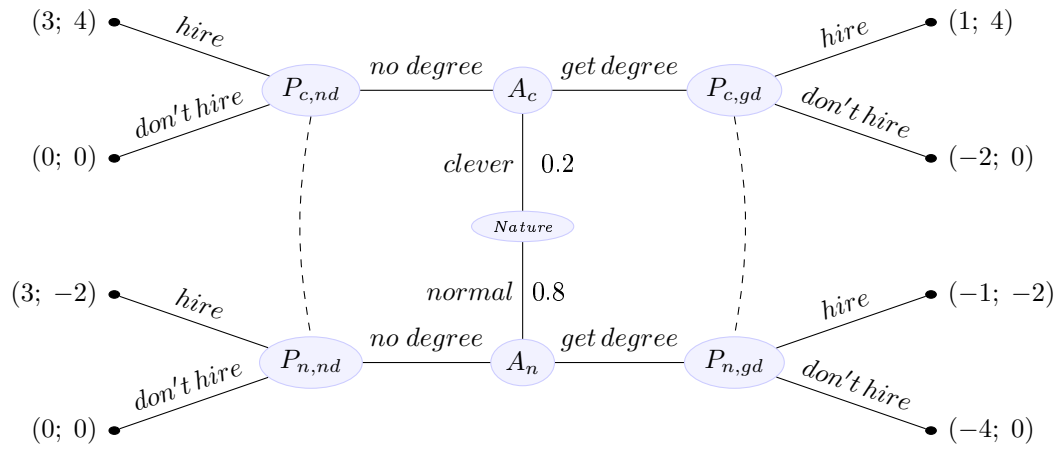
Compare the two games below.



- (1) The two game trees look different. I claim they represent the same game. How do you argue to make sure that this is true - or false?
- (2) What does the first game tree emphasize more clearly than the second?

## Exercise 10

A version of Spence's Education Game



Player  $A$  can be seen as the agent in this game, player  $P$  as the principal.

- (1) List the strategies of the agent and identify pooling and separating strategies!
- (2) What are the Bayesian beliefs associated with these strategies?
- (3) What are the best responses of the principal based on Bayesian beliefs?
- (4) Find the perfect Bayesian equilibria of the game?
- (5) Explain the role of signaling in this game!