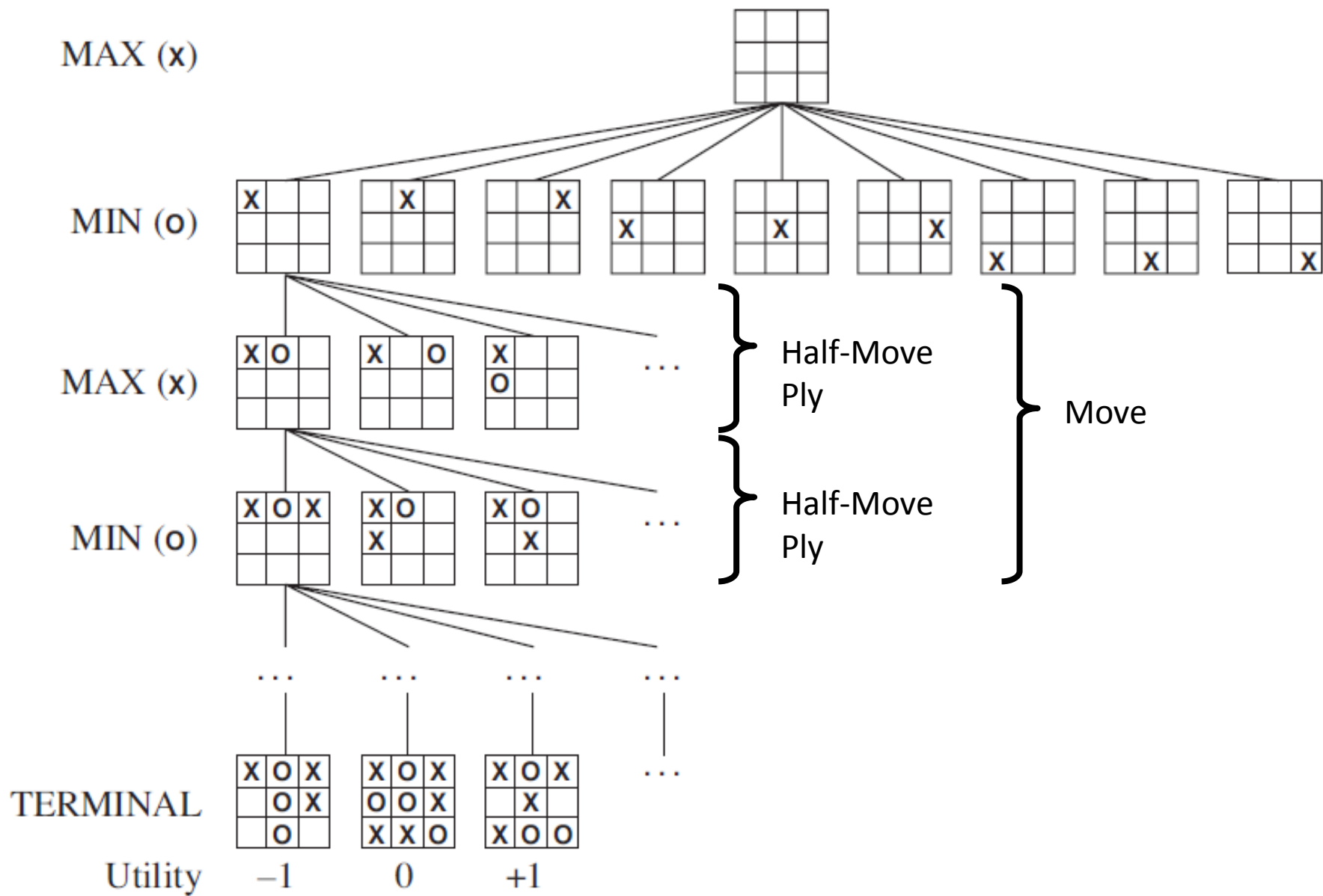
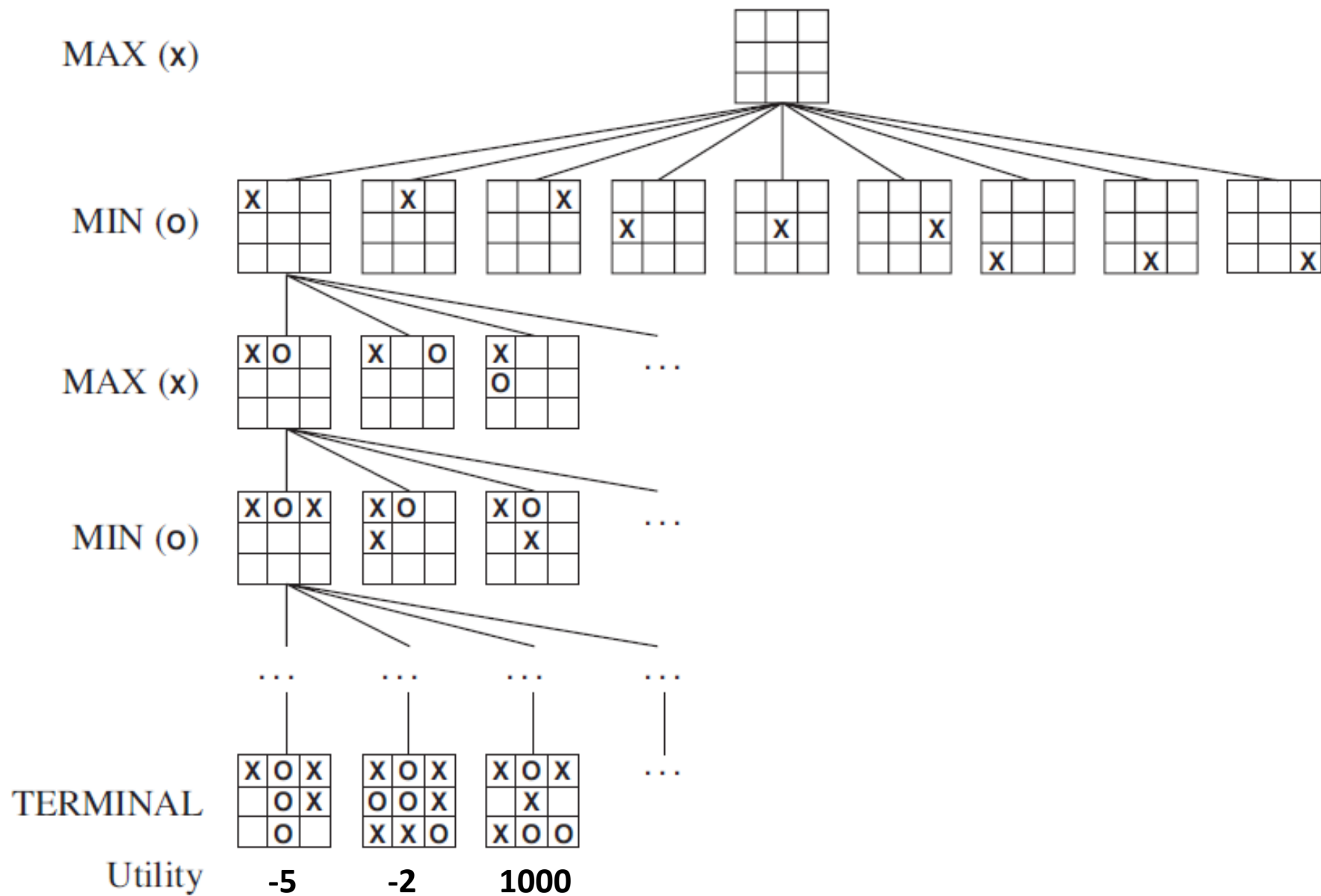


Adversarial Search: Games

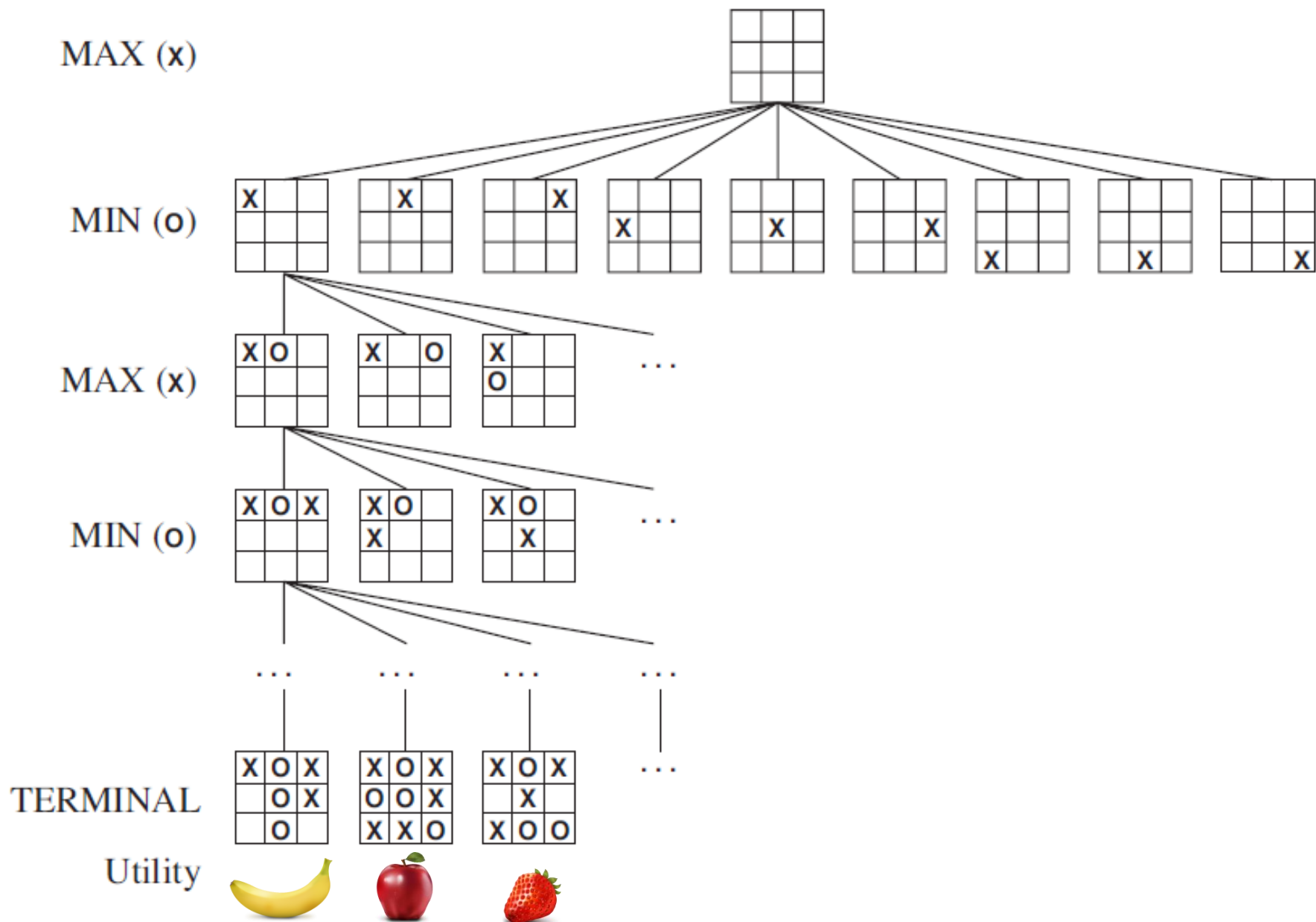
CS161

Guy Van den Broeck



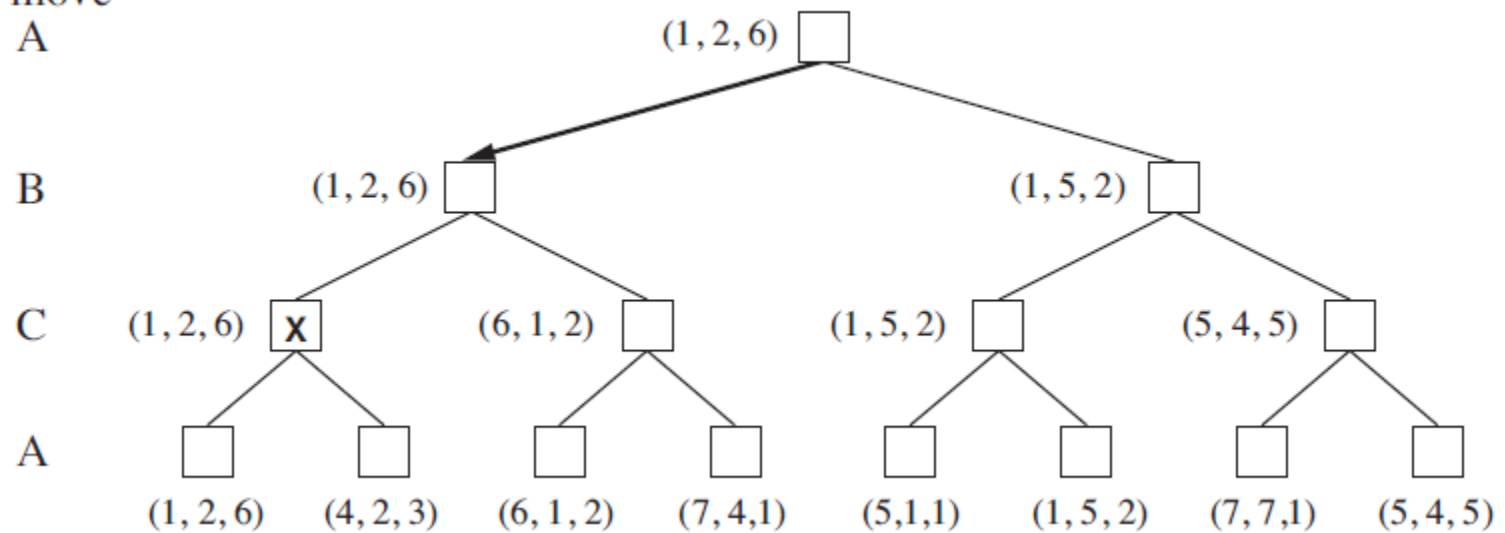


(not zero-sum game)



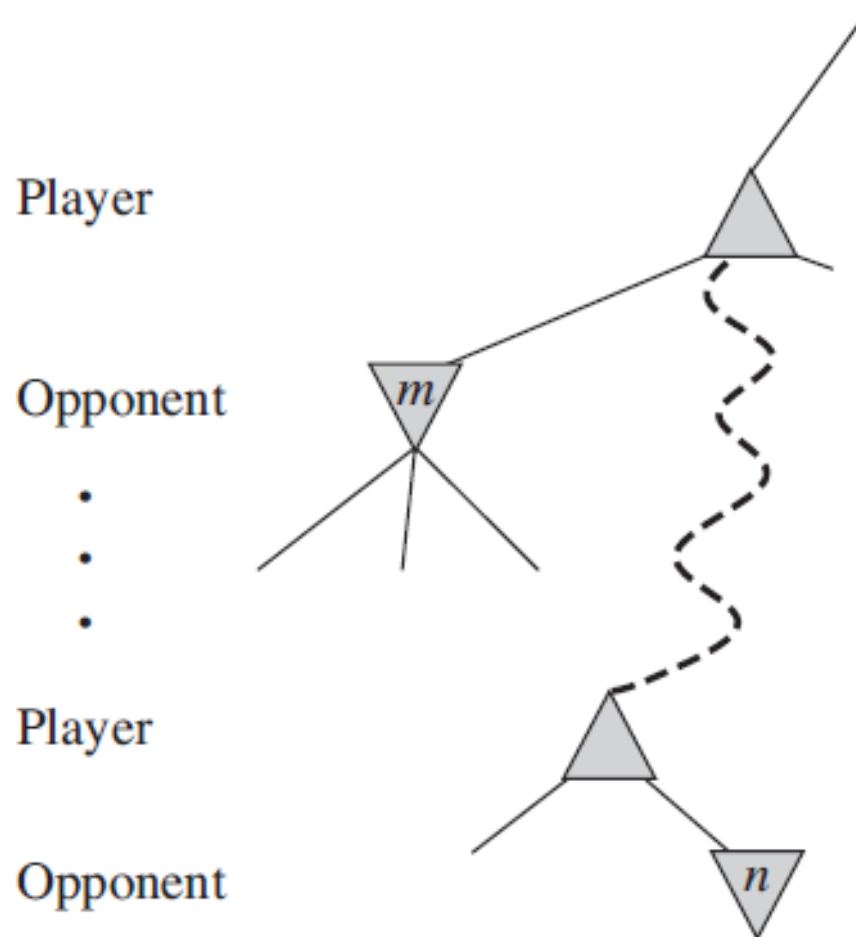
Three Players

to move
A



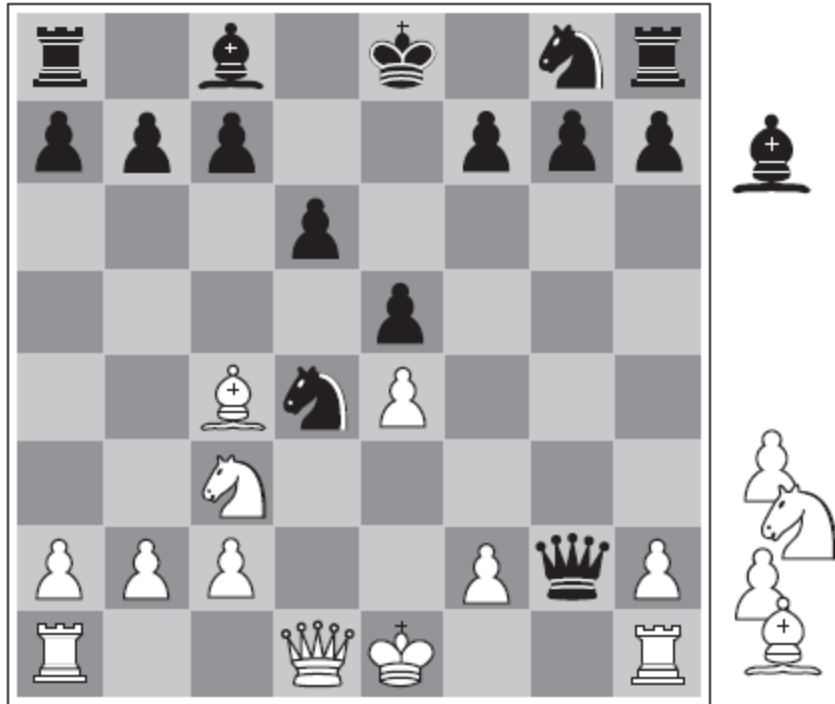
Can we save time?

Pruning

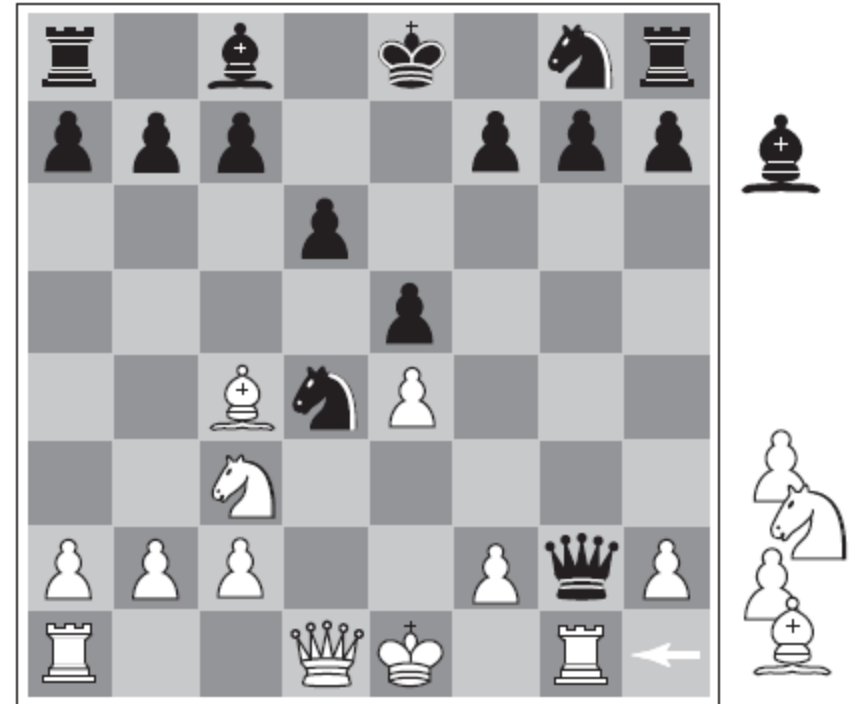


What if game tree still too large?

Evaluation: Tricky



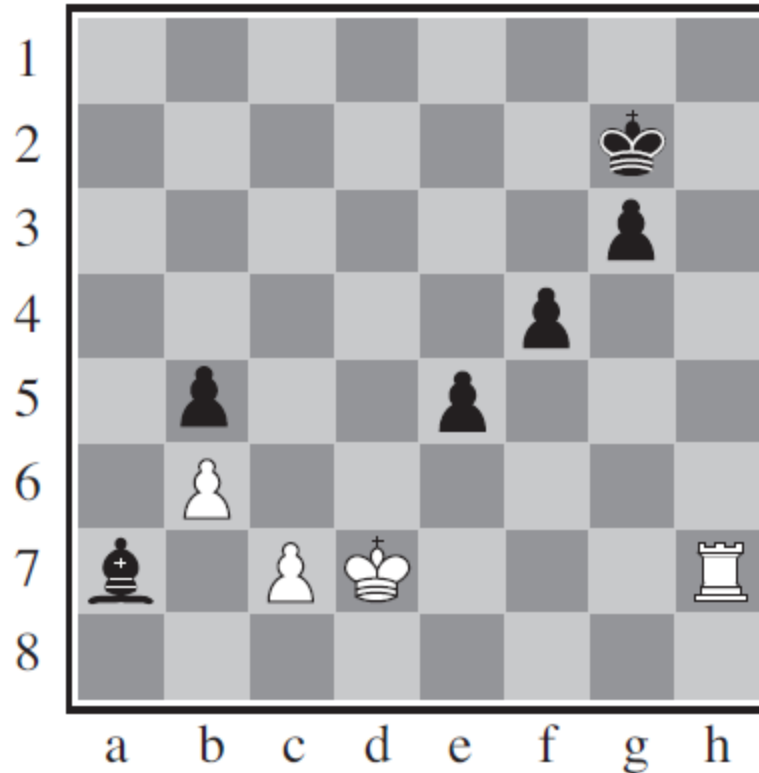
(a) White to move



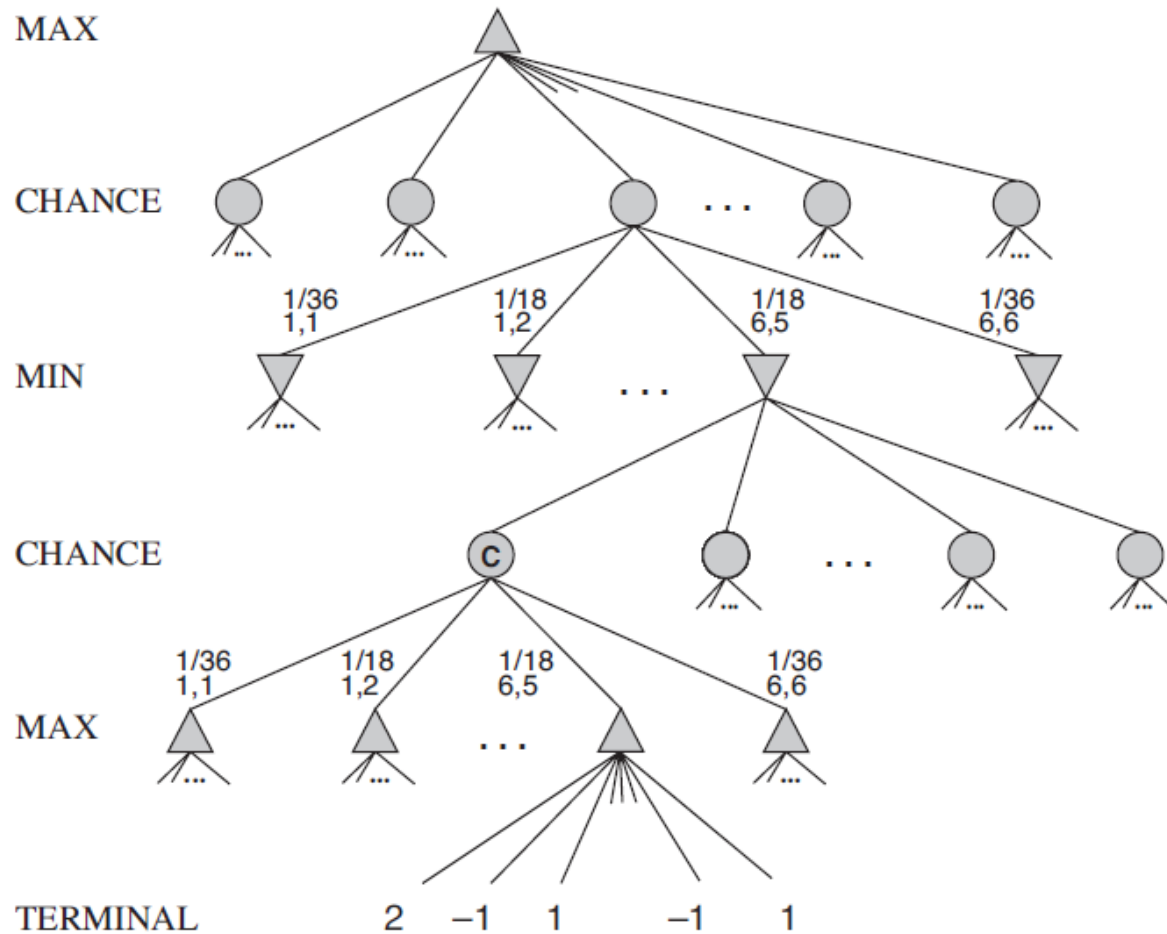
(b) White to move

Two chess positions that differ only in the position of the rook at lower right. In (a), Black has an advantage of a knight and two pawns, which should be enough to win the game. In (b), White will capture the queen, giving it an advantage that should be strong enough to win.

Horizon Effect: Black to Move



Chance: Expecti-Minimax



Changing Rewards

