19 - Subgame perfect equilibrium: matchmaking and strategic investments

2 players.
Not a hard game. Can do with backwards induction.

Player 1 may choose D if he doesn’t trust the other person.
Lesson 20: Wars of Attrition

Bribe contests (try to get your way by bribing, but as long as both parties do, no winner) — also called all pay auctions.

Bidding for a $1 bill
Possible that a fight could go on quite a while. By the time they fought the second time, they had exhausted the reward. Over time, losses far exceed possible prize at stake.

Reasons for the fight:
a. Want to establish a reputation of being fighters. Reputation could extend beyond this game.
b. Even though the prize is only a dollar, the players care about winning! (pride) A dollar isn’t a good description of reward.
c. Losses in the past are “sunk” — lost it anyway. Are irrelevant now. If fighting seemed good initially, would still seem good later.

Can get huge loss even if:
a. no reputation to maintain
b. are rational
Look at a simplified version – only two periods.

Two cases: $V > C \leftarrow$ here in class
$V < C \leftarrow$ on homework

Second subgame

Two pure-strategy NE in this subgame:
$(F(1), q(1))$, $(Q(1), f(1))$
preferred $(V, 0)$, $(0, V)$