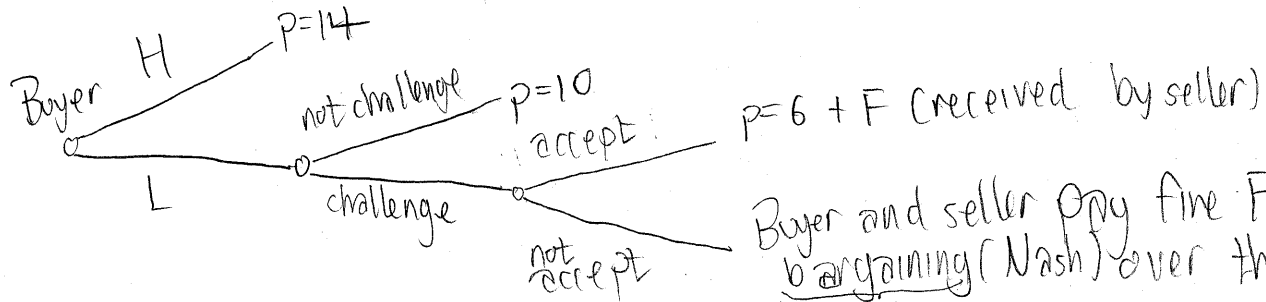


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1

- Good has value 10 or 14 (each w/pr 1/2)
- cost = 0
- can one make the price sensitive to valuation?



Buyer and seller pay fine F . Then, bargaining (Nash) over the good pay $\frac{v}{2} + F$
 ◦ there is renegotiation at this stage, which is why there is Nash Bargaining

Need $F \geq 8$

almost common knowledge. Do not observe valuation, but only noisy signal of it.

	$\theta'_B \theta'_S$	$\theta'_B \theta''_S$	$\theta''_B \theta'_S$	$\theta''_B \theta''_S$
$v=14$	$\frac{1}{2}(1-\epsilon)^2$	$\frac{1}{2}(1-\epsilon)\epsilon$	$\frac{1}{2}\epsilon(1-\epsilon)$	$\frac{1}{2}\epsilon^2$
$v=10$	$\frac{1}{2}\epsilon^2$	$\frac{1}{2}\epsilon(1-\epsilon)$	$\frac{1}{2}(1-\epsilon)\epsilon$	$\frac{1}{2}(1-\epsilon)^2$

ϵ small

Party i observes θ_i' or θ_i'' (independently distributed)
 ◦ highly correlated with the state of nature
 Thm: There is no truthful equilibrium. In such a candidate equilibrium, the seller revises beliefs if "Low" is announced and does not challenge
 Is there an approximate truth-telling equilibrium?

		Seller	
		Challenge	Not Challenge
Buyer	High		
	Low		
θ'_B	$1-\sigma'_B$	θ'_S	$1-\sigma'_S$
θ''_B	σ''_B	θ''_S	$1-\sigma''_S$
		σ'_B	σ'_S
		σ''_B	$1-\sigma''_S$

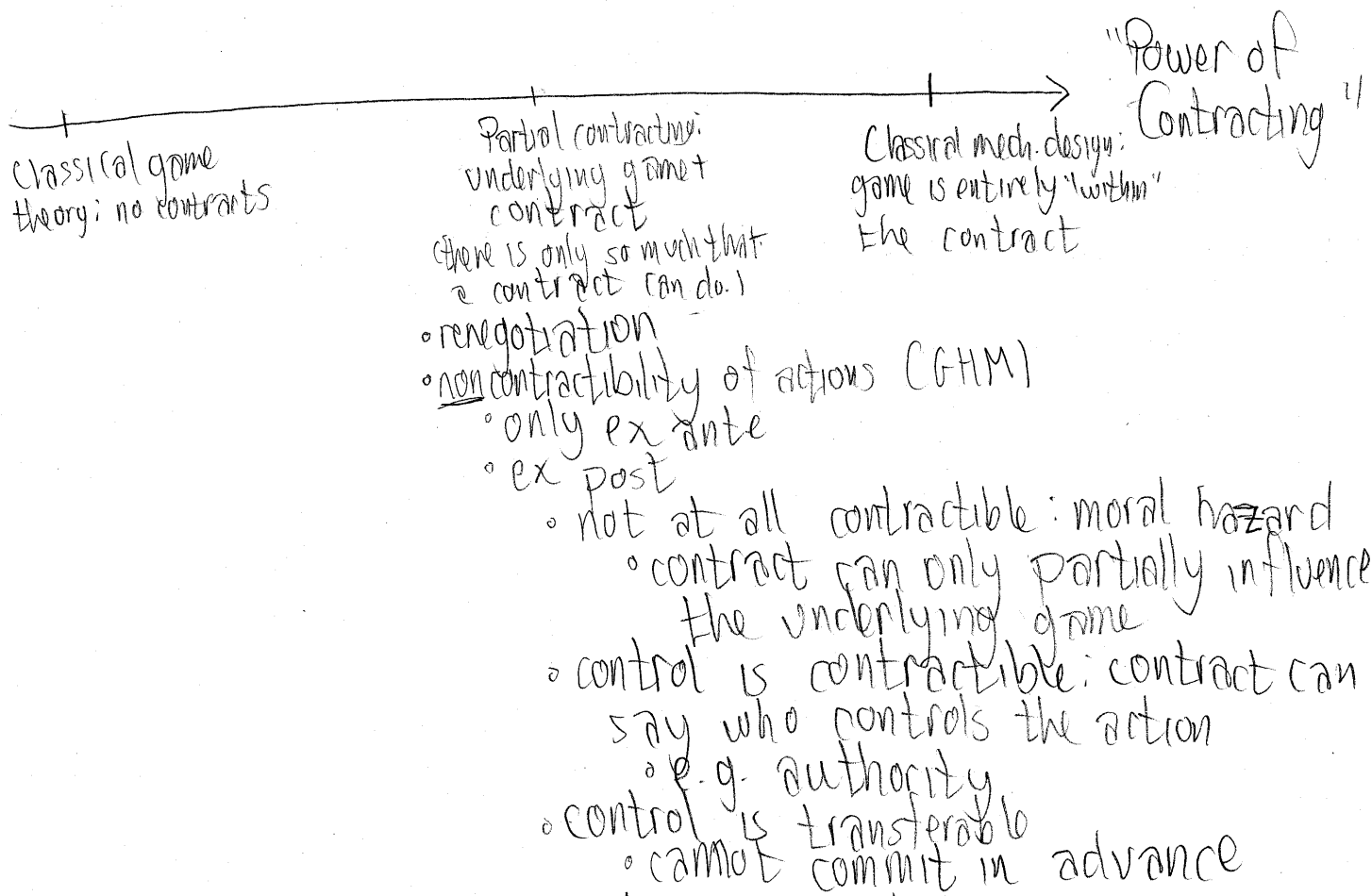
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2

Prop: $\forall F, \exists$ eq. sequence σ_B', σ_S' s.t. $\sigma_B' \rightarrow 0, \sigma_S' \rightarrow 0$
as $\epsilon \rightarrow 0$.

This little bit of incomplete information destroys this equilibrium.



In classical mechanism design, actions are contractible ex ante and ex post.

Aghion-Dewatripont-Stein (NBER WP 11542)

- Two stages - Value V if two successes
- At each stage, probability p of "success" if "prudent strategy" is pursued
- Opportunity wage = R

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3

Disutility of "practical strategy" = $\begin{cases} 0 & \text{w/pr } \alpha \\ z & \text{w/pr } 1-\alpha \end{cases}$

$w_A = R$, $w_P = R + (1-\alpha)z$
 academic private sector

Stage 2: $\underbrace{pV - w_P}_{\pi_2^P} > \alpha pV - w_A \Rightarrow \text{go w/ private firm}$

Stage 1: If $\pi_2^P > \alpha pV - w_A$, private firm is more efficient in stage 1 if

$$p\pi_2^P - w_P > \alpha p\pi_2^P - w_A$$

Since $\pi_2^P < V$, this is harder to satisfy!

stage 1

• entrepreneur hires researcher (wage w_r)

• entrepreneur chooses effort to learn about practical strategy

• if informed, has real authority

• otherwise, researcher has real authority

When get closer to end, entrepreneur becomes more and more informed, since stakes are higher

Since entrepreneur effort crowds out agent effort, it might be good to commit the entrepreneur not to intervene.