

# Order & Violence



Lecture 3: Agency problems and uncertainty

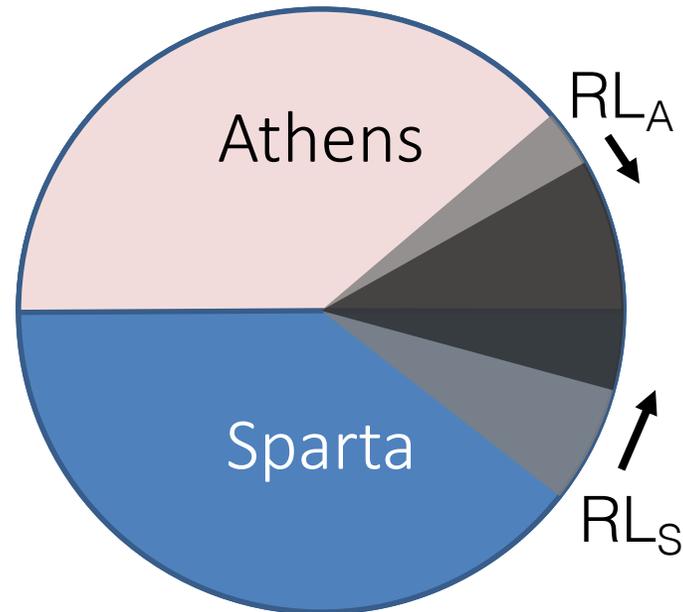
Chris Blattman

# Assignment for first half of quarter

- Read the syllabus for full details
- TA will organize you into 8 groups of roughly 4–5
  - Will try his best to take into account your preferences
- Assignment
  - Goal is to read deeply and widely on a conflict and try to articulate roots of violence
  - Collectively organize a 20-min presentation (about 4–7 slides) in Week 5 or 6
  - On either the US-Taliban or Israeli/Palestinian conflict
  - Individual group members will read widely and share insights with the group
- Opportunities for feedback
  - I will meet groups Week 4 for 20-25 minutes each to give you feedback
  - No class meeting Week 4 other than this small group meeting
  - You should submit an outline of your ideas by 8pm the evening before
  - TA will organize signups for these meetings

1. Unchecked leaders (continued)
2. Uncertainty
3. Commitment problems
4. Intangible incentives
5. Misperceptions

# What happens when we relax the unitary actor assumption?



- Simplistically, we could think of this as shrinking the bargaining range
- But if a bargaining range still exists, war remains a “puzzle”
  - Although the situation is more fragile

# What kinds of agency problems might plague the conflicts we have been discussing?

- China—Taiwan
- US—Taliban
- India—Pakistan
- Mexican state—Drug cartels
- Israelis—Palestinians
- US urban gangs

# 1. Splinter groups and spoilers

## Militants attack in Indian Kashmir as it locks down for anniversary

Authorities blanketed Kashmir with troops, who laid out barbed wire and set up road blocks to prevent demonstrations.



— A woman wipes sweat from her forehead while holding flags to mark one year after the Indian government split the state of Jammu and Kashmir into two, in Karachi, Pakistan on Wednesday. AKHTAR SOOMRO / Reuters

Aug. 5, 2020, 4:05 AM CDT

By Reuters

SRINAGAR, India – Militants attacked Indian security forces with a grenade and gunfire in Kashmir on Wednesday, defying a strict security lockdown on the first anniversary of the government's

washingtonpost.com > World > Middle East

## Analysts Say Battle With Splinter Group Suggests Hamas Faces Growing Challenges

By Howard Schneider  
Washington Post Foreign Service  
Sunday, August 16, 2009

Mourners in Rafah, Gaza Strip, carry the bodies of Hamas security officers killed in a bloody battle with a radical organization inspired by al-Qaeda. (By Eyad Baba -- Associated Press)

### TOOLBOX

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JERUSALEM, Aug. 15 -- The deadly shootout in a Gaza Strip mosque Friday between members of the ruling Islamist Hamas movement and a militant splinter group may signal further challenges to Hamas's authority in Gaza as it tries to reconcile the demands of running a government with its policy of armed conflict with [Israel](#), according to Palestinian and Israeli analysts.

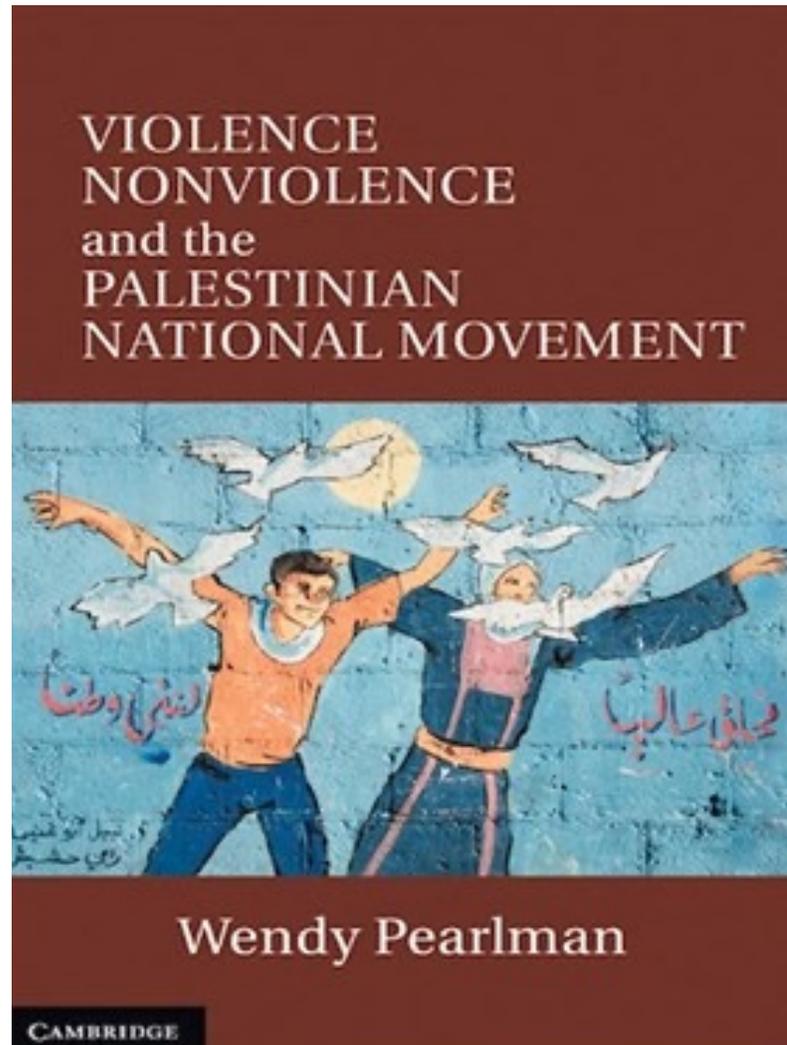
After two years as the sole authority in the Palestinian enclave, Hamas is not doing particularly well on either front -- with living standards in decline under an Israeli-imposed embargo and the conflict with Israel ratcheted down since a punishing three-week war that ended in January.

The battle at the mosque was waged against an organization, Jund Ansar Allah, that has carried out attacks against Israel but that had in recent months stepped up criticism of Hamas, saying it was not strict enough in its interpretation of Islam or aggressive enough in fighting Israel. The group, influenced by al-Qaeda, was blamed for recent attacks on Internet cafes, beauty salons and other targets in Gaza it considered an affront to its vision of Islam.

Hamas, a Sunni organization that began as an offshoot of [Egypt's](#) Muslim Brotherhood, is supported by Syria and by the Shiite government in [Iran](#), but its leaders say their aim is only to challenge Israel -- not participate in the type of broader war with the West that al-Qaeda advocates.

"The objective conditions in Gaza -- poverty, the siege, restriction of movement, lack of services -- are bound to create more and more destabilizing factors. It is fertile ground" for militants, said Ziad Abu Amr, a member of the Palestinian Legislative Council elected from Gaza as an independent. Although a successful challenge of Hamas is unlikely in the near term, he said, "Hamas cannot count on this forever. There can always be changes. We saw an example" Friday.

In non-cohesive groups (maybe especially non-state groups) subgroups may have private incentives to prevent a peace deal between the group's leader and the rival group



## Spoiler Problems in Peace Processes

Stephen John Stedman

The wars of the 1990s confirm a basic finding from the study of civil war termination: “peacemaking is a risky business.”<sup>1</sup> The greatest source of risk comes from spoilers—leaders and parties who believe that peace emerging from negotiations threatens their power, worldview, and interests, and use violence to undermine attempts to achieve it.<sup>2</sup> By signing a peace agreement, leaders put themselves at risk from adversaries who may take advantage of a settlement, from disgruntled followers who see peace as a betrayal of key values, and from excluded parties who seek either to alter the process or to destroy it. By implementing a peace agreement, peacemakers are vulnerable to attack from those who oppose their efforts. And most important, the risks of peacemaking increase the insecurity and uncertainty of average citizens who have the most to lose if war is renewed.

When spoilers succeed, as they did in Angola in 1992 and Rwanda in 1994, the results are catastrophic. In both cases, the casualties of failed peace were infinitely higher than the casualties of war. When Jonas Savimbi refused to accept the outcome of UN-monitored elections in 1992 and plunged Angola back into civil war, approximately 300,000 people died. When Hutu extremists in Rwanda rejected the Arusha Peace Accords in 1994 and launched a campaign of genocide, over 1 million Rwandans died in less than three months.<sup>3</sup>

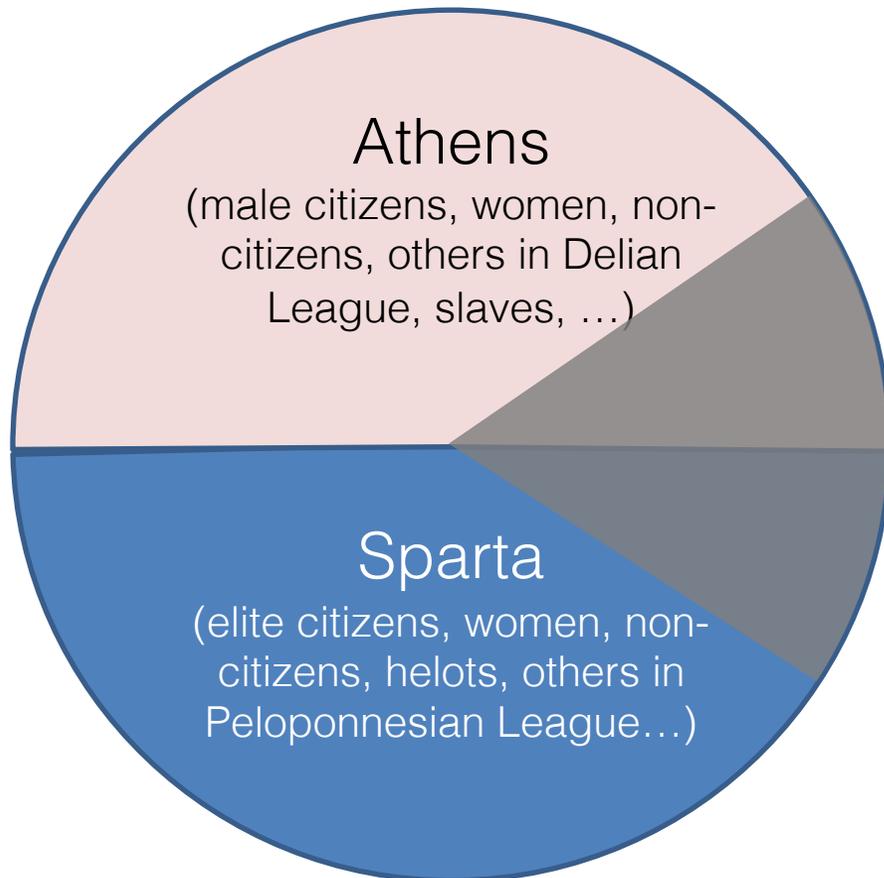
*Stephen John Stedman is Senior Research Scholar at the Center for International Security and Arms Control at Stanford University.*

This paper was commissioned by the Committee on International Conflict Resolution of the National Research Council. A different version will be published by the council. I would like to thank the following for their comments, criticisms, and suggestions: Howard Adelman, Cynthia Chataway, Juergen Dedring, Michael Doyle, Daniel Druckman, William Durch, Alexander L. George, Charles L. Glaser, Robert Jarvis, Stephen Low, Michael O’Hanlon, Jerrold Post, Tonya Putnam, Donald Rothchild, Timothy D. Sisk, Janice Gross Stein, Paul Stern, and Saadia Touval. I would also like to thank the current and former policymakers and diplomats who spoke with me

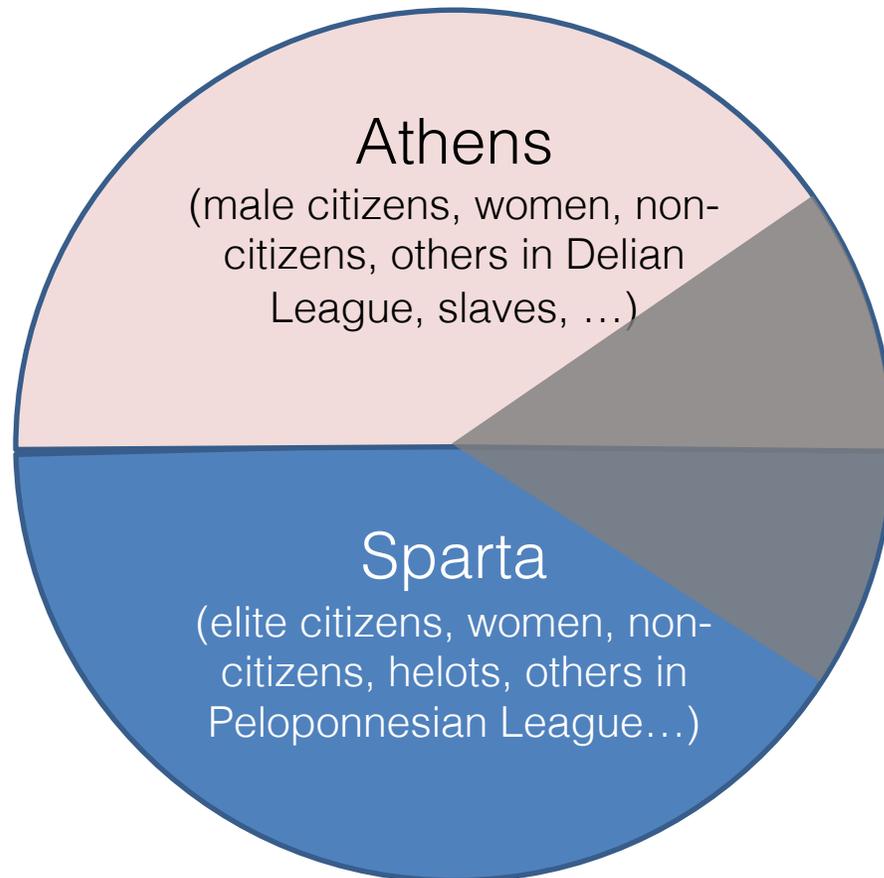
## 2. Related: Private incentives for war

(Jackson & Morelli 2007; Bueno de Mesquita & Lalman 1992)

What a unitary actor would consider when Athens & Sparta are evenly matched, with a \$20 cost of war



What a unitary actor would consider when Athens & Sparta are evenly matched, with a \$20 cost of war



But suppose a handful of elite Spartans receive  $x=30\%$  of their side's pie and care nothing for the rest of their group. Only this enters their decision.



# What does the Spartan elite's decision look like?

(Assuming in war they win  $x\%$  of pie and pay  $x\%$  of costs)

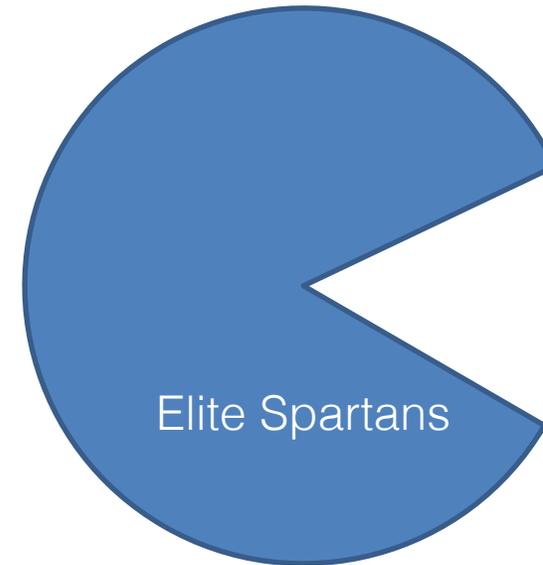
Choose peace



Athens and Sparta split the pie

Spartan elite's share worth about \$15  
(30% of \$50)

Choose war



50% shot at half the pie, minus share of war cost

Spartan elite's share worth about \$9 (0.5 chance  
at 30% of \$100, minus 30% of \$20)

# What if war allows elite Spartans to claim a larger share $x^*$ of pie?

e.g. They get a larger share of benefits than they pay in costs

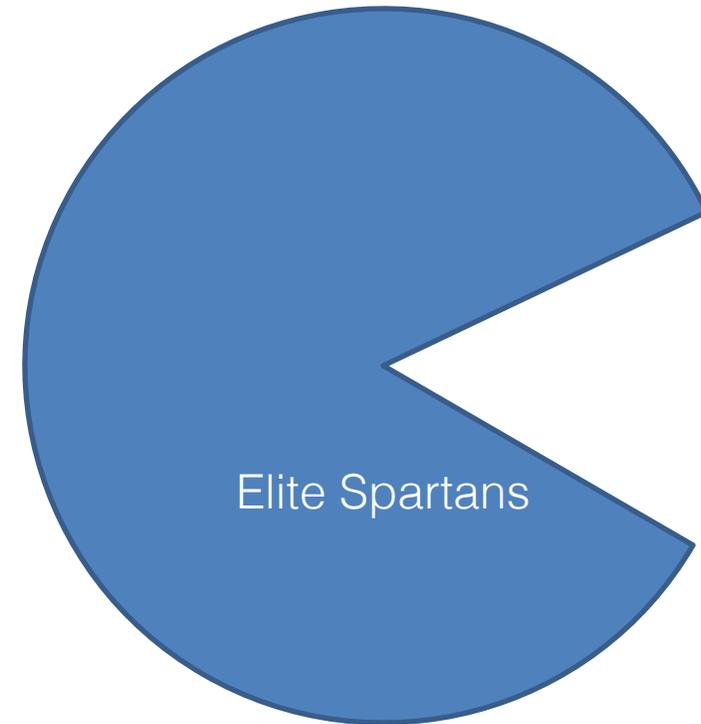
Choose peace



Athens and Sparta split the pie

Spartan elite's share worth about \$15  
(30% of \$50)

Choose war



$x^* = 50\%$

Spartan elite's share worth about \$19  
(0.5 chance of 50% of \$100 minus 30% of \$20)

# What are sources of private incentives?

- “Rally effects”
  - Unpopular leaders who, before a close election, try to rally nationalist support behind them by attacking an enemy
- “Military-industrial complex”
  - Incentives for profit and promotion
  - As he left office, US President (and former General) Eisenhower publicly worried that powerful business and military elites had incentives to lead the country to war, and society must guard against that
- War economies and lootable resources
  - e.g. Conflict minerals
  - When the prospects for peace suddenly blossomed in diamond-rich Angola, the stocks of diamond companies there fell substantially (Guidolin & La Ferrara 2007)

## Today and next class: So-called “rationalist” warfare

1. Unchecked leaders
2. Uncertainty
3. Commitment problems
4. Intangible incentives
5. Misperceptions

1. Unchecked leaders

**2. Uncertainty**

a. Noise / Different prior beliefs

b. Private information and incentives to misrepresent

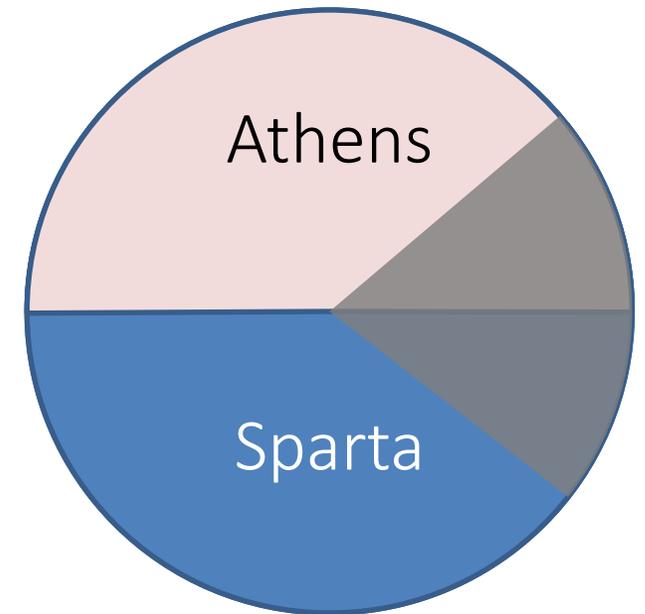
3. Commitment problems

4. Intangible incentives

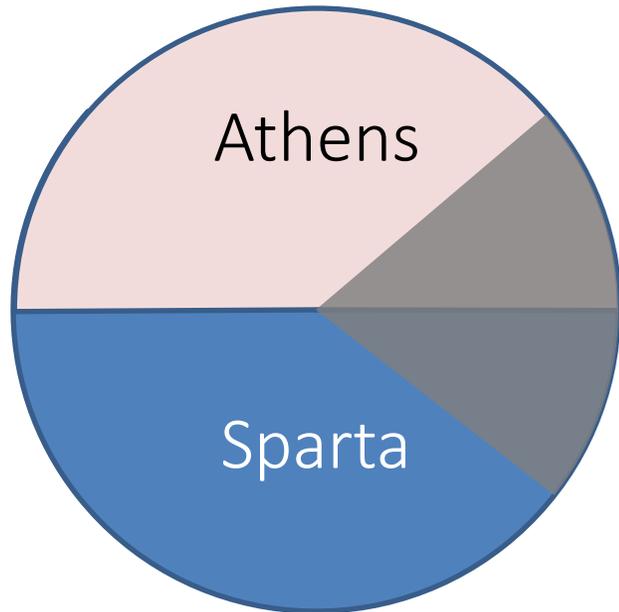
5. Misperceptions

## We assumed that both Athens and Sparta agreed on the costs of war and the chances each would win

- With a 50-50 chance of victory, and a \$10 cost, there is a \$20 bargaining range
- But expert opinions vary by a lot. True of:
  - People who value stocks and real estate
  - Judges estimating criminal culpability
  - Accountants predicting financial audits
- They tackle similar problems repeatedly, with large financial incentives for getting it right, and regular feedback
- Should we expect gangs, military generals, or Presidents to do much better?

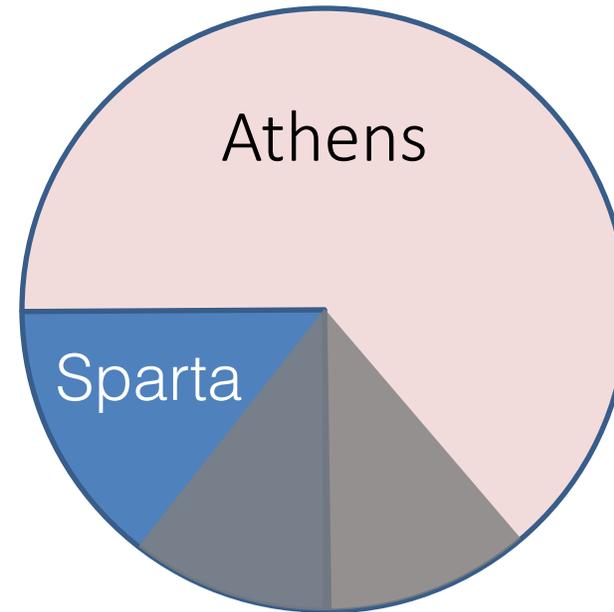


Suppose the two rivals start with very different priors?



### What Sparta believes

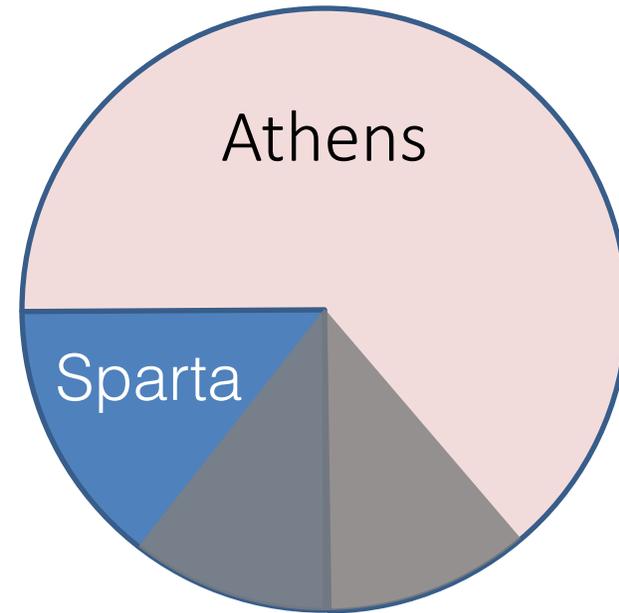
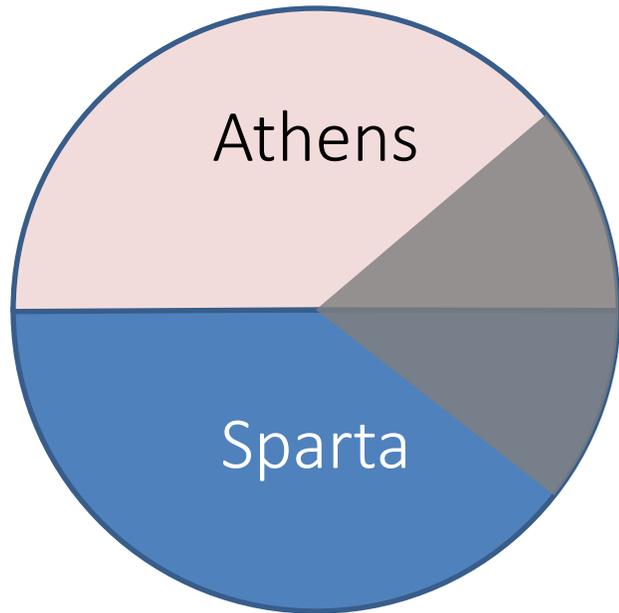
- Sparta feels it evenly matches Athens, and each as a 50% chance of winning a fight
- So Sparta's bargaining range is \$40-60



### What Athens believes

- Athens thinks Sparta is weak, and that they have a 75% chance of winning
- So Athens' bargaining range is \$15-35

Are they going to fight? Why or why not?



Do you expect them to reach a bargain eventually or not? Why?

# What kinds of uncertainty might plague the conflicts we have been discussing?

- China—Taiwan
- US—Taliban
- India—Pakistan
- Mexican state—Drug cartels
- Israelis—Palestinians
- US urban gangs

# Example: US–Taliban

## Uncertainty about USA

- No question they can dominate the battlefield
- But sufficiently resolved to put boots on the ground?
  - Recent events raised doubts about willingness to put troops at risk
    - Somalia
    - Rwanda
    - Balkans
- And how long would USA stay?
  - Bush had campaigned against nation-building

## Uncertainty about Taliban

- Degree of strength as counterinsurgents
- Popularity and capabilities of alternative Pashtun leaders
  - E.g. Karzai

Why might some people disdain this explanation for long and sustained fighting?

# Why might some people disdain this explanation for long and sustained fighting?

- Both sides ought to know that the world's an unpredictable place
  - So they ought to have much more diffuse priors, and account for the imprecision
  - This will tend to expand the range of acceptable bargains
- Also, war is so costly they have incentives to avoid the mistake of starting one
  - Nobody wants to be underestimated
  - They have strong incentives to send credible signals of strength
- How do warring parties send credible signals?

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  - Nobody wants to be underestimated
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- How do warring parties send credible signals?
  - By doing things difficult or costly enough that weaker types would be unlikely or unable to do them
    - Military buildups
    - Parades, tests, large training maneuvers, etc.
  - By engaging in skirmishes and clashes that reveal information about strength and resolve
    - Raids and looting
    - Gangbanging and shootings

# You might not want to be underestimated, but you might like to be overestimated

1. Unchecked leaders
- 2. Uncertainty**
  - a. Noise / Different prior beliefs
  - b. Private information and incentives to misrepresent
3. Commitment problems
4. Intangible incentives
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## Private information and bluffing

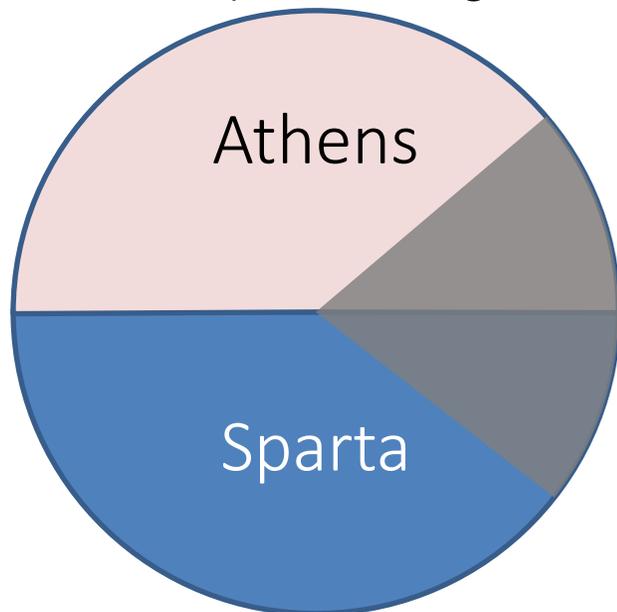
Why would a poker player make a bet with a weak hand?



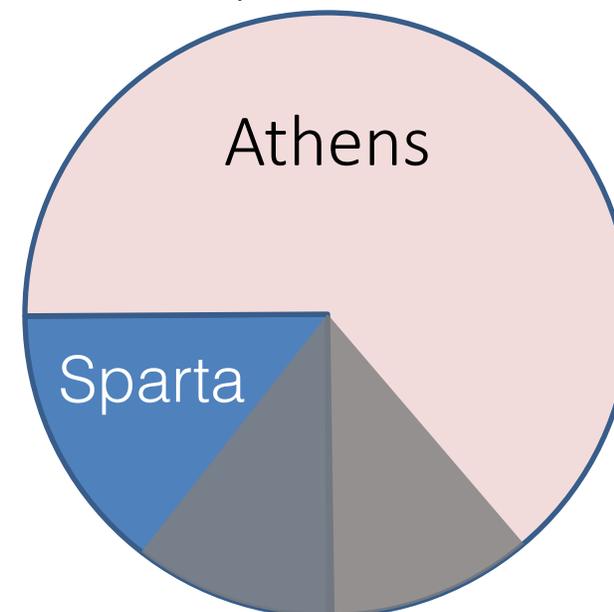
# What if Athens didn't know which state of the world was correct, but Sparta did? i.e. Sparta has private information

- Sparta knows it is weak (right side) because if it fields its full army it risks a slave revolt
- But Athens isn't sure how strong Sparta is. It knows there is chance  $p$  they are evenly matched with Sparta (left) and a chance  $1 - p$  that Sparta is weak (right)
- In one world the bargaining range is (\$40,\$60) and in the other world (\$15,\$35)

If Sparta strong

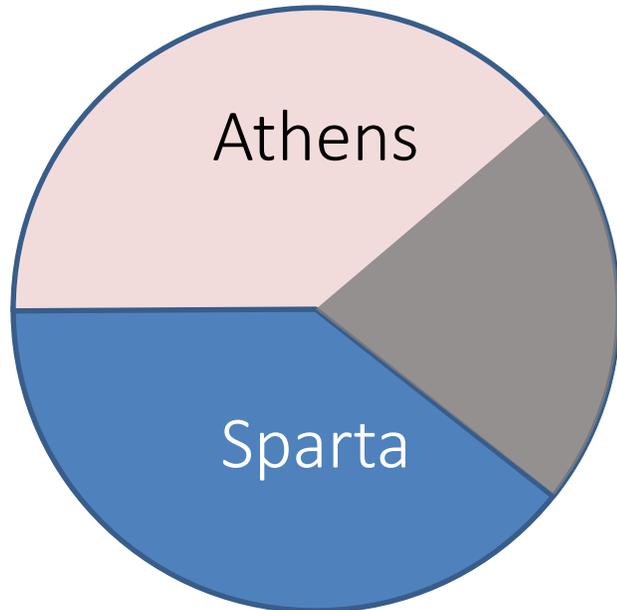


If Sparta weak

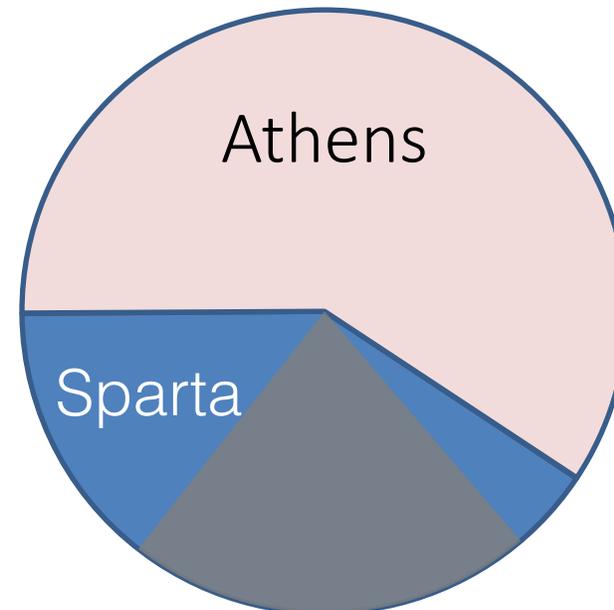


Athens option 1: Give Sparta \$40, keep \$60  
Sparta accepts for certain and there is no war

If Sparta strong



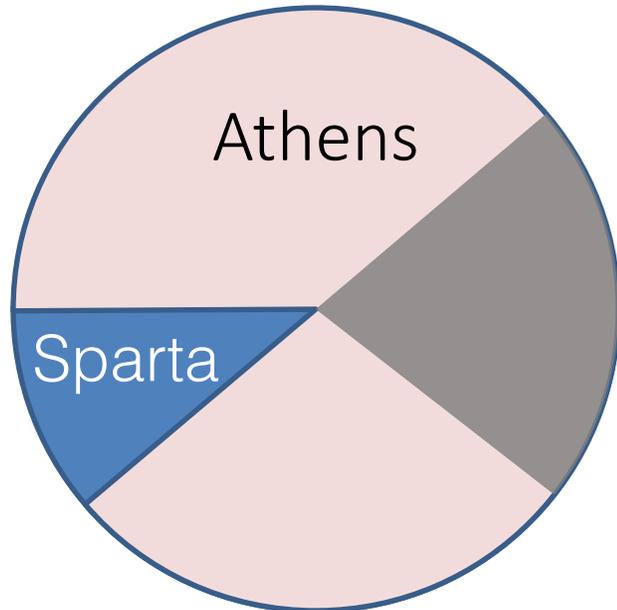
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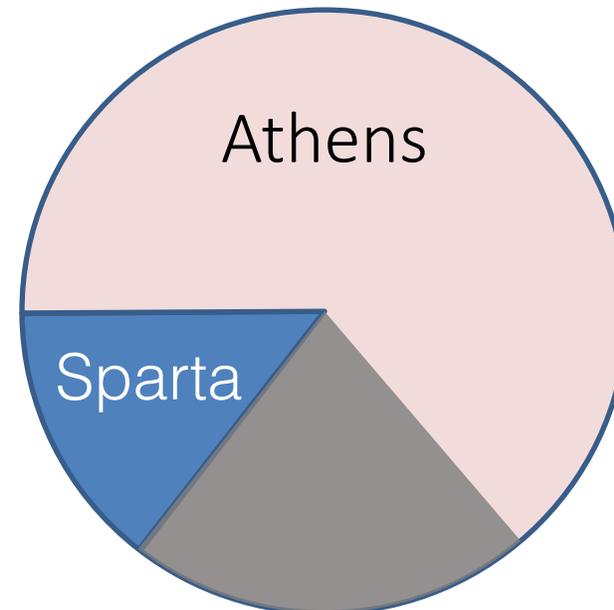
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**Athens option 2: Offer Sparta \$15.**

If Sparta strong



If Sparta weak



Athens option 1: Give Sparta \$40, keep \$60

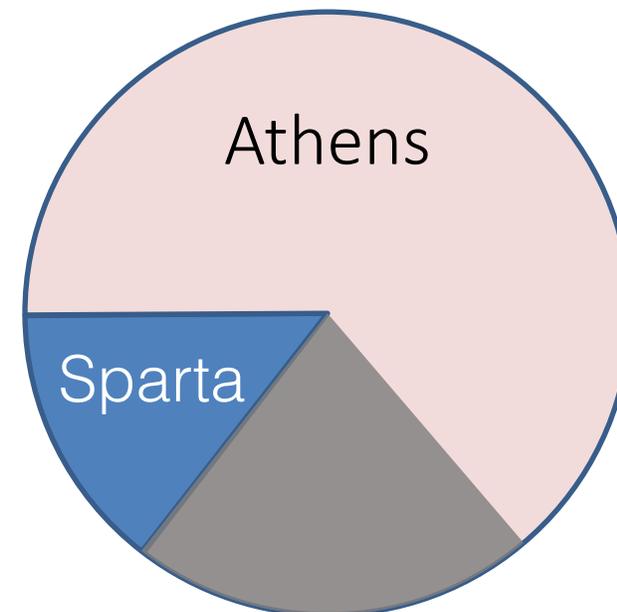
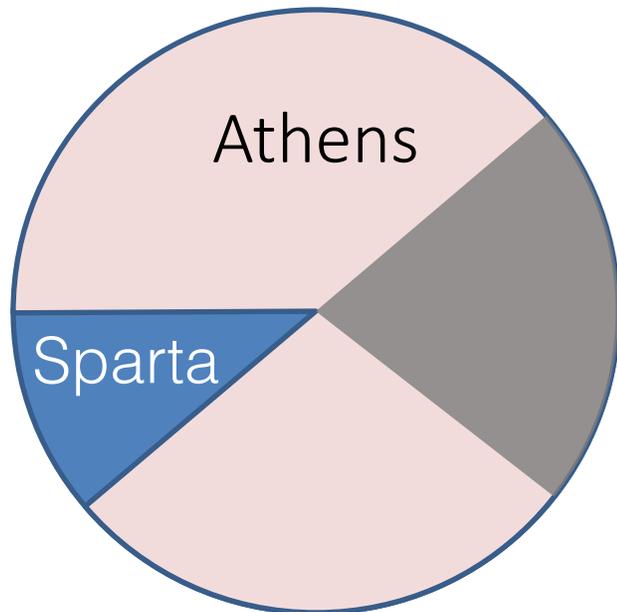
Sparta accepts for certain and there is no war

**Athens option 2: Offer Sparta \$15.**

$1 - p$  chance Sparta is weak and accepts, and Athens keeps \$85.

$p$  chance Sparta is strong and fights, leaving Athens \$40.

What's Athens' incentive?



Athens option 1: Give Sparta \$40, keep \$60

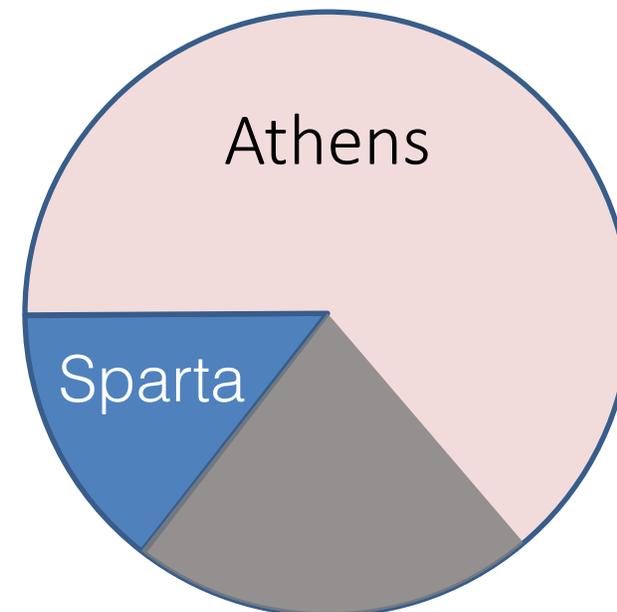
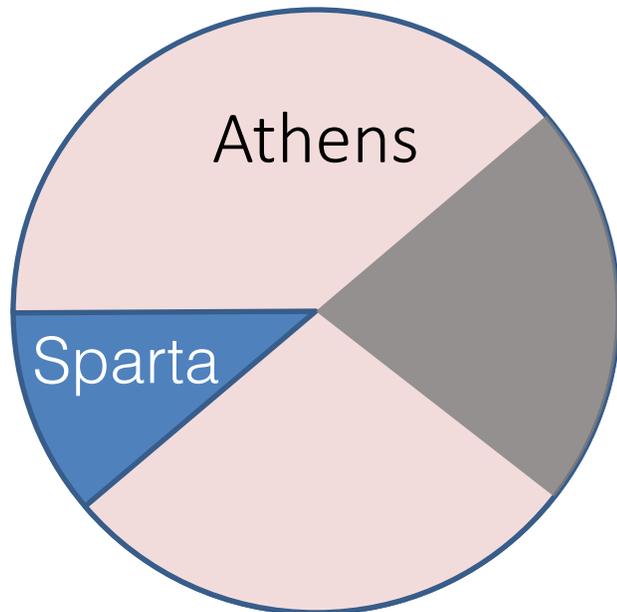
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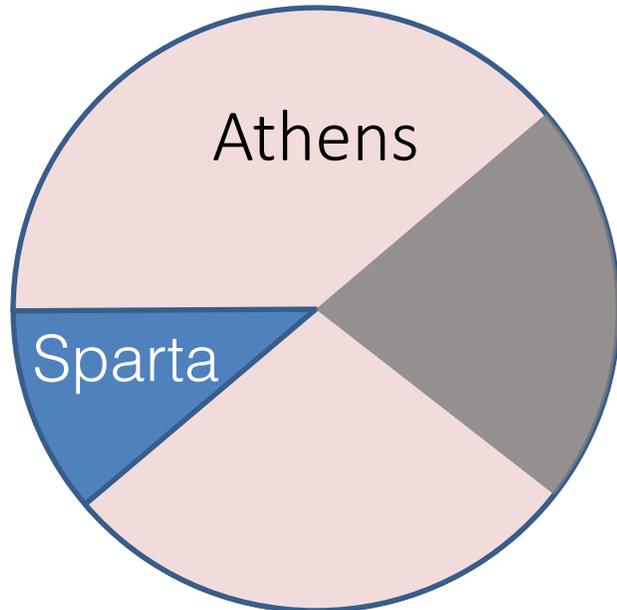
$p$  chance Sparta is strong and fights, leaving Athens \$40

When  $p$  is high, Athens ought to offer at least \$40. But as  $p$  falls, the expected value of a low offer rises, risking war

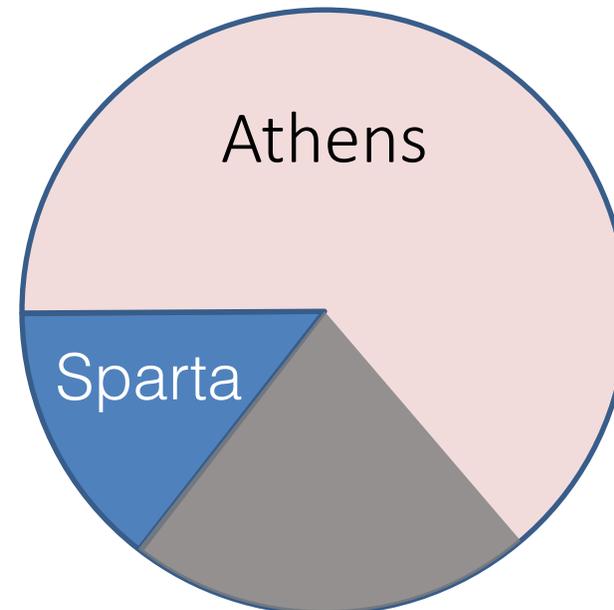


Knowing this, what would a strong Sparta like to do?

If Sparta strong



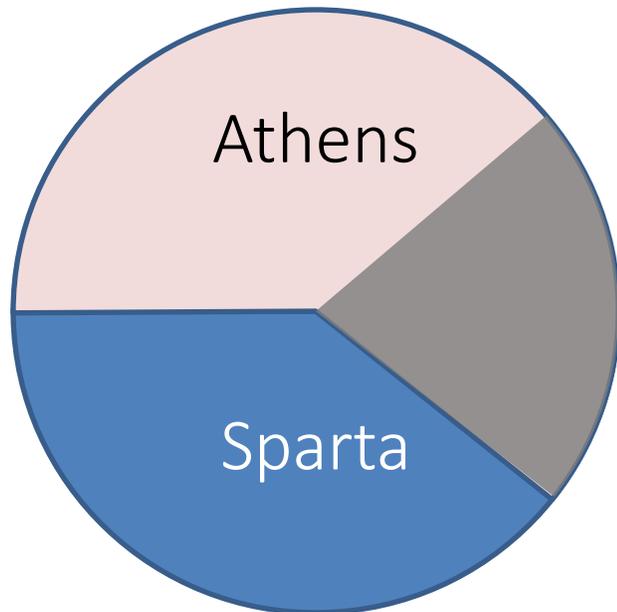
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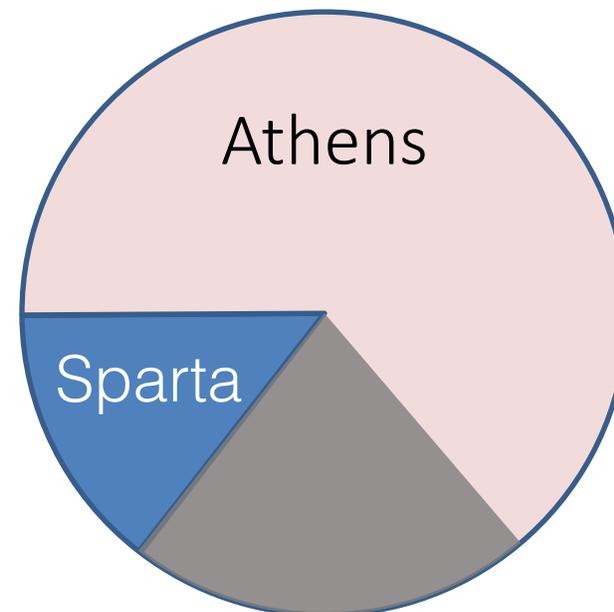
Knowing this, what would a strong Sparta like to do?

They'd like to be able to signal their strength to avoid war, even if signaling came at some cost

If Sparta strong



If Sparta weak

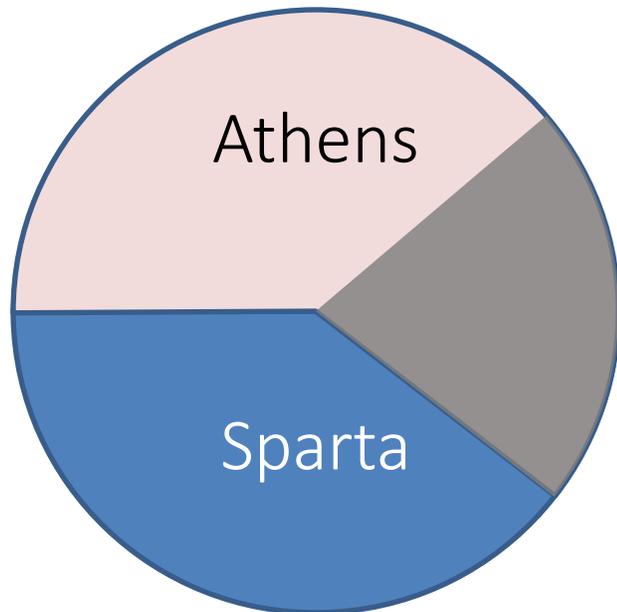


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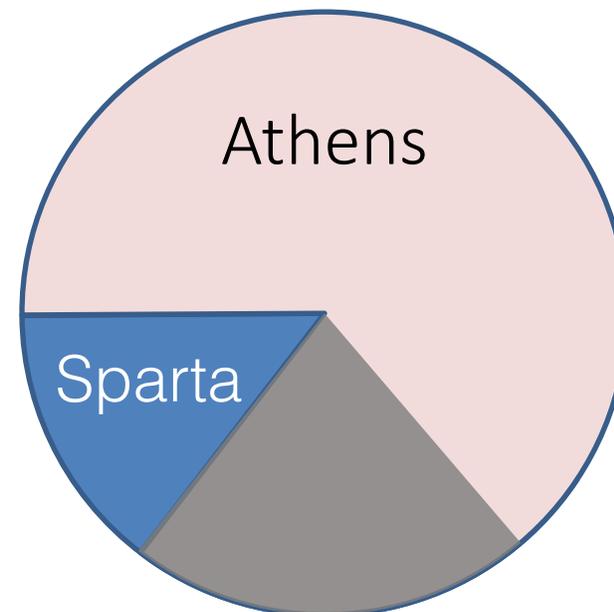
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So what would a weak Sparta have an incentive to do?

If Sparta strong



If Sparta weak



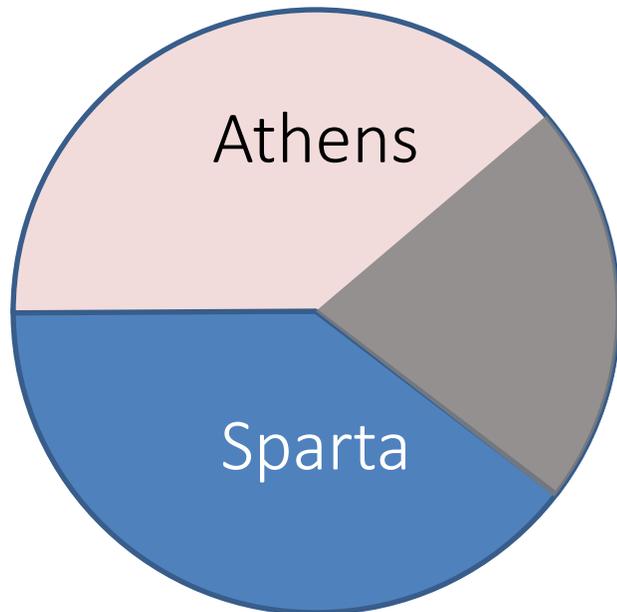
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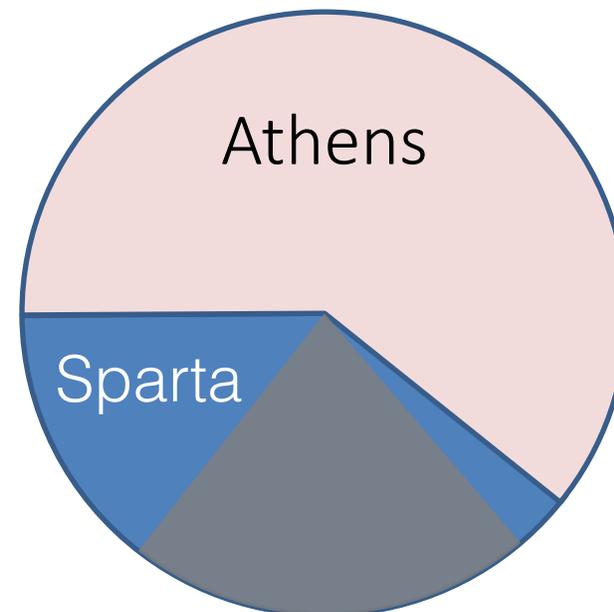
So what would a weak Sparta have an incentive to do?

A weak Sparta has an incentive to invest and send the same strong signal (assuming those signals are not prohibitively costly)

If Sparta strong



If Sparta weak



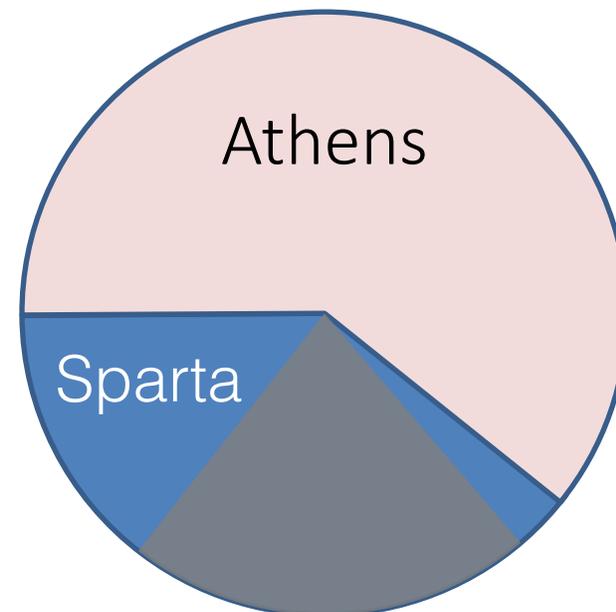
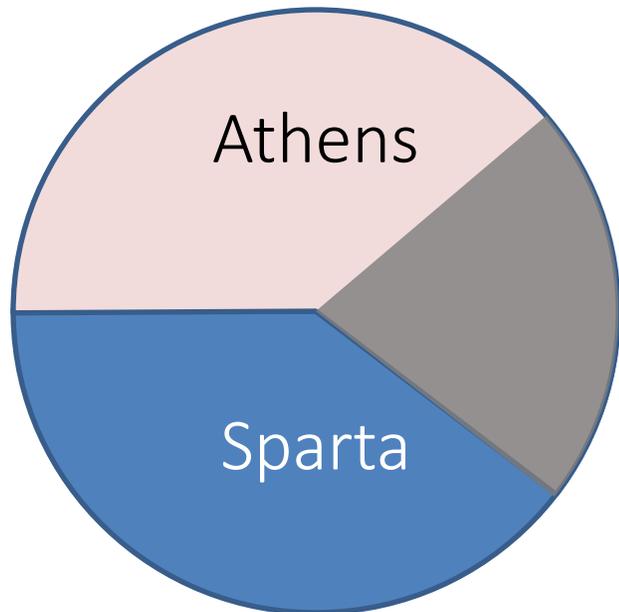
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So what would a weak Sparta have an incentive to do?

A weak Sparta has an incentive to invest and send the same strong signal (assuming those signals are not prohibitively costly)

We have a signaling game, where under reasonable assumptions weak Spartas bluff with some probability, and Athens risks war by making a low offer



# Recall from your core micro class: Education as a Signal

- High-ability workers
  - a high-ability worker produces  $w_h$
  - $\theta$  share of the workforce
- Low-ability workers
  - each produces  $w_l$
  - $1 - \theta$  share
- A worker's ability is private information

# The separating equilibrium

- Assume that there is a school such that high-ability individuals can get a degree by spending  $c$  on tuition
- In a separating equilibrium,
  - high-ability people pay  $c$  to get a degree and are employed at a wage of  $w_h$
  - low-ability individuals find this task too cumbersome, do not get a degree, and work for  $w_l$
- Implication: High-ability people will pay  $c$  even to get a useless education if  $w_h - w_l > c$ 
  - You do complicated problem sets and math, not because you'll ever use it, but merely to show that you differ from low-ability types in the labor market
- Likewise, if strong groups can pay  $c$  to signal their strength, they have incentives to do so
  - Spending 30% of GDP on arms buildups that you never hope to use
  - Parades and military exercises

# When is it difficult to maintain a separating equilibrium?

- When the benefit from education (the extra pay) is less than cost of schooling:  $w_h - wL < c$
- When weak types have incentives to pay  $c$ 
  - This could be because there are few truly costly signals available
  - Or it could be because  $c$  is high in this one rivalry, but pays off in future rivalries
    - Reputation!

# The pooling equilibrium

- Pooling equilibrium: If firms can't tell high- and low-ability workers apart, they pay all workers the average wage, at the risk that high wage workers will not accept

$$w = \theta w_h + (1 - \theta)w_l$$

- What's the implication for conflict?
  - In the absence of credible costly signals, may be optimal to make low offers to enemies, and skirmish to find out the truth
  - i.e. Bargaining while fighting

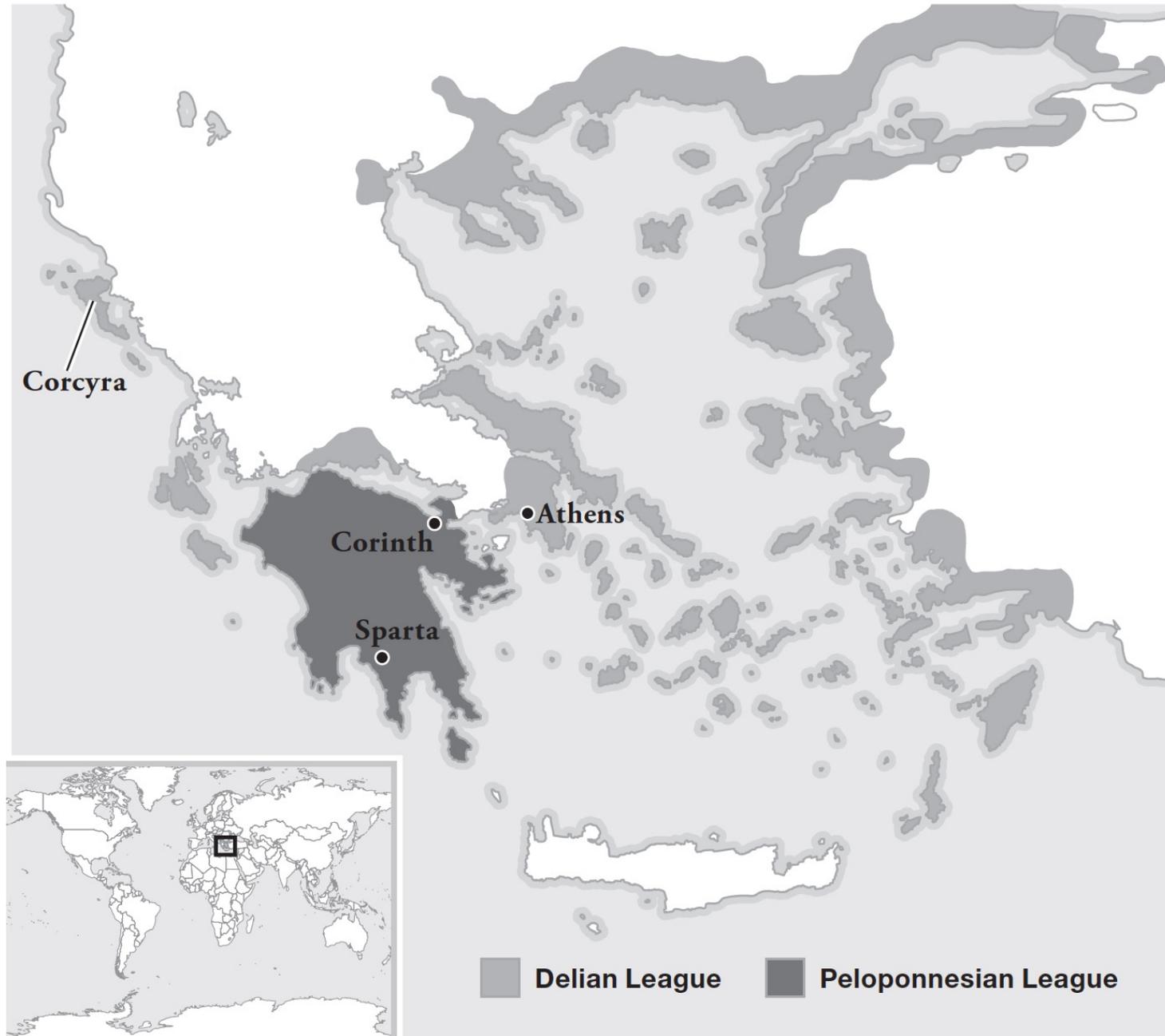
But can private information and bluffing explain long wars?

## But can private information and bluffing explain long wars?

- Skirmishes and initial battles should close the information gap
  - Indeed many “wars” end before they really begin
  - In Greek city-states and colonies, many small conflicts in the colonies did not escalate into warfare
  - Many episodes of saber-rattling leading to negotiation
- But that seems like a bad explanation for a long, drawn out 3-decade war like the Peloponnesian War

Does this mean asymmetric information is an explanation for skirmishes but not for wars?

## Back to the Greek World



- A situation of anarchy – no overarching authority
- Many observers
  - Persian Empire
  - Neutral city states with large navies (Corcyra)
  - Junior allies (tribute-paying Delian & Peloponnesian Leagues)
  - Subjugated peoples (enslaved helots)
- Can heighten the incentives to bluff

# How might reputation shape the behavior of these rivals?

- China—Taiwan
- US—Taliban
- India—Pakistan
- Mexican state—Drug cartels
- Israelis—Palestinians
- US urban gangs