Motivated Reasoning in Intelligence Collection: A Rationalist Perspective

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Motivation

Policymakers privilege favorable and disregard unfavorable intelligence

- Pearl Harbor, Suez Crisis, Cuban Missile Crisis...

Motivated reasoning as unconscious distortion of judgment
(Betts 2009; Jervis 2019; Yarhi-Milo 2018)

Alternative explanation: dismissing pessimistic signals can be rational

Intelligence

Definition: information relevant to a government's formulation and implementation of policy (Shulsky and Schmitt 2002)

Intelligence cycle (Betts 2009)

- policymakers identify needs
- agencies gather raw data
- analysts interpret data
- products delivered back to policymakers

Policymakers' decision on how to process received intelligence

Model

Two actors: Challenger (C), Target (T)

Two states of the world: $s \in \{L, H\}$

Timing:

- actors formulate common prior beliefs, $Pr(s = L) = \lambda$
- T chooses verification effort, $\alpha \in (0, 1)$
- Nature decides whether to reveal the true state to T; decision observable *only* to T
- ultimatum bargaining: C offers $(1 - x, x)$; T accepts or rejects

Payoff

Payoff for peace

$$U_C(peace) = 1 - x$$
$$U_T(peace) = x - \frac{1}{2}\alpha^2$$

Expected payoff for war

$$EU_C(war) = 1 - p_s - k$$
$$EU_T(war) = p_s - k - \frac{1}{2}\alpha^2$$

- prospect in war: $0 < p_L < p_H < 1$
- verification cost: $\frac{1}{2}\alpha^2$
- cost of war: $k > 0$

Analysis – Challenger's Offer

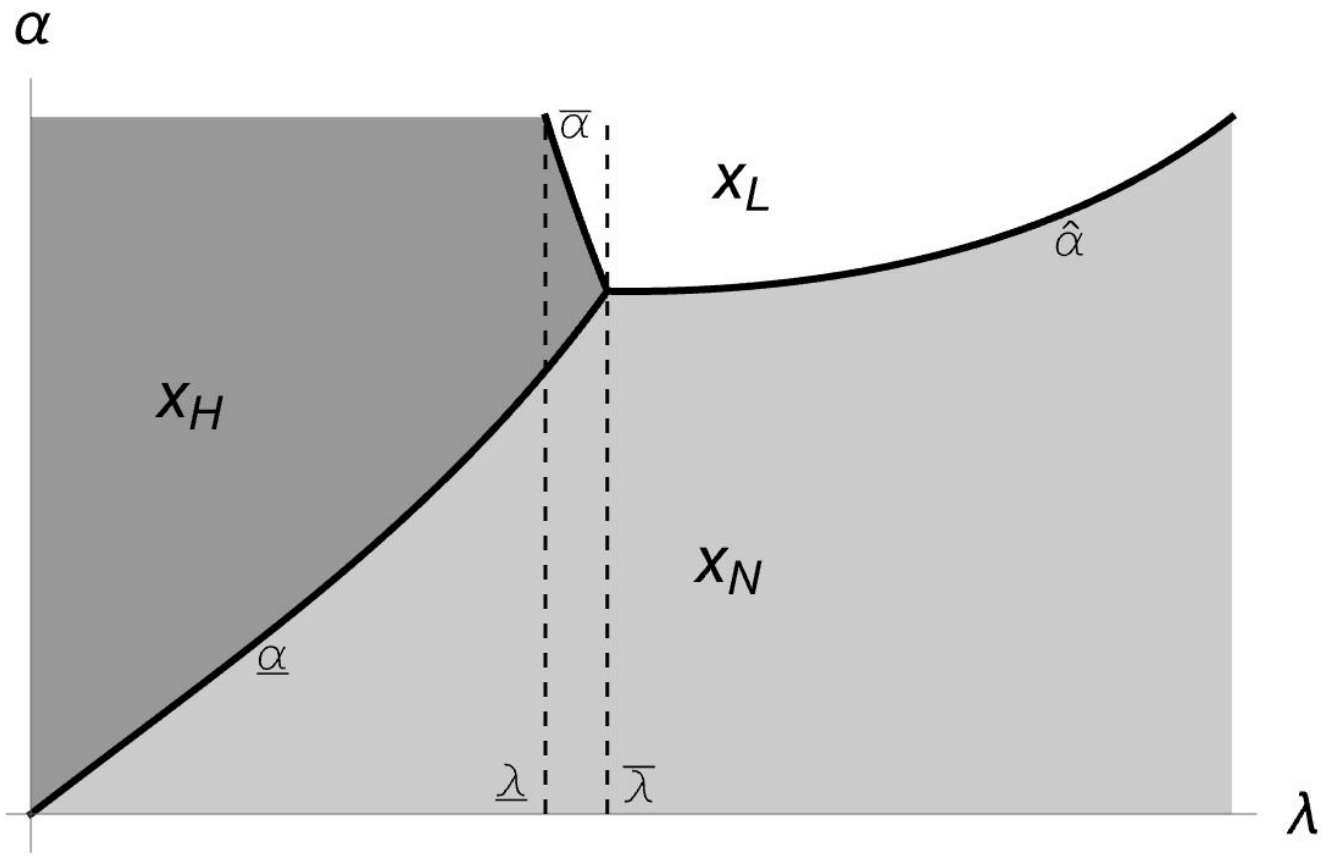


Figure 1

- favorable prior ($\lambda < \bar{\lambda}$): more effort leads to better offer
- unfavorable prior ($\lambda \geq \bar{\lambda}$): more effort leads to worse offer

Analysis – Target's Verification Effort (Overt)

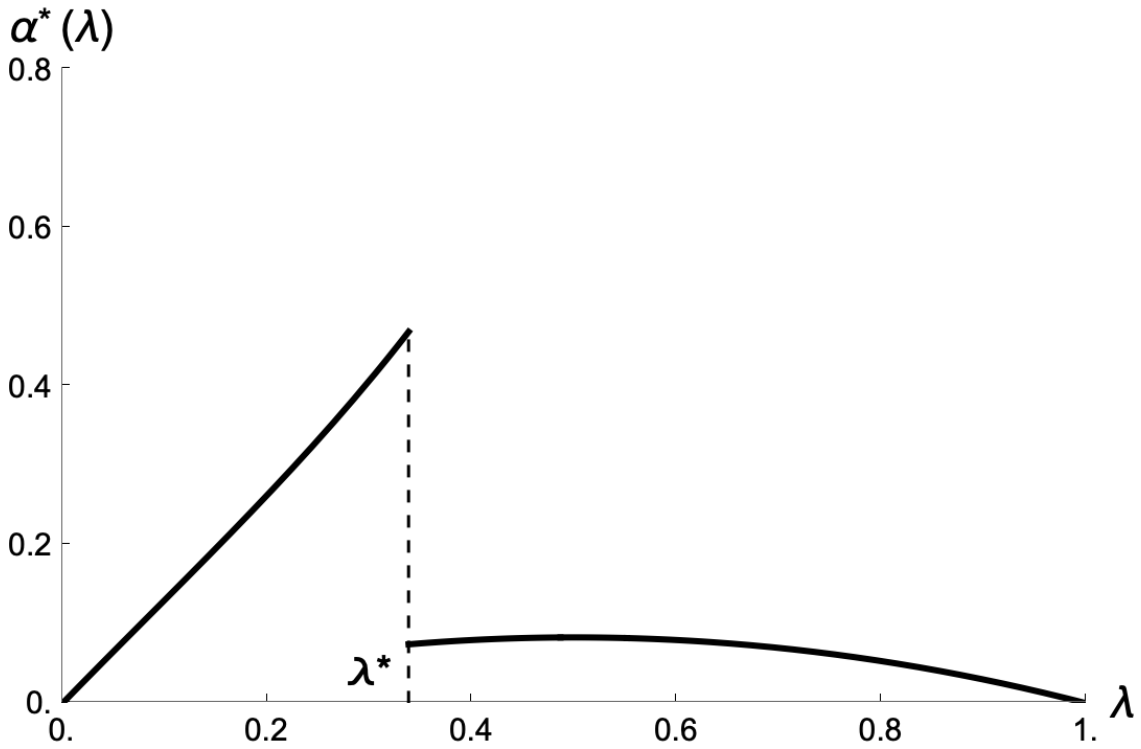
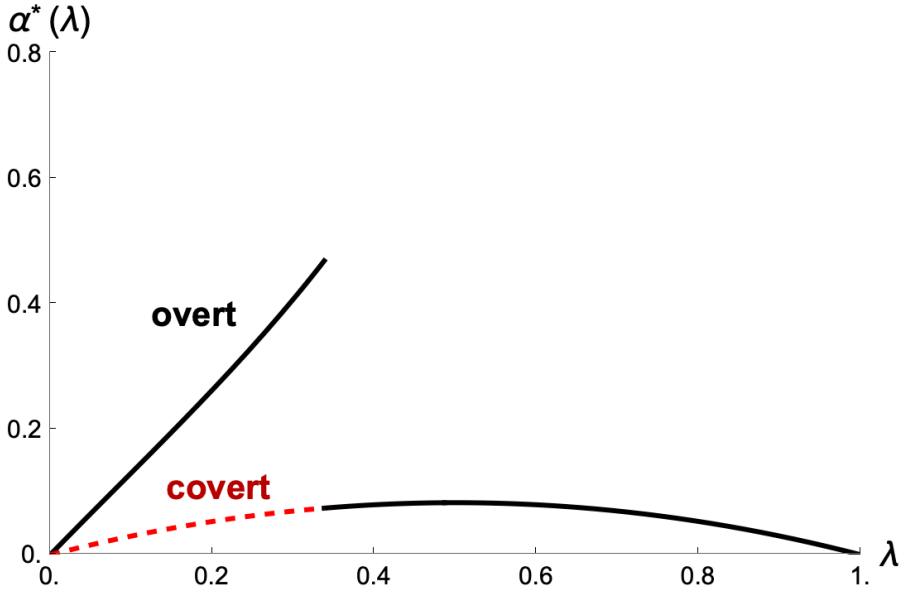


Figure 2

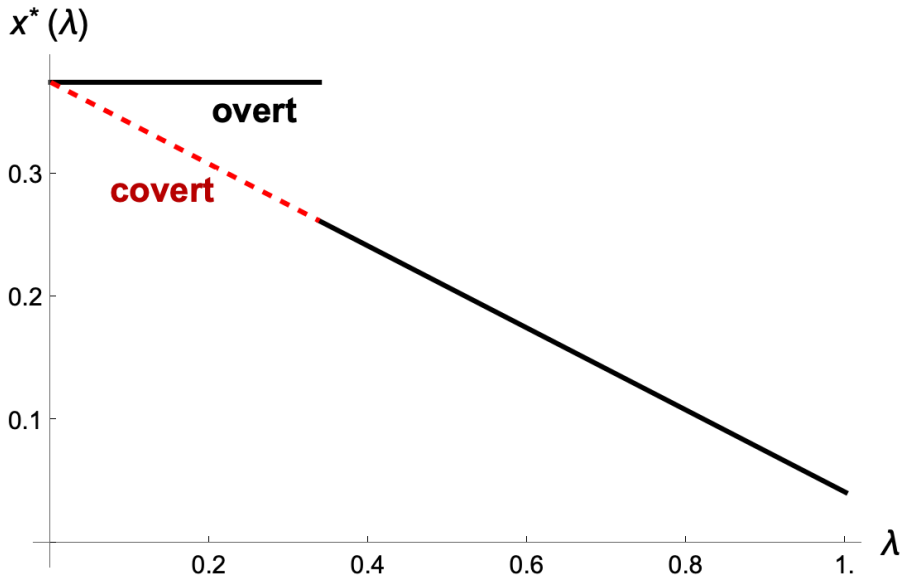
Two reasons T refrains from investing when $\lambda \geq \lambda^*$

- small marginal benefit
- making C more aggressive

Analysis – Target's Verification Effort (Covert)



T's verification effort



C's equilibrium offer

T benefits from publicizing effort when $\lambda < \lambda^*$

Extension – Signaling

C knows the state and signals through his offer

T's information structure influences C's offer

Trade-off of information acquisition

- strong C more conciliatory if T uninformed of his strength
- weak C bluffs if T uninformed of his weakness

Optimistic T benefits from more information $\rightarrow$ deter weak C

Pessimistic T benefits from less information $\rightarrow$ constrain strong C

Implication

Rationalist explanation for why intelligence fails to inform policy

More sobering than institutional and cognitive explanations

Acting on pessimistic signals does little beyond reinforcing pessimism

You can't wake someone who pretends to be asleep!

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Thanks!

APSA Panel: Models of International Crises

Discussant comments by Matt Malis

11 Sep 2025

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Author: Yu Mei

Mechanism

Case 1: prior favors Target

- Investing in intelligence → T likely to become even more confident in her own strength
- T wants Challenger to know she invested

Mechanism

Case 1: prior favors Target

- Investing in intelligence → T likely to become even more confident in her own strength
- T wants Challenger to know she invested
- If intelligence collection is **overt**: T makes high investment
  - direct benefit of info (to choose accept or reject), + induces better offer
- If intelligence collection is **covert**: less incentive to invest

So, more intelligence collection occurs when it is overt

Asymmetry

Case 2: prior favors Challenger

- Why is it asymmetric? My intuitive expectation would be:
- T wants C to think T didn't invest in intelligence
  - investing → T likely to be more confident in her own weakness
  - not investing makes T more bold at the bargaining table, forces better offer from C

Asymmetry

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- T wants C to think T didn't invest in intelligence
  - investing → T likely to be more confident in her own weakness
  - not investing makes T more bold at the bargaining table, forces better offer from C
- If **overt**: T invests less
- If **covert**: T invests more (because can't credibly commit not to)

Why is this not the case?

Intelligence Collection Cycle

1. **Policymakers identify informational needs, task intelligence agencies with data collection**
2. Collectors gather and transmit raw data
3. Analysts interpret the data
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5. **Policymakers determine how to process and act on the intelligence they receive**

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Intro and discussion/conclusion: this is a model of step 5

My read: model is all about step 1, says nothing about step 5

Multilateral Deterrence

Authors: Livio Di Lonardo and Scott Tyson

Mechanism

Punchline of Prop 2 (ii):

- With low alignment between D1 and D2 (low α), there is a moderate transgression which:
  - avoids retaliation from D2;
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So: D1 and D2 not necessarily better off with stronger alignment

Commitment problem

Alignment between allies as a commitment problem?

- D1 and D2 better off if D2 could commit *not* to retaliate against moderate transgression

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But: how dependent is this on retaliation being binary?

- In the model, with high α, A punished equally for maximal vs. moderate transgression
- What if D could scale their retaliation according to the size of the transgression? Is the commitment problem resolved?

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Putting Yourself Out There: Designing Credible Assurances Through Endogenous Power Shifts.

Peter Schram & Brandon Yoder.

Question

- When and how do power shifts lead to war?
- How do endogenous power shifts and the ability to engage in "hassling" shape the occurrence of preventive wars?
- This is a very interesting project !!!
- I have few comments/suggestions.

Model

Comments

- When D grants R the right to choose a transgression, the benefit of going for it from the perspective of R is limited because the choice of transgression itself is costly even if it raises P.
- What if transgression is costless?
  - i.e $K_R \equiv 0$?
  - Having $K_R \equiv 0$ makes D much more vulnerable and could strengthen the results.
- Not all types will choose transgression even if it is costless
- The reason is because type $\theta = 0$ always wants $t = 0$.

Model

Comments

- D does not enable R
- Why is offer $x_1 = 0$ accepted by $\theta = \overline{\theta}$ in equilibrium?
- An explanation will help us understand the intuition behind Proposition 1.

Model

Comments

- D does enable R
- Why is $(\theta', h^{s0}, h^{s\bar{t}})$ with $x_1 = 0$ (always !!!) an equilibrium?
- More precisely,

  What is the benefit of choosing transgression $(t = \bar{t})$ for a type theta high (say $\theta = \bar{\theta}$)? This type receives the worst offer $(x_1 = 0)$ a high level hassle (which means a low probability of winning a conflict if it ever occurs, $h^{st} > h^{s0}$), and pays a cost $K(\bar{t}) > 0$.
- While a deviation (to $t = 0$) is optimal, given $D's$ response to $t = 0$.

- A deviation by $\theta = \overline{\theta}$ from $t = \overline{t}$ to $t = 0$ (which is costless; $K(0) = 0$) will lead to a low level hassle h^{s0}.

- And the same offer $x_1 = 0$.

- Why is this deviation not profitable?

- Thank you for sharing your work !!!