

4.1 — Exit, Voice, and Loyalty

ECON 410 • Public Economics • Spring 2022

Ryan Safner

Assistant Professor of Economics

✉ safner@hood.edu

🔗 [ryansafner/publicS22](https://github.com/ryansafner/publicS22)

🌐 publicS22.classes.ryansafner.com



Exit, Voice, and Loyalty Framework



- Basic premise: **an organization deteriorates in quality**
 - (firm, club, State, etc)
- Hirschman assumes this is *random* or *unintentional*, i.e. not malevolent

Exit, Voice, and Loyalty Framework



- Consumers/members/citizens can respond in 3 ways:
 1. **“Exit”**: leave the organization (for another)
 2. **“Voice”**: influence the organization without leaving (i.e. complain, protest, persuade, lobby)
 3. **“Loyalty”**: remain silent, suffer the deterioration



Exit



- Economists focus almost exclusively on **exit**
- Ideal of perfect competition
 - If a firm raises price (suffers high costs), simply switch to one of its countless competitors!
- Exit is **silent!**
 - Requires no confrontation
 - Simply abstain from showing up again!



- Exiting provides **no informational content** for the organization
- Demonstrates only the warning sign of a decline in quality
- Firms see decline in revenues resulting from fewer sales

Quality-Elasticity of Demand



- Consider a “**quality elasticity of demand**” concept:
 - How responsive is your buying behavior to a change in *quality* (rather than *price*)?
- Consider two types of customers:

Quality-Elasticity of Demand



- “Alert customers” have **quality elastic** demand, *very sensitive* to changes in quality
 - These customers will leave at the smallest drop in quality
- “Inert customers” have **quality inelastic** demand, *not very sensitive* to changes in quality
 - Takes a much larger fall in quality for these customers to leave

Quality-Elasticity of Demand



- Seems optimal for a firm to have a mix of *both* “alert” and “inert” customers during a decline:
- Alert customers exit and provide the warning sign to firms
- Inert customers stay and provide a “cushion” for firm to stay afloat while rectifying the problem

Quality-Elasticity of Demand



- Firm with *only* alert customers would go out of business very quickly
 - *Any* decline in quality would cause all alert customers to exit
 - Firm experiences sudden drop in revenues to 0
 - Firm “never knew what hit it” and has no chance to rectify the problem

Quality-Elasticity of Demand



- Firm with *only* inert customers would never fix the problem
 - Customers would stay amid decline in quality
 - Firm gets no feedback that something is going wrong

Exit and Superfluous Competition



- Exit and a very competitive marketplace creates a potential problem:
- Hyper quality-conscious buyers always believe they can exit and find a better option
 - “Grass is always greener” illusion
- If every minor decline in quality drives one to search for a better product, one may never stop searching!



Voice

Voice

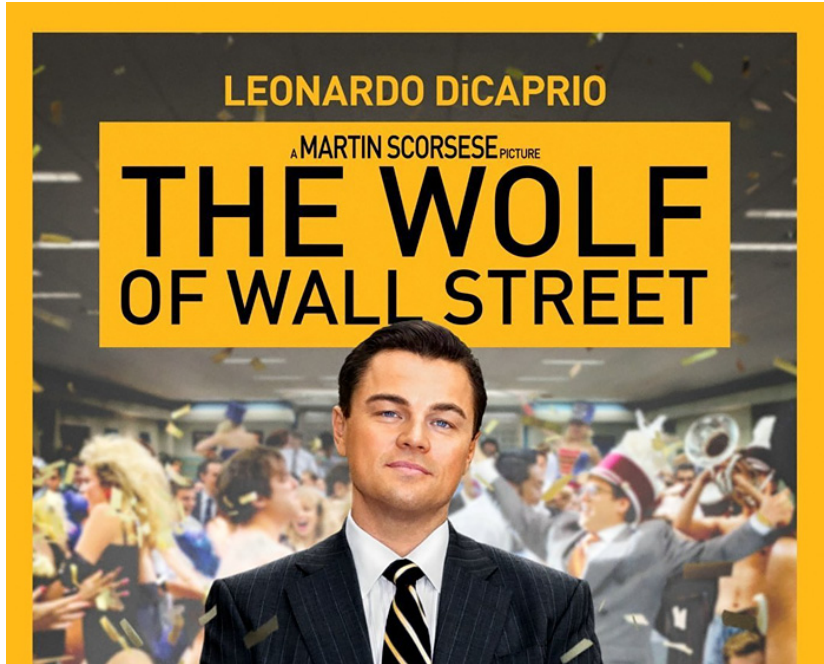


- Political scientists focus almost exclusively on **voice**
 - protests, boycotts, rallies, debate and persuasion, social media, etc
- Voice is inherently political and confrontational



- Political scientists seem to assume a functioning democracy requires a *maximally active, vocal* citizenry
- But what about voter apathy, rational ignorance, rational irrationality?
- Hirschman: a lot of slack exists, but people will care and get active only when *truly* threatened

Voice, In Markets



★☆☆☆☆ There are no wolves in the movie -_- ,

6 May 2016

By [Shiva P.](#)

This review is from: [The Wolf of Wall Street \(Blu-ray\)](#)

There were no wolves in the movie -_-



Voice



- Like exit, Seems again to be an optimal mix of very **vocal** vs. **quiet** members
- Vocal members alert the organization to a problem
- Quiet members allow organization flexibility and patience to address the problem

Relationship Between Exit and Voice



Organizations whose members react strongly via	Exit	
	Yes	No
Yes	Voluntary associations, competitive political parties, and some business enterprises, for example, those selling output to a few buyers	Family, tribe, nation, church, parties in non-totalitarian one-party systems
No	Competitive business enterprise in relation to customers	Parties in totalitarian one-party systems, terroristic groups, and criminal gangs

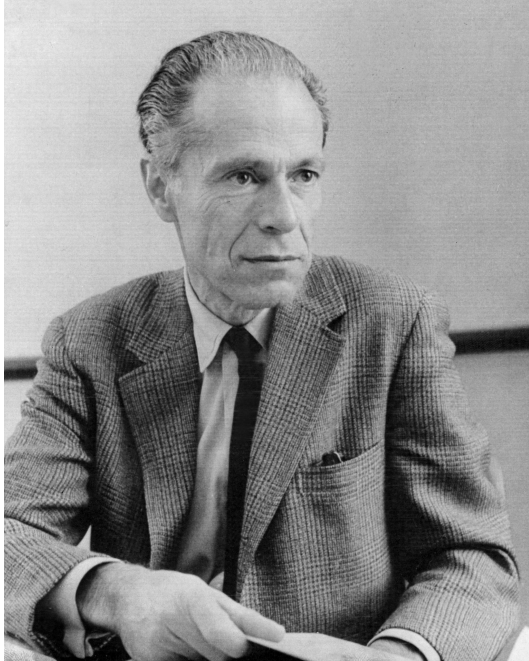
- Different organizations are likely to have different **dominant** modes of reaction (exit vs. voice)

Relationship Between Exit and Voice



- Voice and exit may be **inversely related** in a lot of organizations
- Voice might be used more where exit is not possible
- The stronger voice is, the less likely exit needs to be used
 - Demand will become less elastic with respect to quality
 - i.e. people put up with more if they feel they are being heard
- The weaker voice is (e.g. stifling dissent), more likely exit will be used

Problems Combining Exit and Voice

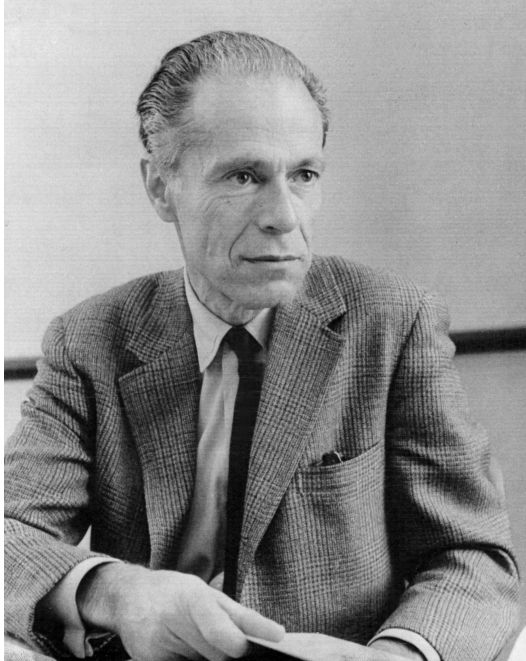


Albert O. Hirschman

1915-2012

“Suppose at some point, for whatever reason, the public schools deteriorate. Thereupon, increasing numbers of quality-education-conscious parents will send their children to private schools. This "exit" may occasion some impulse toward an improvement of the public schools; but here again this impulse is far less significant than the loss to the public schools of those member-customers who would be most motivated and determined to put up a fight against the deterioration if they did not have the alternative of private schools,”
(pp.44-45)

Problems Combining Exit and Voice



Albert O. Hirschman

1915-2012

“When the management of a corporation deteriorates, the first reaction of the best-informed stockholders is to look around for the stock of better-managed companies. In thus orienting themselves toward exit, rather than toward voice, investors are said to follow the Wall Street rule that 'if you do not like the management you should sell your stock.' According to a well-known manual this rule 'results in perpetuating bad management and bad policies.'

Naturally it is not so much the Wall Street rule that is at fault as the ready availability of alternative investment opportunities in the stock market which makes any resort to voice rather than to exit unthinkable for any but the most committed stockholder,” (p.46)



Perverse Effects of Competition

Monopoly and X-inefficiency



“The best of all monopoly profits is a quiet life” - Sir John Hicks

- In economic theory, one of the many benefits of competition is it keeps would-be-monopolists on their toes
- “**X-inefficiency**”: lack of competition causes monopoly to be **complacent** or **lazy** (inefficiently raises costs of production)

The "Comfort" of Competition



“The best of all monopoly profits is a quiet life” - Sir John Hicks

- **Hirschman:** the reverse can actually be a problem too!
- Users who are *most* quality-sensitive (elastic) will be the first ones to exit and not buy from a deteriorating firm
- These may be the very people who would be the most vocal and demand change!
- Firm is left with least quality-sensitive (inelastic) customers who can tolerate mediocrity

The "Comfort" of Competition



“The best of all monopoly profits is a quiet life” - Sir John Hicks

- **Hirschman:** might a lazy monopolist with no exit-option be better than competition?
- If exit is ineffective, monopolist retains all of its most quality-conscious users
- These users are locked in, voice becomes stronger
 - they are precisely the ones who will speak up and demand change

The "Comfort" of Competition



“The best of all monopoly profits is a quiet life” - Sir John Hicks

- Lazy monopolists would welcome competition as a release from effort and effective criticism!
 - (reduce voice, most quality-sensitive would exit instead)

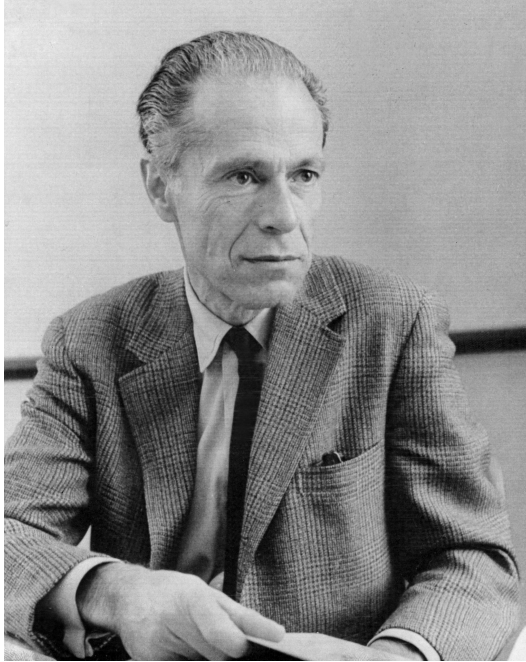
The "Comfort" of Competition



“The best of all monopoly profits is a quiet life” - Sir John Hicks

- Hirschman: which is worse, a monopolist with everyone locked-in, or a weaker monopolist that is able to survive the departure of its most vocal critics?
- A more frequent danger of monopoly is not that it will exploit customers to max profits, but that it is unable to combat declining quality, mediocrity, and incompetence!

The "Comfort" of Competition



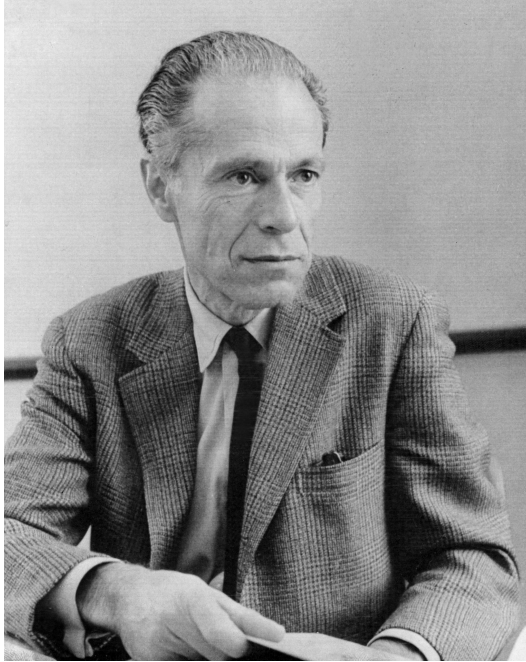
Albert O. Hirschman

1915-2012

“In the economic sphere such ‘lazy’ monopolies which ‘welcome competition’ as a release from effort and criticism are frequently encountered when mobility differs strongly from one group of local customers to another. If, as is likely, the mobile customers are those who are most sensitive to quality, their exit, caused by the poor performance of the local monopolist, permits him to persist in his comfortable mediocrity,” (p.59).

Hirschman, Albert O, 1970, *Exit, Voice, and Loyalty*

The "Comfort" of Competition



“[This leads to] an oppression of the weak by the incompetent and an exploitation of the poor by the lazy,” (p.59)

Hirschman, Albert O, 1970, *Exit, Voice, and Loyalty*

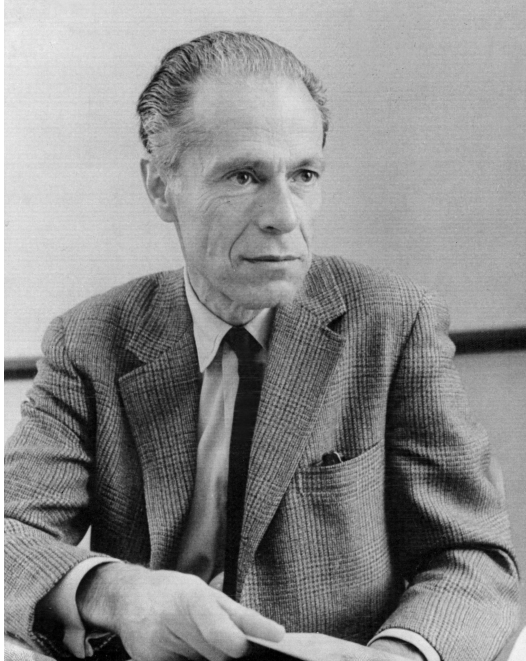
Albert O. Hirschman

1915-2012

Examples



Examples



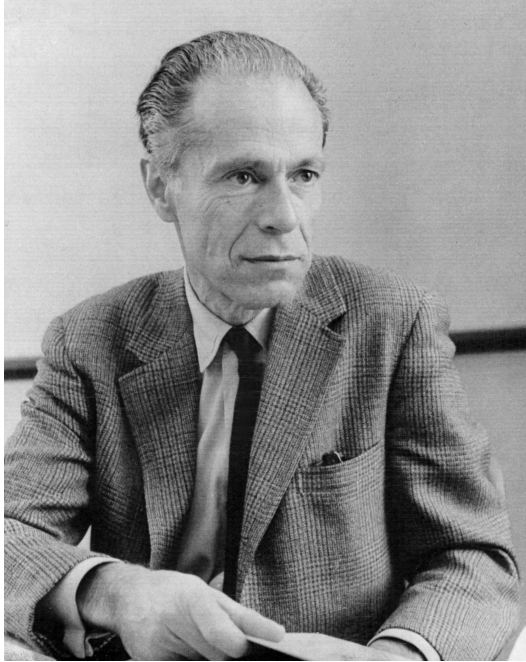
Albert O. Hirschman

1915-2012

“The United States Post Office can serve as another example of the lazy monopolist who thrives on the limited exit possibilities existing for most of its fastidious and well-to-do customers. The availability of fast and reliable communications via telegraph and telephone makes the shortcomings of the Post Office to tyrannize the better over those of its customers who find exit to other communication modes impractical or too expensive,” (pp.59-60).

Hirschman, Albert O, 1970, *Exit, Voice, and Loyalty*

Other Differences from Profit-Maximizing Monopoly



Albert O. Hirschman

1915-2012

“Those who hold power in the lazy monopoly may actually have an interest in *creating* some limited opportunities for exit on the part of those whose voice might be uncomfortable,” (p.60).

“Here is a good illustration of the contrast between the profit-maximizing and the lazy monopolist: the former would engage, if he could, in discriminatory pricing so as to extract maximum revenue from its most avid customers, while the lazy monopolist would much rather price these customers out of the market entirely so as to be able to give up the strenuous and tiresome quest for excellence. For the most avid customers are not only willing to pay the highest prices, but are also likely to be the most demanding and querulous, in case of any lowering standards,” (p.60)



Exit, Voice, Loyalty, and the State

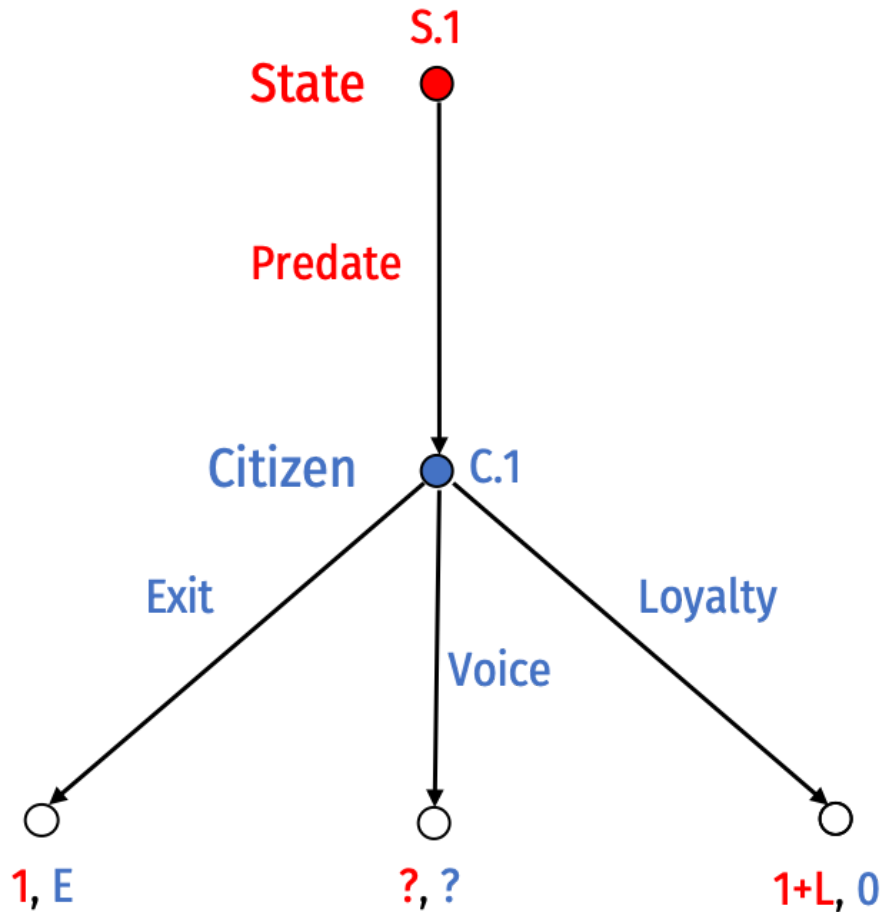
Exit, Voice, Loyalty, and the State



Table 1: Exit, Voice, and Loyalty Options

<i>Stimulus</i>	EXIT	VOICE	LOYALTY
State increases taxes	Reallocate portfolio to avoid tax increase	Organize or join tax revolt	Pay taxes and keep your mouth shut
State rules that prayer in public school is unconstitutional	Home school your children	Lobby the government to change the constitution	Keep your children in the public school system and keep your mouth shut
State bans handguns	Move to a different state	Join the NRA or a militia group to pressure the state to reverse the policy	Turn in your handguns and keep your mouth shut
State devalues currency	Buy goods that are not imported	Lobby the government to change its policy	Continue to buy imports and keep your mouth shut

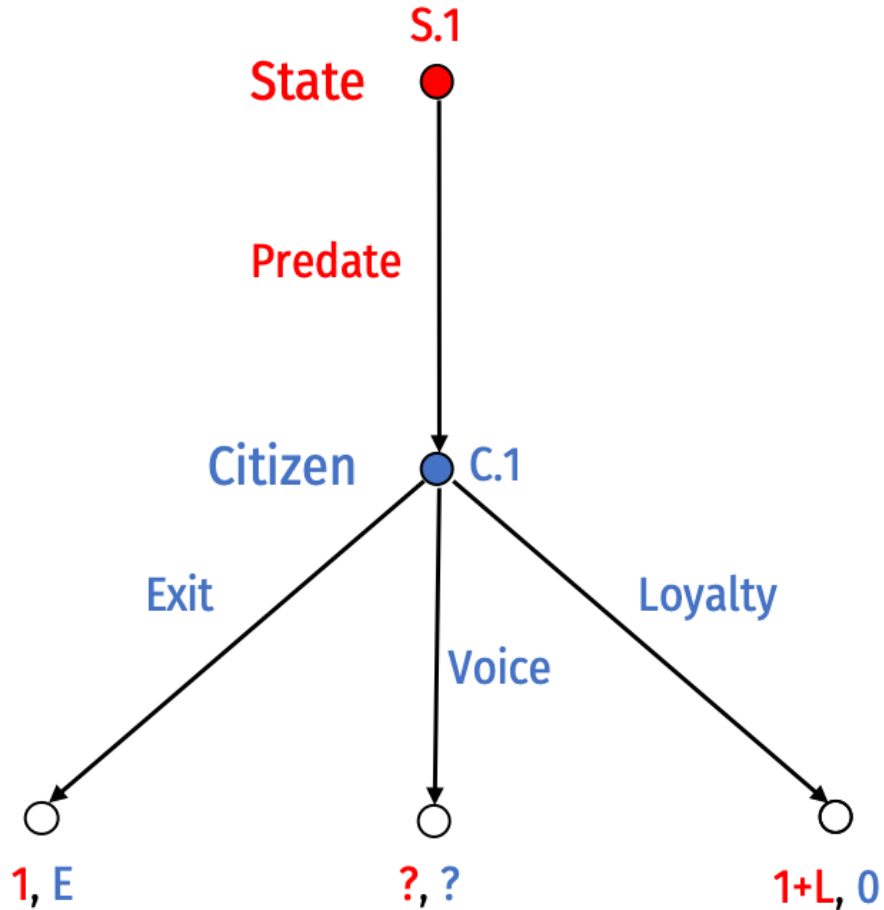
A Game Theoretic Model



- A game between **State** and **Citizen**
- **State** begins the game by deciding to **Predate** 1 unit from **Citizen**
- **Citizen** must respond with either:

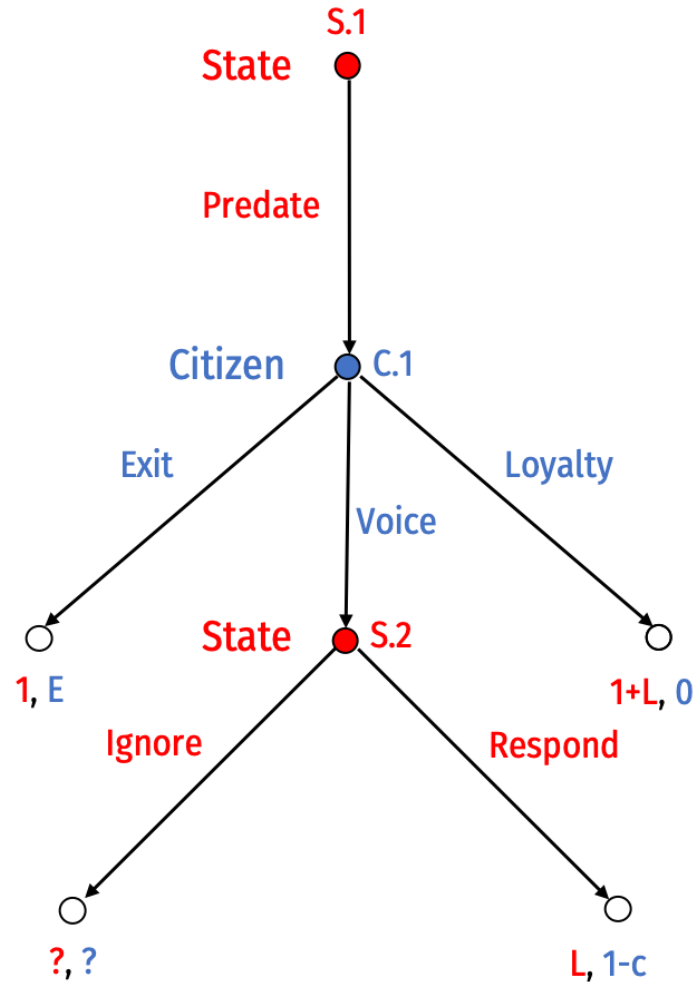
Model parameterizations from Clark et. al 2012

A Game Theoretic Model



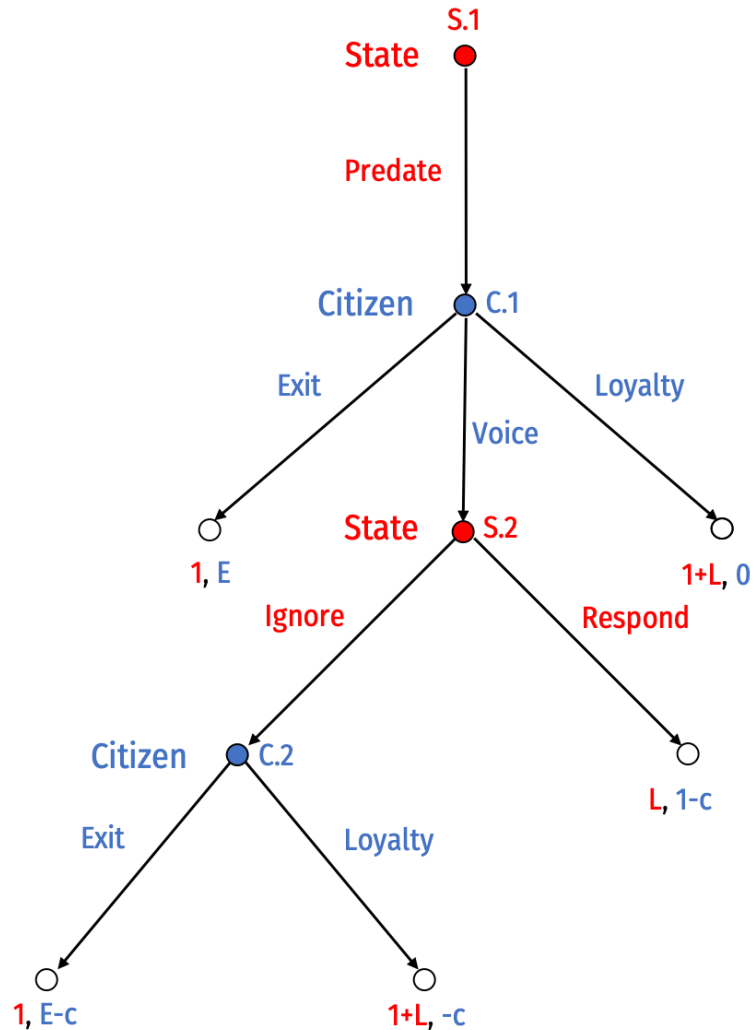
- Exit
 - **State: 1** (keeps)
 - **Citizen: E** (exit payoff)
- Loyalty
 - **State: 1+L**
 - L : benefit of citizen's loyalty)
 - **Citizen: 0**
- Voice
 - **State:** will have to respond
 - **Citizen:** might get 1 back

A Game Theoretic Model



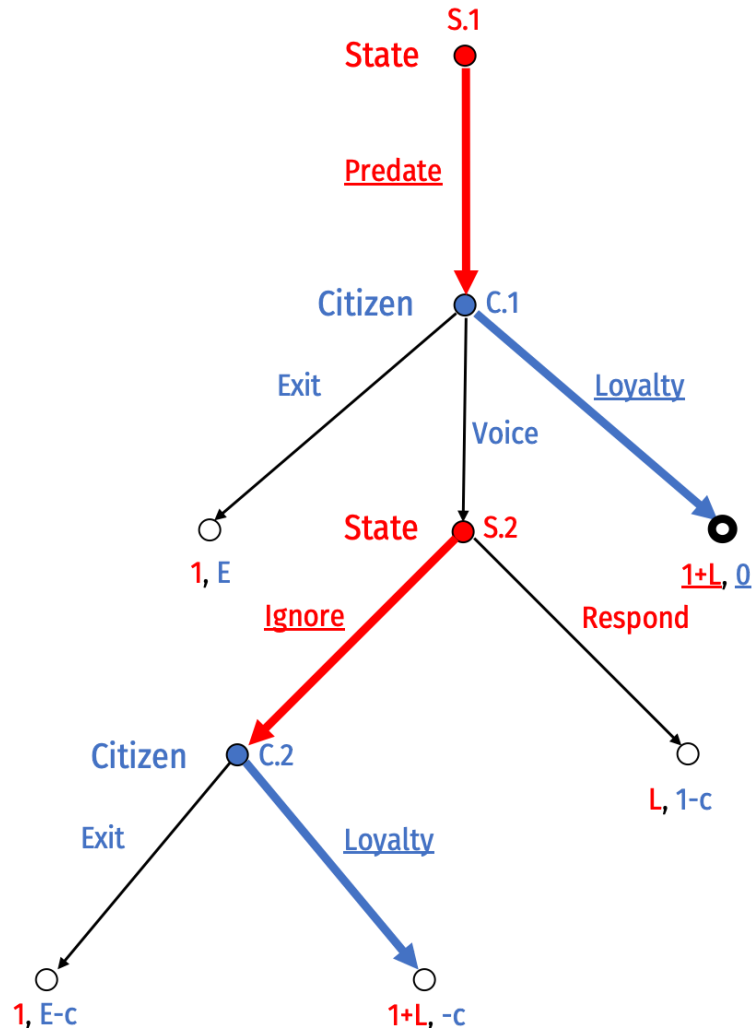
- If **Citizen** exercised **Voice**, **State** must then respond (S.2):
- **Respond:**
 - **State:** L
 - gives back 1, but gets benefit of loyalty
 - **Citizen:** $1-c$
 - gets 1 back, pays cost of exercising voice $c > 0$
- **Ignore:**
 - We'll give the **Citizen** a response...

A Game Theoretic Model



- If **Citizen** exercised **Voice** and **State Ignores**, **Citizen** must then respond (C.2):
- **Exit:**
 - **State:** 1
 - **Citizen:** $E - c$
 - gets exit payoff E , but also paid voice cost c
- **Loyalty:**
 - **State:** $1 + L$
 - **Citizen:** $-c$
- In principle, could add another round of **Voice** and **Ignore** or **Respond** but gets repetitive...

A Game Theoretic Model: Scenario 1



- **Scenario 1:** **Citizen** has no credible **exit** threat

$$E \leq 0$$

- **Subgame perfect Nash equilibrium:**

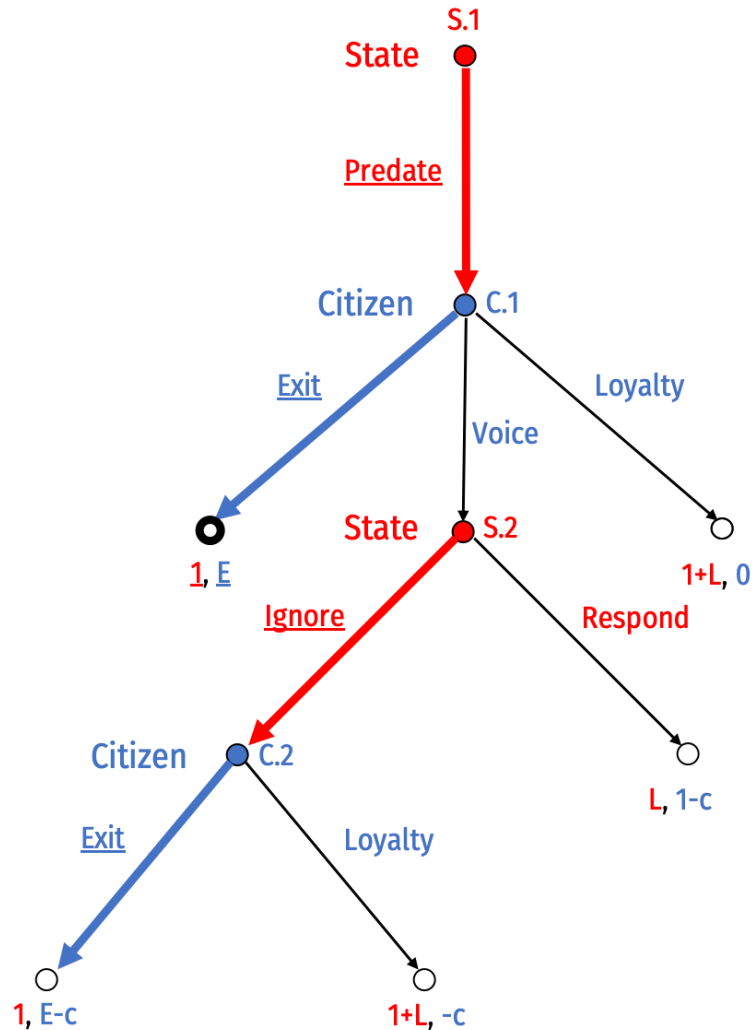
$$\left\{ (\text{Predate}, \text{Ignore}), (\text{Loyalty}, \text{Loyalty}) \right\}^\dagger$$

- **Outcome:** State predates and citizen remains loyal:

- **State:** 1+L
- **Citizen:** 0

[†] Strategies for **State** chosen at (S.1, S.2) and **Citizen** at (C.1, C.2)

A Game Theoretic Model: Scenario 2



- **Scenario 2: Citizen** has a credible **exit** threat, but **State** doesn't depend on citizens

$$E > 0$$

$$L = 0$$

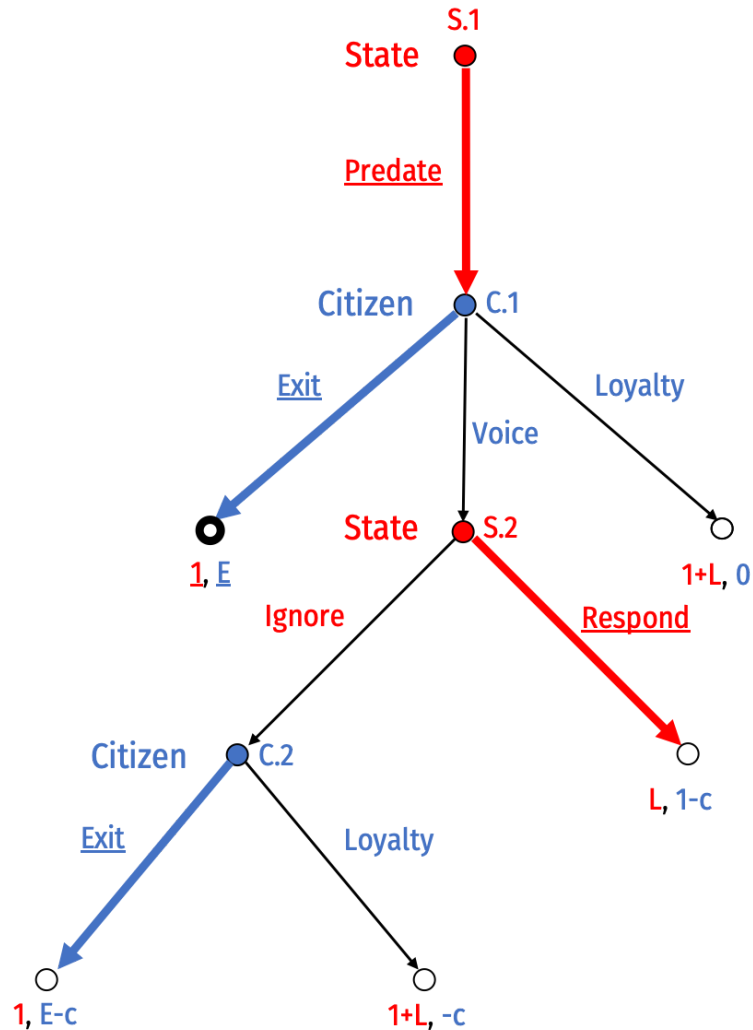
- **Subgame perfect Nash equilibrium:**

$$\{ (\text{Predate, Ignore}), (\text{Exit, Exit}) \}$$

- **Outcome:** State predates and citizen exits:

- **State: 1**
- **Citizen: E**

A Game Theoretic Model: Scenario 3



- **Scenario 3:** **State** depends on citizens, but **exit** is better than cost of **voice** to citizen

$$E > 1 - c$$

$$L > 0$$

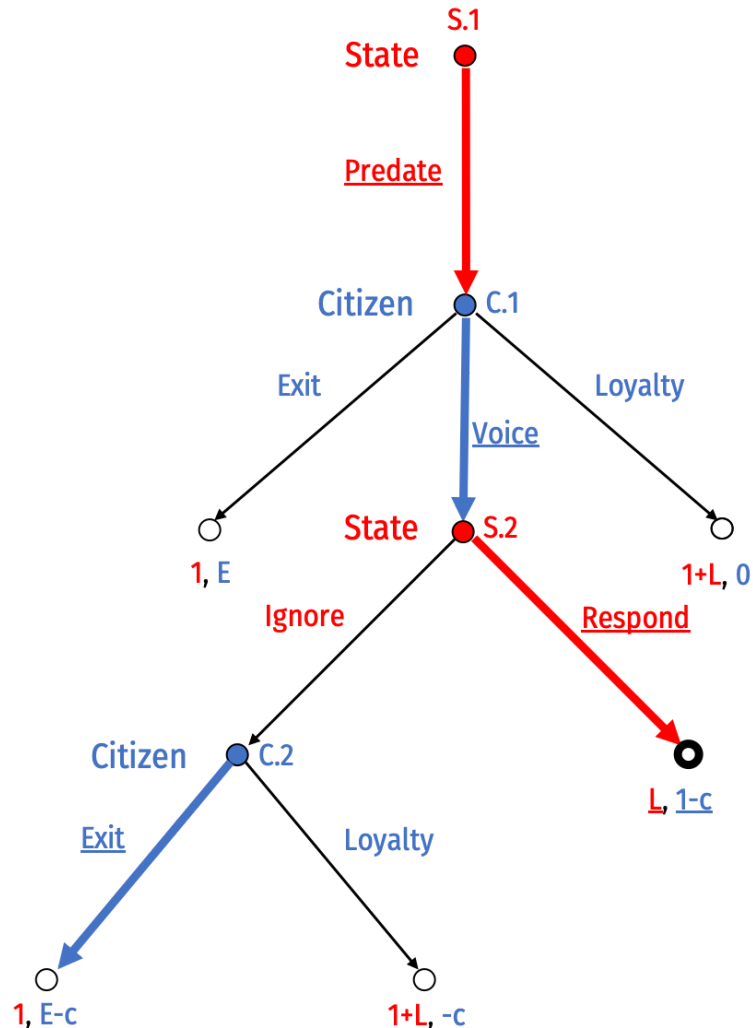
- **Subgame perfect Nash equilibrium:**

$$\{ (\text{Predate}, \text{Respond}), (\text{Exit}, \text{Exit}) \}$$

- **Outcome:** State predates and citizen exits:

- **State: 1**
- **Citizen: E**

A Game Theoretic Model: Scenario 4



- **Scenario 4:** **State** depends on citizens, **voice** is cheap to citizen

$$E < 1 - c$$

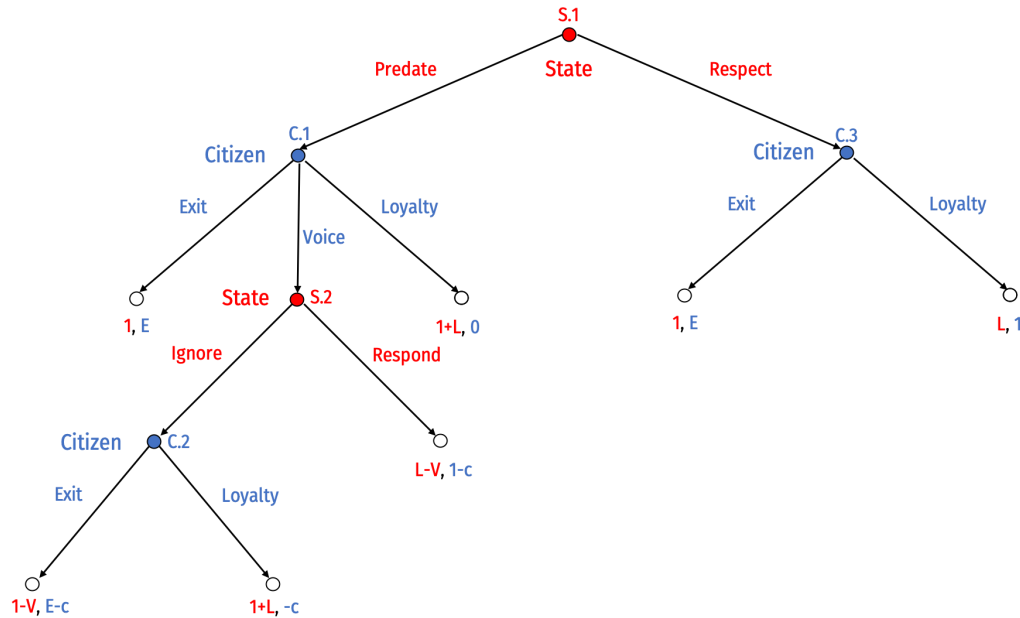
$$L > 0$$

- **Subgame perfect Nash equilibrium:**

$$\{ (\text{Predate, Respond}), (\text{Voice, Exit}) \}$$

- **Outcome:** State predates, citizen voices, State responds:
 - **State:** L
 - **Citizen:** $1-c$

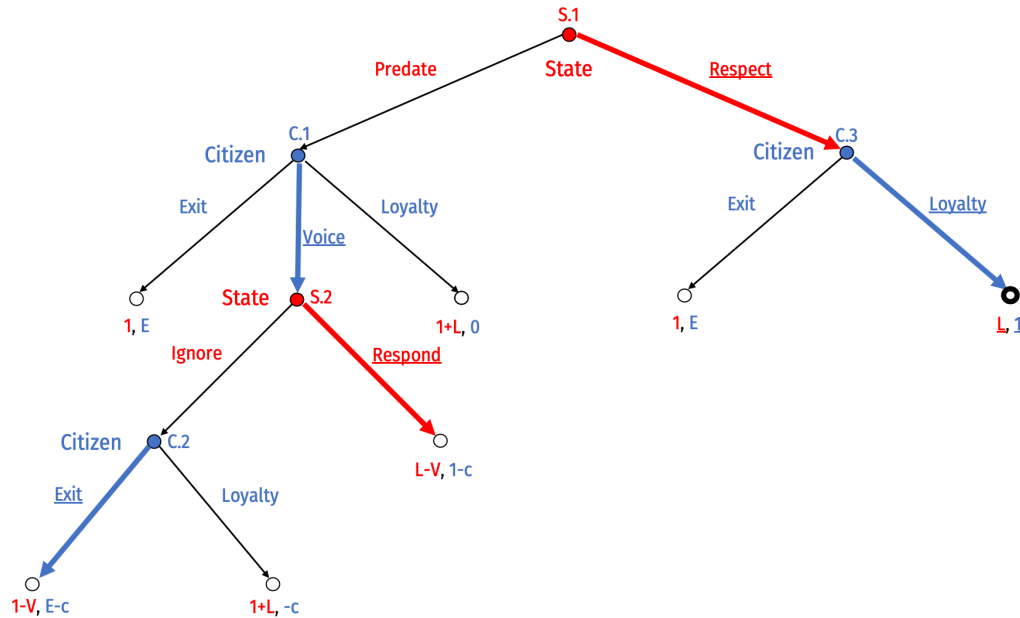
A Game Theoretic Model: Detering Predation



- **Full Model:** give **State** the choice to **Respect** instead of **Predate**
- What would it require for **State** to **Respect**?
 - Suppose it costs **State** to **respond** to **voice**

$$V > 0$$

A Game Theoretic Model: Detering Predation



$$L > 1$$

$$V > 0$$

$$E > 0$$

$$E > 1 - c$$

- **Subgame perfect Nash equilibrium:**

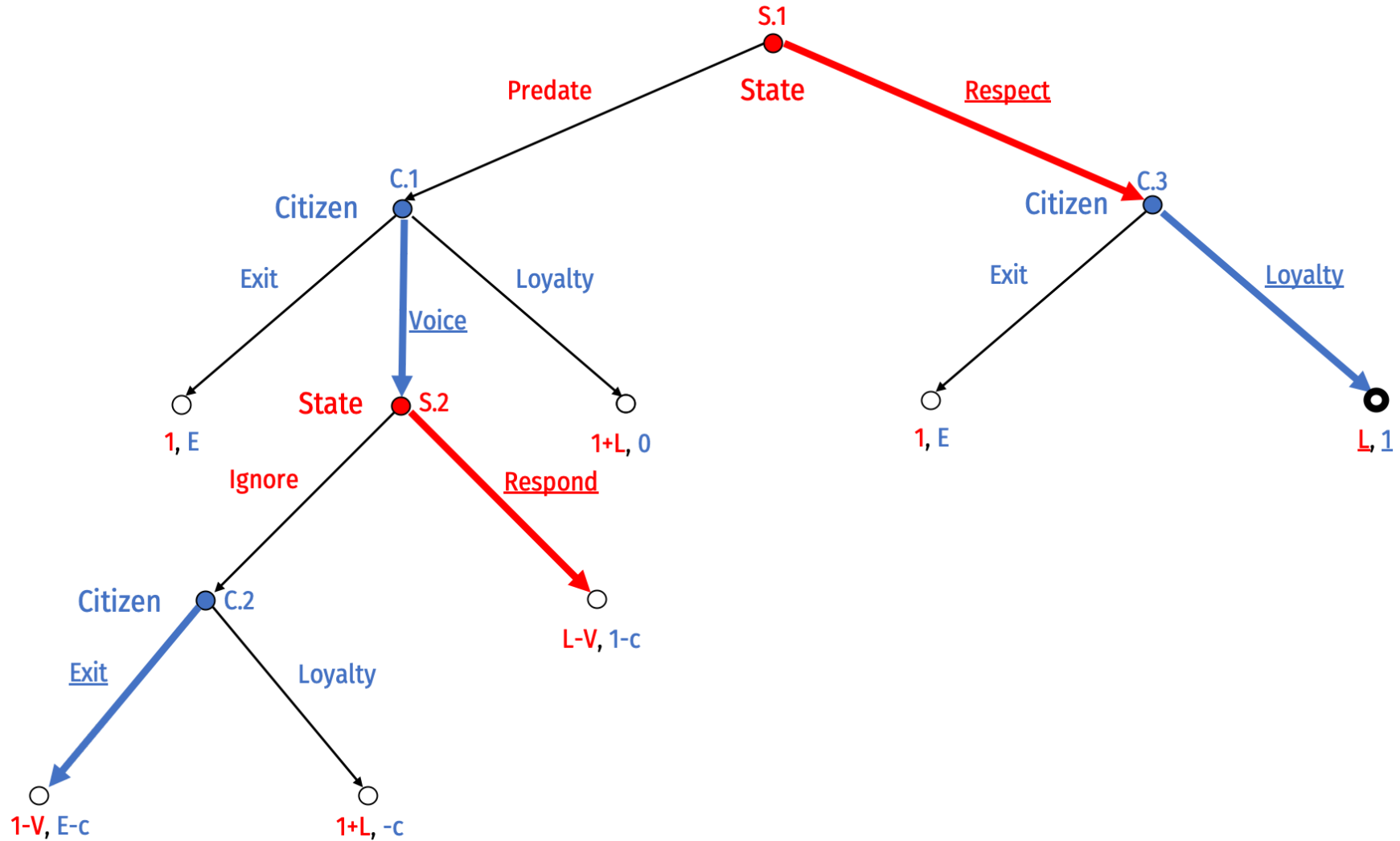
$$\{ (\text{Respect}, \text{Respond}), (\text{Voice}, \text{Exit}, \text{Loyalty}) \}^\dagger$$

- **Outcome:** State respects, citizen is loyal:

- **State:** L
- **Citizen:** 1

[†] Strategies for **State** chosen at (S.1, S.2) and **Citizen** at (C.1, C.2, C.3)

A Game Theoretic Model: Detering Predation



A Game Theoretic Model: Detering Predation



$$L > 1$$

$$V > 0$$

$$E > 0$$

$$E > 1 - c$$

- Let's examine the conditions for some lessons on how to deter predation:
 1. **State** must be dependent on citizens ($L > 1$)
 2. **Citizens** must have credible **exit** threats ($E > 0, E > 1 - c$)
 3. **Voice** must be costly to **State** ($V > 0$)
 - But should be cheap for **citizens** to exercise ($\downarrow c$)