

# Gov 1539: Section 1

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Tyler Simko

February 12th, 2021

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- Today's section will be a little more like a lecture than they will be in general.
- But please ask any and all questions! Interrupt me - this is a review that is supposed to help you understand this model for exams.
- But don't worry about 100% mastering everything:
- Also don't worry about writing all of this down - I can post slides.

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  4. understand how the model might change if assumptions or players changed.
- We'll revisit the model on Tuesday!

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- You've probably heard of other formal models before!
  1. Many are used in **Game Theory** (so you'll often hear models called *games*, also why the actors are called *players*).
  2. Cameron and Park 2008 reading had a model on burden sharing.
  3. The **Median Voter Theorem** is normally expressed as a model.
  4. So is the **Prisoner's Dilemma**.

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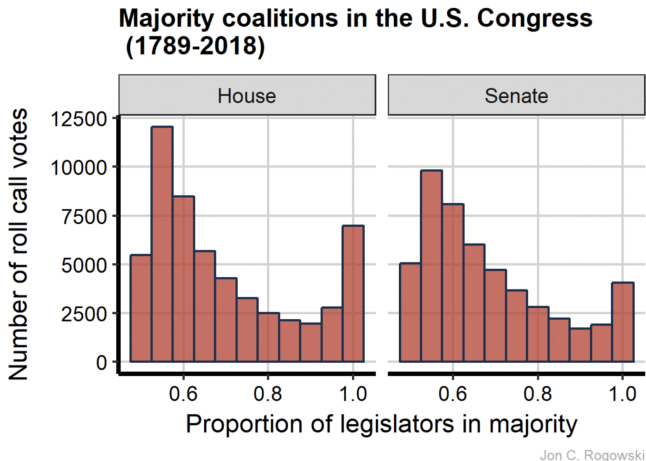
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  - **Assumptions:** models are always simplified abstractions of the real world - what does the model assume to make these simplifications?
- Models are usually followed by a section where authors use data to test model predictions.

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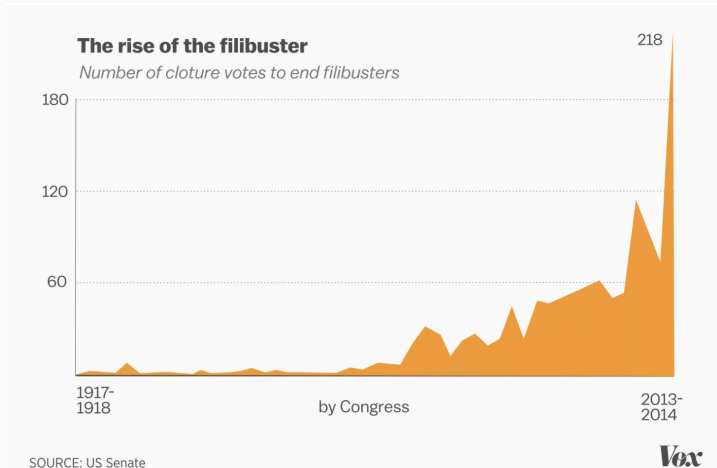
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# Motivation #1: Coalition size is generally larger than 50%





## Motivation #2: Gridlock occurs often but not always



Filibusters are good proxy for gridlock - takes two-third of senate to overturn.

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- His formal model is a tool to demonstrate and explain this (↑) theoretical argument.



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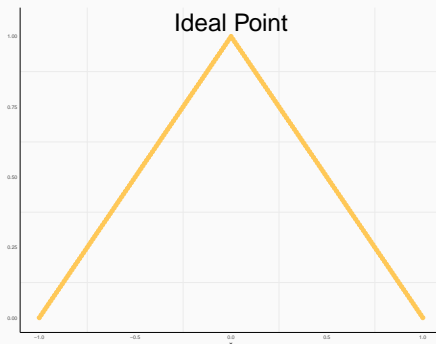
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- Procedural assumptions - all players
  - know the sequence (the move order) and each other's preferences ("complete information").
  - know who pivotal voters are and adopt "optimal" strategies.

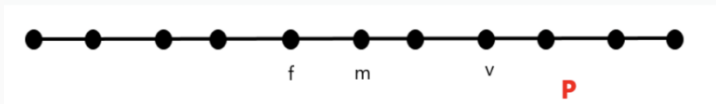
# Assumption: single-peaked symmetric preferences

- This means that how much everyone “prefers” a particular point on the line is symmetric in either direction starting from their ideal point.
- i.e. For my ideal point  $x$ , I am neutral between  $x + 3$  and  $x - 3$ , but I prefer  $x - 3$  to  $x - 5$  (because  $x - 3$  is closer to  $x$ ).
- so “optimal” strategies means that players want to minimize the difference between policy and their ideal point.



# Players

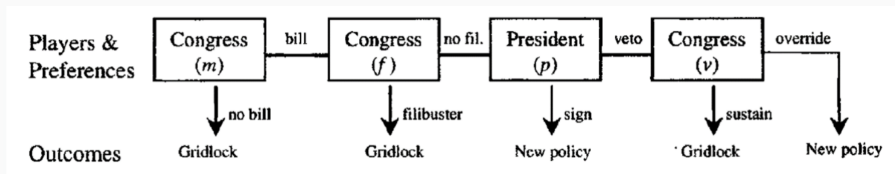
- Who are the players?
  1.  $m$ : Median member of unicameral legislature (let's say the Senate).
  2.  $p$ : President.
  3.  $f$ : Filibuster pivot - Senator who has 3/5 of Senate between them and the most extreme member in the president's direction.
    - i.e. if conservative president, then filibuster pivot is the 60th most conservative Senator (10 more liberal than the median).
  4.  $v$ : Veto pivot ( $\frac{2}{3}$  of Senate, typically same side of median as president)
    - Filibuster pivot ( $\frac{3}{5}$  of Senate, typically opposite of median to president)



# Sequence of events

(read from left to right, up to down)

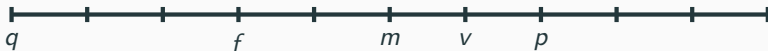
(i.e.  $m$  moves first, they offer a bill or not. then  $f$ , filibuster or not, etc.)





# Example

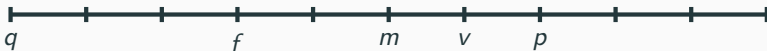
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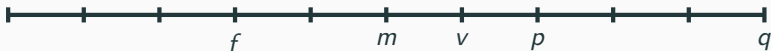
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- Median  $m$  always moves first: what point should they propose for their bill?
  - Exactly their ideal point  $m$ .
  - Why? Both  $f$  and  $v$  prefer  $m$  to the status quo  $q$  (because  $m$  is closer than  $q$  to their ideal points).
  - The only members who prefer  $q$  to  $m$  are those closer to  $q$  than to  $m$ . They're not a large part of the legislature.  $f$  prefers  $m$ , so no filibuster.
  - President prefers  $m$  to  $q$ , so there will be no veto.

## Example #2

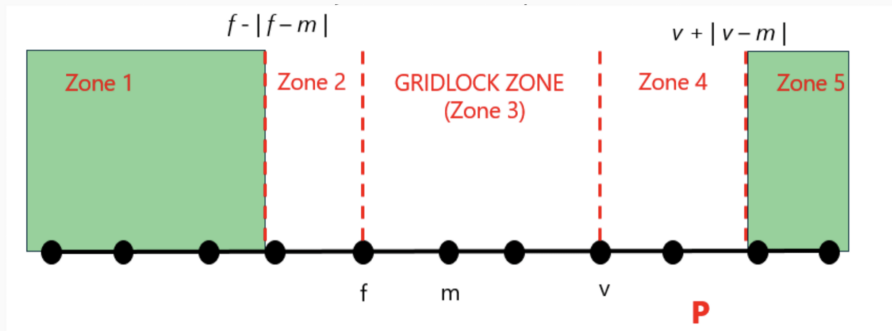
- Extreme status quo  $q$  in the other direction.



- What happens now?
  - Exactly the same! Median should propose  $m$ .
  - Why? Both  $f$  and  $v$  prefer  $m$  to the status quo  $q$  (because  $m$  is closer to their ideal point).
  - As before, the only members who prefer  $q$  to  $m$  are those for whom  $q$  is closer to their ideal point than  $m$ .  $f$  prefers  $m$ , so no filibuster.
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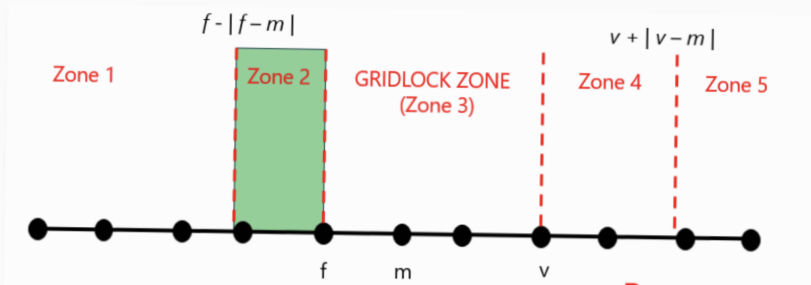
# The edge cases

- Those were exactly what Professor Rogowski will call Zones #1 and #5.
- If  $q$  is ever there, it can easily be moved to  $m$ .
- This works because the important players -  $f$ ,  $v$ , and  $p$  always prefer  $m$  to  $q$ .



## Example #3

- Once status quo isn't as extreme,  $f$ ,  $v$ , or  $p$  might prefer  $q$  to certain proposals and can get concessions.
- For status quo in Zone 2, filibuster  $f$  is closer to  $q$  than  $m$ .
- When  $m$  is proposing, they know  $f$  won't support a bill further away from  $f$  than  $q$  already is. **So  $m$  proposes a bill between  $f$  and  $m$  that is equally far away as  $f$  and  $q$  but on the opposite side.**
- This is very tricky! You will need to stare at it for a while - use these slides and the ones from lecture.



# The single most important plot

Once it starts to make more sense, everything you need to know is in this plot:

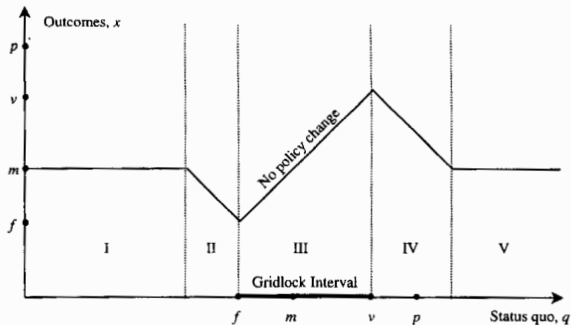
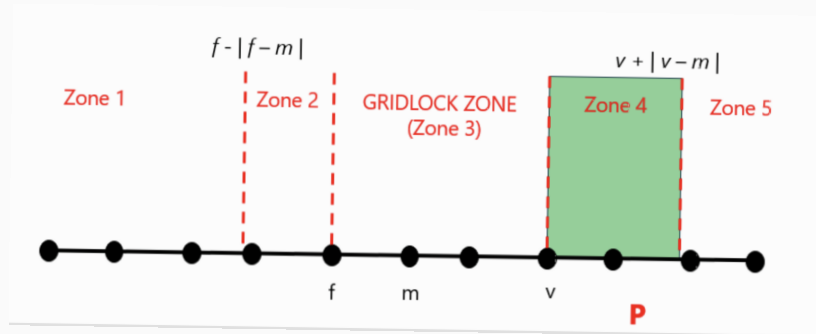


Figure 2.7  
Equilibrium policies in the pivotal politics theory

- Notice Zones #1 and #5 are always  $m$  (see Examples #1 and #2).
- Zone #2:  $m$ 's proposals must gradually move to satisfy  $f$ .

## Example #4

- For Zone #4, similar logic to Zone #2.
- If status quo is in Zone #4,  $m$  knows they need to please  $v$ . If  $v$  is pleased, then president won't veto.
- So  $m$  can propose a bill closer to them that  $v$  prefers equally to  $q$ .



## Back to this plot

Notice parallels between Zones #2 (outcome moves toward  $f$ ) and #4 (outcome moves toward  $v$ ).

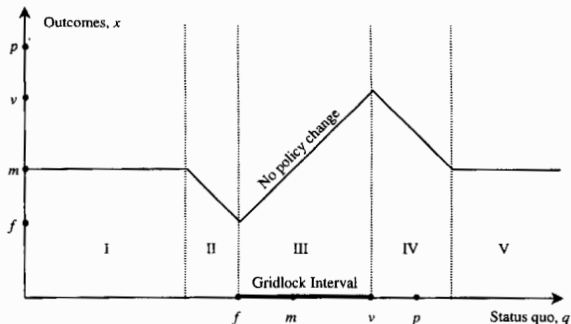


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## Example #5: The Gridlock Zone

Now we're in trouble. Imagine  $q$  is in Zone #3.  $m$  has two options:

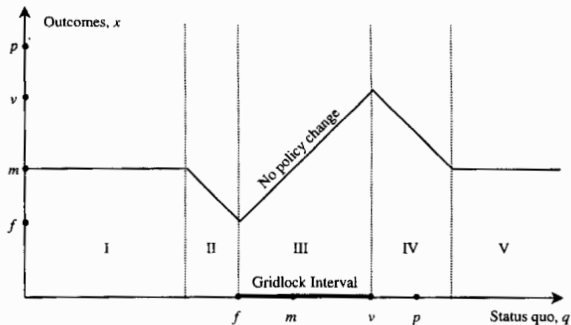


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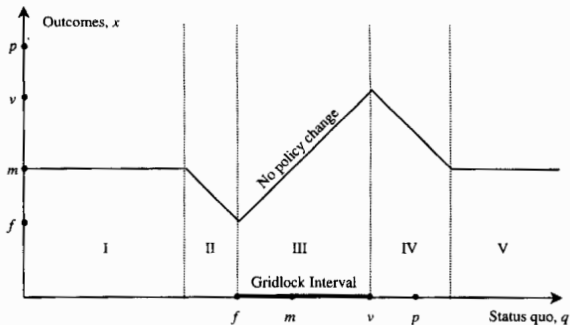


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- If  $q$  is to the left of  $m$ , then  $m$  wants to move it right.
- Nope!  $f$  and everybody to their left prefers  $q$  to any proposal moving  $q$  to the right.  $f$  will filibuster.

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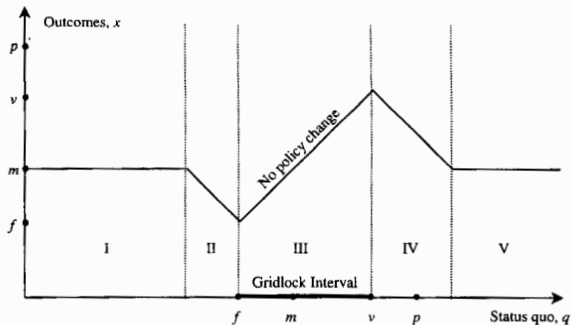


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- If  $q$  is to the right of  $m$ , then  $m$  wants to move it left.

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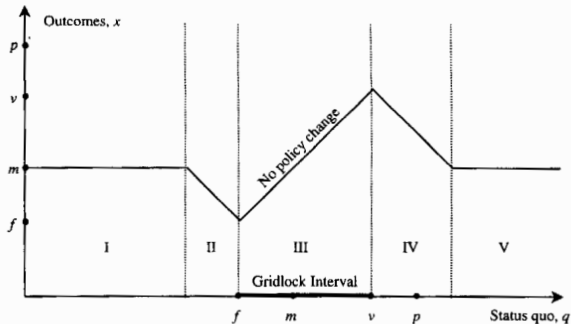


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- If  $q$  is to the right of  $m$ , then  $m$  wants to move it left.
- Nope!  $v$  and everybody to their right (including the president) prefers  $q$  to any proposal moving  $q$  to the left. President will veto and there aren't enough votes to override it (because  $v$  agrees).

I wasn't lying - this plot tells it all!

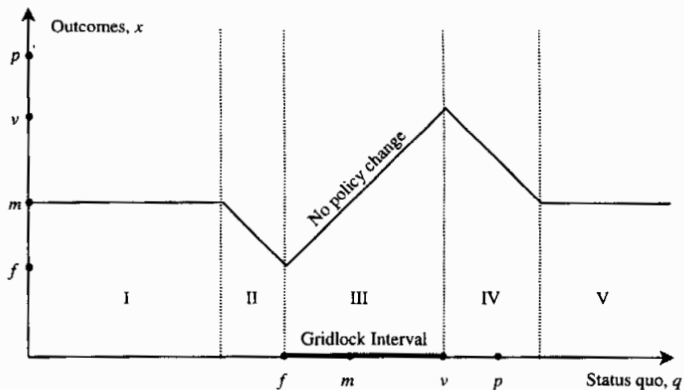


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- He uses the model described above to do this, which is based on important assumptions, including:
  - Single-peaked preferences
  - No parties