

The Pragmatics of Legislative Debate

Extracting Reasons and Reasoning Chains from Parliamentary Speeches

David Sylvan Ashley Thornton

Graduate Institute of International and Development Studies
Geneva

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Garrison State Project: hypotheses

- Long-term tendency in democracies for significant expansion in national security apparatuses
- However, because of secrecy, can't observe directly
- So, measurement: study via elite consensus



Garrison State Project: overview

- Elite consensus via differential legislative consensus: within a country, compare degree of legislative accord in national security-related debates over time compared with non-national security-related debates over time
- 3 time periods: early CW, late CW, post-9/11
- Multiple countries: 7 altogether
- Coding of speeches to capture agreement in reasoning
 - 20-60 speeches per debate (around 1600 speeches)
 - Hand-coding



Reasons

- Argument: any verbal construction of the sort A because of B (different types of “because”: discussed when we talk about connectors). (Note: these can be contradictory or false.)
- Claim: speaker’s position on pending vote
- Reason: a point made in support of the claim
- Core reason: reason that supports the claim directly (“vote for the bill because of X”)
- Secondary reason: reason that supports a core reason (“vote for the bill because of X and X is the case because of Y”) or another secondary reason

Reasoning chains

- Reasoning chain: a claim supported by a core reason, which in turn is supported by at least one secondary reason and, recursively, any secondary reasons in support of the latter.
- Can be compound chains (same core reason, diverging secondary reasons).
- Restriction: if there is a chain with more than one secondary reason, we don't permit it to be divided into subsets (A-B-C can't be A-B and B-C)
- Restriction: can't be cycles (A-B and B-A), because usually the connectors are quite different
- Not all reasons have to be part of chains: can be core reason without secondary reason support ("isolated reasons")
- Justification: combination of claim and all reasoning chains and isolated reasons supporting it



Connectors (types of “because”): 1

- L: legal or conceptual/definitional (“we can’t do X because it would be unconstitutional”)
- H: historical (“we should do it because we’ve done it before”)
- C: consequential (including slippery slope: “if we do X, it will put the budget into deficit”)
- N: normative (“we can’t do X because it’s immoral to treat people that way”)



Connectors: 2

- A: anthropological (“we should do X because it’s the only kind of language people like Y understand”)
- I: identity/who we are or are not (“we shouldn’t do X because we’re a democracy, not a dictatorship”)
- O: opponents (“do X because opponents of X are reprobates”)
- E: even though (“do X even though Y is the case”)



Pre-processing

- Paraphrasing: each paragraph, sentence by sentence; in English
- Summarizing: each paragraph, focusing on main points (which may be tacit: signal by putting in square brackets). Includes pragmatics: why would the speaker say this; what is s/he trying to do (e.g., shame opponents, demonstrate one's bona fides).
- Reliability: paraphrasing and summarizing done by individual researchers, but are reviewed by entire research team and is a de facto unit veto.



Reasons

- Try to generate arguments from sentences, or clauses, or groups of sentences, in the summary, using “vote for the bill because ...”
- Can be multiple core reasons in any given summary. (Can also be none at all, if the summary is extraneous as a justification.)
- Reasons can be used multiple times: within paragraphs, across paragraphs, across speeches/speakers
- Reasons are different across debates; on average, are 250-300 reasons per debate
- Reasons vary in granularity
- Reasons may be implicit (e.g.: opponents are flip-flopers); signal by square brackets
- Coding done individually, but reviewed (and vetoed) collectively



Chains

- Check every pair of reasons to see if the summary supports them being connected into a chain, using the rubric “vote for the bill because of A, and A because of B”
- Some reasons are unable to be connected; others can be added onto a chain to make it a 3-reason chain, etc.
- Consistency criterion (same connector) as additional check for whether a chain exists and its “directionality” (A-B vs. B-A)
- Done individually, but reviewed (and vetoed) collectively



Paraphrasing and summarizing

As a matter of fact, the hon. and gallant Member was wrong. Conscription has not been a part of the Conservative policy for 40 years. It has never figured in our programme. With regard to the argument of the right hon. and learned Gentleman the Member for Montgomery that if it was not in our programme or speeches or policy it was in our heart of hearts, I would reply: Is not that rather a dangerous argument to put forward? It is, of course, an easy line to take. If one's opponent does not say things to prove one's case it is open to one to say that a certain view is still held by him in his heart of hearts. It is, of course, an argument that several people can use. It would be quite possible, although I would not dream of saying so, to say that "in their heart of hearts" the Liberal Party really believe that conscription is necessary. I should have just as much evidence to give in support of that, as there is in support of the charge which the right hon. and learned Gentleman has brought against us. But it has not been our programme for 40 years. It is not something which we have looked forward to, something we have worked for, or something that we welcome.

As a matter of fact, Mr. Wigg was wrong. Conscription has not been a Conservative policy for 40 years and it has never figured in our program. Regarding the argument made by the Member for Montgomery that if it wasn't in our policies it was in our hearts, I'd say that was a dangerous argument. It's easy to make. If your opponent doesn't say what you want, you can always say he believes it in his heart of hearts. Several people can use this argument. Even though I'd never dream of doing this, it's possible to say the Liberal Party really believes conscription is necessary. I have just as much evidence for that as what Mr. Wigg charged us with. But it hasn't been in our program for 40 years. It's not something we have looked forward to, worked for, or welcome.

The Conservative Party has not supported conscription for 40 years, and those who claim this are trying to make us look like villains.



From summary to reasons and chains

- Summary: The Conservative Party has not supported conscription for 40 years, and those who claim this are trying to make us look like villains.
- Reason 105:
 - Conscription is NOT a fundamentally Conservative idea
 - Connector: O (vote for the bill because opponents are smearing us)
- Reason 14:
 - Conservatives are not bad guys
 - Connector: O (vote for the bill because opponents are smearing us)
- Reason 121:
 - Opponents are playing politics
 - Connector: O (vote for the bill because opponents are bad)
- Chain: Claim-O-121-O-105



Rationale

- Problem with our procedures: hand-coding is incredibly time-consuming
 - Speeches can easily take several hours to paraphrase and summarize
 - Translation only a small part of this: text needs to be read, understood in terms of what is said and what is implied
 - Relatively speaking, coming up with reasons and seeing if they can be linked into chains is much less time-consuming
- Ideally, we'd like to be able to take original texts and produce candidates for reasons (not reasons themselves; nowhere near enough specificity), then code those as reasons



Potential components of connectors

- Legal: (doing-X [not], legal [not])
- Normative: (doing-X [not], to-actor-Y, immoral [not])
- Historical: (doing-X [not], past [not])
- Consequential: (doing-X [not], results [not], evaluation)
- Identity: (doing-X [not], we, attribute [not])
- Opponents: (doing-X [not], claim-by-opponents, evaluation)
- Anthropological: (doing-X [not], to-actor-Y, attribute-of-actor)
- Even though: (in-spite-of, claim-by-opponents, connector <L OR N OR H OR C OR I OR A>)



Possible steps

- Original text
- Unify sentences by reference
- Perform a dependency parse on unified sentences
- Certain dependency relations are candidates for certain connectors; inspect that subset of the dependency parse and code as reasons



Example (conscription redux)

As a matter of fact, the hon. and gallant Member was wrong. Conscription has not been a part of the Conservative policy for 40 years. It has never figured in our programme. With regard to the argument of the right hon. and learned Gentleman the Member for Montgomery that if it was not in our programme or speeches or policy it was in our heart of hearts, I would reply: Is not that rather a dangerous argument to put forward? ... the charge which the right hon. and learned Gentleman has brought against us. But it has not been our programme for 40 years. It is not something which we have looked forward to, something we have worked for, or something that we welcome.

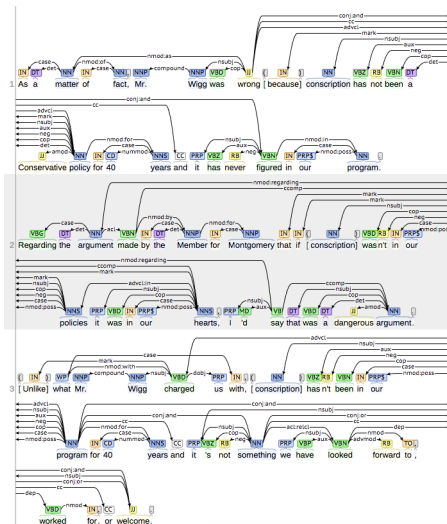
As a matter of fact, the hon. and gallant Member was wrong [because] conscription has not been a Conservative policy for 40 years [and] it has never figured in our program.

With regard to the argument of the right hon. and learned Gentleman the Member for Montgomery that if [conscription] was not in our programme or speeches or policy it was in our heart of hearts, I would reply: Is not that rather a dangerous argument to put forward?

[Unlike] the charge which the right hon. and learned Gentleman has brought against us, [conscription] has not been our program for 40 years [and] it is not something which we have looked forward to, something we have worked for, or something that we welcome.



Possible dependency parse (Stanford)





Candidate for O-type reasons

- In each unified sentence, evaluation of claim by opponent as negative
- More than one type of dependency relation to this effect (because sometimes the evaluation is of the person, other times of the claim)
- We still have to know that the honourable and gallant member is the Member for Montgomery and also a member of the Opposition; that a charge is a kind of argument; and that wrong and dangerous are not only negative evaluations but that a false charge is also wrong



So...

Is this a way forward?