

5th European Conference on Argumentation, Warsaw, 23-26 September 2025

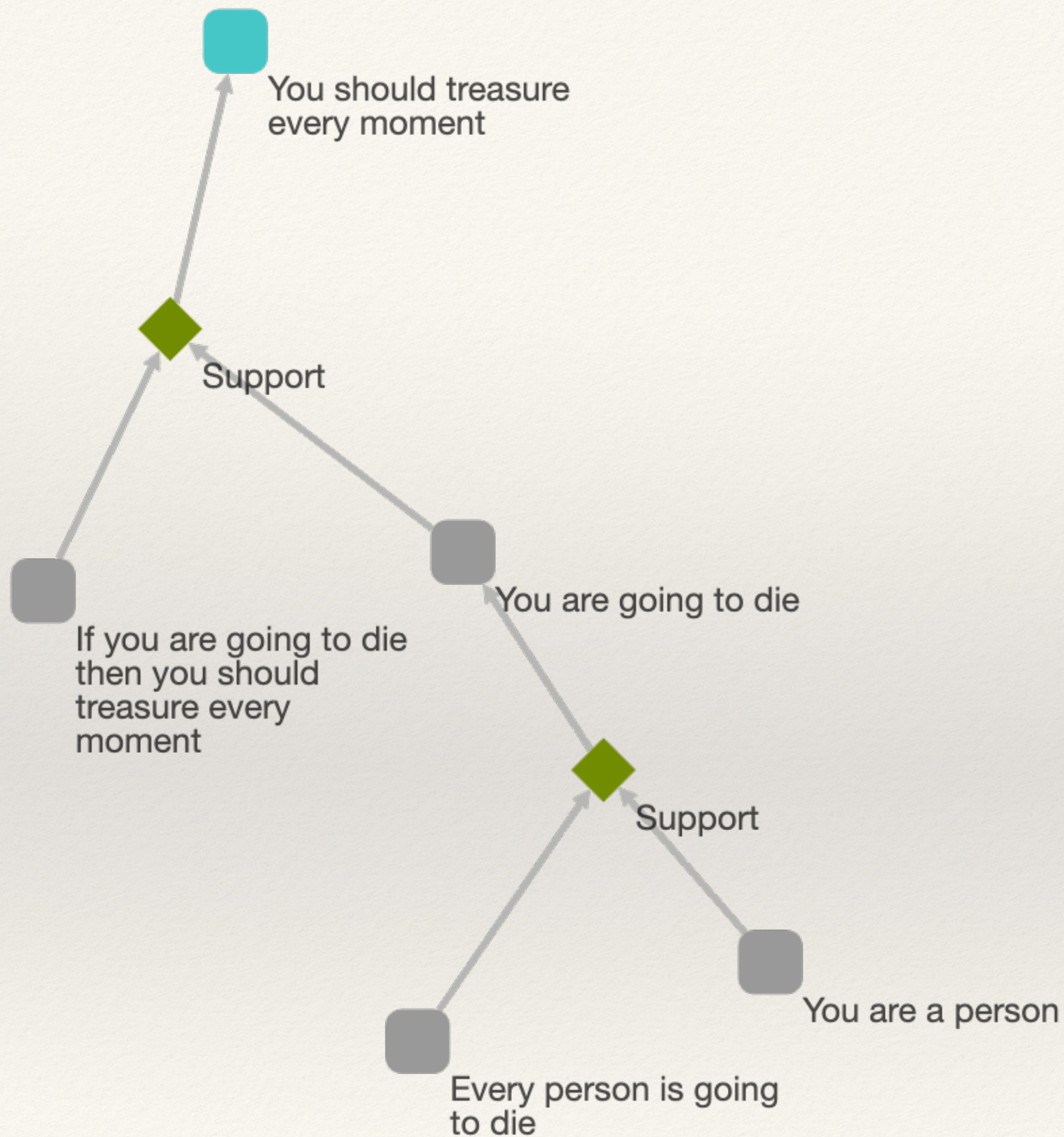
Dialogue Cartography

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The screenshot shows a web browser window with the address bar displaying <https://open-argumentation.github.io/MonkeyPuzzle>. The browser's bookmark bar includes folders for 'personal', 'research', 'teaching', 'admin', 'archive', and '__tmp', along with 'Other Bookmarks'. The application interface on the left has a sidebar with a '+ 1' tab, a toolbar with icons for delete, upload, download, lock, and share, and input fields for 'Title' (containing 'The name of this resource...') and 'Content' (containing 'Enter your source text here...'). The main area displays an argument diagram with nodes and arrows. The nodes are: a teal square at the top with an orange dot labeled 'You should treasure every moment'; a green diamond labeled 'Support' below it; a grey square on the left labeled 'If you are going to die then you should treasure every moment'; a grey square on the right labeled 'You are going to die'; a green diamond labeled 'Support' below the right square; a grey square at the bottom left labeled 'Every person is going to die'; and a grey square at the bottom right labeled 'You are a person'. Arrows point from the left square to the top diamond, from the right square to the top diamond, from the bottom left square to the bottom diamond, and from the bottom right square to the bottom diamond.

<http://openargumentation.org/>
<https://open-argumentation.github.io/MonkeyPuzzle/index.html>

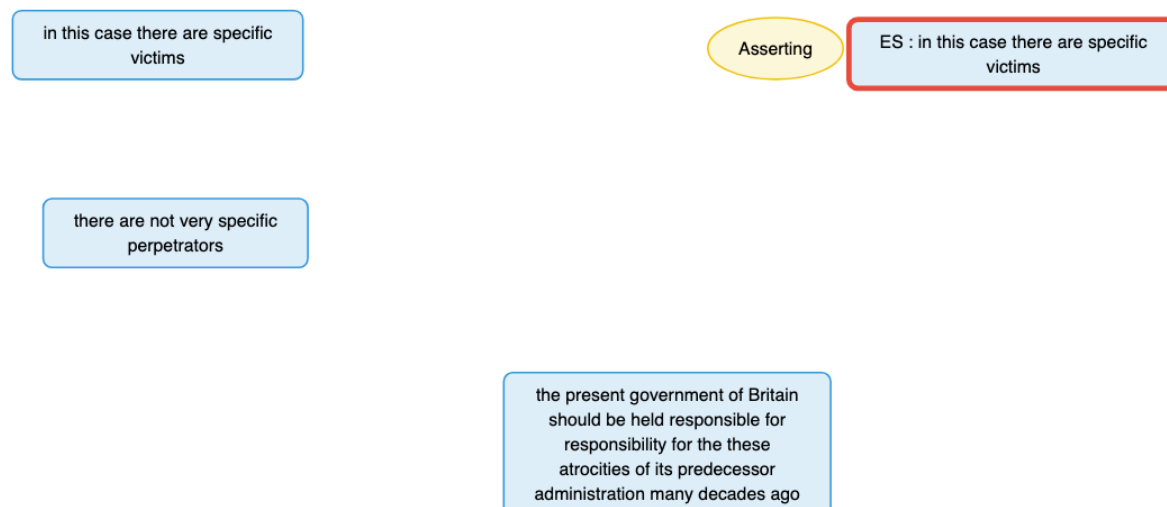
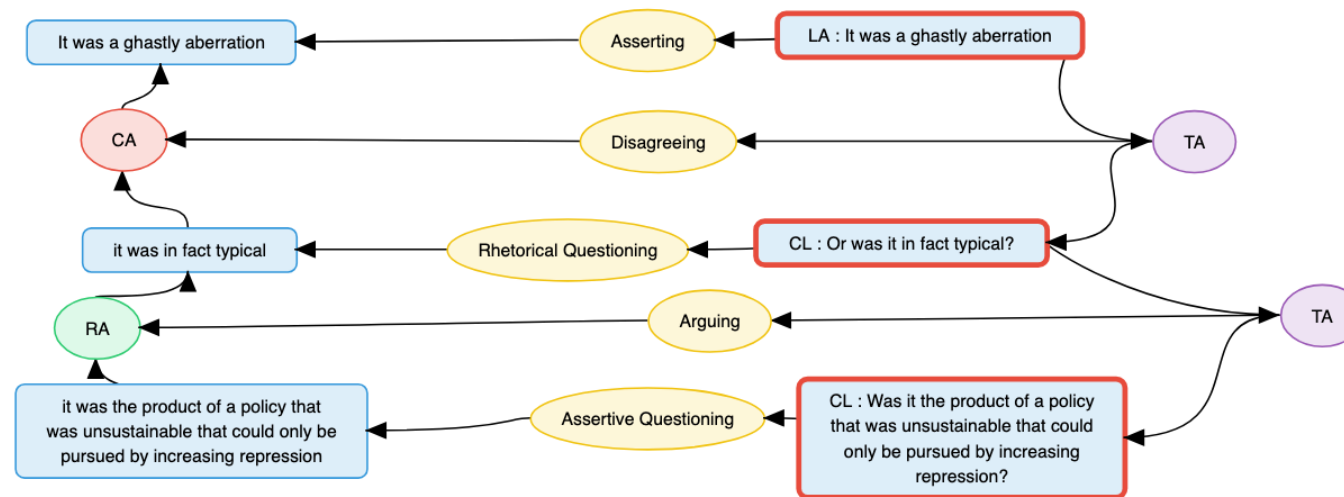


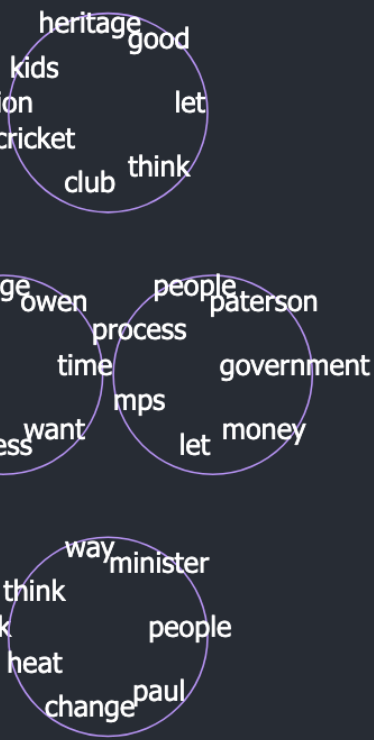
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Mapping the cause
to climate change.

The structure of the
like a wiki; every as
further refinement,
positions, argumen

So where you spot arguments on the correct and challenge





Fiona Bruce

Let's get started. Our first question tonight is from Aneel James.

Public

Has Tory sleaze returned?

Fiona Bruce

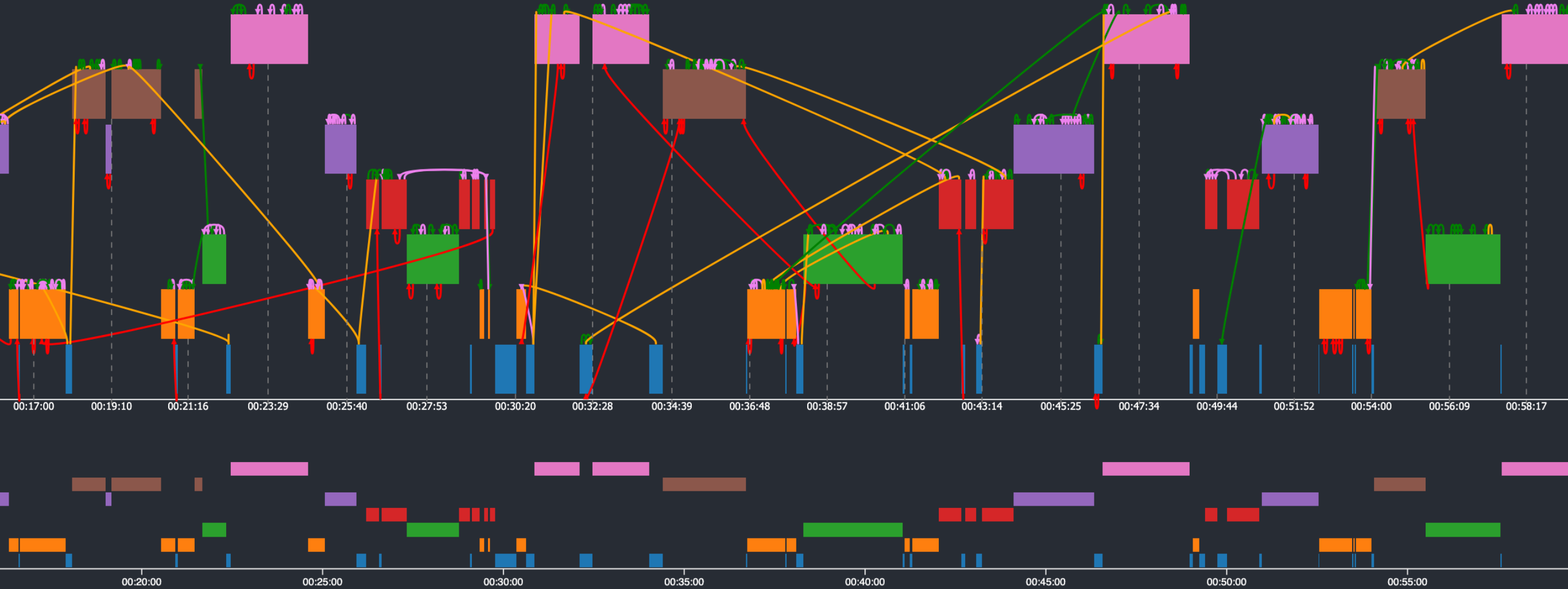
Caroline Lucas.

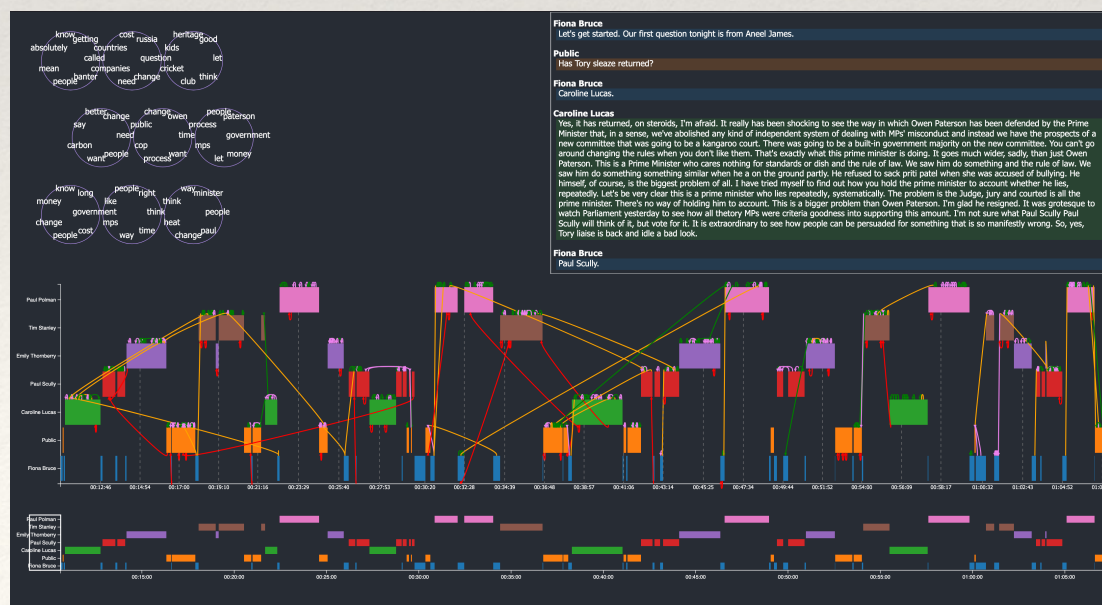
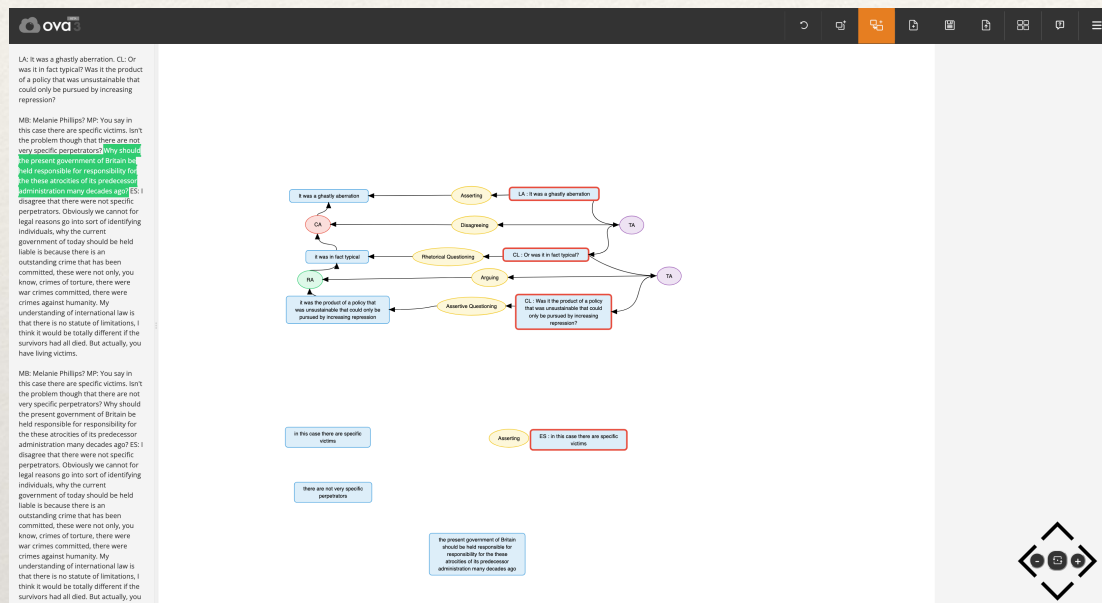
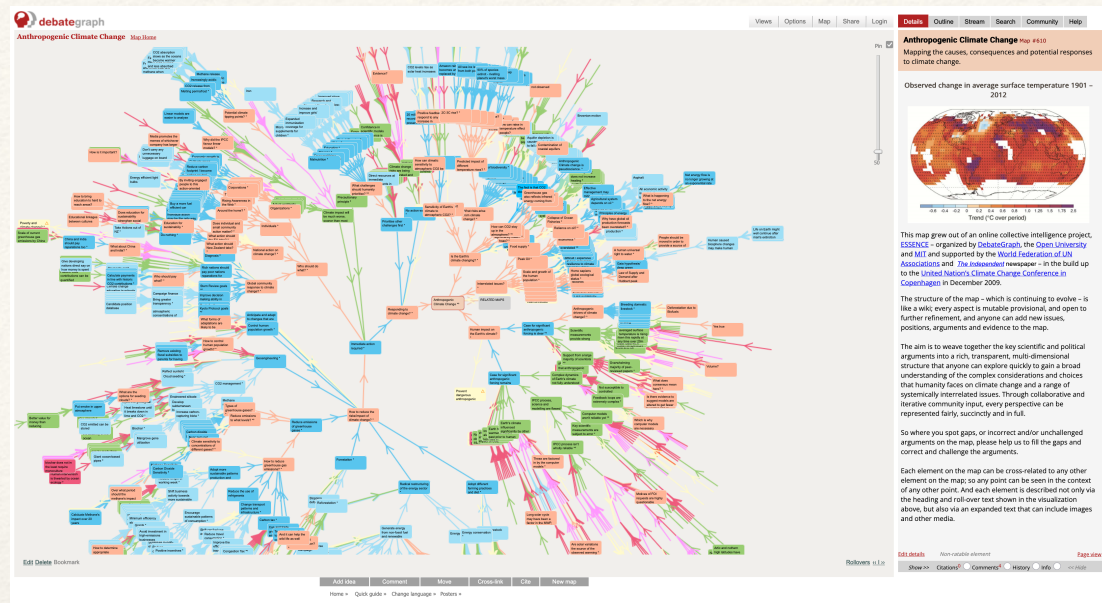
Caroline Lucas

Yes, it has returned, on steroids, I'm afraid. It really has been shocking to see the way in which Owen Paterson Minister that, in a sense, we've abolished any kind of independent system of dealing with MPs' misconduct and new committee that was going to be a kangaroo court. There was going to be a built-in government majority around changing the rules when you don't like them. That's exactly what this prime minister is doing. It goes to Owen Paterson. This is a Prime Minister who cares nothing for standards or dish and the rule of law. We saw him do saw him do something something similar when he a on the ground partly. He refused to sack priti patel when himself, of course, is the biggest problem of all. I have tried myself to find out how you hold the prime minister repeatedly. Let's be very clear this is a prime minister who lies repeatedly, systematically. The problem is the J prime minister. There's no way of holding him to account. This is a bigger problem than Owen Paterson. I'm g watch Parliament yesterday to see how all the Tory MPs were criteria goodness into supporting this amount. I'm Scully will think of it, but vote for it. It is extraordinary to see how people can be persuaded for something that Tory liaison is back and idle a bad look.

Fiona Bruce

Paul Scully.

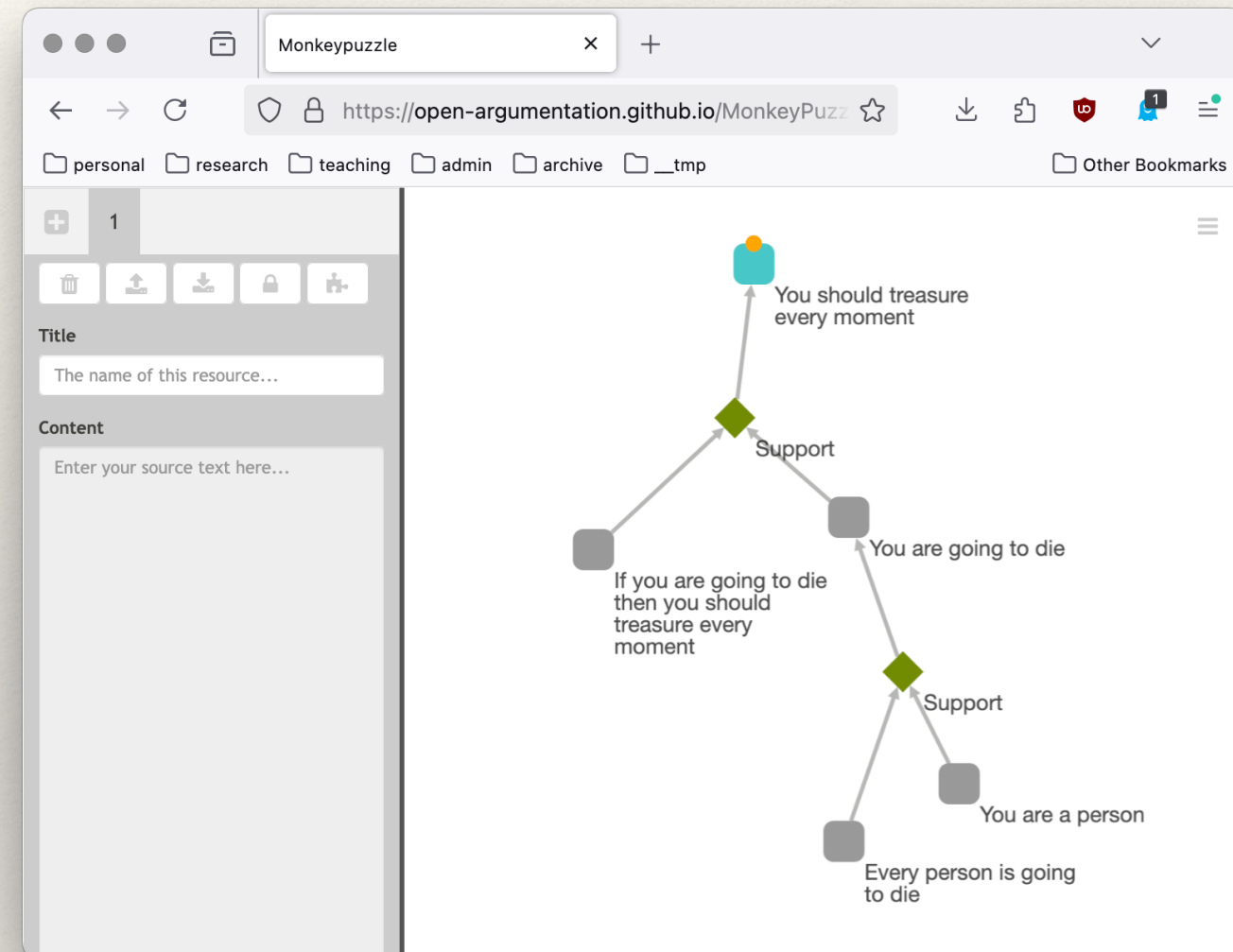




- ❖ Debategraph:
- ❖ Flexibility in layout.
- ❖ OVA3:
- ❖ Detailed & wide ranging data & relationships.
- ❖ DebArgVis:
- ❖ Importance of dialogue dynamics.

Process

- ❖ Define the problem.
- ❖ Formulate design principles.
- ❖ Work within constraints...
- ❖ ... magic.





The Problem

- ❖ Visualise (argumentative) dialogue.
- ❖ Single, integrated visualisation.
- ❖ Adopt nicest lessons from related work.
- ❖ Constraint: Reuse the MonkeyPuzzle diagramming method (and later code) as much as possible.



Dialogue?

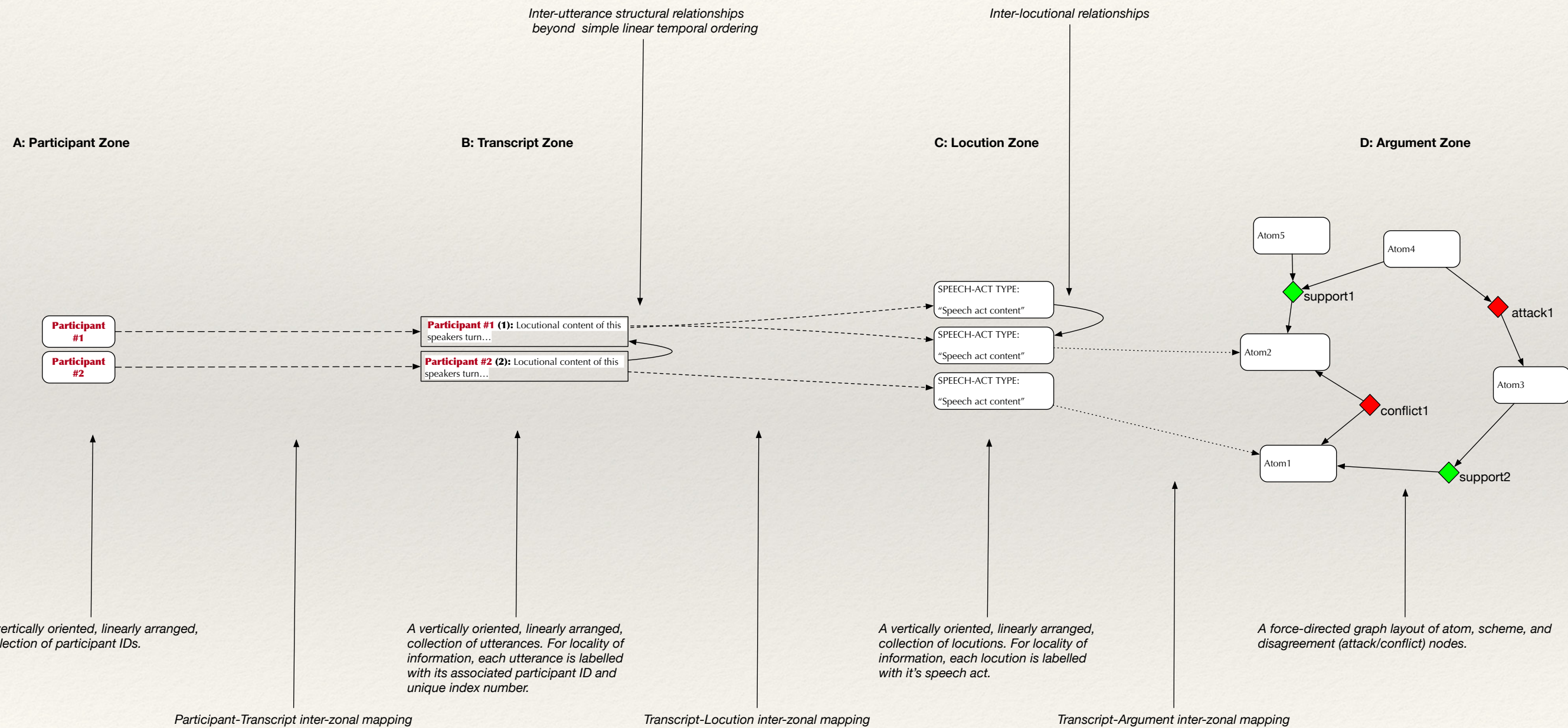
- ❖ Pragmatic working definition:
 - ❖ A collection of **utterances** made by the members of a group of **participants** and primarily addressed towards members of that self-same group.
 - ❖ Utterances are more or less focussed upon the same general topic, are made at different times, and may themselves comprise a number of individual **speech acts** which in turn function to establish **argumentative structure**.



Design Principles

1. Focus
2. Cohesion
3. Interconnectedness
4. Flexibility
5. Predictability
6. Extensibility
7. Clarity

The Zonal ARgumentative DialOgue visualiZation (ZARDOZ) method.



Methodology

- ❖ Methodology for preparing an analysis applying the method:
 1. Source & normalise dialogue text.
 2. (Opt.) Map between utterances if non-linear.
 3. Read dialogue & note arguments made.
 4. Identify participants.
 5. Map participants to utterances.
 6. Decompose utterances into speech-acts.
 7. (Opt.) Map between locutions to record dialogical relationships.
 8. Map utterances to locutions.
 9. Perform argument analysis based upon.
 10. Map locutions to arguments.
 11. Iterate over steps 6 — 11

Exemplar #1: The Tipping Dialogue

- ❖ Ostensibly about the practicalities of whether to tip or not tip but the argument focusses upon whether the practise itself should be discontinued.
- ❖ Source: Walton (2006) *Fundamentals of Critical Argumentation*.
- ❖ Approximately 200 words over 9 exchanges between 2 participants.

Bob (1): It's not so difficult. If you got excellent service, give a tip. Otherwise don't give a tip at all.

Helen (2): But how much should one give? And how can you judge whether service is excellent?

Bob (2): You just have to use common sense.

Helen (3): Come on Bob, that's no answer! Common sense is often wrong, isn't it? What kind of criterion for good judgment is that?

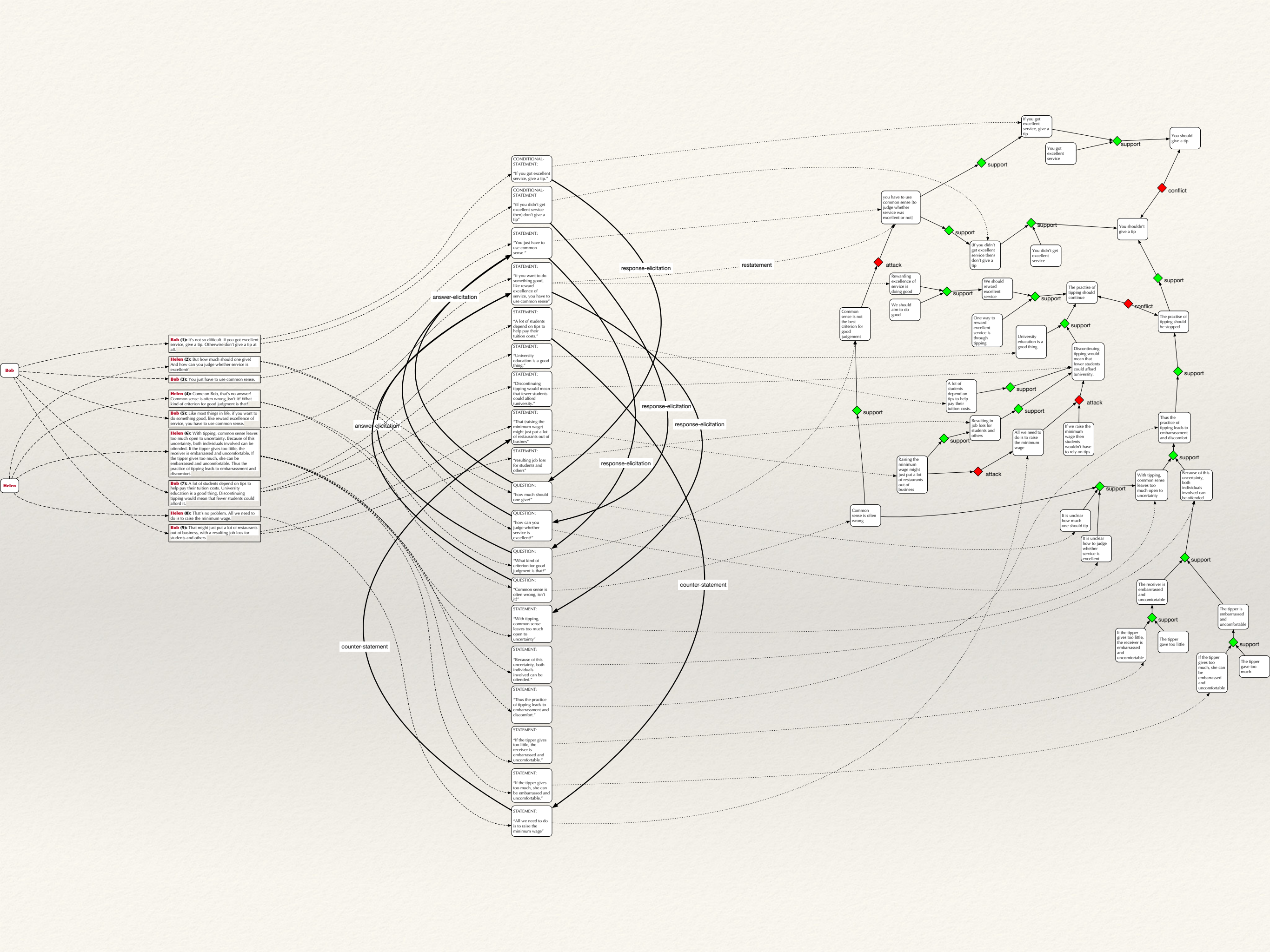
Bob (3): Like most things in life, if you want to do something good, like reward excellence of service, you have to use common sense.

Helen (4): With tipping, common sense leaves too much open to uncertainty. Because of this uncertainty, both individuals involved can be offended. If the tipper gives too little, the receiver is embarrassed and uncomfortable. If the tipper gives too much, she can be embarrassed and uncomfortable. Thus the practice of tipping leads to embarrassment and discomfort.

Bob (4): A lot of students depend on tips to help pay their tuition costs. University education is a good thing. Discontinuing tipping would mean that fewer students could afford it.

Helen (5): That's no problem. All we need to do is to raise the minimum wage.

Bob (5): That might just put a lot of restaurants out of business, with a resulting job loss for students and others.



Exemplar #2: The Santa Claus Dialogue

- ❖ Starts as an argument about whether lying is always wrong or can be justified but develops into a discussion of principles & ethics.
- ❖ Source: Walton (2006) *Fundamentals of Critical Argumentation*.
- ❖ Approximately 900 words over 14 exchanges between 2 participants.

Alice (1): Well I think that lying is wrong. It's an ethical rule that lying is always wrong.

Bob (2): Well yes, I agree that lying is wrong as a general rule, but surely it's not wrong in all cases. Take the rule that everyone has a right to his or her property.

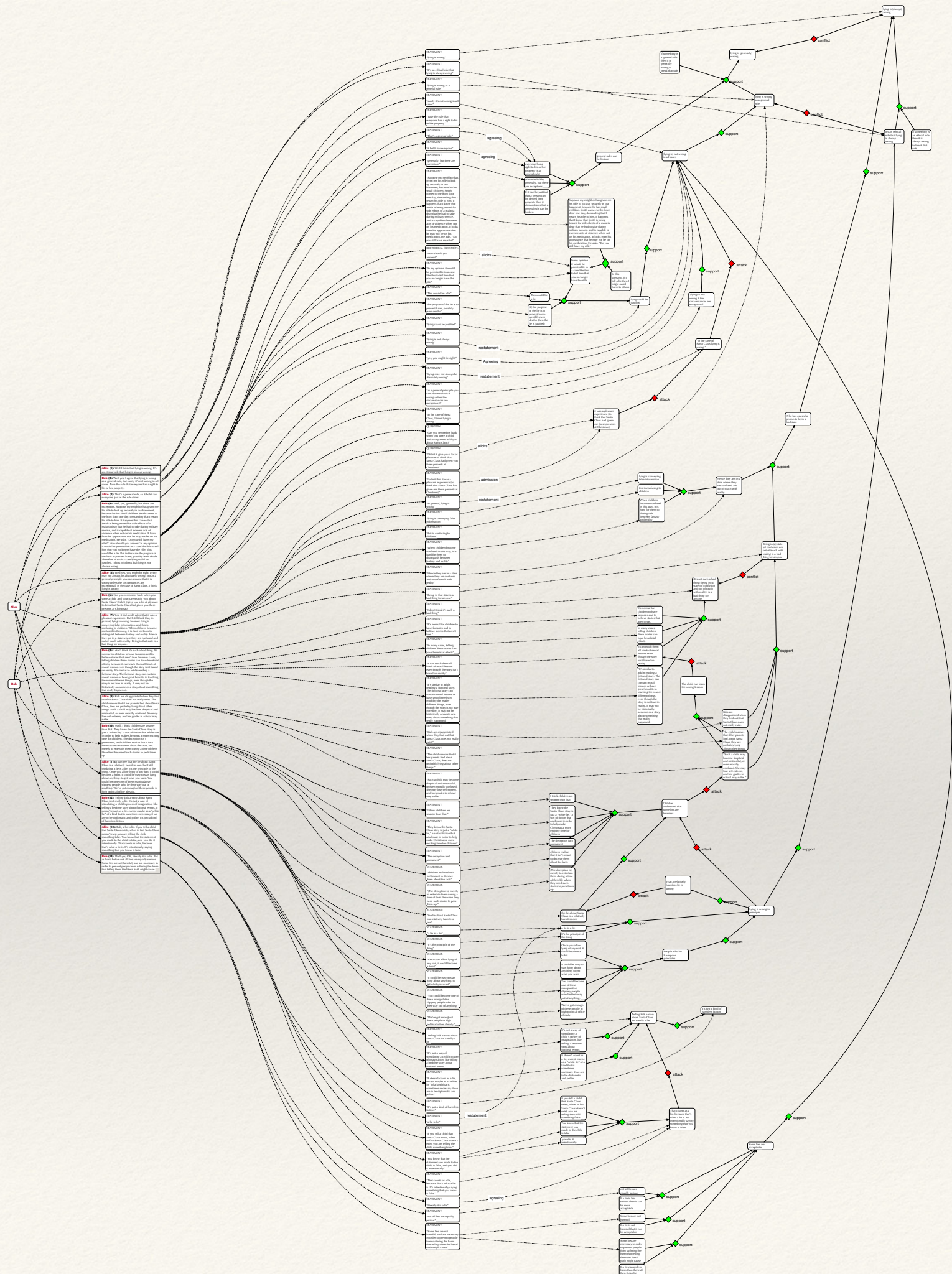
Alice (3): That's a general rule, so it holds for everyone, just as the rule states.

Bob (4): Well, yes, generally, but there are exceptions. Suppose my neighbor has given me his rifle to lock up securely in our basement, because he has small children. Smith comes to the front door one day, demanding that I return his rifle to him. It happens that I know that Smith is being treated for side effects of a malaria drug that he had to take during military service, and is capable of extreme acts of violence when not on his medication. It looks from his appearance that he may not be on his medication. He asks, "Do you still have my rifle?" How should you answer? In my opinion it would be permissible in a case like this to tell him that you no longer have the rifle. This would be a lie. But in this case the purpose of the lie is to prevent harm, possibly even deaths. Therefore in such a case lying could be justified. I think it follows that lying is not always wrong.

Alice (5): Well yes, you might be right. Lying may not always be absolutely wrong, but as a general principle you can assume that it is wrong unless the circumstances are exceptional. In the case of Santa Claus, I think lying is wrong.

Bob (6): Can you remember back when you were a child and your parents told you about Santa Claus? Didn't it give you a lot of pleasure to think that Santa Claus had given you these presents at Christmas?

...



Exemplar #3: The Moon Landing Dialogue

- ❖ An initial post stating a position is responded to in a non-linear, threaded manner.
- ❖ Source: Reddit Change My View Subreddit (2013) *“I do not believe in the 1969 American Moon Landing”*.
- ❖ Approximately 2500 words over 31 exchanges between 22 participants.

AlternativeAccount13 (1):

I do not believe in the 1969 American Moon Landing CMV. I really don't see how such a thing could have happened in a time when computers were walls of buttons and lights. The whole idea of it is preposterous. I would like to keep as little people here who are "Patriotic" and view my understanding offensive to America. None of this "Hurr Durr America best country". The way I see it is Russia begins space exploration via Sputnik. America catches on and so do other countries. Then Russia send out a dog into orbit, and countries follow. Then Russia sends man to orbit and other countries follow, except America who sends a company of 3 men to the moon (wtf?). If There have been men there already, why don't they go back? If America is so proud of achieving such an event, why don't they go and colonize it. This happened 40 years ago, why is no one still there? I may be a bit biased, so bare with me.

[deleted] 1 (2):

> I really don't see how such a thing could have happened in a time when computers were walls of buttons and lights. The whole idea of it is preposterous.

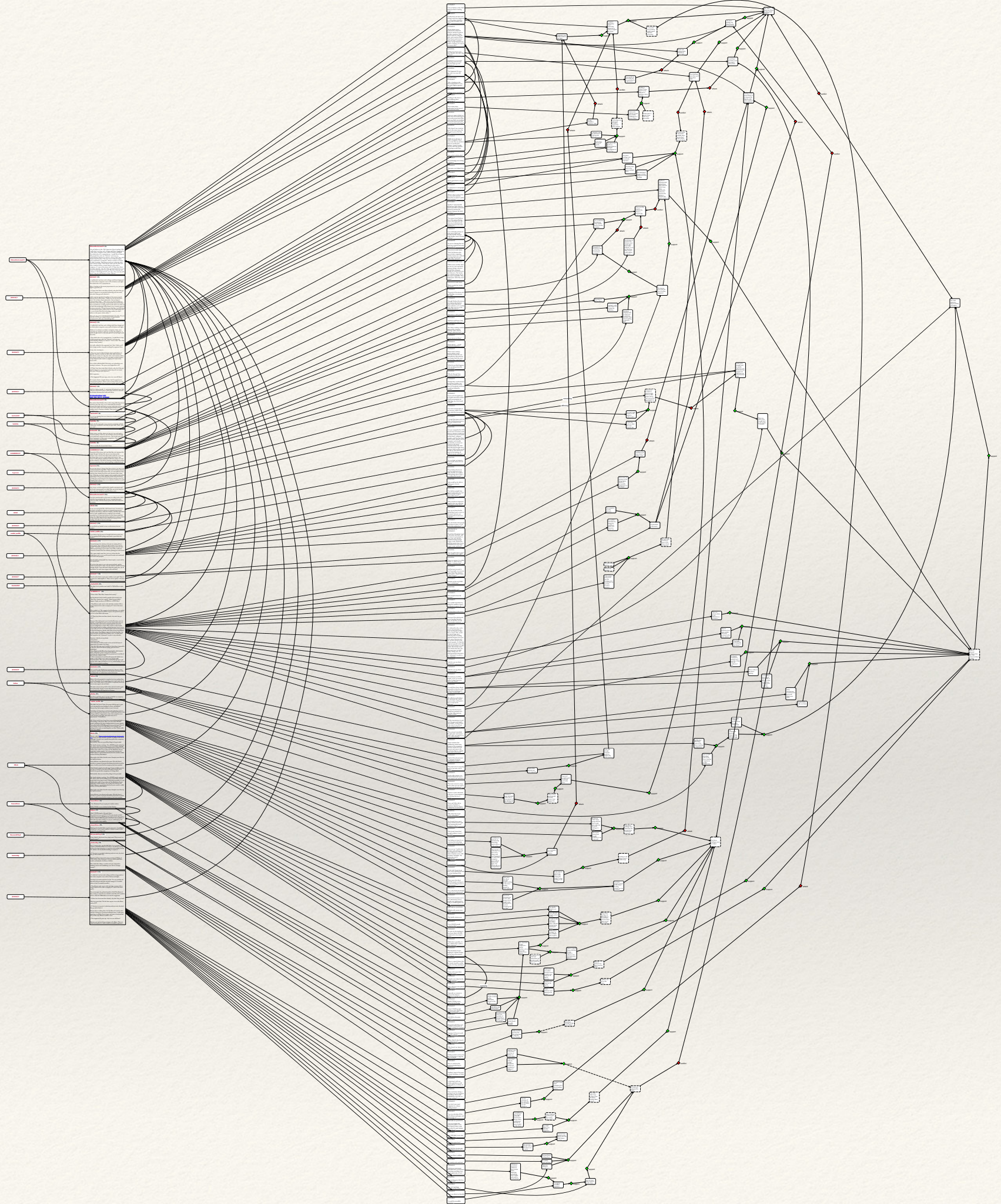
Why is landing on the moon preposterous to you, but space flight in general isn't?

> If There have been men there already, why don't they go back? If America is so proud of achieving such an event, why don't they go and colonize it.

Is this a serious question? Landing on the moon is much different than colonizing it. I hope you can see this basic point. We've been deep underwater, but we haven't colonized that either.... Also, since you seem to think we didn't have the technology to land on the moon back then, don't you think we would go back to the moon now that we do have the technology? Why haven't any countries gone to the moon since the 70s just to prove that they can? We have an international space station and can dock spaceships into it, so we clearly have the technology (unless you don't believe in the space station either...)

Also, you say you're a bit biased, but don't say why. Do you hate the US? Do you simply mistrust all government accounts (9/11, JFK, etc.)? Something else?

...





Future Work

- ❖ Implementation is still experimental:
 - ❖ Rendering large graphs, with different constraints over sub-graphs, yielding predictable layouts, quickly and reliably, is challenging.
- ❖ There is a perennial challenge associated with providing unifying micro- & macro-detail within a single diagram.



Conclusions

- ❖ Introduce ZARDOZ:
 - ❖ An integrated and comprehensive dialogue analysis methodology and associated diagramming layout for use in analysing, understanding, and mapping argumentative dialogue.
 - ❖ Illustrated ZARDOZ applied to three dialogues



References

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