

Argument Mining on Social Media Comments

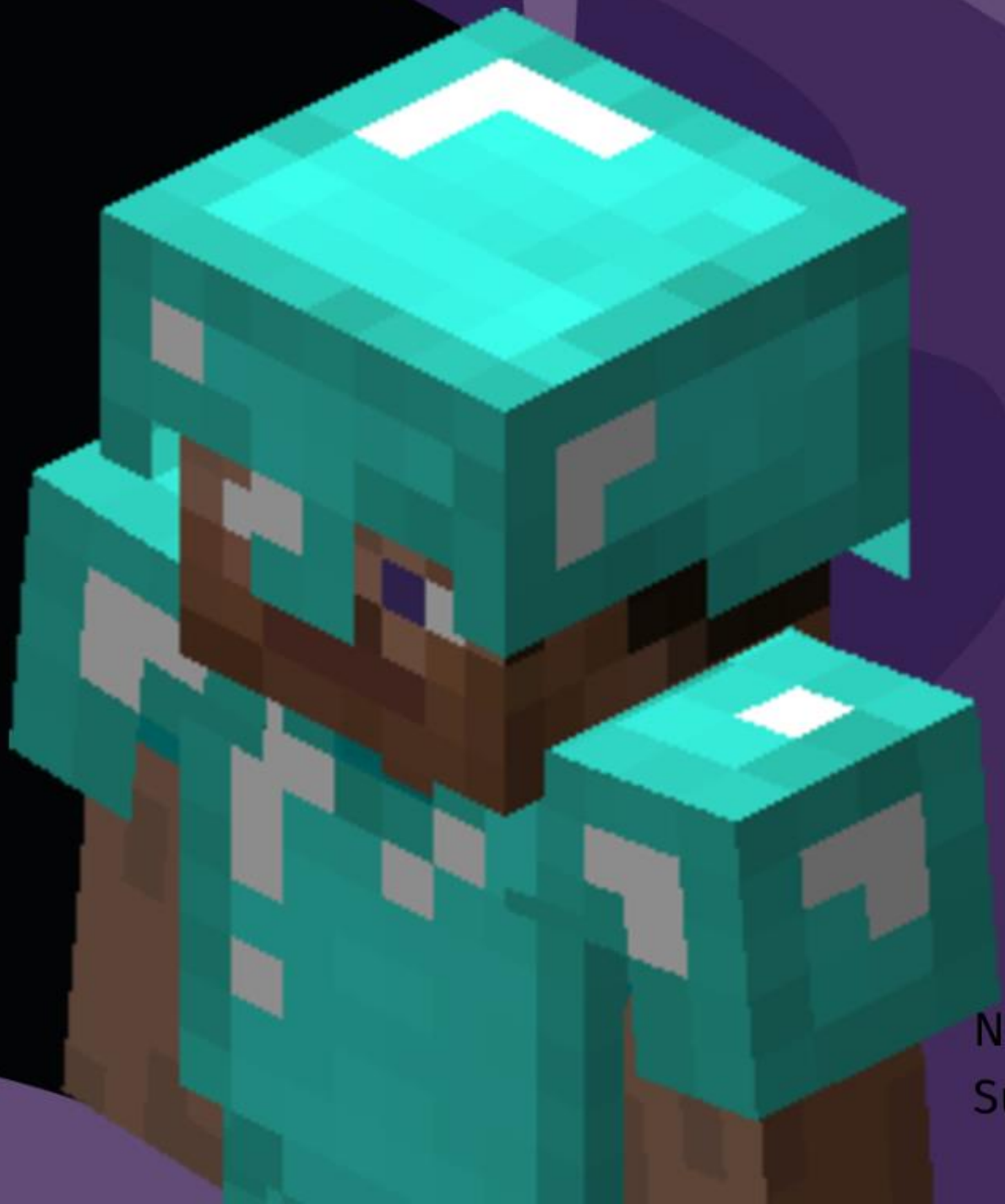
Approach

Conclusion
&
discussion

What?

Pilot





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Supervisor: prof. dr. Els Lefever

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Argument mining

Aim



AUTOMATICALLY EXTRACT ARGUMENTS

- Related to opinion mining and sentiment analysis
- The **why** of an opinion

Argument mining

Aim



Subtasks

1

Topic detection

2

Stance detection

3

Segmentation

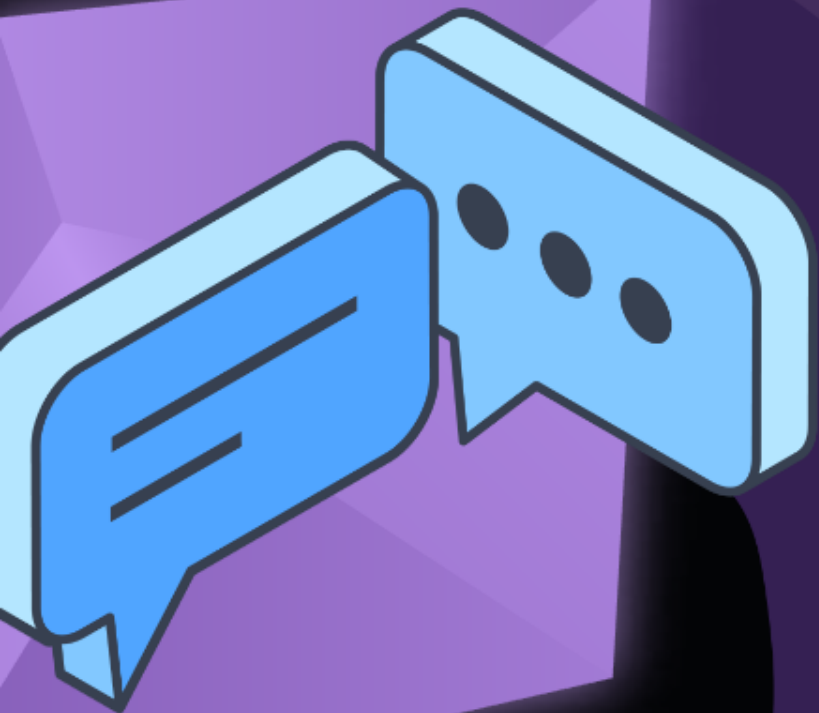
4

Claim/premise detection

5

Premise type and relation detection



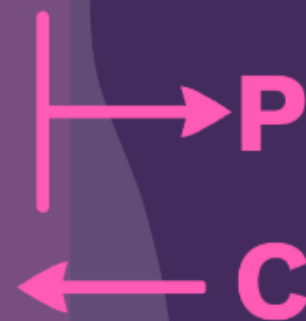


What about the people who worked from home day in day out and have kids to entertain? The government doesn't give them anything either. I've also seen an increase in the electricity bill these last three months... Poorly thought out decision!

T corona+compensation bills

S pro

/ What about...
The government...
I've also seen...
Poorly thought out...



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CHOICES, CHOICES

- Monological perspective (for now)
- Product view
- Descriptive approach



Data



Labeling

DATA

- Facebook comments
- Political topics
- Newspaper articles
- Noisiness, irony, etc.



Annotation

- Vital: good guidelines
- Balancing act



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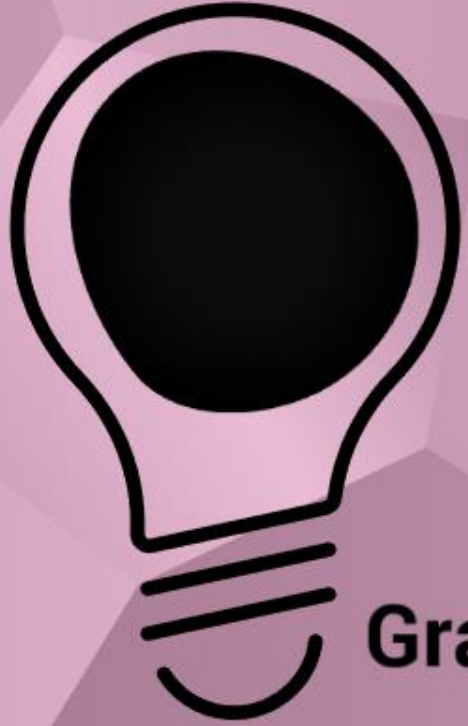
complexity vs data



experiment



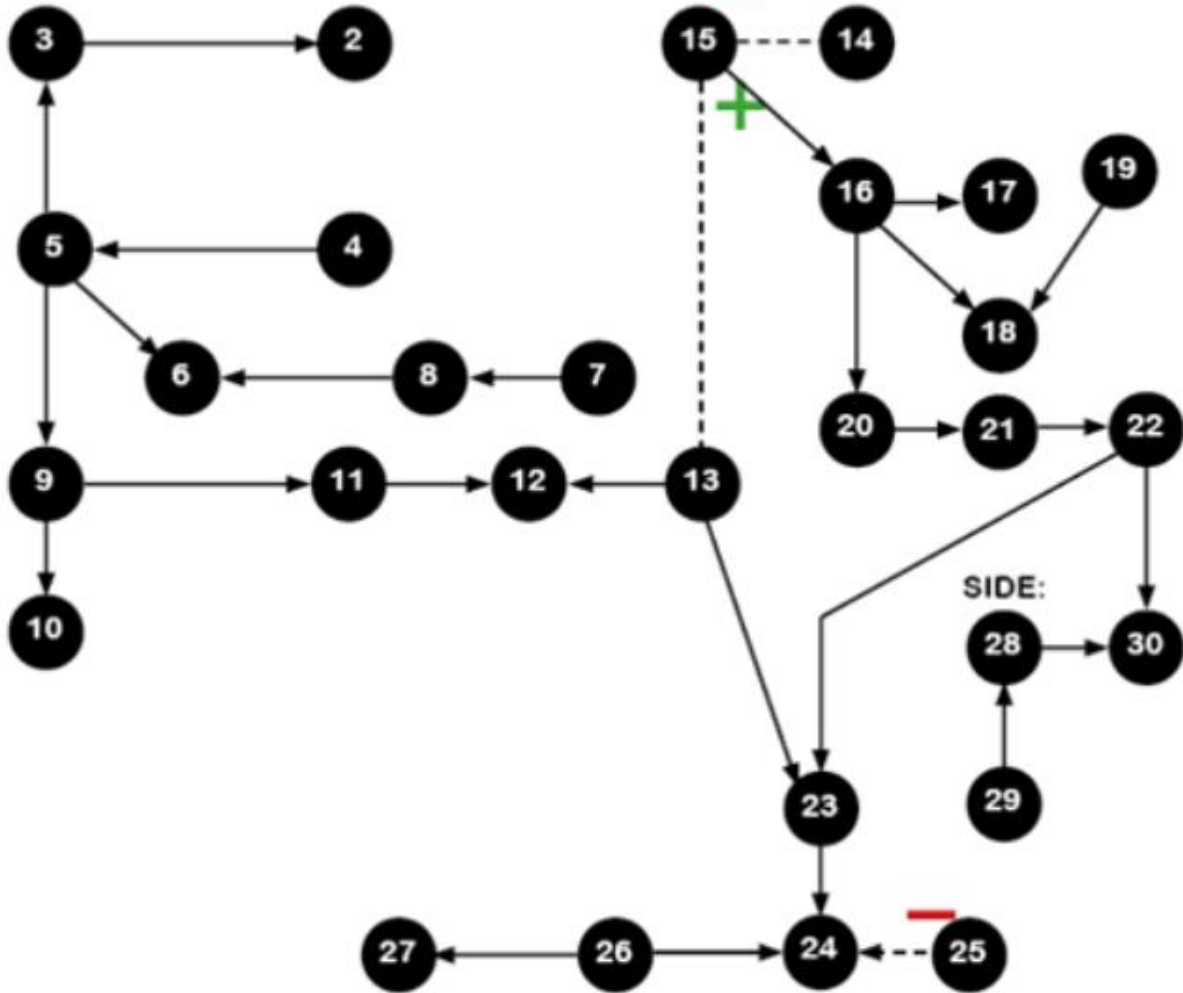
experiment



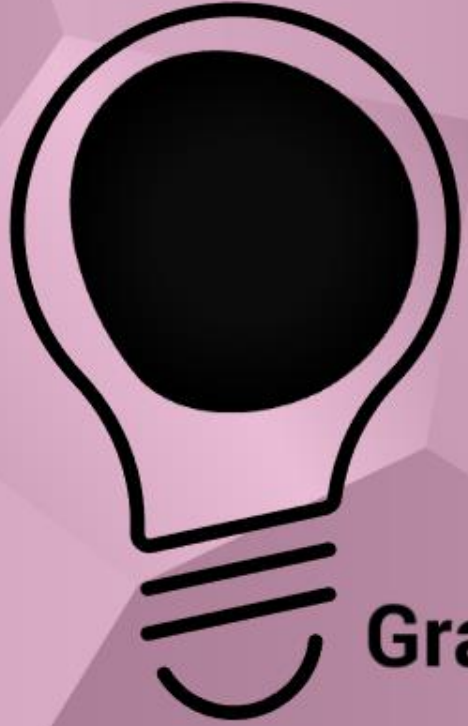
Graphing



SIDE: 1



Complexity in data



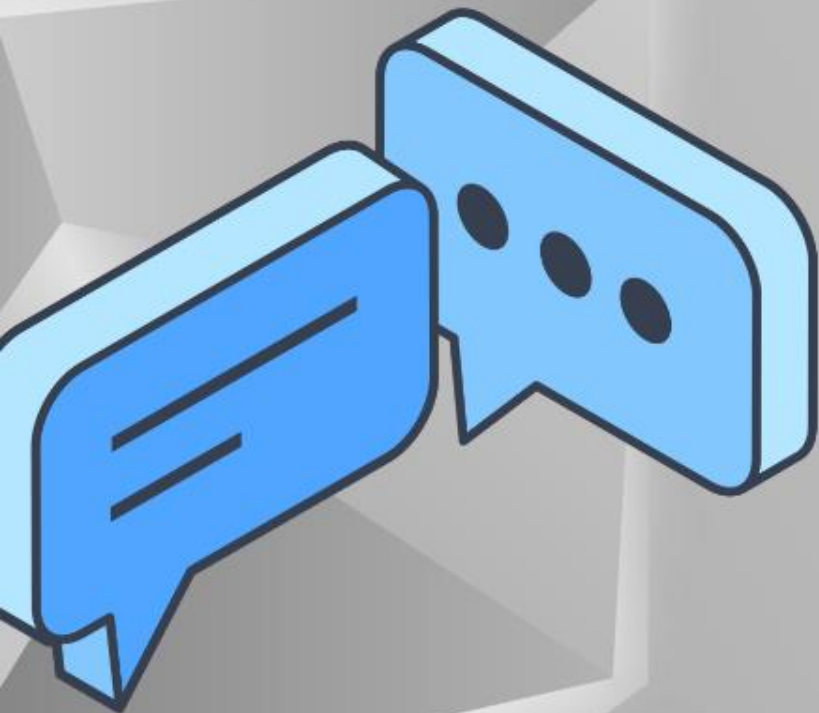
Graphing



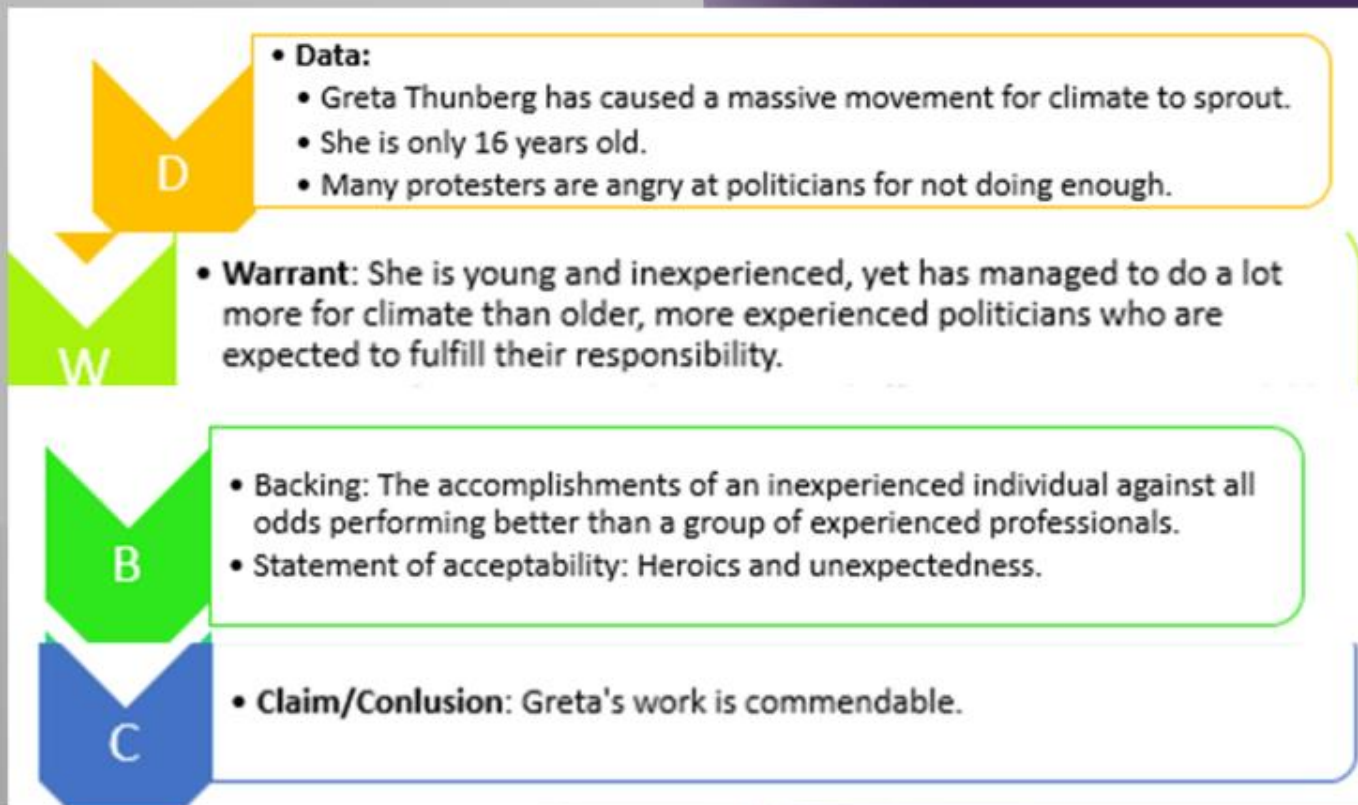


Implicitness

- Lack of context
- Sarcasm
- Taking reconstruction too far



Super! Greta Thunberg has done more for climate on her own than all European politicians combined. She has set up a whole movement and all that for a young woman of 16. Well done! Keep going!



complexity vs data



experiment



experiment



**Theory - data
feedback loop**

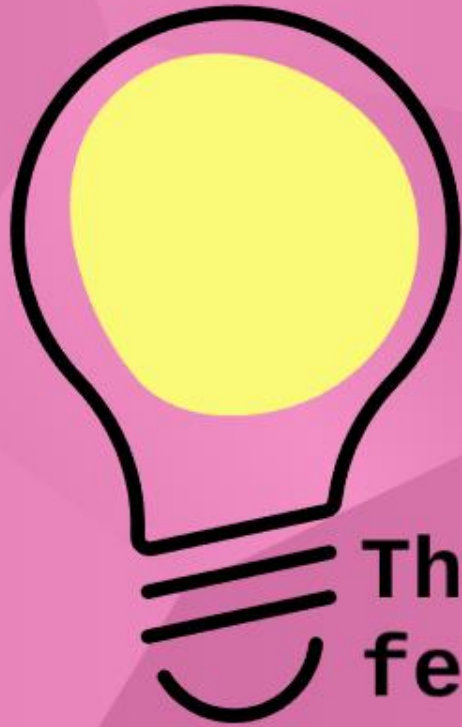
- 1 Closer to text**
- 2 Context remains important**
- 3 Tailored definitions of concepts are vital**

CLOSER TO THE TEXT

- Descriptive aim
- Unexpected markers of claims
(and, but)
- Feasibility

- Difficult for annotators





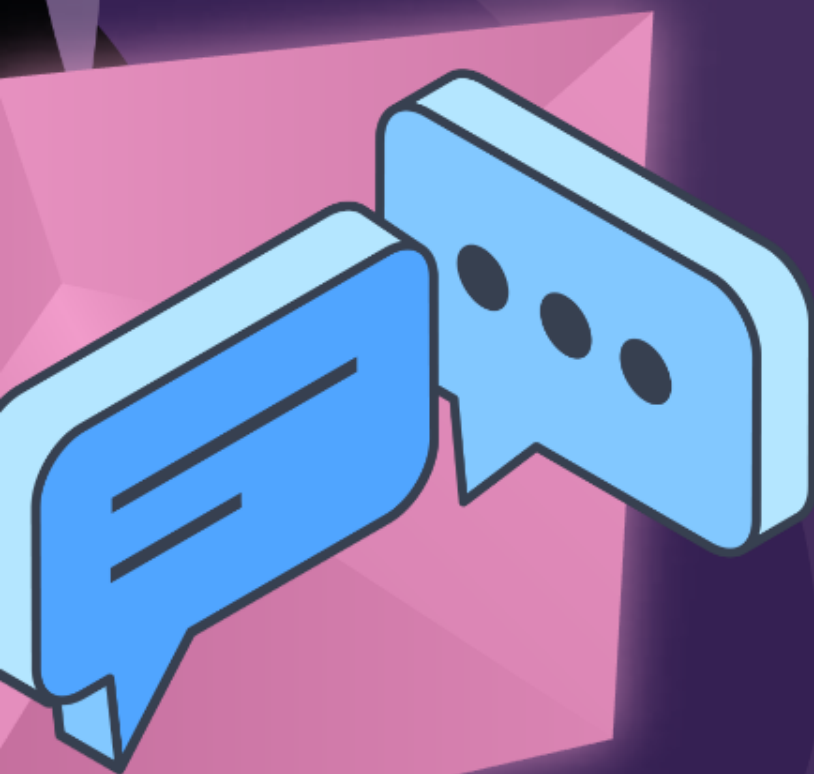
Theory - data feedback loop

- 1 Closer to text
- 2 Context remains important
- 3 Tailored definitions of concepts are vital

DEFINITIONS

- **Argumentativeness, claim, etc.**
- **Annotators preconceptions**
- **E.g., stance-bearing segments**





She's right. But **whatever she says or does, it well never be enough.** I would like to see the reactions if they gave everyone a fine of 250 euros. Then all of a sudden we would be living in a police state.

complexity vs data



experiment



experiment

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Conclusion & discussion



Conclusion



Discussion



Conclusion

Some miner troubles



Discussion

Thank you for your
attention!

References

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