

On the Negativity of Negation

Potts (2011) in Proceedings of SALT 20

Presented by Robert Ward
Georgia Institute of Technology

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Background

Negation is a logical operation: $\neg A$ means “*not A*”



Two neutral statements:

1. The hat is blue
2. The hat is *not* yellow



negation

In this sense, no relationship between negation and pragmatic negativity.

This Paper

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One hypothesis (from the last slide):

Negation is uniformly distributed across contexts.

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Potts claims...

Negation is more probable in negative contexts than in positive contexts.

$$P(c_{negative} \mid \pi_{negation}) > P(c_{positive})P(\pi_{negation})$$

Data & Methods

Corpora: Audience Reactions

IMDB Movie Reviews / Experience Project Reactions

★ 4/10

Houseless by choice
Dunnarunna 2 January 2021

I am one of those people who live on the road by choice, and have done so for 10 years. I felt as though this movie did not paint a true picture of folk who are houseless, by choice. Their day to day struggle was only touched on. Safety, security, health, fuel costs are all issues faced by these good folk every single hour of every single day.

The raw close ups did make you feel every emotion and the scenery was beautiful, the movie didn't hit the mark for me. The camaraderie with fellow travellers was great. We all help each other out, no matter the circumstances.

I would be very interested to hear what other permanent travellers think of this movie.

606 out of 816 found this helpful. Was this review helpful? [Sign in](#) to vote.
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Event
Subject of
the reaction
Movie / Anecdote

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Label
“4 stars”



Text →

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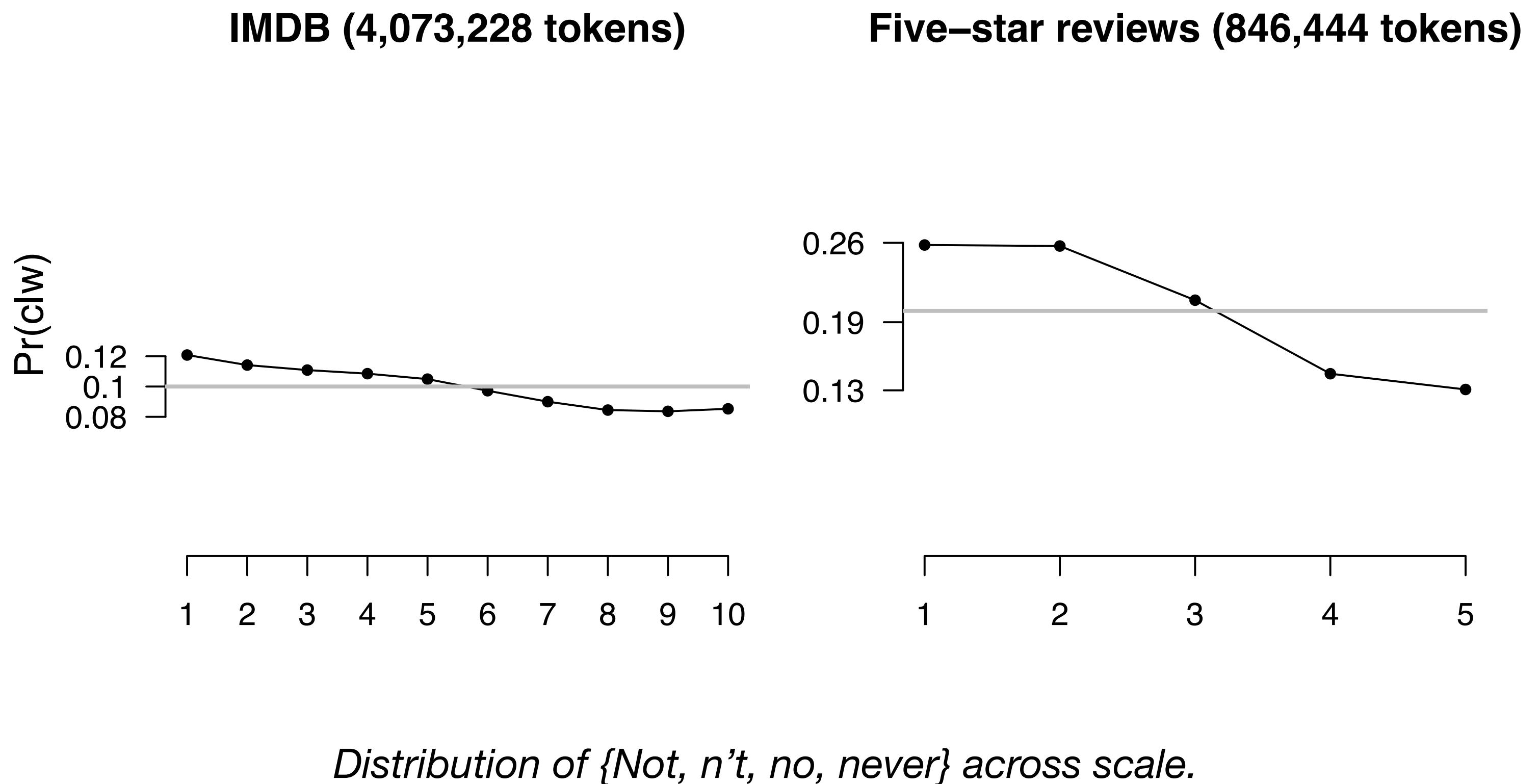
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- Compute the distribution of linguistic types π over labels c and vice-versa.
- Null hypothesis is that π which are negating will be uniformly distributed across all $c \in C$

What do we learn?

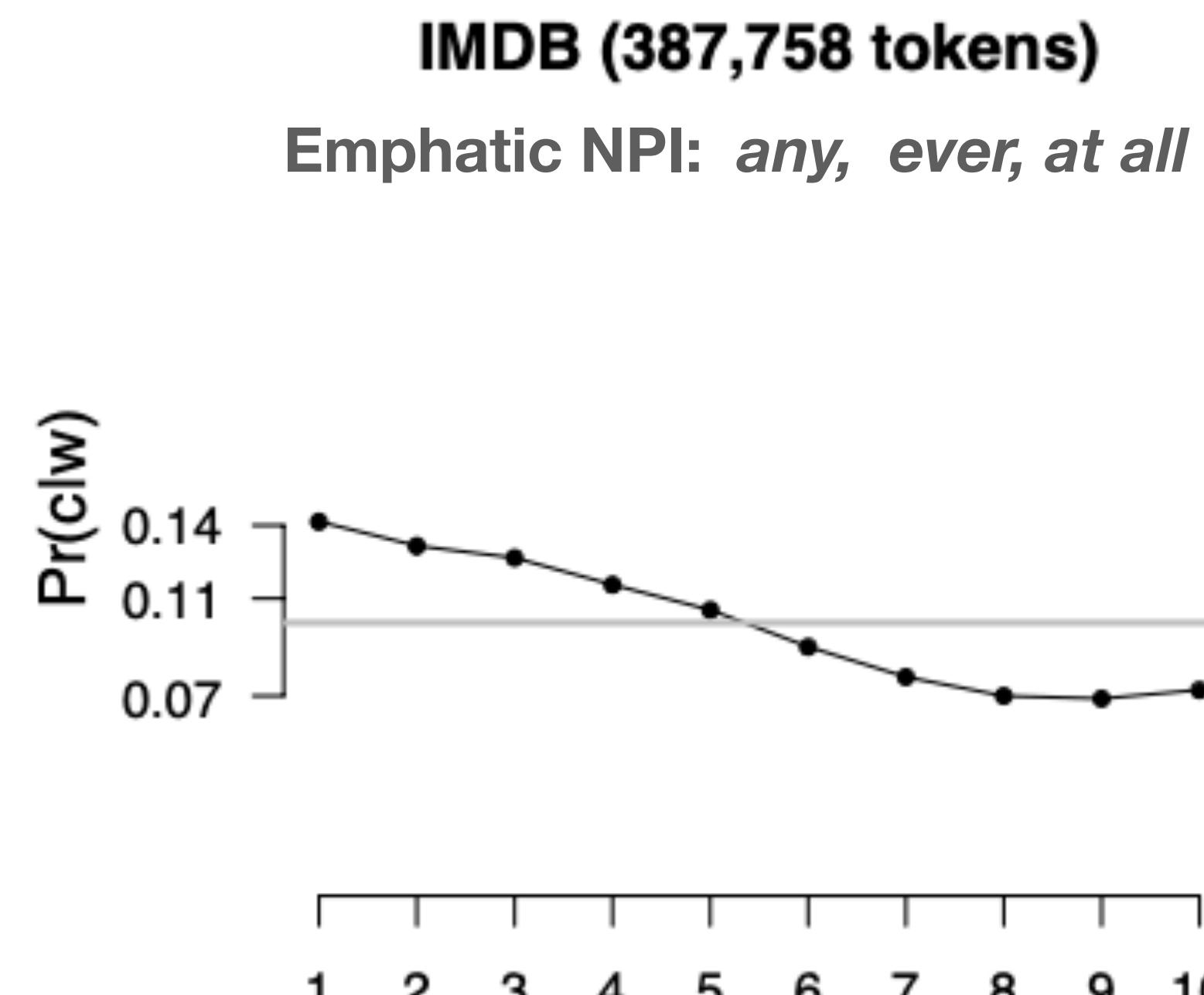
Result 1: Negation is informative about context.

It is pragmatically negative i.e. prevalent in negatively contexts (below the center of the scale).

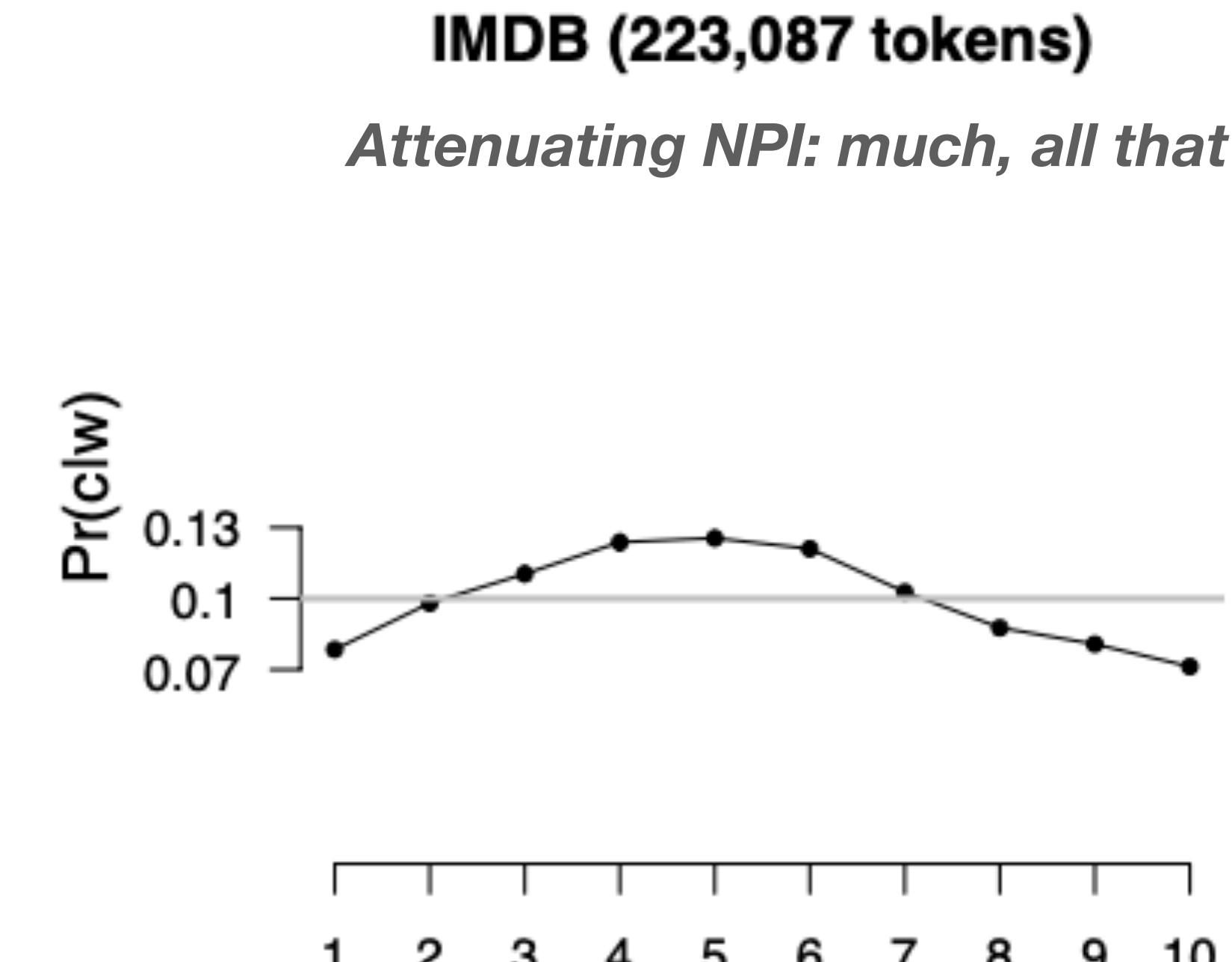


What do we learn?

Result 2: Cooccurrence of negation with negative polarity items (NPIs) is informative about *how* negative negation is.



Emphatic NPI shift negation
towards negative pole



Attenuating NPI shift negation
towards center of the scale

Takeaways

Good: Simple, refined paper w/ excellent presentation of evidence

Interesting: Language of evaluation

Critique: Hypothesis tests are imprecise (should test the joint null)

Extensions

- Multimodal data
- Multiple audiences
- Selective evaluation

Fits into: Lit on NLU of evaluation (e.g. sentiments), human conversation