

Vox Populi Annotation: Measuring Intensity of Ideological Perspectives by Aggregating Group Judgments

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Goal: Annotating Intensity of Expressing
Ideology at the Sentence Level

Sentence of High Intensity

- In the first weeks of the Intifada, for example, Palestinian public protests and civilian demonstrations were answered brutally by Israel, which killed tens of unarmed protesters.

Sentence of Low Intensity

- The Rhodes agreements of 1949 set them as the ceasefire lines between Israel and the Arab states.

Annotating Intensity is Hard

- Hard to define Strong, Medium, and Weak
- Hard to train annotators
- Hard to achieve high inter-rater agreement

Solution: Vox Populi Annotation

- Aggregate group judgments on a simple, forced binary question
- “Which side do you think the sentence was written from?”

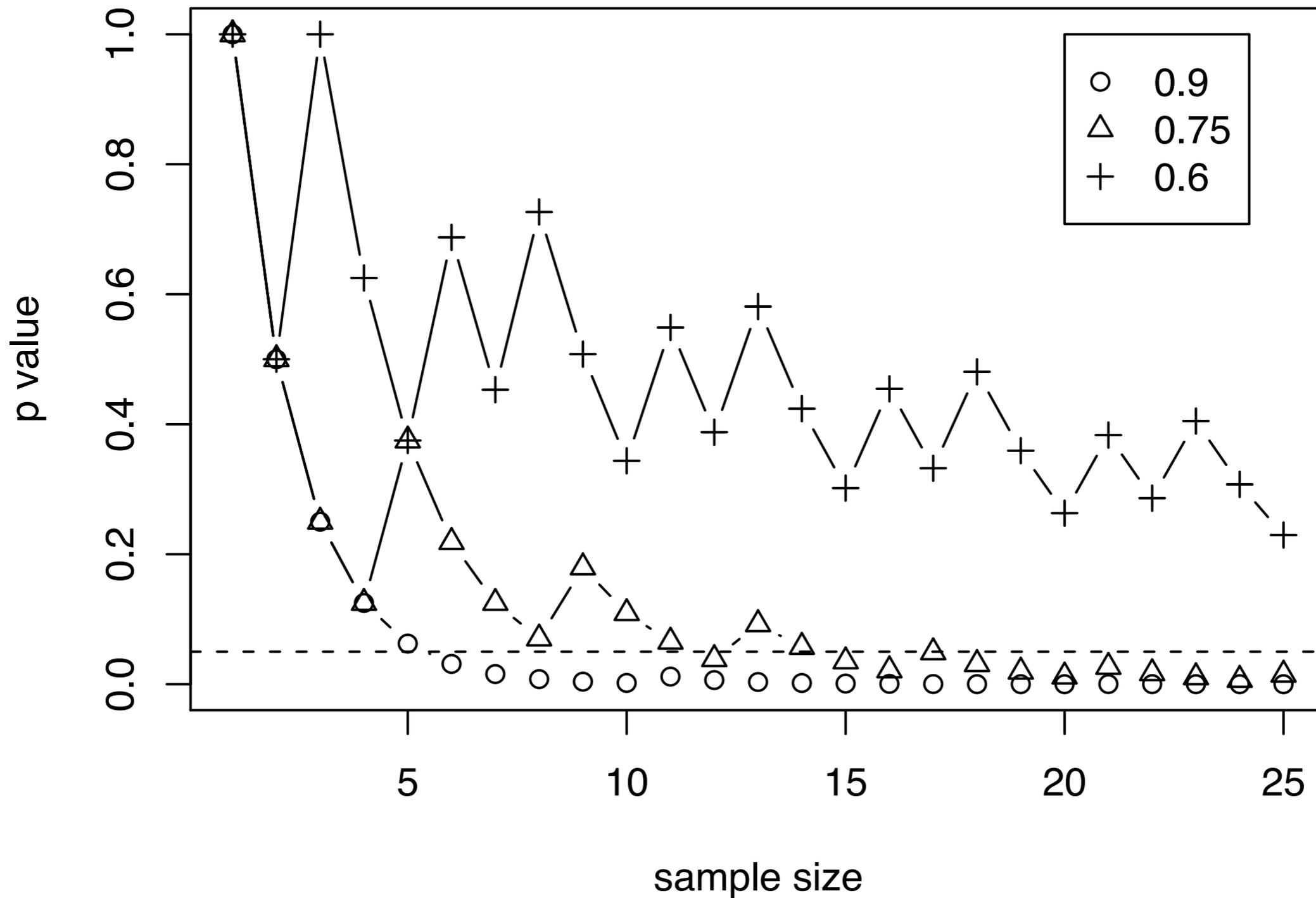
Two Problems

- How many annotators are needed?
- Are these group judgments random?

Number of Annotators

- A statistical testing problem
- The more annotators, the finer difference in intensity we can discern.

Number of Annotators



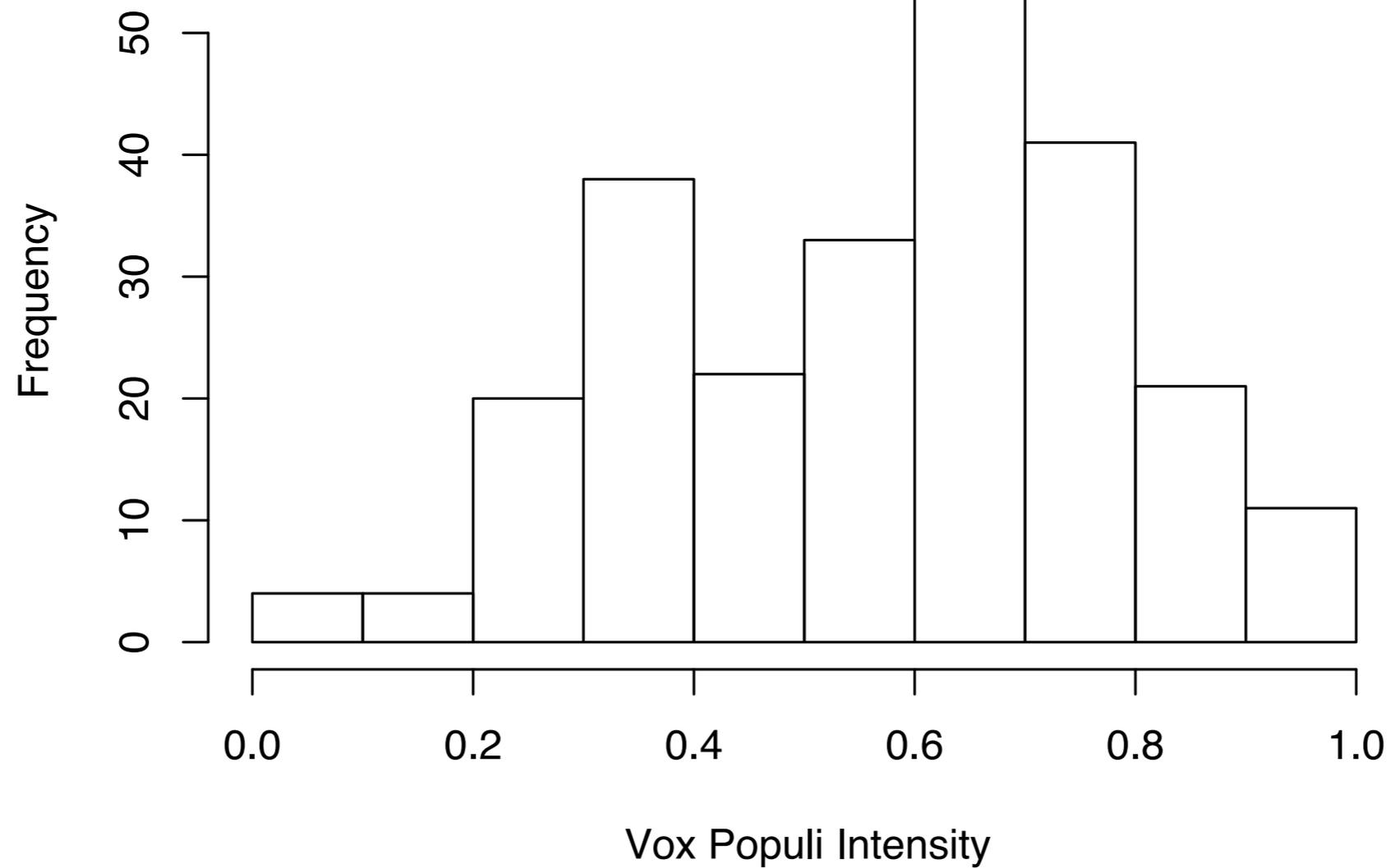
Reliability

- Reliable = two groups agree with each other
- Measure Pearson's correlation coefficient

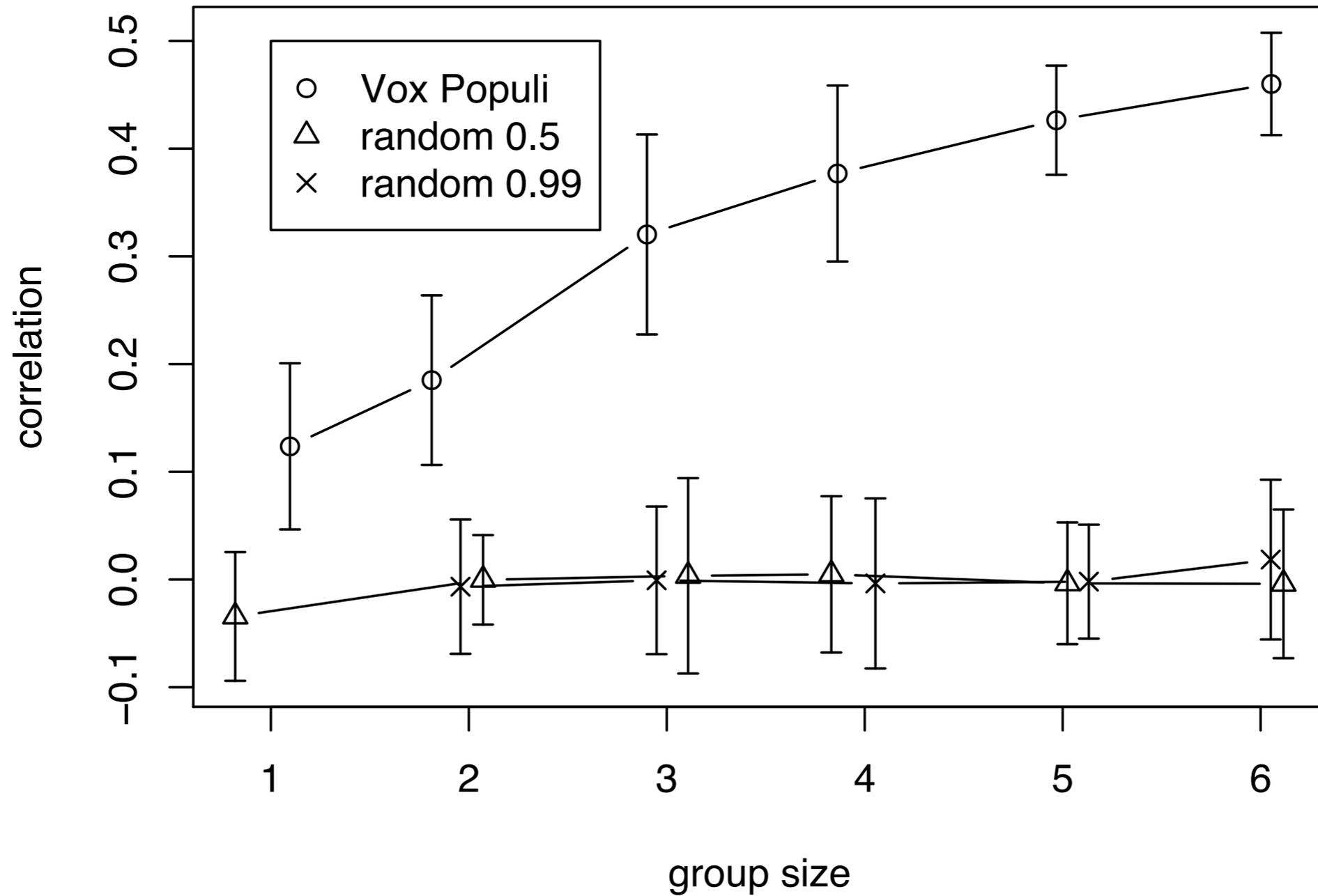
Annotation Study

- 250 sentences from editorials on the Israeli-Palestinian conflict
- 18 participants
- “Do you think the sentence is written from the Israeli or Palestinian perspective?”

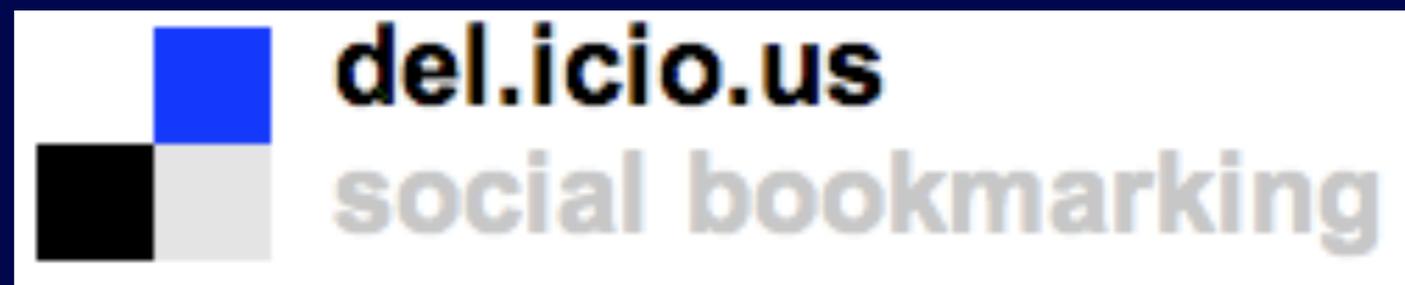
Distribution of Intensity



Reliability Assessment



Where to recruit many annotators?



Conclusion

- Vox Populi Annotation for hard annotation tasks
- Solution to two problems in VPA
- Positive correlation observed in an empirical annotation study