

# Predicting language change

George Walkden

University of Konstanz  
<http://walkden.space>

XLanS: Triggers of Language Change  
11th October 2017

# The problem

- ▶ If our theories of language change are to be explanatory (i.e. more than just-so stories), they should be applicable in principle to the future as well as the past.
- ▶ Prediction hasn't always been held up as a relevant goal for historical linguistics:
  - ▶ “absolute predictability may not be an appropriate requirement, since evolution by natural selection in biology is almost universally recognised as scientifically legitimate explanation, though it does not ‘predict’ the evolutionary changes that it explains” (Campbell, 2013, 321)
  - ▶ “a theory of change which ... is fully predictable ... is not necessary in order to obtain explanations” (Lightfoot, 1981, 363)
  - ▶ Change is “irrational, violent, and unpredictable” (Labov, 1994, 10)
- ▶ BUT: this conception of prediction is out of line with how the term is used everywhere except discrete maths and some areas of physics. Modern prediction is inherently probabilistic (Silver, 2013)
- ▶ Can we predict language change for the future?

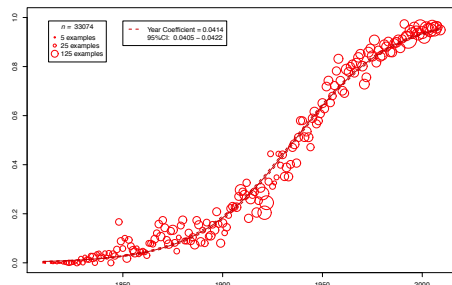
# The solution?

Well, we won't know until we try.

- ▶ Make predictions!
- ▶ Database of predictions would be useful – store them in advance and see which ones turn out right!
- ▶ Suggestion: establish a *prize for linguistic prediction*.
  - ▶ Does anyone know any wealthy potential benefactors?
- ▶ Potential applications: NLP, language teaching, etc.

Cf. also Sanchez-Stockhammer (2015).

*Development of possessive have in American English in negation contexts, from Zimmermann (2017, 64); data from COHA*



Anyone want to bet that the proportion of the new variant in 2027 will *not* be between 90% and 100%?

# References

- Campbell, Lyle. 2013. *Historical linguistics: an introduction*. Cambridge, MA: MIT Press 3rd edn.
- Labov, William. 1994. *Principles of linguistic change: internal factors*, vol. 1. Oxford: Blackwell.
- Lightfoot, David. 1981. A reply to some critics. *Lingua* 55. 351–368.
- Sanchez-Stockhammer, Christina. 2015. Can we predict linguistic change? An introduction. In Christina Sanchez-Stockhammer (ed.), *Can we predict linguistic change?*, vol. 16 Studies in Variation, Contacts and Change in English, Helsinki: VARIENG.
- Silver, Nate. 2013. *The signal and the noise: the art and science of prediction*. London: Penguin.
- Zimmermann, Richard. 2017. *Formal and quantitative approaches to the study of syntactic change: three case studies from the history of English*: Université de Genève dissertation.