

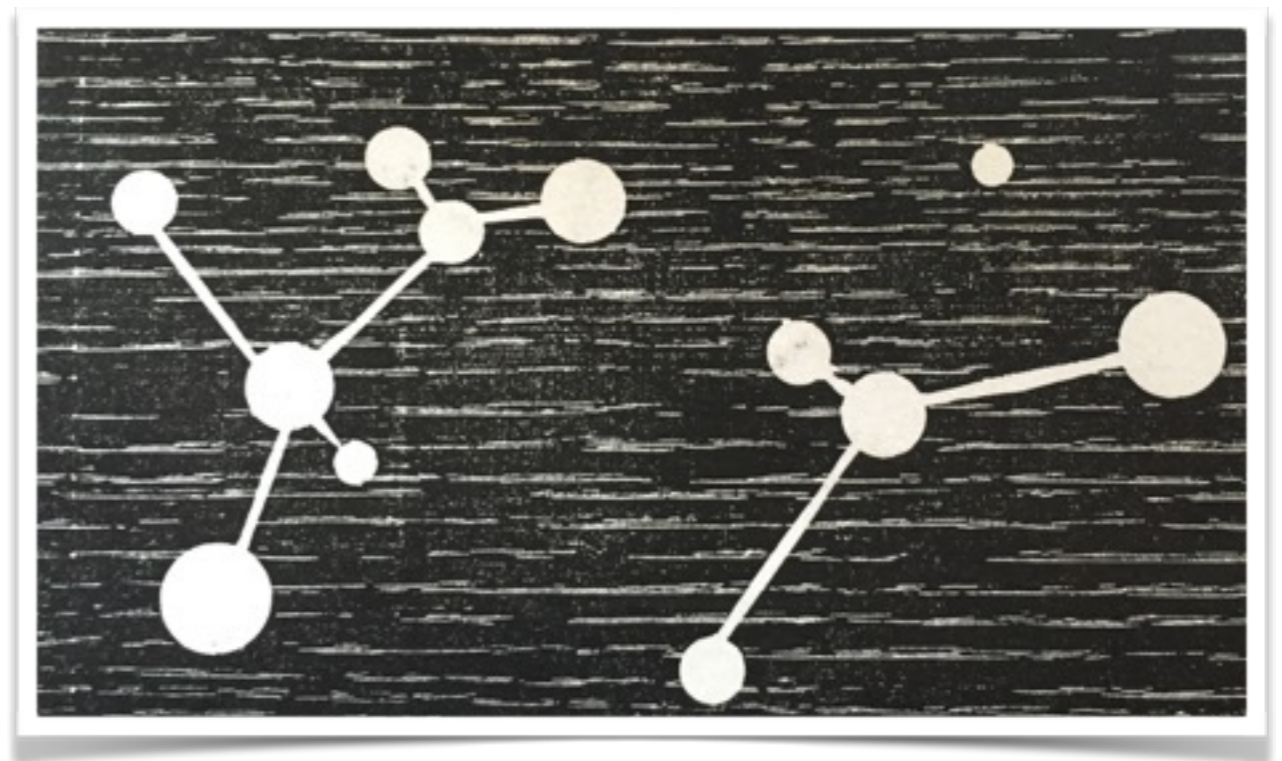
# The Predictability Horizon

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Samuel V. Scarpino

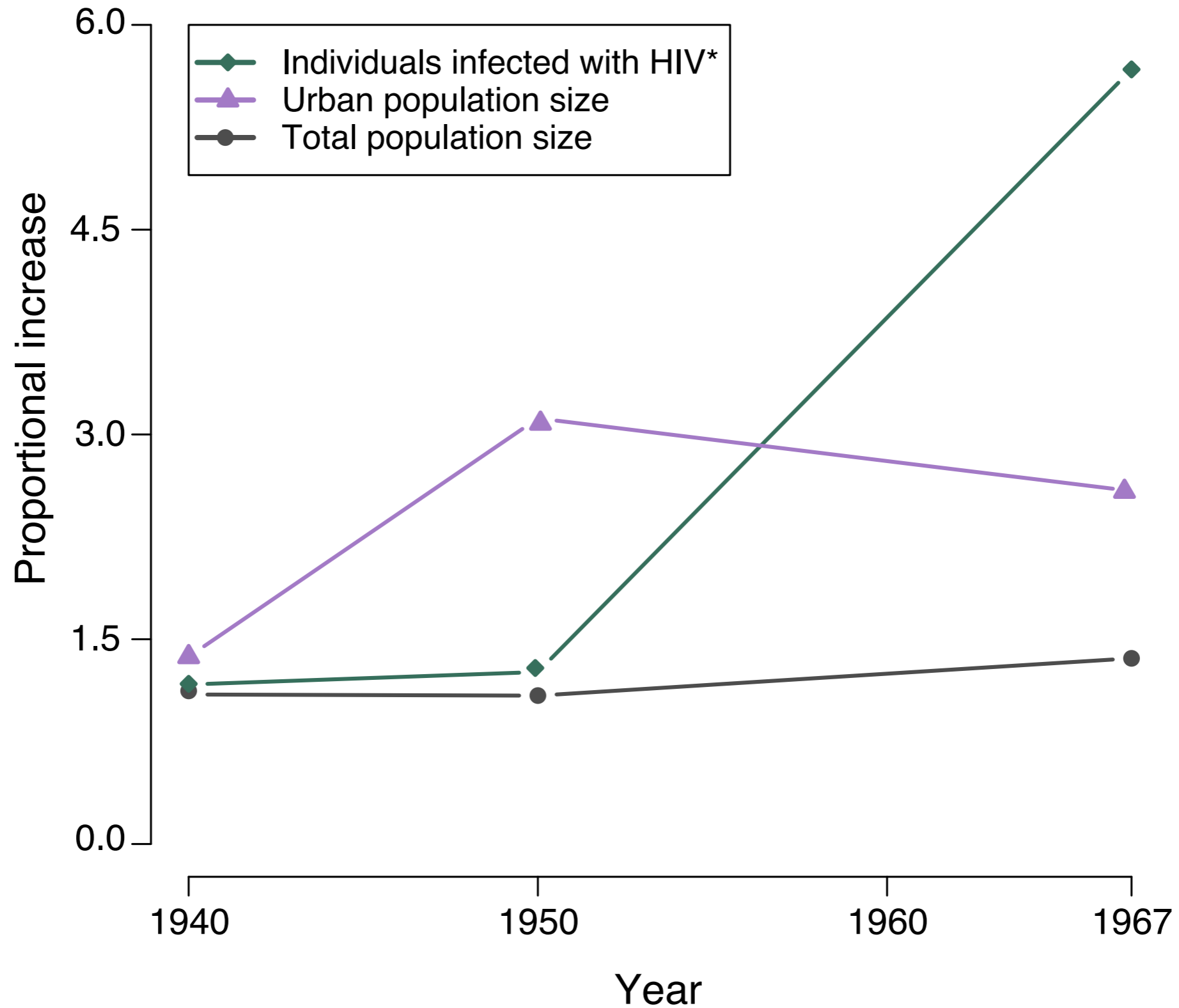
Assistant Professor  
University of Vermont

[scarpino@santafe.edu](mailto:scarpino@santafe.edu)  
[@svscarpino](https://twitter.com/svscarpino)  
[scarpino.github.io](https://scarpino.github.io)



# Urbanization and HIV in central Africa

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# Can we predict complex systems?

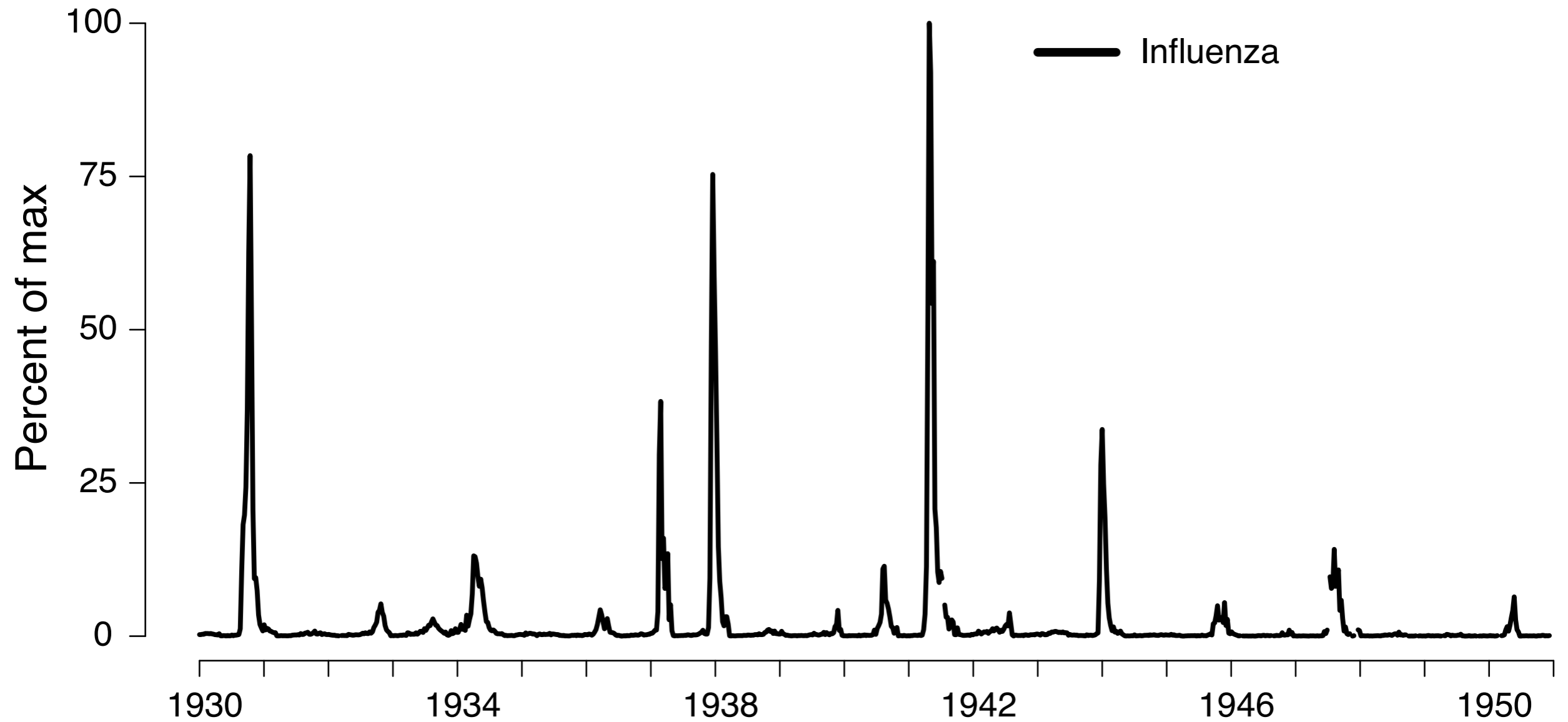
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Giovanni Petri  
Principle Research  
ISI Foundation

# Can we predict this time series?

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# Permutation entropy in higher dimensions

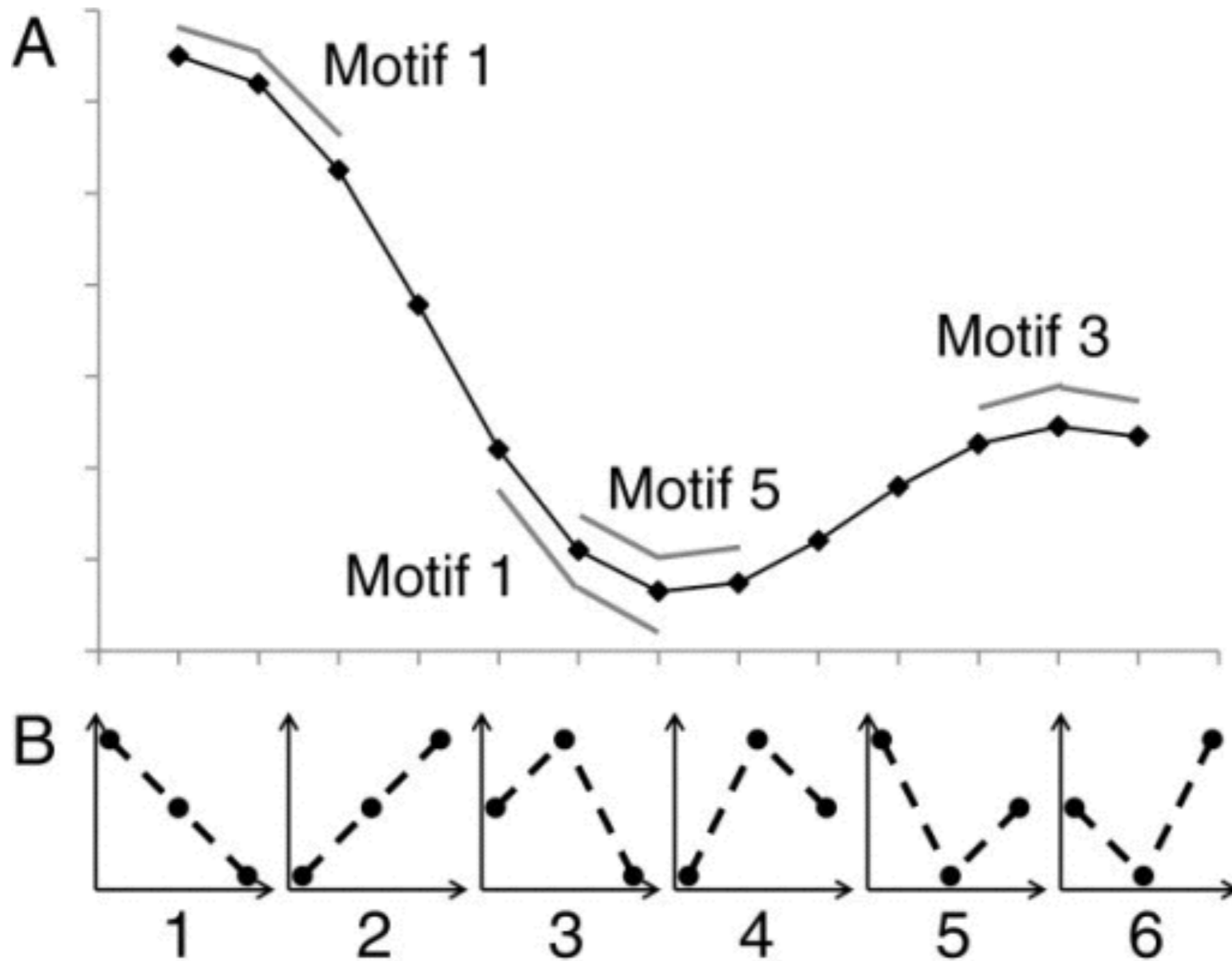
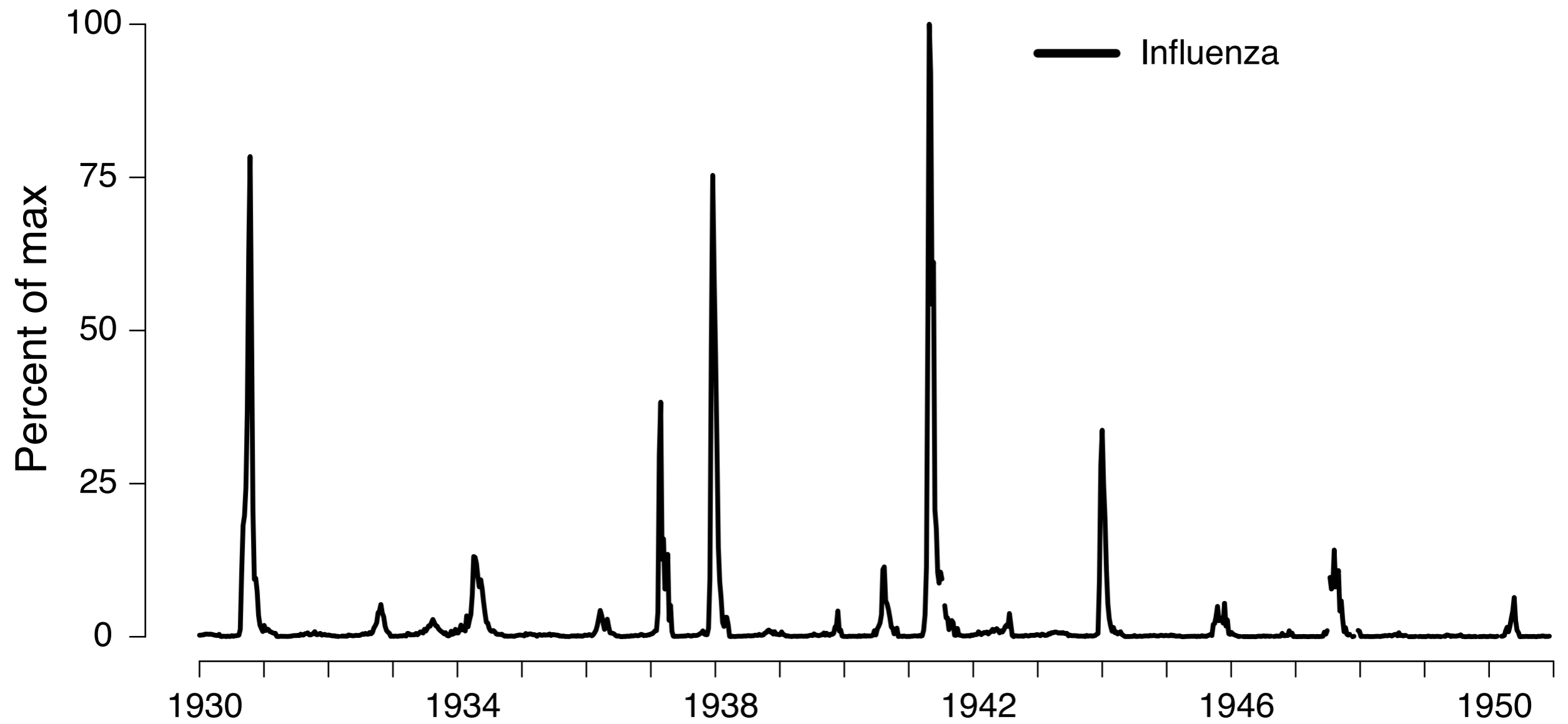


Fig. from Hillen et al. 2013

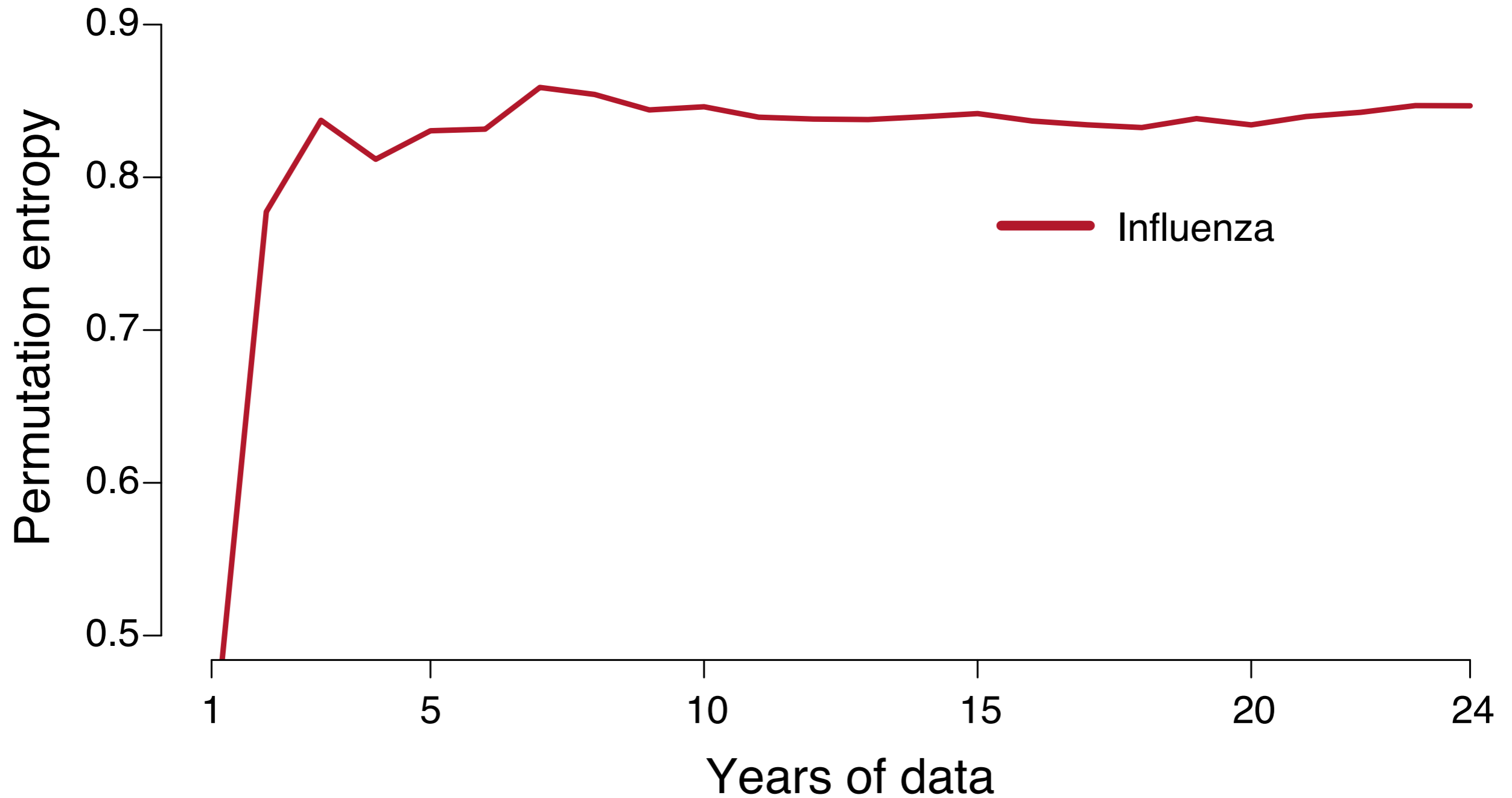
# Historical influenza in Texas

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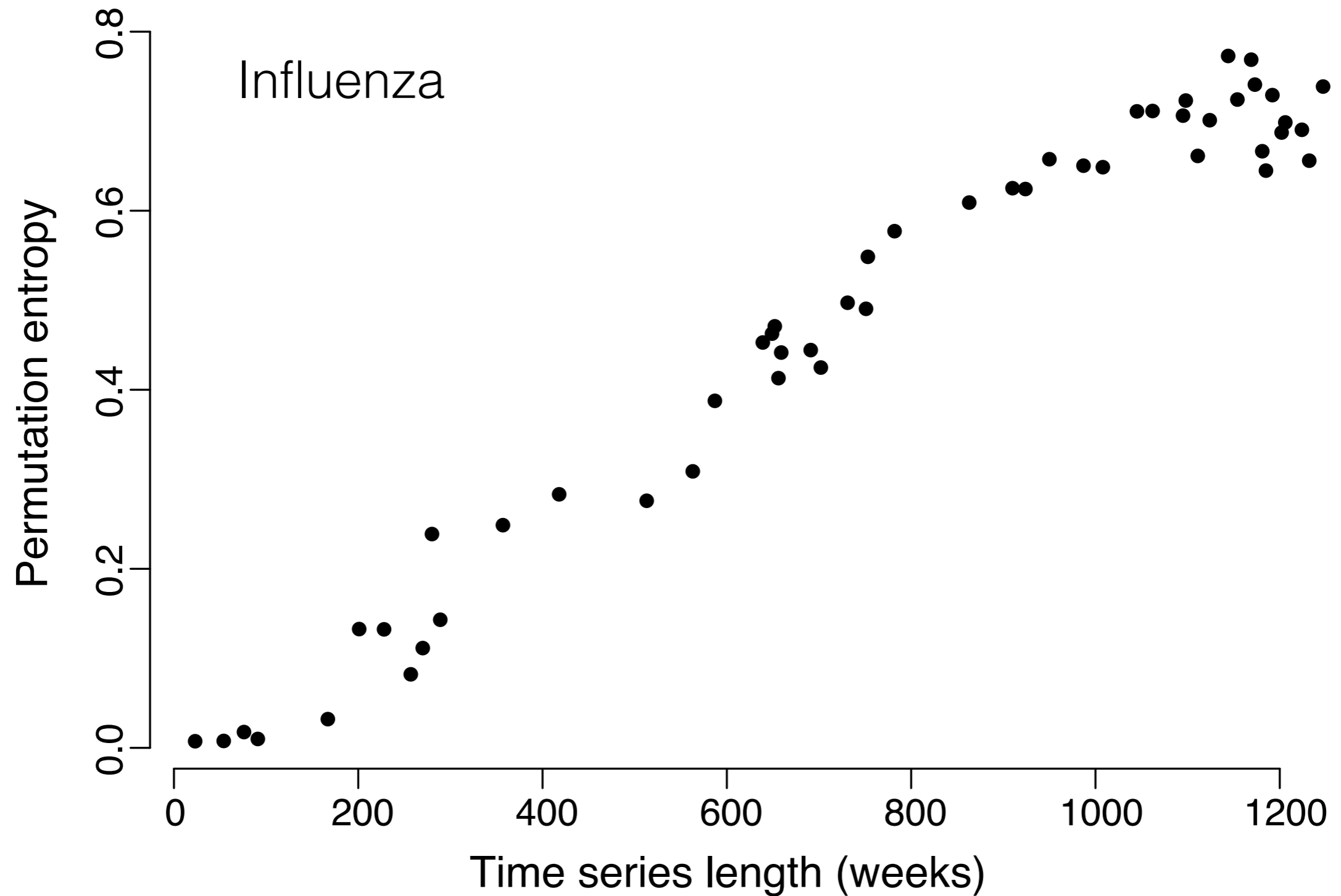
# The more data we see, the less certain we are

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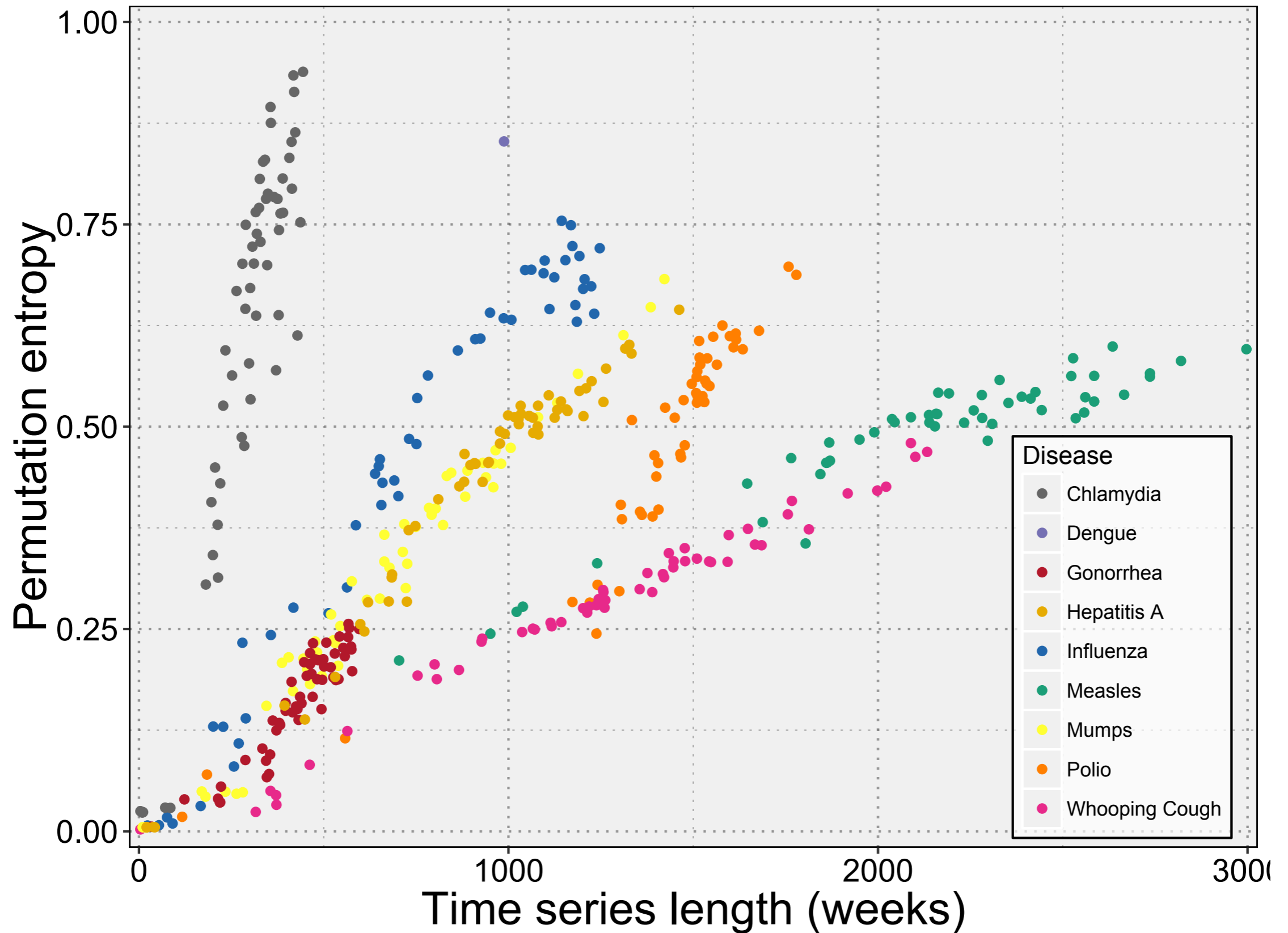
# More data = less predictability

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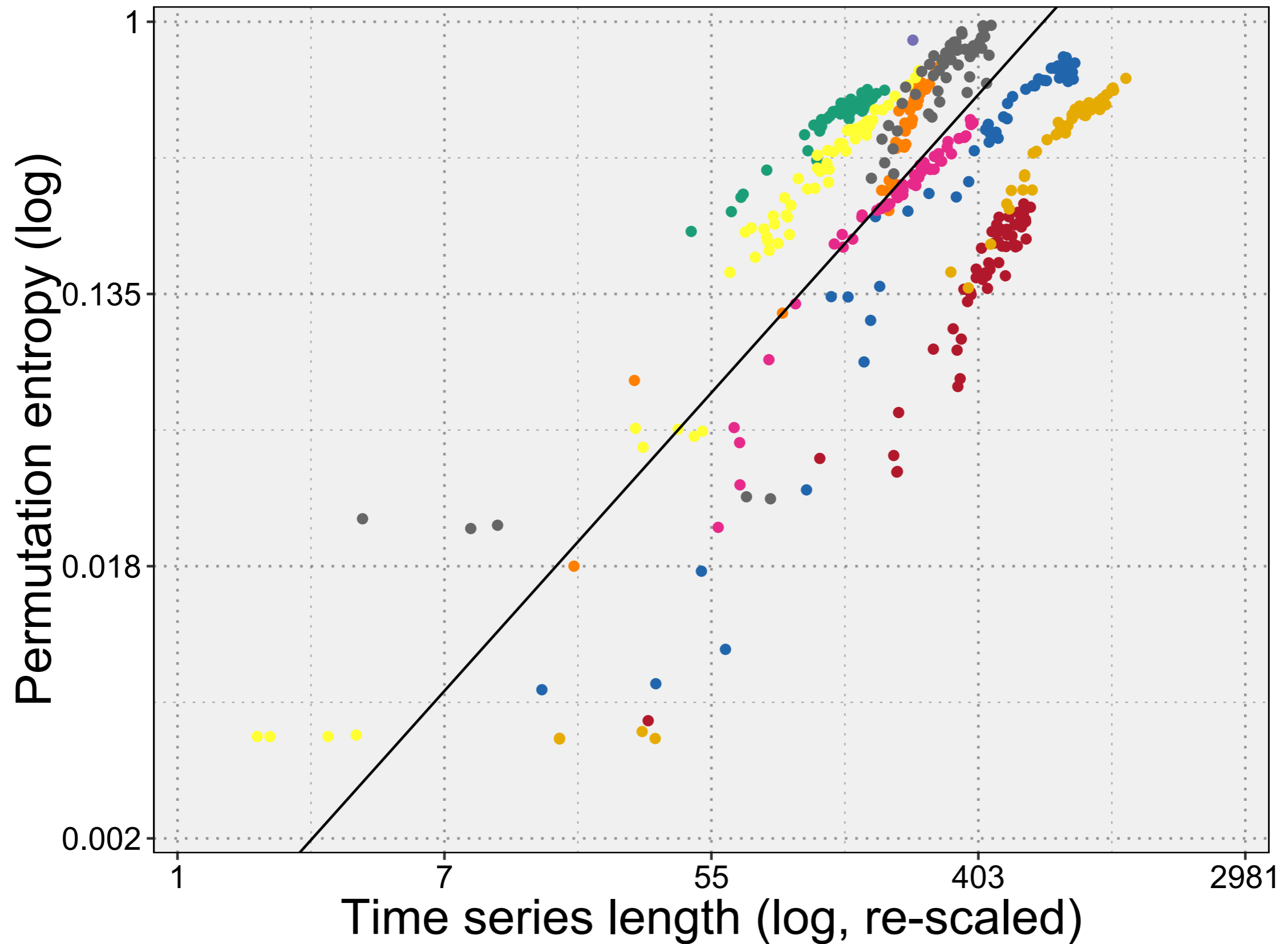




# Prediction horizon



# Universal prediction horizon?



# Questions?

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## Samuel V. Scarpino

Assistant Professor  
University of Vermont

[scarpino@santafe.edu](mailto:scarpino@santafe.edu)

[@svscarpino](https://twitter.com/svscarpino)

[scarpino.github.io](https://scarpino.github.io)

