

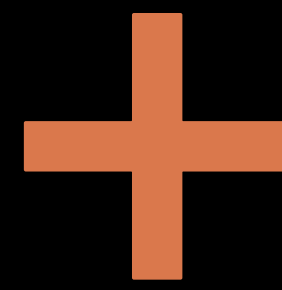
CULTURAL ACCUMULATION AND IMPROVEMENT IN ONLINE FAN FICTION

Federico Pianzola, Alberto Acerbi, Simone Rebora

CHR 2020: Workshop on Computational Humanities Research, November 18–20, 2020

INTERDISCIPLINARY WORK

CULTURAL
EVOLUTION



COMPUTATIONAL
LITERARY STUDIES

testing

cultural evolution theory
(and its specificity in the
digital age)

modelling
literary history

WHAT IS CULTURAL EVOLUTION?

- ✓ Quantitative and evolutionary-inspired approach to the study of culture.
- ✓ How does culture influence human behaviour?
- ✓ How do cultural items spread, become successful, disappear?

CUMULATIVE CULTURE

The accumulation of increasingly effective modifications over time without reverting back to prior, less effective states.

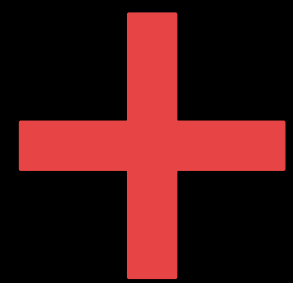


3 FEATURES OF CUMULATIVE CULTURE

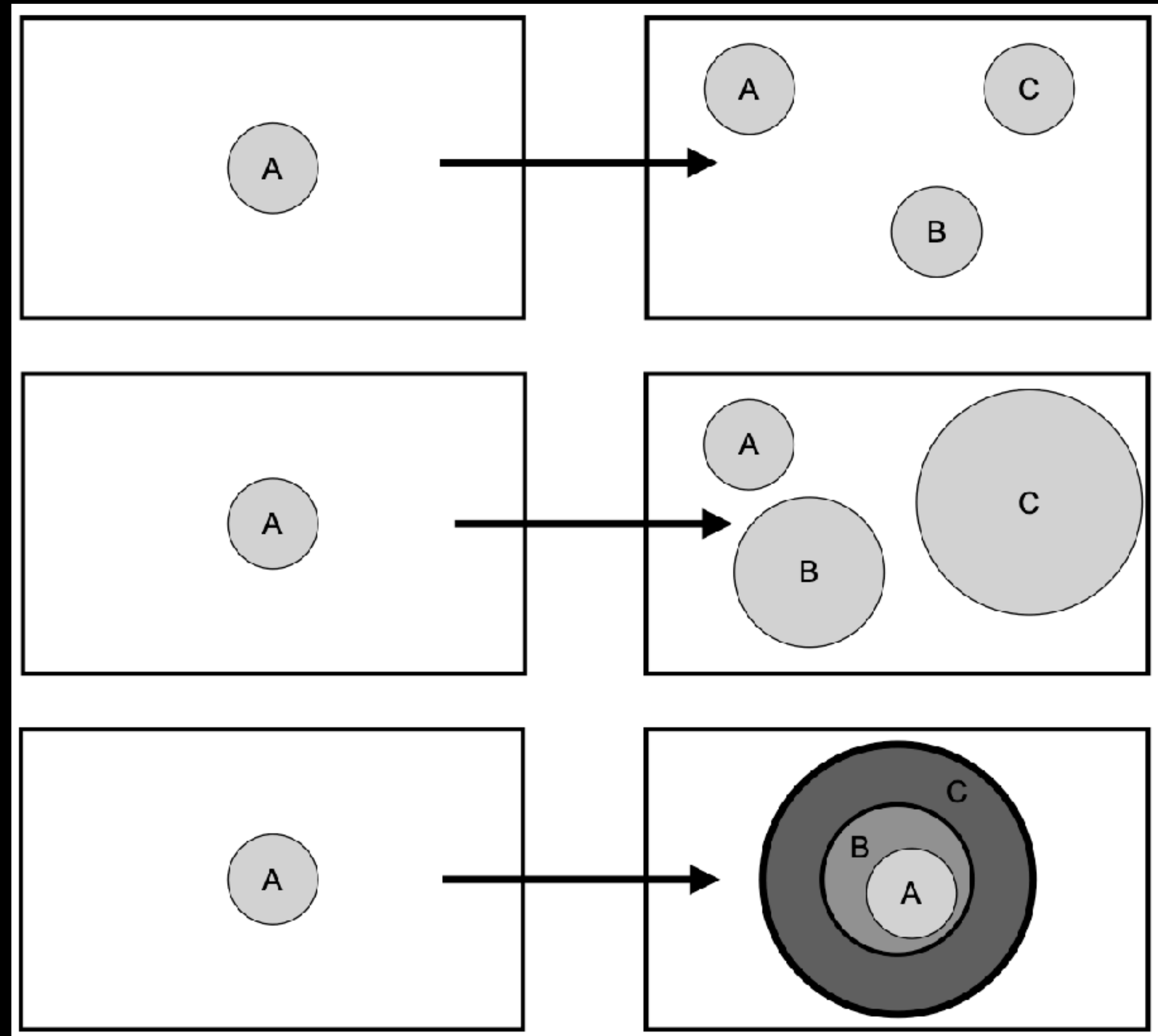
Accumulation



Improvement



Ratcheting





CUMULATIVE CULTURAL EVOLUTION IN FANFICTION

“Folks’ reappropriation of contemporary myths owned by corporations” (H. Jenkins)

Community of readers and writers who reinterpret stories and further transmit modifications of them.

A03 METADATA

Archive of Our Own *beta*

Hi, fedormyskin!PostLog Out

FandomsBrowseSearchAbout

Entire Work

Next Chapter →

Chapter Index ↓

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Comments

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Rating:

General Audiences

Archive Warning:

Creator Chose Not To Use Archive Warnings

Categories:

F/M, Gen

Fandom:

Harry Potter – J. K. Rowling

Relationships:

Hermione Granger/Ron Weasley, Harry Potter/Ron Weasley, Harry Potter/Ginny Weasley

Characters:

Ron Weasley, Hermione Granger, Harry Potter, Other(s)

Additional Tags:

Love, Romance, Angst, Alternate Universe, Love Confessions, Friendship

Language:

English

Stats:

Published: 2020-10-16

Updated: 2020-11-06

Words: 9922

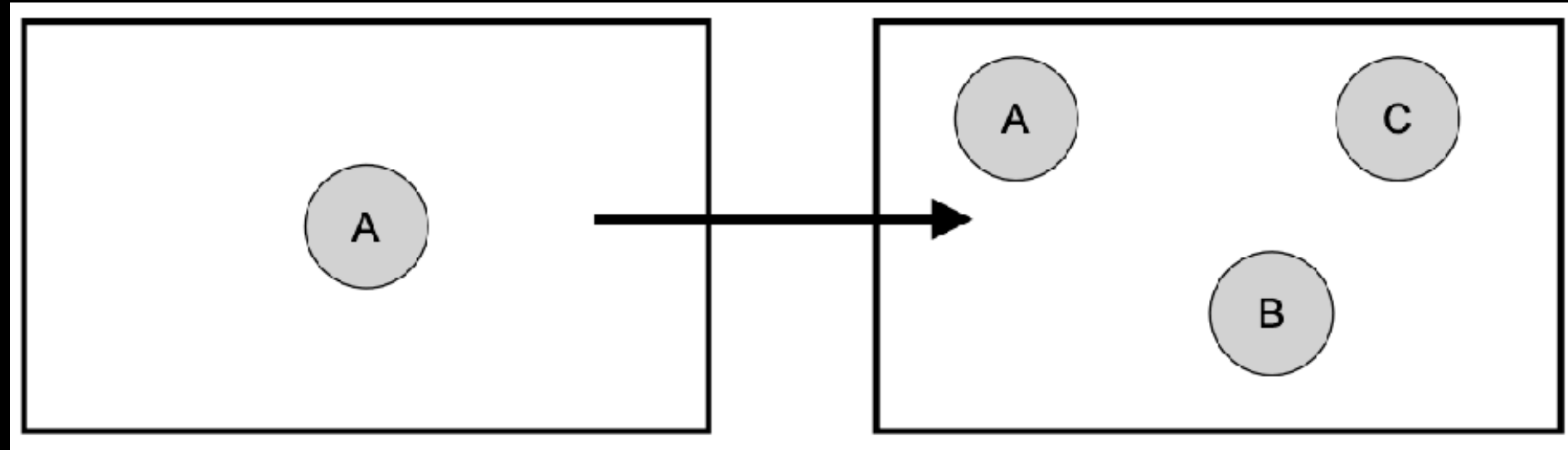
Chapters: 8/?

Comments: 14

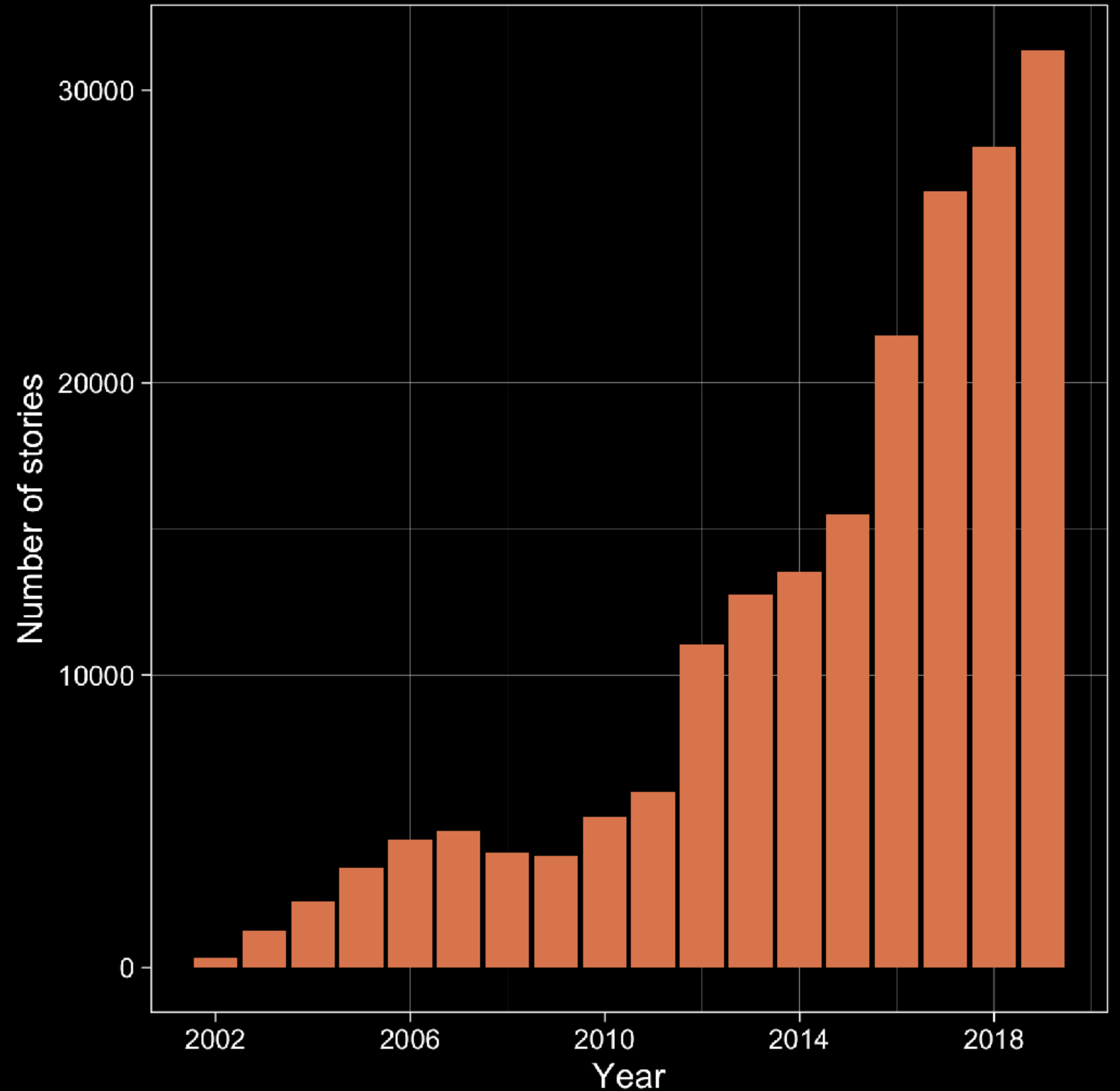
Kudos: 11

Hits: 316

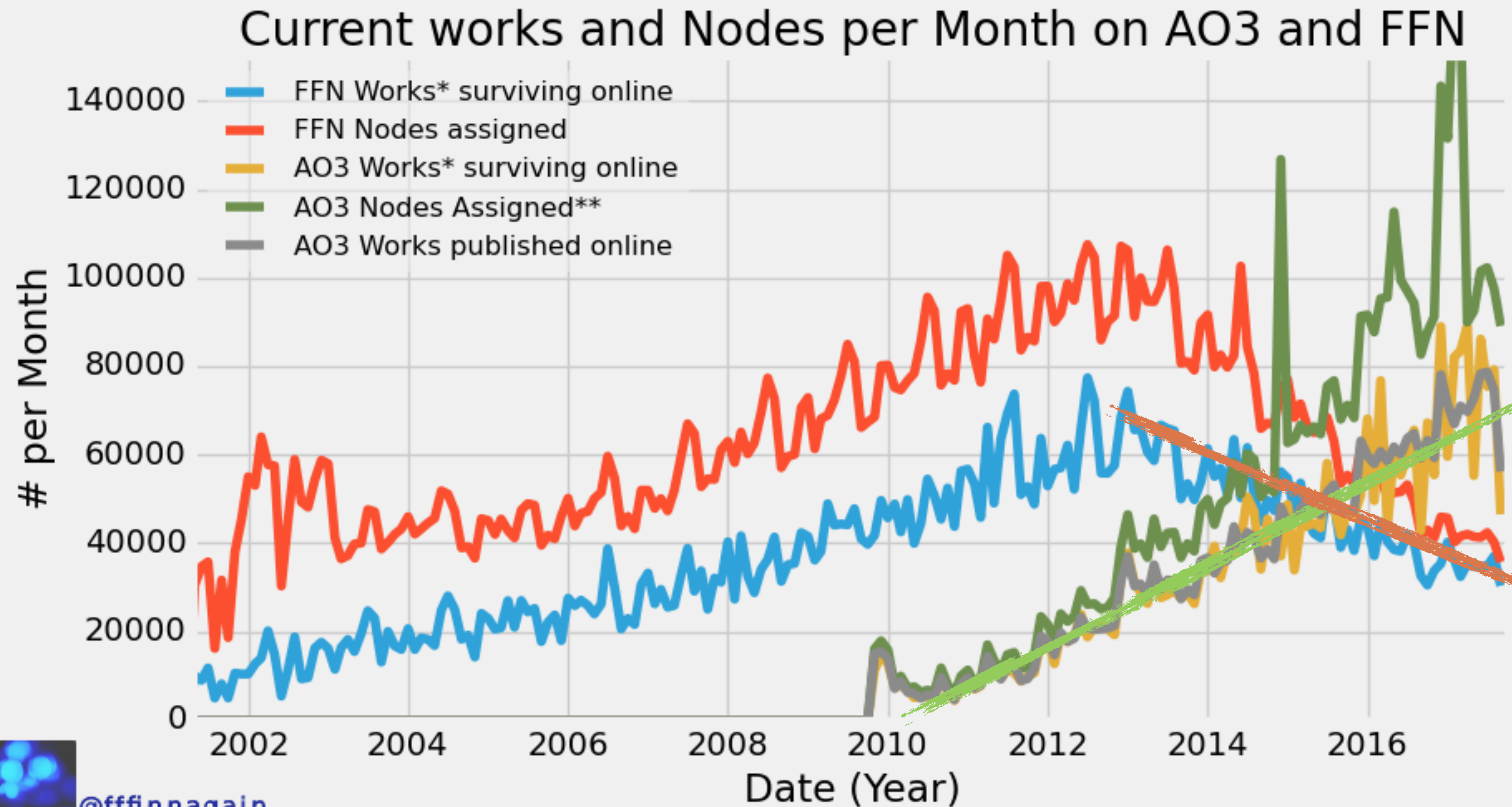
ACCUMULATION OF STORIES



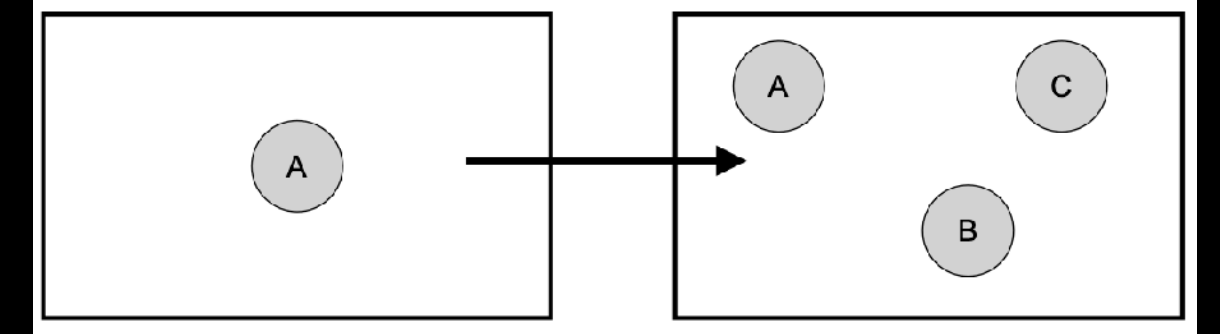
Harry Potter



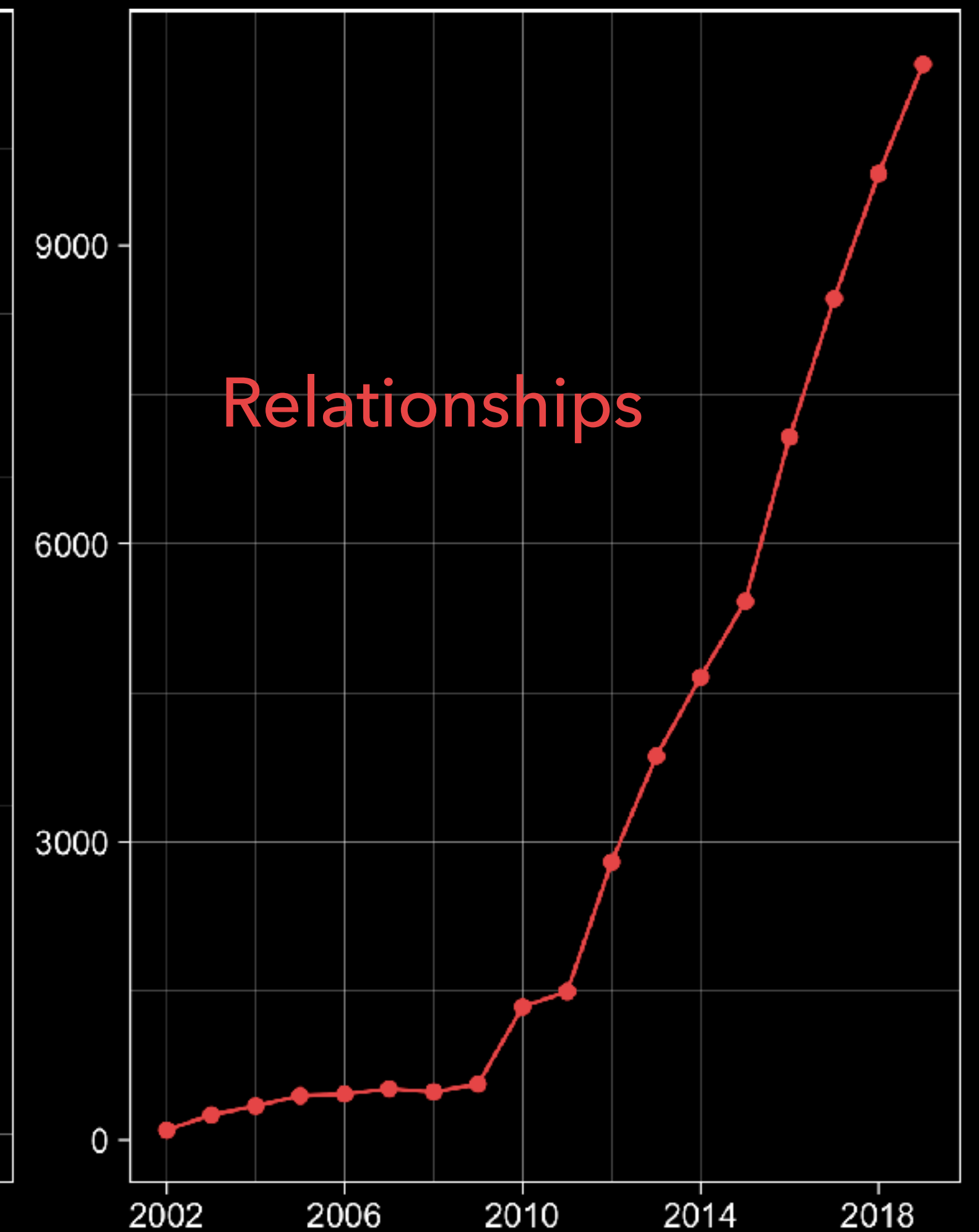
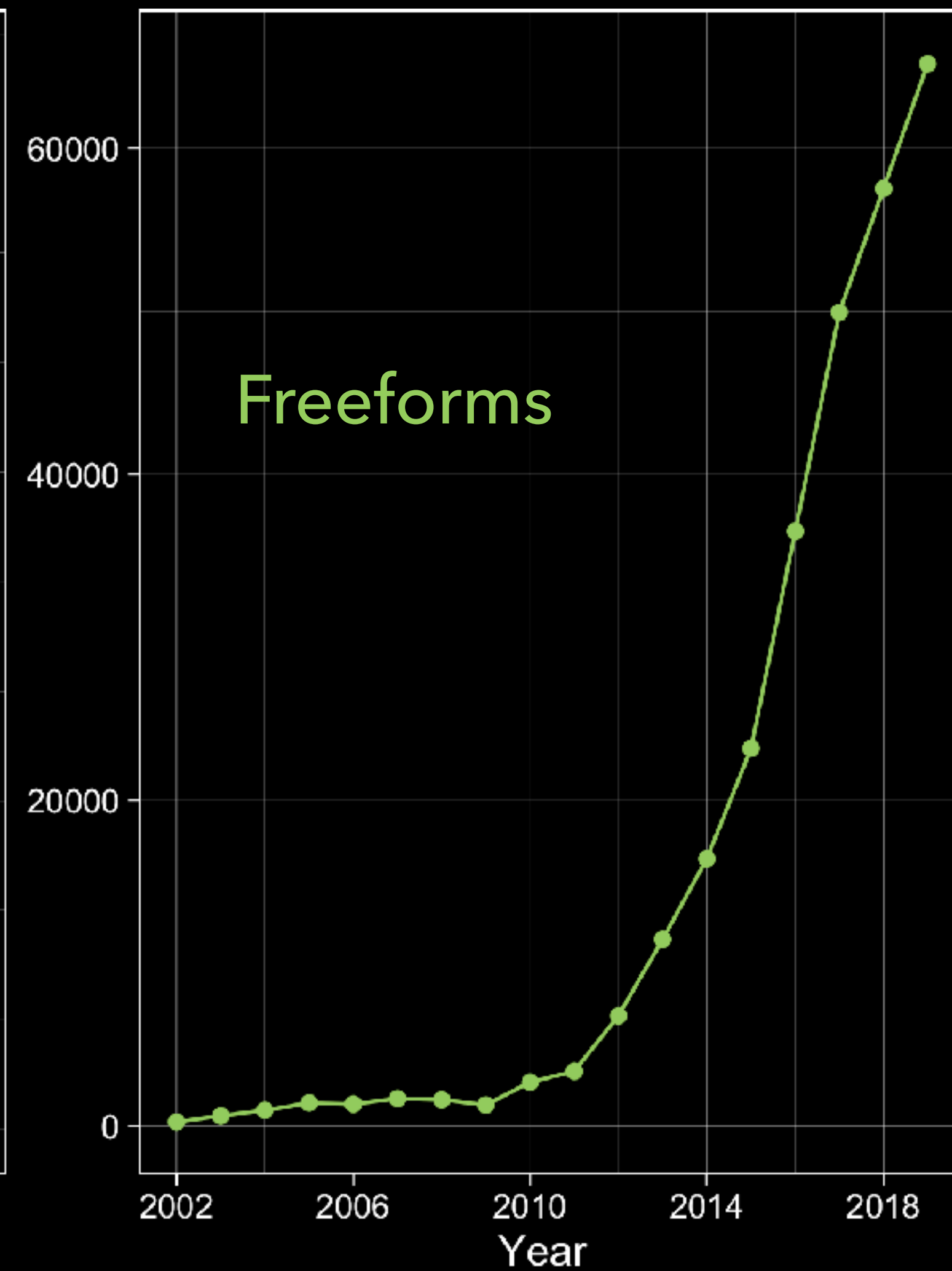
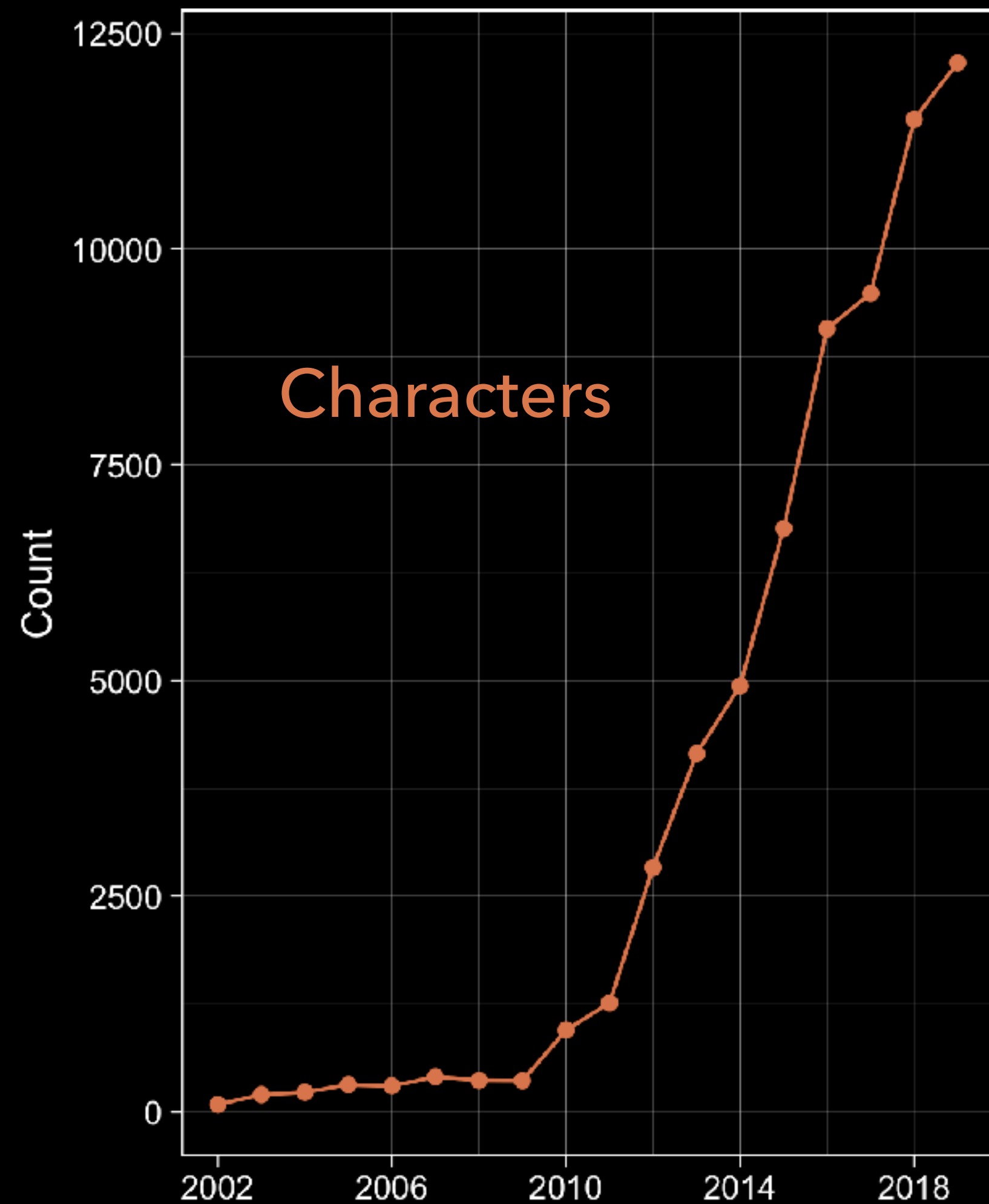
ACCUMULATION OF STORIES: A03 VS. FANFICTION.NET



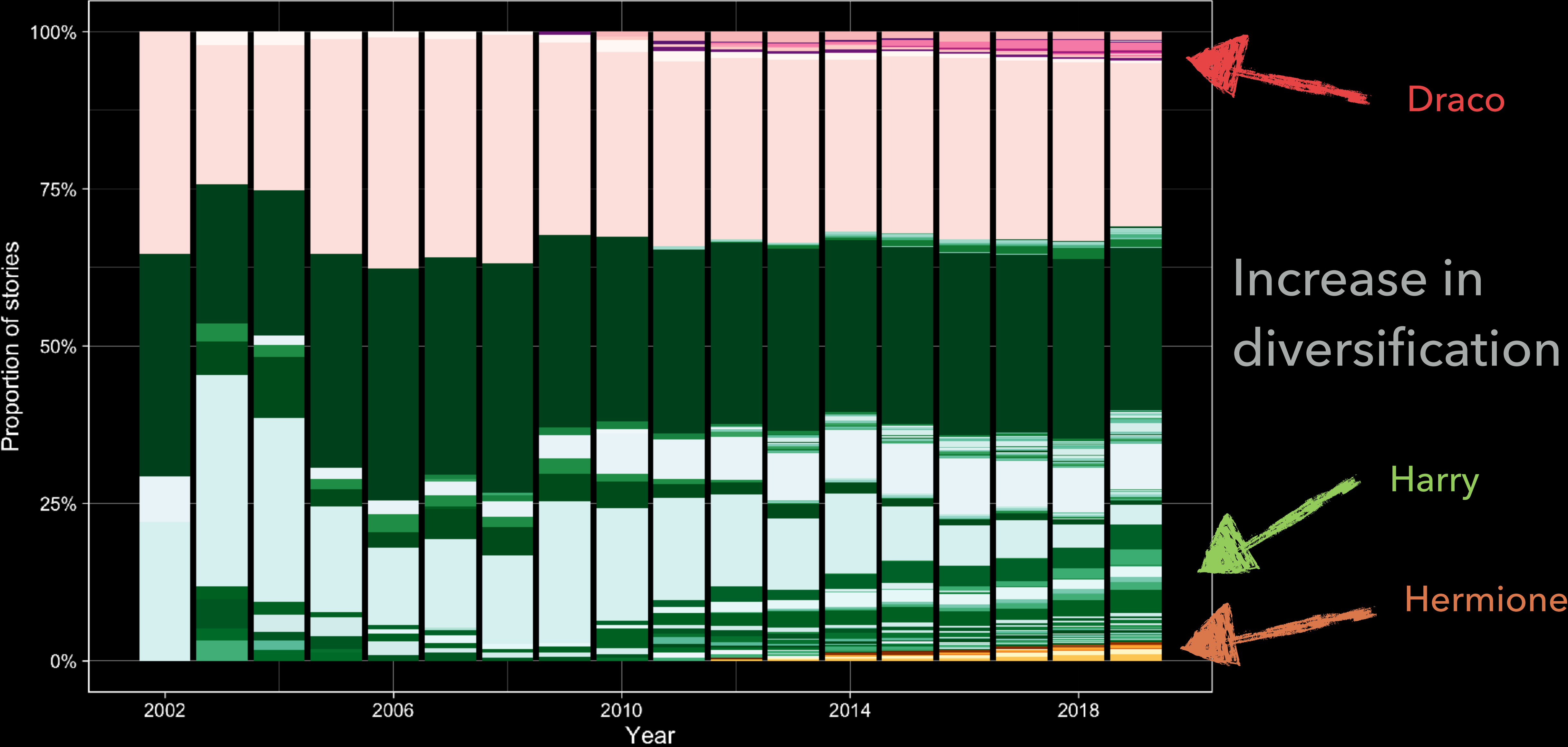
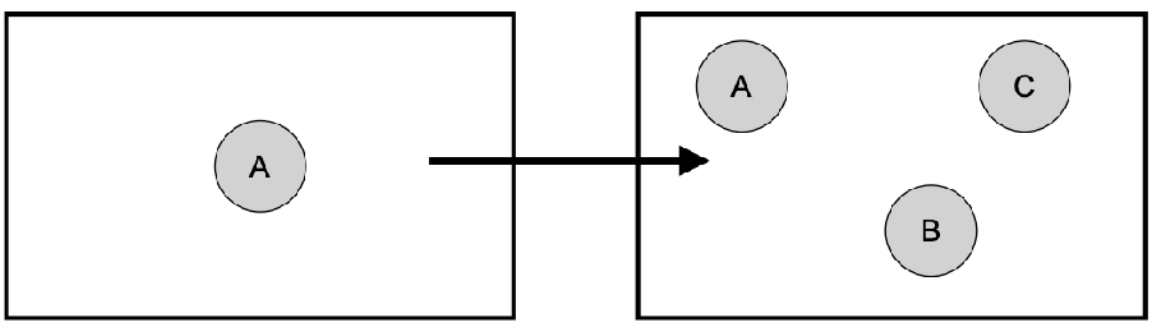
ACCUMULATION OF UNIQUE TAGS



Increase in diversification



ACCUMULATION OF UNIQUE TAGS

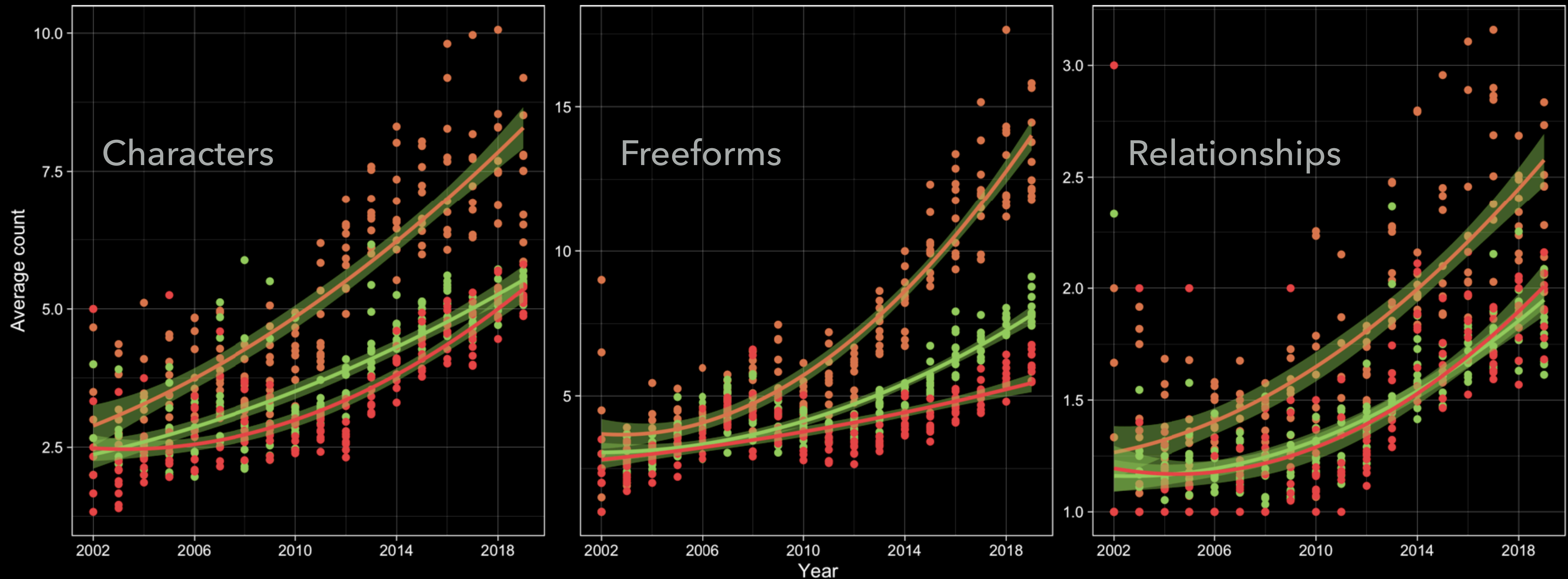


ACCUMULATION IN INDIVIDUAL STORIES

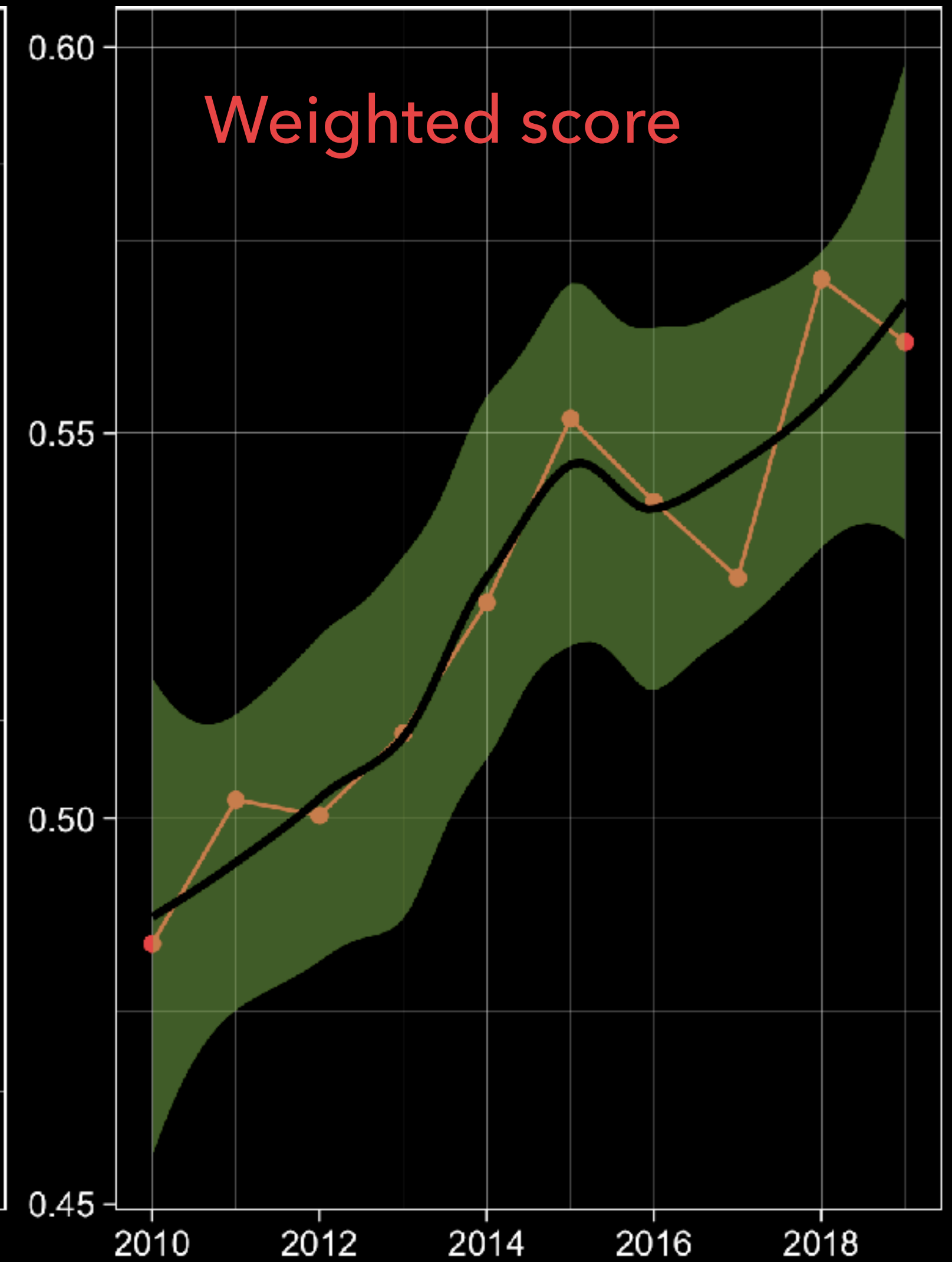
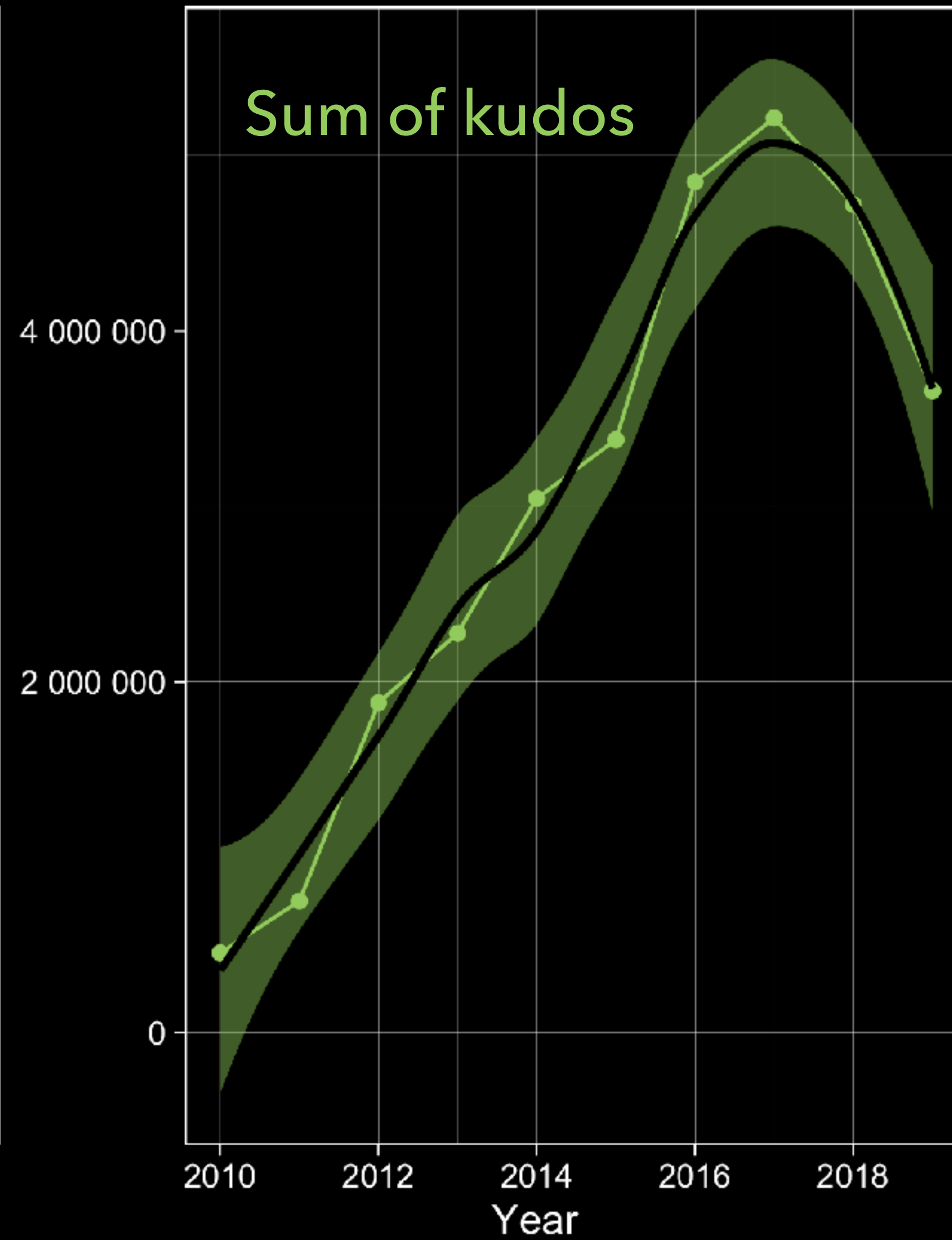
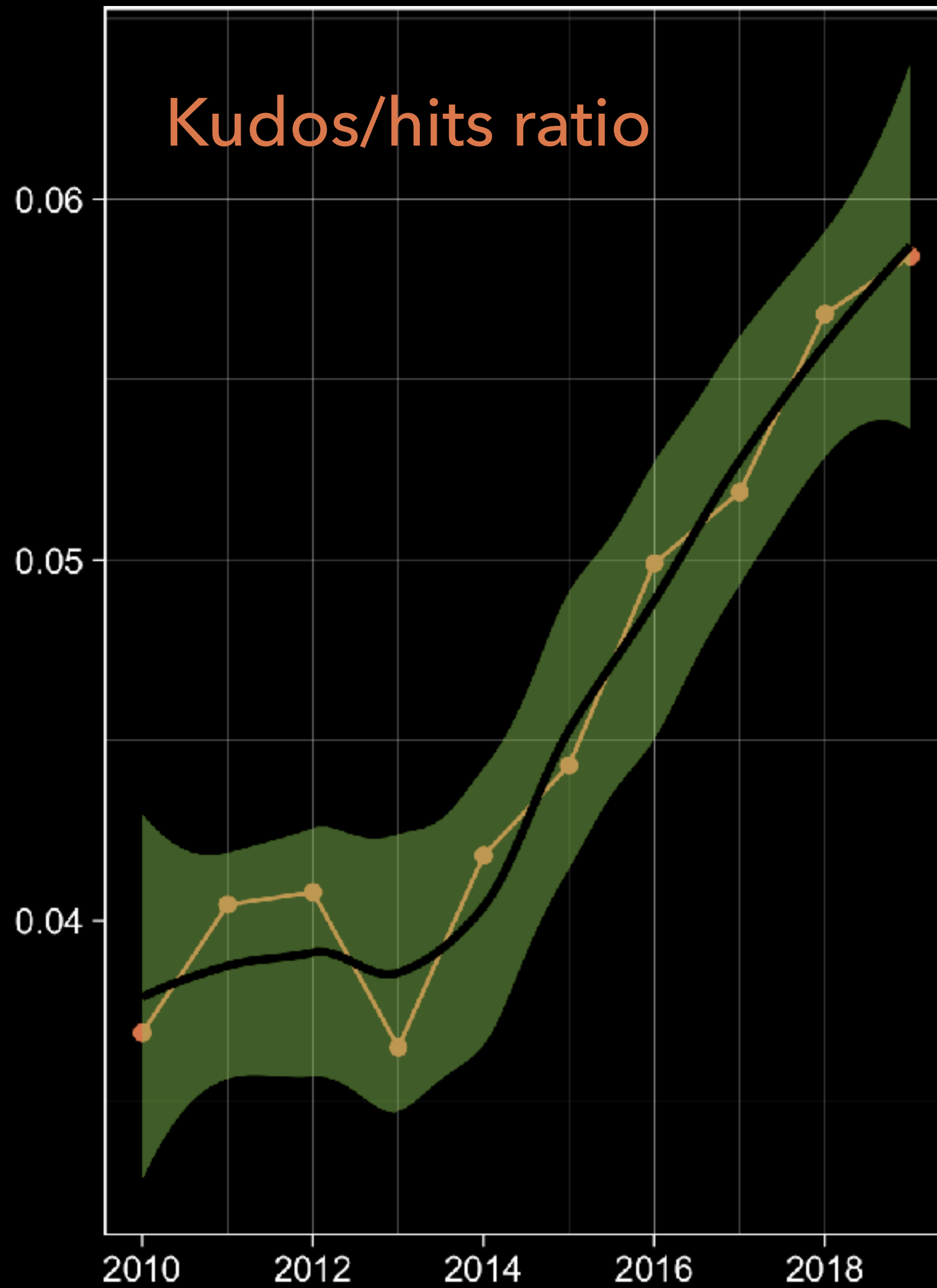
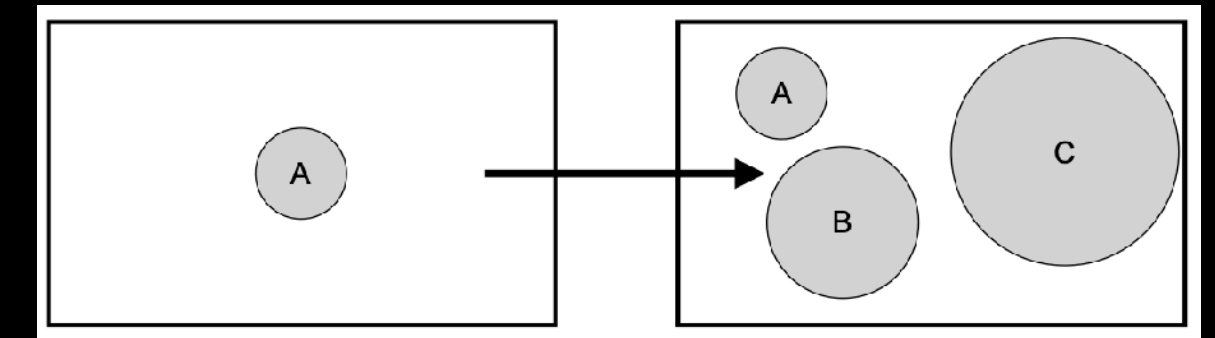
Increase in complexity of stories

Percentiles:

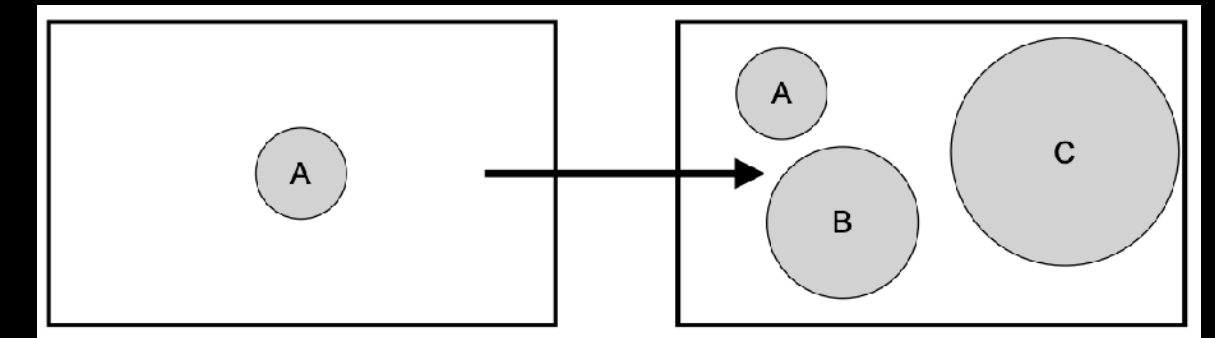
- High kudos (91–100th)
- Mid kudos (46–55th)
- Low kudos (1–10th)



IMPROVEMENT



IMPROVEMENT

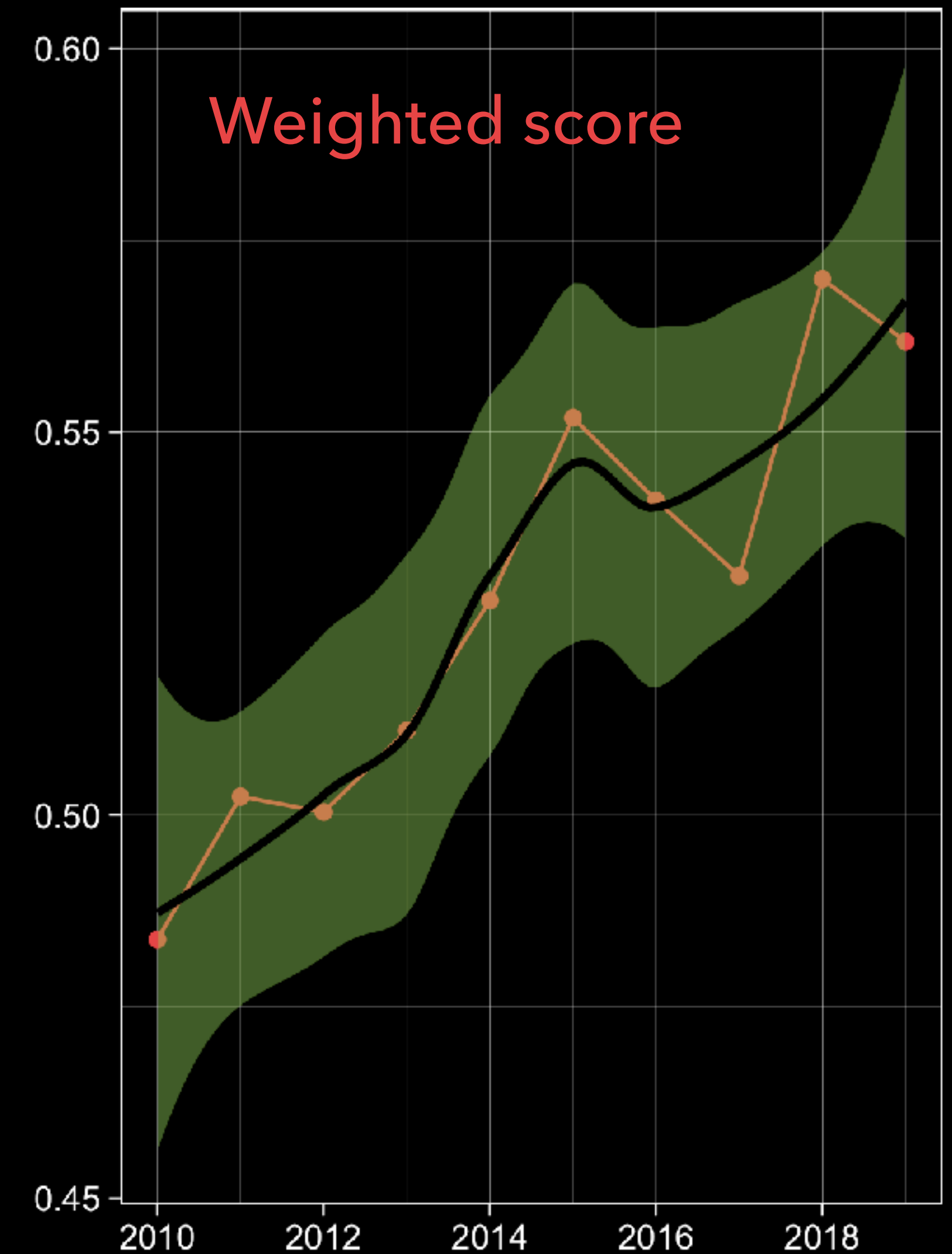


Kudos/hits ratio

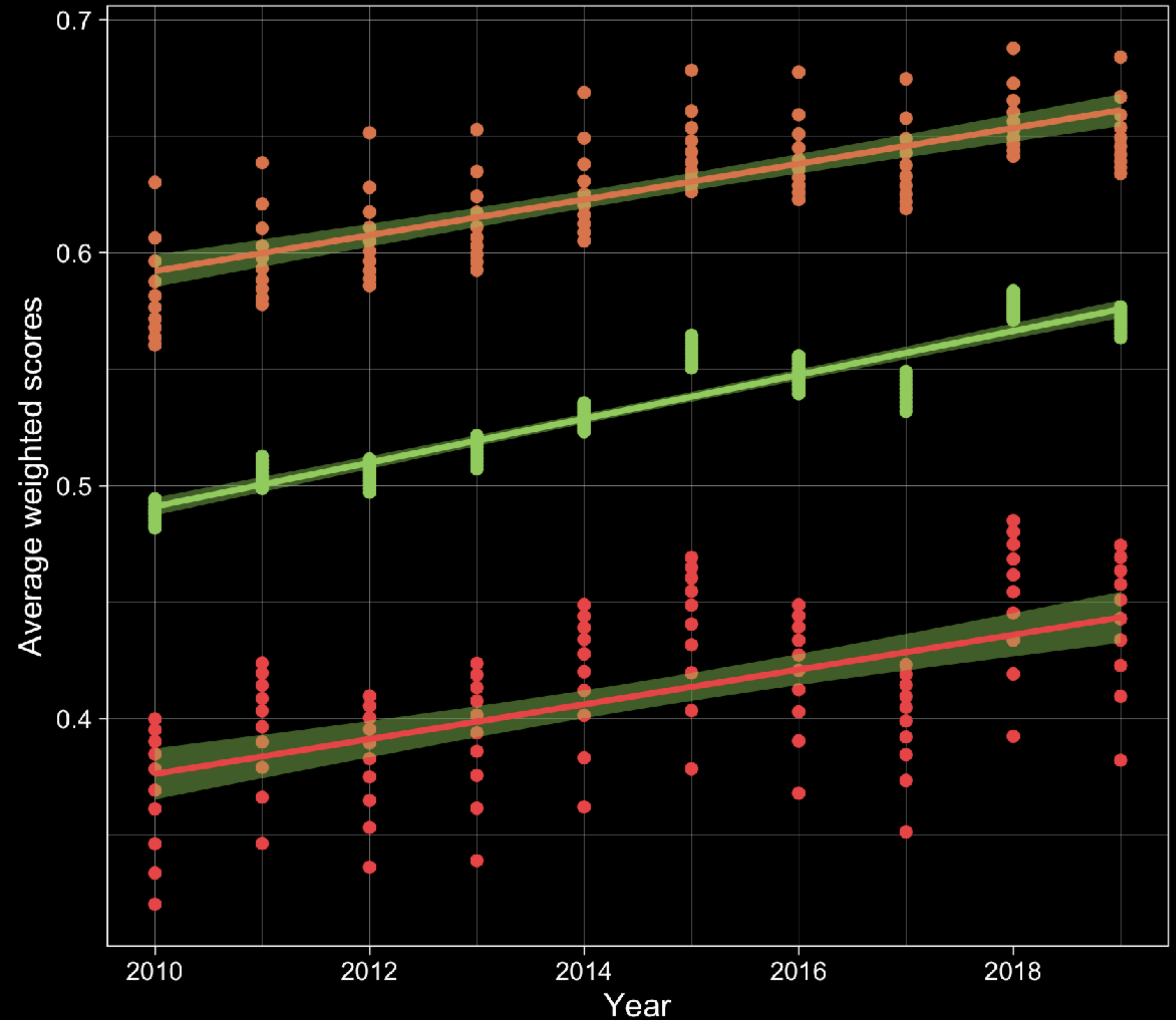
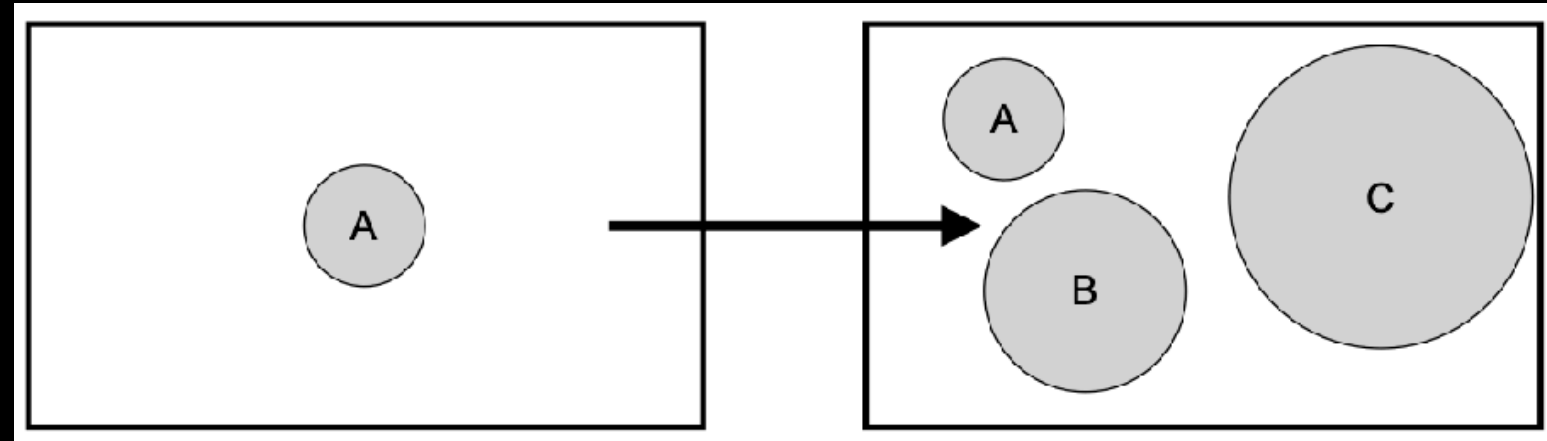
$$S = wK + (1 - w) * K_{avg_year}$$

hits

hits + hits_{avg_year}



IMPROVEMENT



Percentiles:

- High score (91-100th)
- Mid score (46-55th)
- Low score (1-10th)



THANK YOU!

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