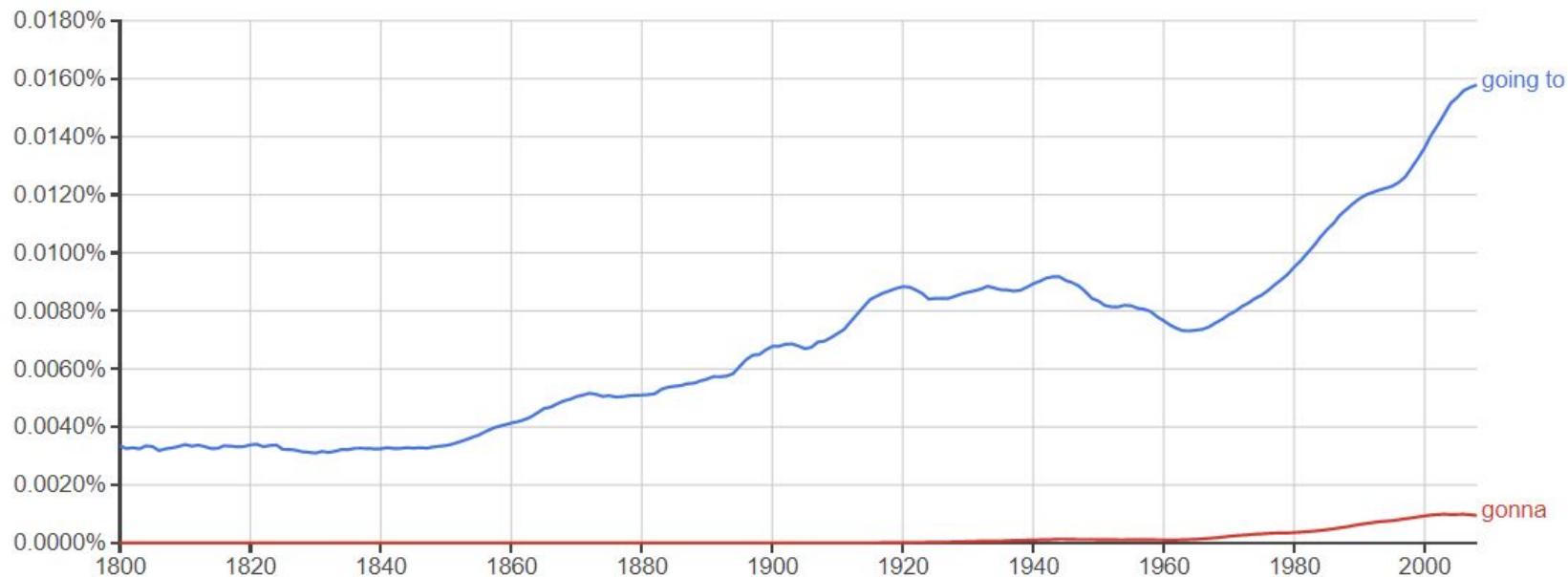


# Macro-patterns of culture

Oleg Sobchuk & Peeter Tinitis

*University of Tartu  
February 7, 2018*

# Google Books Ngram

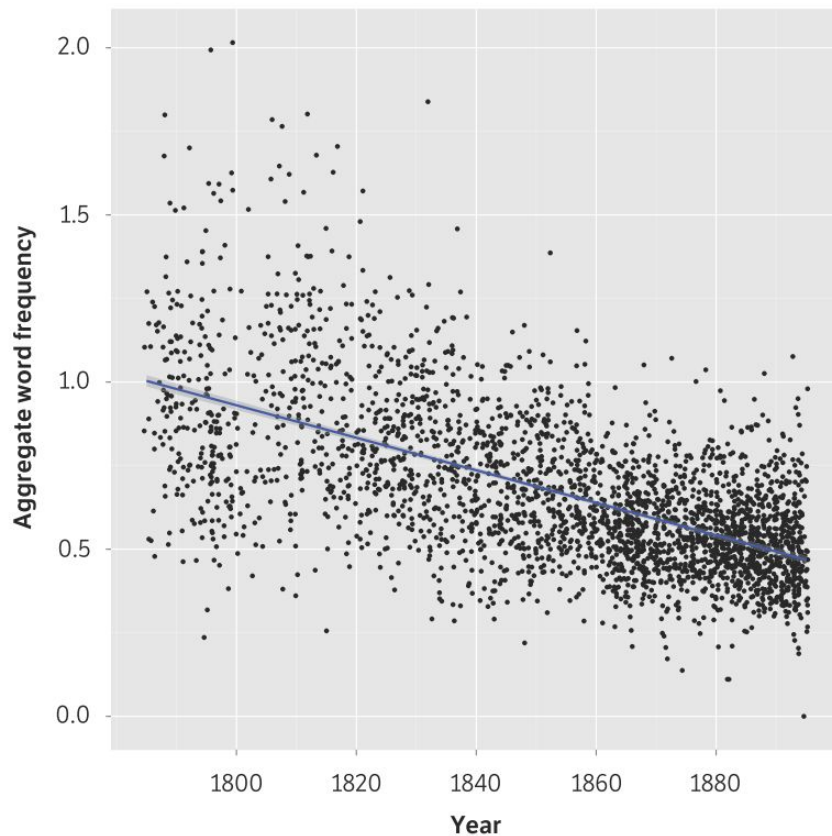


# Google Books Ngram



# Decline of abstract words

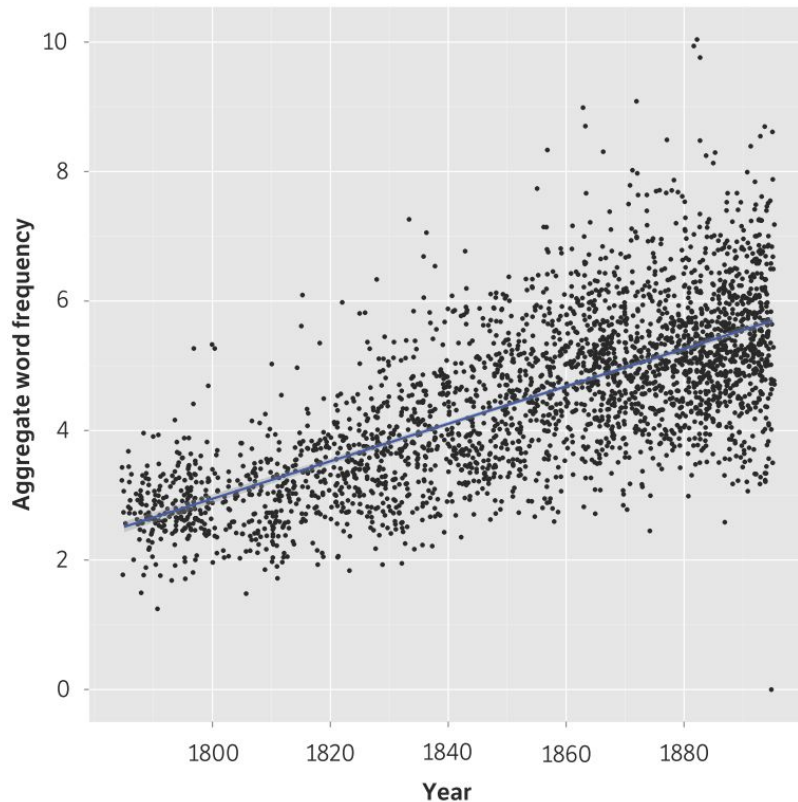
integrity,  
modesty,  
sensibility,  
reason,  
talent,  
conduct,  
elegant,  
ostentation,  
partiality,  
friendship,  
accomplishment,  
character,  
persevere,  
vanity,  
benevolence  
...



**(Heuser & Le-Khac 2012)**

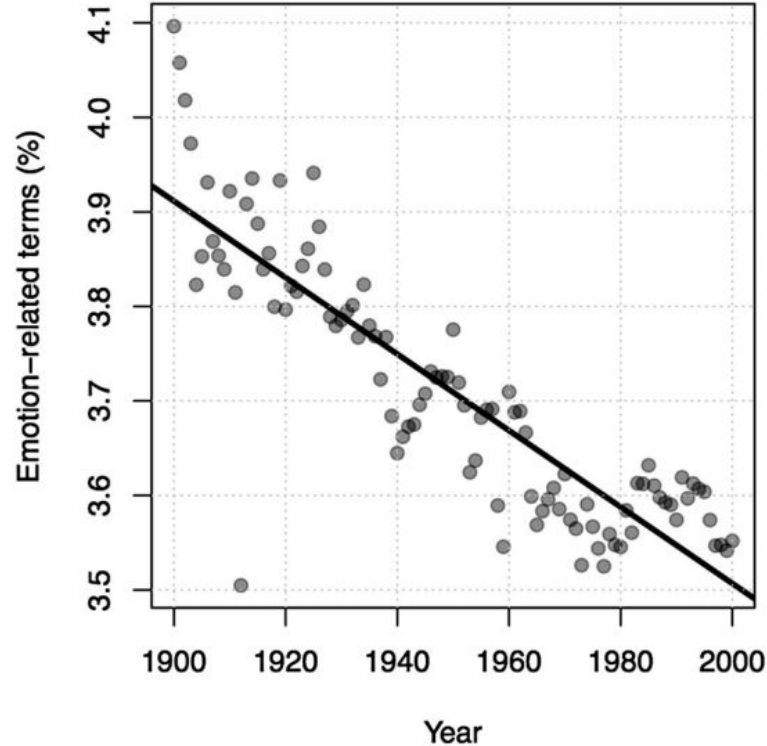
# Rise of “hard seed” words

come,  
go,  
finger,  
face,  
hair,  
fist,  
red,  
brown,  
down,  
back,  
hard,  
flat,  
sharp  
...

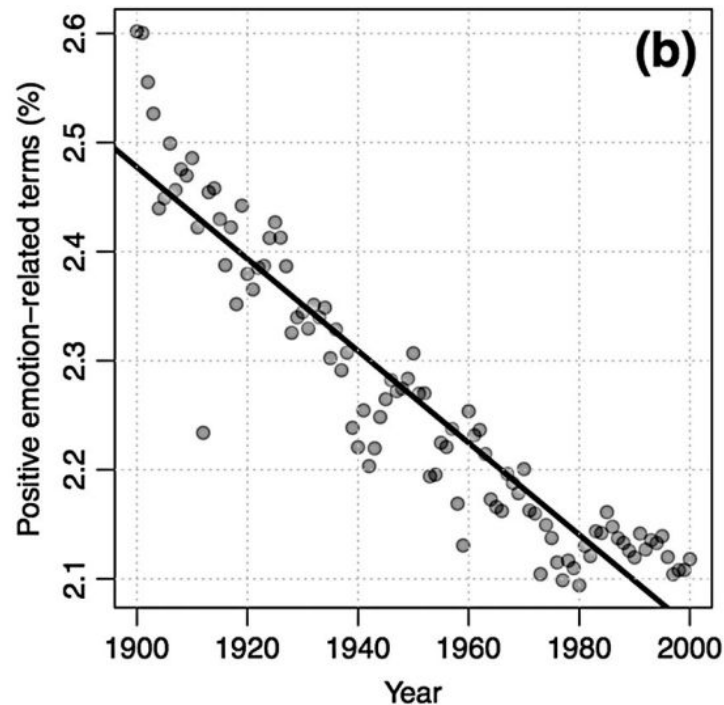
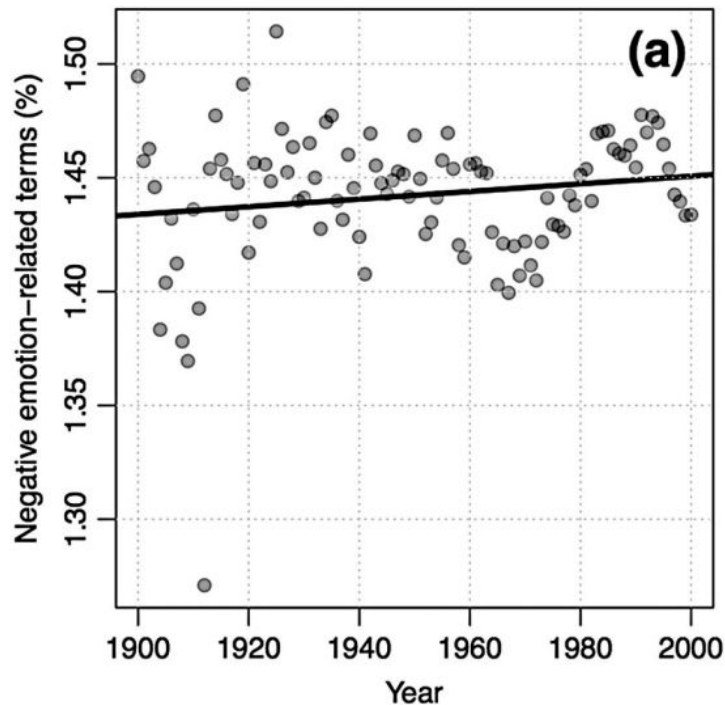


(Heuser & Le-Khac 2012)

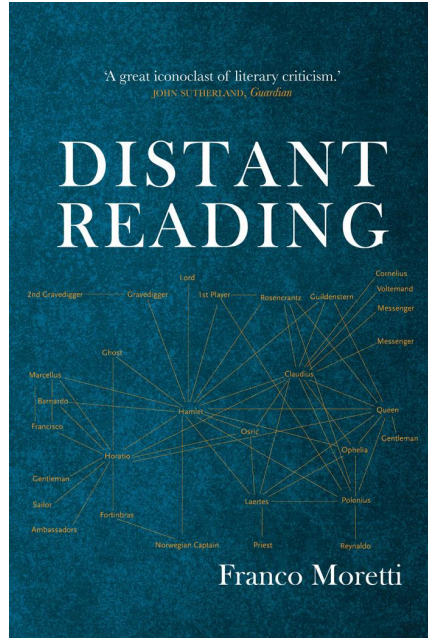
# Birth of the cool...



# A more precise look: **negative** vs. **positive** words



# *Distant Reading* and distant reading



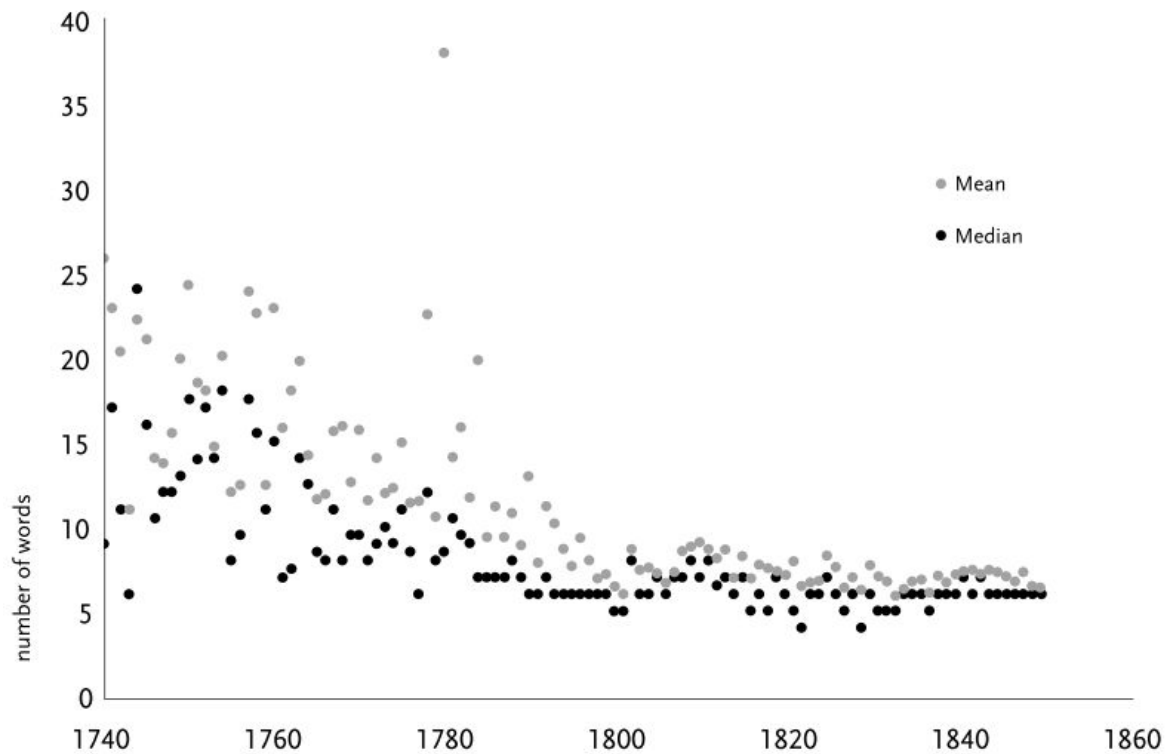
2013



Franco Moretti



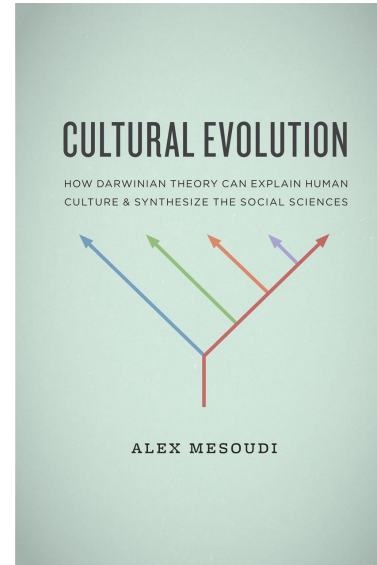
# Length of book titles



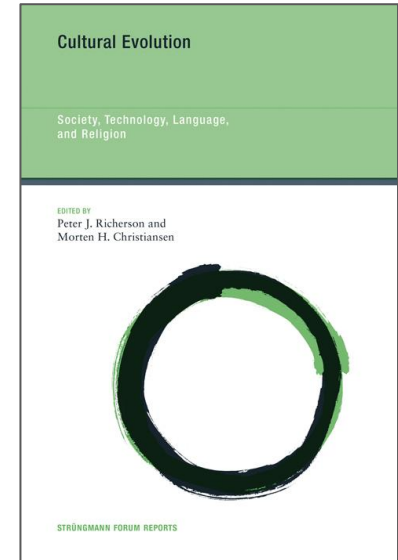
(Moretti 2009)

# Cultural evolution

**Cultural evolution** is a relatively new discipline that studies the development of culture with empirical *methods*, and typically takes Darwinian *theory* of evolution as explanatory framework.



2011

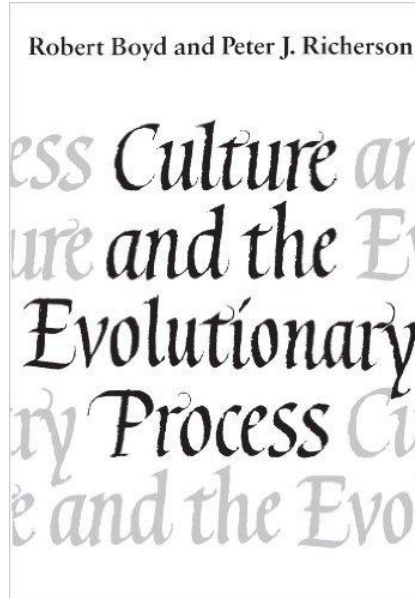


2013

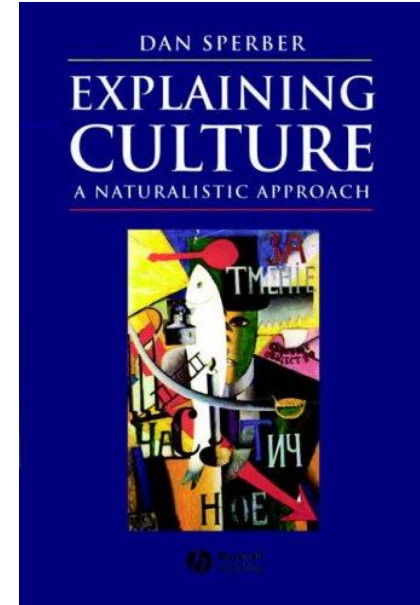
# Founding fathers



1981

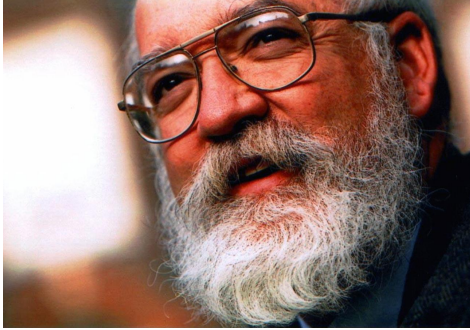


1985

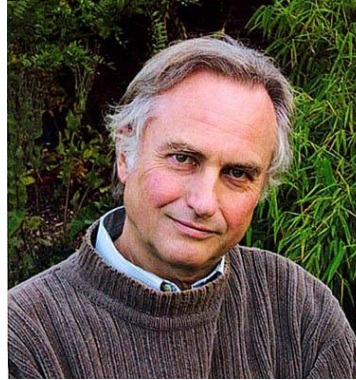


1996

# A bit of name dropping...



Daniel Dennett



Richard Dawkins



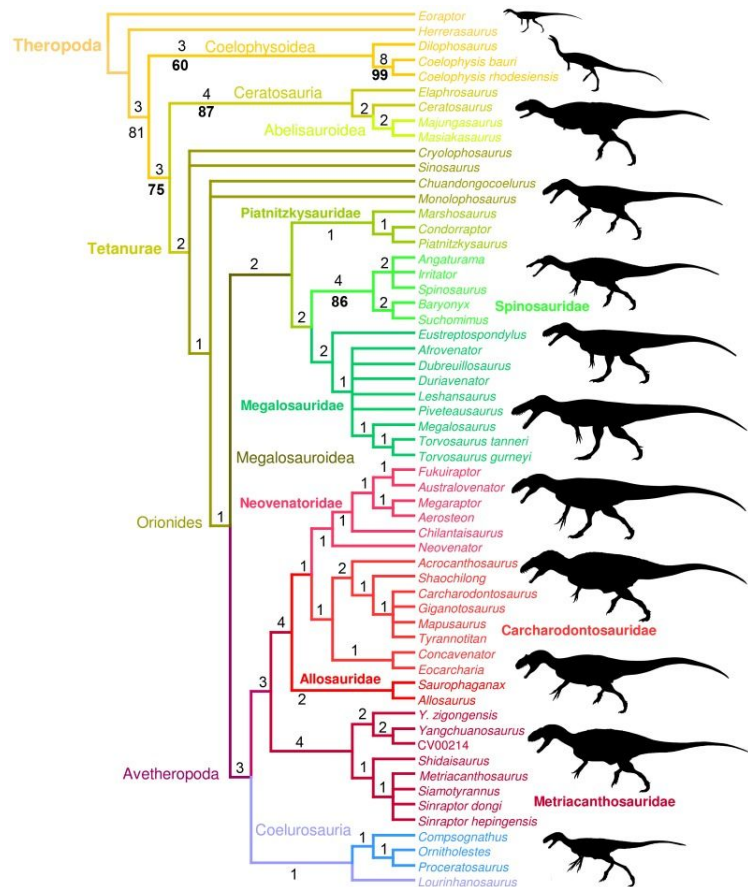
Michael Tomasello



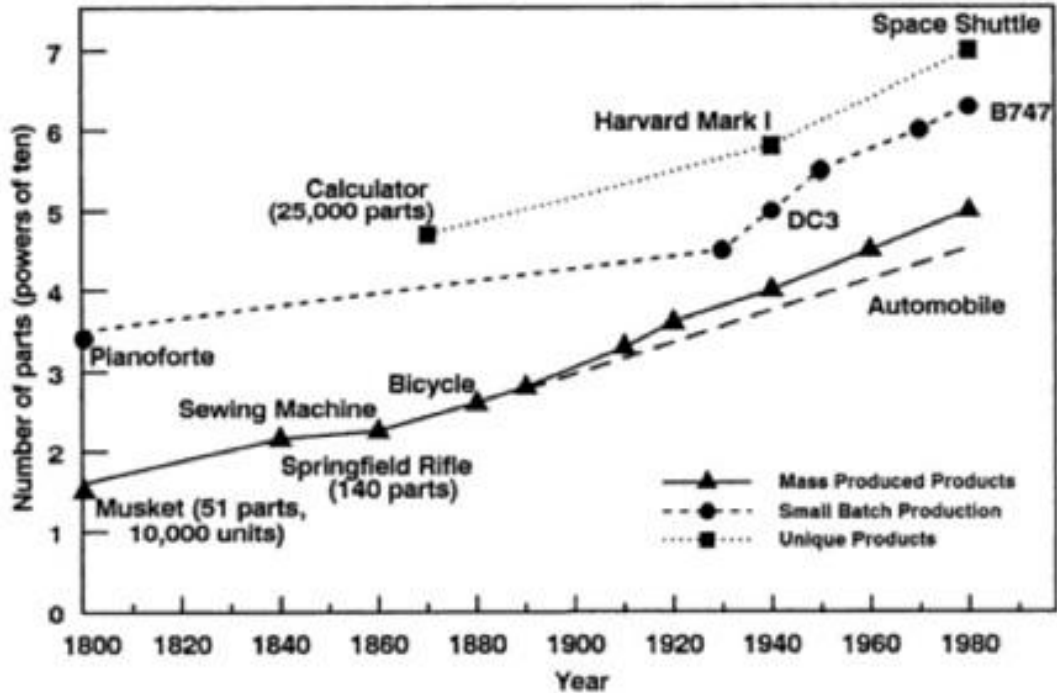
Robin Dunbar



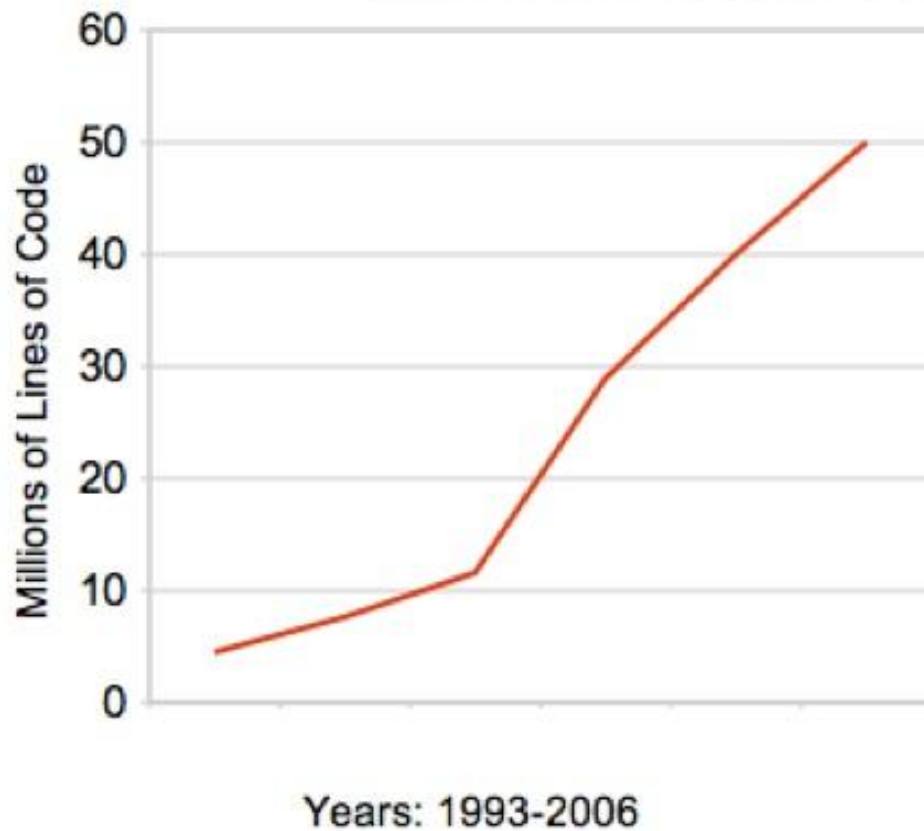
Joel Mokyr



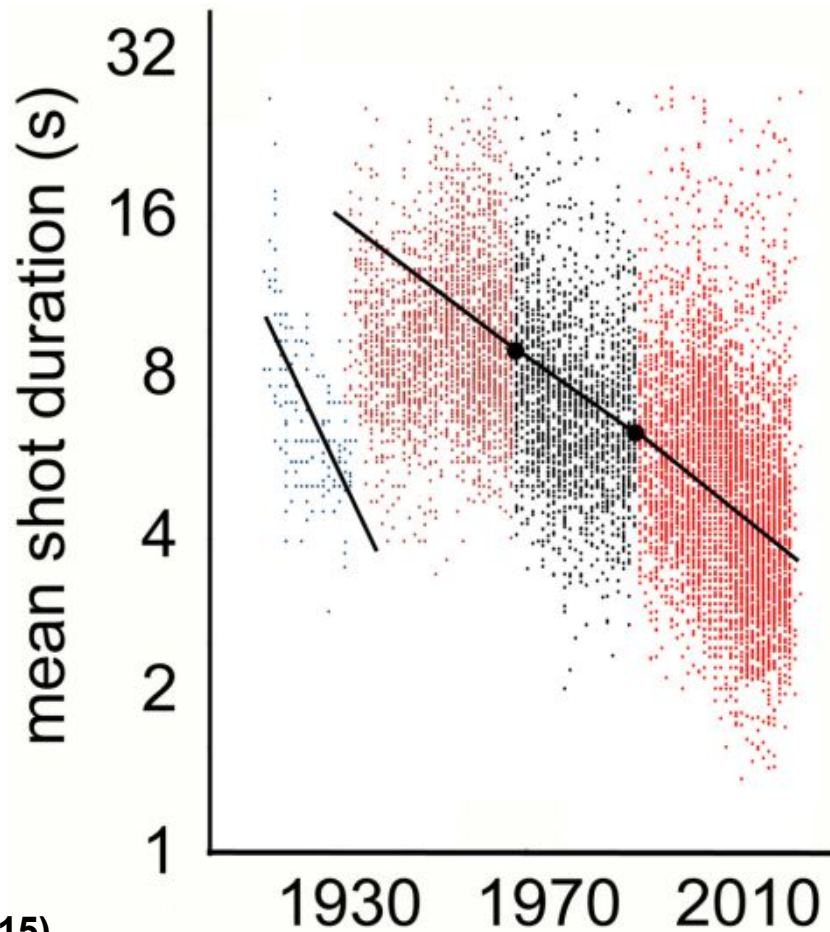
# Culture becomes more complex



## Lines of Code in Windows



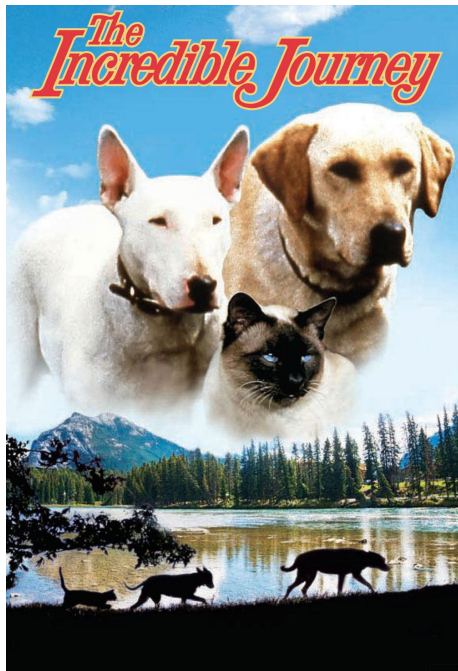
# Attention bias



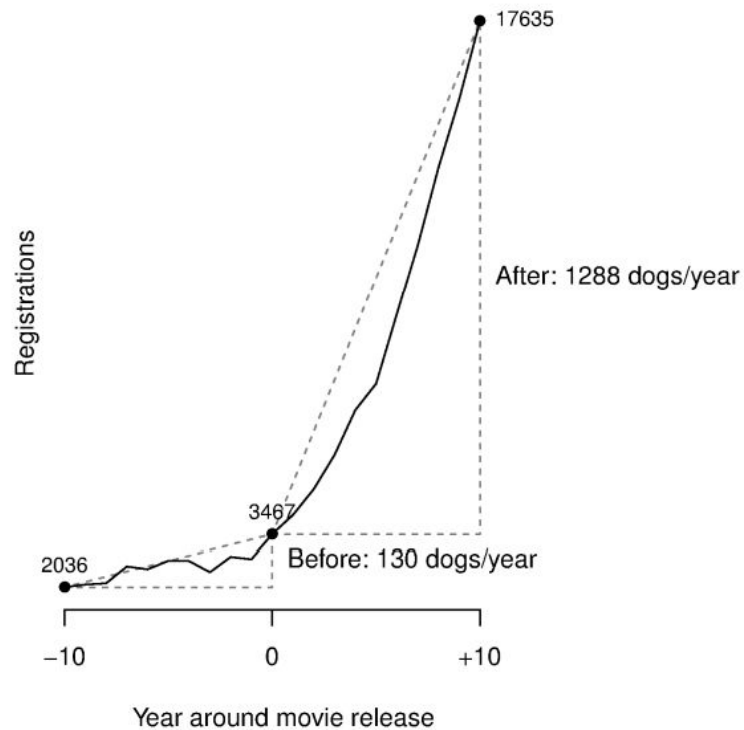
(Cutting & Candan 2015)



# Prestige bias



1963



(Ghirlanda et al. 2014)