Storytellers
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Memory & Turbulence
Emotional Arcs
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References

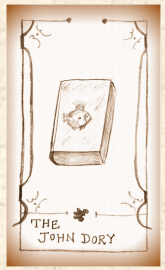
What's the Story?

Last updated: 2020/09/12, 12:45:25 EDT

Principles of Complex Systems, Vol. 1 | @pocsvox
CSYS/MATH 300, Fall, 2020

Prof. Peter Sheridan Dodds | @peterdodds

Computational Story Lab | Vermont Complex Systems Center
Vermont Advanced Computing Core | University of Vermont



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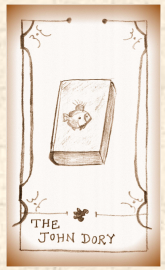

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Special Guest Executive Producer

On Instagram at pratchett_the_cat

Outline

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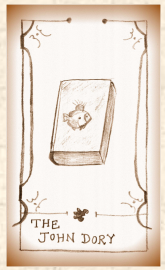

Story editor:

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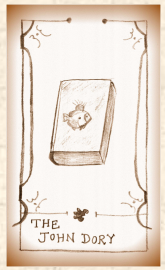
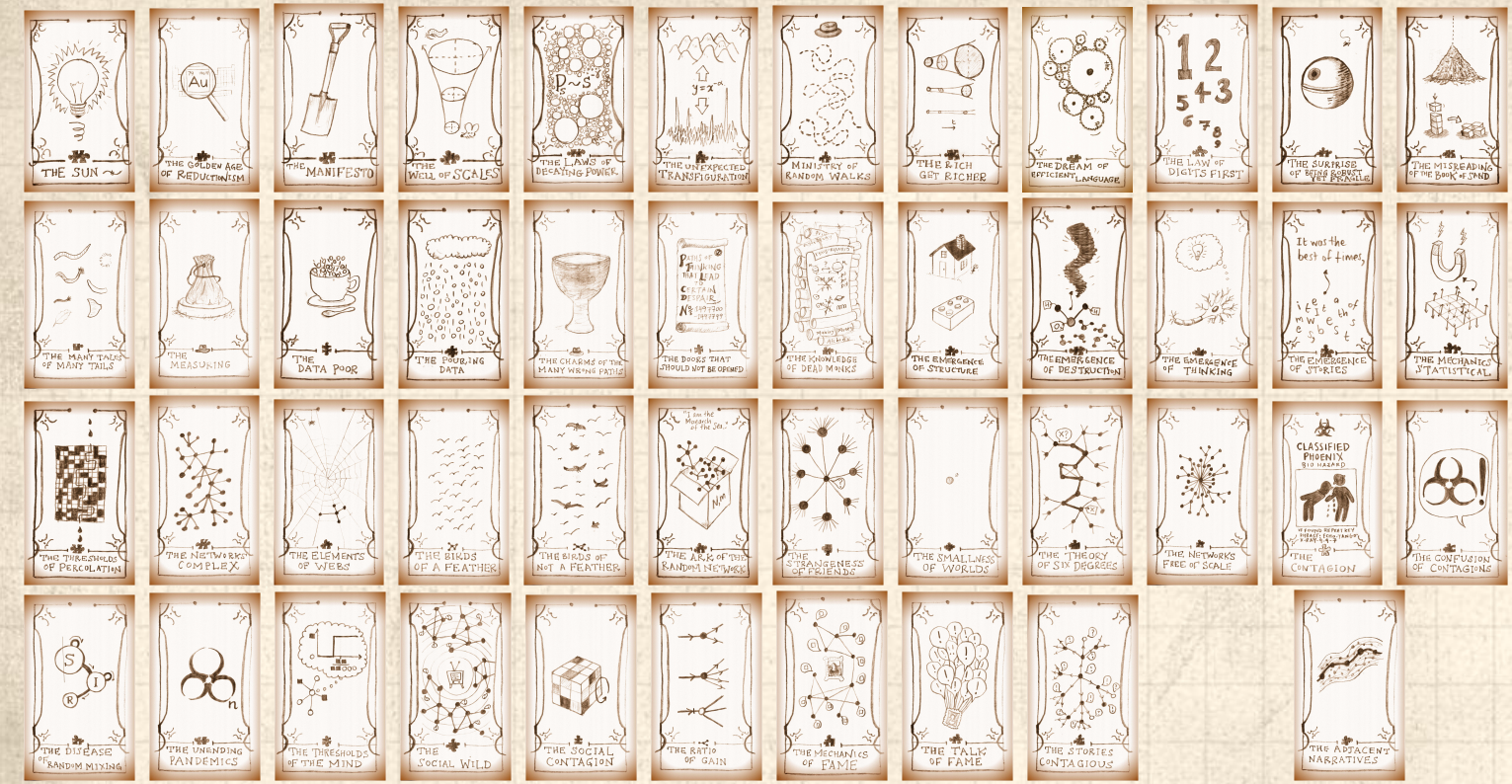
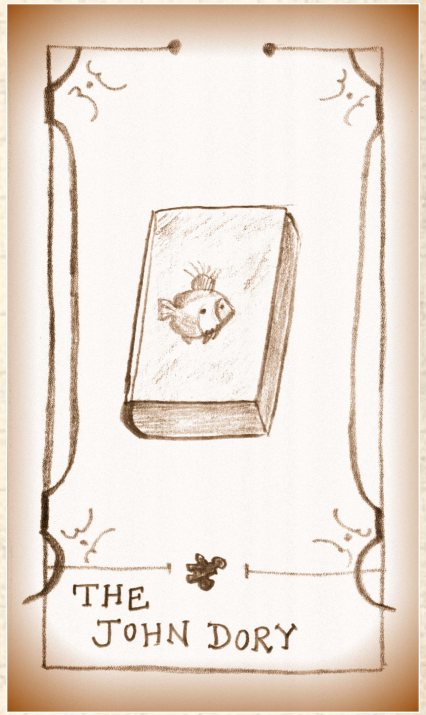



THE SUN
THE GOLDEN AGE OF REDUCTIONISM
THE MANIFESTO
THE WELL OF SCALES
THE LAWS OF DECAYING POWER
THE UNEXPECTED TRANSFIGURATION
MINISTRY OF RANDOM WALKS
THE RICH GET RICHER
THE DREAM OF EFFICIENT LANGUAGE
THE LAW OF DIGITS FIRST
THE SURPRISE OF BEING BORROWED AND BLUE
THE MISREADING OF THE BOOK OF SAND
THE MANY TALES OF MANY TAILS
THE MEASURING
THE DATA POOR
THE POOLING DATA
THE CHARMS OF THE MANY VIRING PATHS
THE BOOKS THAT SHOULD NOT BE OPENED
THE KNOWLEDGE OF DEAD MANKS
THE EMERGENCE OF STRUCTURE
THE EMERGENCE OF DESTRUCTION
THE EMERGENCE OF THINKING
It was the best of times,
THE EMERGENCE OF STORIES
THE MECHANICS STATISTICAL
THE THRESHOLDS OF PERCOLATION
THE NETWORKS COMPLEX
THE ELEMENTS OF WEBS
THE BIRDS OF A FEATHER
THE BIRDS OF NOT A FEATHER
THE ARK OF THE RANDOM NETWORK
THE STRANGENESS OF FRIENDS
THE SMALLNESS OF WORLDS
THE THEORY OF SIX DEGREES
THE NETWORKS FREE OF SCALE
CLASSIFIED PHOENIX BIO HAZARD
THE CONTAGION
THE CONFUSION OF CONTAGIONS
THE DISEASE OF RANDOM MIXING
THE UNENDING PANDEMICS
THE THRESHOLDS OF THE MIND
THE SOCIAL WILD
THE SOCIAL CONTAGION
THE RATIO OF GAIN
THE MECHANICS OF FAME
THE TALK OF FAME
THE STORIES CONTAGIOUS
THE ADJACENT NARRATIVES


THE JOHN DORY

THE STORYTELLERS
THE FATED CENTRAL PATH
THE PATHS OF UNIVERSALITY
THE DEPENDENT PATHS
THE TROUBLES OF BIFURCATING REALITIES
THE UNKNOWN MECHANISM
THE LANDSCAPE OF FORKING PATHS
THE NETWORKS OF BLOOD
THE TREES OF REALITY
THE ORDERS OF STREAMS
THE LAWS OF BRANCHING
THE SCALING OF BROKEN HIERARCHIES
THE BRAID OR THE BRANCH
THE LAW OF OPTIMAL FORKS
THE CHURCH OF QUARTEROLOGY
THE TRUTHICIDE
THE FAMILY OF PANCAKE COWS
THE FAMILY OF SPHERICAL COWS
THE IMPROBABLE PACHYDERM
THE ILL-SCALING OF ALLOMETRIC BODIES
THE SUPPLY MOST FAIR
THE SUPPLY TO THE MOST
THE DARK ART OF GENERATING FUNCTIONS
THE RANDOM SUM OF RANDOMNESS
THE TWO-SIDED WORLDS
THE STORIES AND THE TROPES
THE TRUTH OF DIFFUSION
THE UNVEILING OF HIDDEN POWERS
THE SCRYING FOR THE SHAPES OF THINGS
THE LIMITS OF ORGANIZATIONS
THE OVERCOMING OF CATASTROPHE
THE TROUBLES ILL-FORMED
THE NETWORKS OF MANY ILKS
THE CHAOS OF FETTERED CONTAGION
THE END

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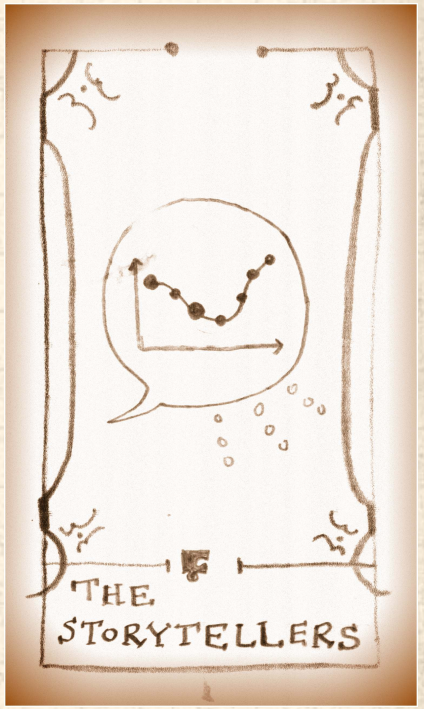
THE STORYTELLERS

Super Survival of the Stories:

The Desirability of Storytellers, The Atlantic, Ed Yong, 2017-12-05.

- Study of Agta, Filipino hunter-gatherers.
- Storytelling valued well above all other skills including hunting.
- Stories encode prosocial norms such as cooperation.
- Like the best stories, the best storytellers reproduce more successfully.

Major competing storytelling entities:

- News.
- Books, magazines.
- Art.
- Music industry.
- Television, movie studios, Netflix, HBO, Disney.
- Social media: Facebook, Instagram, Snapchat, ...
- All sport.
- Video games.
- Religions, ideologies, belief systems, Freemasons, ...
- Enduring coherent groups: Cultures, countries, cities, ...

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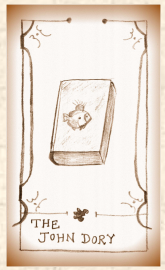

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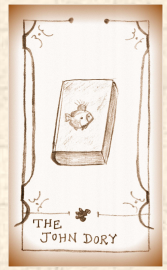
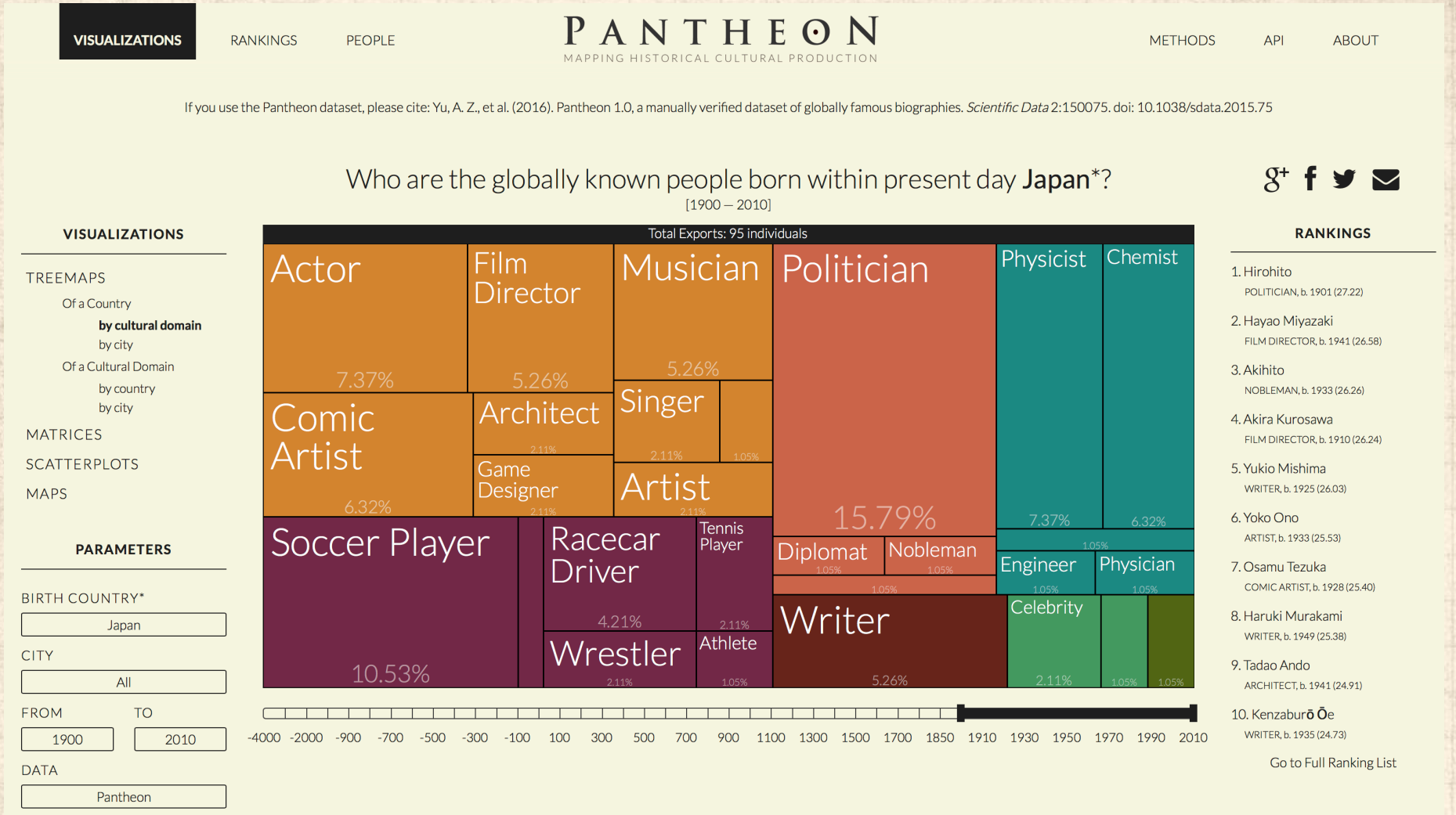


Cultural products from Pantheon:

- Writers, artists, movie directors, video game directors.

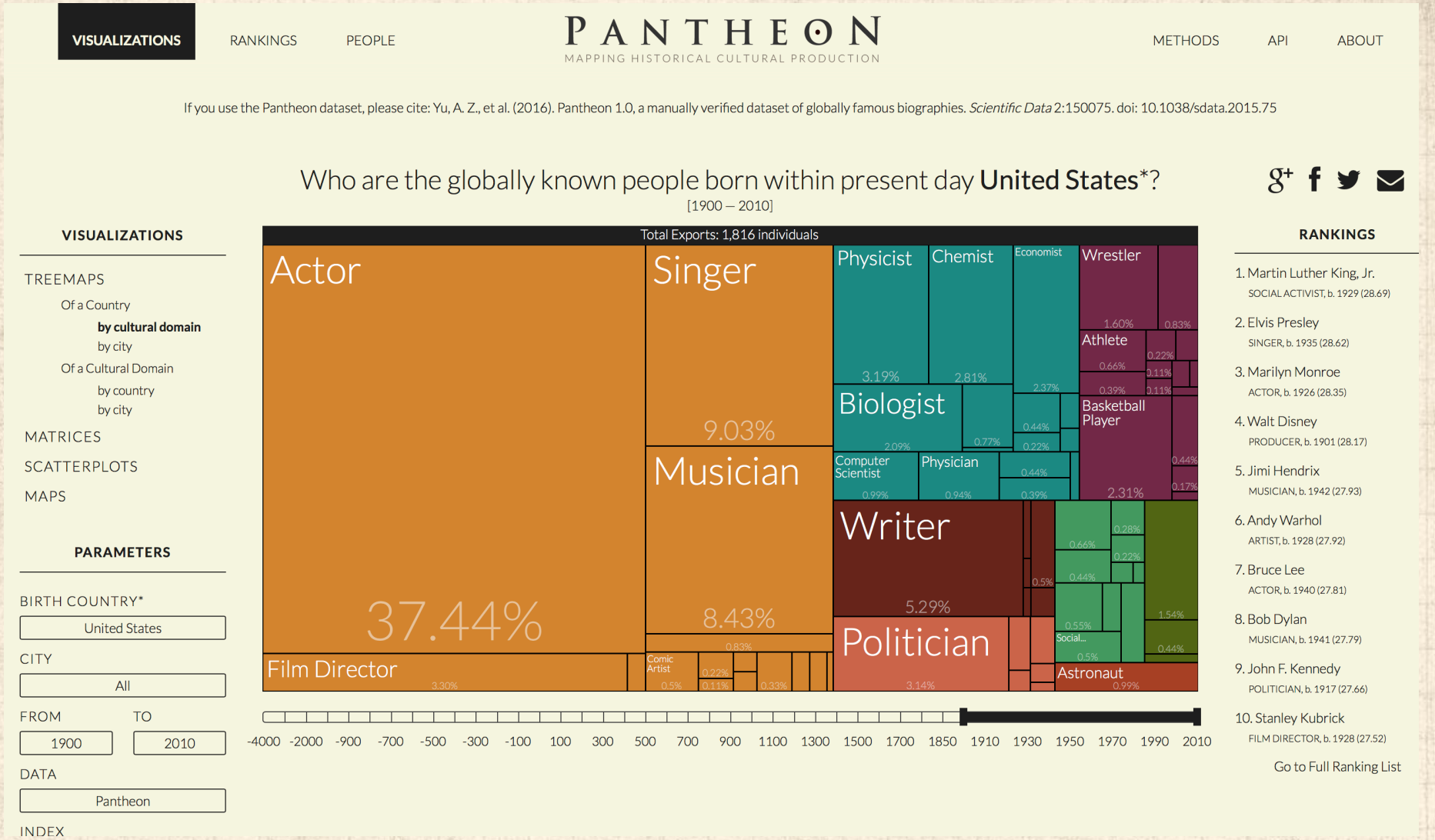
The famous are storytellers—Japan:



For people born 1950–

http://pantheon.media.mit.edu/treemap/country_exports/JP/all/1900/2010/H15/pantheon

The famous are storytellers—United States:



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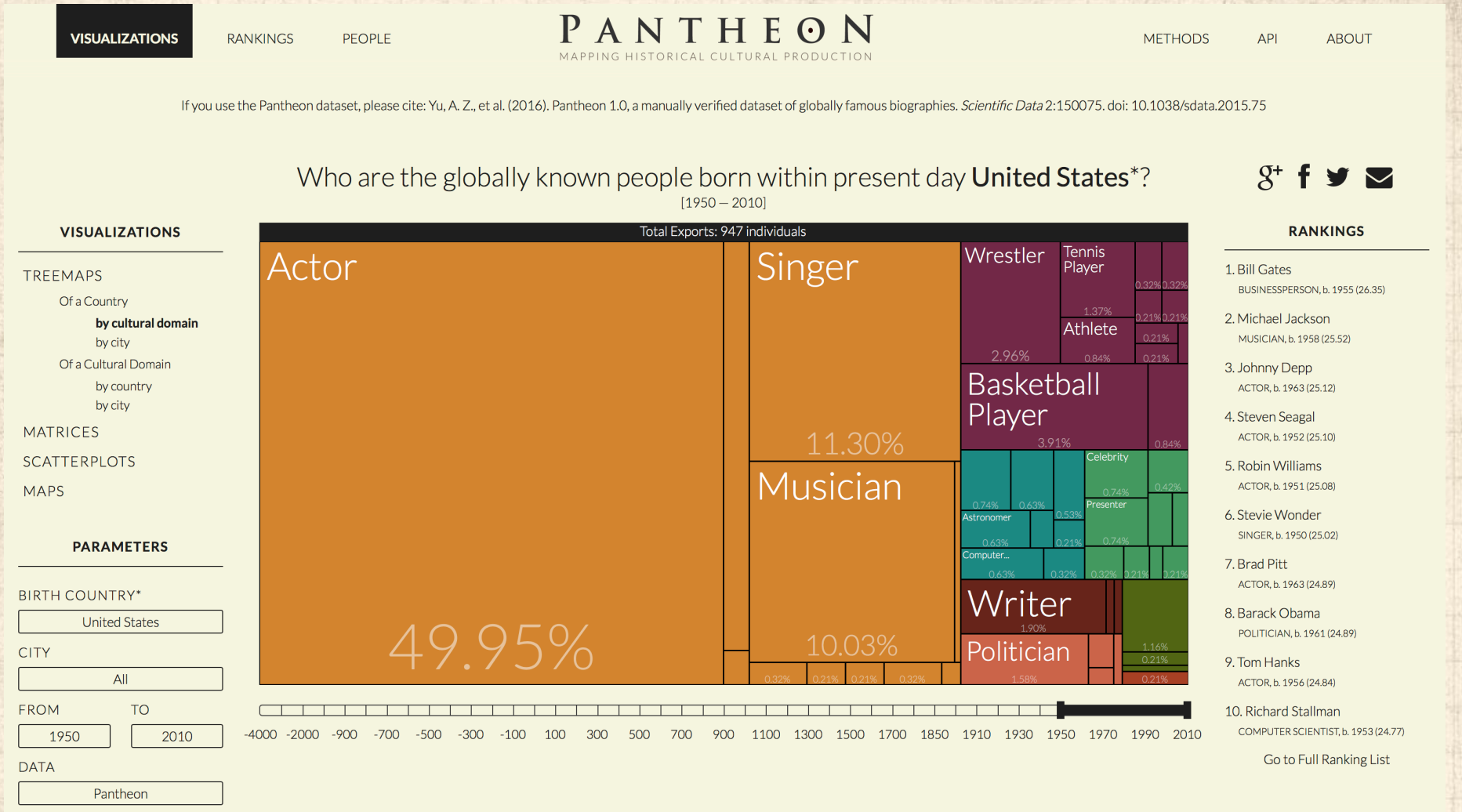

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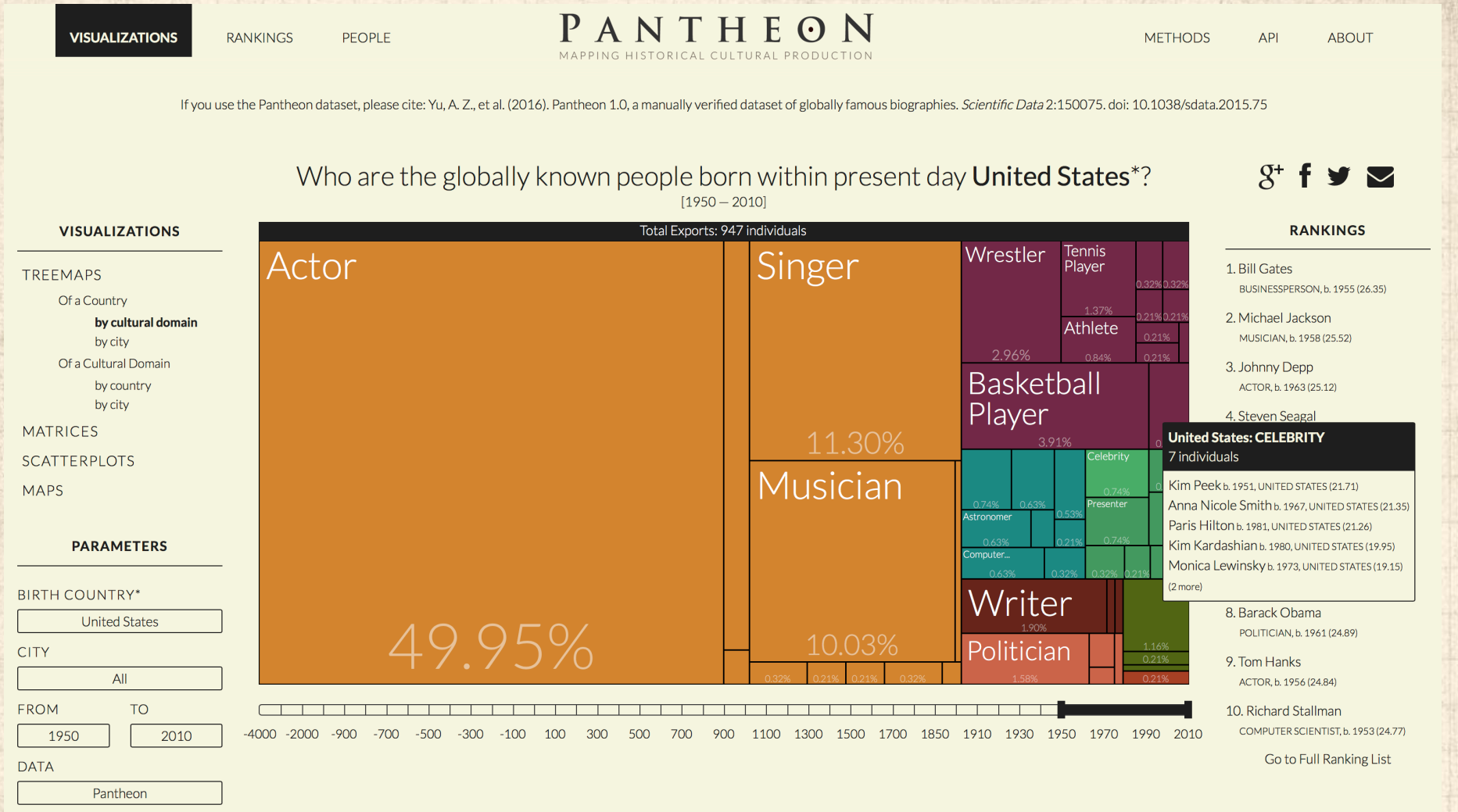

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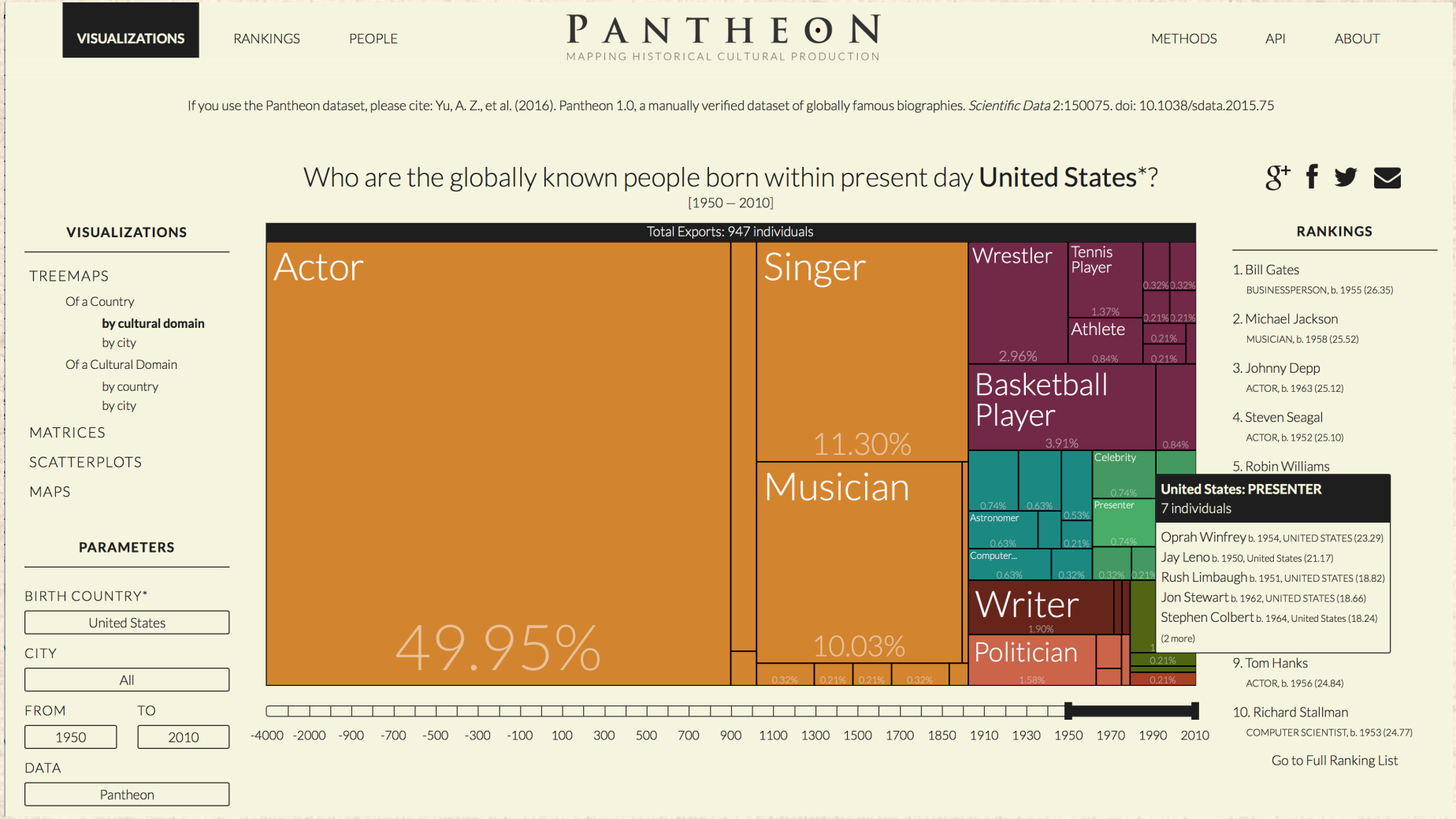

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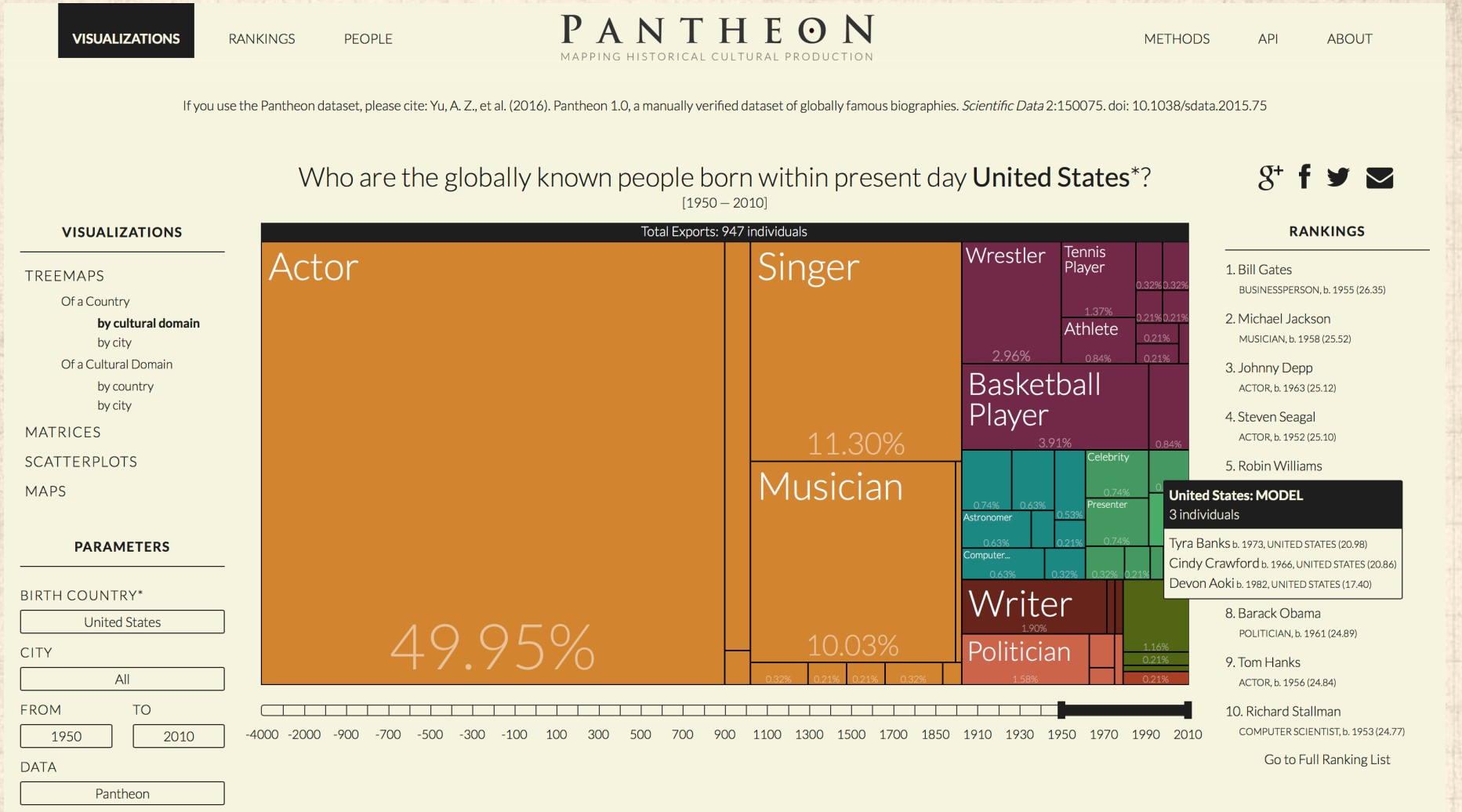

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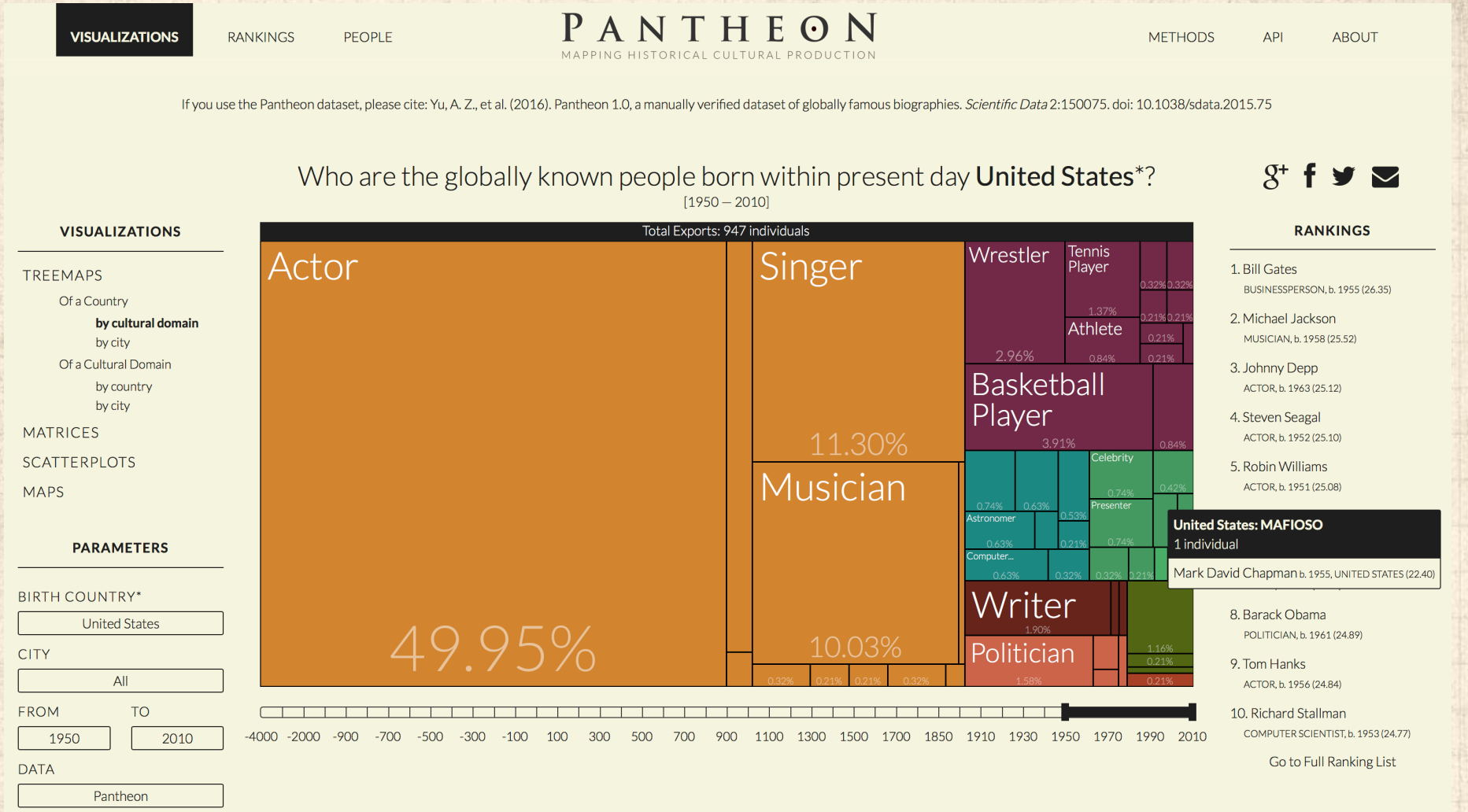

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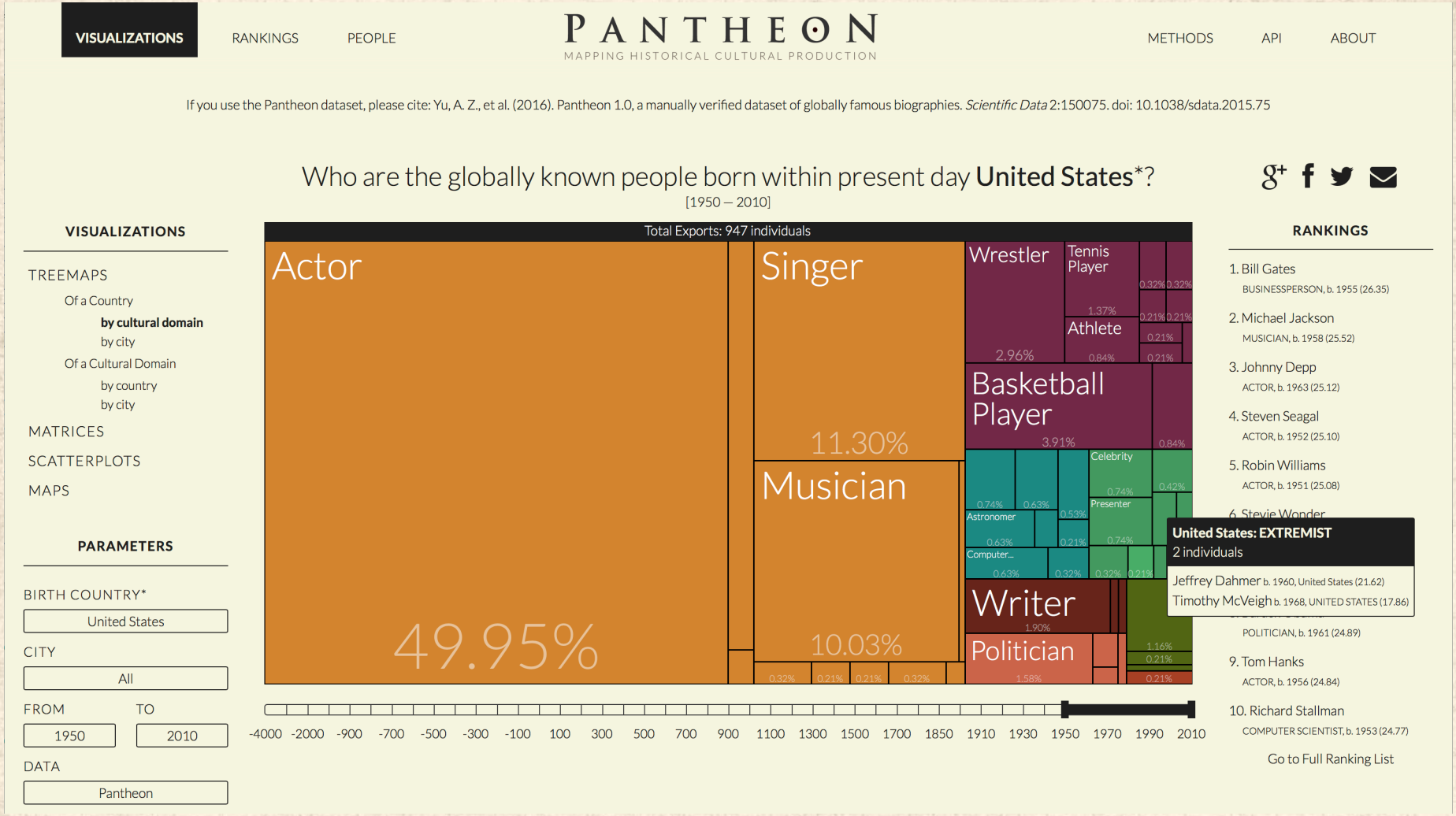

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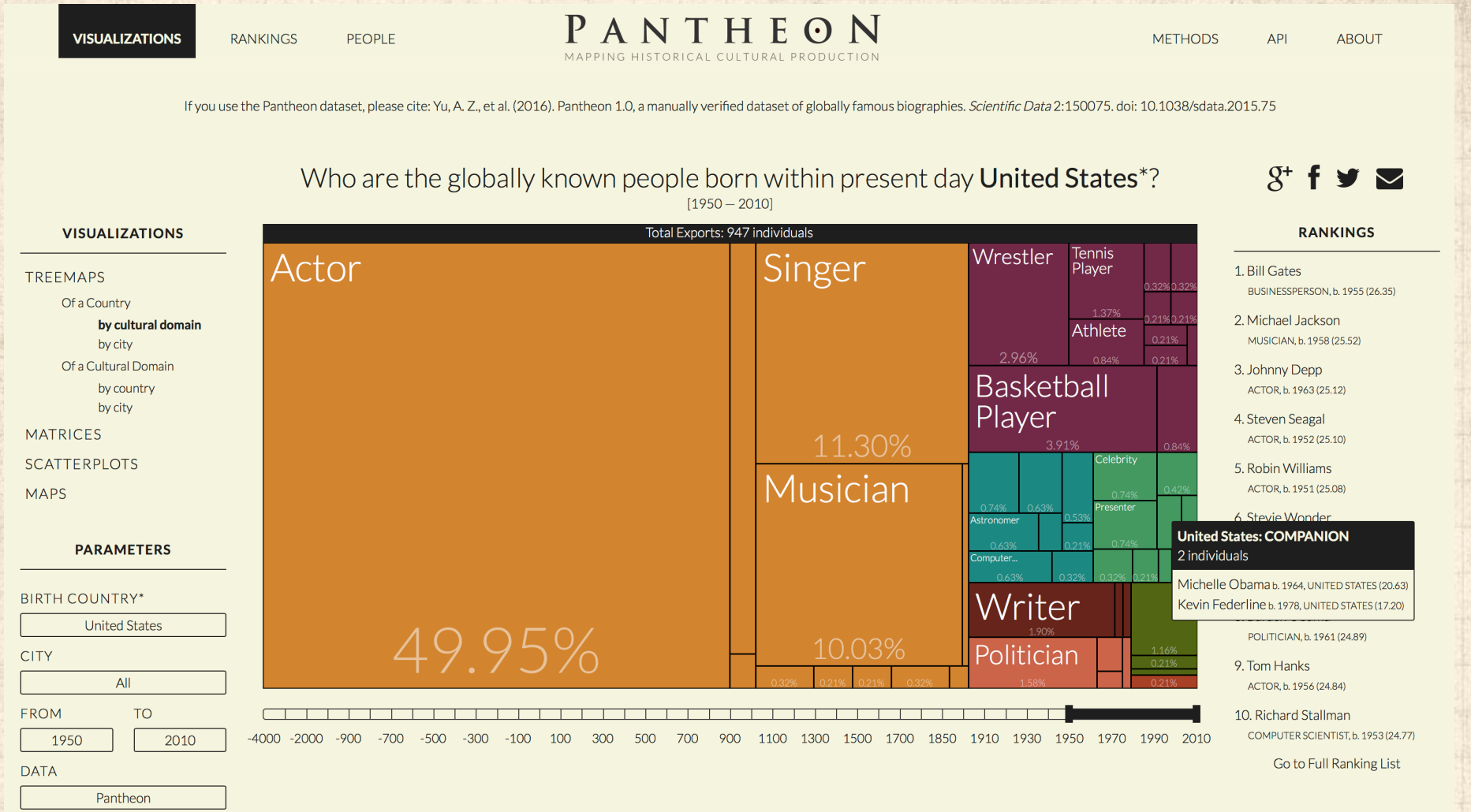

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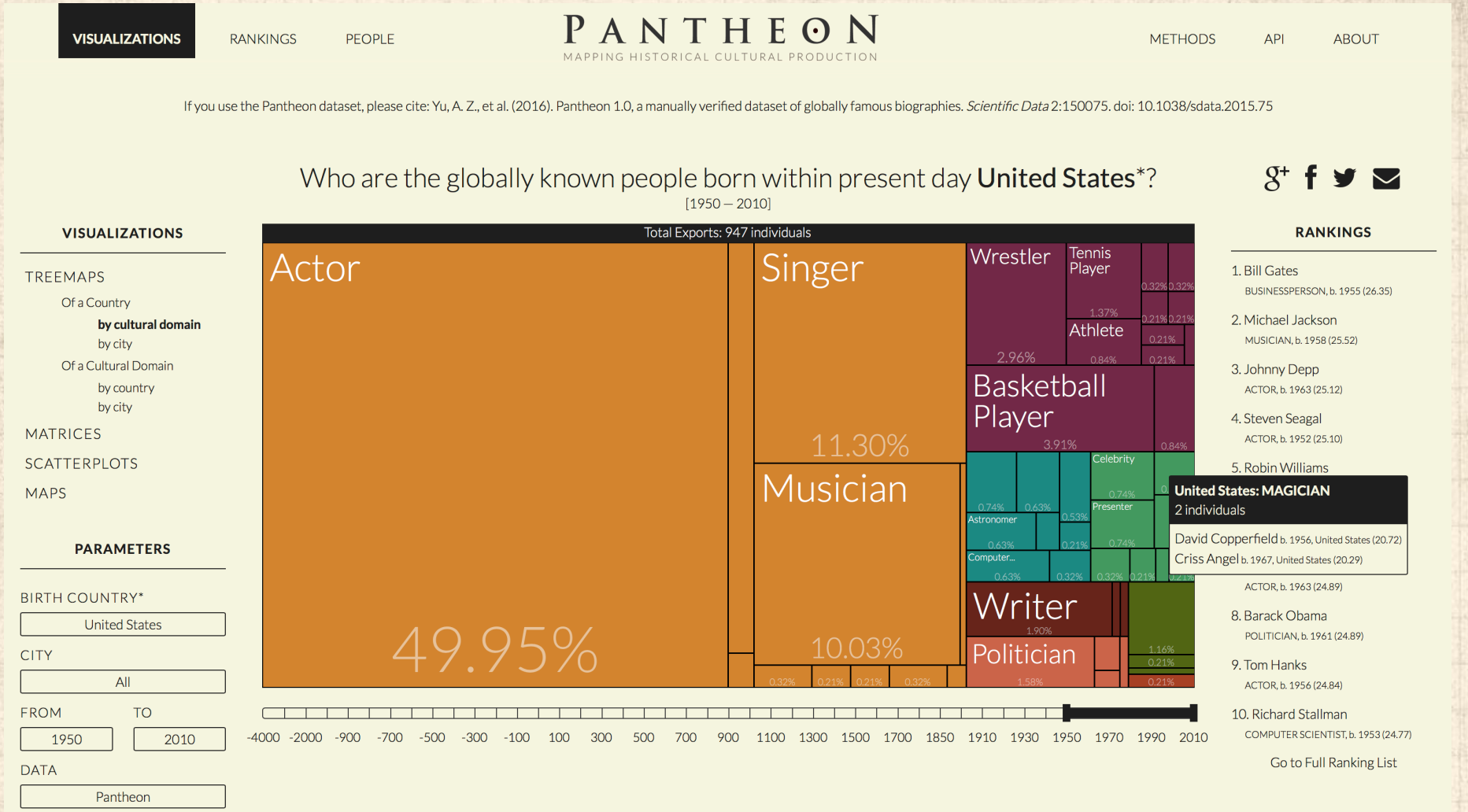

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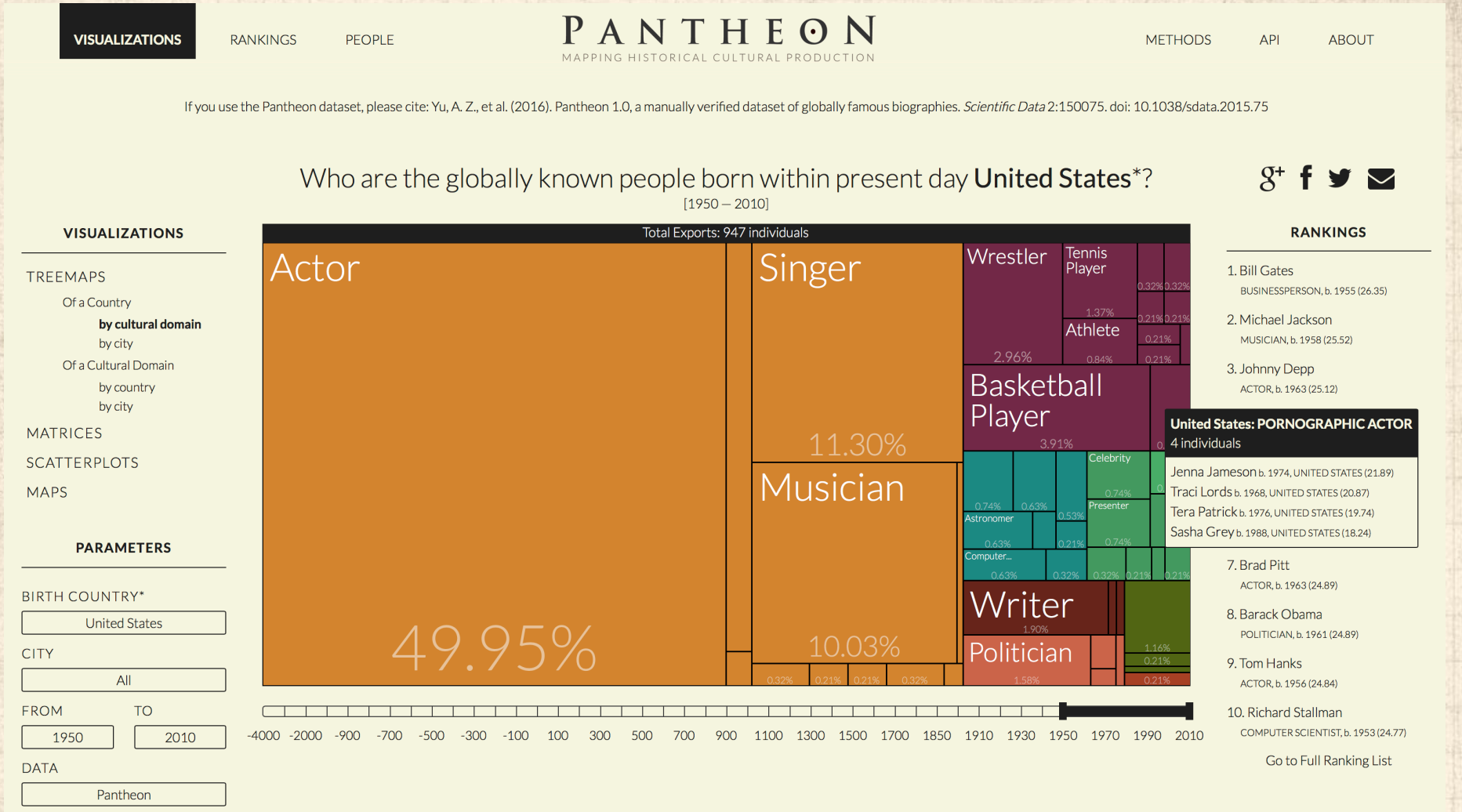

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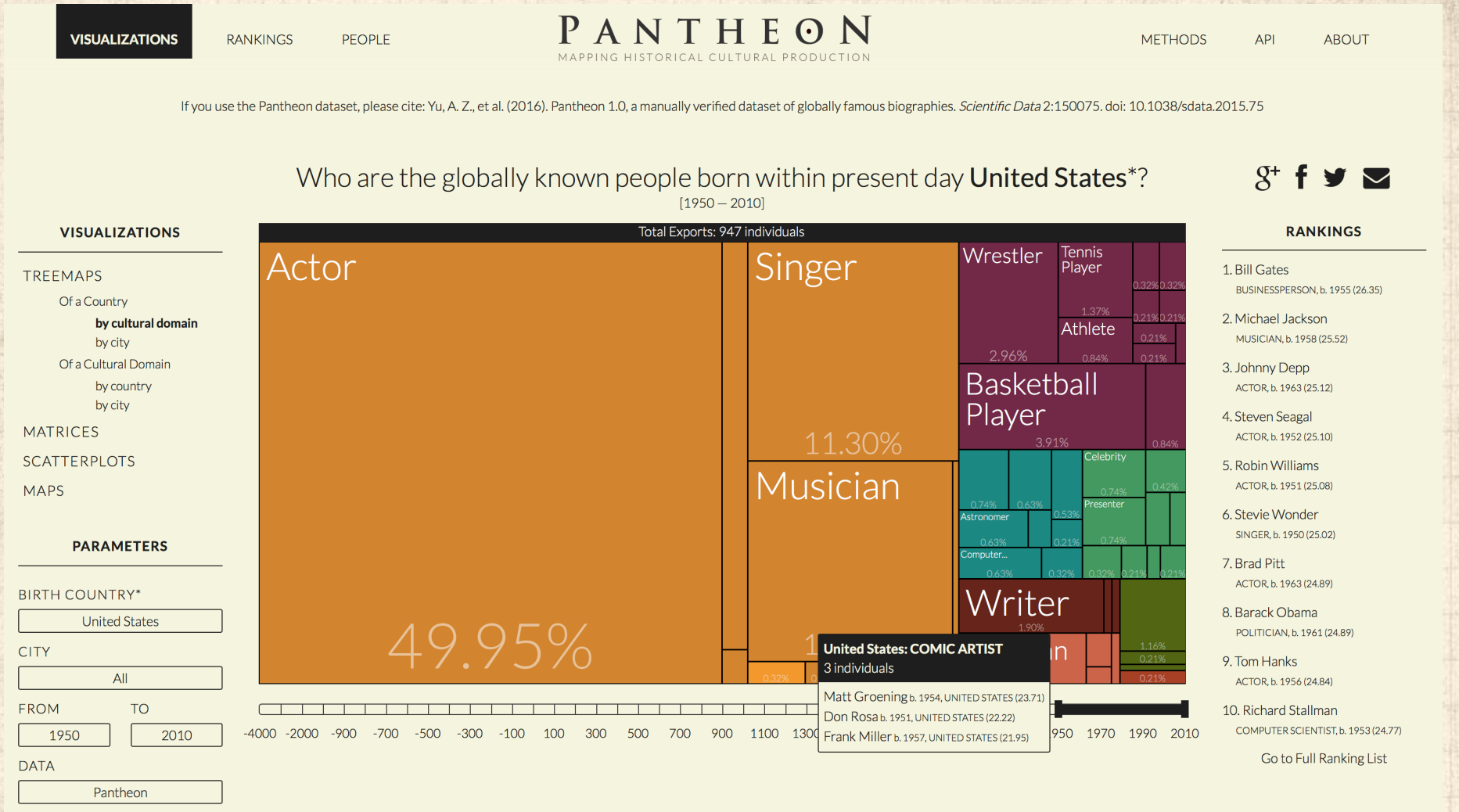

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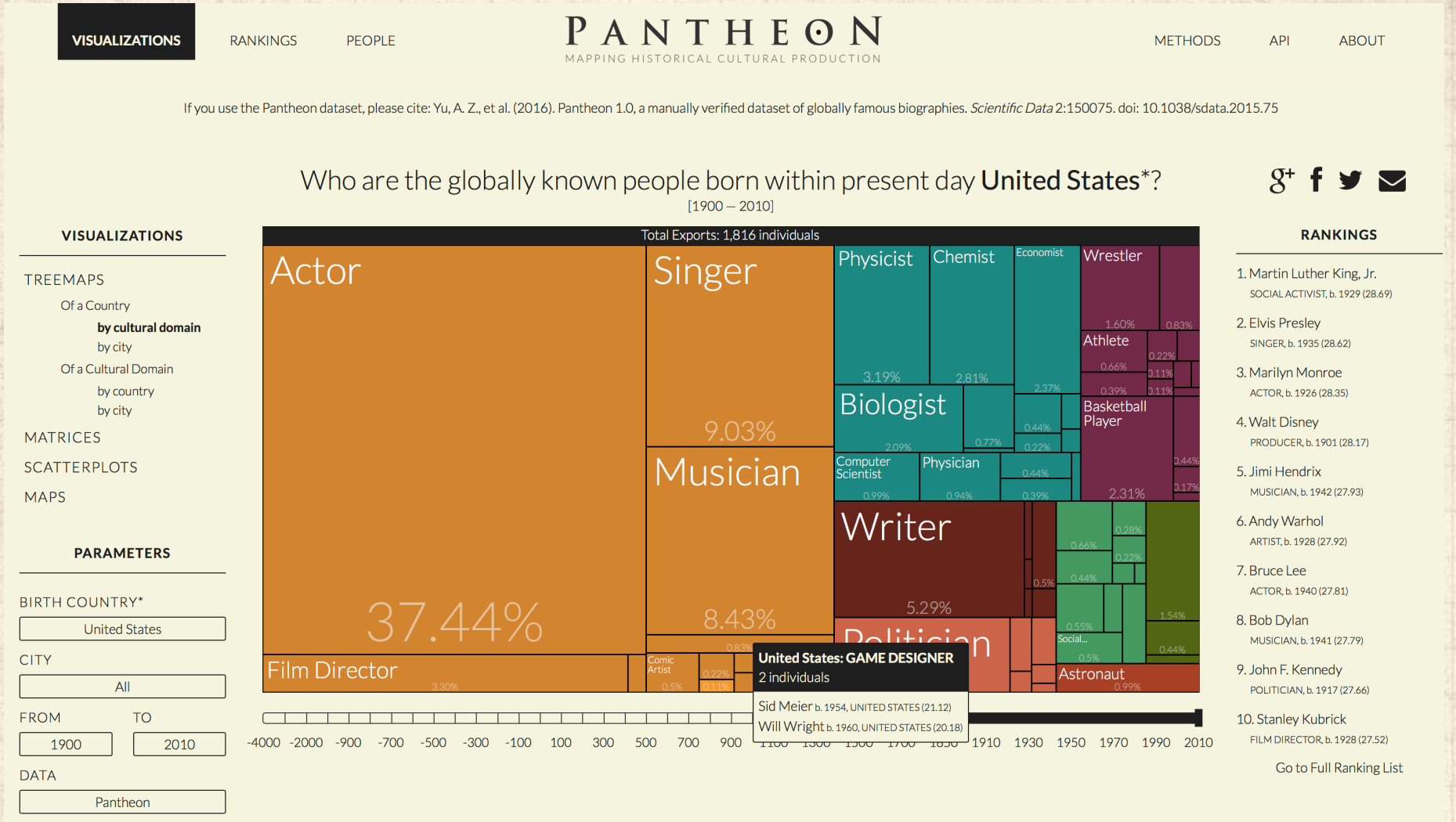
Storytellers win:



For people born 1900–

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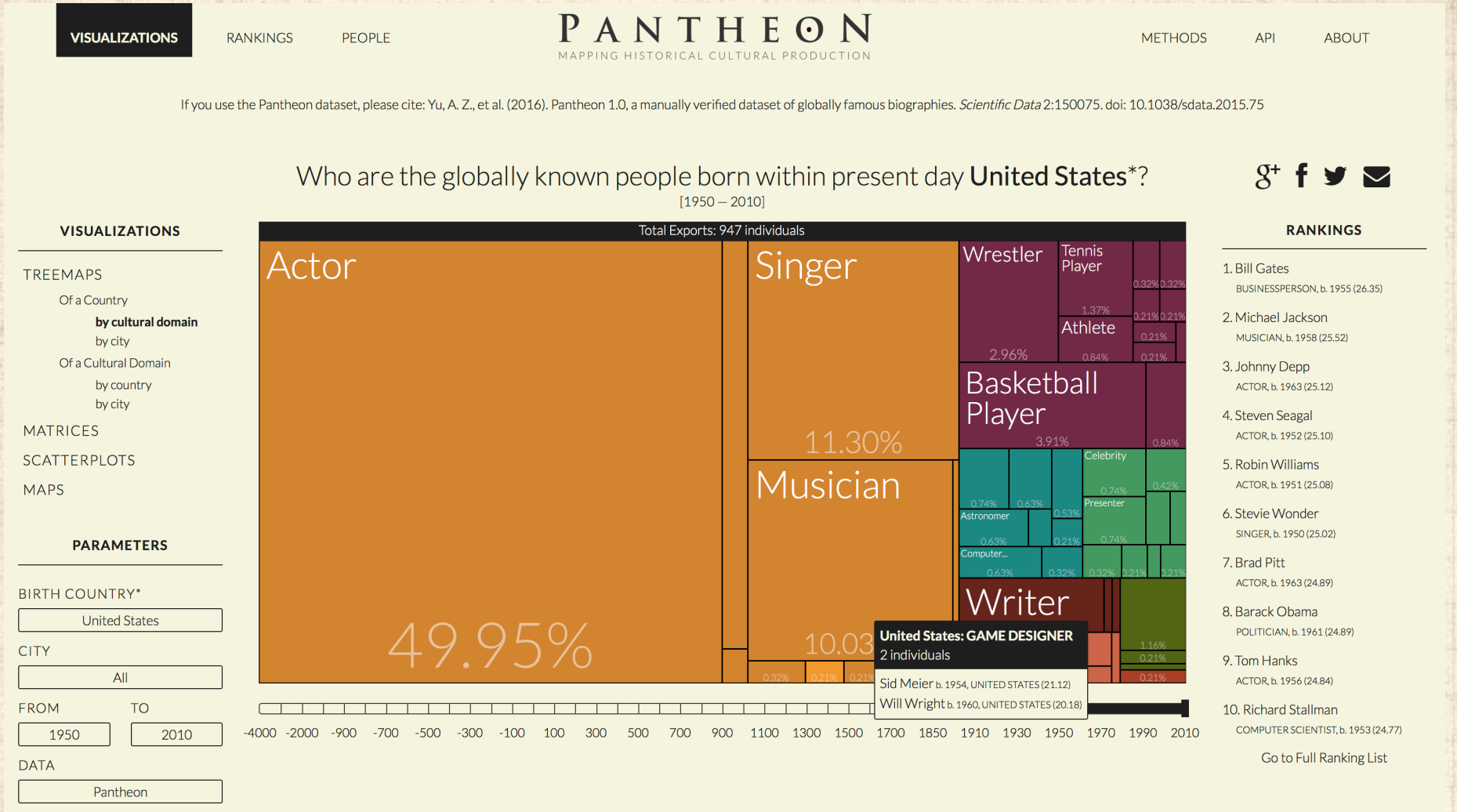
Storytellers win:



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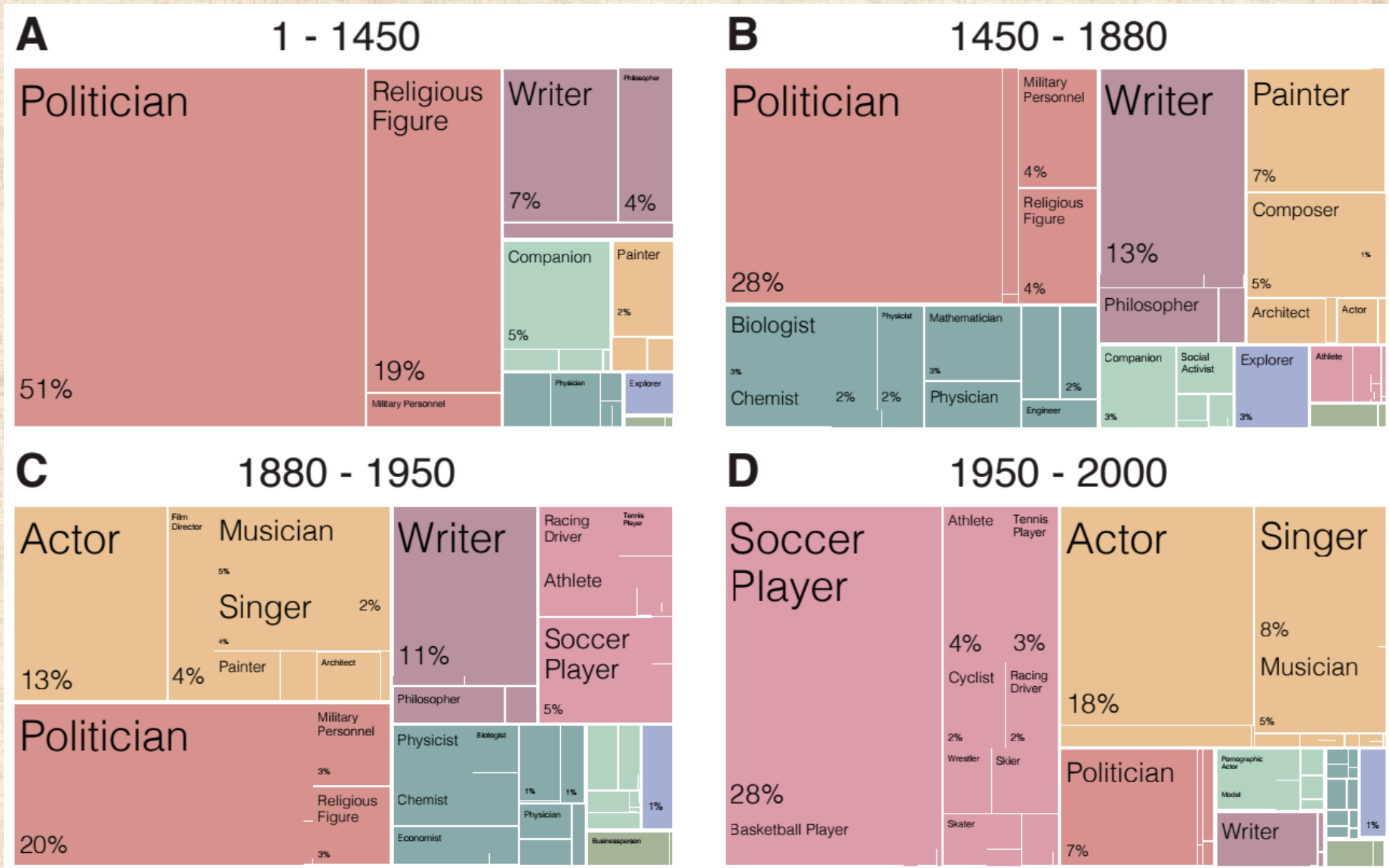

https://www.media.mit.edu/projects/pantheon-new/overview/

It’s all about algorithms (stories):

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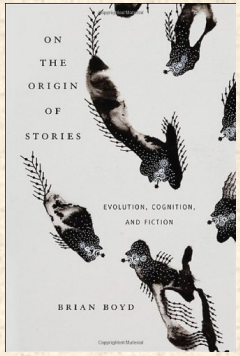
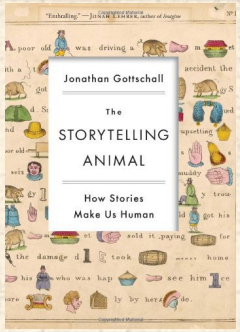


“On the Origin of Stories: Evolution, Cognition, and Fiction”
by Brian Boyd (2010). [4]



“The Storytelling Animal: How Stories Make Us Human”
by Jonathan Gottschall (2013). [11]

(Sir Terry) Pratchett's Narrativium:

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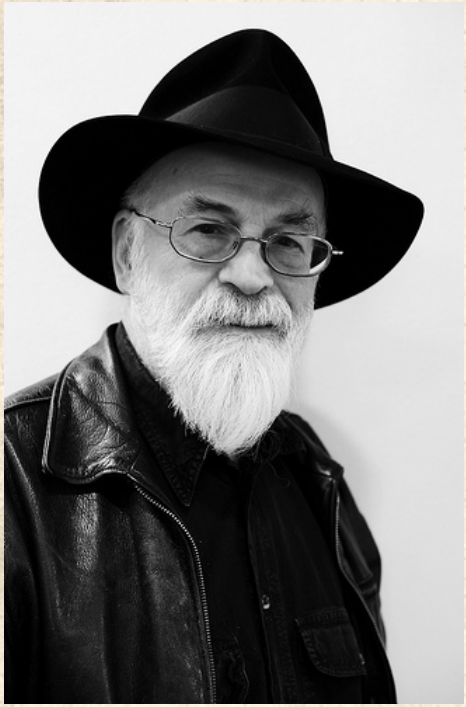
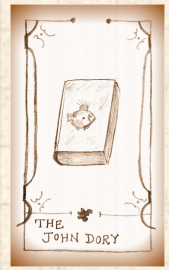


- "The most common element on the disc, although not included in the list of the standard five: earth, fire, air, water and surprise. It ensures that everything runs properly as a story."
- "A little narrativium goes a long way: the simpler the story, the better you understand it. Storytelling is the opposite of reductionism: 26 letters and some rules of grammar are no story at all."



- "Heroes only win when outnumbered, and things which have a one-in-a-million chance of succeeding often do so."

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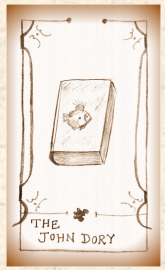
We see (certain kinds of) stories:

http://www.youtube.com/watch?v=VTNmLt7QX8E?rel=0



Heider and Simmel, 1944 [12]

Simple Definitions:

- Story: a laying out of a temporal sequence of events.

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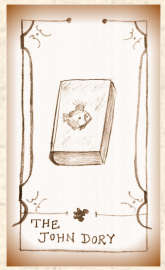

Simple Definitions:

- Story: a laying out of a temporal sequence of events.
- “Time is a great storyteller” (Irish proverb)

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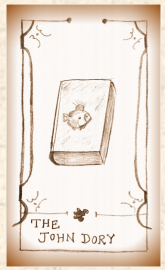

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- Story: a laying out of a temporal sequence of events.
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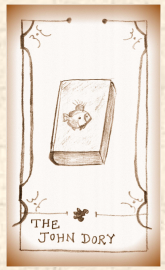

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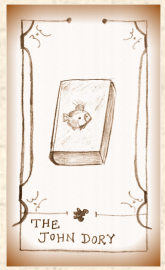

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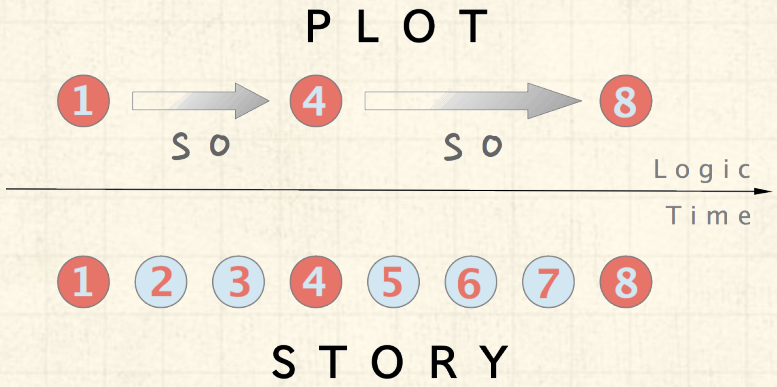

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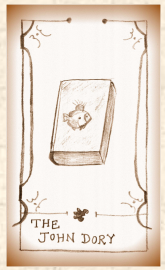

[1] By まとりょ🄵しか — Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=24054522

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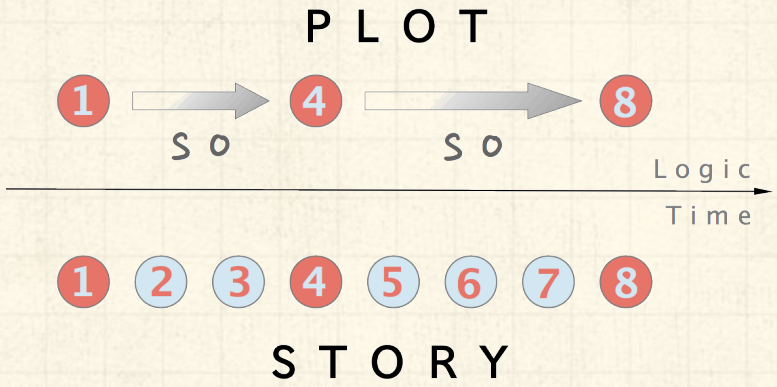

- Plot = Algorithm

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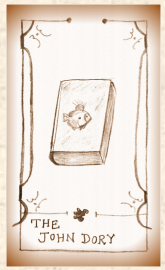

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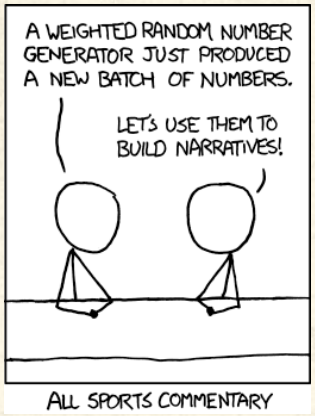

xkcd.com/904/

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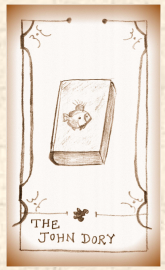

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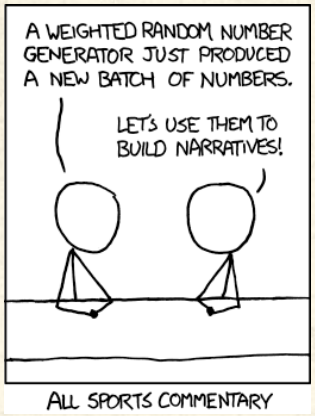

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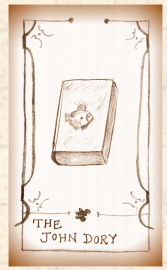

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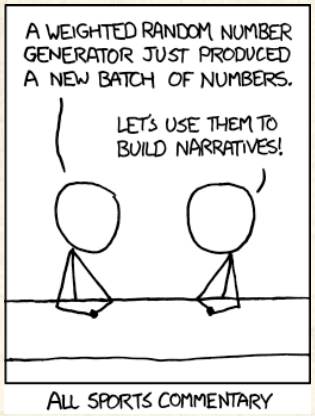

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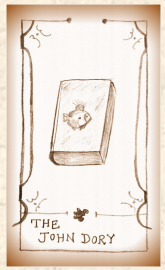

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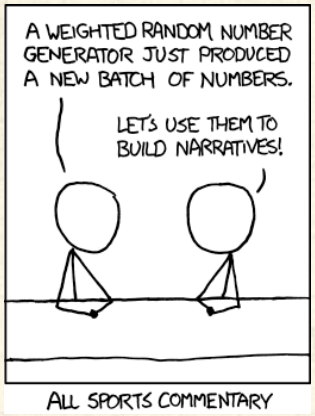

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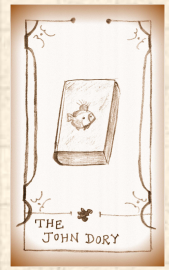

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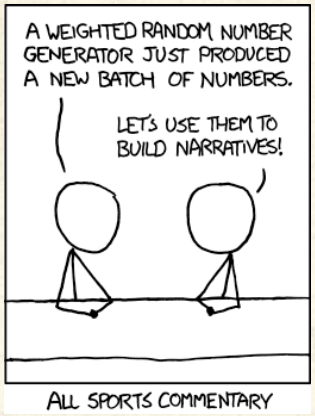

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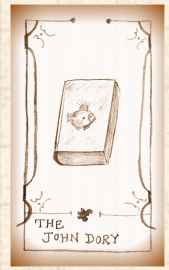
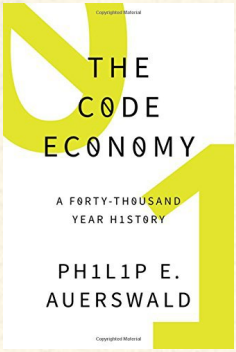


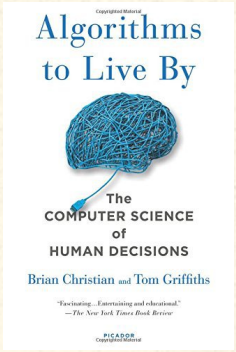
Algorithms are everywhere:

- Communication/Language.
- Economic systems
  (Shiller: "Narrative Economics" [19])
- Legal systems.
- Social norms, customs, cultures.
- Food:
  growing, harvesting, preparing, distribution, ...
- Safety codes and protocols
- Military.
- Stories ...

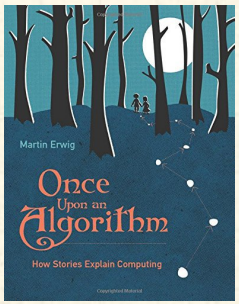
Algorithms, recipes, stories, ...



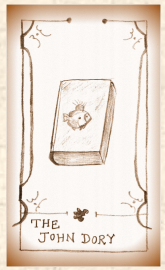
"The Code Economy: A Forty-Thousand Year History"
by Philip E Auerswald (2017). [2]



"Algorithms to Live By"
by Christian and Griffiths (2016). [8]



"Once Upon an Algorithm"
by Martin Erwig (2017). [10]



Also: Numerical Recipes in C [16] and How to Bake π [7]

THE SUN
THE GOLDEN AGE OF REDUCTIONISM
THE MANIFESTO
THE WELL OF SCALES
THE LAWS OF DECAYING POWER
THE UNEXPECTED TRANSFIGURATION
MINISTRY OF RANDOM WALKS
THE RICH GET RICHER
THE DREAM OF EFFICIENT LANGUAGE
THE LAW OF DIGITS FIRST
THE SURPRISE OF BEING ROBUST YET FRAGILE
THE MISREADING OF THE BOOK OF SAND
THE MANY TALES OF MANY TAILS
THE MEASURING
THE DATA POOR
THE POURING DATA
THE CHARMS OF THE MANY WRONG PATHS
THE DOORS THAT SHOULD NOT BE OPENED
THE KNOWLEDGE OF DEAD MONKS
THE EMERGENCE OF STRUCTURE
THE EMERGENCE OF DESTRUCTION
THE EMERGENCE OF THINKING
THE EMERGENCE OF STORIES
THE MECHANICS STATISTICAL
THE THRESHOLDS OF PERCOLATION
THE NETWORKS COMPLEX
THE ELEMENTS OF WEBS
THE BIRDS OF A FEATHER
THE BIRDS OF NOT A FEATHER
THE ARK OF THE RANDOM NETWORK
THE STRANGENESS OF FRIENDS
THE SMALLNESS OF WORLDS
THE THEORY OF SIX DEGREES
THE NETWORKS FREE OF SCALE
THE CONTAGION
THE CONFUSION OF CONTAGIONS
THE DISEASE OF RANDOM MIXING
THE UNENDING PANDEMICS
THE THRESHOLDS OF THE MIND
THE SOCIAL WILD
THE SOCIAL CONTAGION
THE RATIO OF GAIN
THE MECHANICS OF FAME
THE TALK OF FAME
THE STORIES CONTAGIOUS
THE JOHN DORY
THE STORYTELLERS
THE FATED ASTRAL PATH
THE PATHS OF UNIVERSALITY
THE DEPENDENT PATHS
THE TROUSERS OF BIFURCATING REALITIES
THE UNKNOWN MECHANISM
THE LANDSCAPES OF FORKING PATHS
THE NETWORKS OF BLOOD
THE TREES OF REALITY
THE ORDERS OF STREAMS
THE LAWS OF BRANCHING
THE SCALING OF BROKEN HIERARCHIES
THE BRAID OR THE BRANCH
THE LAW OF OPTIMAL FORKS
THE CHURCH OF QUARTEROLOGY
THE TRUTHICIDE
THE FAMILY OF PANCAKE COWS
THE FAMILY OF SPHERICAL COWS
THE IMPROBABLE PACHYDERM
THE ILL-SCALING OF ALLOMETRIC BODIES
THE SUPPLY MOST FAIR
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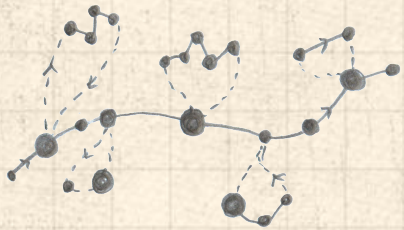
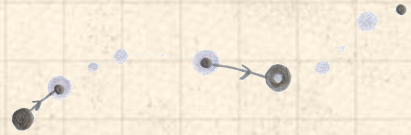
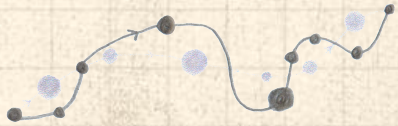
THE DARK ART OF GENERATING FUNCTIONS
THE RANDOM SUM OF RANDOMNESS
THE TWO-SIDED WORLDS
THE STORIES AND THE TROPES
THE TRUTH OF DIFFUSION
THE UNVEILING OF HIDDEN POWERS
THE SCRYING FOR THE SHAPES OF THINGS
THE LIMITS OF ORGANIZATIONS
THE OVERCOMING OF CATASTROPHE
THE TROUBLES ILL-FORMED
THE NETWORKS OF MANY ILKS
THE CHAOS OF FETTERED CONTAGION
THE END

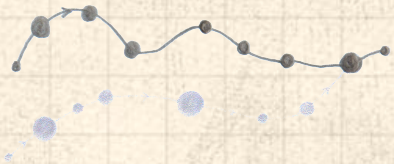
THE ADJACENT NARRATIVES

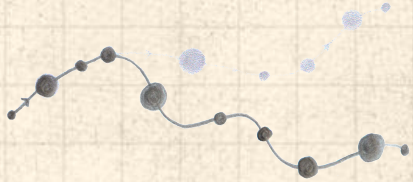
Adjacent narratives—why mistruths and conspiracy theories exist and flourish:

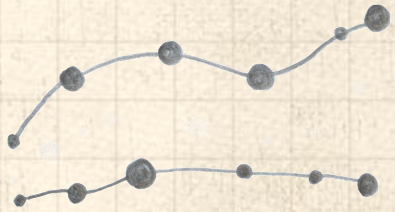


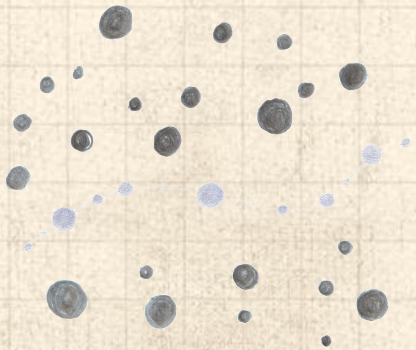












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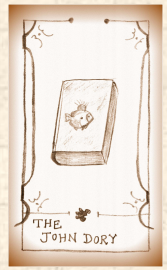
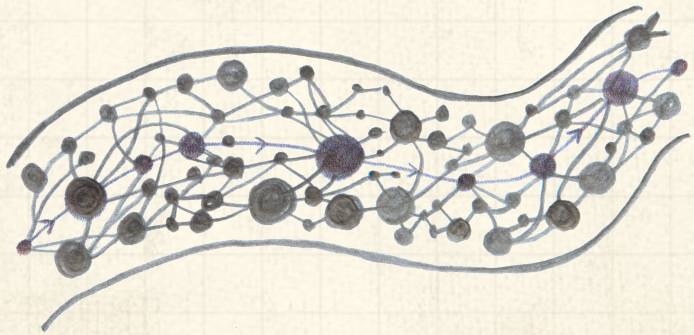


Why adjacent narratives exist and untrue stories flourish:

1/4. A real story is never recorded and retold completely



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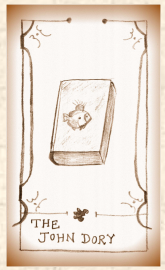

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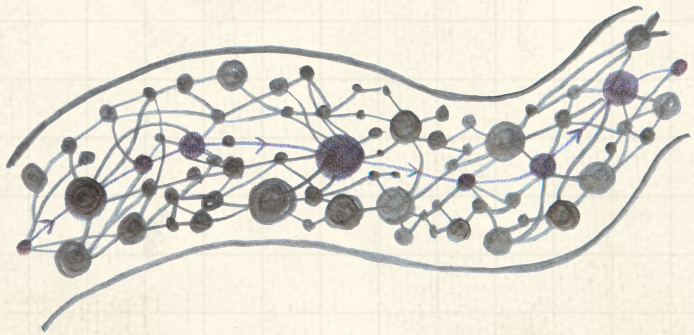

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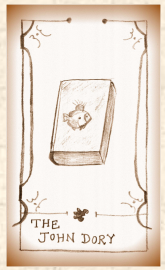

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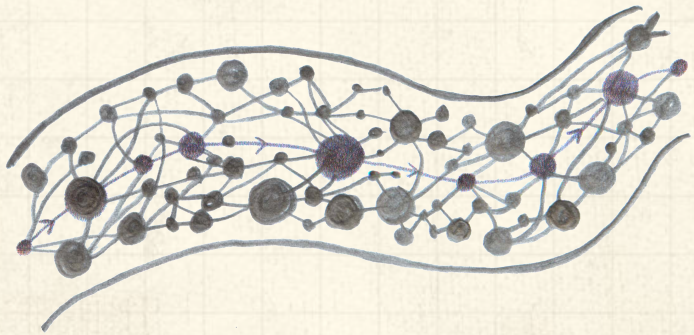

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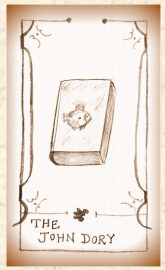

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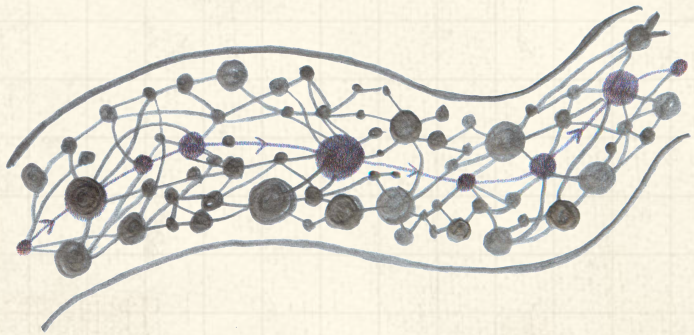
- Story logic will be favored, and seemingly irrelevant aspects discarded.



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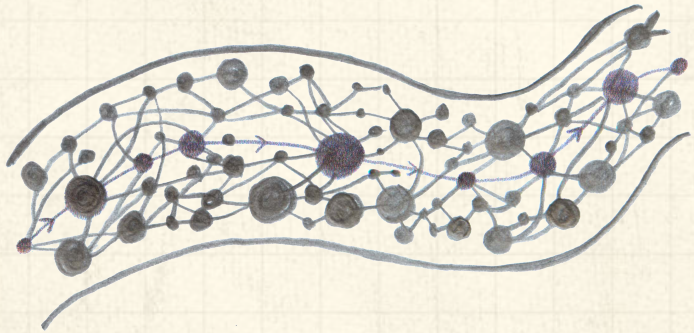
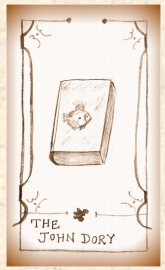
Why adjacent narratives exist and untrue stories flourish:

2/4. The infinitude of adjacent stories will afford “better” stories





Why adjacent narratives exist and untrue stories flourish:

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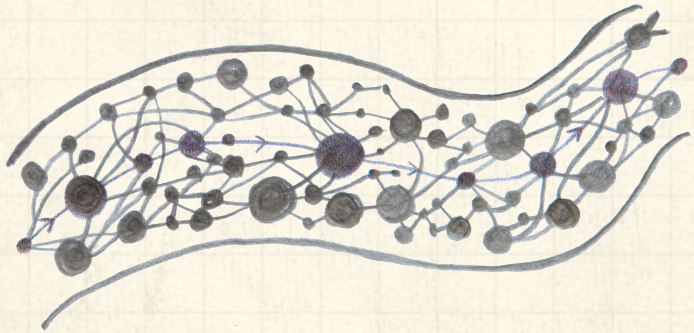
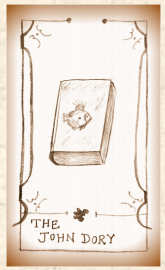
- Better = More engaging, more motivating to spread, more durable under spreading.





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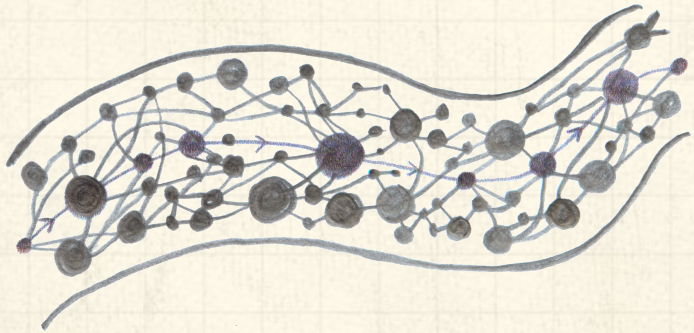
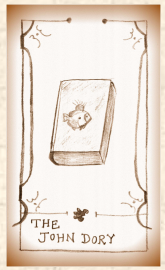
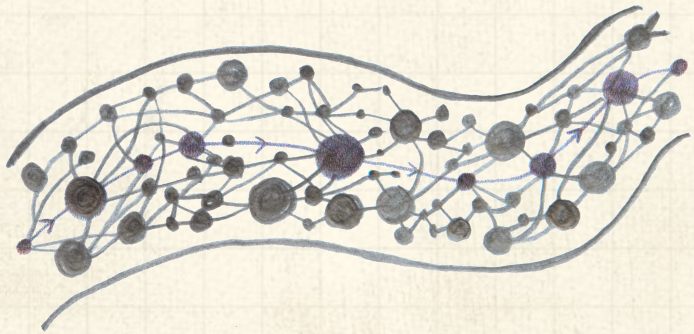
- Better stories exist for truthful recorders and retellers (journalists).





Why adjacent narratives exist and untrue stories flourish:

3/4. The infinitude of adjacent stories means “better” stories exist for those who would disinform



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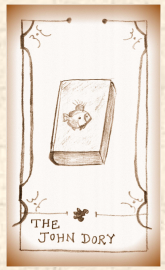

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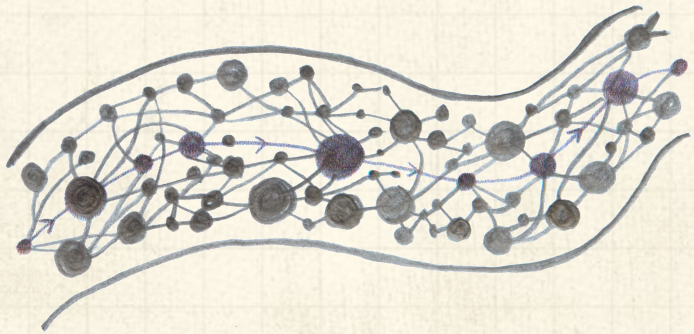

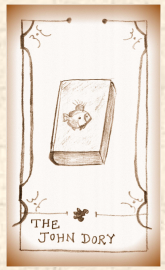

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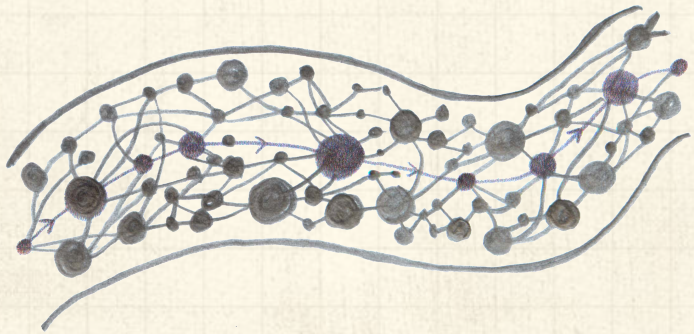

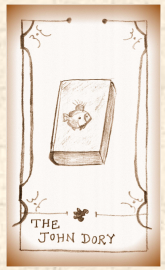

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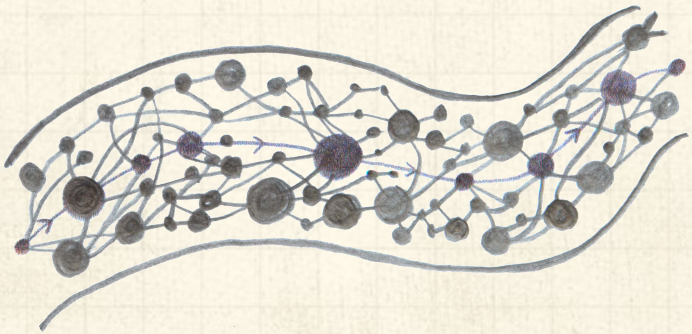
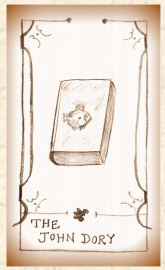
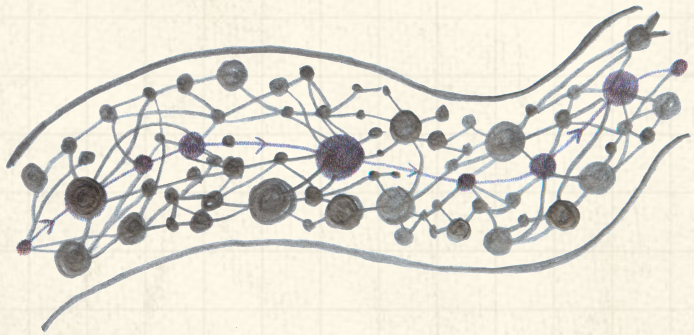
- There may exist adjacent stories that conform to a world view/ideology.
- Even the seemingly non-adjacent must have some plausibility (Pizzagate).





Why adjacent narratives exist and untrue stories flourish:

4/4. Character is the short cut to story



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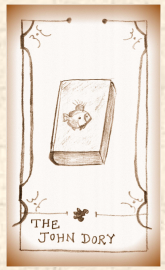

Why adjacent narratives exist and untrue stories flourish:

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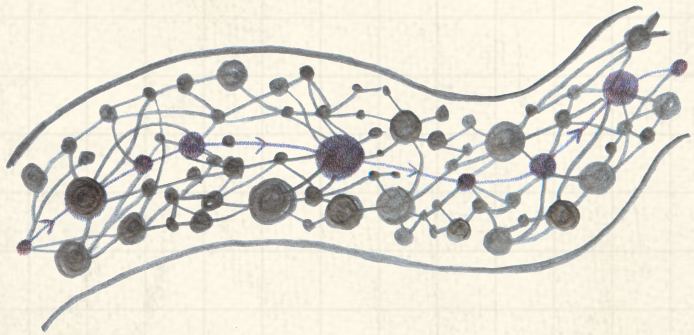

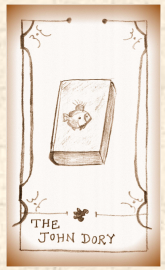

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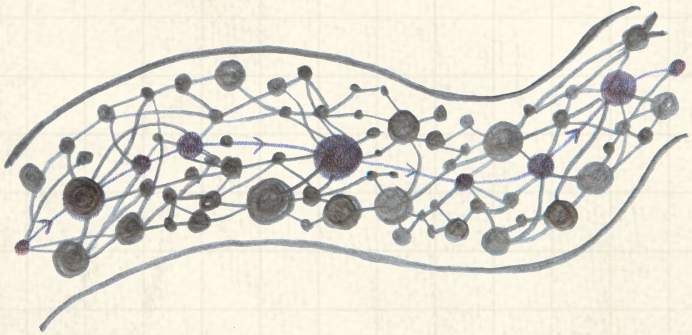
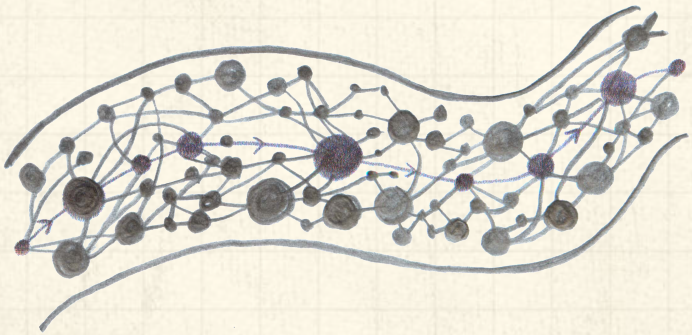


Why adjacent narratives exist and untrue stories flourish:

4/4. Character is the short cut to story

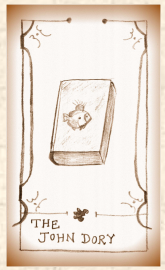
- The barely implausible can be believed if the character can make it so.
- A believe-to-be evil character can do anything.
- Iterate between character and story to make the character fixed.



1999 Gallup poll:

- 6% of Americans said the lunar landings were fake.
- 5% were undecided.
- Video replay (The Comments).

Buzz Aldrin has enough:



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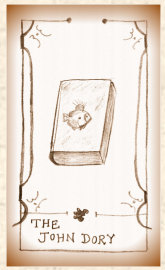

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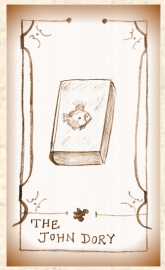

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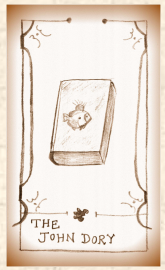
  - A. "Yes. Yes it is."



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Phantom time hypothesis:

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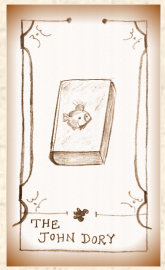

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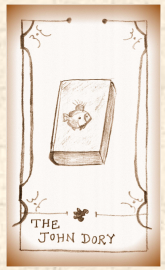

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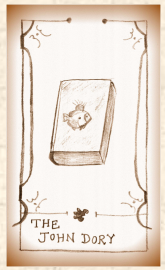

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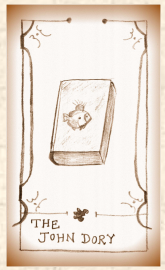

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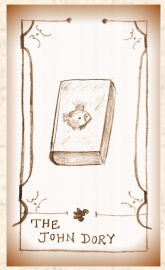

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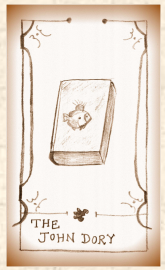

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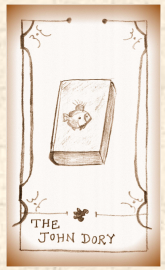

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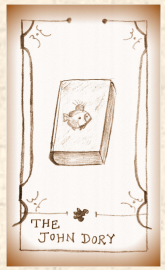

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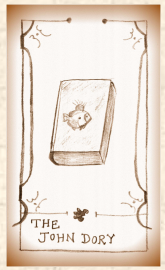

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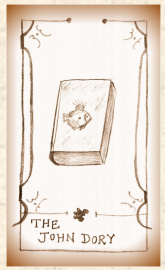

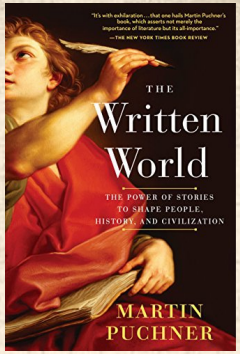

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We are what we read (NYT)

"Storytelling is as human as breathing. When fabulation intersected with writing, stories were empowered to propagate themselves in society and around the world as civilization-forming ''foundational texts.'' "

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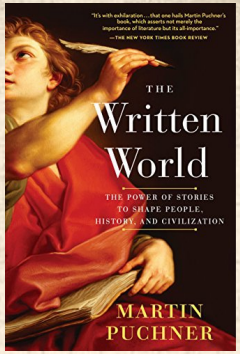

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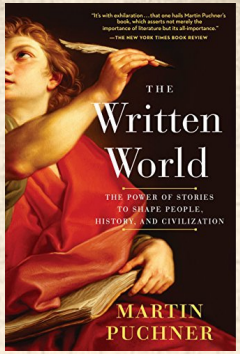

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- Common strawman frame: Stories as lightweight entertainment

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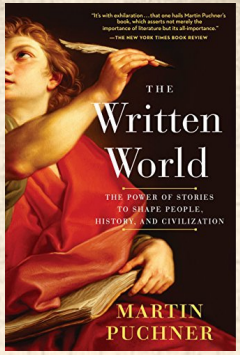

"The Written World: How Literature Shaped Civilization"

by Martin Puchner (2017). [17]

We are what we read (NYT)

"Storytelling is as human as breathing. When fabulation intersected with writing, stories were empowered to propagate themselves in society and around the world as civilization-forming "foundational texts." "

- NYT review has a flicker of concern at the end that stories can be used for bad ...
- Common strawman frame: Stories as lightweight entertainment
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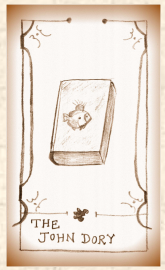

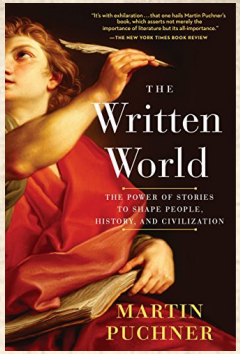

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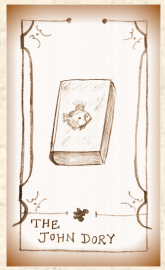

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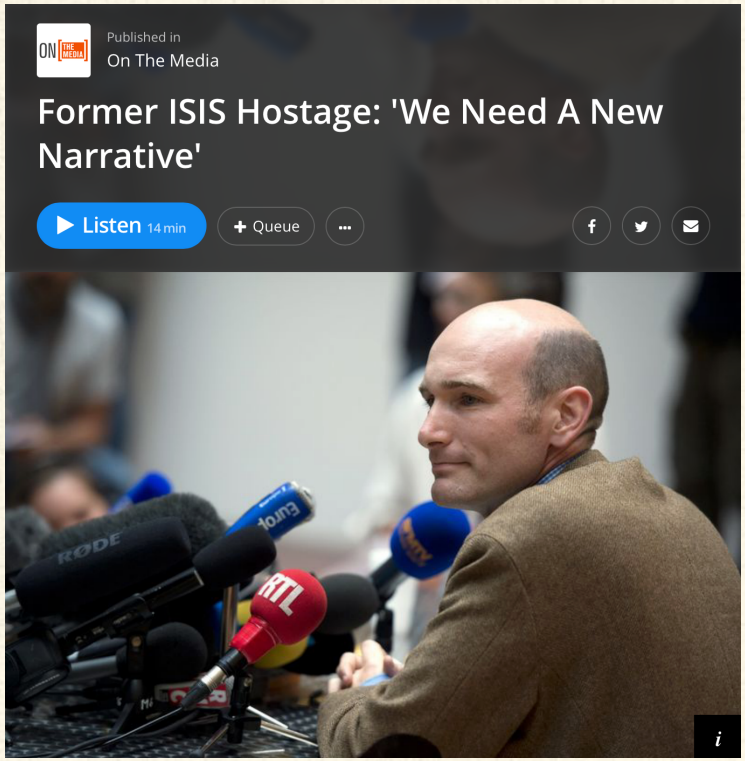

Nicholas Hénin, French Journalist, held captive for 10 months.

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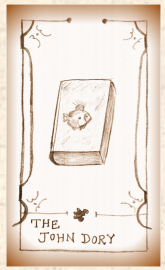

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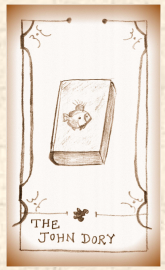

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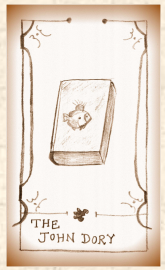

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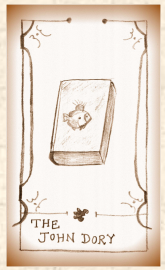

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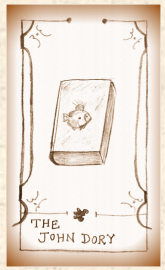

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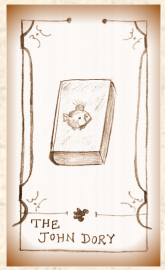

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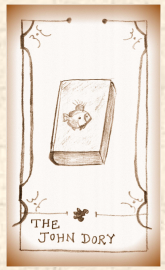

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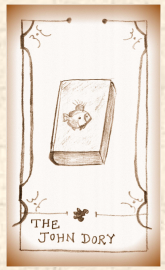

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[BROOKE LAUGHS]

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Just because we have no imagination, we cannot just tell beautiful stories, create beautiful characters, beautiful heroes.

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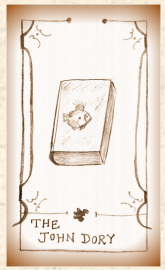
And this is what we have to do because in our world, in our societies what do people want?



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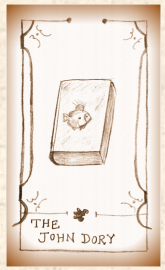

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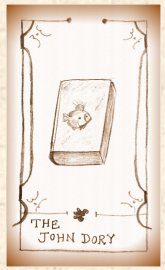

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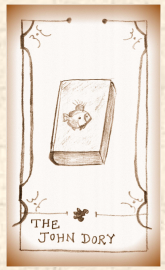

Stories make us do all kinds of things:

The Comet Ping Pong Gunman Answers Our Reporter's Questions:

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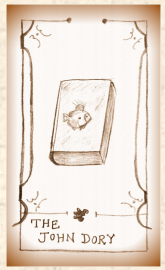

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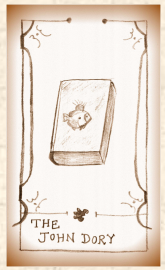

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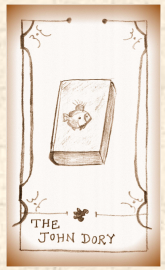
- He said he did not believe in conspiracy theories, but then added that the Sept. 11, 2001, attacks needed to be re-examined. He has listened to Alex Jones, whose radio show traffics in conspiracy theories and who once said that Mrs. Clinton ''has personally murdered and chopped up'' children. ''He's a bit eccentric,'' Mr. Welch said. ''He touches on some issues that are viable but goes off the deep end on some things.'' "



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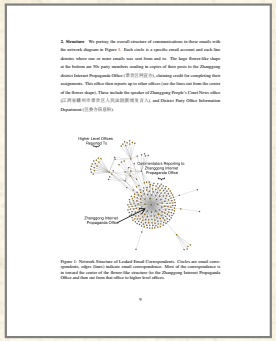

"How the Chinese government fabricates social media posts for strategic distraction, not engaged argument"

King, Pan, and Roberts,
American Political Science Review, , ,
Forthcoming. [15]

- Make the truth a needle in a haystack

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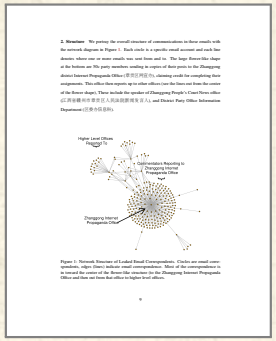

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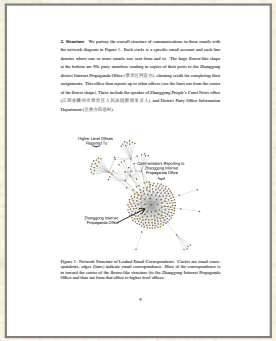

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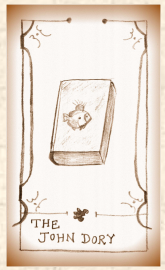
- "Surkov turned Russian politics into a bewildering constantly changing piece of theater. He sponsored all kinds of groups, ...no one was sure what was real or fake. ...it is a strategy of power that keeps any opposition constantly confused."



Stories generated the first surveillance state:

- Low tech, low cost.

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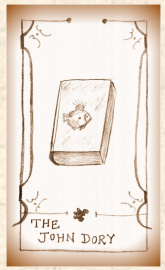

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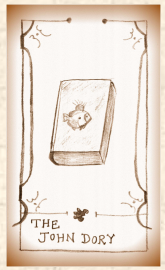

- Low tech, low cost.
- Infrastructure maintained in the Social Wild by storytellers and storybelievers.

Stories generated the first surveillance state:

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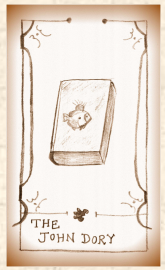

- Low tech, low cost.
- Infrastructure maintained in the Social Wild by storytellers and storybelievers.
- Omnipresence and omniscience: The end of privacy.

Defend the Story:

The Ten Commandments:

I am the LORD thy God
No other gods before me
No graven images or likenesses
Not take the LORD's name in vain

Remember the sabbath day

Honour thy father and thy mother
Thou shalt not kill
Thou shalt not commit adultery
Thou shalt not steal
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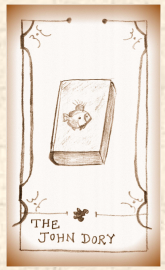

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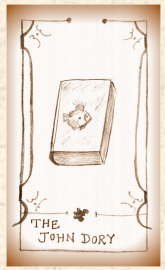
Windows: "No other installations before me"



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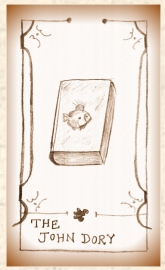
Propaganda

"If you're looking to understand what's actually happening in this country, always assume the opposite of whatever they're telling you on the big news stations," — Tucker Carlson



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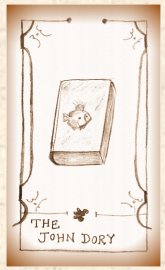
Defend your mind:

If a storyverse—whether it be through storytellers, groups, books, movies–tells you that all other stories are wrong, then that storyverse is false.



Book (story) burning (451 °F)

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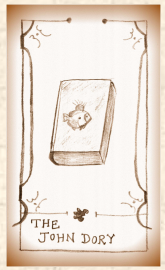

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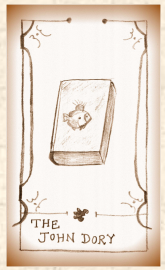
The American Dream = Rags to Riches



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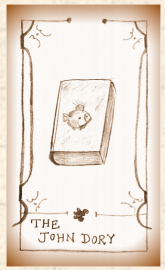

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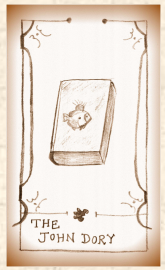

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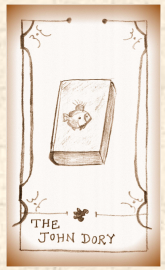

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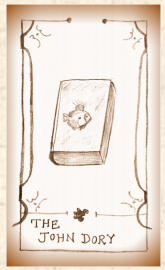
- "Entertaining beliefs in economic mobility": Effort to understand if rags to riches stories in popular culture affect people's lives. [14]



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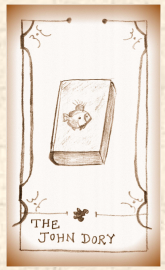

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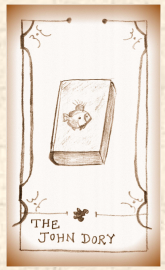

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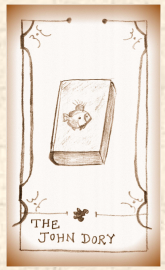

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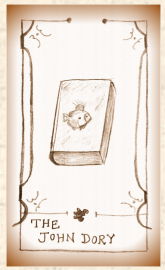

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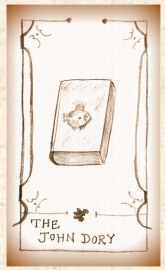

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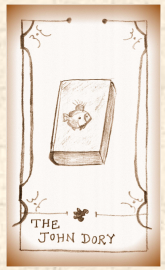

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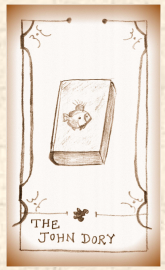

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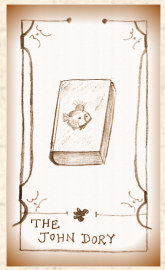

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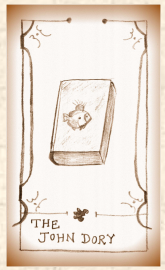

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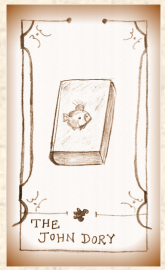

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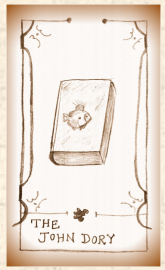

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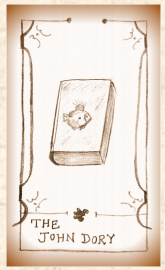

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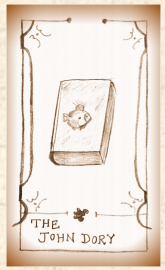

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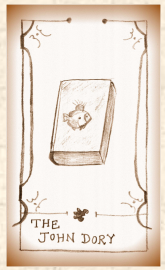

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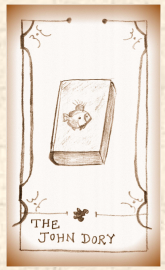

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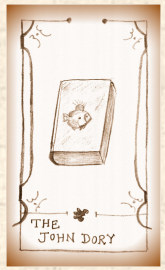

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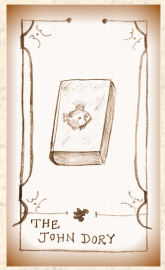
  - Lance Armstrong. Also got to meet Oprah.
- Enormous power: Fiction that speaks to real experiences.



[2] Reality is being tested harshly

“The game story space of professional sports: Australian Rules Football”

Kiley, Reagan, Mitchell, Danforth, and Dodds.
Physical Review E, **93**, 052314, 2016. [13]

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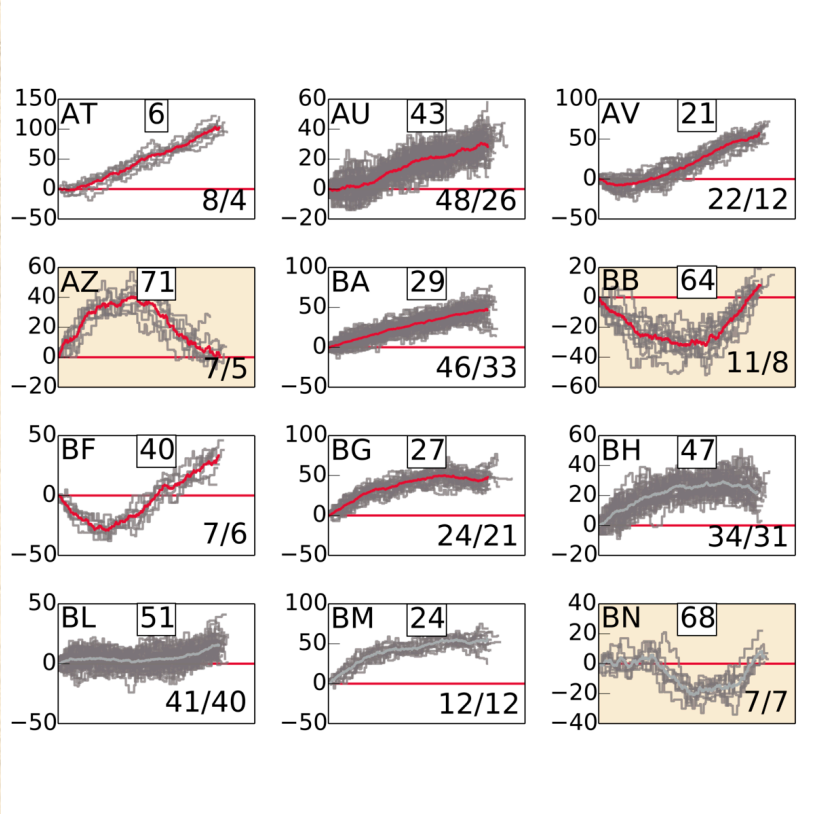
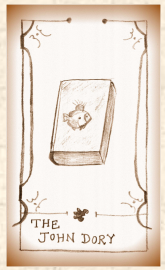
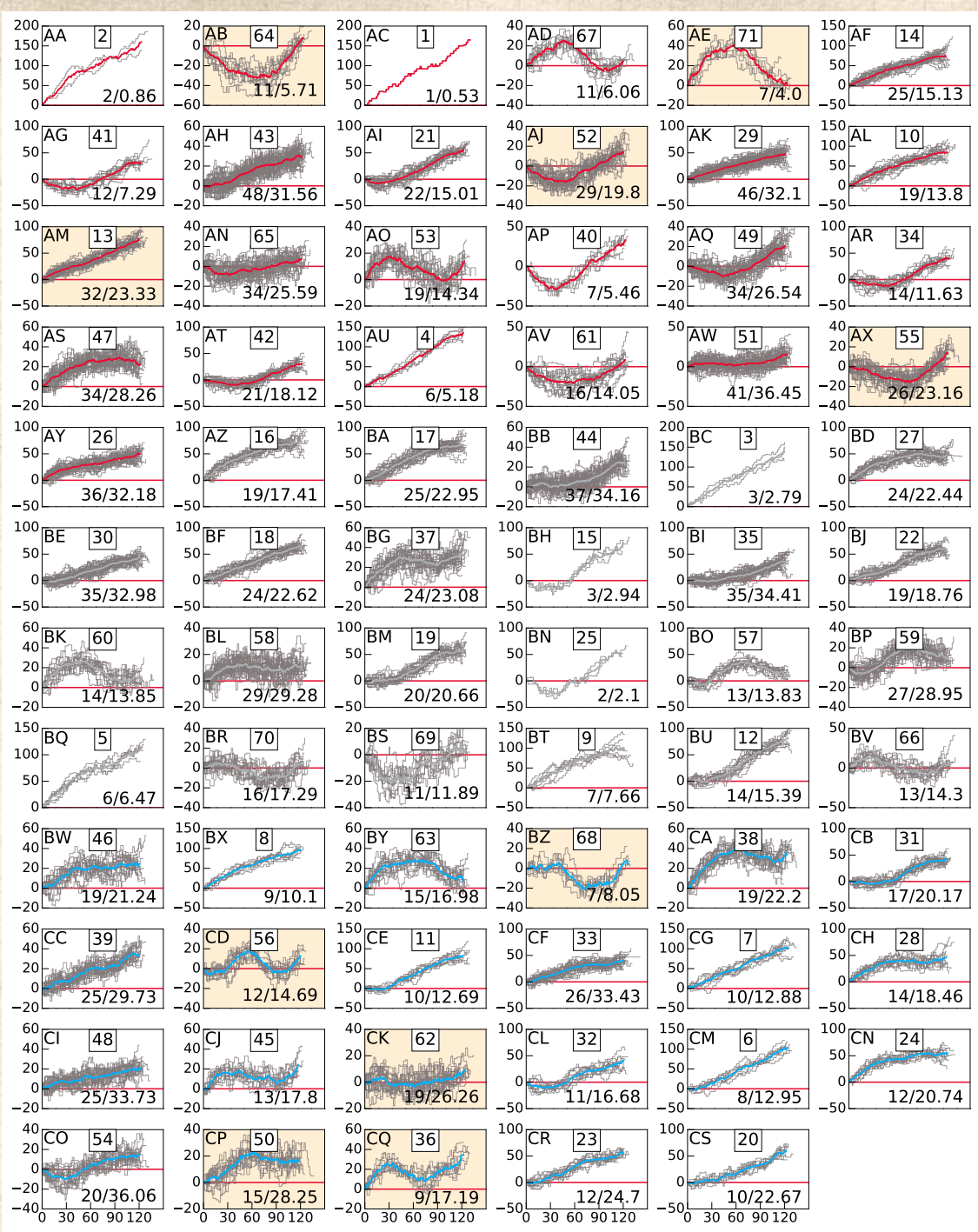




Sports = Spontaneous story producing systems



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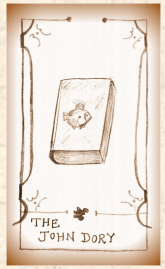

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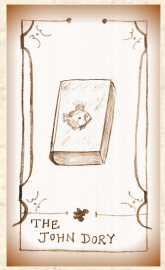
The story trap by Philip Ball, 2015-11-12

- "We use neat stories to explain everything from sports matches to symphonies. Is it time to leave the nursery of the mind?"
- "...we might wonder if the ultimate intelligibility of the universe will be determined not so much by the capacity of our minds to formulate the appropriate concepts and equations, but by whether we can find a meaningful story to tell about it."



Competitive Punning, The Economist, 2017-08-12:

The quip and the dread

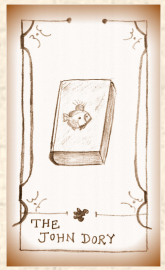
Why English is such a great language for puns

Gamers now even take part in world champunships

- Punster pseudonym: "Punder Enlightening"

Being funny, a grand challenge for AI:

- Wired (2014-04-01): It's Comedian vs. Computer in a Battle for Humor Supremacy. Myq Kaplan pun-off.



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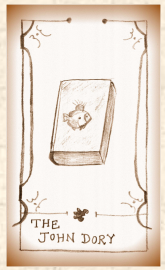

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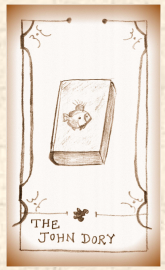
- "Warning: This paper may cause the reader to groan to death."



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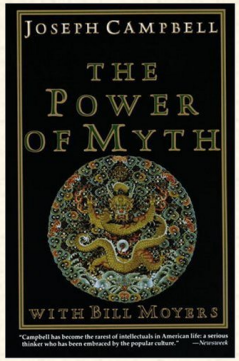
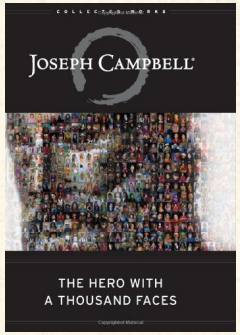
The "I wonder who wrote this?" Great Man Theory:



"The Power of Myth" by Campbell and Moyers (1991). [6]



"The Hero with a Thousand Faces" by Joseph Campbell (2008). [5]

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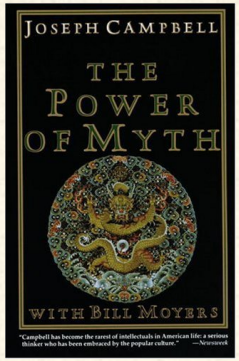

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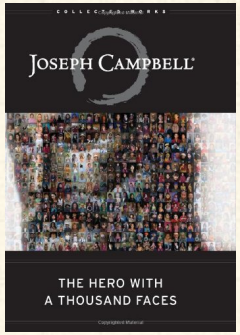

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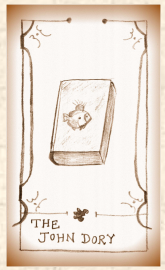
Highly influential but it's a trap!



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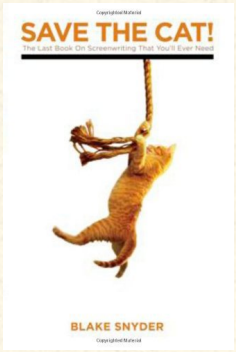
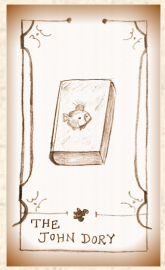


"Save the Cat!"
by Blake Snyder (2005). [20]

- 9 acts.



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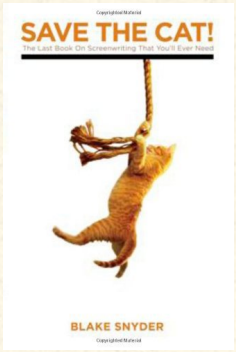

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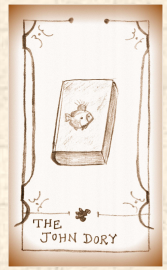

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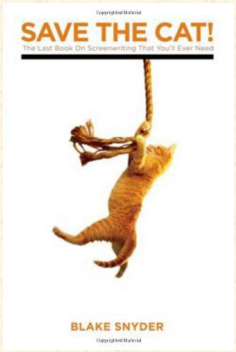

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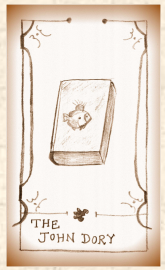

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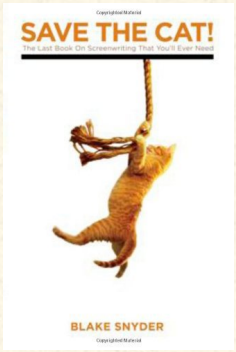

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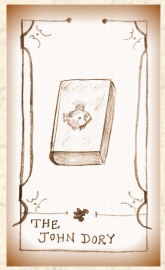

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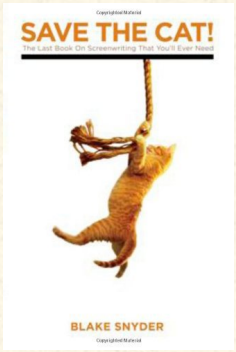

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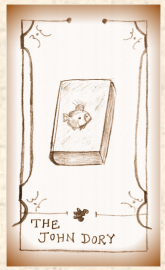
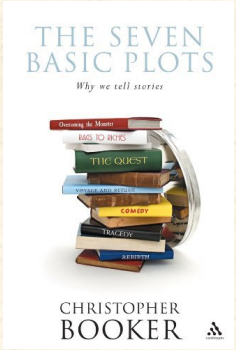
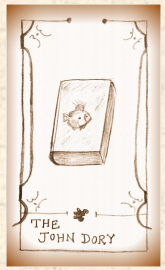


Seven “good” stories?:



“The Seven Basic Plots: Why We Tell Stories”
by Christopher Booker (2005). [3]

- Seven Gateways to the Underworld (?)
- Overcoming the Monster $\times 2$ and the Thrilling escape from Death (plot).
- Rags to Riches (plot).
- The Quest (plot).
- Voyage and Return (plot).
- Comedy $\times 2$ (plot but really structure).
- Tragedy $\times 3$ (plot).
- Rebirth (plot).
- The Dark Power: From Shadow into Light (master structure).



The taxonomy of stories:

- ANIMAL TALES 1-299
  - Wild Animals 1-99
    - The Clever Fox (Other Animal) 1-69
    - Other Wild Animals 70-99
  - Wild Animals and Domestic Animals 100-149
  - Wild Animals and Humans 150-199
  - Domestic Animals 200-219
  - Other Animals and Objects 220-299
- TALES OF MAGIC 300-749
  - Supernatural Adversaries 300-399
  - Supernatural or Enchanted Wife (Husband) or Other Relative 400-459
    - Wife 400-424
    - Husband 425-449
    - Brother or Sister 450-459
  - Supernatural Tasks 460-499
  - Supernatural Helpers 500-559
  - Magic Objects 560-649
  - Supernatural Power or Knowledge 650-699
  - Other Tales of the Supernatural 700-749
- RELIGIOUS TALES 750-849
  - God Rewards and Punishes 750-779
  - The Truth Comes to Light 780-799
  - Heaven 800-809
  - The Devil 810-826
  - Other Religious Tales 827-849
- REALISTIC TALES 850-999
  - The Man Marries the Princess 850-869
  - The Woman Marries the Prince 870-879
  - Proofs of FidelitY and Innocence 880-899
  - The Obstinate Wife Learns to Obey 900-909
  - Good Precepts 910-919
  - Clever Acts and Words 920-929

Folkloristics:

- Academic area formally started around 1900.
- Aarne–Thompson classification systems
- Motif-based taxonomy.
- Online classification database

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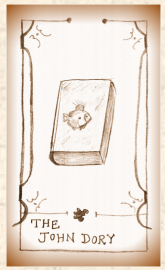

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A searchable meta-graph can connect even troublesome house elves and other supernatural beings to scholarly folk categories.

BY JAMES ABELLO, PETER BROADWELL, AND TIMOTHY R. TANGHERLINI

Computational Folkloristics

"Computational folkloristics"
Abello, Broadwell, and Tangherlini, Communications of the ACM, **55**, 60–70, 2012. [1]

- Motivation: "As a simple, historical example from the Danish materials, no one has yet classified (according to the ATU index) the several thousand fairy tales in the collections of the Danish Folklore Archive (http://www.dafos.dk), nor does it seem anyone ever will."

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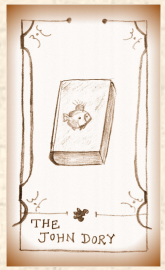
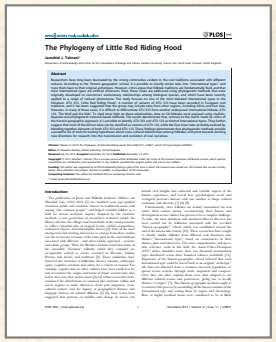
- Motivation: "As a simple, historical example from the Danish materials, no one has yet classified (according to the ATU index) the several thousand fairy tales in the collections of the Danish Folklore Archive (http://www.dafos.dk), nor does it seem anyone ever will."
- 'Imagine a system in which the complexities of a folklore corpus can be explored at different levels of resolution, from the broad perspective of "distant reading" down to the narrow perspective of traditional "close reading."'





"The phylogeny of Little Red Riding Hood"

Jamshid J. Tehrani,
PLoS ONE, **8**, e78871, 2013. [21]

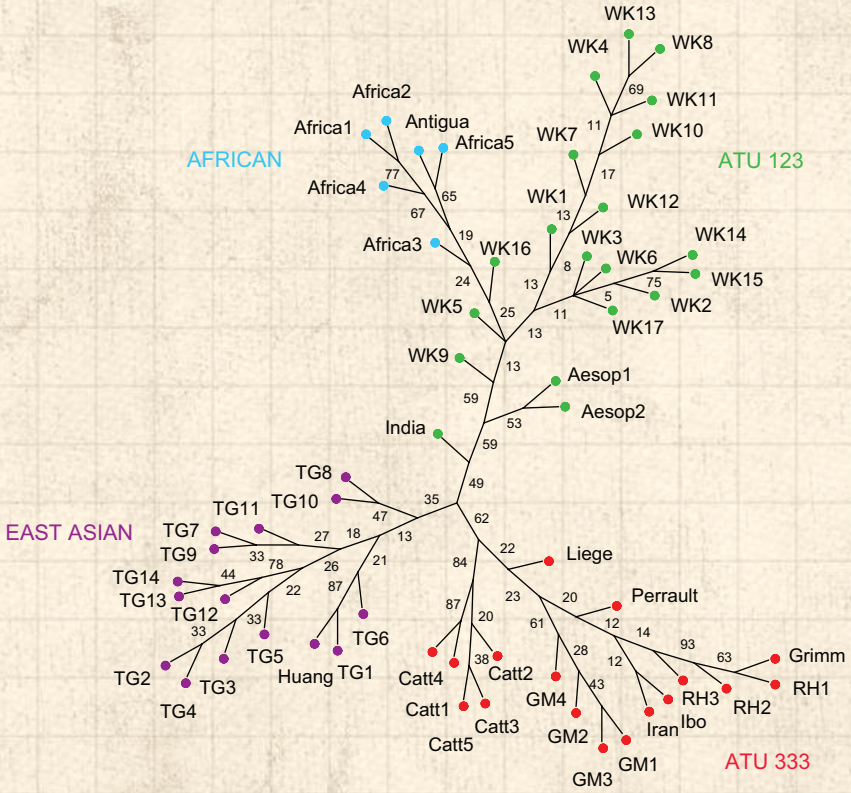


Figure 2. Majority-rules consensus of the most parsimonious trees returned by the cladistic analysis of the tales. Major groupings are labelled by region or ATU international type and indicated by the coloured nodes. Sub-types are indicated in the taxa labels (RH = Little Red Riding Hood; GM = Story of Grandmother; Catt = Catterinella; WK = The Wolf and the Kids; TG = Tiger Grandmother). Variants by particular authors, or from countries/ethnic groups that are discussed in the text have individual labels. Numbers beside the edges represent the level of support for individual clades returned by the bootstrap analysis.
doi:10.1371/journal.pone.0078871.g002

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The taxonomy of stories:

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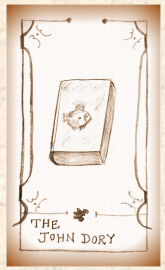
Fundamental arcs:

- Kill the Monster.



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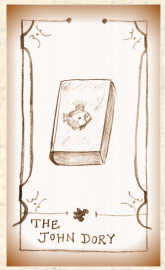

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What about comedies?

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What about comedies?

- Comedies are not in themselves a story, but a way of telling stories.

Stories are algorithms for life:

Homo narrativus:

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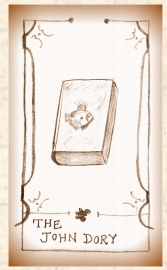

Stories are algorithms for life:

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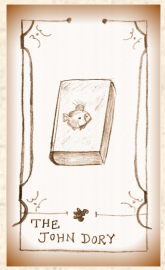

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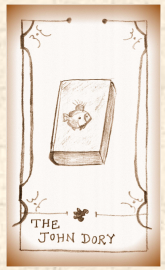

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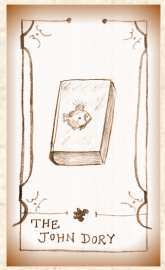

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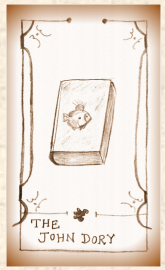

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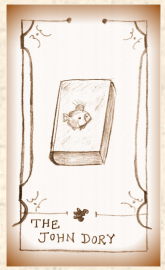

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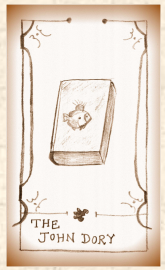

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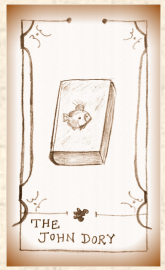

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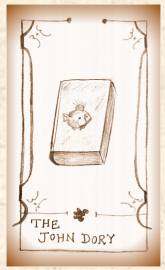

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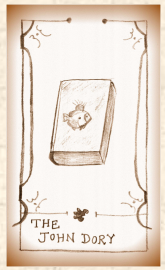

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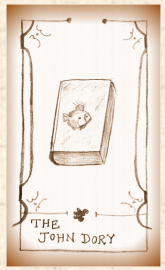

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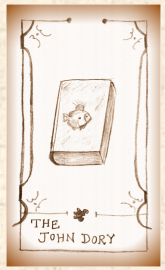

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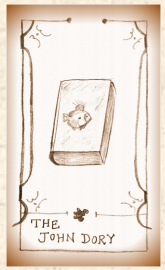

The boiled-down essence of stories:

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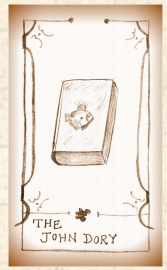
The three fundamental events of (non-clone) life:



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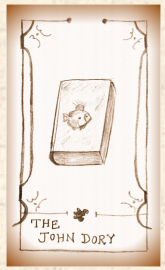

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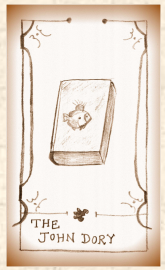

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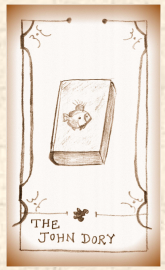

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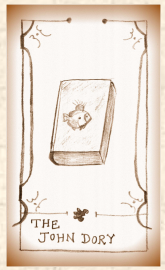

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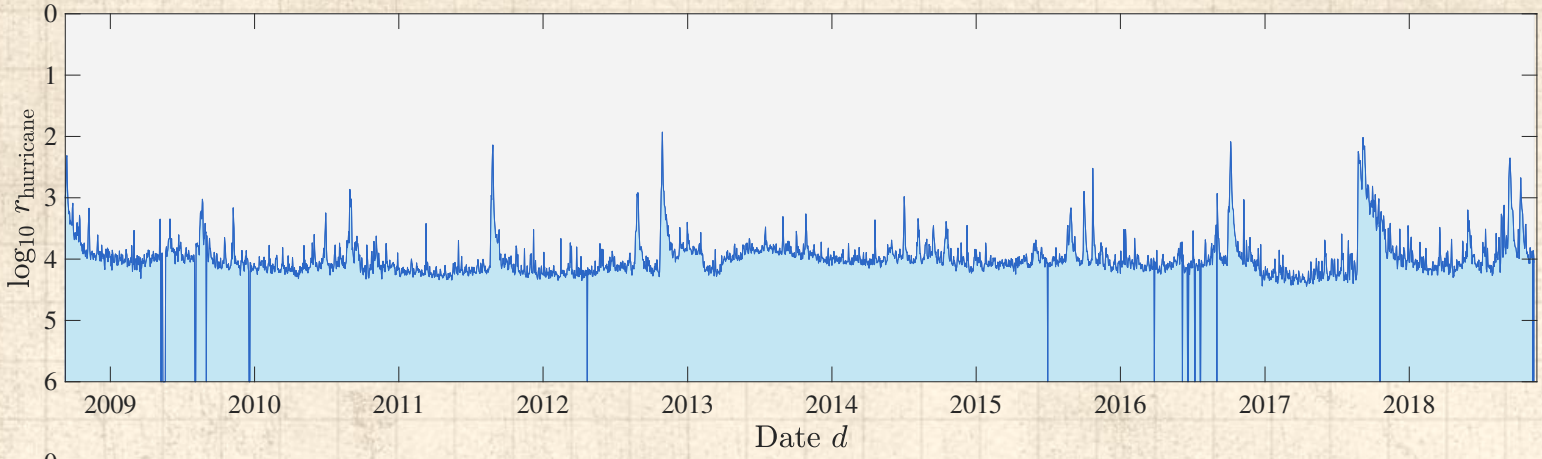
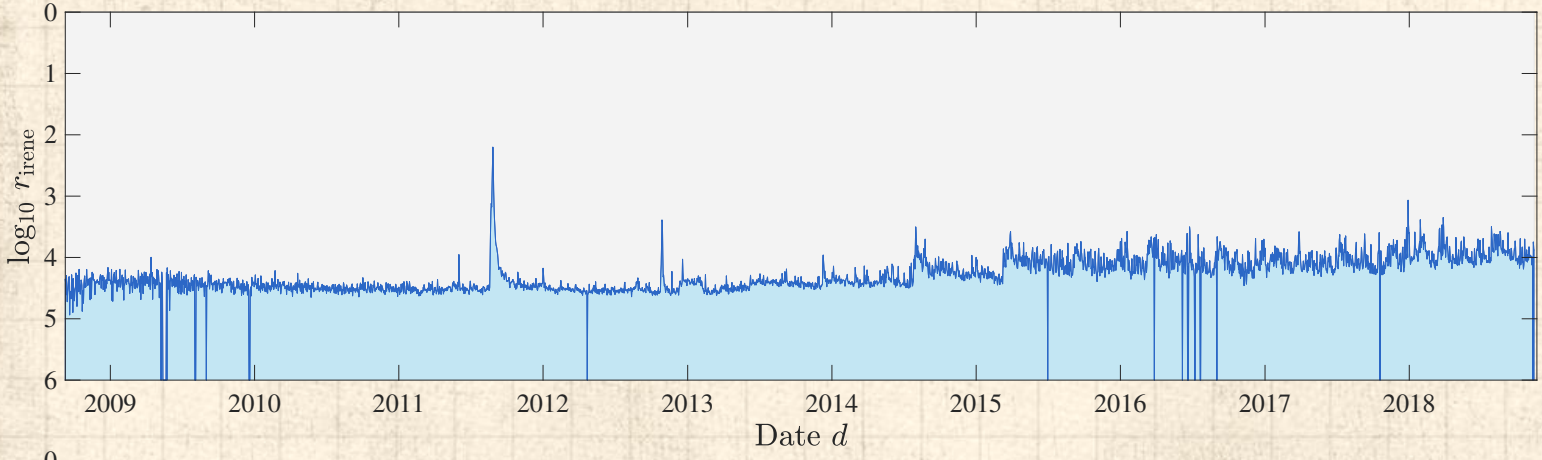
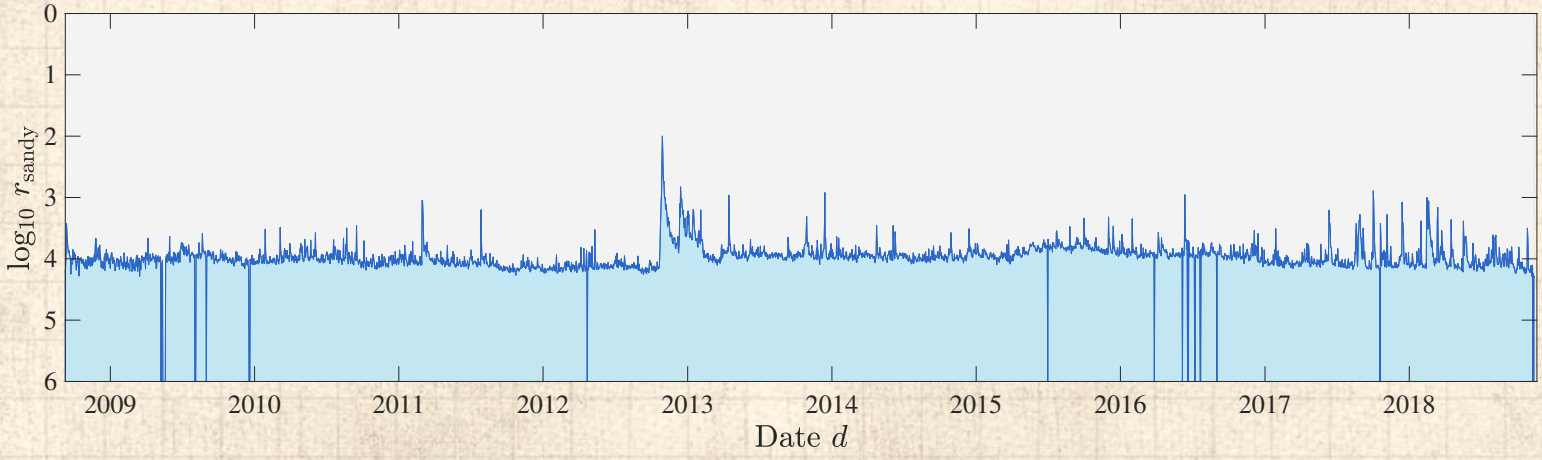
- The unifying theme of existence is existence.

Awareness and Memory: Hurricanes







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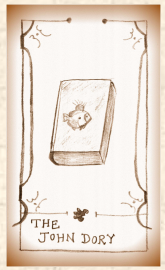

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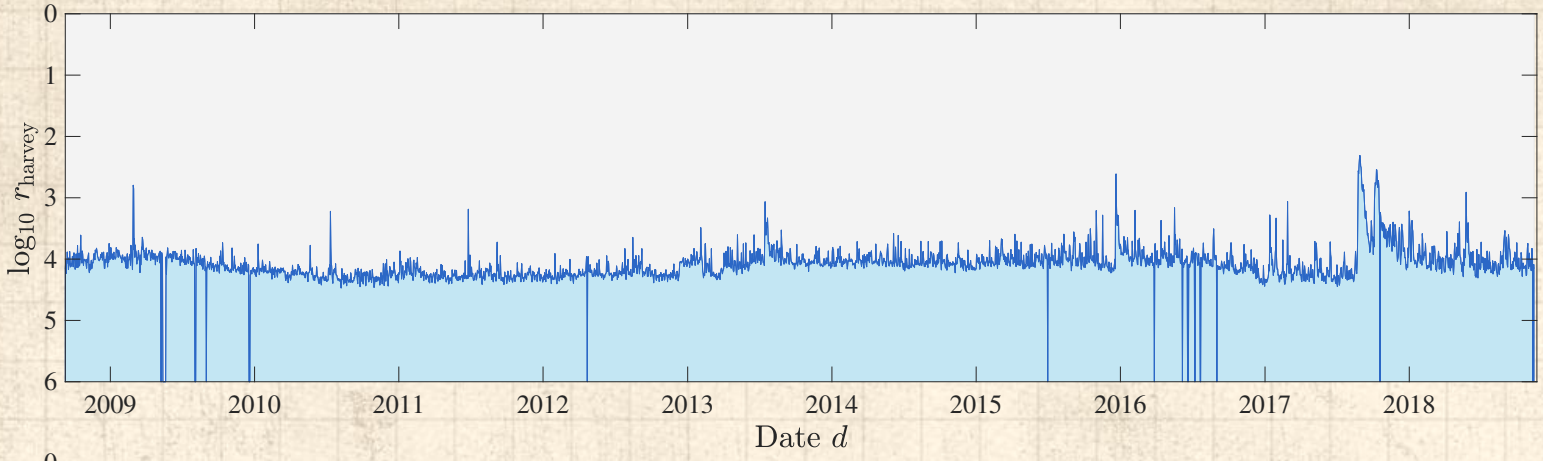

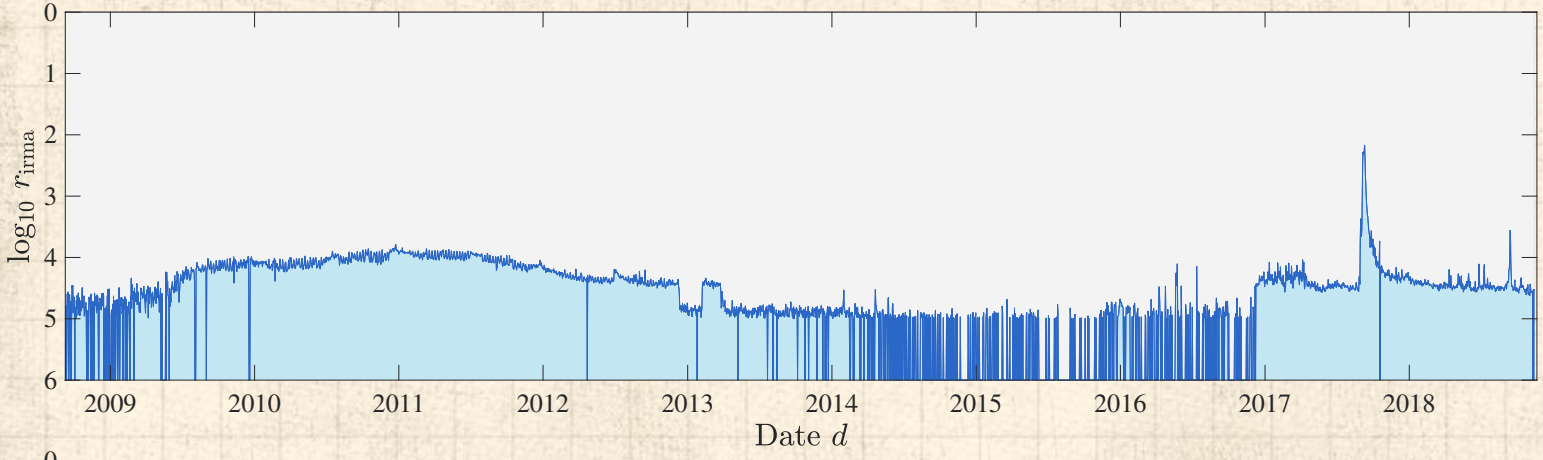

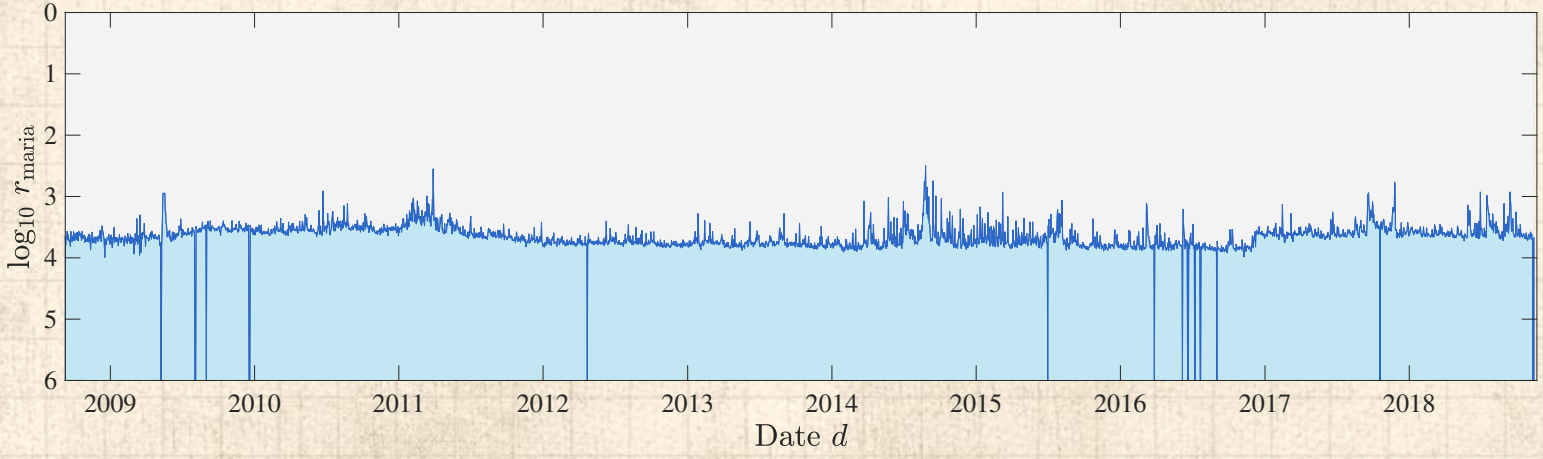

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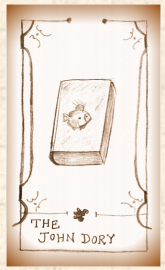

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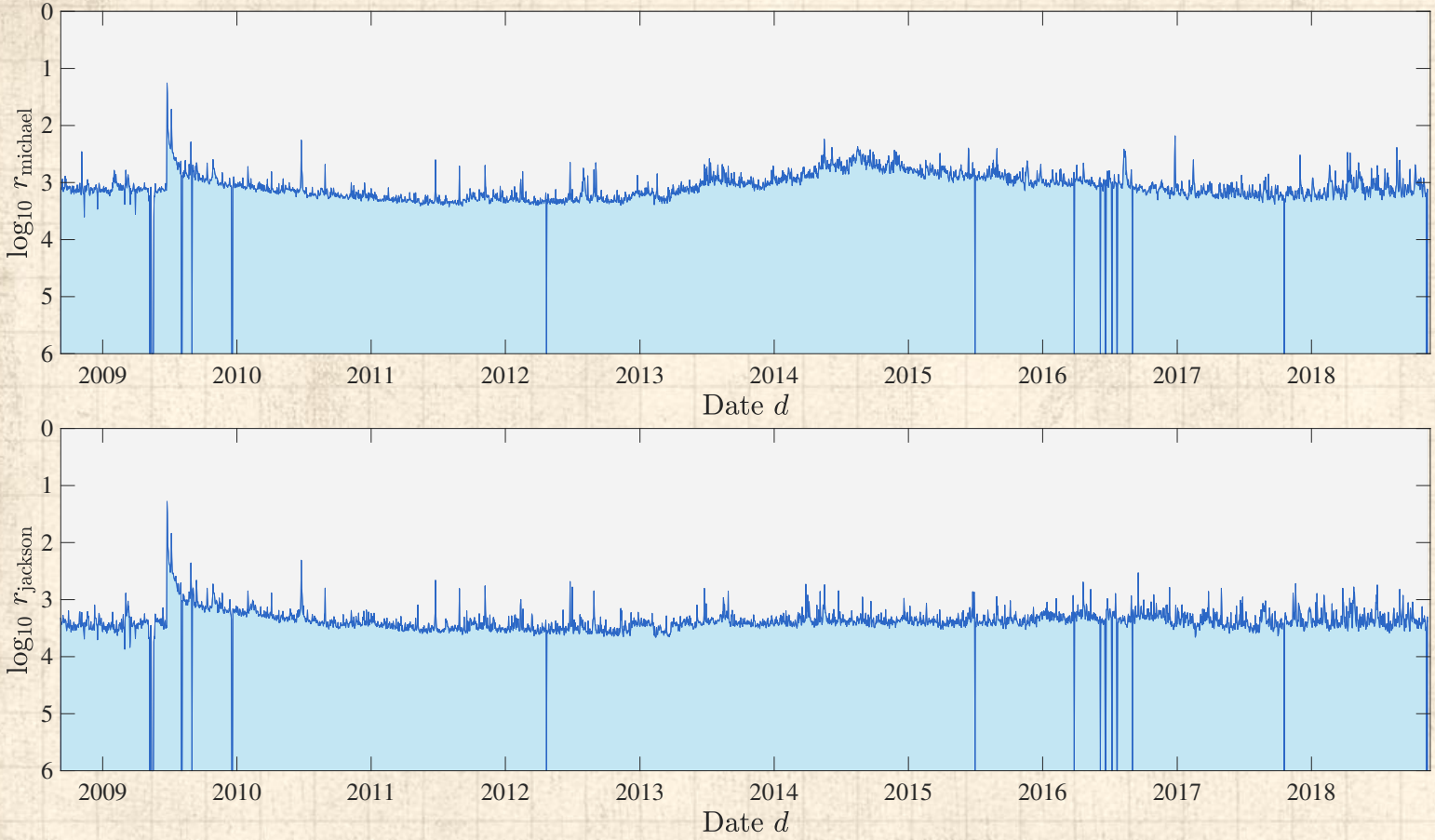
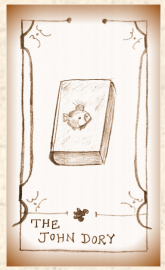
Michael Jackson





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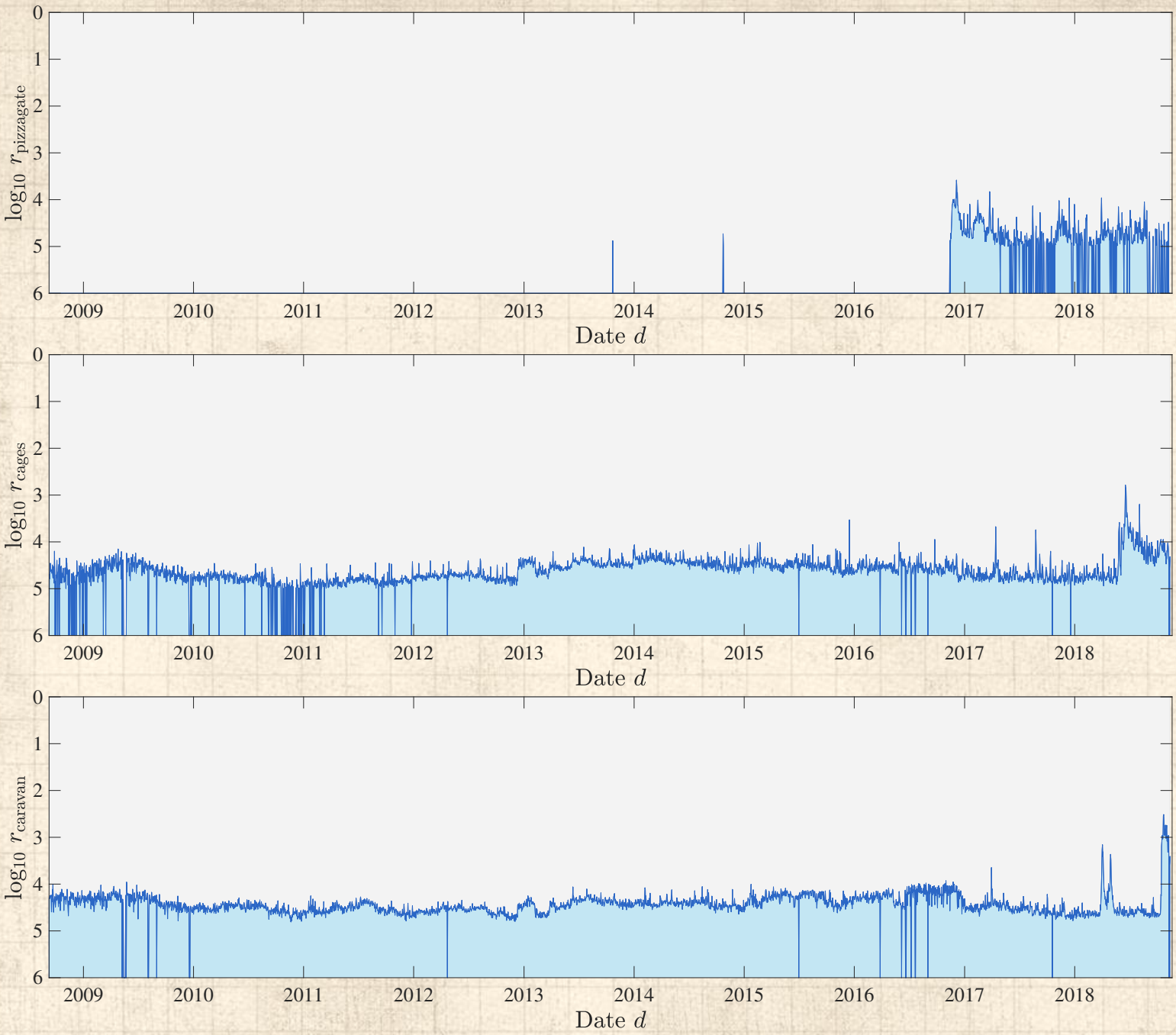

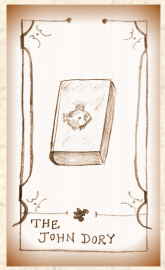

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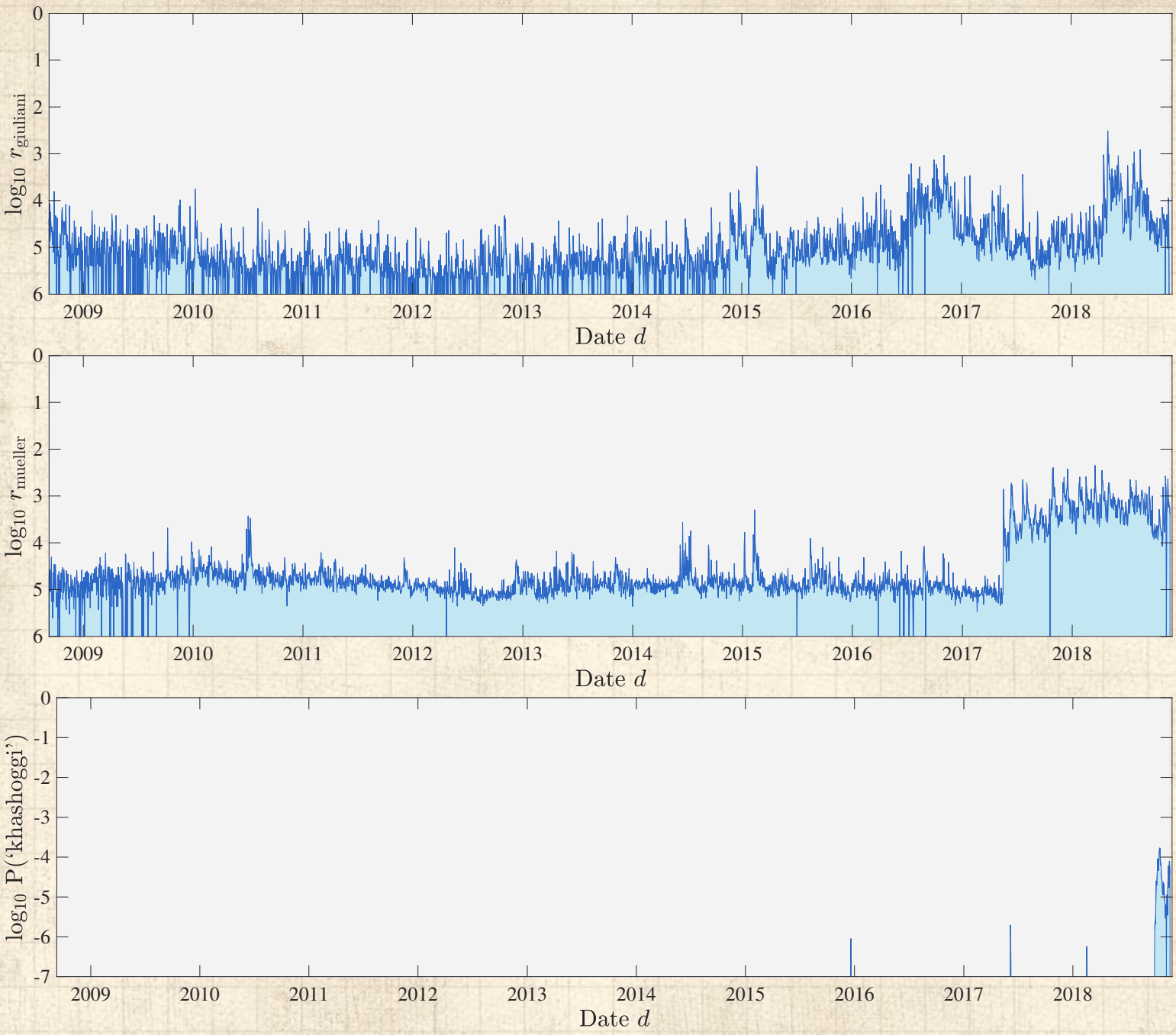
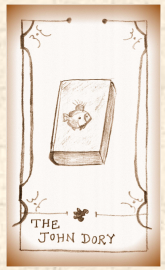
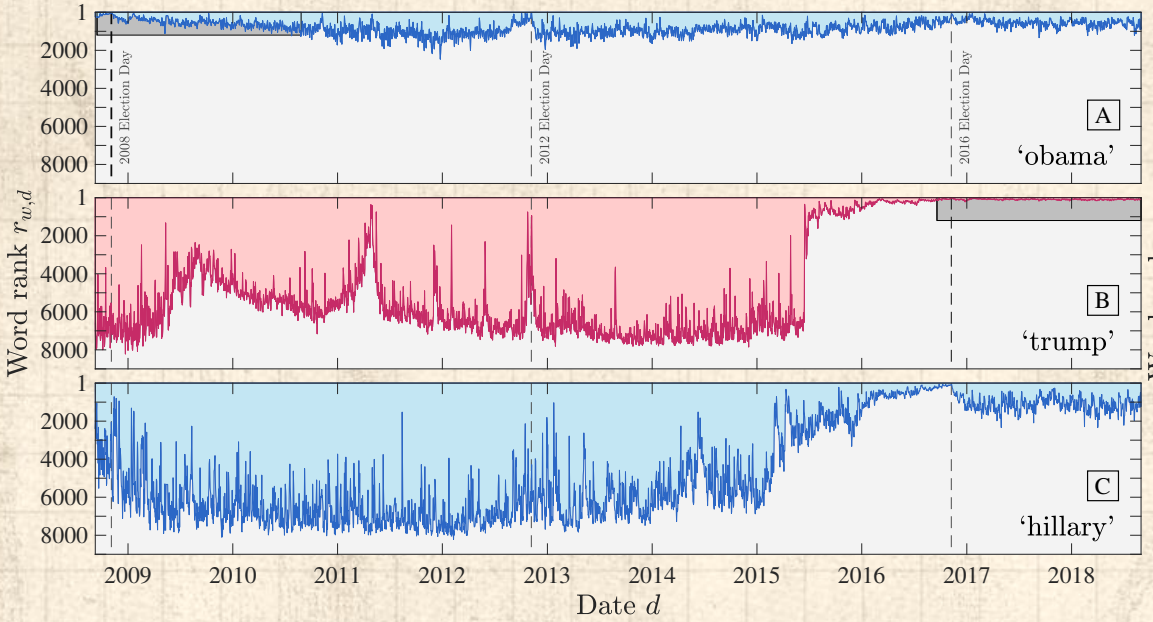
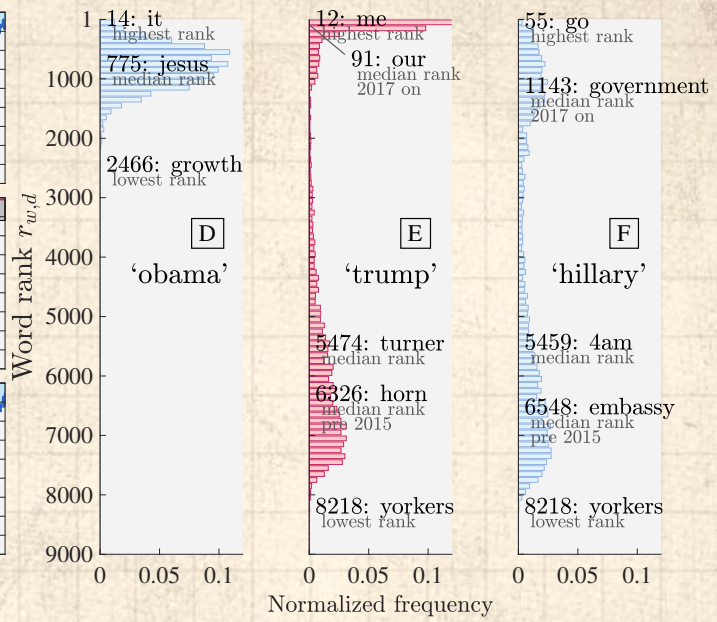
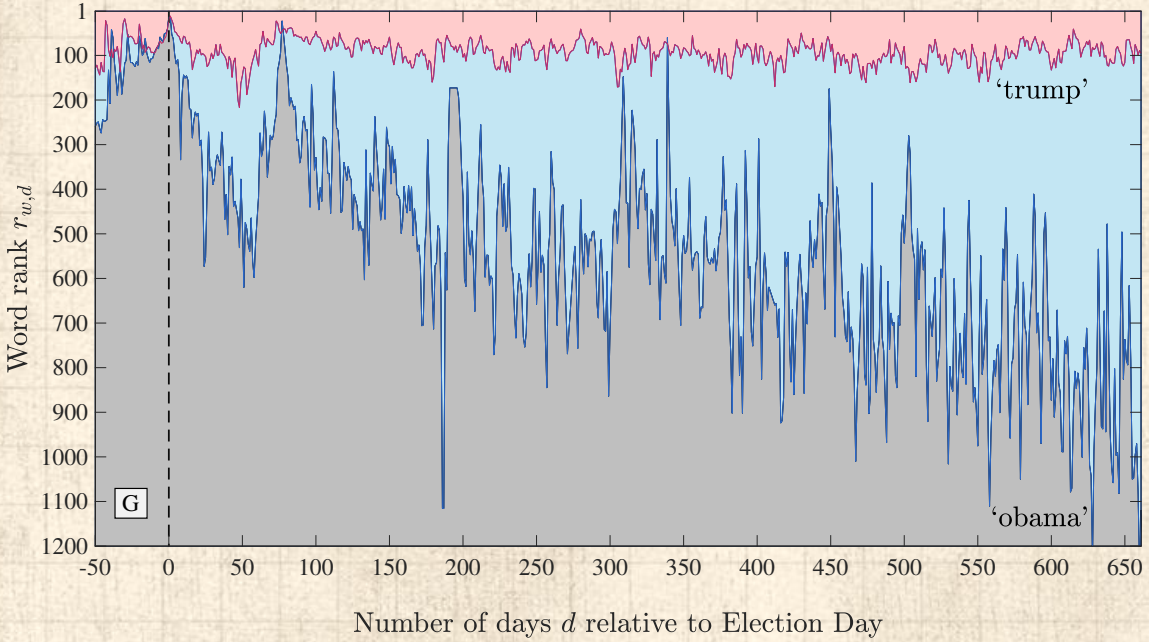




Lexical fame of POTUSes and possible POTUSes:

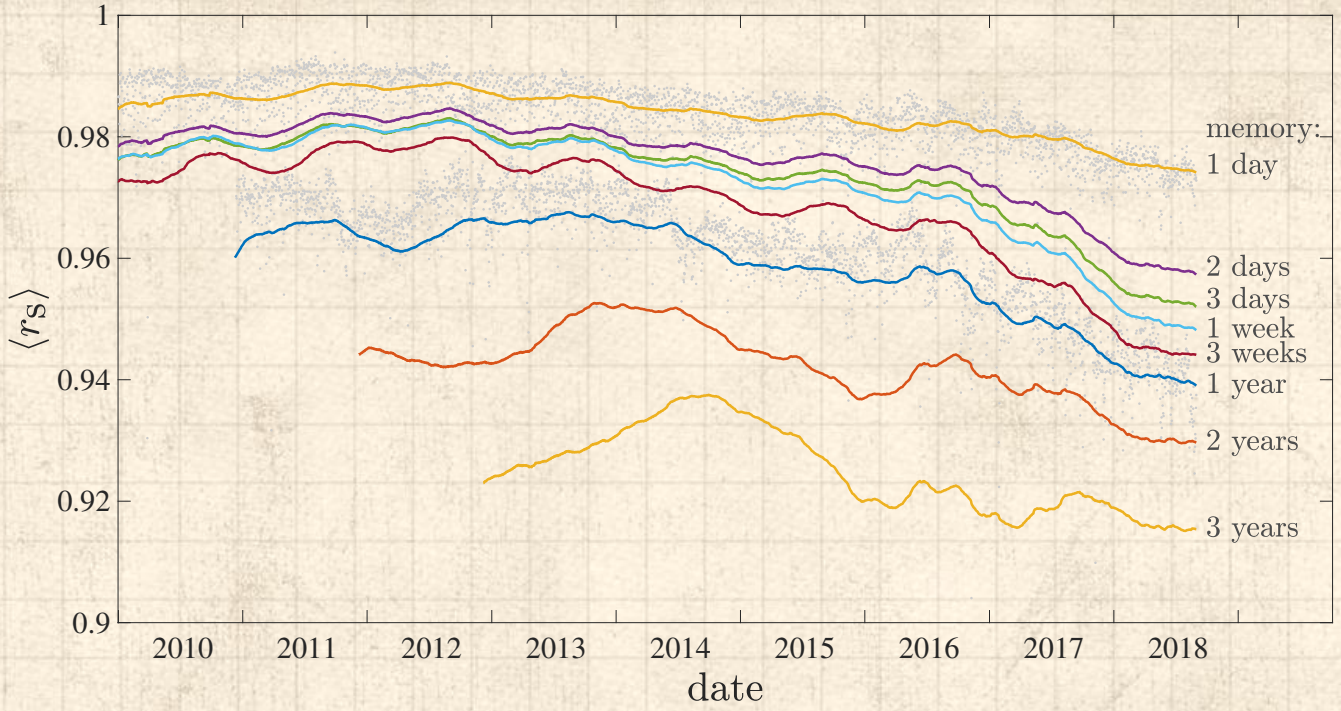


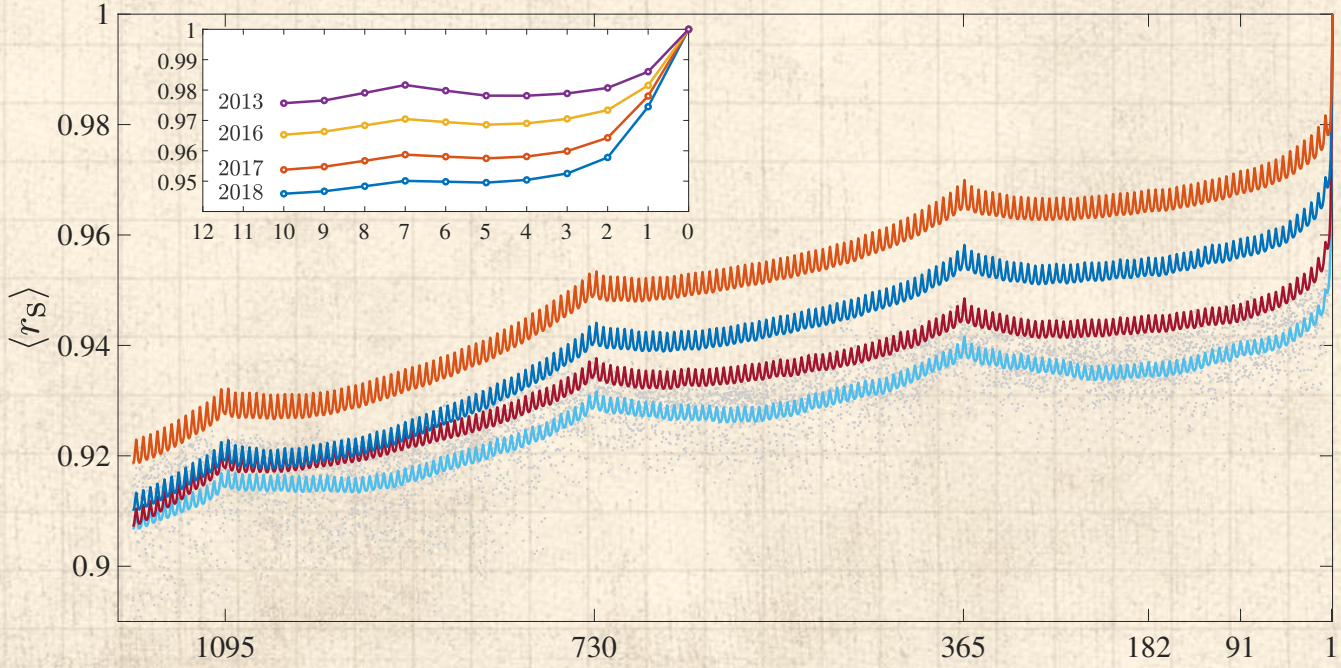




1–14: the, i, to, a, you, and, is, in, of, for, my, me, on, it
50–59: will, as, by, good, they, go, know, it's, he, who
100–109: been, its, am, off, you're, via, twitter, us, shit, had
150–155: everyone, could, where, tonight, hate, year
200–205: followers, birthday, yeah, guys, before, dont
250–255: mean, black, nothing, house, put, money
300–305: own, bed, remember, though, soon, stay
350–355: hell, sex, talking, youtube, we're, seen
400–405: place, sometimes, saw, don, gone, christmas
450–457: co, they're, join, early, lady, smile, red, book
500–507: half, young, wit, words, heard, sick, fast, send
550–555: pls, state, worth, pic, everybody, during
600–605: ill, pay, relationship, problem, president, month
650–655: case, photos, gay, account, knew, mood
700–705: click, fact, takes, knows, ones, crying
750–757: sister, st, pm, sound, inside, shot, lunch, answer
800–807: pain, dreams, lord, huge, kiss, child, movies, card
850–855: drunk, wife, killed, forgot, happens, hoe
900–905: united, lots, simple, watched, review, brown
950–956: absolutely, laughing, price, walking, sense, bar, taken
1000–1005: meant, chicken, aww, four, soo, asking
1050–1057: near, space, earth, piece, writing, kno, hurts, xxx
1100–1105: train, india, award, camera, awkward, stories
1150–1154: supposed, especially, training, broken, players
1200–1205: trending, race, dying, mobile, putting, winter

Story turbulence:





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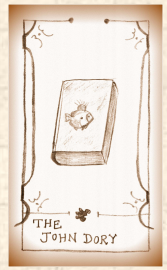

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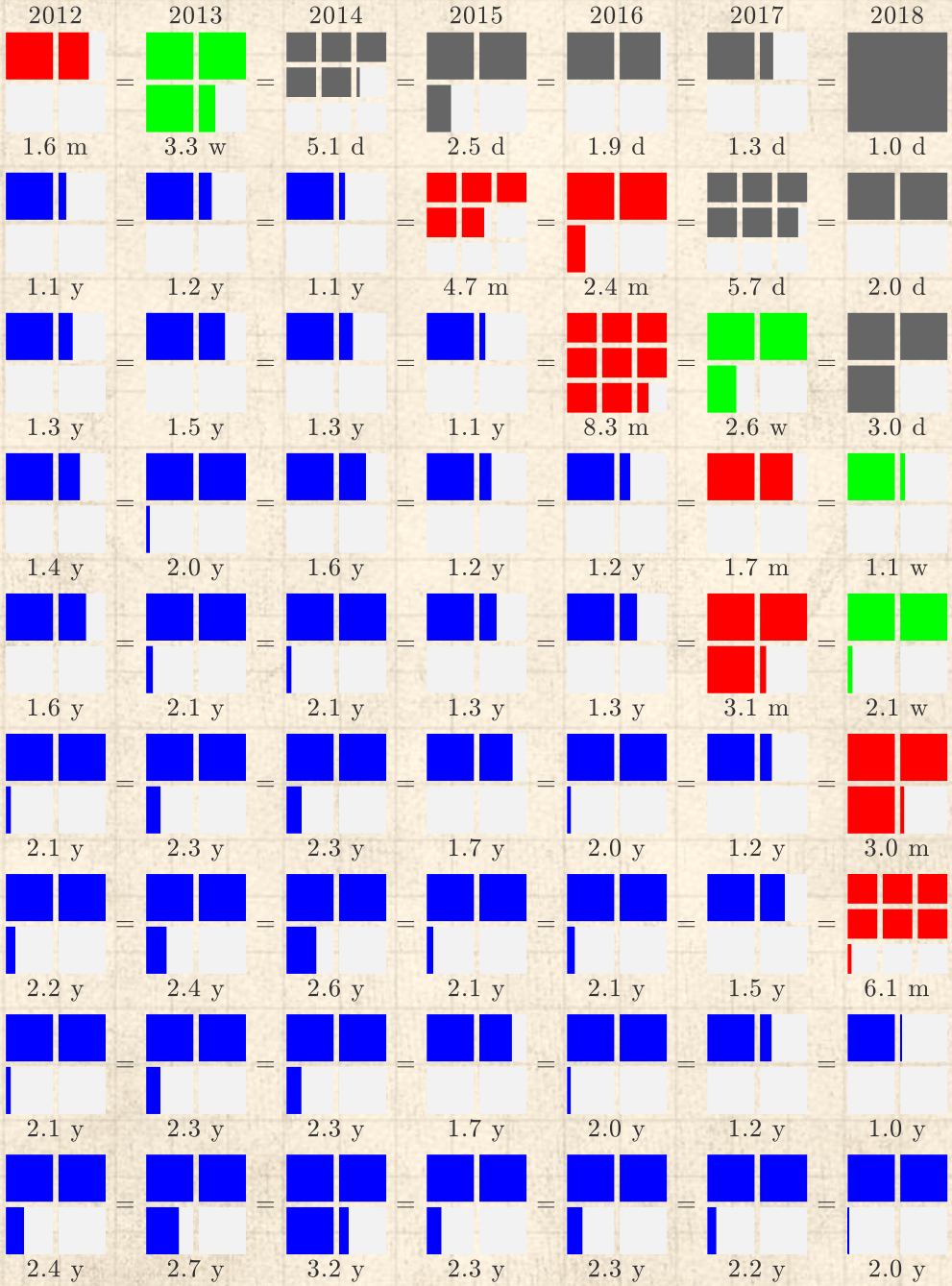

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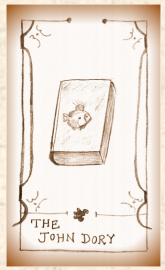

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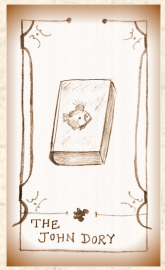
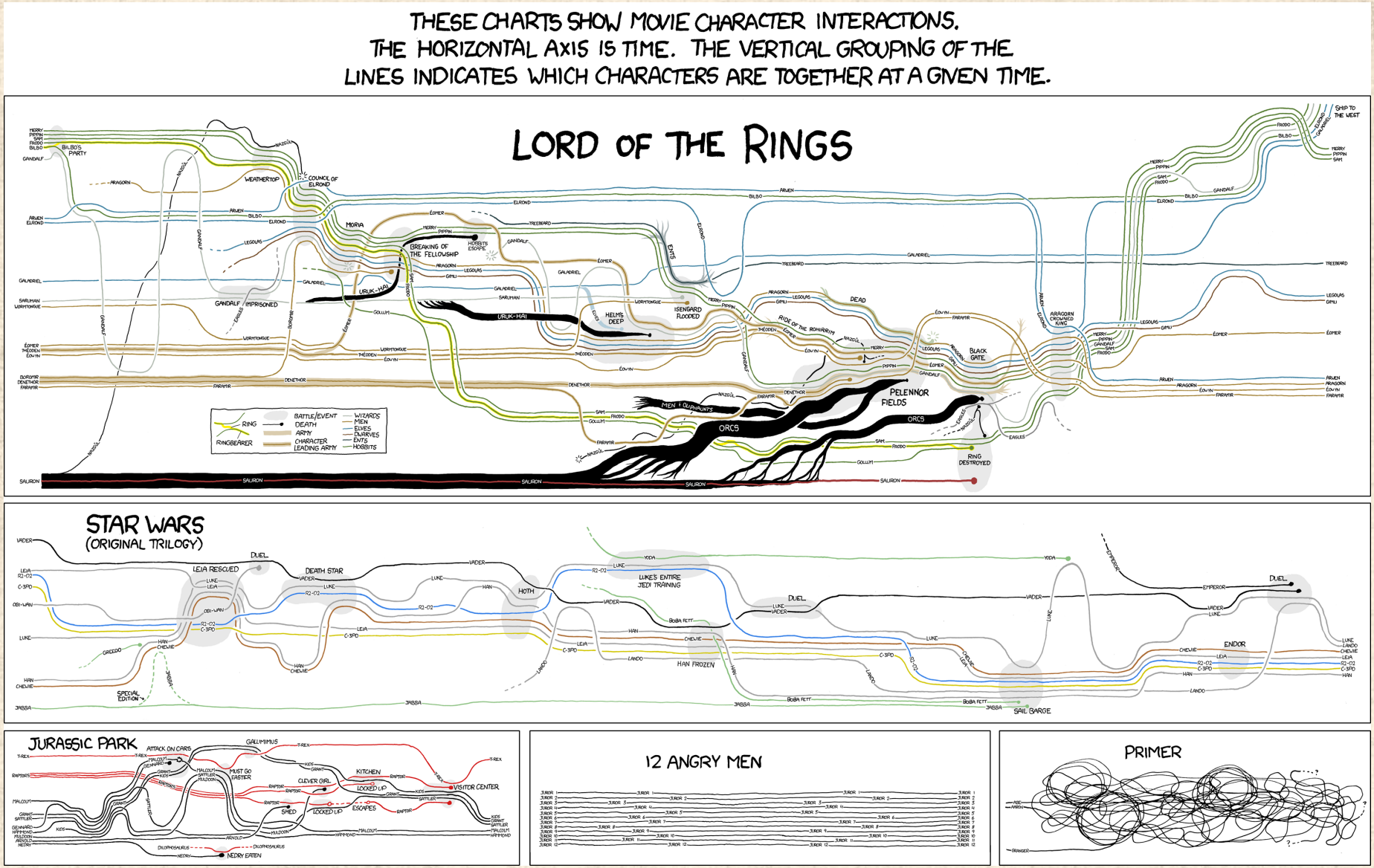
Kurt Vonnegut on the Shapes of Stories



Emotional arcs are not plots. Neither are character paths:



https://xkcd.com/657/

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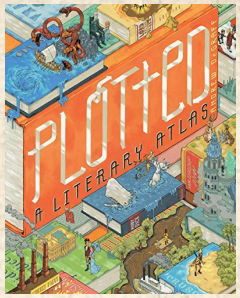
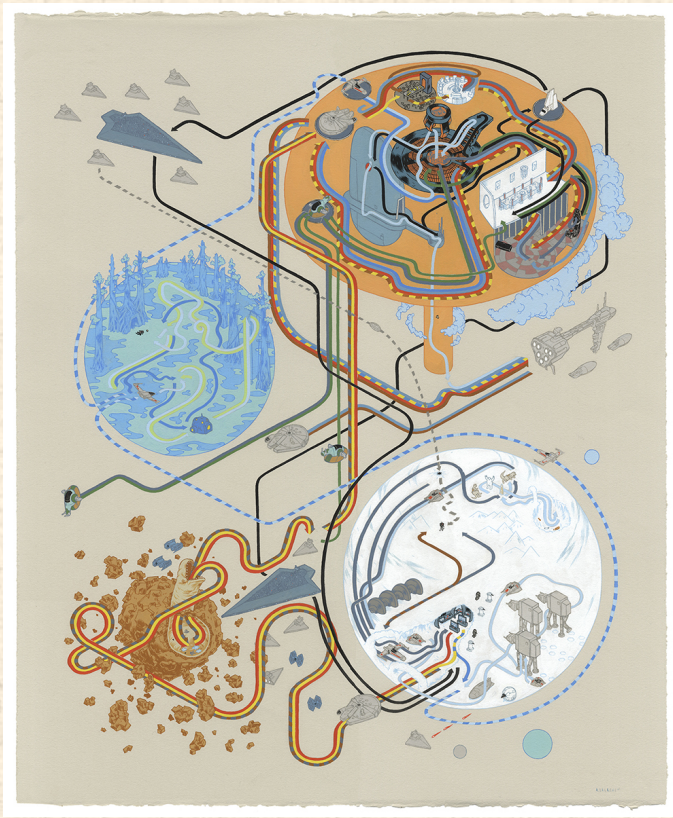
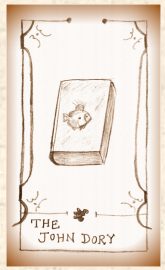


"Plotted: A Literary Atlas" by Andrew DeGraff (2015). [9]





http://www.andrewdegraff.com/moviemaps/

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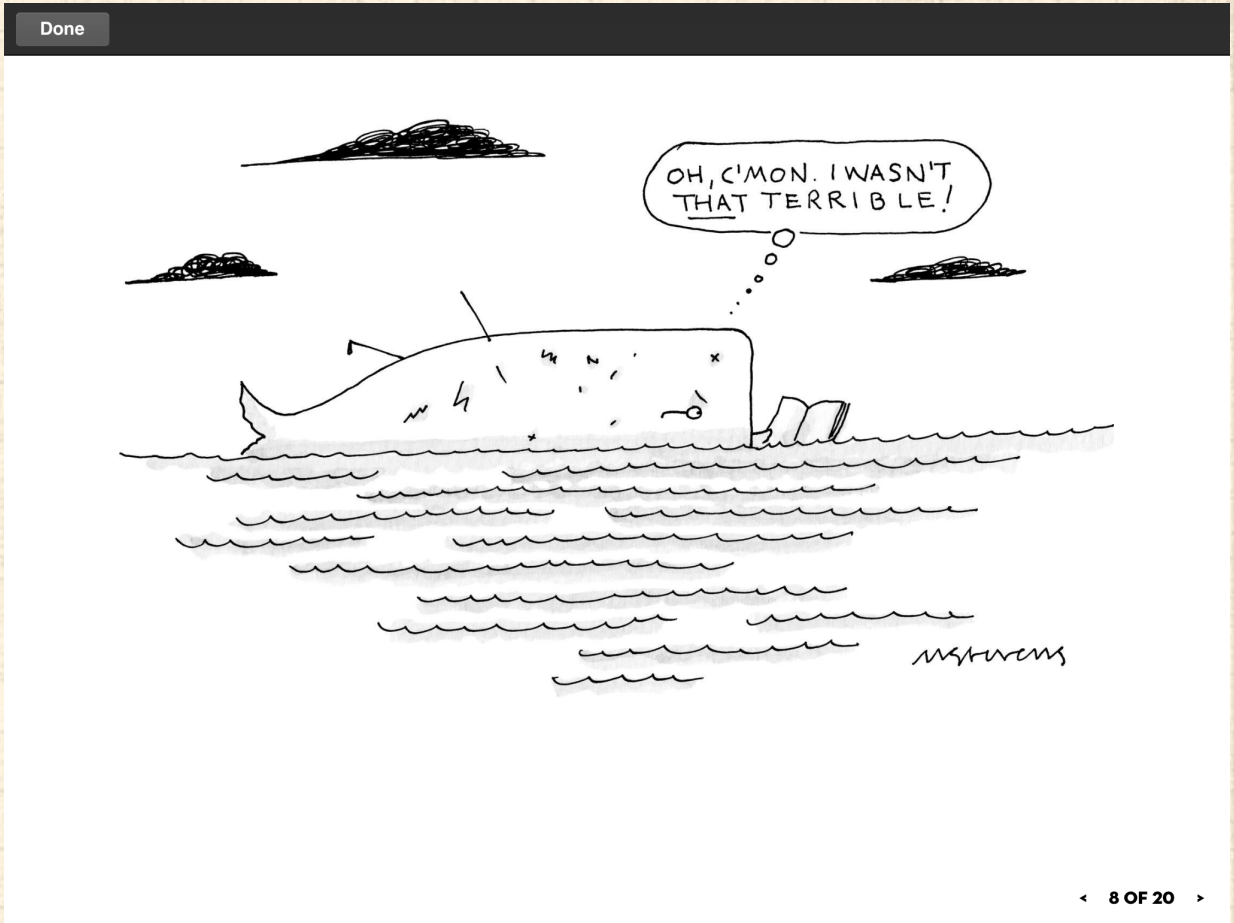
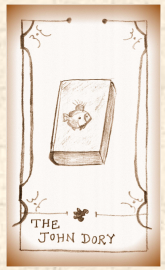


The New Yorker, December 16, 2013, p. 56.



Ron Swanson on metaphors:

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- "I hate metaphors. That's why my favorite book is Moby Dick. No frou-frou symbolism.

Ron Swanson on metaphors:

- "I hate metaphors. That's why my favorite book is Moby Dick. No frou-frou symbolism. Just a good, simple tale about a man who hates an animal."

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Aside: From a 2013 Believer Magazine interview with Maurice Sendak:

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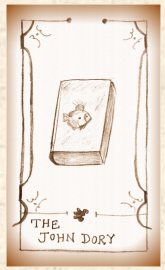

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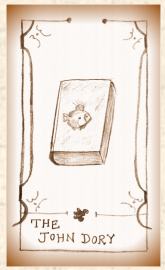

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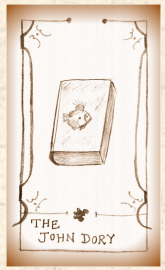

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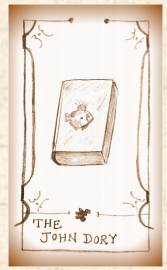

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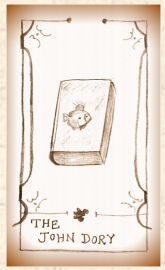

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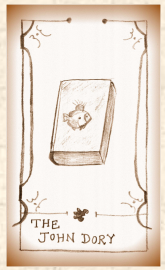

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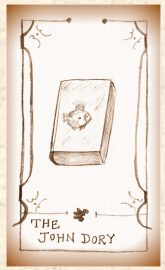

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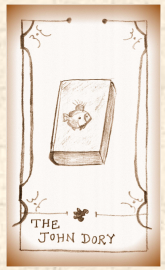

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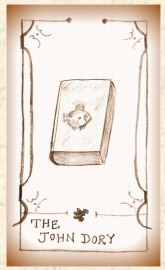

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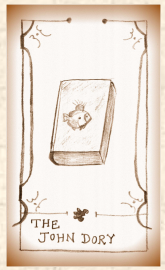

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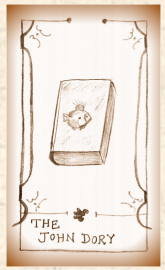

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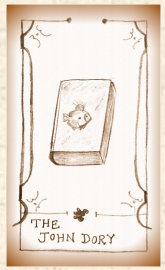

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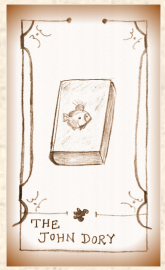

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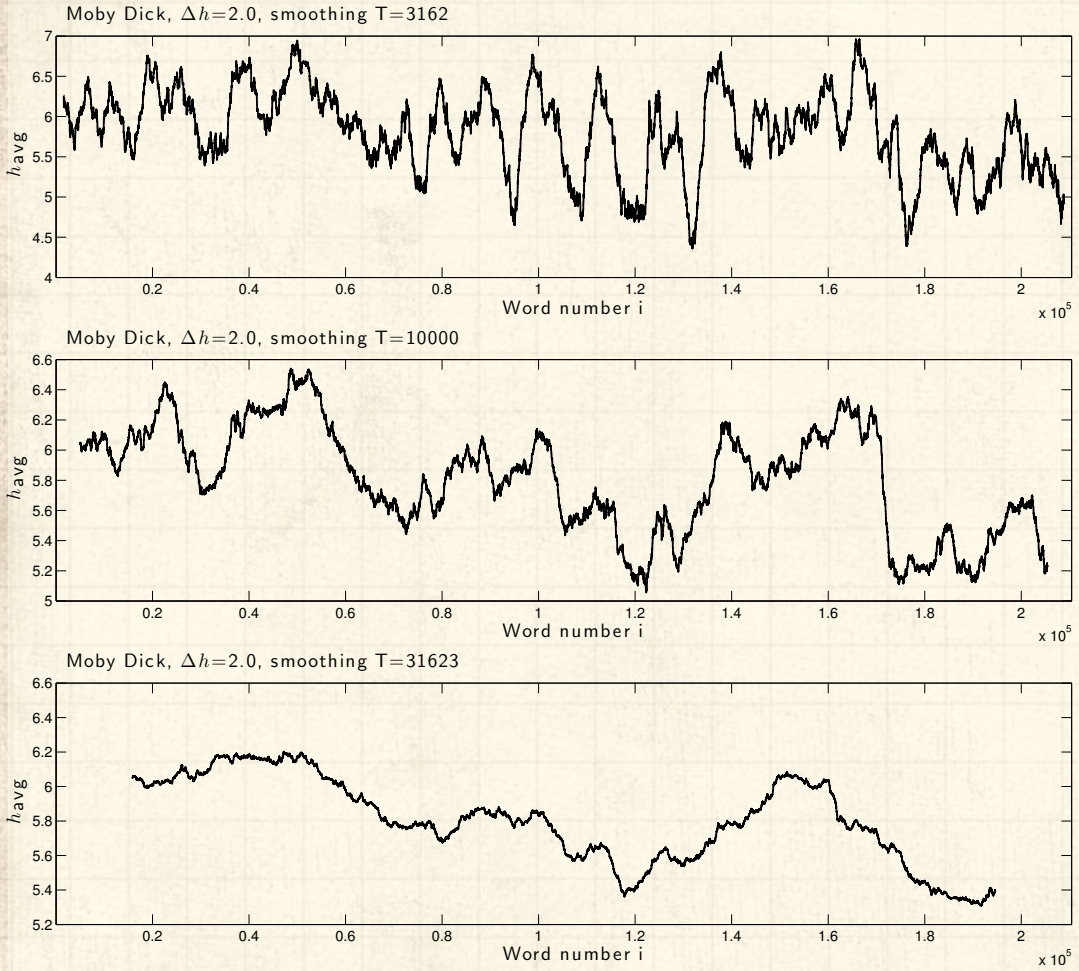
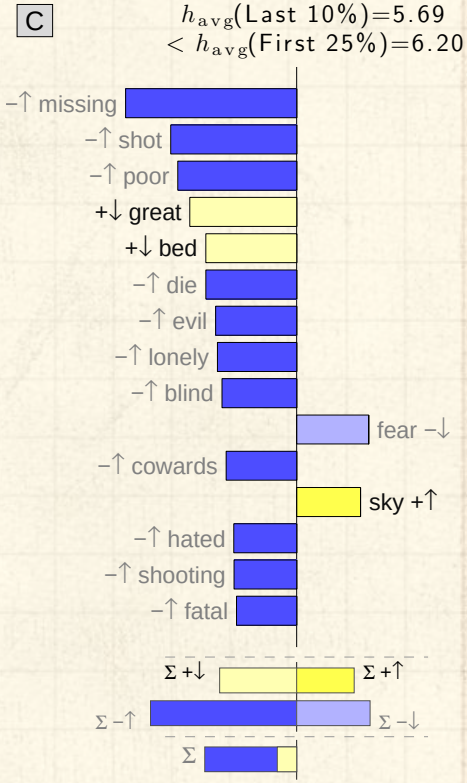
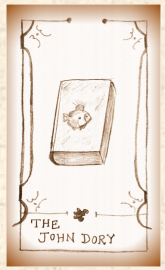
The emotional shapes of stories—Moby Dick:







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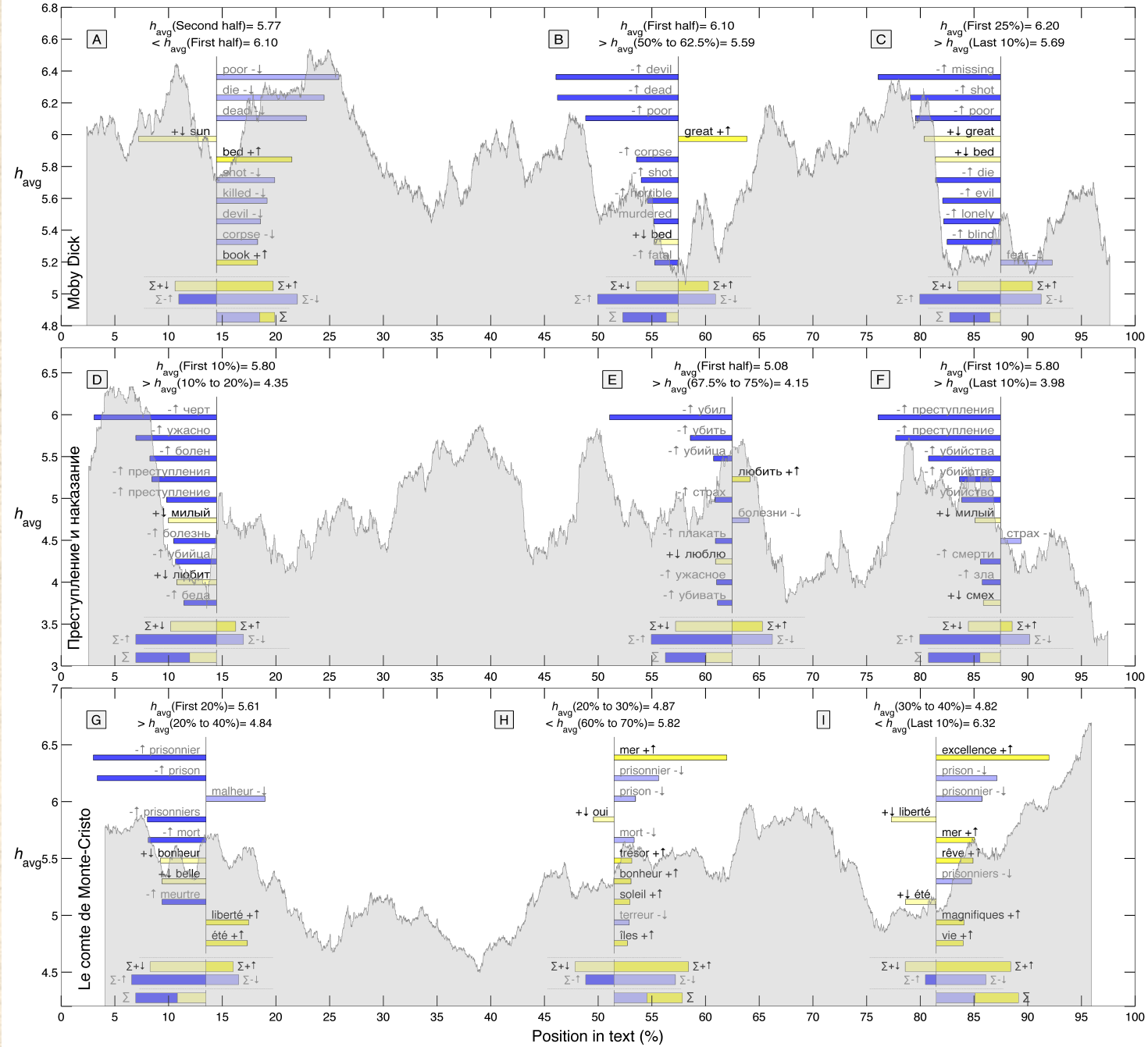
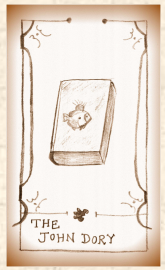




Online, interactive Emotional Shapes of Stories for 10,000+ books:

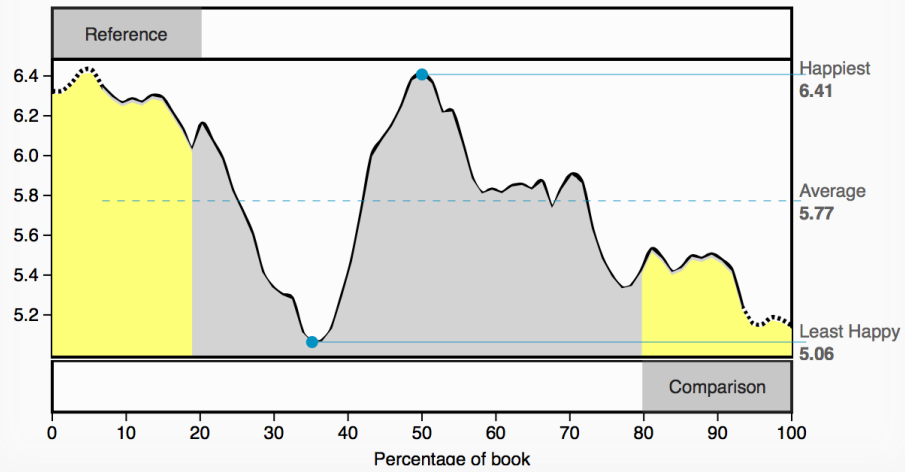
Frankenstein; Or the Modern Prometheus (wiki)

by Mary Shelley

Search Gutenberg Corpus | by Title | Classics | Harry Potter | Random

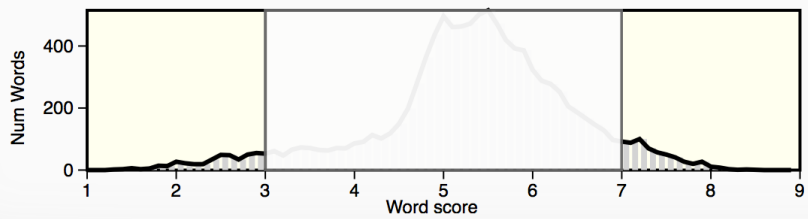
Book happiness time series:

Explore the work's emotional dynamics by sliding and resizing the reference and comparison sections.



Lens (for advanced users):

Slide and resize the stop-window to change the lens:

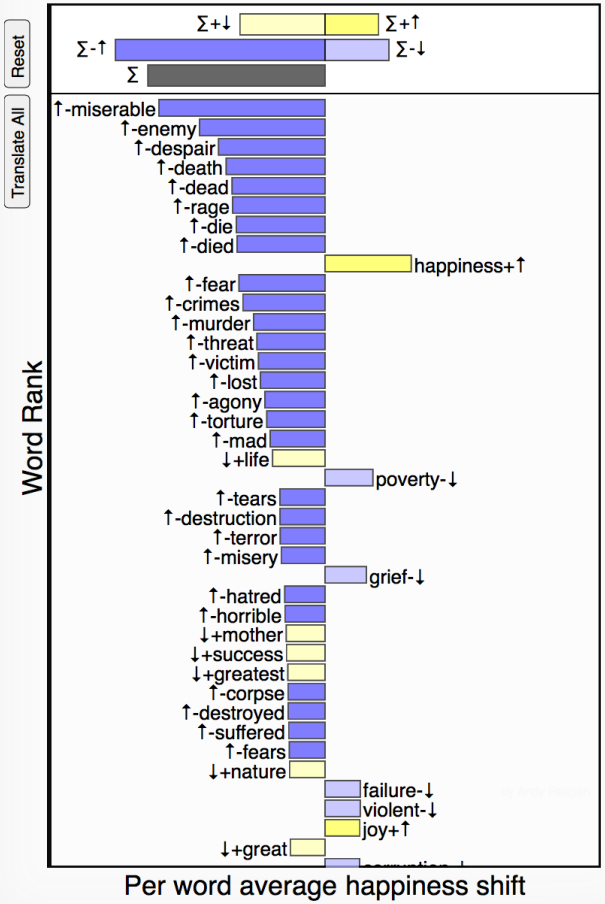


Word Shift:

Why comparison section is less happy than the reference one

Reference sections's happiness = 6.31

Comparison section's happiness = 5.35



Online, interactive Emotional Shapes of Stories for 10,000+ books:

Harry Potter (all books together)

by J.K. Rowling

Search Gutenberg Corpus | by Title | Classics | Harry Potter | Random

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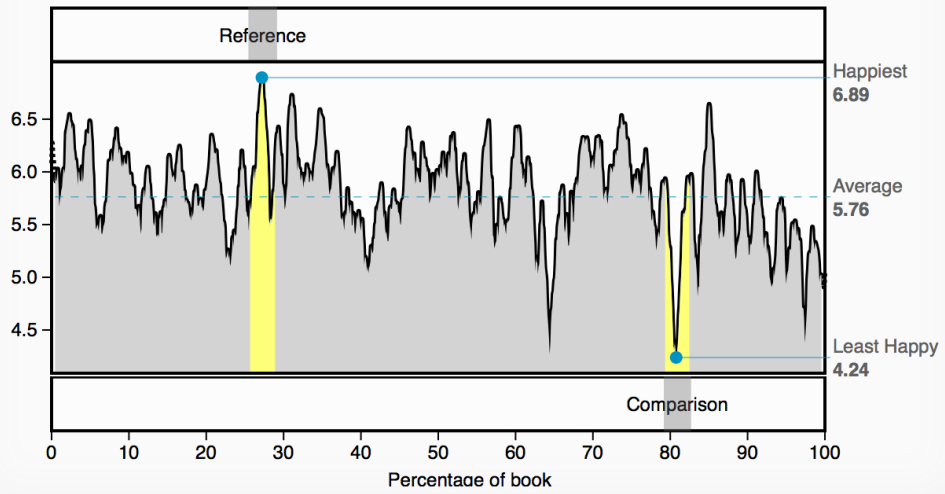

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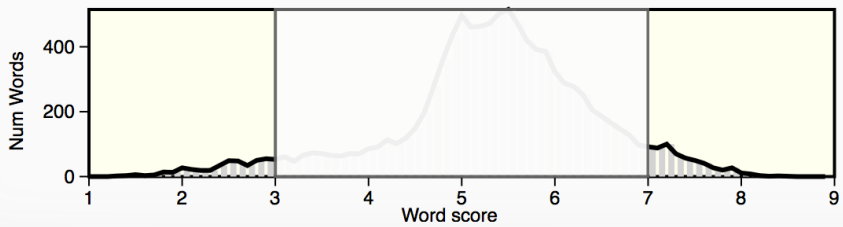
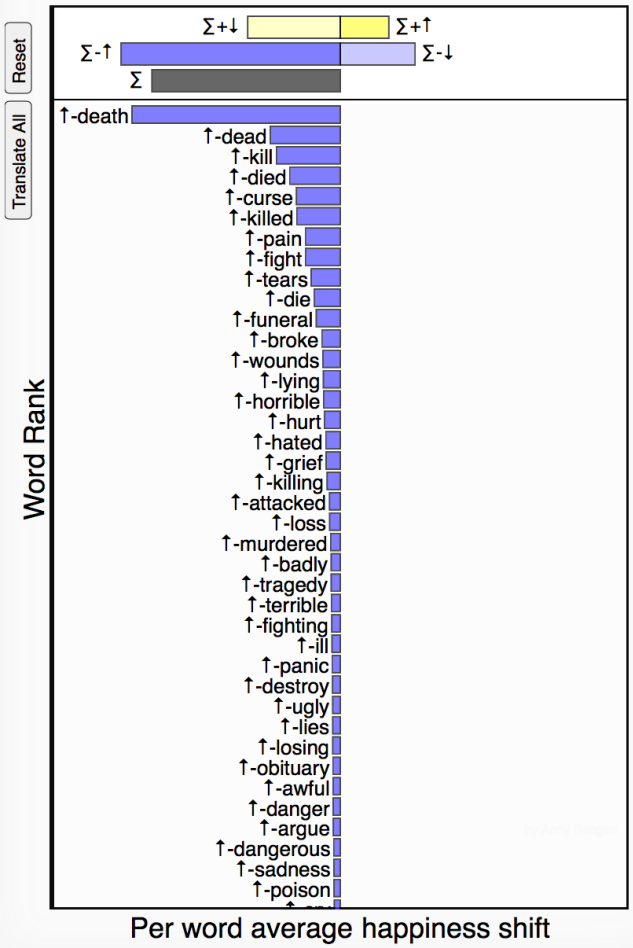


Word Shift:

Why comparison section is less happy than the reference one

Reference sections's happiness = 6.13

Comparison section's happiness = 5.14



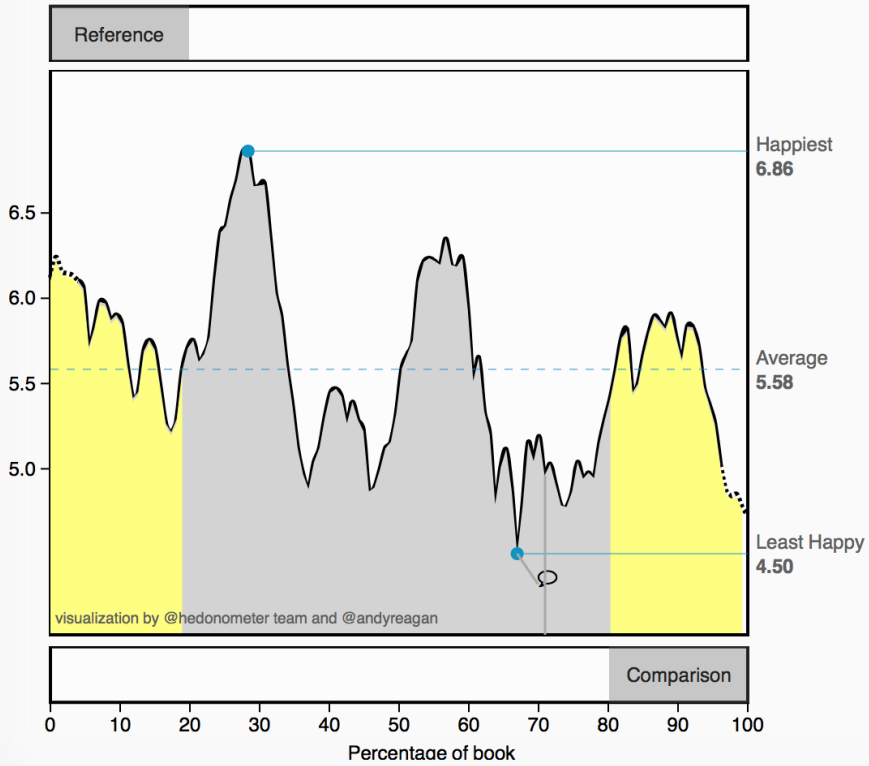
Online, interactive Emotional Shapes of Stories for 1,000+ movie scripts:

Pulp Fiction

directed by Quentin Tarantino

Search Movies | Classics | Team Picks | Random

Movie happiness time series:
Explore the work's emotional dynamics by sliding and resizing the reference and comparison sections.



Movie script:
Portion of script scored for each point in timeseries.

Zed takes the chair, sits it in front of the two prisoners, then lowers into it. Maynard hands The Gimp's leash to Zed, then backs away.

MAYNARD
(to The Gimp)
Down!

The Gimp gets on its knees.

Maynard hangs back while Zed appraises the two men.

MAYNARD
Who's first?

ZED
I ain't fer sure yet.

Then with his little finger, Zed does a silent "Eenie, meany, miney, moe... " just his mouth mouthing the words and his finger going back and forth between the two.

Butch are Marsellus are terrified.

Maynard looks back and forth at the victims.

The Gimps's eyes go from one to the other inside the mask.

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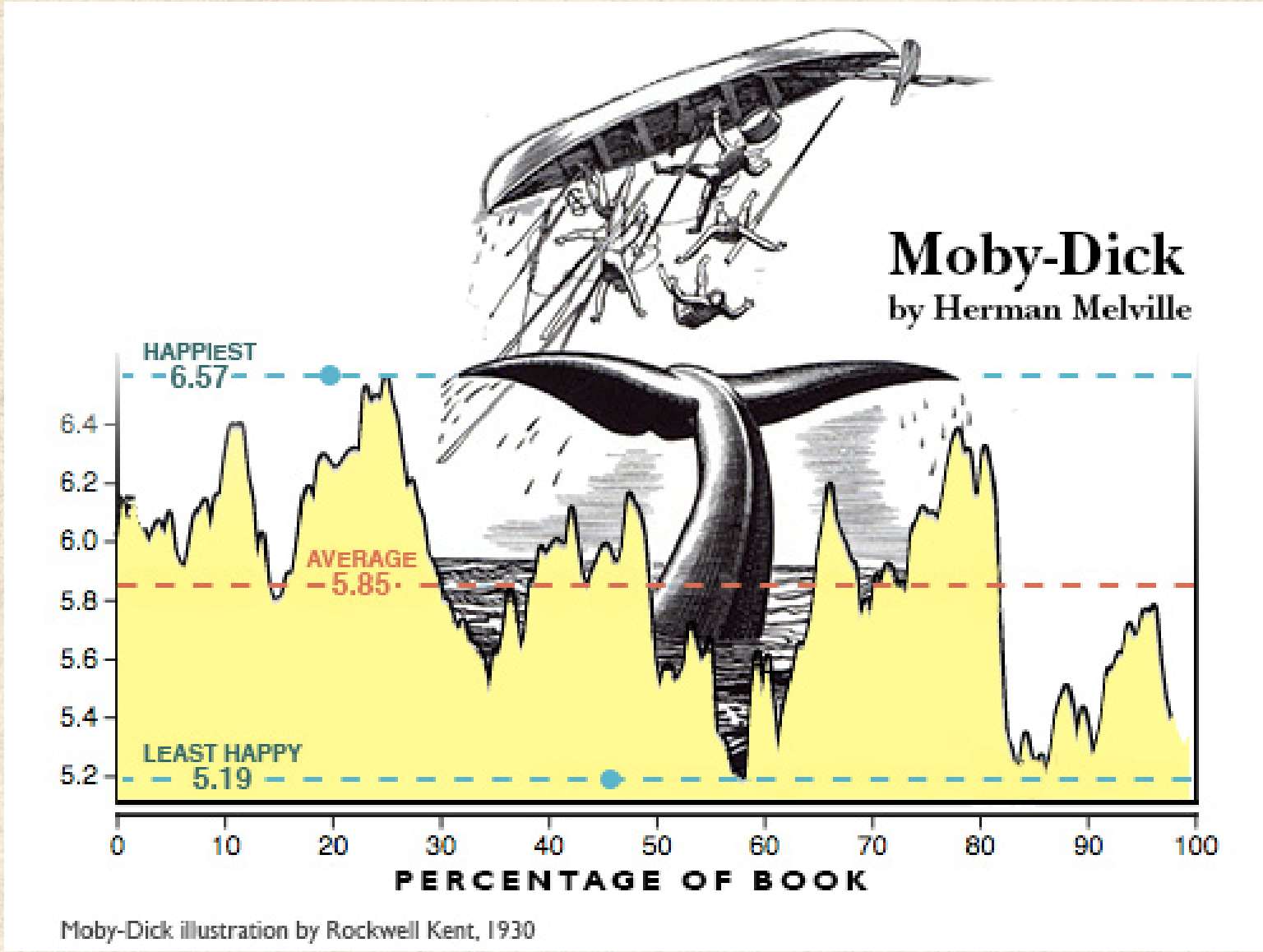
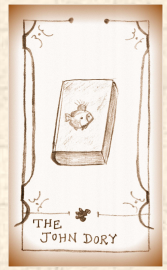
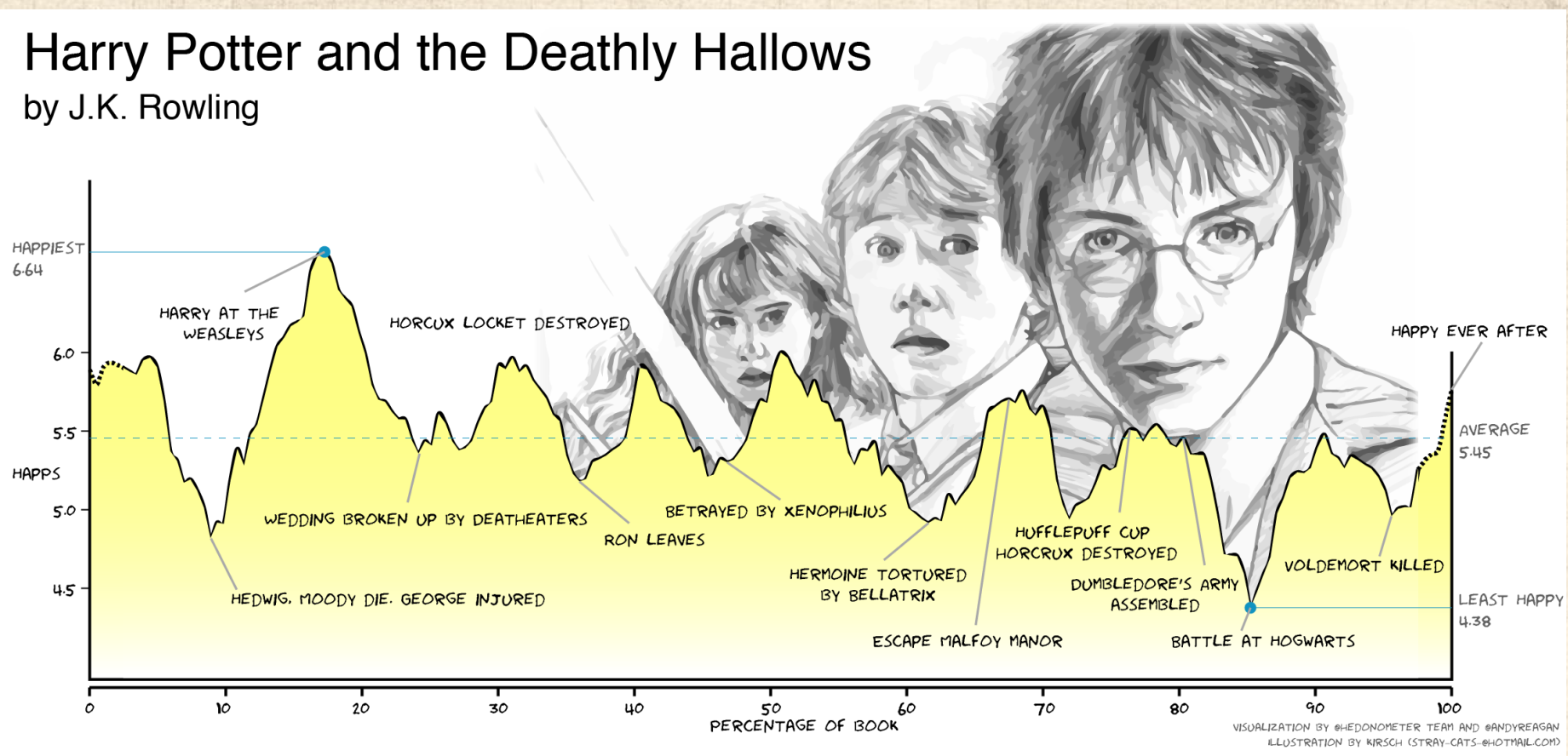
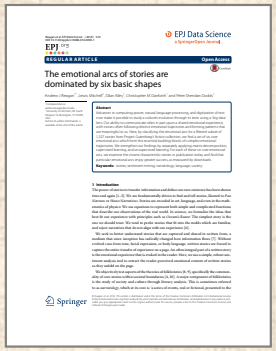


Moby-Dick illustration by Rockwell Kent, 1930

http://whyfiles.org/2015/in-10-languages-happy-words-beat-sad-ones/







"The emotional arcs of stories are dominated by six basic shapes"

Reagan, Mitchell, Danforth, Dodds, and Dodds.

EPJ Data Science, **5**, 31, 2016. [18]

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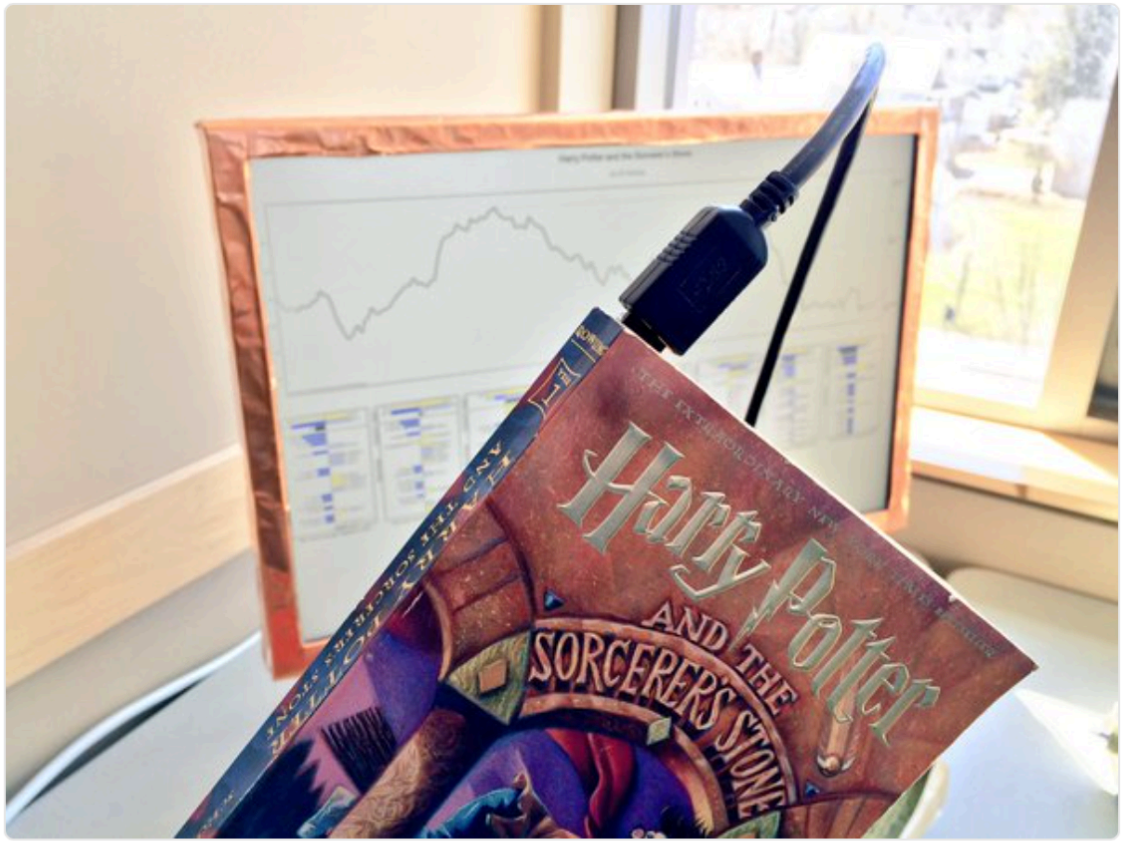
UVM
@uvmvermont

Following

USB in a book? What is this wizardry? Check it out at the Student Research Conference creative lounge. #uvmresearch



RETWEETS 8 LIKES 14

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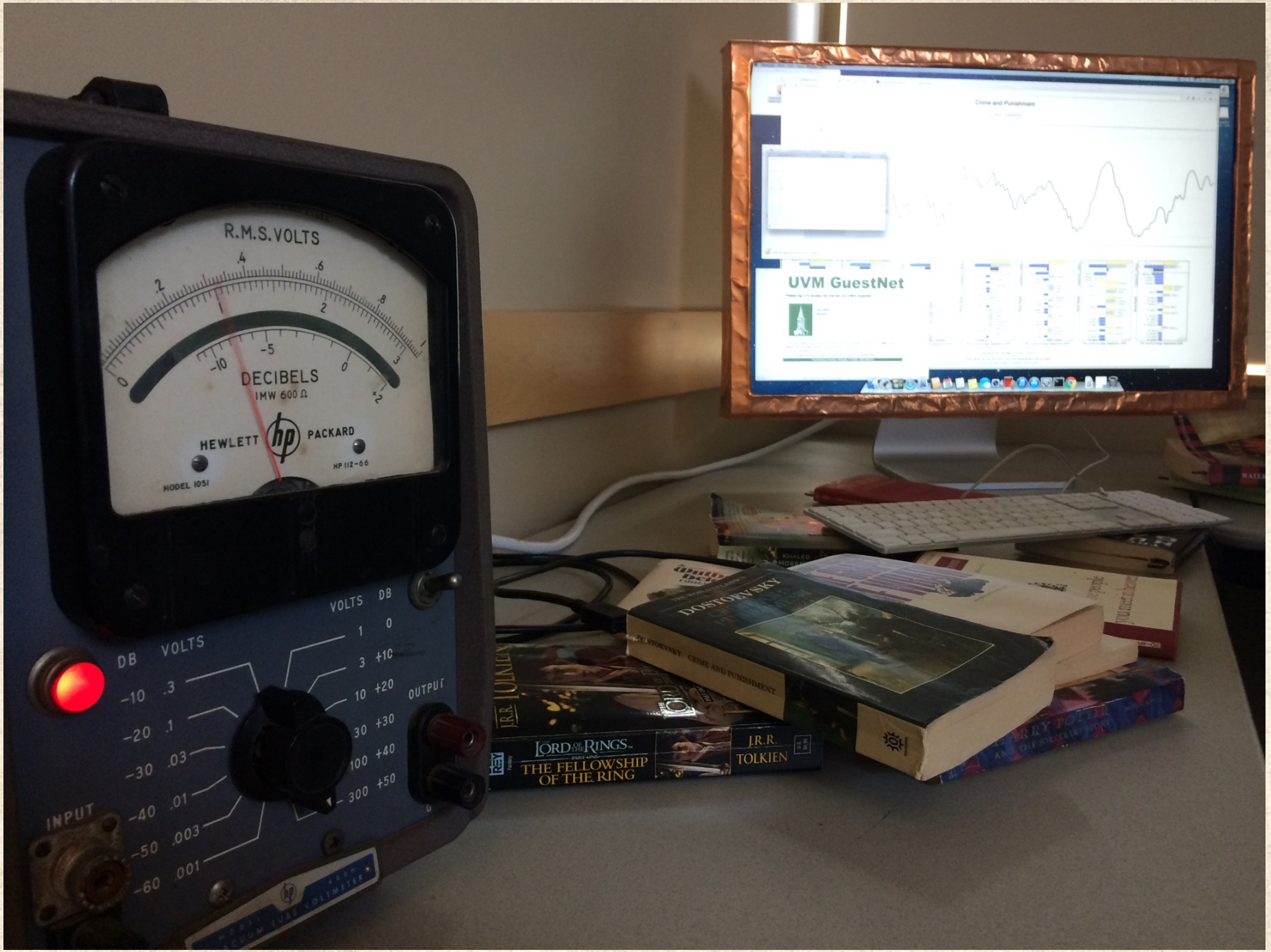
R.M.S. VOLTS
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HP 112-66
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DOSTOEVSKY
CRIME AND PUNISHMENT
THE FELLOWSHIP OF THE RING
J.R.R. TOLKIEN

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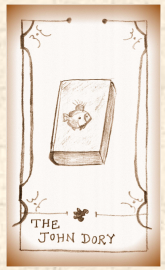
Harry Potter and the Chamber of Plot Devices:



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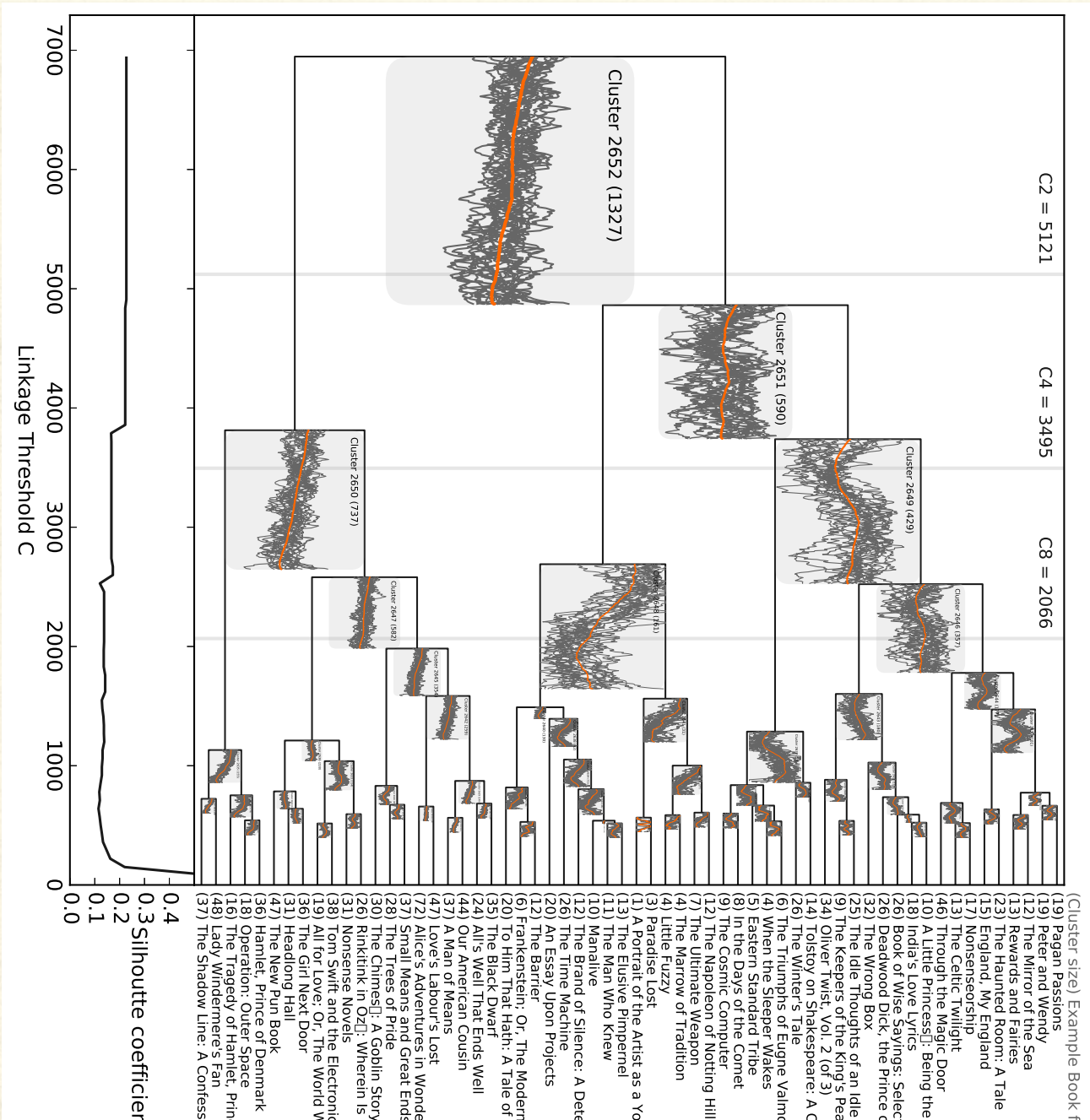
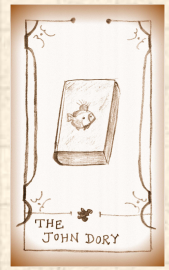
Emotional arcs for 1748 books from gutenberg.org





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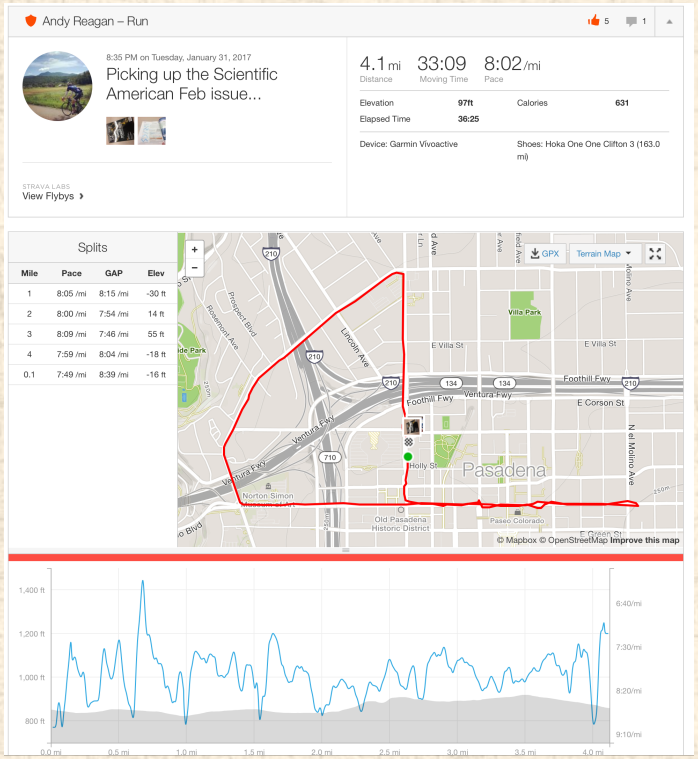

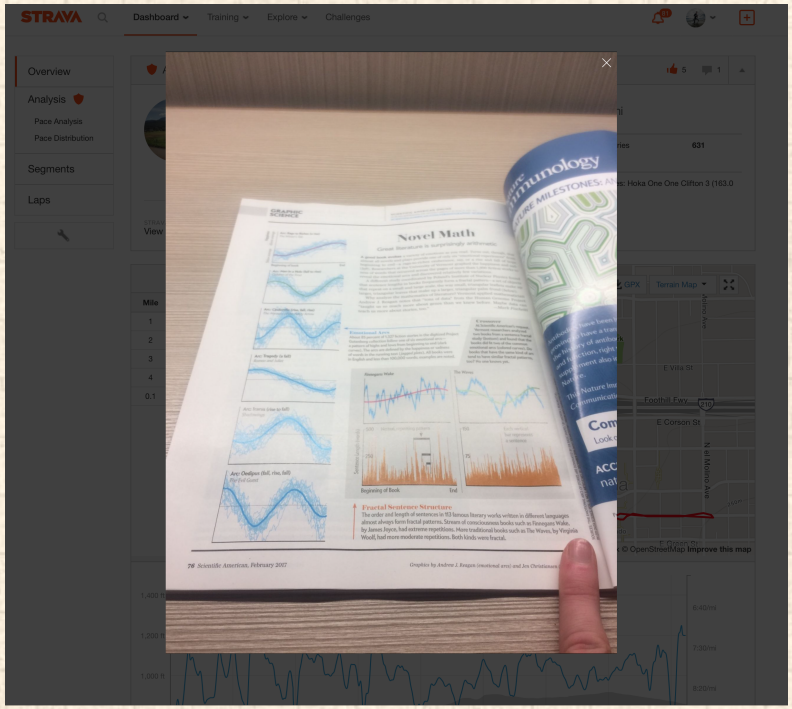

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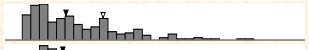
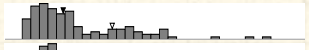
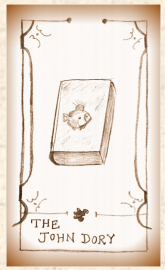
Mode	Mode Arc	N_m	N_m/N	DL Median ▼	DL Mean ▽	DL Variance	Download Distribution
SV 1		263	15.1%	295.0	644.3	2207201	
-SV 1		442	25.3%	337.5	636.0	913464	
SV 2		230	13.2%	314.0	630.3	1058916	
-SV 2		169	9.7%	296.0	569.1	780365	
SV 3		104	6.0%	298.0	874.5	7826797	
-SV 3		108	6.2%	298.0	748.7	2517822	
SV 4		108	6.2%	316.0	848.8	2763060	
-SV 4		50	2.9%	292.0	770.7	1546202	
SV 5		48	2.7%	280.0	421.7	182443	
-SV 5		48	2.7%	263.5	462.0	211259	

FIG. 6: Download statistics for SVD Modes with more than 2.5% of books. Modes *SV 3* through *-SV 4* (both polarities of modes 3 and 4) exhibit a higher average number of downloads and more variance than the rest.



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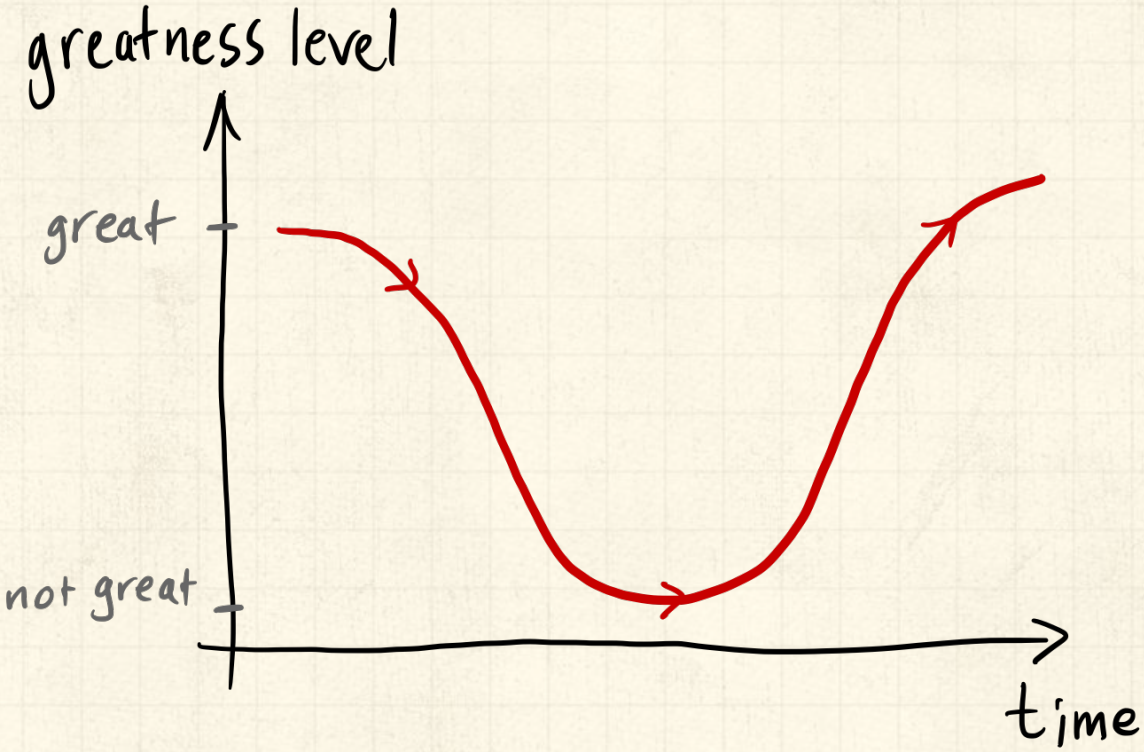
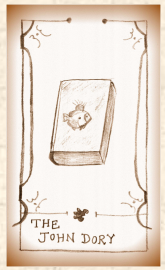
Stories matter:



- Used by Reagan and Bush in 1980.



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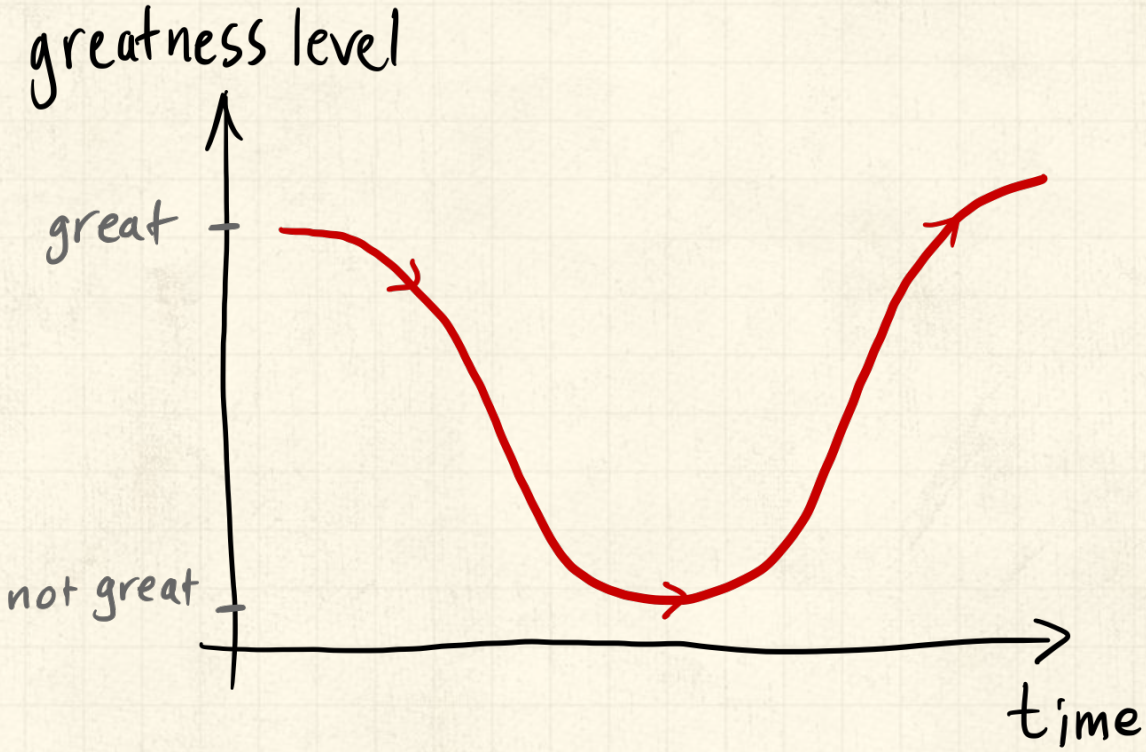
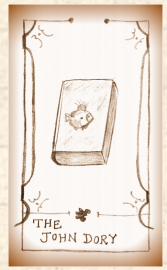


- Used by Reagan and Bush in 1980.
- Template used by many others including Bill Clinton.



A Science of Stories?

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Stories are everything

- Probably, yes.

We talk about and study stories everywhere but ...

- We don't have a central place academically.
- Departments of: English, political science, folklore, cognitive sciences, arts, musicology, communication, ...

Organizing structure going forward:

- PLOS One foundational paper and collection[3]
- Annual meeting?
- Create a new journal: No.

[3] the journal formerly known as PLoS ONE

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Observations/Claims/Questions:

- Primacy of storytelling and storybelieving in for individuals and populations.
- Maybe: Stories are dynamical paths; plots are algorithms that give rise to stories.
- Internet gives extraordinary power to propaganda, disinformation, conspiracy theories, ...
- Global social media creates a global robust-yet-fragile social system.
  - Failure can be endogenous (infighting) and/or ignited/supoorted from the outside.

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Observations/Claims/Questions:

- Basic social fabric: What is the spectrum of stories in the media being told about classes of people, from within and without.
- Story decoherence: telephone game
- What about stories about global problems like climate change? Government? Journalism?
- All separately powerful: Words, Music/Sound, Visual, ... interplay?
- Outcome: How to communicate scientific findings powerfully.

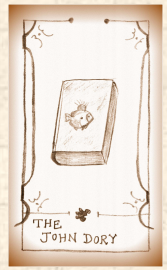
References I

[1] J. Abello, P. Broadwell, and T. R. Tangherlini.
Computational folkloristics.
Communications of the ACM, 55:60–70, 2012.
pdf

[2] P. E. Auerswald.
The Code Economy: A Forty-Thousand Year History.
Oxford University Press, 2017.

[3] C. Booker.
The Seven Basic Plots: Why We Tell Stories.
Continuum, 2005.

[4] B. Boyd.
On the Origin of Stories: Evolution, Cognition, and Fiction.
Belknap Press, 2010.



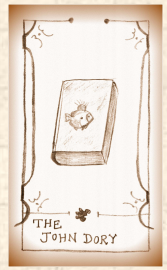
References II

[5] J. Campbell.
The Hero with a Thousand Faces.
New World Lbirary, third edition, 2008.

[6] J. Campbell and B. Moyers.
The Power of Myth.
Anchor, 1991. pdf

[7] E. Cheng.
How to bake pi: An edible exploration of the mathematics of mathematics.
Basic Books, 2015.

[8] B. Christian and T. Griffiths.
Algorithms to Live By.
Macmillan, 2016.



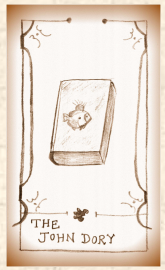
References III

[9] A. DeGraff.
Plotted: A Literary Atlas.
Pulp/Zest Book, 2015.

[10] M. Erwig.
Once Upon an Algorithm.
MIT Press, 2017.

[11] J. Gottschall.
The Storytelling Animal: How Stories Make Us Human.
Mariner Books, 2013.

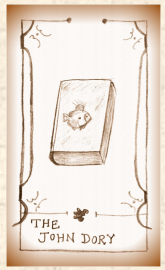
[12] F. Heider and M. Simmel.
An experimental study in apparent behavior.
The American Journal of Psychology, 57:243–159, 1944. pdf



References IV

[13] D. P. Kiley, A. J. Reagan, L. Mitchell, C. M. Danforth, and P. S. Dodds.
The game story space of professional sports: Australian Rules Football.
Physical Review E, 93, 2016.
Available online at http://arxiv.org/abs/1507.03886. pdf

[14] E. Kim.
Entertaining beliefs in economic mobility.
https://www.dropbox.com/s/i9pm6wd51c3fzbh/Kim_WS.pdf?dl=0, 2018. pdf

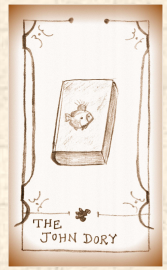


References V

[15] G. King, J. Pan, and M. E. Roberts.
How the Chinese government fabricates social media posts for strategic distraction, not engaged argument.
American Political Science Review, 2017 Forthcoming. pdf

[16] W. H. Press, S. A. Teukolsky, W. T. Vetterling, and B. P. Flannery.
Numerical Recipes in C.
Cambridge University Press, second edition, 1992.

[17] M. Puchner.
The Written World: How Literature Shaped Civilization.
Random, 2017.



References VI

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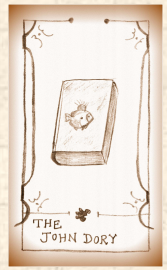
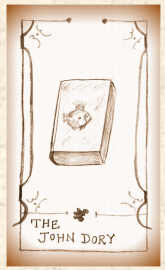
[18] A. J. Reagan, L. Mitchell, C. M. Danforth, and P. S. Dodds.
The emotional arcs of stories are dominated by six basic shapes.
EPJ Data Science, 5:31, 2016.
Available at http://arxiv.org/abs/1606.06820.pdf

[19] R. J. Shiller.
Narrative economics.
American Economic Review, 107(4):967–1004, 2017. pdf

[20] B. Snyder.
Save the Cat!
Michael Wiese Productions, 2005.



References VII

[21] J. J. Tehrani.
The phylogeny of Little Red Riding Hood.
PLoS ONE, 8:e78871, 2013. pdf