

# Fame and fate: Why is global success so unpredictable?

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Principles of Complex Systems, Vols. 1, 2, & 3D  
CSYS/MATH 6701, 6713, & a pretend number,  
2023–2024 | @pocsvox

Prof. Peter Sheridan Dodds | @peterdodds

Computational Story Lab | Vermont Complex Systems Center  
Santa Fe Institute | University of Vermont

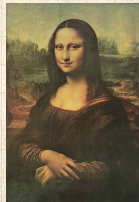


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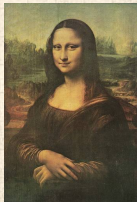


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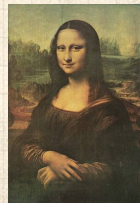
 On Instagram at [pratchett\\_the\\_cat](https://www.instagram.com/pratchett_the_cat) 

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# Outline

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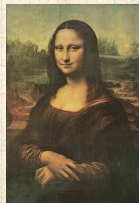
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# The most famous painting in the world:



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# The dismal predictive powers of editors .....

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Twelve ...







# We understand bushfire stories:

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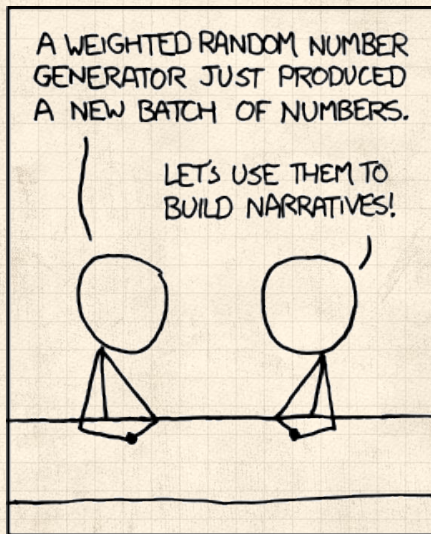
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1. Sparks start fires.
2. System properties control a fire's spread.
3. But we make two mistakes about **Social Fires**...



# Reason 1—We are Homo Narrativus.



ALL SPORTS COMMENTARY

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## Reason 2—"We're all individuals!"



Archival footage.



Individual narratives do not describe distributed, networked minds.

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## Reason 3—We are spectacular imitators



BBC/David Attenborough

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# Mistake 1: Success is due to intrinsic properties

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See ["Becoming Mona Lisa" by David Sassoon](#) ↗





48 songs  
30k participants

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## Exp 1— weak social

	R.I.C. Rank	Hit!	Loss!	R.I.C. Rank	R.I.C. Rank
WANT TO BE "Through it rough?"	20	12	WRECKED "I am what I eat?"	31	24
DEEP ENDING TO ONE "You're cool"	17	14	PARADE THEORY "Get out!"	47	37
THE WINDY SPARKLE "Cold enough?"	30	20	WASH COTTONS "You are not!"	27	24
THE BEECHER PROMISE "You are not here!"	30	20	ROCK BAND TRACKER "Boring!"	31	24
THE NEW GAME "You have shown the answer!"	13	10	YOUR FAVORITE "You!"	24	18
NOBODY AT HOME "You are!"	9	6	THE COLLABORATION "I am not here!"	38	31
BEHOLD, I AM GOD "You are!"	8	6	LIVE THE "You are!"	24	18
NOT FROM BONGOLAND "You are not here!"	10	7	SHIRAZI RAINING "You are not here!"	36	29
SHINE SHINY "You are!"	5	4	ELITE CLIMBERS "You are!"	38	31
PART OF MEAN "You are not here, but here instead!"	10	7	THE LITTLE "You are not here!"	31	24
BEYOND THE HORIZON "You are not here!"	10	7	IS IT YOUR FAVORITE "You are not here!"	37	29
CHERRY SODA "You are not here!"	11	8	BEHOLDING "You are not here!"	31	24
SHINE THE NEW GAME "You are!"	11	8	LIVE THE "You are not here!"	36	29
THE NEW GAME "You are not here!"	11	8	THE LITTLE "You are not here!"	31	24
REMEMBER "You are not here!"	11	8	THE LITTLE "You are not here!"	31	24
ALL OF THEM "You are not here!"	11	8	THE LITTLE "You are not here!"	31	24

## Exp. 2—strong social

	Hit!	Loss!	R.I.C. Rank	R.I.C. Rank
WANT TO BE "You are!"	311			
THE NEW GAME "You are not here!"	311			
SHINE SHINY "You are!"	81			
YOUR FAVORITE "You are!"	18			
THE COLLABORATION "I am not here!"	49			
BEHOLDING "You are not here!"	41			
SHIRAZI RAINING "You are not here!"	41			
THE LITTLE "You are not here!"	31			
REMEMBER "You are not here!"	31			
IS IT YOUR FAVORITE "You are not here!"	29			
THE NEW GAME "You are not here!"	29			
THE LITTLE "You are not here!"	29			
THE NEW GAME "You are not here!"	29			
THE LITTLE "You are not here!"	29			
THE NEW GAME "You are not here!"	29			
THE LITTLE "You are not here!"	29			
THE NEW GAME "You are not here!"	29			
THE LITTLE "You are not here!"	29			

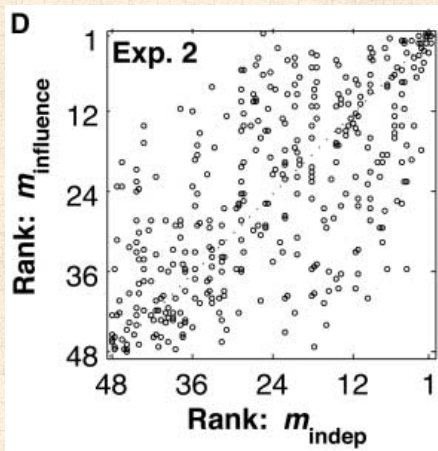


"An experimental study of inequality and unpredictability in an artificial cultural market" ↗

Salganik, Dodds, and Watts,  
Science, **311**, 854–856, 2006. [4]



# Resolving the paradox:



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Increased social awareness leads to  
Stronger inequality + Less predictability.



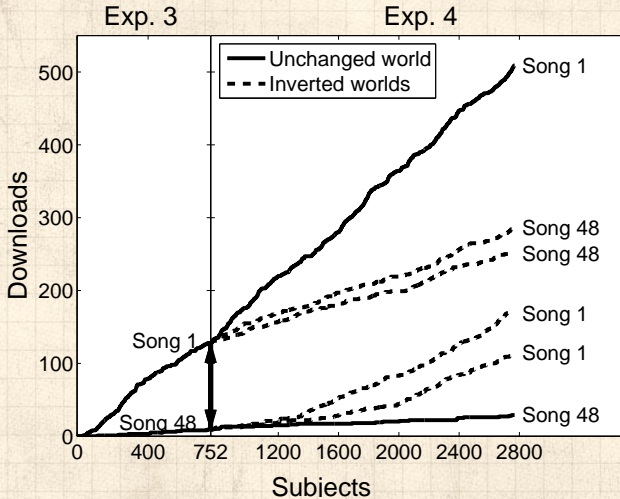
# Payola/Deceptive advertising hurts us all:

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## Mistake 2:

Seeing success is 'due to social' and  
wanting to say 'all your interactions are  
belong to us'

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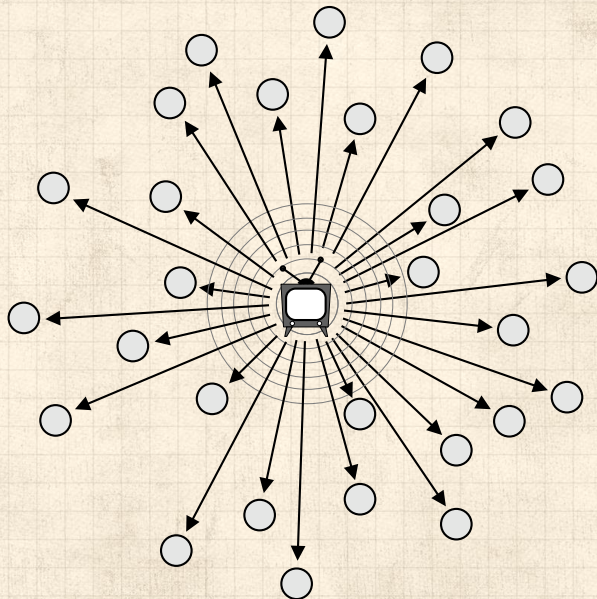
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# The hypodermic model of influence:



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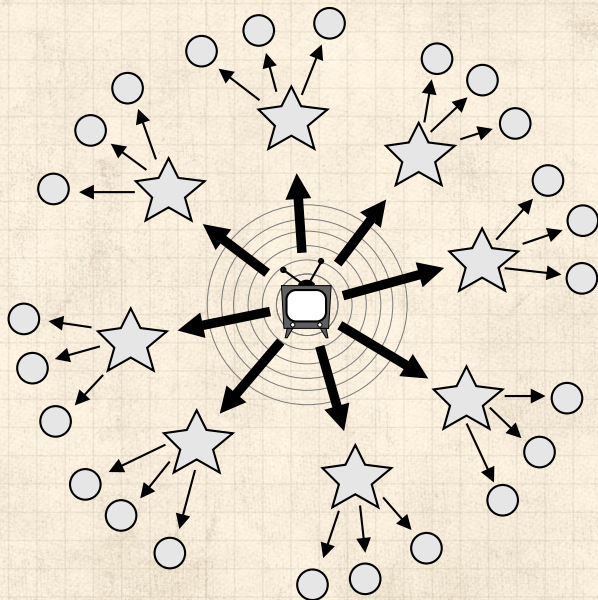
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# The two step model of influence: [2]



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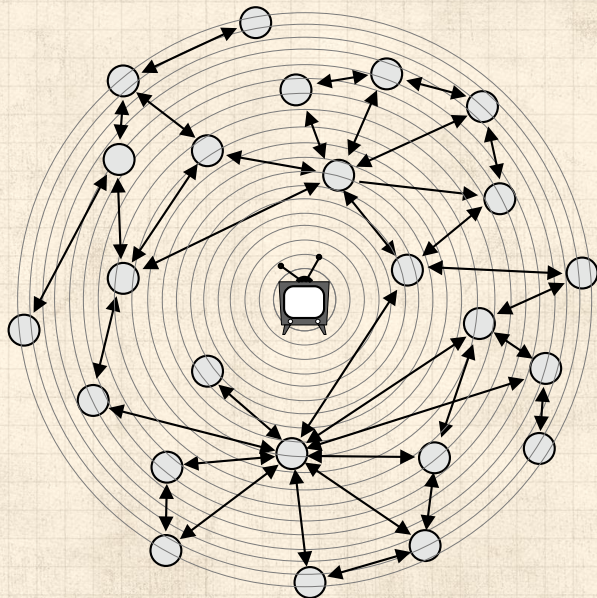
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# The network model of influence:



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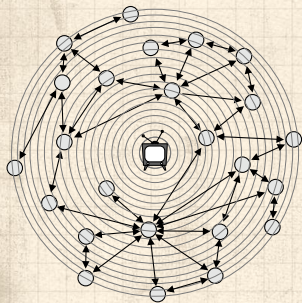
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# The network model of influence:



## How superspreading works:

Many interconnected, average, trusting people must benefit from both **receiving** and **sharing** a message far from its source.



"Influentials, Networks, and Public Opinion Formation" 

Watts and Dodds,

J. Consum. Res., **34**, 441–458, 2007. [5]

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# Things that spread quickly:



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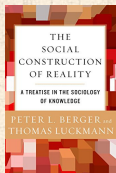
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+ News ...


[buzzfeed.com](http://buzzfeed.com) 






"The social construction of reality: A treatise  
in the sociology of knowledge"    
by Berger and Luckmann (1991). <sup>[1]</sup>


 Reality is socially constructed ,  
to some hard-to-measure degree.



 People do and don't see this: Fate versus Fortune.





## Etymological clarity:


 **Fate**—from the Latin *fatus*: meaning “spoken”.



 Fate is talk that has been done.  
“It is written”, fore-tell, pre-dict.



 “There is no such thing as fate, only the story of fate.” 

 Destiny is probablistic.

 **Fame**—from the Latin *fāma*: meaning “to talk.”

 Fame is inherently the social discussion about the thing, not the thing itself.

 Renown : Repeatedly named, talked about. Old French *renon*, from re- + non (“name”).

 Réclame . “Clamo”—Proto-Indo-European: “to shout” (again). Connected to “lowing”.





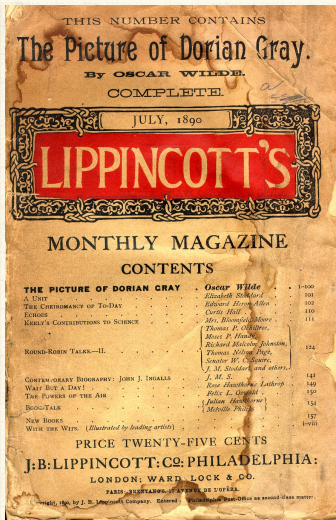
# Oscar Wilde, The Picture of Dorian Gray

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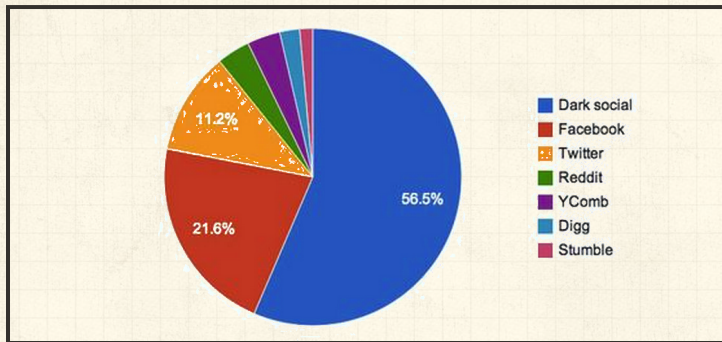


“There is only one  
thing in the world  
worse than being  
talked about,  
and that is  
not being talked  
about.”



# Spreading in the social wild:

## The Dark Social Web



“The only real way to optimize for social spread is in the nature of the content itself. There’s no way to game email or people’s instant messages. There’s no power users you can contact. There’s no algorithms to understand. This is pure social, uncut. [sic]”



Dark Social: We Have the Whole History of the Web

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# A completely made up pie chart:



Real  
Dark  
Social



Measurable  
Web  
stuff

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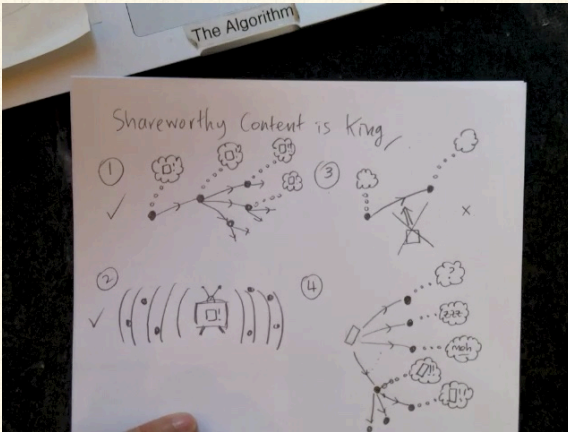
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# How to make things spread deeply




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 And how to stop things spreading?



# Story wars:

## Shareworthy content:

1. Build entities/messages/stories that have intrinsic and social value out in the **Social Wild**.
2. Advertise but lay off the social interactions.
3. Just keep trying.

## Stopping bad shareworthy content:

1. The truth is against an infinitude of adjacent narratives.
2. Build better spreading true stories.
3. Defend social interactions (“do you know who<sup>1</sup> your friends have been imitating?”)
4. Just keep trying.

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<sup>1</sup>The whomists are followers of MGGA

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- [1] P. L. Berger and T. Luckmann.  
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- [2] E. Katz and P. F. Lazarsfeld.  
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The Free Press, New York, 1955.
- [3] T. Kuran.  
Now out of never: The element of surprise in the east european revolution of 1989.  
World Politics, 44:7-48, 1991. pdf ↗
- [4] M. J. Salganik, P. S. Dodds, and D. J. Watts.  
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Science, 311:854-856, 2006. pdf ↗

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# References II

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