

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

Principles of Complex Systems | @pocsvox  
CSYS/MATH 300, Fall, 2017

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References

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Dept. of Mathematics & Statistics | Vermont Complex Systems Center  
Vermont Advanced Computing Core | University of Vermont



The University of Vermont



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Sealie & Lambie  
Productions



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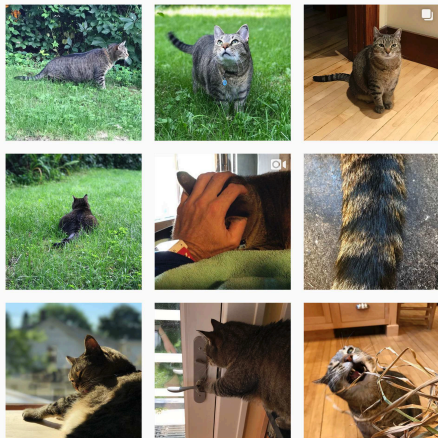


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## Special Guest Executive Producer: Pratchett

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





# Outline

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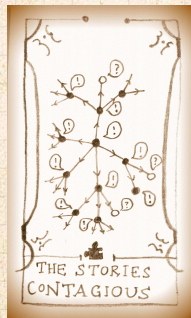
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# The most famous painting in the world:

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

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Twelve ...





# The completely unpredicted fall of Eastern Europe:

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Timur Kuran: <sup>[2]</sup> "Now Out of Never: The Element of Surprise in the East European Revolution of 1989"



# We understand bushfire stories:

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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.

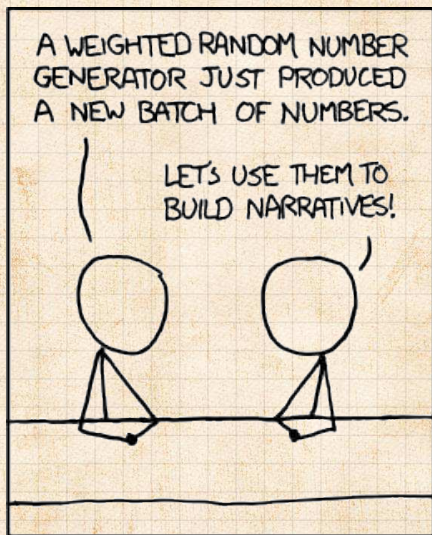
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ALL SPORTS COMMENTARY





## Reason 2—"We are all individuals."

Archival footage:

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Individual narratives are not enough to understand distributed, networked minds.



## Reason 3—We are spectacular imitators.

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BBC/David Attenborough.



# Mistake 1: Success is due to intrinsic properties

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See "Becoming Mona Lisa" by David Sassoon 







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48 songs  
30k participants

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## Exp 1— weak social

	Rank	Hit!	Loss!	Rank	Rank
WANT TO BE	20	12	35	30	24
THROUGH A STRUGGLE	17	18	31	28	21
DEEP STRUGGLE TO ONE	16	19	30	27	20
YOU WANT TO BE	15	20	29	26	19
THE WINDY STRUGGLE	14	21	28	25	18
THE WINDY STRUGGLE	13	22	27	24	17
THE WINDY STRUGGLE	12	23	26	23	16
THE WINDY STRUGGLE	11	24	25	22	15
THE WINDY STRUGGLE	10	25	24	21	14
THE WINDY STRUGGLE	9	26	23	20	13
THE WINDY STRUGGLE	8	27	22	19	12
THE WINDY STRUGGLE	7	28	21	18	11
THE WINDY STRUGGLE	6	29	20	17	10
THE WINDY STRUGGLE	5	30	19	16	9
THE WINDY STRUGGLE	4	31	18	15	8
THE WINDY STRUGGLE	3	32	17	14	7
THE WINDY STRUGGLE	2	33	16	13	6
THE WINDY STRUGGLE	1	34	15	12	5

## Exp. 2—strong social

	Rank	Hit!	Loss!	Rank	Rank
WANT TO BE	20	12	35	30	24
THROUGH A STRUGGLE	17	18	31	28	21
DEEP STRUGGLE TO ONE	16	19	30	27	20
YOU WANT TO BE	15	20	29	26	19
THE WINDY STRUGGLE	14	21	28	25	18
THE WINDY STRUGGLE	13	22	27	24	17
THE WINDY STRUGGLE	12	23	26	23	16
THE WINDY STRUGGLE	11	24	25	22	15
THE WINDY STRUGGLE	10	25	24	21	14
THE WINDY STRUGGLE	9	26	23	20	13
THE WINDY STRUGGLE	8	27	22	19	12
THE WINDY STRUGGLE	7	28	21	18	11
THE WINDY STRUGGLE	6	29	20	17	10
THE WINDY STRUGGLE	5	30	19	16	9
THE WINDY STRUGGLE	4	31	18	15	8
THE WINDY STRUGGLE	3	32	17	14	7
THE WINDY STRUGGLE	2	33	16	13	6
THE WINDY STRUGGLE	1	34	15	12	5



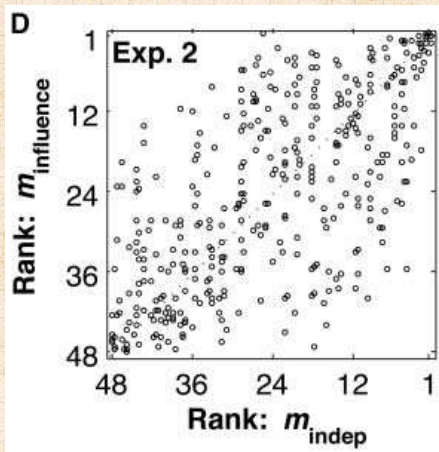
“An experimental study of inequality and unpredictability in an artificial cultural market” ↗

Salganik, Dodds, and Watts,  
Science, **311**, 854–856, 2006. [3]



# Resolving the paradox:

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Increased social awareness leads to  
Stronger inequality + Less predictability.



# Payola/Deceptive advertising hurts us all:

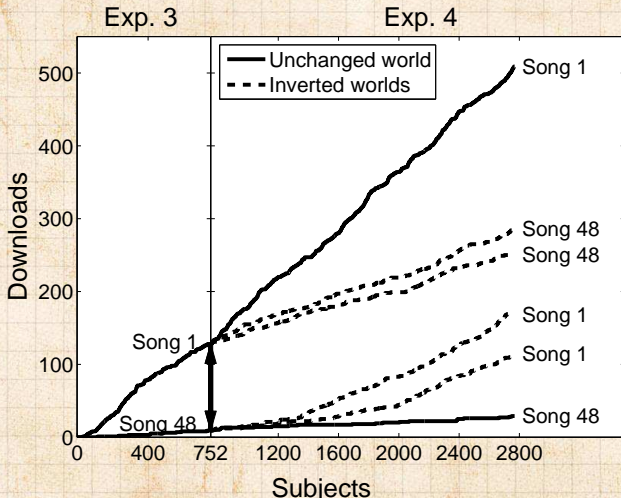
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## Mistake 2:

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

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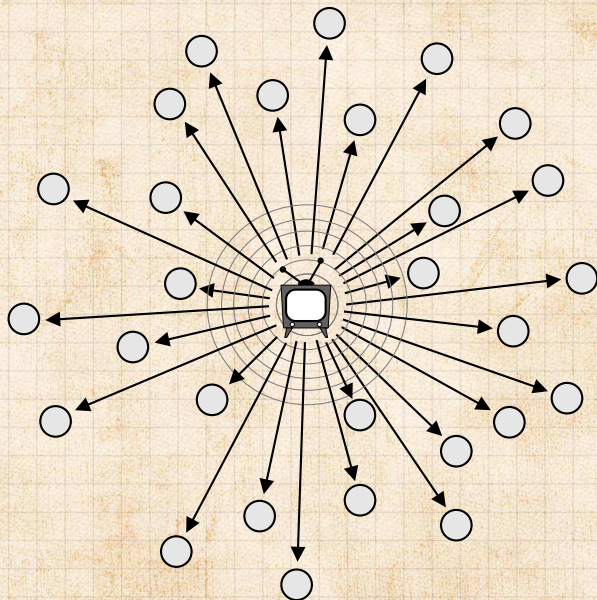
References



# The hypodermic model of influence:

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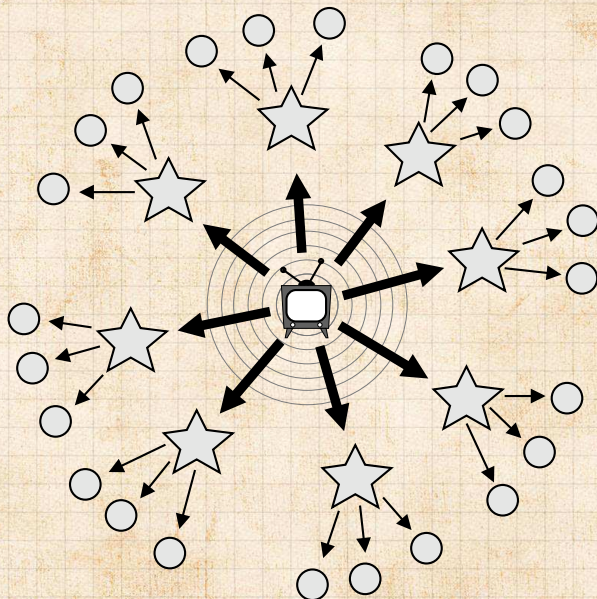
References



# The two step model of influence: [1]

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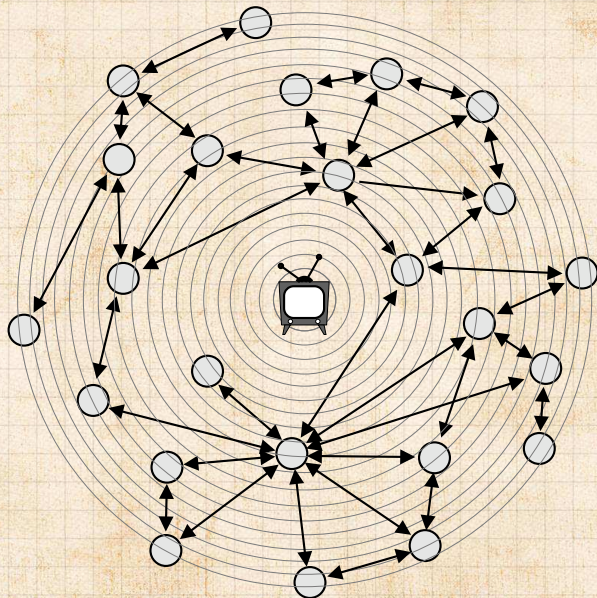




# The network model of influence:

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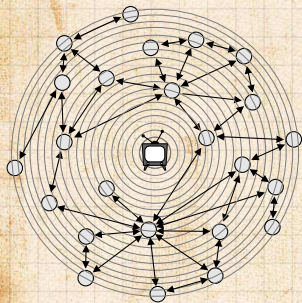
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# The network model of influence:

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## How superspreading works:


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

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References



"Influentials, Networks, and Public Opinion  
Formation" 

Watts and Dodds,

J. Consum. Res., **34**, 441–458, 2007. <sup>[4]</sup>



# Things that spread quickly:

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+ News ...


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









## 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”.

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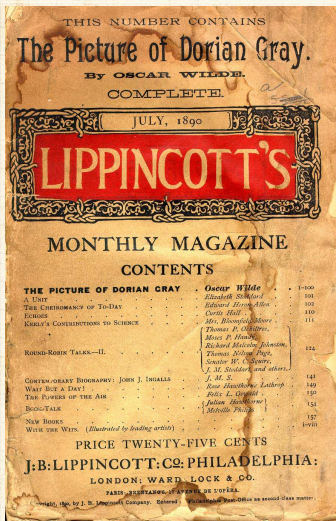
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# Oscar Wilde, The Picture of Dorian Gray



"There is only one  
thing in the world

worse than being  
talked about,

and that is

not being talked  
about."



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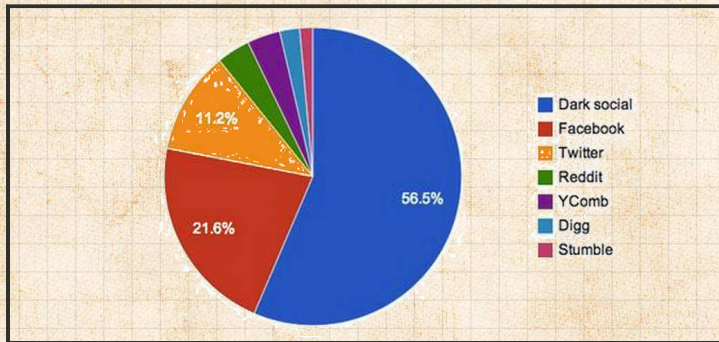


# Spreading in the social wild:

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## The Dark Social Web



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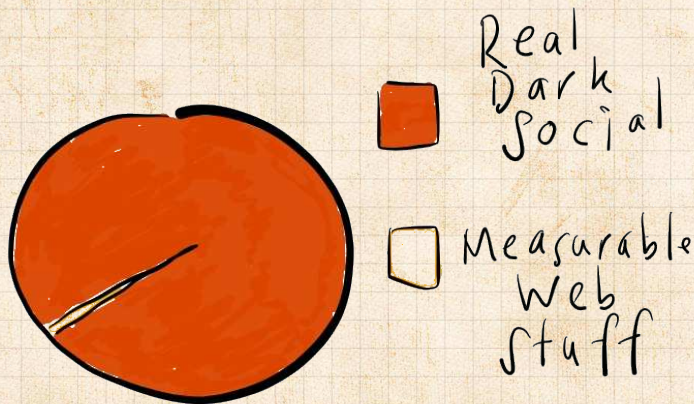
Dark Social: We Have the Whole History of the Web  
Wrong  [The Atlantic]





# A completely made up pie chart:

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## How to make things spread (maybe):

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## Shareworthy Content is King:

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.





# References I

- [1] E. Katz and P. F. Lazarsfeld.

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References

Personal Influence.

The Free Press, New York, 1955.

- [2] T. Kuran.

Now out of never: The element of surprise in the  
east european revolution of 1989.

World Politics, 44:7-48, 1991. pdf ↗

- [3] M. J. Salganik, P. S. Dodds, and D. J. Watts.

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

Science, 311:854-856, 2006. pdf ↗



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[4] D. J. Watts and P. S. Dodds.

Influentials, networks, and public opinion  
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[Journal of Consumer Research](#), 34:441–458, 2007.

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