

Fame and fate: Why is global success so unpredictable?

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

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References

Prof. Peter Dodds | @peterdodds

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



The University of Vermont



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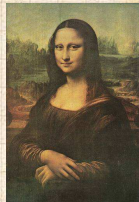
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Productions



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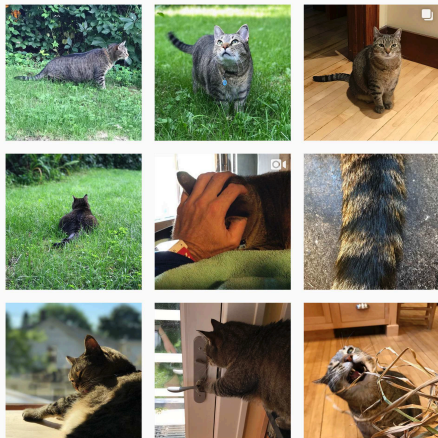


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Outline

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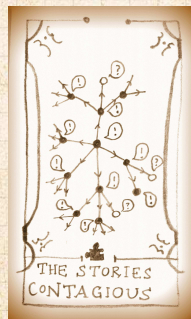
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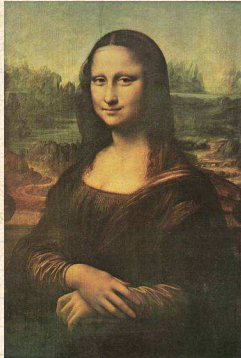




The most famous painting in the world:

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The dismal predictive powers of editors

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Twelve ...



The completely unpredicted fall of Eastern Europe:

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Timur Kuran: ^[2] "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...



We understand bushfire stories:

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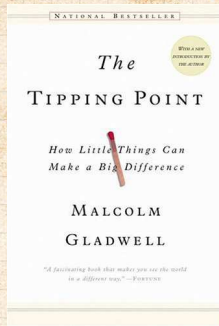
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2. System properties control a fire's spread.
3. But we make two mistakes about **Social Fires**...



We understand bushfire stories:

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3. But we make two mistakes about **Social Fires**...



Reason 1—We are Homo Narrativus.

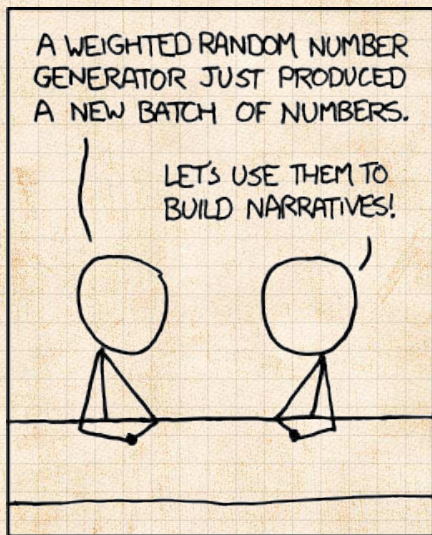
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ALL SPORTS COMMENTARY



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 [↗](#)



Mistake 1: Success is due to intrinsic properties

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it's just so disappointingly small

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



Mistake 1: Success is due to intrinsic properties

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Stolen in 1913, recovered in 1915.

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See "Becoming Mona Lisa" by David Sassoon 



Mistake 1: Success is due to intrinsic properties

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Hidden during WWII.

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See "Becoming Mona Lisa" by David Sassoon 



Mistake 1: Success is due to intrinsic properties

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Repeatedly vandalised and attacked.

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See "Becoming Mona Lisa" by David Sassoon





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success so
unpredictable?

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	36	21
DEEP STRUGGLE TO ONE	16	19	30	37	22
THE WAY I STRUGGLE	15	20	29	38	23
THE STRUGGLE TO ONE	14	21	28	39	25
THE STRUGGLE TO ONE	13	22	27	40	26
THE STRUGGLE TO ONE	12	23	26	41	27
THE STRUGGLE TO ONE	11	24	25	42	28
THE STRUGGLE TO ONE	10	25	24	43	29
THE STRUGGLE TO ONE	9	26	23	44	30
THE STRUGGLE TO ONE	8	27	22	45	31
THE STRUGGLE TO ONE	7	28	21	46	32
THE STRUGGLE TO ONE	6	29	20	47	33
THE STRUGGLE TO ONE	5	30	19	48	34
THE STRUGGLE TO ONE	4	31	18	49	35
THE STRUGGLE TO ONE	3	32	17	50	36
THE STRUGGLE TO ONE	2	33	16	51	37
THE STRUGGLE TO ONE	1	34	15	52	38

Exp. 2—strong social

	Rank	Hit!	Loss!	Rank	Rank
WANT TO BE	20	12	35	30	24
THROUGH A STRUGGLE	17	18	31	36	21
DEEP STRUGGLE TO ONE	16	19	30	37	22
THE WAY I STRUGGLE	15	20	29	38	23
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THE STRUGGLE TO ONE	5	30	19	48	34
THE STRUGGLE TO ONE	4	31	18	49	35
THE STRUGGLE TO ONE	3	32	17	50	36
THE STRUGGLE TO ONE	2	33	16	51	37
THE STRUGGLE TO ONE	1	34	15	52	38



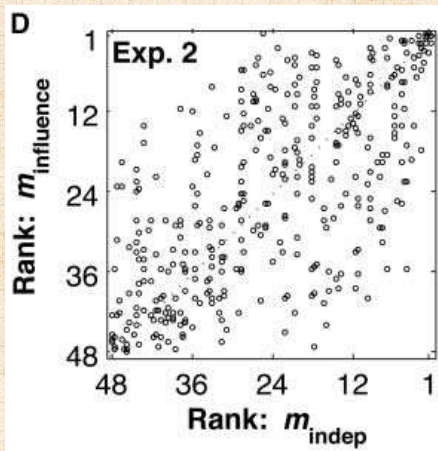
“An experimental study of inequality and contagiousness in an artificial cultural market” ↗

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



Resolving the paradox:

Fame and fate:
Why is global
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Increased social awareness leads to
Stronger inequality + Less predictability.



Payola/Deceptive advertising hurts us all:

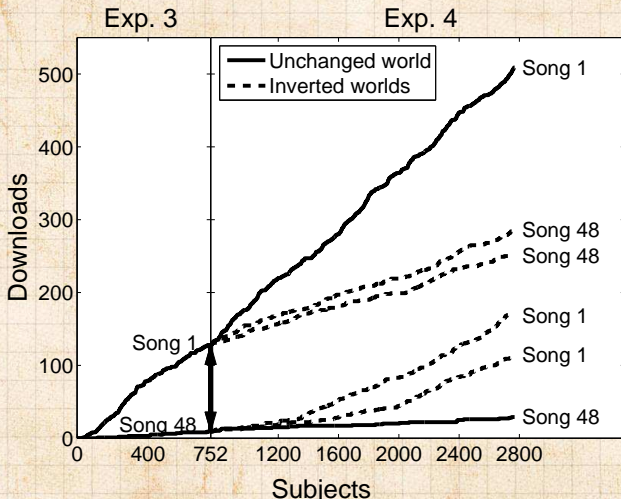
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Mistake 2:

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

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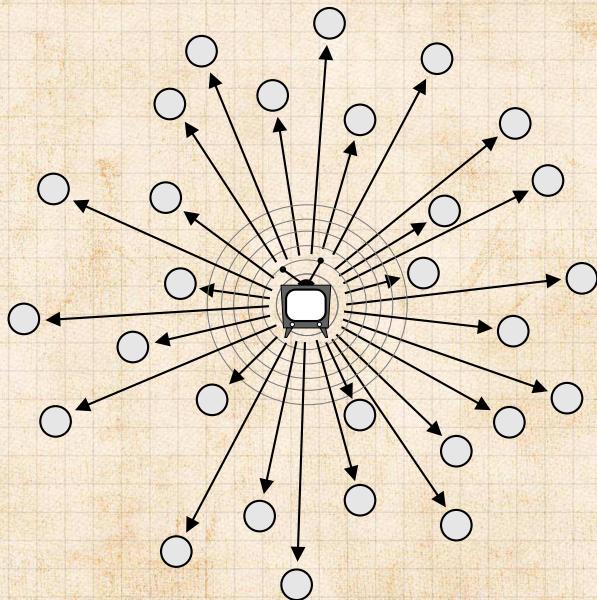
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The hypodermic model of influence:

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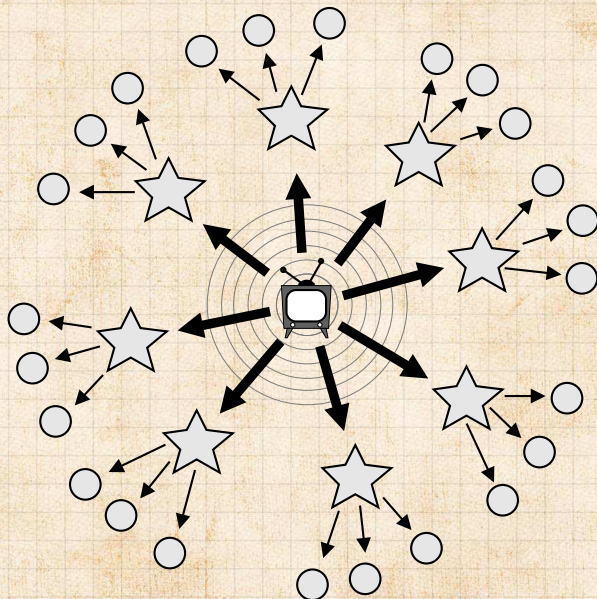
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The two step model of influence: [1]

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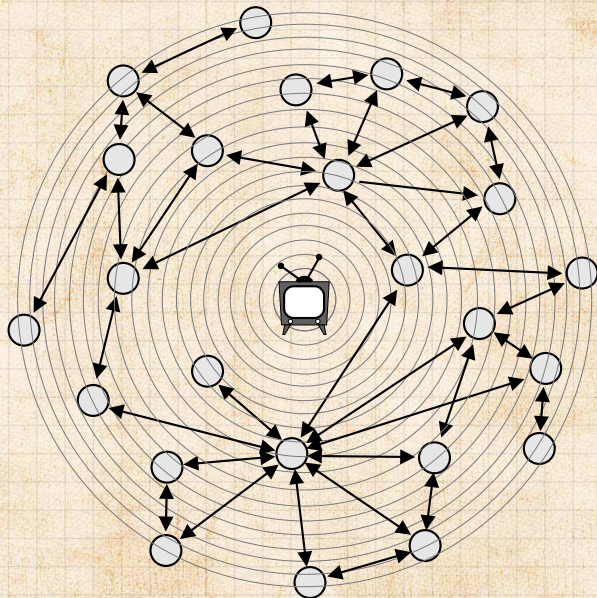
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The network model of influence:

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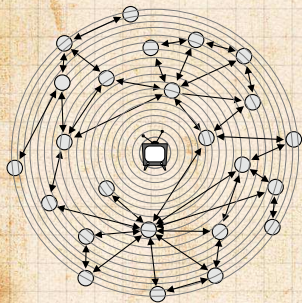
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The network model of influence:

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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. ^[4]



Things that spread quickly:

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+ News ...

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”).

 **Reclame** . “Clamo”—Proto-Indo-European: “to shout” (again). Connected to “howling”


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Oscar Wilde, The Picture of Dorian Gray

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JULY, 1890

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“There is only one
thing in the world

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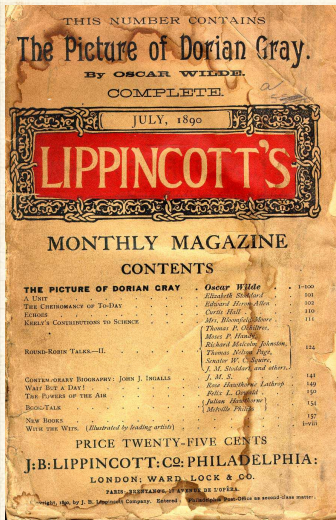
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“There is only one
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worse than being
talked about,

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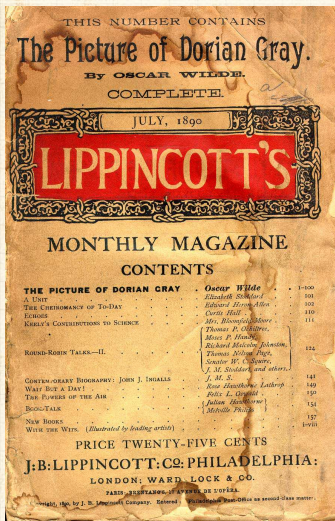
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“There is only one
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talked about,

and that is

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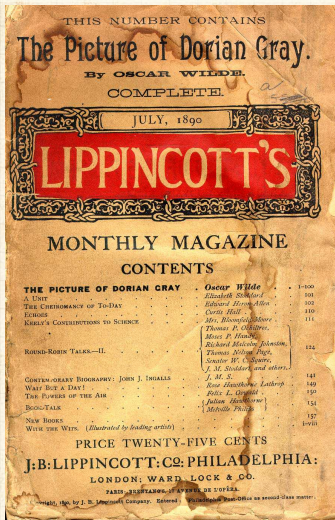
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“There is only one
thing in the world

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talked about,

and that is

not being talked
about.”



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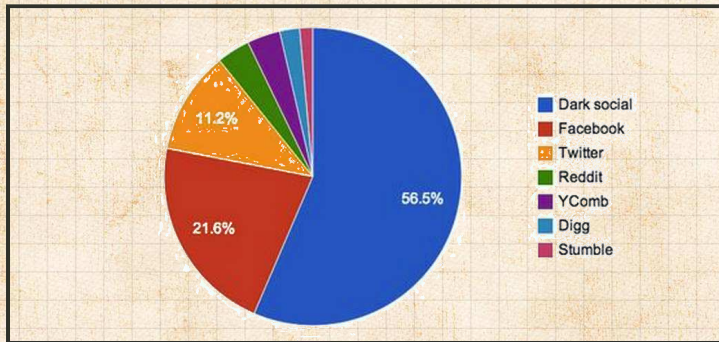


Spreading in the social wild:

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The Dark Social Web



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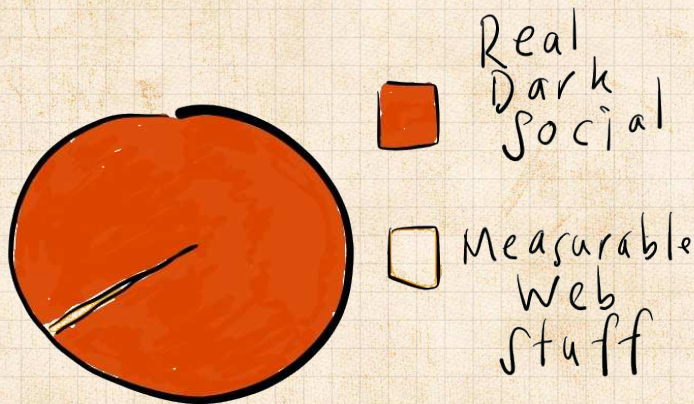
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Dark Social: We Have the Whole History of the Web
Wrong  [The Atlantic]



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.



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

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- [2] T. Kuran.

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[Journal of Consumer Research, 34:441–458, 2007.](#)

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