

Fame and fate: Why is global success so unpredictable?

Principles of Complex Systems | @pocsvox
CSYS/MATH 300, Fall, 2016 | #FallPoCS2016

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References

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



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Sealie & Lambie
Productions



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Outline

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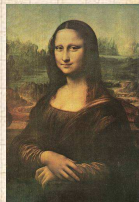
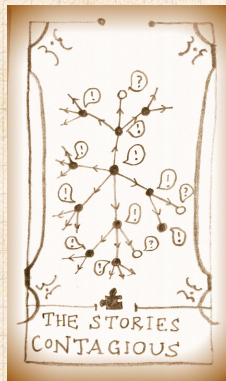


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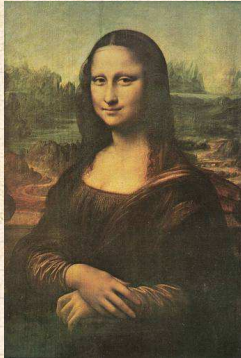
References



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**...



Reason 1—We are Homo Narrativus.

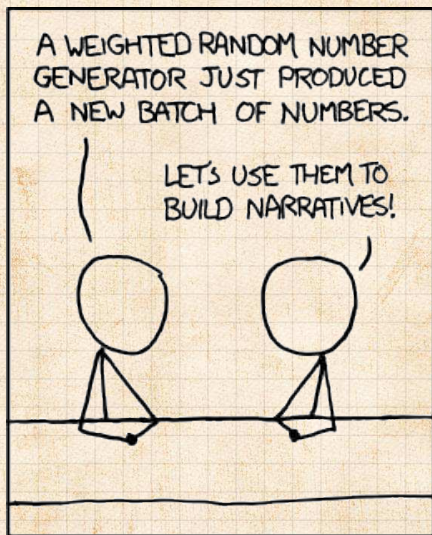
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ALL SPORTS COMMENTARY



<http://xkcd.com/904/>

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	Artist	Lyrics	Rank	Rank
1	1	THE WEEKND	"I'm on a roll"	1	1
2	2	THE WEEKND	"I'm on a roll"	2	2
3	3	THE WEEKND	"I'm on a roll"	3	3
4	4	THE WEEKND	"I'm on a roll"	4	4
5	5	THE WEEKND	"I'm on a roll"	5	5
6	6	THE WEEKND	"I'm on a roll"	6	6
7	7	THE WEEKND	"I'm on a roll"	7	7
8	8	THE WEEKND	"I'm on a roll"	8	8
9	9	THE WEEKND	"I'm on a roll"	9	9
10	10	THE WEEKND	"I'm on a roll"	10	10
11	11	THE WEEKND	"I'm on a roll"	11	11
12	12	THE WEEKND	"I'm on a roll"	12	12
13	13	THE WEEKND	"I'm on a roll"	13	13
14	14	THE WEEKND	"I'm on a roll"	14	14
15	15	THE WEEKND	"I'm on a roll"	15	15
16	16	THE WEEKND	"I'm on a roll"	16	16
17	17	THE WEEKND	"I'm on a roll"	17	17
18	18	THE WEEKND	"I'm on a roll"	18	18
19	19	THE WEEKND	"I'm on a roll"	19	19
20	20	THE WEEKND	"I'm on a roll"	20	20
21	21	THE WEEKND	"I'm on a roll"	21	21
22	22	THE WEEKND	"I'm on a roll"	22	22
23	23	THE WEEKND	"I'm on a roll"	23	23
24	24	THE WEEKND	"I'm on a roll"	24	24
25	25	THE WEEKND	"I'm on a roll"	25	25
26	26	THE WEEKND	"I'm on a roll"	26	26
27	27	THE WEEKND	"I'm on a roll"	27	27
28	28	THE WEEKND	"I'm on a roll"	28	28
29	29	THE WEEKND	"I'm on a roll"	29	29
30	30	THE WEEKND	"I'm on a roll"	30	30

Exp. 2—strong social

	Rank	Artist	Lyrics	Rank	Rank
1	1	THE WEEKND	"I'm on a roll"	1	1
2	2	THE WEEKND	"I'm on a roll"	2	2
3	3	THE WEEKND	"I'm on a roll"	3	3
4	4	THE WEEKND	"I'm on a roll"	4	4
5	5	THE WEEKND	"I'm on a roll"	5	5
6	6	THE WEEKND	"I'm on a roll"	6	6
7	7	THE WEEKND	"I'm on a roll"	7	7
8	8	THE WEEKND	"I'm on a roll"	8	8
9	9	THE WEEKND	"I'm on a roll"	9	9
10	10	THE WEEKND	"I'm on a roll"	10	10
11	11	THE WEEKND	"I'm on a roll"	11	11
12	12	THE WEEKND	"I'm on a roll"	12	12
13	13	THE WEEKND	"I'm on a roll"	13	13
14	14	THE WEEKND	"I'm on a roll"	14	14
15	15	THE WEEKND	"I'm on a roll"	15	15
16	16	THE WEEKND	"I'm on a roll"	16	16
17	17	THE WEEKND	"I'm on a roll"	17	17
18	18	THE WEEKND	"I'm on a roll"	18	18
19	19	THE WEEKND	"I'm on a roll"	19	19
20	20	THE WEEKND	"I'm on a roll"	20	20
21	21	THE WEEKND	"I'm on a roll"	21	21
22	22	THE WEEKND	"I'm on a roll"	22	22
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29	29	THE WEEKND	"I'm on a roll"	29	29
30	30	THE WEEKND	"I'm on a roll"	30	30



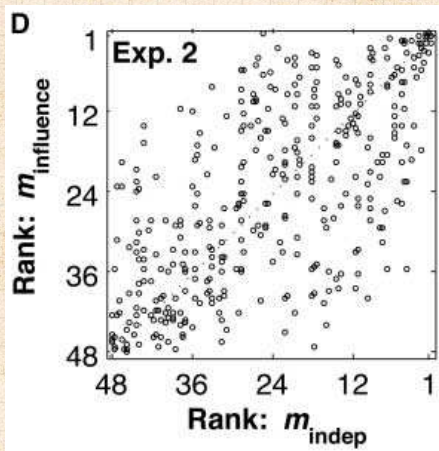
“An experimental study of inequality and unpredictability in an artificial cultural market” ↗

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



Resolving the paradox:

Fame and fate:
Why is global
success so
unpredictable?



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Increased social awareness leads to
Stronger inequality + Less predictability.



Payola/Deceptive advertising hurts us all:

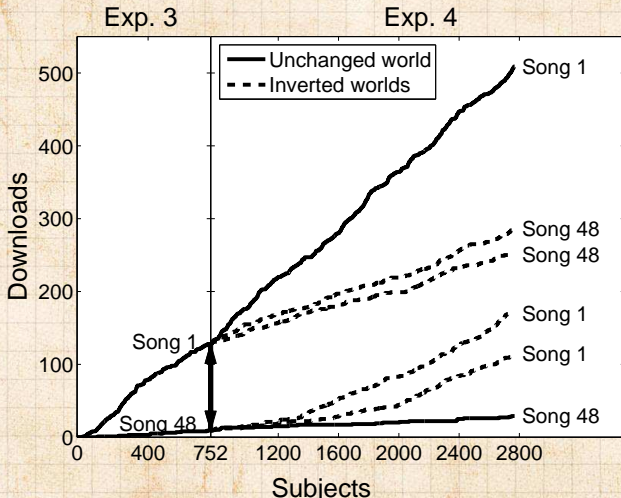
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Mistake 2:

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

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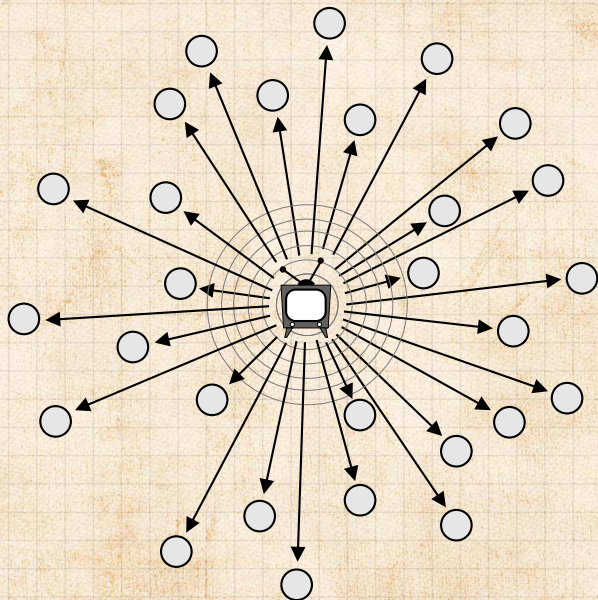
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The hypodermic model of influence:

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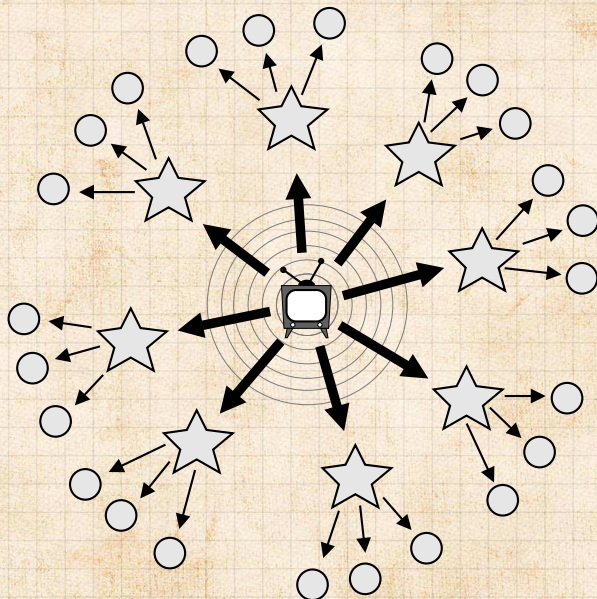
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The two step model of influence: [1]

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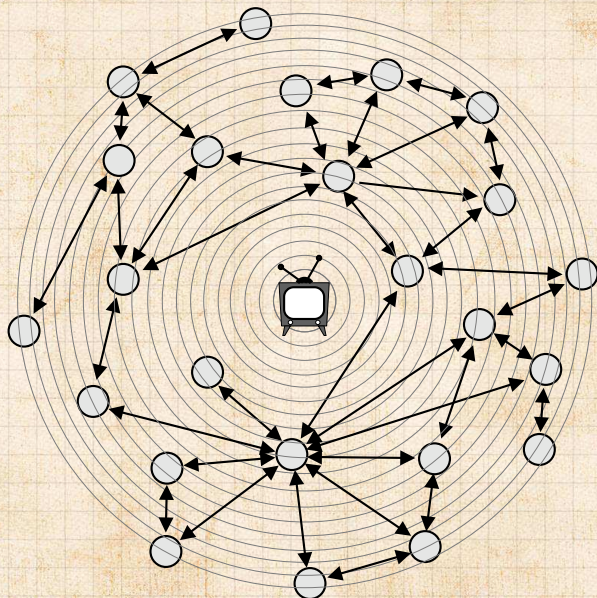
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The network model of influence:

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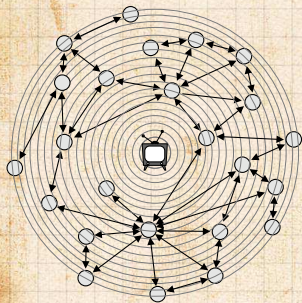
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The network model of influence:

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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”).

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

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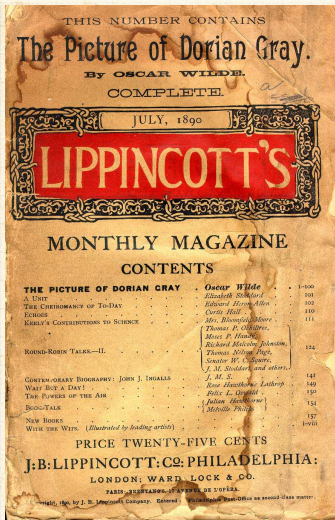
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Oscar Wilde, The Picture of Dorian Gray



“There is only one
thing in the world

worse than being
talked about,

and that is

not being talked
about.”



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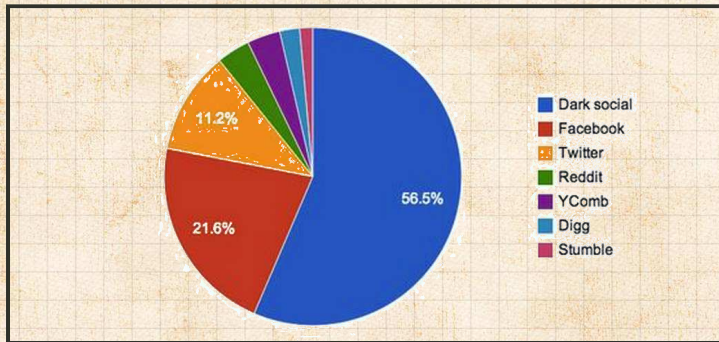
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Spreading in the social wild:

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The Dark Social Web



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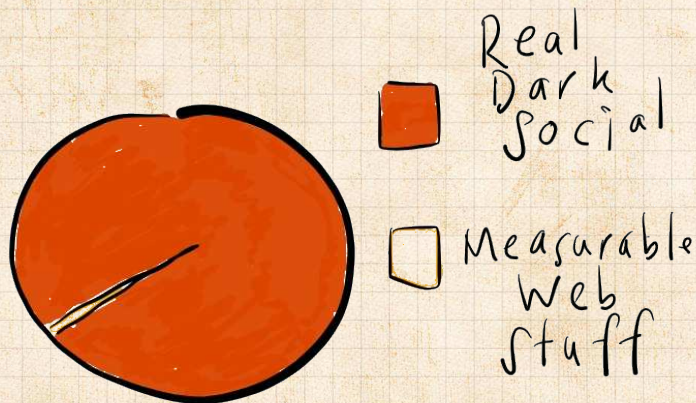
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Dark Social: We Have the Whole History of the Web
Wrong  [The Atlantic]



A completely made up pie chart:

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How to make things spread (maybe):

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References



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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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
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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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