

Fame and fate: Why is global success so unpredictable?

Last updated: 2022/08/27, 23:54:10 EDT

Principles of Complex Systems, Vols. 1, 2, & 3D
CSYS/MATH 300, 303, & 394, 2022–2023 | @pocsvox

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Santa Fe Institute | University of Vermont



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Outline

Superstars

Superspreading

References

The most famous painting in the world:



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Fame and fate:
Why is global
success so
unpredictable?

Superstars
Superspreading
References



1 of 29

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Why is global
success so
unpredictable?

Superstars
Superspreading
References



2 of 29

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success so
unpredictable?

Superstars
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References



4 of 29

The dismal predictive powers of editors



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unpredictable?

Superstars
Superspreading
References



5 of 29

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Why is global
success so
unpredictable?

Superstars
Superspreading
References



6 of 29

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unpredictable?

Superstars
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References



7 of 29

Twelve ...

The completely unpredicted fall of Eastern Europe:



Timur Kuran: [3] "Now Out of Never: The Element of Surprise in the East European Revolution of 1989"

We understand bushfire stories:

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



4 of 29

Reason 1—We are Homo Narrativus.



ALL SPORTS COMMENTARY

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

Reason 2—"We are all individuals."

Archival footage:

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

Reason 3—We are spectacular imitators.

BBC/David Attenborough.

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Why is global
success so
unpredictable?

Superstars
Superspreading
References



8 of 29

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Fame and fate:
Why is global
success so
unpredictable?

Superstars
Superspreading
References



9 of 29

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Why is global
success so
unpredictable?

Superstars
Superspreading
References



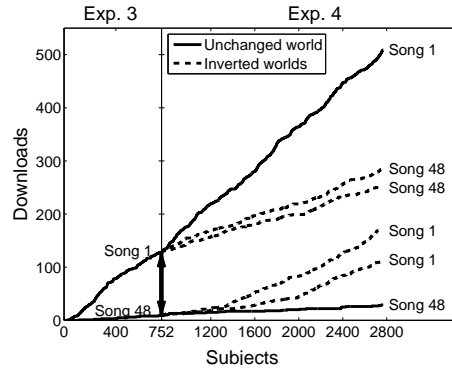
10 of 29

Mistake 1:
Success is due to intrinsic properties

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Payola/Deceptive advertising hurts us all:



11 of 29

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Mistake 2:
Seeing success is 'due to social' and
wanting to say 'all your interactions are
belong to us'

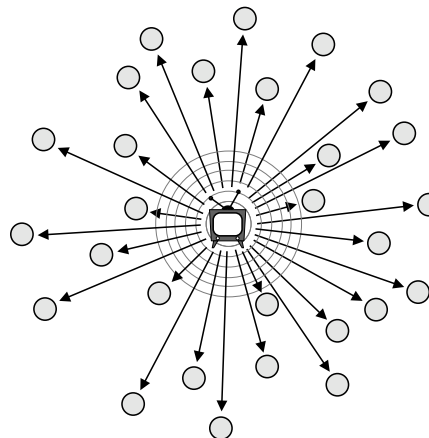


12 of 29

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unpredictable?

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The hypodermic model of influence:

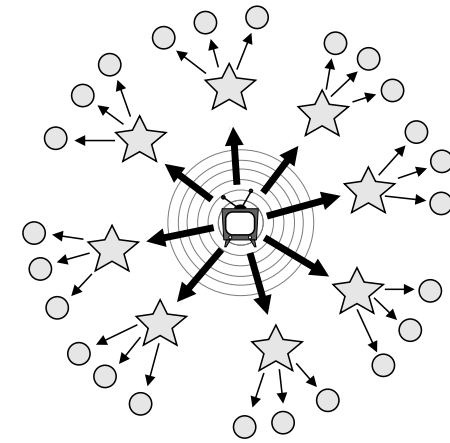


13 of 29

The two step model of influence: [2]

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success so
unpredictable?

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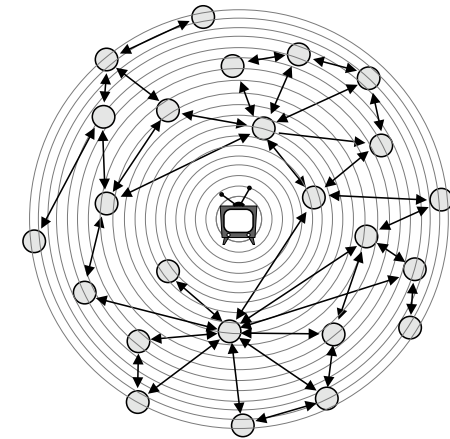


14 of 29

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Why is global
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unpredictable?

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References

The network model of influence:

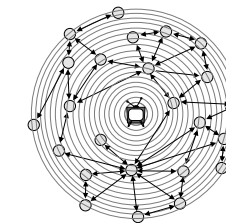


15 of 29

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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]

16 of 29

See "Becoming Mona Lisa" by David Sassoon



48 songs
30k participants

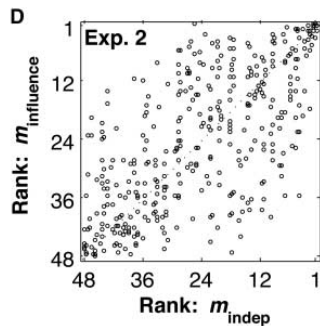
Exp 1— weak social

Exp. 2—strong social

Rank	Rank
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2	2
3	3
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47	47
48	48

"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:



Increased social awareness leads to
Stronger inequality + Less predictability.

13 of 29

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Why is global
success so
unpredictable?

Superstars
Superspreading
References

17 of 29

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Fame and fate:
Why is global
success so
unpredictable?

Superstars
Superspreading
References

18 of 29

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Why is global
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unpredictable?

Superstars
Superspreading
References

19 of 29

Things that spread quickly:



+ News ...

buzzfeed.com

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Fame and fate:
Why is global
success so
unpredictable?

Superstars
Superspreading
References

20 of 29

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Fame and fate:
Why is global
success so
unpredictable?

Superstars
Superspreading
References

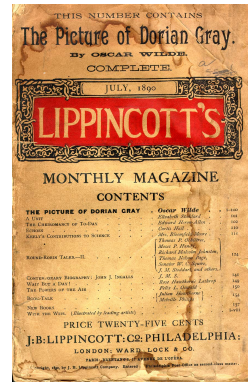
21 of 29

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Why is global
success so
unpredictable?

Superstars
Superspreading
References

22 of 29

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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Why is global
success so
unpredictable?

Superstars
Superspreading
References

23 of 29

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Fame and fate:
Why is global
success so
unpredictable?

Superstars
Superspreading
References

24 of 29

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Fame and fate:
Why is global
success so
unpredictable?

Superstars
Superspreading
References

25 of 29

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Fame and fate:
Why is global
success so
unpredictable?

Superstars
Superspreading
References

26 of 29

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Why is global
success so
unpredictable?

Superstars
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References

27 of 29

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Why is global
success so
unpredictable?

Superstars
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References

28 of 29

How to make things spread (maybe):

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] P. L. Berger and T. Luckmann. The social construction of reality: A treatise in the sociology of knowledge. Penguin UK, 1991.

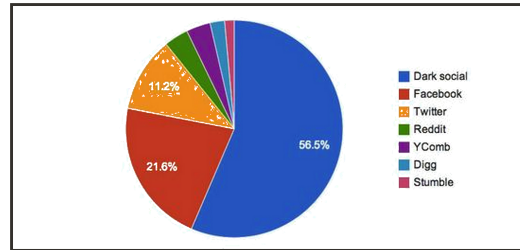
[2] E. Katz and P. F. Lazarsfeld. Personal Influence. The Free Press, New York, 1955.

[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. An experimental study of inequality and unpredictability in an artificial cultural market. Science, 311:854-856, 2006. pdf

Spreading in the social wild:

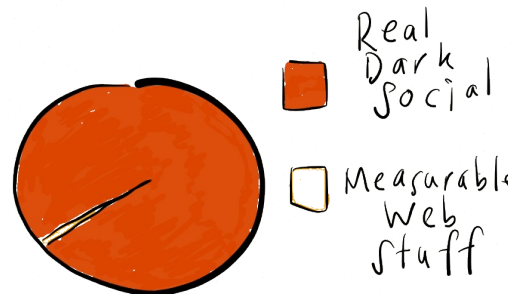
The Dark Social Web



"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

A completely made up pie chart:



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

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 probabilistic.
- Fame**—from the Latin *fama*: 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".

22 of 29


25 of 29

28 of 29

References II

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

Superstars
Superspreading
References

- [5] D. J. Watts and P. S. Dodds.
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[Journal of Consumer Research](#), 34:441–458, 2007.
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29 of 29