

# Class 11: Cascades and fads in cultural markets

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Sociology 204: Social Networks  
Princeton University

Monday, October 11, 2021

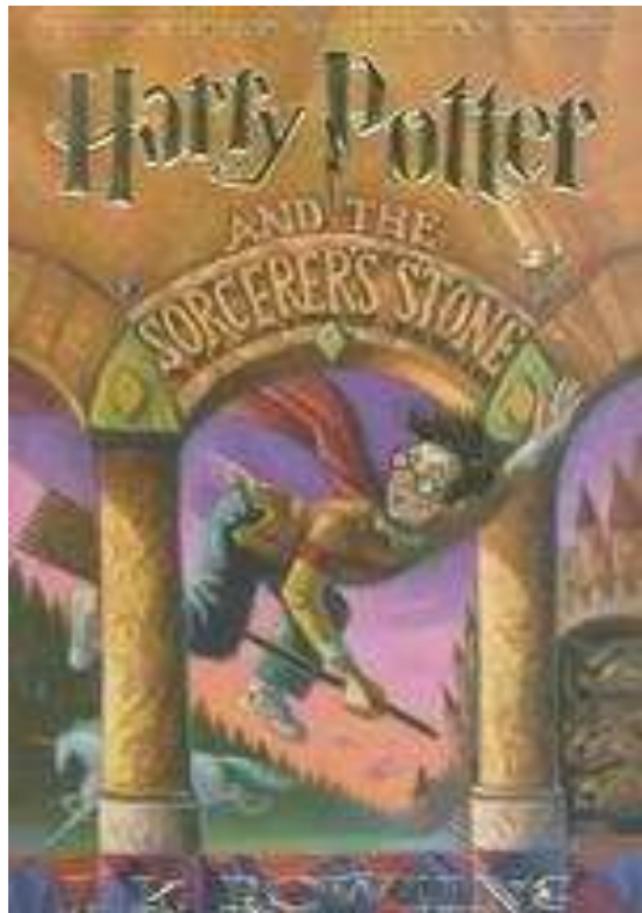


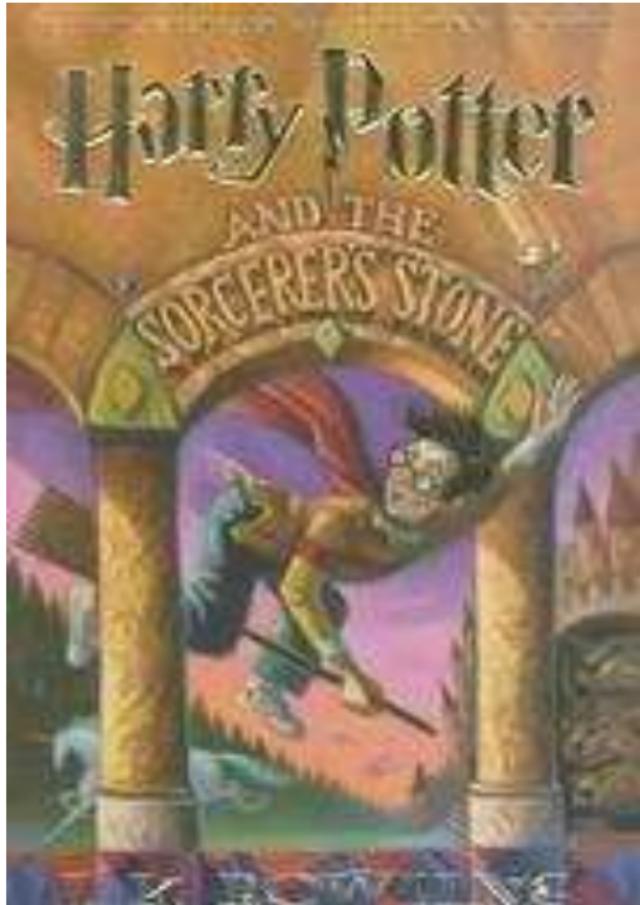
Review:

- ▶ sometimes small shocks get big and sometimes they don't

Review:

- ▶ sometimes small shocks get big and sometimes they don't
- ▶ sequential behavior can lead to unexpected outcomes





- ▶ Wild success
- ▶ Rejected by eight publishers

This seems like a strange combination.



- ▶ Set box office records, won 6 Oscars, and launched a multi-billion dollar franchise
- ▶ Rejected by United Artists and Universal before being made by Fox



- ▶ One of the most popular shows of the decade
- ▶ Rejected by ABC, CBS, and NBC before being picked up by Fox

Puzzling nature of success for cultural objects (books, movies, piece of art, music)

- ▶ extreme inequality in the success of objects

Puzzling nature of success for cultural objects (books, movies, piece of art, music)

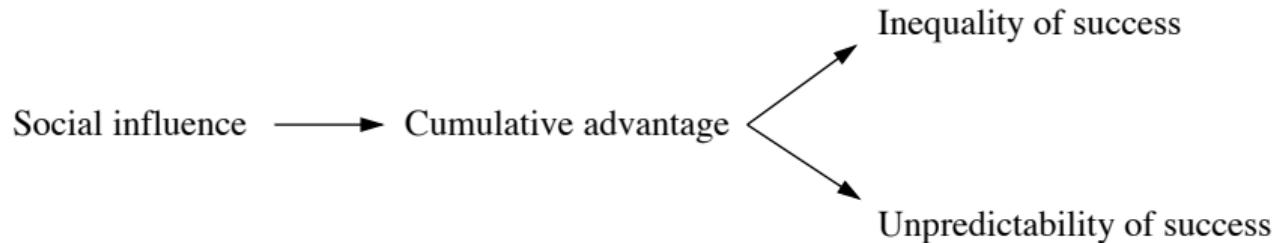
- ▶ extreme inequality in the success of objects
- ▶ unpredictability in the success of objects

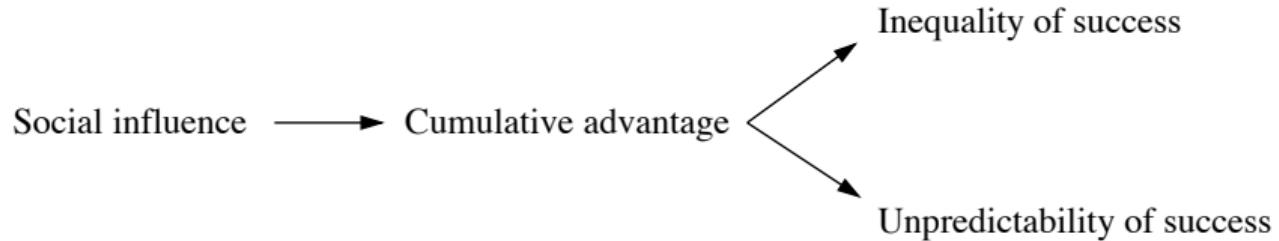
### **Psychological explanation:**

People agree on what's good, but people are hard to predict

### **Sociological explanation:**

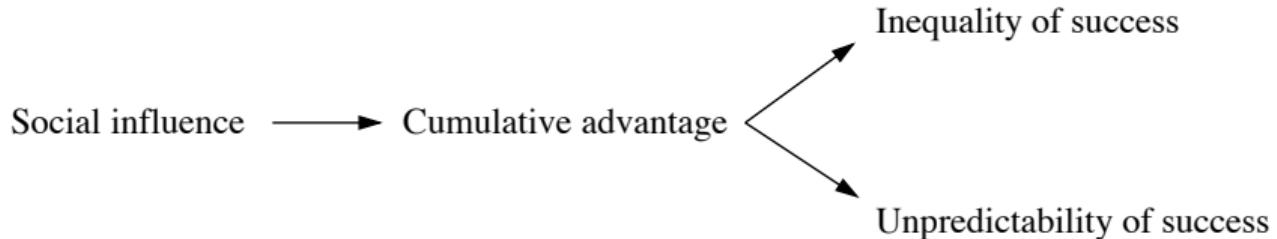
The collective outcomes of inequality and unpredictability of success both arise from an individual-level process of social influence





Problems with observational data:

- ▶ don't know what would have happened without social influence



Problems with observational data:

- ▶ don't know what would have happened without social influence
- ▶ can't see multiple "histories" to observe unpredictability

Instead of using observational data we are going to run an experiment because

- ▶ can control the information that people have about the behavior of others

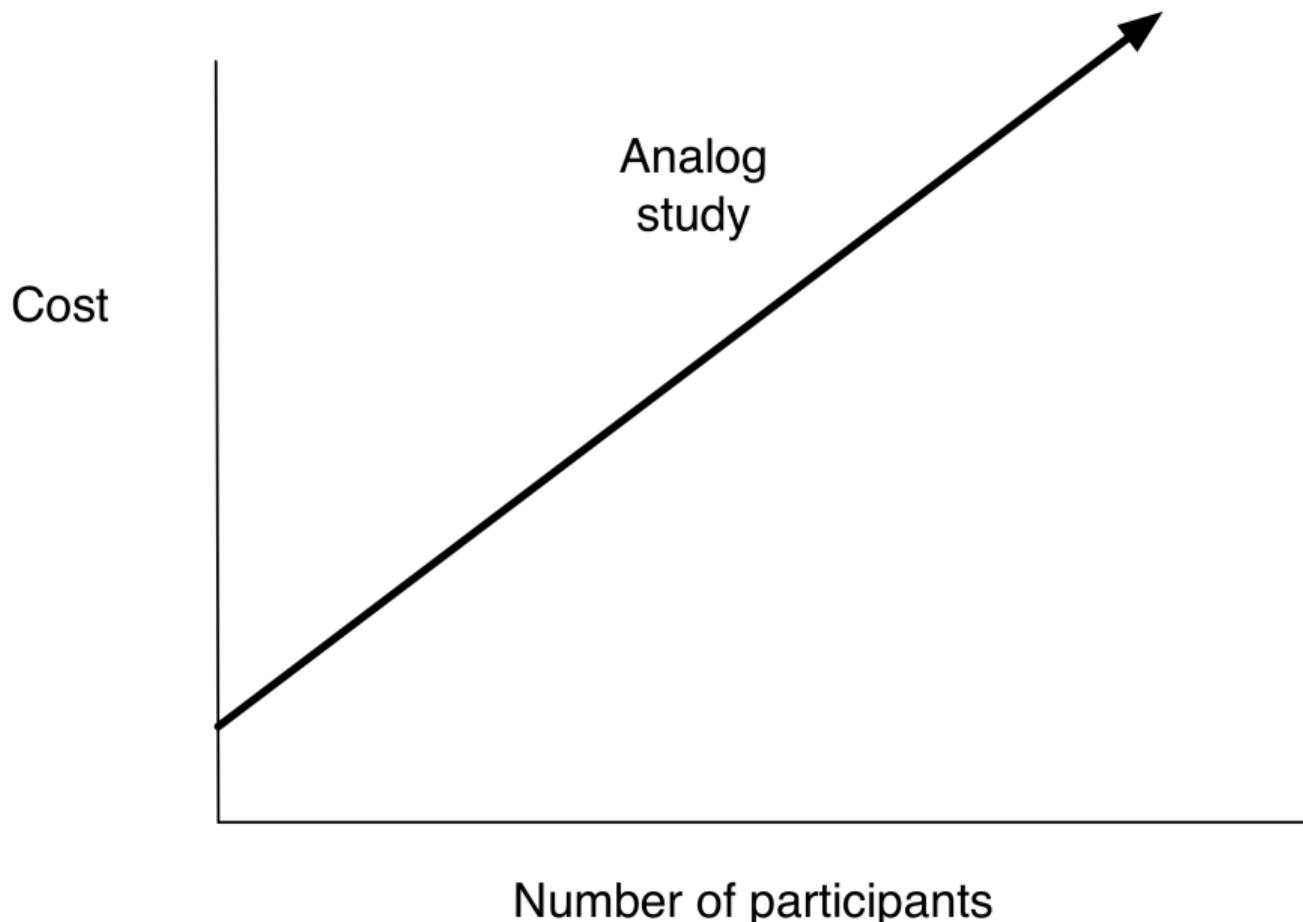
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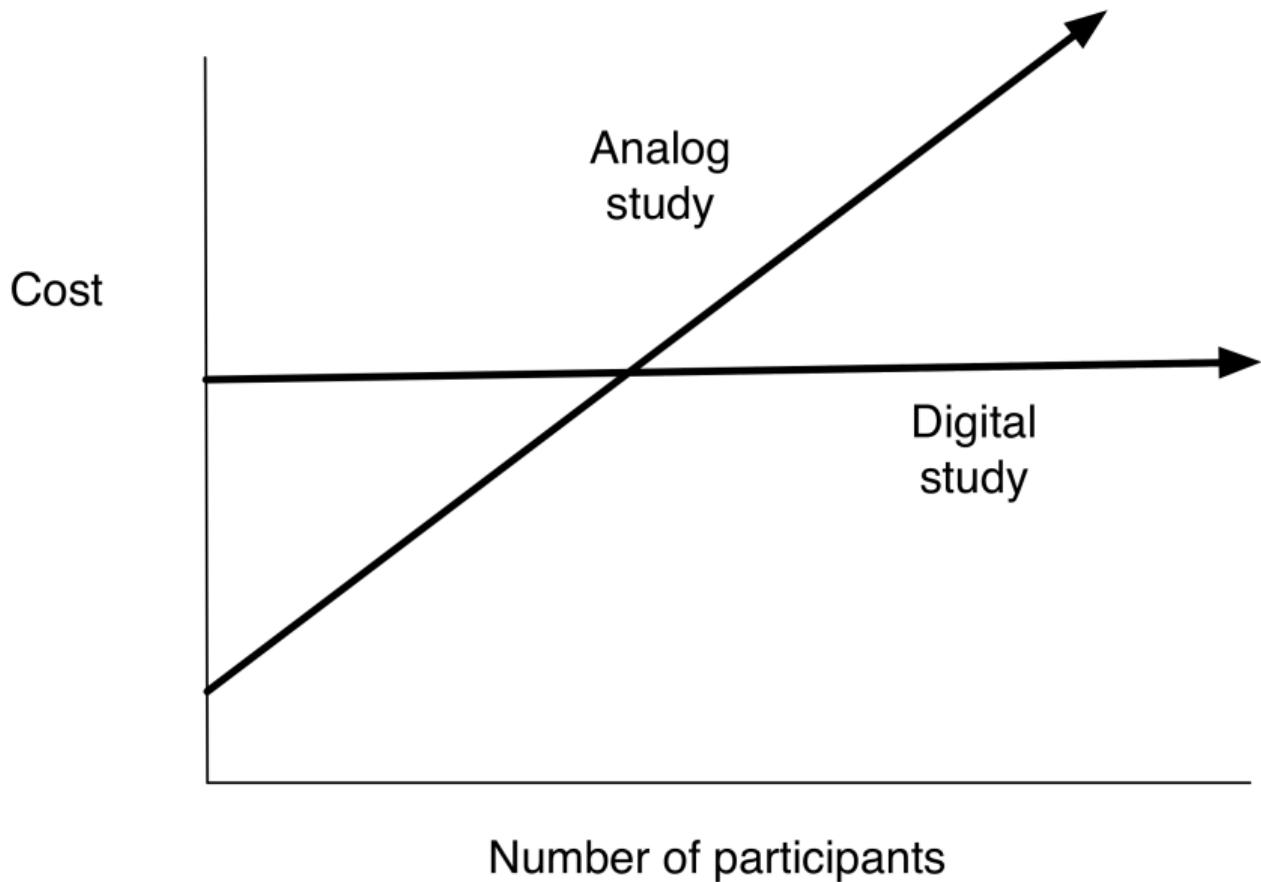
- ▶ can control the information that people have about the behavior of others
- ▶ can run the same process multiple times under exactly the same conditions, allows us to see multiple “histories”

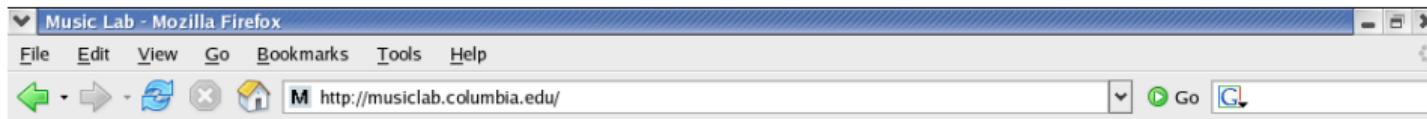
But, this experiment is different from most,

- ▶ experiments in psychology and economics have **individual** as unit of analysis, require **hundreds** of participants
- ▶ these sociological experiments have **collective outcome** as unit of analysis, require **thousands** of participants

Web-based experiment allow for such large sample sizes because each additional participant has no cost (total  $n = 27,267$ )







MUSIC LAB

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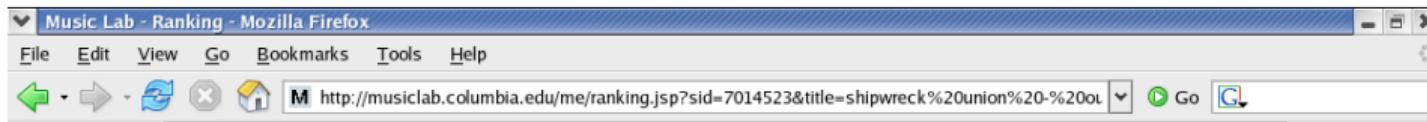
CLICK  
HERE TO  
START

FREE MUSIC DOWNLOADS

A photograph of a four-piece drum set (bass drum, snare, and two toms) against a plain, light-colored wall. The bass drum's drumhead features the text "CLICK HERE TO START" in white, sans-serif capital letters. The top left corner of the image contains the "MUSIC LAB" logo, which includes a stylized silhouette of a person playing a guitar or bass. The top right corner contains the "COLUMBIA UNIVERSITY" logo, which includes the university's name and its iconic 'C' monogram. At the bottom of the image, a light blue horizontal bar contains the text "FREE MUSIC DOWNLOADS".



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HARTSFIELD: "enough is enough"	20	GO MOREDAI: "it does what its told"	12	UNDO: "while the world passes"	24
DEEP ENOUGH TO DIE: "for the sky"	17	PARKER THEORY: "she said"	47	UP FOR NOTHING: "in sight of"	13
THE THRIFT SYNDICATE: "2003 a tragedy"	20	MISS OCTOBER: "pink aggression"	27	SILVERFOX: "gnaw"	17
THE BROKEN PROMISE: "the end in friend"	19	POST BREAK TRAGEDY: "florence"	14	STRANGER: "one drop"	10
THIS NEW DAWN: "the belief above the answer"	12	FORTHFADING: "fear"	24	FAR FROM KNOWN: "route 9"	18
NOONER AT NINE: "walk away"	6	THE CALEFACTION: "trapped in an orange peel"	20	STUNT MONKEY: "inside out"	46
MORAL HAZARD: "waste of my life"	8	52METRO: "lockdown"	17	DANTE: "lifes mystery"	14
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SECRETARY: "keep your eyes on the ballistics"	5	STAR CLIMBER: "tell me"	38	UNKNOWN CITIZENS: "falling over"	34
ART OF KANLY: "seductive intro, melodic breakdown"	10	THE FASTLANE: "til death do us part (i dont)"	31	BY NOVEMBER: "if i could take you"	20
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HALL OF FAME: "best mistakes"	19	SILENT FILM: "all i have to say"	61	SHIPWRECK UNION: "out of the woods"	16

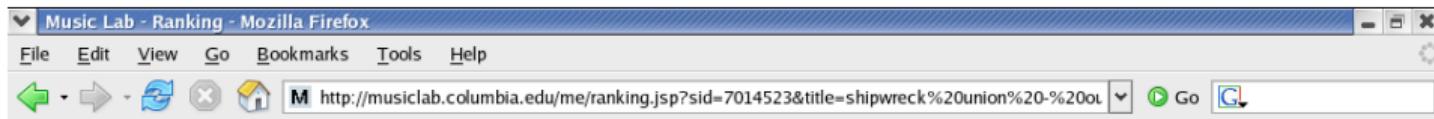


00:21 shipwreck union - out of the woods volume

Please rate this song.  
You don't need to wait until it's finished

★★★★★ i love it  
 ★★★★ i like it  
 ★★★ it's OK  
 ★★ i don't like it  
 ★ i hate it

**Rate It!**



00:53 shipwreck union - out of the woods volume

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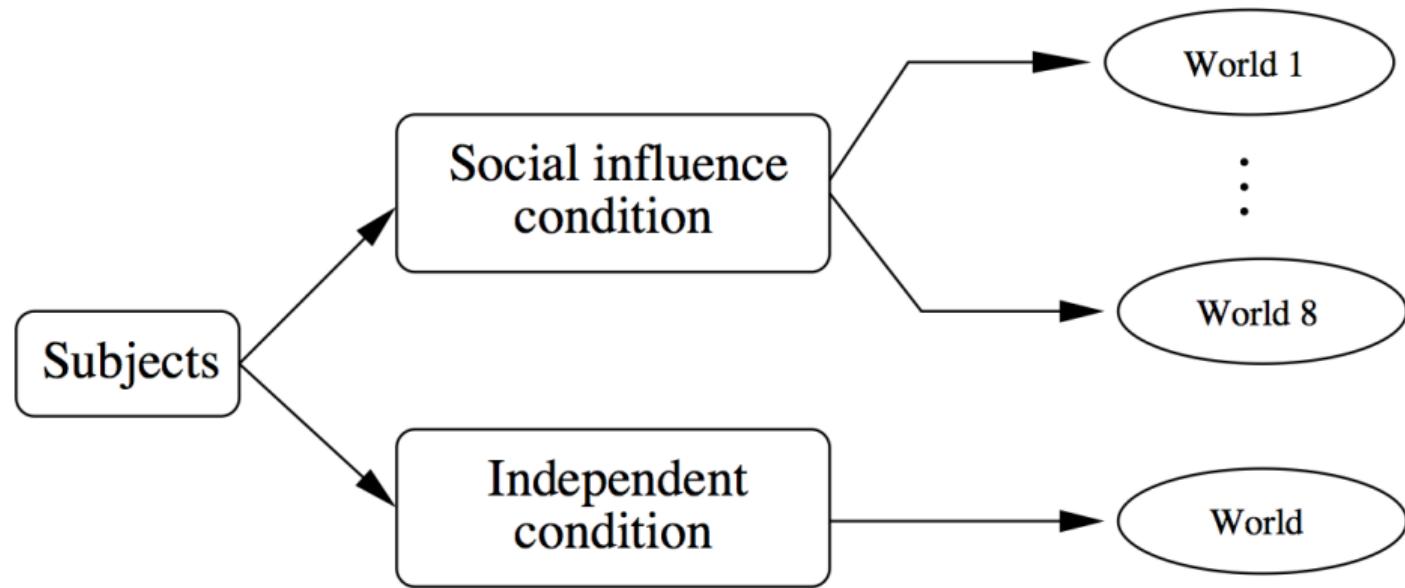
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- ▶ <https://www.dropbox.com/s/j0wpjg379xuhe7n/331122-hi.mp3?dl=0>
- ▶ <https://www.dropbox.com/s/tobqqk4ar9qzc01/846626-hi.mp3?dl=0>



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M http://www.musiclab.columbia.edu/me/songs

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HARTFIELD "though & through"	20	GO HARRISOCAL "it does what it did"		12	UNICO "telle the world passes"	24
DEEP PATRIOT TO DIE: "for the sky"	17	PARKER THEORY: "she said"		47	UP FOR NOTHING: "in right of"	13
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THE BROKEN PROMISE: "the end is here"	19	POST BREAK TRAGEDY: "reverse"		14	STRANGERS: "one day"	18
THIS NEW DAWN: "you let feel above the arrows"	12	PORTHOLEONG:		24	FAIR FROM UNKNOWN: "you are"	18
HOUSER AT HOME: "work makes me"	6	THE CALLEFACTION: "stepped in an orange peal"		20	STUTT MONKEY: "wide eye"	46
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SECRETARY: "keep peacocks on the balloons"	5	STAR CLIMBER: "tell me"		36	UNKNOWN CITIZENS: "telling over"	34
ART OF EARLY: "adventures, methods, insouciance"	32	THE FASTLANE: "feel do do so good (do do)"		31	BY NOVEMBER: "take care jive"	28
HYDRAULIC SANDWICH: "separated anxiety"	39	A BLINDING SILENCE: "memories and insects"		17	DRAINS IN THE SKY: "top the sky"	12
EMBER SKY: "this upcoming winter"	25	SLIM RANKA: "like baba ka bhang"		15	SELSSUS: "size of the city"	22
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RYAN ESSAMAKER: "minus the sun"	14	ZIP FALLS DOWN: "what's the money?"		11	IVAN GOLD: "what's the money?"	19
DEPTHOGIC: "mother to son"	12	SHAME CONSOLIDATED: "a plan for kind decoration"		17	RENDITION OF A DOUBT: "i'm sorry"	38
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(a) Experiment 1, Weaker signal

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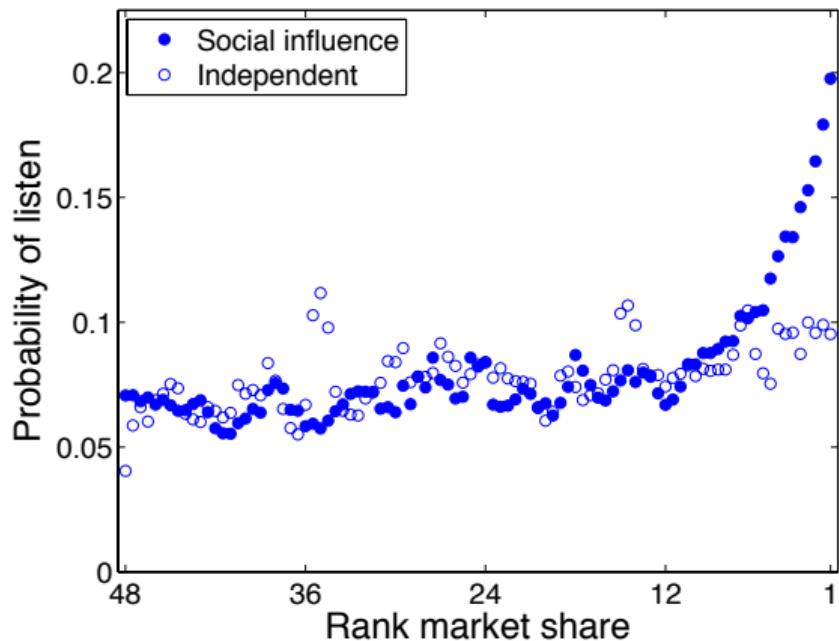
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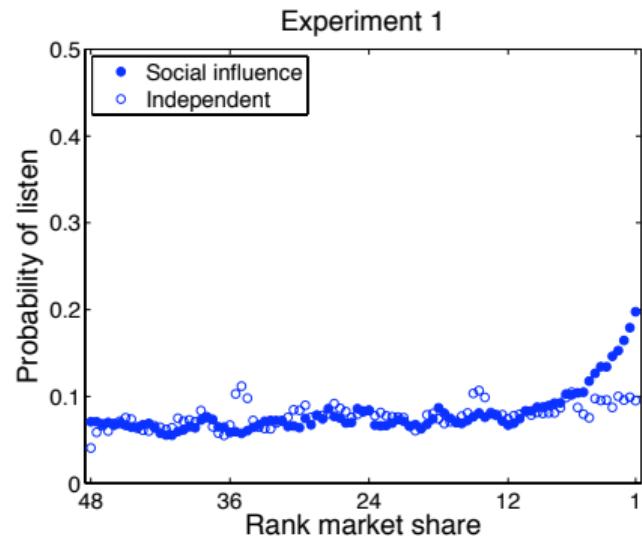
M http://www.musiclab.columbia.edu/me/cont1/

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PARKER THEORY: "she said"	139		
THE FASTLANE: "what do we gain (don't)"	181		
SELSSUS: "size of the city"	62		
STUTT MONKEY: "wide eye"	56		
BY NOVEMBER: "i could take you"	55		
PORTHOLEONG: "true"	49		
HYDRAULIC SANDWICH: "separated anxiety"	43		
SILENT FILM: "i have to say"	40		
UDOO: "while like we all pass"	36		
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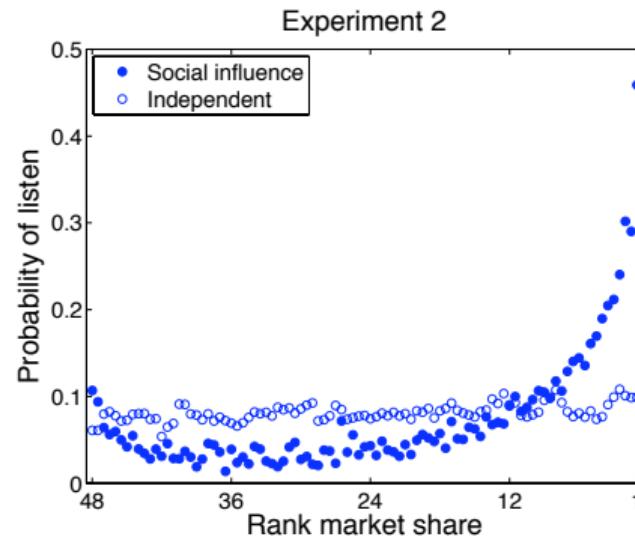
(b) Experiment 2, Stronger signal

Experiment 1



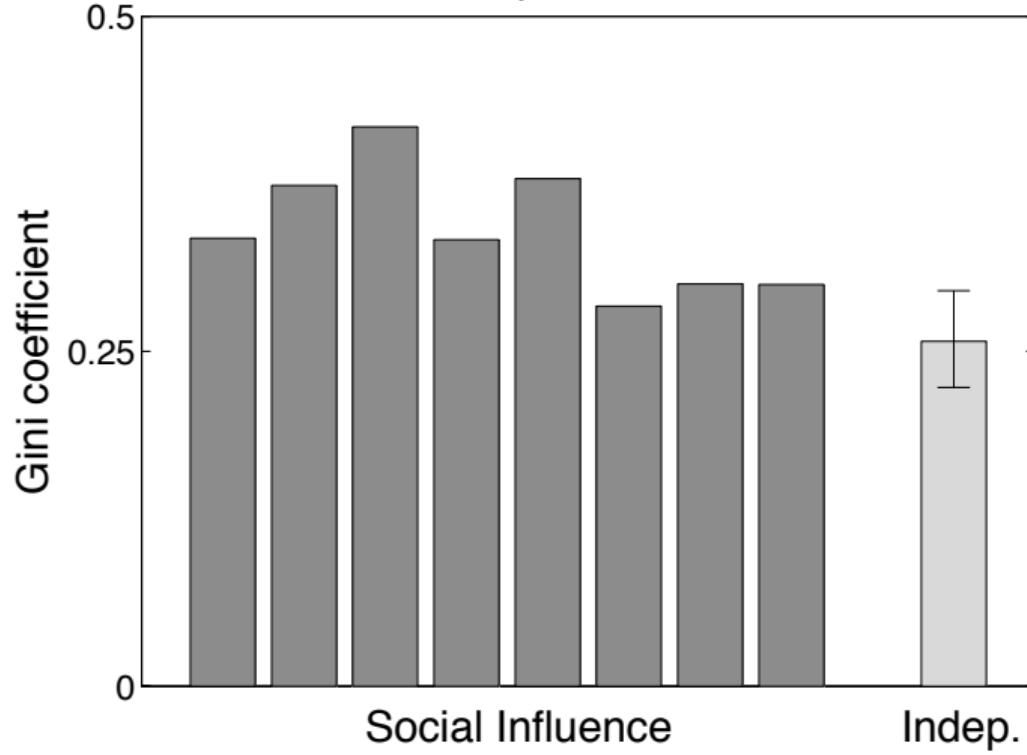


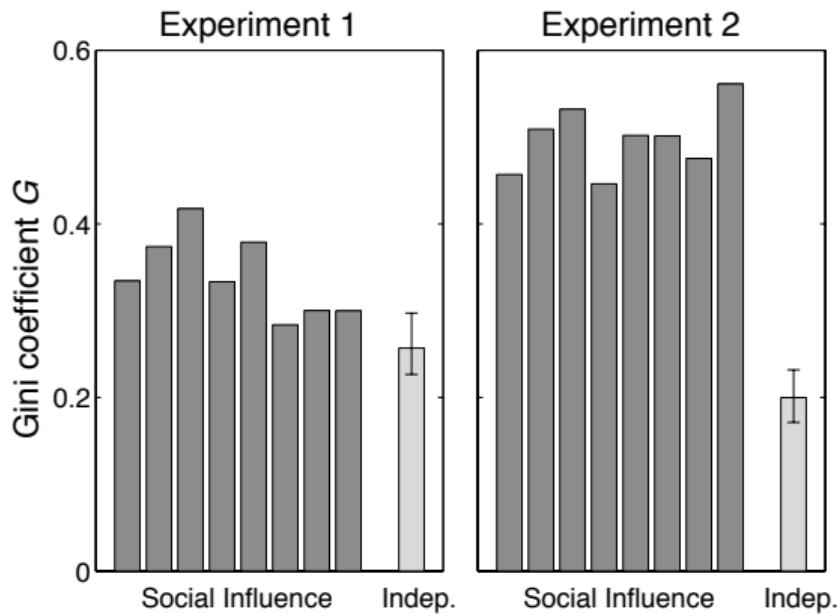
(a) Experiment 1, weaker signal



(b) Experiment 2, stronger signal

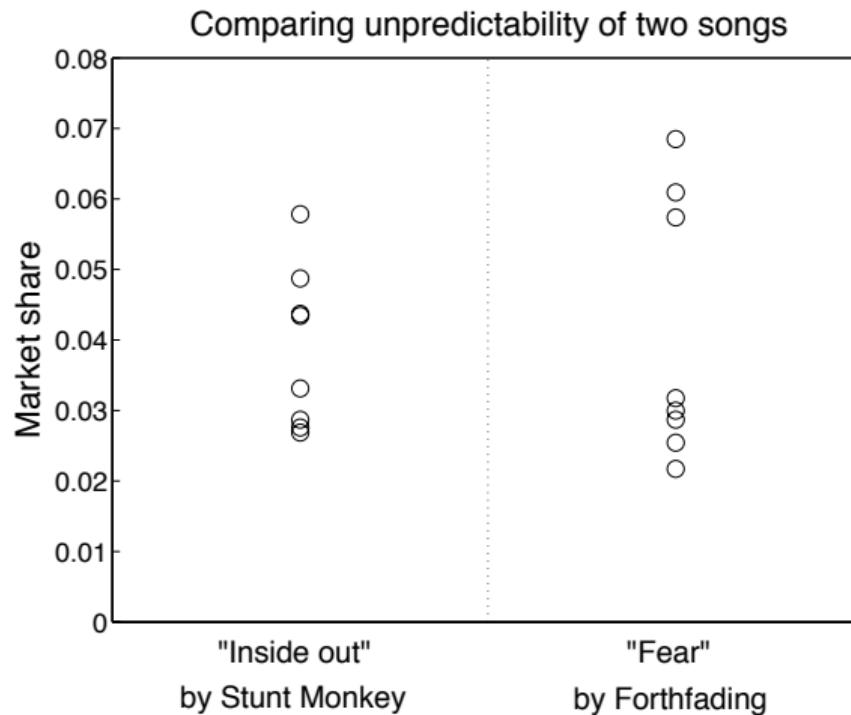
Experiment 1



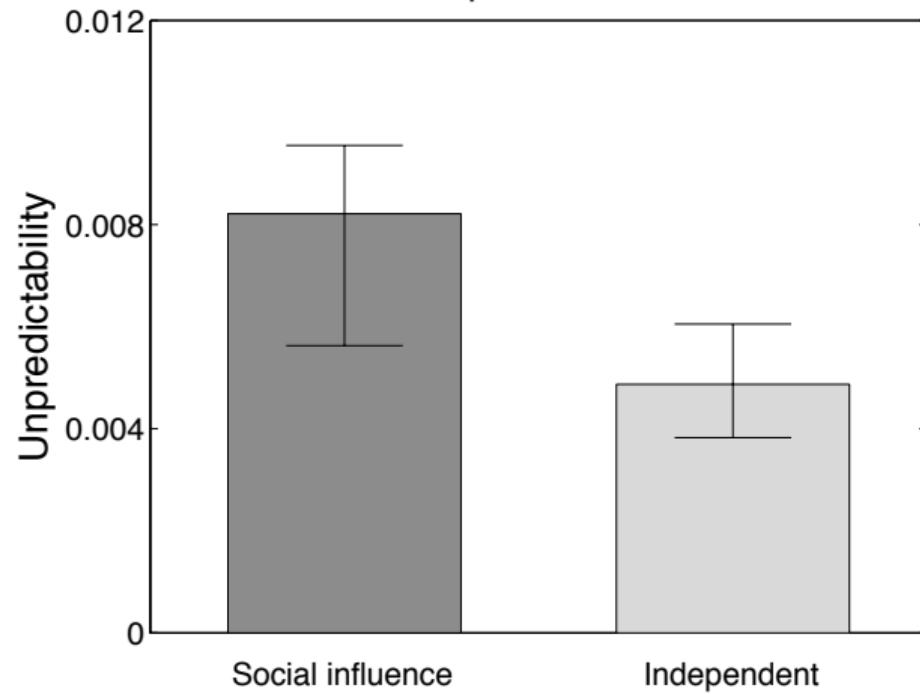


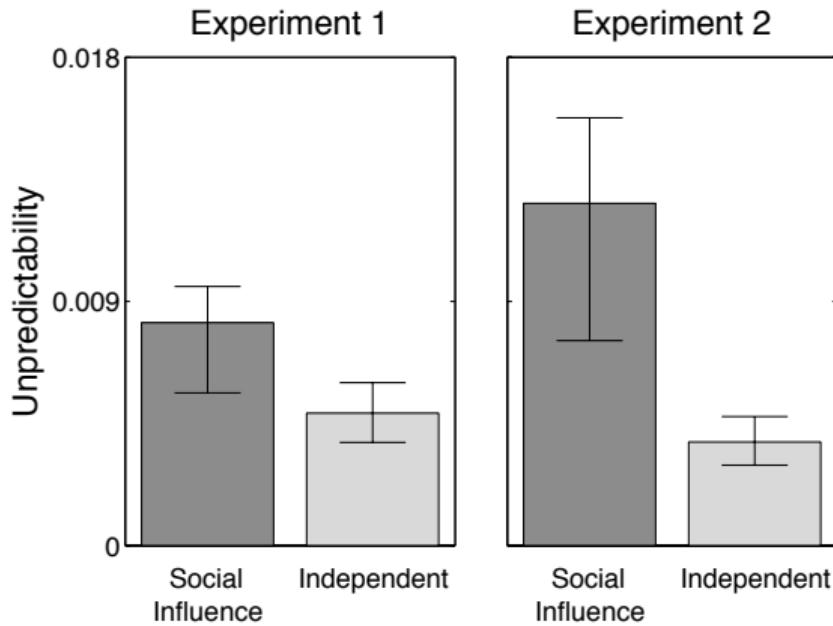
Median Gini coefficient increases from 0.34 (France) to 0.50 (Nigeria)

$U$  = mean difference in market share across all pairs of realizations



Experiment 1



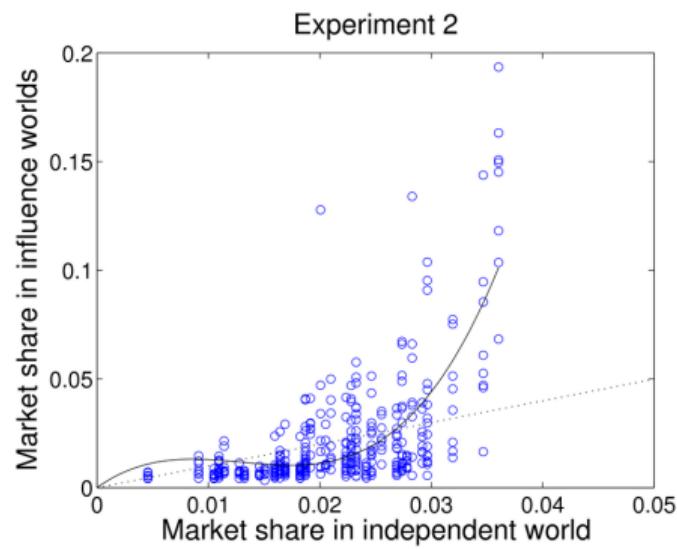
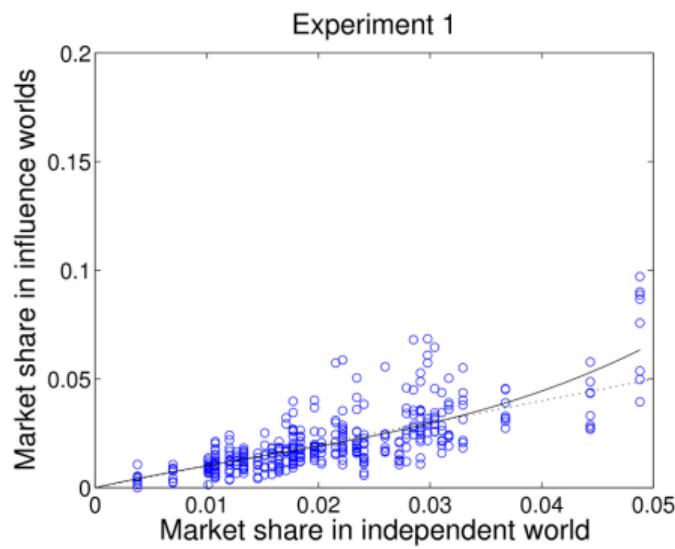


Unpredictability increases by about 50%

Experiments 1 and 2 show a dose-response relationship. Increasing the strength of social influence leads to

- ▶ increased inequality of success
- ▶ increased unpredictability of success

What is the relationship between “quality” and success?



If real success can lead to more success, can fake success lead to real success?

# THE BUREAU AND THE MOLE



THE UNMASKING OF ROBERT PHILIP HANSEN,  
THE MOST DANGEROUS DOUBLE AGENT IN FBI HISTORY

DAVID A. VISE  
PULITZER PRIZE-WINNING AUTHOR

Someone bought and returned 17,000 copies of this book.

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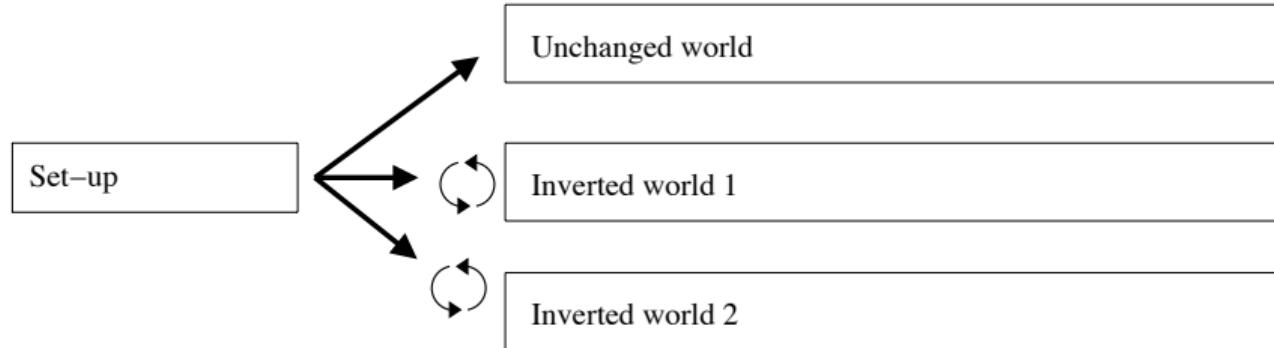
## Self-fulfilling prophecies

"[a] self-fulfilling prophecy is, in the beginning, a *false* definition of the situation evoking a new behavior which make the originally false conception come *true*." Robert Merton (1948)

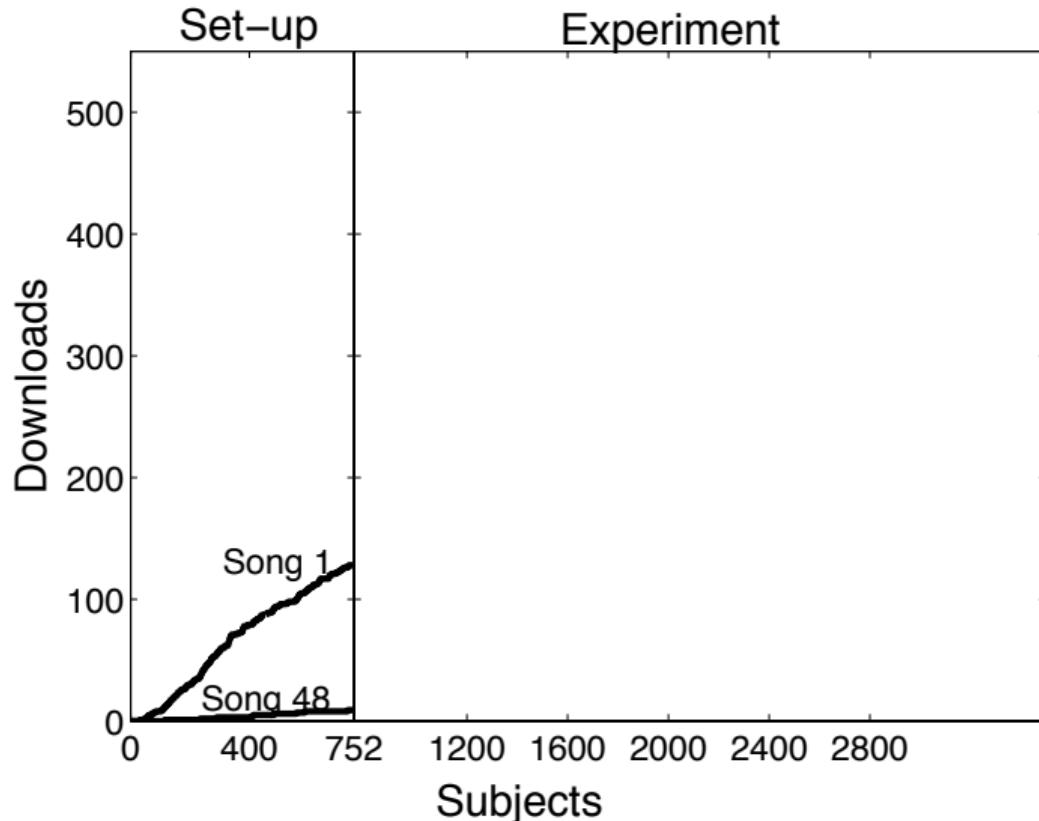
Vise's book sold more than 180,000 copies. How much of this was due to a self-fulfilling prophecy? Hard to say.

Again, this is difficult with observational data, but possible with a multiple-realization experiment

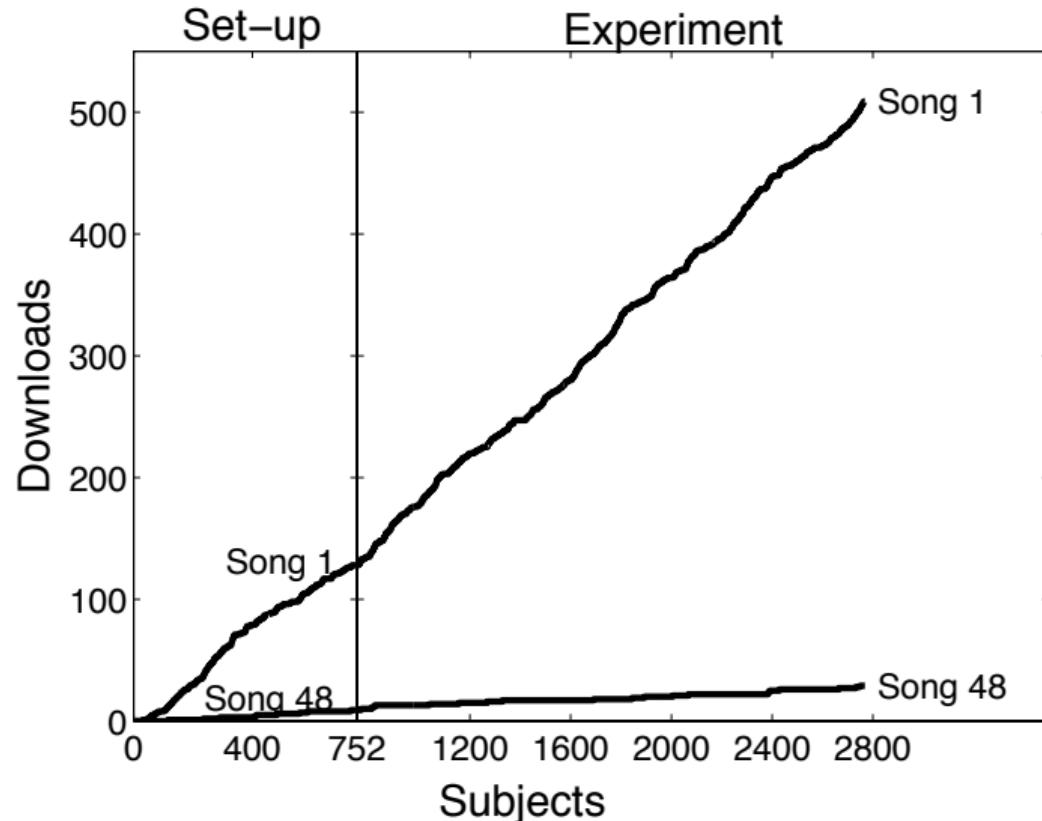
# Experimental design



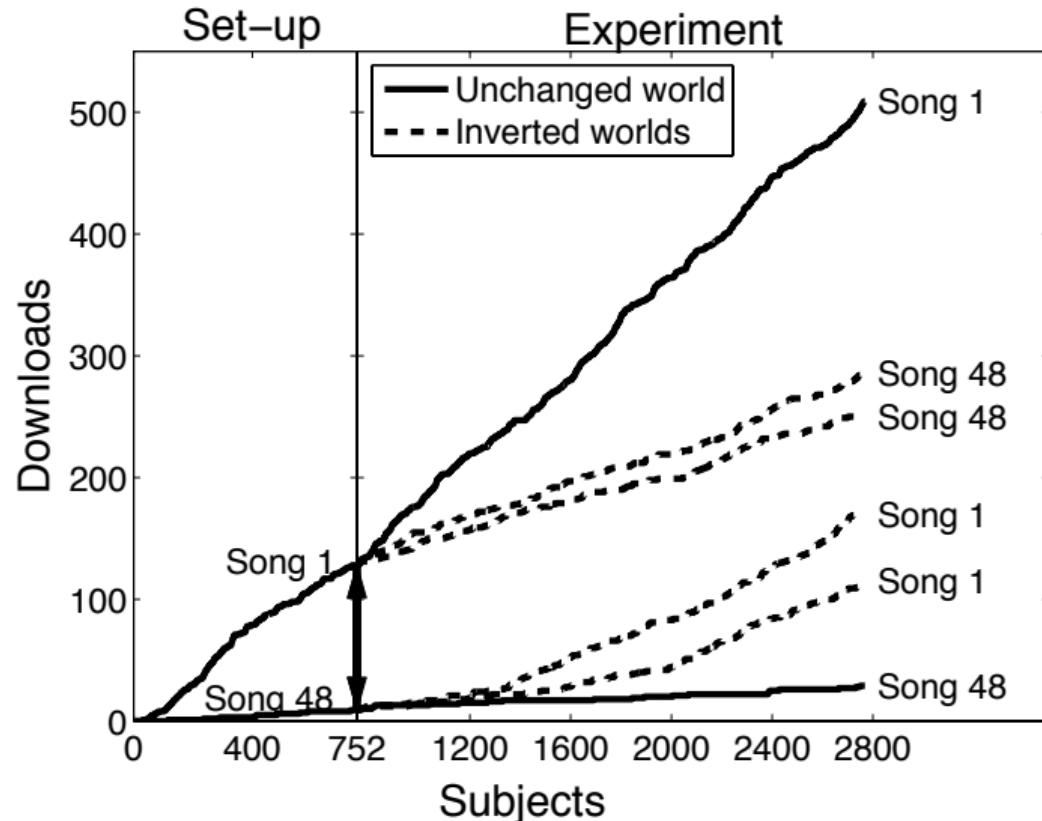
## Tracking song 1 and song 48



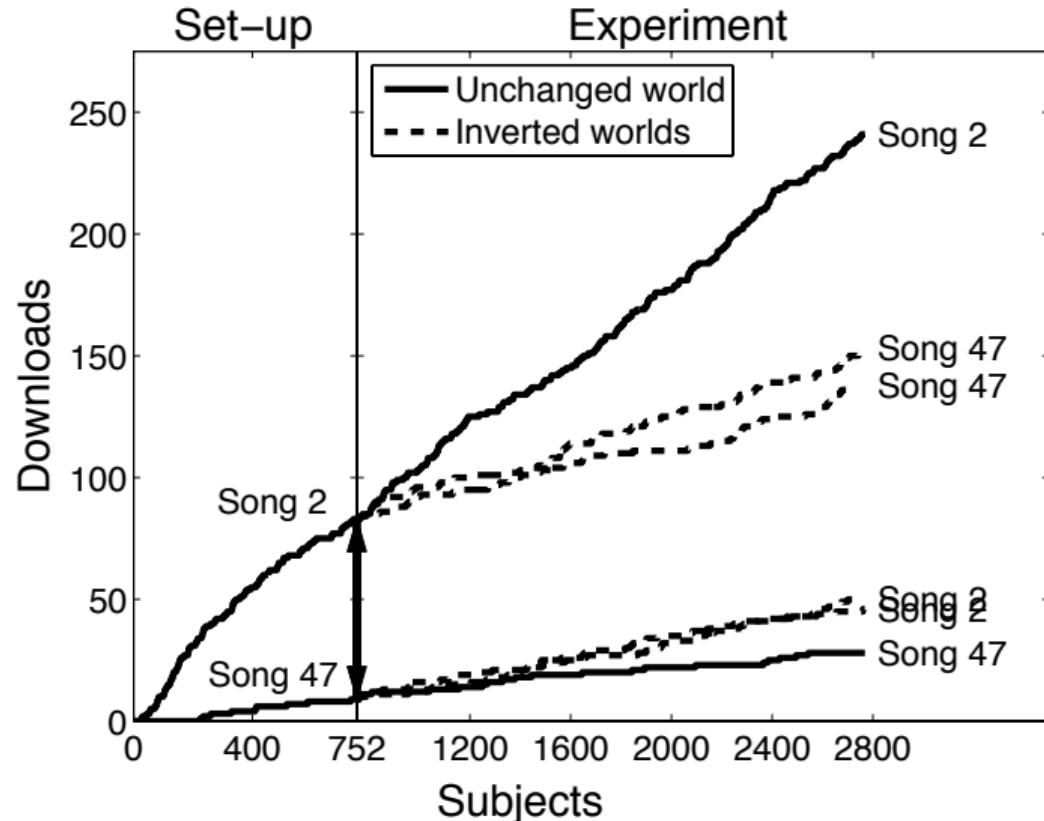
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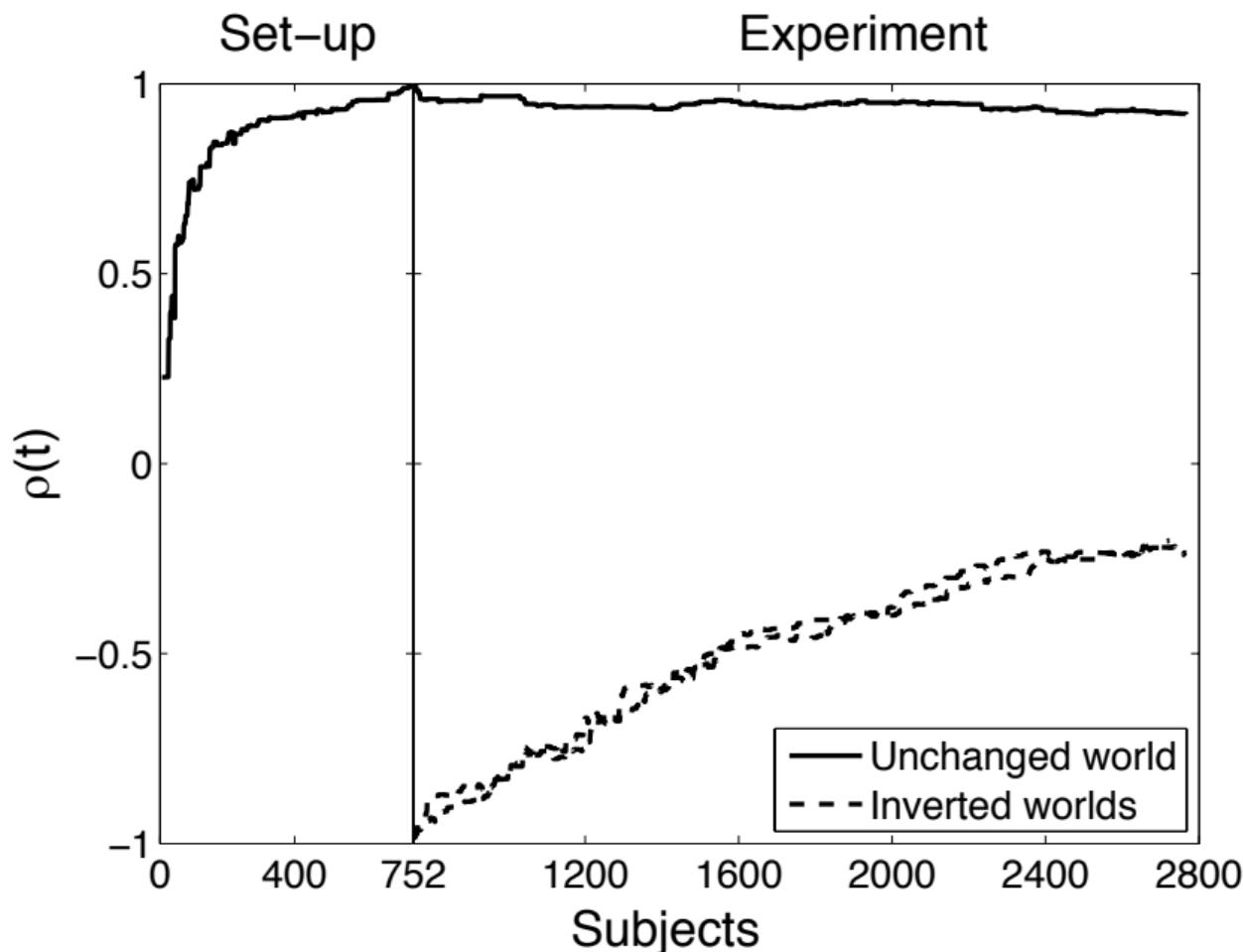


## Tracking song 1 and song 48



## Tracking song 2 and song 47









(Duchamp, 1919)



(Duchamp, 1919)



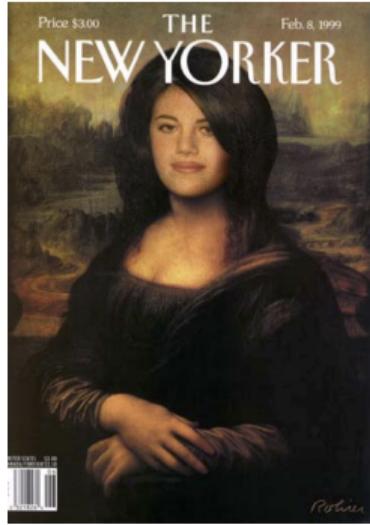
(Warhol, 1963)



(Duchamp, 1919)



(Warhol, 1963)



(Roher, 1999)



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- ▶ social influences weakens the relationship between appeal and success
- ▶ you can predict failure but you can't predict success
- ▶ the perception of success can become a self-fulfilling prophecy

Download all the data from these experiments:

<http://opr.princeton.edu/archive/cm/>

Looking backward and looking forward:

[https://www.princeton.edu/~mjs3/soc204\\_f2021/](https://www.princeton.edu/~mjs3/soc204_f2021/)

Rest of this week:

- ▶ Midterm is available now.

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- ▶ Open book and 1 hour. Full details here: [https://princeton.instructure.com/courses/4801/discussion\\_topics/43845](https://princeton.instructure.com/courses/4801/discussion_topics/43845)

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Good luck on the midterm, and have a wonderful fall break!