

Class 11: Cascades and fads in cultural markets

Matthew J. Salganik

Sociology 204: Social Networks
Princeton University

1/2: The puzzling nature of success in cultural markets

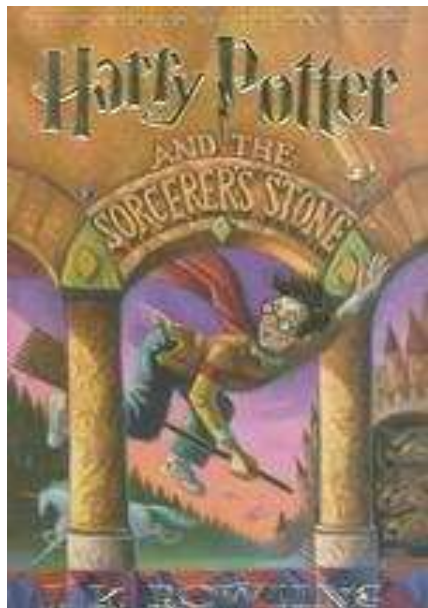


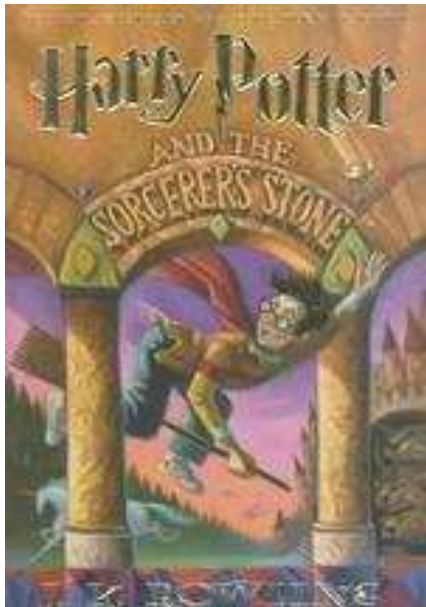
Review:

- ▶ 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)

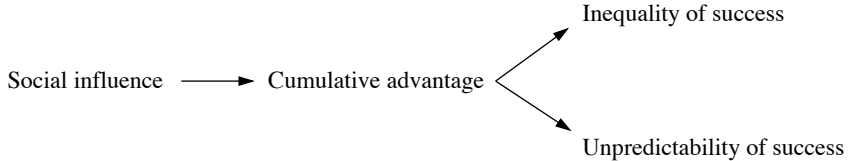
- ▶ extreme inequality in the success of objects
- ▶ unpredictability in the success of objects

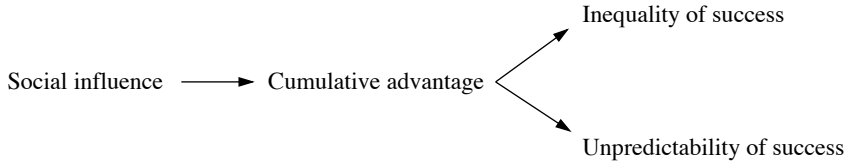
Psychological explanation:

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

Sociological explanation:

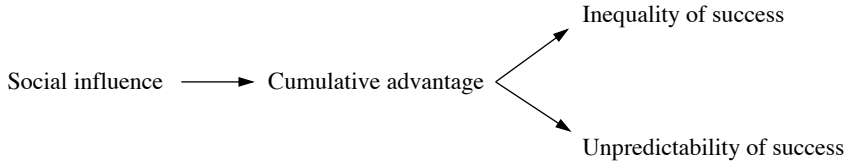
The collective outcomes of inequality and unpredictability of success both arise from an individual-level process of social influence





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

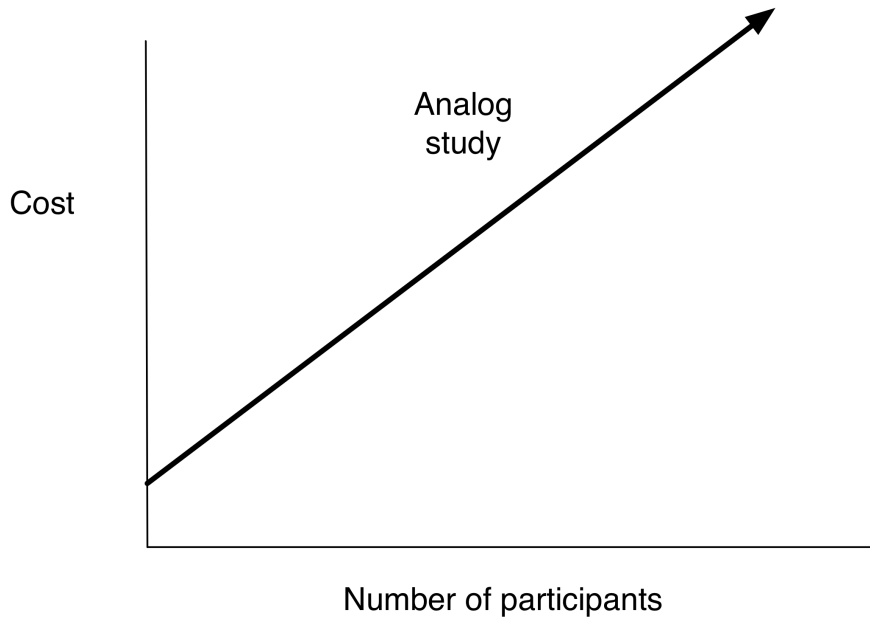
Instead of using observational data we are going to run an experiment because

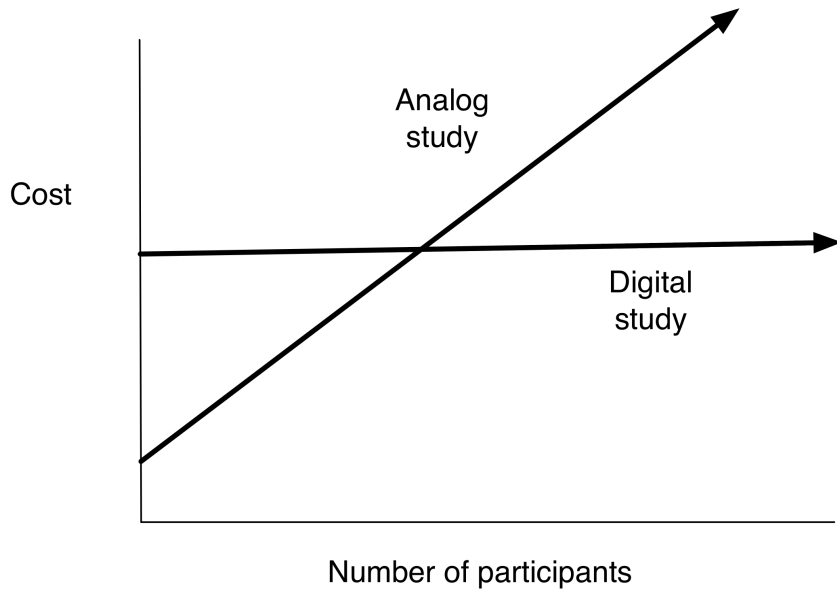
- ▶ can control the information that people have about the behavior of others
- ▶ can run the same process multiple times under exactly the same conditions, allows us to see multiple “histories”

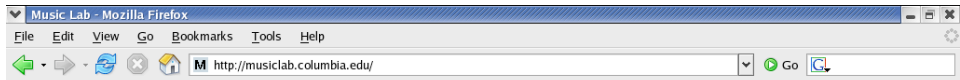
But, this experiment is different from most,

- ▶ 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**

 **COLUMBIA
UNIVERSITY**



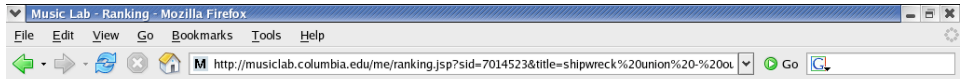
FREE MUSIC DOWNLOADS

Music Lab – Song Selection - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

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

	# of down loads	[Help]	[Log off]	# of down loads	# of down loads
HARTSFIELD: "enough is enough"	20	GO MOREDCAI: "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 agression"	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
NOT FOR SCHOLARS: "as seasons change"	27	SIMPLY WAITING: "went with the count"	16	FADING THROUGH: "wish me luck"	10
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
HYDRAULIC SANDWICH: "separation anxiety"	20	A BLINDING SILENCE: "miseries and miracles"	17	DRAWN IN THE SKY: "tap the ride"	12
EMBER SKY: "this upcoming winter"	25	SUM RANA: "the bolshevik boogie"	15	SELSIUS: "stars of the city"	22
SALUTE THE DAWN: "i am error"	13	CAPE RENEWAL: "baseball warlock v1"	12	SIBRIAN: "eye patch"	14
RYAN ESSMAKER: "detour_(be still)"	14	UP FALLS DOWN: "a brighter burning star"	11	EVAN GOLD: "robert downey jr"	10
BEERBONG: "father to son"	12	SUMMERSWASTED: "a plan behind destruction"	17	BENEFIT OF A DOUBT: "run away"	38
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

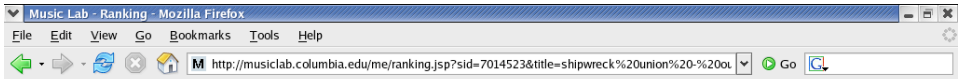
☐ ★ ★ ★ ★ i like it

☐ ★ ★ ★ it's OK

☐ ★ ★ i don't like it

☐ ★ i hate it

Rate It!



00:53 shipwreck union - out of the woods

volume

|| ▶

Would you like to download this song?

Yes, download

No, Thanks

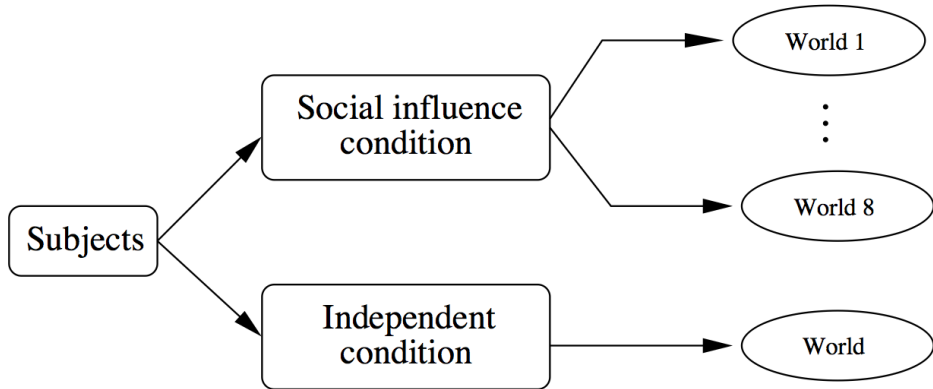
Music Lab – Song Selection - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

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

	# of down loads	[Help]	[Log off]	# of down loads	# of down loads
HARTSFIELD: "enough is enough"	20	GO MOREDCAI: "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 agression"	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
NOT FOR SCHOLARS: "as seasons change"	27	SIMPLY WAITING: "went with the count"	16	FADING THROUGH: "wish me luck"	10
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
HYDRAULIC SANDWICH: "separation anxiety"	20	A BLINDING SILENCE: "miseris and miracles"	17	DRAWN IN THE SKY: "tap the ride"	12
EMBER SKY: "this upcoming winter"	25	SUM RANA: "the bolshevik boogie"	15	SELSIUS: "stars of the city"	22
SALUTE THE DAWN: "i am error"	13	CAPE RENEWAL: "baseball warlock v1"	12	SIBRIAN: "eye patch"	14
RYAN ESSMAKER: "detour_(be still)"	14	UP FALLS DOWN: "a brighter burning star"	11	EVAN GOLD: "robert downey jr"	10
BEERBONG: "father to son"	12	SUMMERSWASTED: "a plan behind destruction"	17	BENEFIT OF A DOUBT: "run away"	38
HALL OF FAME: "best mistakes"	19	SILENT FILM: "all i have to say"	61	SHIPWRECK UNION: "out of the woods"	16

- ▶ <https://www.dropbox.com/s/k02iy1hcx0g3xir/165444-hi.mp3?dl=0>
- ▶ <https://www.dropbox.com/s/j0wpjg379xu7n/331122-hi.mp3?dl=0>
- ▶ <https://www.dropbox.com/s/tobqqk4ar9qzc01/846626-hi.mp3?dl=0>



Music Lab - Song Selection - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

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

	# of down loads	[Help] [Log off]	# of down loads	# of down loads	
HARTSFIELD "Enough is enough"	20	GO MORGUE "I don't want to die"	12	UNDO: "while the world passes"	24
DEEP ENOUGH TO DIE: "for the city"	17	PARKER THEORY: "the last"	47	UP FOR NOTHING: "in sight of"	13
THE THIRTY SYNDICATE: "2003 is stupid"	20	MISS OCTOBER: "pink aggression"	27	SILVERFOX: "love"	17
THE BROKEN PROMISE: "the end is here"	19	ROCKY BREAK: TRAGEDY: "Nirvana"	14	STRANGER: "tune down"	10
THIS NEW DAWN: "the belief above the answer"	12	FORTHFADING: "tea"	24	FAIR FROM KNOWN: "radio it"	18
HOOKER AT NINE: "with money"	6	THE COLLECTION: "trapped in an orange peel"	20	STUNT MONKEY: "inside out"	46
MORAL HAZARD: "waste of my life"	8	LINKED: "lockdown"	17	DANTE: "the money"	14
NOT FOR SCHOLARS: "an unusual change"	27	SIMPLY WAITING: "death with the count"	16	PACING THROUGH: "each one last"	10
SECRETARY: "keep your eyes on the bottom"	5	STAR CLIMBER: "tell me"	36	UNKNOWN CITIZENS: "telling over"	34
ART OF KAILY: "reflexes into, melody breakdown"	30	THE FASTLANE: "I'd death do as just I don't"	31	BY NOVEMBER: "I could take you"	26
HYDRAULIC SANDWICH: "no passion anxiety"	20	A BLINDING SILENCE: "reunites and reaches"	17	DRAWN IN THE SKY: "top the side"	12
EMBER DAY: "an opening scene"	25	SEMI RANA: "the backbone teenage"	15	SELSAUS: "rain of the city"	22
SALUTE THE DAWN: "I am not"	13	CAPS REVENAL: "baseball notebook v1"	12	SOBRIAN: "eye patch"	14
RYAN REISSAIDER: "leave, the self"	14	IF FALLS DOWN: "a higher burning out"	11	RYAN GOLD: "where downey"	10
REDEERING: "before to see"	12	CLIMBERWASTED: "a plan behind darkness"	17	BENEFIT OF A DOUBT: "run away"	36
HALL OF FAME: "best mistakes"	29	SILENT FILM: "all have to say"	61	SHIPWRECK UNDO: "test of the woods"	16

(a) Experiment 1, Weaker signal

Music Lab - Song Selection - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

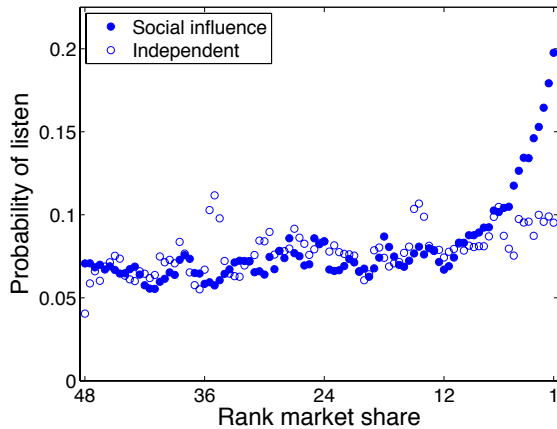
http://www.musiclab.columbia.edu/me/control

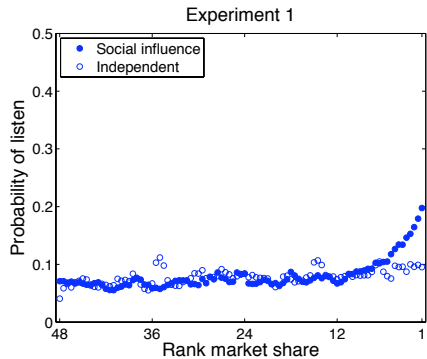
	[Help] [Log off]	# of down loads
PARKER THEORY: "the last"		159
THE FASTLANE: "I'd death do as just I don't"		183
SELSAUS: "rain of the city"		62
STUNT MONKEY: "inside out"		56
BY NOVEMBER: "I could take you"		55
FORTHFADING: "tea"		49
HYDRAULIC SANDWICH: "reunites anxiety"		43
SILENT FILM: "all have to say"		40
UNDO: "while the world passes"		38
BENEFIT OF A DOUBT: "run away"		32
A BLINDING SILENCE: "reunites and reaches"		27
MISS OCTOBER: "pink aggression"		26
STAR CLIMBER: "tell me"		24
FAIR FROM KNOWN: "radio it"		22
HALL OF FAME: "best mistakes"		21
EMBER DAY: "an opening scene"		19

Date

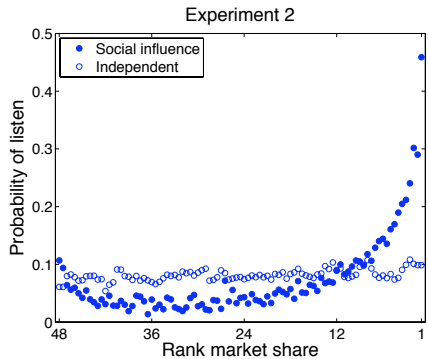
(b) Experiment 2, Stronger signal

Experiment 1



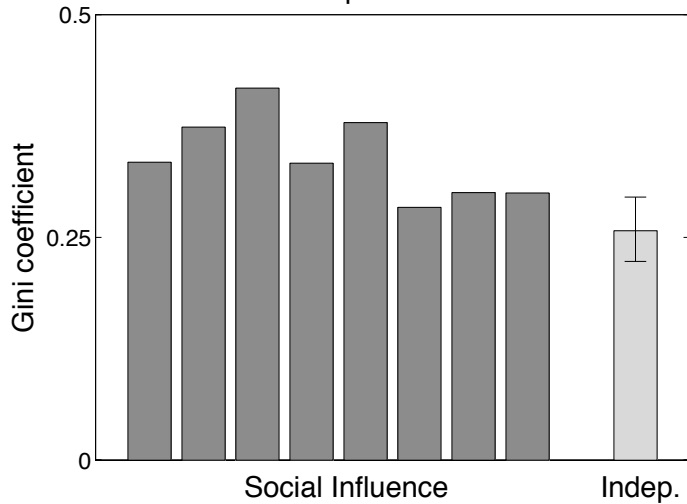


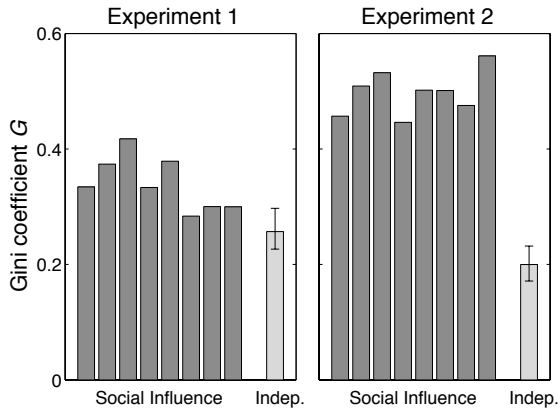
(a) Experiment 1, weaker signal



(b) Experiment 2, stronger signal

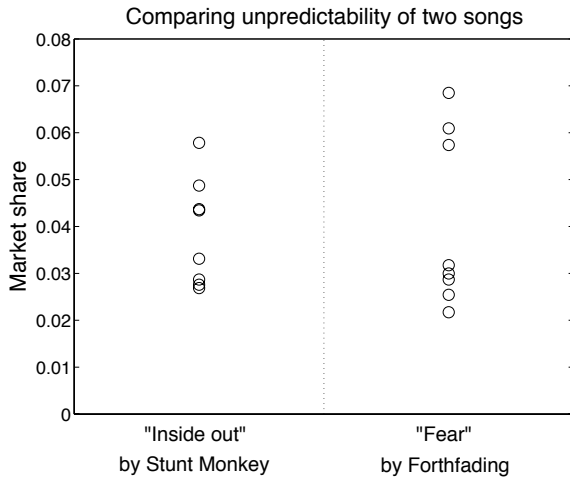
Experiment 1



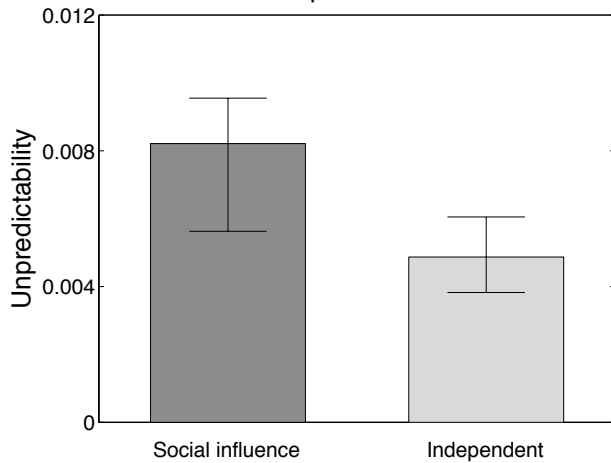


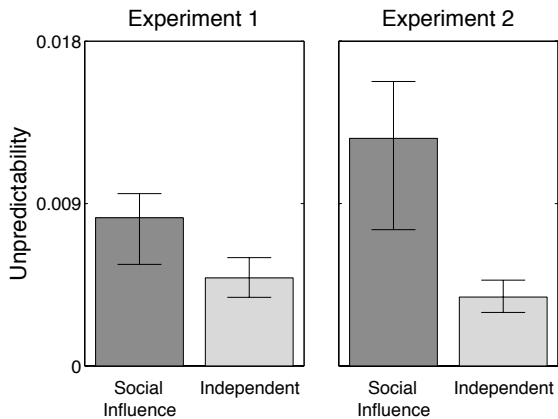
Median Gini coefficient increases from 0.34 (France) to 0.50 (Nigeria)

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



Experiment 1



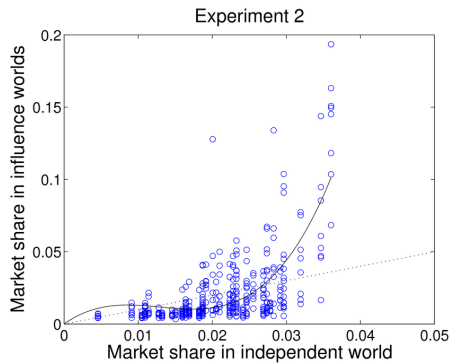
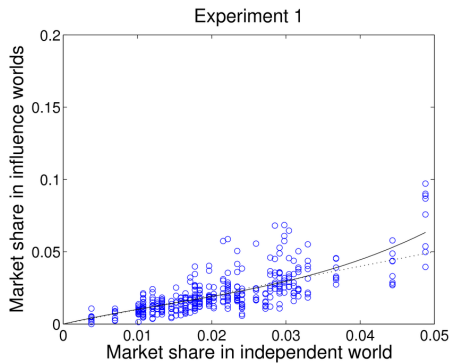


Unpredictability increases by about 50%

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?