

# **Conspiracy Theories in the Lab**

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## Conspiracy

<https://www.theatlantic.com/national/archive/2013/04/12-million-americans-believe-lizard-people-run-our-country/316706/>

	<i>Percent believing</i>	<i>Number of Americans believing</i>
<b>JFK was killed by conspiracy</b>	51 percent	160,096,160
<b>Bush intentionally misled on Iraq WMDs</b>	44 percent	138,122,178
<b>Global warming is a hoax</b>	37 percent	116,148,195
<b>Aliens exist</b>	29 percent	91,035,072
<b>New World Order</b>	28 percent	87,895,931
<b>Hussein was involved in 9/11</b>	28 percent	87,895,931
<b>A UFO crashed at Roswell</b>	21 percent	65,921,948
<b>Vaccines are linked to autism</b>	20 percent	62,782,808
<b>The government <a href="#">controls minds with TV</a></b>	15 percent	47,087,106
<b>Medical industry invents diseases</b>	15 percent	47,087,106
<b>CIA developed crack</b>	14 percent	43,947,966
<b>Bigfoot exists</b>	14 percent	43,947,966
<b>Obama is the Antichrist</b>	13 percent	40,808,825
<b>The government allowed 9/11</b>	11 percent	34,530,544
<b>Fluoride is dangerous</b>	9 percent	28,252,264
<b>The moon landing was faked</b>	7 percent	21,973,983
<b>Bin Laden is alive</b>	6 percent	18,834,842
<b>Airplane contrails are sinister chemicals</b>	5 percent	15,695,702
<b>McCartney died in 1966</b>	5 percent	15,695,702
<b>Lizard people control politics</b>	4 percent	12,556,562

# Motivation

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## “The truth is out there!”

- Three main elements of conspiracy thinking
  - Intentional action
  - Malicious intent
  - Hidden action
- Extremely widespread as the explanation for the (complex) observed characteristics of the world
- Some research on conspiracy thinking, establishing that it has an effect
  - Mostly immediate consequences of belief in specific conspiracy theories (survey experiments) or correlates between conspiracy thinking and other aspects of behavior / personality (observational data)
- Problems
  - More complex consequences of conspiracy **thinking**: not about belief in certain facts, but about certain way of interpreting the (social) reality
    - Conspiracy theorists believe in contradictory theories at the same time!
    - Belief in conspiracies = Belief in “weird things”??
  - Most studies: Exposure to conspiracy theories → Belief in conspiracy theories → Behavioral consequences. Is it really so?

# Contribution

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## This paper

- A laboratory experiment
- Conspiracy priming
- Consequences of conspiracy priming in an environment *unrelated* to it
- General behavioral characteristics:
  - Trust (a frequently found correlate of belief in conspiracies)
  - Strategic sophistication
- Attempt to explicitly uncover whether effect of conspiracy treatment goes ‘through’ conspiracy beliefs

## Findings

- Conspiracy priming has an effect on human behavior, but
- It does not affect trust
- It does increase strategic sophistication
- Priming increases belief in conspiracy, but its behavioral consequences are not mediated by this belief

## General characteristics

- N = 144
- Student subjects, University of Innsbruck
- Two randomly assigned treatments
  - A short video with a sympathetic account of the Moon hoax (a widespread conspiracy belief in the US context, rather unimportant in the German context)
  - An equally long video on space exploration (space shuttle program)
- Incentivized responding to informational questions reveals no differences in the difficulty level across videos
- Two games played in random order
  - Trust game
  - Beauty contest game

# Games

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## Trust game

- Pairs of A and B (no communication, no repeated interaction...)
  - A receives 5 €
  - A can transfer a portion of it to B
  - The transferred portion is multiplied by 3
  - B can transfer some of this money back to A
- How much does A transfer?

## Beauty contest

- Pairs of A and B (no communication, no repeated interaction...)
  - A and B are asked to bid an integer between 5 and 14 €
  - The participant with the smaller bid receives the bid plus 10 €
  - The participant with the larger bid receives just the bid
  - Ask respondents why did they select a certain bid
- Proxy of strategic sophistication (k-level thinking)

# Main results

	Primed group	Control group	$\Delta$
Moon landing	2.736 (0.148)	1.972 (0.140)	0.764*** (0.204)
Princess Diana	1.958 (0.123)	1.861 (0.118)	0.097 (0.170)
Pharmaceuticals	3.361 (0.146)	3.125 (0.149)	0.236 (0.209)
Roswell	1.444 (0.103)	1.361 (0.089)	0.083 (0.136)
9/11	2.472 (0.163)	2.333 (0.147)	0.139 (0.219)
k-level reasoning	1.738 (0.117)	1.281 (0.136)	0.456** (0.180)
Trust level	3.278 (0.332)	2.944 (0.333)	-0.334 (0.471)

# Causal mediation analysis

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## Conspiracy priming

- Increases beliefs in conspiracy thinking
- Increases strategic sophistication
- How does the causal structure look like?

## Causal mediation analysis

	Effect	[95% Confidence Interval]	
Indirect effect	-0.002	-0.140	0.127
Direct effect	0.460	0.076	0.813
Total effect	0.458	0.077	0.814

Essentially, not the effect of conspiracy beliefs, but of mere exposure to conspiracy ideas!



# Mediators

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9

## Effects could be conditional on subjects' characteristics

- Not so much in our sample
  - A variation of the frequently criticized WEIRD sample
- One variable, which matters, is potentially religiosity
  - Also relies on hidden intentional explanations (but less on malicious intent)
    - Substitute or a strengthening factor?
  - Affects interest to the topic we prime
    - We cannot ask about it explicitly before experiment, or we will bias our results!!
- Findings (dif-in-dif)
  - Belief in Moon hoax increases in particular for *less religious subjects*
  - K-level thinking increases in particular for *more religious subjects*
    - In any case, effects significant for a sufficiently large portion of the sample
    - Effects on beliefs: religion as a substitute?
    - Effects on k-level thinking: lower familiarity with the subject promoting stronger response?

# Summary

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## Main findings

- Exposure to conspiracy theories
  - Does increase beliefs in conspiracies
  - But also has other important effects
- Exposure to conspiracy theories increases strategic sophistication
  - What does it mean for human interaction?
  - At least not a simple ‚negative‘ effect often posited by the literature
- Effect on trust reported in many observational studies not causal

## Limitations

- Very short-term exposure to a conspiracy theory: we need more time to really elicit beliefs
- Maybe other conspiracy theories could work differently in Austrian samples?
  - But, again, our study is about conspiracy thinking, not about (specific) conspiracy theories

# One slide on the second study

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11

## Experimental game instead of an experiment

- Chinese and Russian subjects in Moscow and in Beijing
- Explicitly asking them whether they believe in certain types of conspiracies (in particular, Western-induced conspiracies)
  - No causal identification
  - Experimental game to elicit incentive-induced behavior
- Game: do people expect others to cooperate against them
  - Three-person games: two subjects bid for a good offered by the third subject
  - Communication: bidders can form a coalition against the seller
  - Seller can invite one or two bidders (for a fee): expectation of collusion → save the fee and invite only one bidder
    - Russians: coalitions rarely formed, promises frequently disregarded
    - Chinese: more coalition formation, subjects rarely break promises
    - In the Chinese sample: anti-Western conspiracy beliefs correlated (!) with lower expectation of collusion by the seller
    - In-group thinking!
  - Conspiracy thinking has more complex implications than frequently believed!