Is Aggression Contagious Online? A Case of Swearing on Donald Trump’s Campaign Videos on YouTube

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Aims of the Study

• Empirical evidence of the *contagion* of offensive comments

• Examination of two mechanisms of *swearing* in YouTube: Public vs. Interpersonal.
Background: Emotional Mimicry

- Emotional contagion offline
  - Emphasis on nonverbal mimicry & microsynchrony

- Is emotion contagious text-based interactions online (where nonverbal signals are largely absent, and interactions are asynchronous)?
  - YES
Background: Emotional Mimicry Online

- Emotion is contagious...
  1. through text-based social interactions (in form of linguistic style matching)
  2. in asynchronous setting (e.g. Facebook posting)
- Simply positive vs. negative (?)
- No work on disinhibited emotional expression (e.g., swearing)
Background: Social Network Influence (Social Contagion)

(1) Simple exposure effect ≈ mimicry
Public Swearing

(2) Higher-order network effect
Interpersonal Swearing
Background: Public vs. Interpersonal SW

Public SW
• No specific user attacked
• No anticipation of social interaction
• Contagion due to simple exposure / linguistic mimicry effect

Interpersonal SW
• Attacks a specific user within community
• Anticipation of (negative) social interactions
• Contagion due to sequential interactions
Two Sources of SW Exposures: “parent” and Immediately preceding “child” comment

- Nested structure of YouTube comments
  - Level 1: Video
  - Level 2: Thread ("parent" comment)
    - Level 3: ((hidden child comment))
      - child comment at t-1
      - child comment at t

Focal Actor
Two Sources of SW Exposures: “parent” and immediately preceding “child” comment.
Research Questions

1. Does swearing messages show significantly higher (a) anger and (b) verbal aggression than non-swearing messages?

2. How does a parent-comment swearing influence the likelihood of a focal child-comment swearing?

3. How does a preceding child-comment swearing influence the likelihood of the following (focal) child-comment swearing?
Data: YouTube Comments

- 35 videos in the official channel of Donald Trump (“Donald J. Trump for Presidents”) between January 18 and April 29, 2016
- 13,852 comments constituted 2,075 threads
- Children-comments ($N=11,777$) as unit of analysis
- Multilevel modeling (child $\epsilon$ thread $\epsilon$ video)
Data : Variables

• Linguistic matching using custom-built swear words dictionary (432 derivative words)
• # of swearwords in a parent and preceding child comments
• Three types of children-comments: no-swear / public swear / interpersonal swear
• Video and thread attributes accounted.
Number of swearwords \( \approx \) Intensity of anger/verbal aggression

- “You \textit{fucking} dictator! \textit{Fuck} you! You don’t know what it’s like to live without a house and without freedom \textit{motherfucker}! make America great again? Brainwashing people into voting for you! This is the new \textit{fucking} Adolfo hitler \textit{motherfuckers}!” (5 swear words)

- “At least Hillary doesn’t discriminate people like that nazi \textit{fuck} Trump. You see how your boy Trump made fun of a disabled reporter a while back some guy. He hates women as well but your too blind to see that. I hope you enjoy voting for that cold hearted celebrity as our president” (1 swear word)
Results: Anger and Verbal Aggression

Difference between Non-swearing and Swearing Messages

- Anger
- Verbal Aggression

Comparison categories:
- No Swear
- Swear
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<th>Model</th>
<th>Variables</th>
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LR test: (Public) $\chi^2(2) = 28.39^{***}$ (Interpersonal) $\chi^2(2) = 151.76^{***}$

(Public) Log-likelihood = 3010.001, Wald $\chi^2(11)=93.27^{***}$; (Interpersonal) Log-likelihood = 5073.524, Wald $\chi^2(11)=476.76^{***}$
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Discussion & Conclusion

• **Theoretical Implication:**
  - Anti-social motives of contagion
  - Distinguishing mimicry and social network (interaction effect) as different mechanisms of contagion

• **Practical implication:**
  - Pay attention to parent comments
  - Public emotional outburst vs. interpersonal hostility