The Visual Framing of U.S. Presidential Elections

When Style Obscures Substance in Presidential Debates

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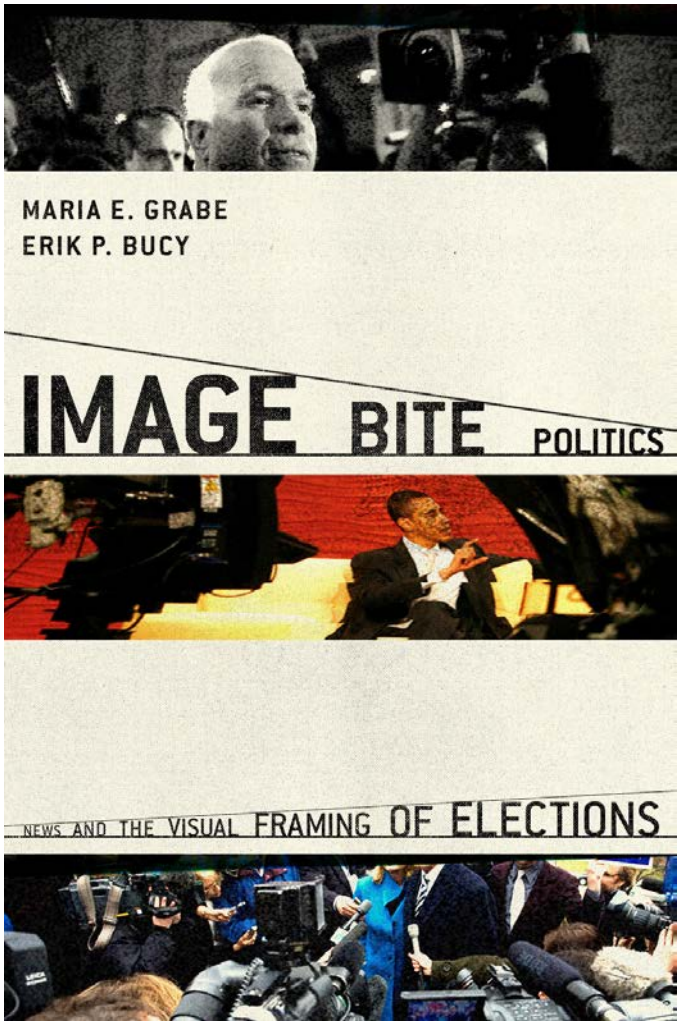
Image bites approach



- Developed methodically, over a period of years
  - in articles, book chapters, a 2009 book, ongoing work
  - comprehensive coding scheme
- Distinguishes between sound bites and image bites in audio-visual content
- Focuses on the nonverbal content of political visuals
- Acknowledges the social information that visuals impart
- Embraces a multi-methodological research outlook, now involving
  - Content analysis, eye-tracking, survey data, experiments, focus groups, social media big data

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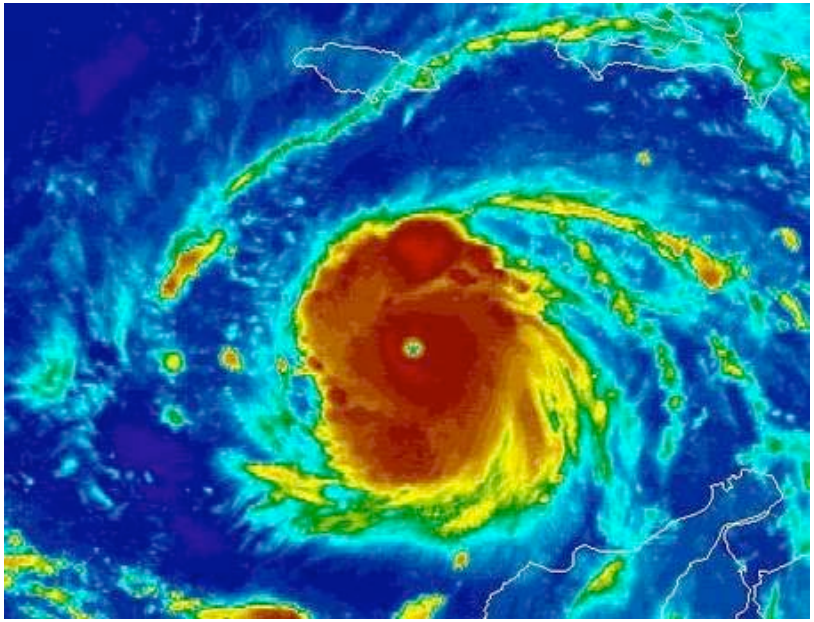
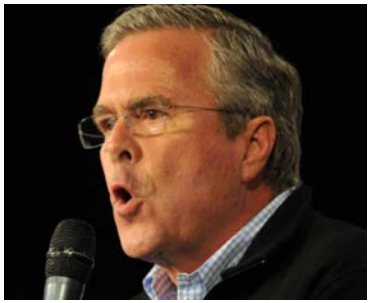
Visuals as social information

- Like radar images of clear weather patterns and incoming storms, **political visuals serve as reliable sources** of information
  - Although 'media-genic' candidates may deliver a false sense of hope or reassurance
  - And ineffective communicators negative emotion
    - Generating doubt, anxiety
- Visuals as a type of **social information**
  - Require minimal literacy, or background understanding of politics
  - Enable quick inferences of politically relevant traits
  - Equalize some knowledge gaps





Could we tell a year ago there was a storm brewing?

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Social vs. factual information

	Information Types: Factual	Information Types: Social
Media	Word-based Dependent on literacy Biased towards print media Present in audio track of television news	Visually based Independent of literacy requirements Biased towards television, visual media Present in video track of television news
Biology	Developed late in hominoid evolution No specialized brain centers for reading Emerges within cognitive band of processing (500 msec and above)	Developed early in hominoid evolution Specialized brain centers for visual processing Emerges within biological band of processing (50 msec and above)
Cognition	Difficult to recall Requires extensive rehearsal for memory Most useful with a political schema Permits slow inferences of politically relevant traits Overriden by compelling visuals	Easy to recall Requires minimal rehearsal for memory Not dependent on a political schema Enables quick inferences of politically relevant traits Assigned priority over spoken words
Culture	Viewed as a marker of intellect Culturally constructed as rational Associated with elites, sophistication Socially stratifying, exclusionary	Viewed as a marker of “idiocy” Culturally constructed as emotional Associated with non-elites, lack of sophistication Socially equalizing, inclusionary

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Leadership and nonverbal displays

- Leadership has a large nonverbal component
  - Dominant individuals have an **'attention binding' quality** (M. Chance, 1976)
  - Faces highly expressive
    - Some more than others
- Televised **leader displays** evoke a range of affective and evaluative responses in viewers
  - Both favorable and unfavorable
  - Affecting attitudes and serving as **motivational cues**
    - Whether the leader's voice is heard in a **sound bite** or the politician is "merely" seen in an **image bite**

Visuals as social information

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Leadership and nonverbal displays

- Myriad **character traits** are manifested nonverbally, both enduring and situational traits
  - Personality vs. communicative
    - Honest, competent, authoritative
    - Evasive, inappropriate, nervous
  - Conveying important **social information**
- Visuals thus contribute to political learning, and are their own form of knowledge (Prior, 2014)
  - Readily encoded and easily retrieved from memory
    - **Visual primacy** a factor with nonverbal expectancy violations
    - When there's a mismatch between what's said and seen, the visual is better remembered

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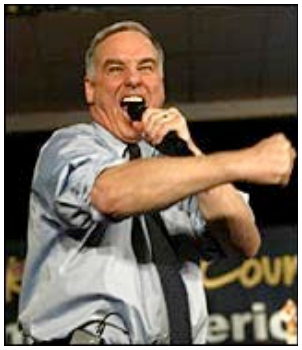
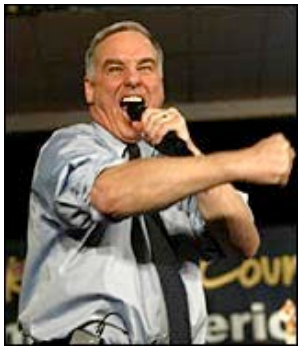
Political nonverbals

- Until recently, nonverbals considered difficult to operationalize and code
  - attempts: **gestalt coding** (Graber, 1990), **image bites** (Barnhurst & Steele, 1997) but no elaboration, **valence framing** (R. Coleman, 2010)
  - 1980s: Basic problem already solved (Masters et al., 1986, at Dartmouth)
    - Not contextualized as *political communication* or *media research* so initially missed
- Important to understand political competition viz **social dominance**
  - As *biobehavior*, not just issue stance, or rhetorical strategy
  - On TV, a codable form of *human ethology* (with evolutionary and adaptive significance)





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Specific coding criteria

Three relevant emotion/intention display types

Table 1. Criteria for classifying facial displays.

	Display Type		
	Anger/threat	*Fear/evasion*	*Happiness/reassurance*
Eyelids	Opened wide	Upper raised/lower tightened	Wide, normal, or slightly closed
Eyebrows	Lowered	Lowered and furrowed	Raised
Eye orientation	Staring	Averted	Focused then cut off
Mouth corners	Forward or lowered	Retracted, normal	Retracted and/or raised
Teeth showing	Lower or none	Variable	Upper or both
Head motion			
Lateral	None	Side-to-side	Side-to-side
Vertical	Upward	Up-down	Up-down
Head orientation			
To body	Forward from trunk	Turned from vertical	Tilted from vertical
Angle to vertical	Down	Down	Up

From Roger D. Masters, Dennis G. Sullivan, John T. Lanzetta, Gregory J. McHugo, and Basil G. Englis, "Facial displays and political leadership," *Journal of Biological and Social Structures*, 1986, 9:330). Copyright 1986. Reprinted with permission from Elsevier. As modified by Roger D. Masters, *Machiavelli, Leonardo, and the Science of Power* (South Bend, IN: University of Notre Dame Press, 1996, p. 141).

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Prototypical displays

Obama's prototypical displays from the 2012 presidential debates (Bucy & Gong, 2016)

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Prototypical displays

Romney's prototypical displays from the 2012 presidential debates (Bucy & Gong, 2016)

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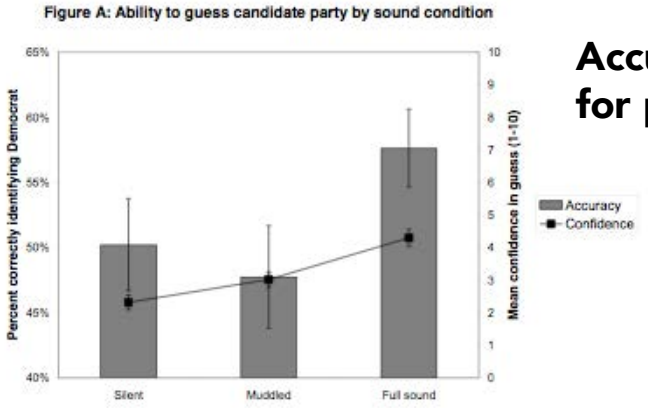
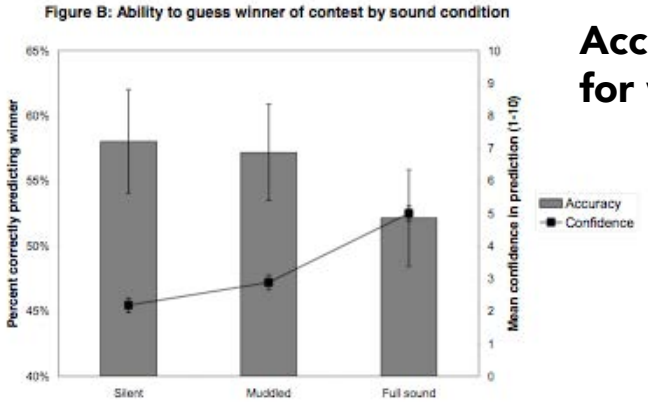
Thin-slice forecasts

- **Nonverbal assessments** can be more reliable than argument-based judgments
  - For predicting partisanship and electoral viability
- Studies using still photographs (Todorov et al., 2005) and 10 sec. video clips (Benjamin & Shapiro, 2009) have shown these effects
  - Short duration exposures to candidates accurately predict election winners
  - With the sound on, ability to predict electoral outcomes decreases – even as confidence increases
    - Hearing the candidates talk only produces more accurate *party* associations



Accuracy for party



Accuracy for winner

(Benjamin & Shapiro, 2009)

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Summarizing the approach

- **Displays as motivational cues**
  - Important when something is on the line, e.g., in the face of threat
- Faces **recognized quickly** and serve a heuristic function
  - Within 50ms of exposure, an ability develops early in infancy
  - Processing time 10 times faster than for verbal information (500ms)
- Provide **reliable insights**
  - About affective states and behavioral intentions
    - Leader expressions help regulate behaviors in ambiguous situations
- Visual experience: a primary **mode of learning, evaluation**
  - Visuals remembered with ease, retrieved more efficiently than verbal info

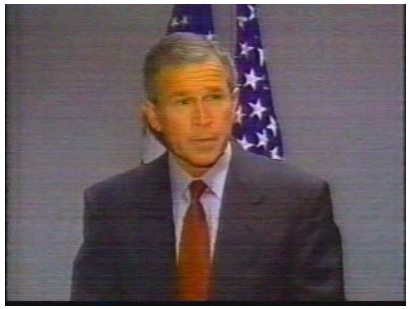
Low Potency Sequence

News Action
(high-intensity, negative image)

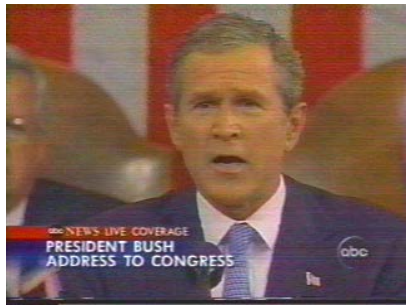
High Potency Sequence

News Action
(low-intensity, negative image)

Presidential Reaction
(low potency display)



Presidential Reaction
(high potency display)



How anxious do you feel after viewing each sequence?

(from Bucy, 2003)

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Study expectations, precursors

- All of this leads to the conclusion
  - **How candidates behave during a high stakes political competition is at least as consequential to the average viewer – or more – than the content of what's said (or the rhetorical strategies used)**
    - i.e., the policy discussion
- But, untested, this remains an empirical question
- Let's begin with two background studies, then a test w/Twitter data
  - Content analysis of the 1960 and 2012 presidential debates
  - Eye-tracking experiment of Obama's display appropriateness in the 2012 debates

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Studying political nonverbals

Four Studies, Five Methods, 50 Odd Years + Some Initial Impressions

1. The 'look of losing,' then and now (1960, 2012)

- 1960 and 2012 presidential debates both accentuated importance of nonverbal behavior
  - Shot-by-shot analysis examines Nixon's actual appearance and portrayal compared to Kennedy in 1960, and Obama and Romney's nonverbal repertoires in 2012

2. Tracking inappropriate displays in Obama vs. Romney (2012)

- Loud criticism of President Obama for his detached and dominated style in debate 1
  - Eye-tracking experiment investigates whether viewers fixate on inappropriate displays more than appropriate displays; focus group also assessed candidate communication

3. Linking biobehavioral and computational approaches (2012)

- Nonverbal coding from the first 2012 debate used to predict real-time Twitter responses
  - Lagged and time series analysis used to test the relative influence of nonverbal behavior compared to tonal elements and rhetorical strategies

4. Dial testing the debate (and shimmy): HRC vs. Trump, part I (2016)

- CRM moment-by-moment analysis with Texas voters shows dynamics of partisan support
  - Independents may be moveable, at least more open to Hillary's message and style

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Key concepts

Key Concepts

- **Display appropriateness** defined as situational nonverbal behavior that is compatible with the message and tone of the setting in which it occurs
  - Congruency between the candidate's expressions and immediate rhetorical context
  - In competitive settings, **appropriate nonverbal behavior** entails an assertive response to challenge or verbal attack
- **Inappropriate displays** defined as evasive and socially submissive nonverbal behavior in juxtaposition to verbal attacks
- Nonverbal behaviors that fall outside of what's considered appropriate and typical for a particular setting or purpose constitute **expectancy violations**
- In politics, evaluations of appropriate behavior often turn on questions of **social dominance**
  - Ability to assert authority while avoiding signs of submission, evasion, or appeasement in the face of challenge
  - The use in 2012 of split-screen technology that features both candidates simultaneously made nonverbal expressions and reactions more prominent than they might have otherwise been

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Nonverbal content analysis

- **Step 1**, nonverbal analysis of **all four 1960 debates**, 60 minutes in length
  - Sept. 26, Oct. 7, 13, 21
    - DVDs of debates obtained from JFK Presidential Library in Boston
  - Unit of analysis = individual camera shot (single camera)
    - Longer shots broken into 30 second chunks
  - 621 total shots counted across all 4 debates
    - 241 featuring Kennedy (214 sound bites, 41 image bites)
    - 273 featuring Nixon (254 sound bites, 36 image bites)
- **Step 2,** nonverbal analysis of **1st and 3rd 2012 debates**, 90-minutes in length
  - October 3, 22
    - Debate footage downloaded from C-SPAN website
  - Unit of analysis = 30 sec. segments
    - Continuous split screen format (dual camera)
  - In debate 1, 180 segments total, many w/crosstalk
    - 147 codable w/no crosstalk for Obama (80 sound bites)
    - 137 codable w/no crosstalk for Romney (69 sound bites)

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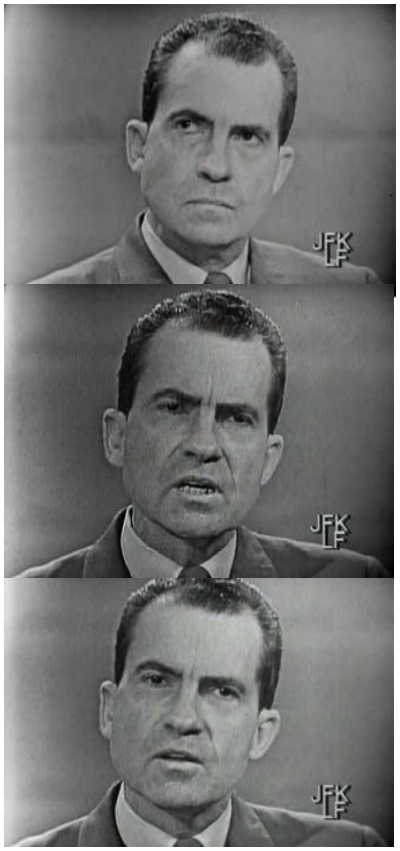
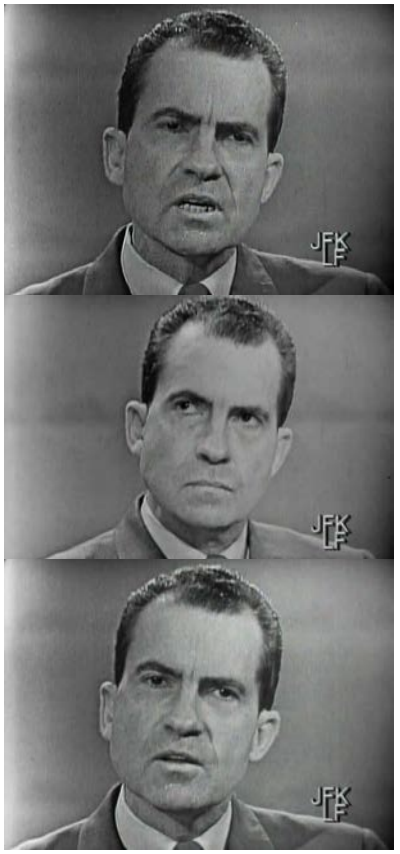
Kennedy-Nixon, 1960

Study 1: The 'Look of Losing,' Then and Now

- In a competitive election, television provided millions of voters across the country with the unprecedented opportunity to evaluate both candidates at the same time
- However, just before the debates Nixon had injured his knee, came down with a fever, and has spent several days in the hospital
- Much has been written about Nixon's visual appearance in the first debate, but no systematic nonverbal analysis had been undertaken to definitively answer the question
  - Did Nixon *really* look that bad?





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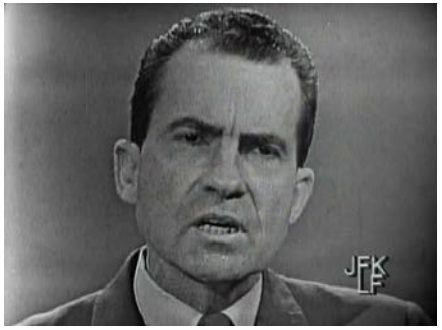
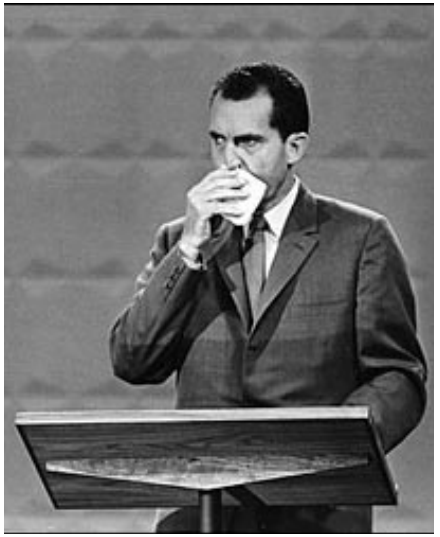
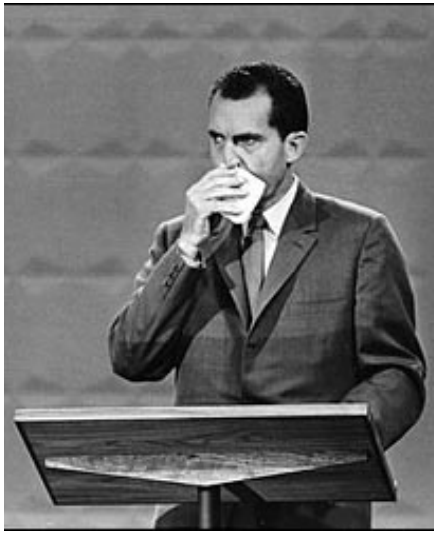
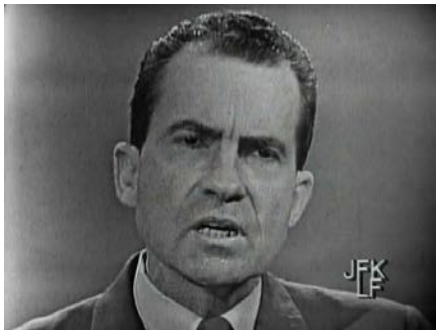
Research expectations

- Objectively speaking, Nixon's nonverbal communication will communicate less dominance, less reassurance, and more signs of physical stress than Kennedy's
  - Namely, more…
    - Evasion displays (looking down)
    - Inappropriate and awkward communication
      - as revealed by nonverbal tics such as head bobs, sudden smiles and glares
    - Stress indicators
      - eye blinks, lip moistening, perspiration
  - …than Kennedy in the crucial first debate performances









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Visual content analysis

- Two types of variables coded
  - **Candidate nonverbals**
    - e.g., facial displays, voice tone, head movement, gestures, blink rate, and nonverbal tics
  - **Structural features** of the broadcast production (1960 only)
    - e.g., shot length and type, camera angle, total camera time, headroom, chin-room, lead-room
  - Together, such variables index **visual framing** of debates
    - Document aspects under candidate or media control (less evident in split screen presentations)

- Three main display types analyzed
  - **Happiness/reassurance**
    - Zygomatic muscle activation (smile), raised brows, relaxed face
  - **Anger/threat**
    - Corrugator muscle activation (frown), brows raised and pulled together, fixed stare
  - **Fear/evasion**
    - Gaze avoidance, lip bite/ compression, hand to face, downward head tilt
- Corresponding voice tone also scrutinized in sound bites

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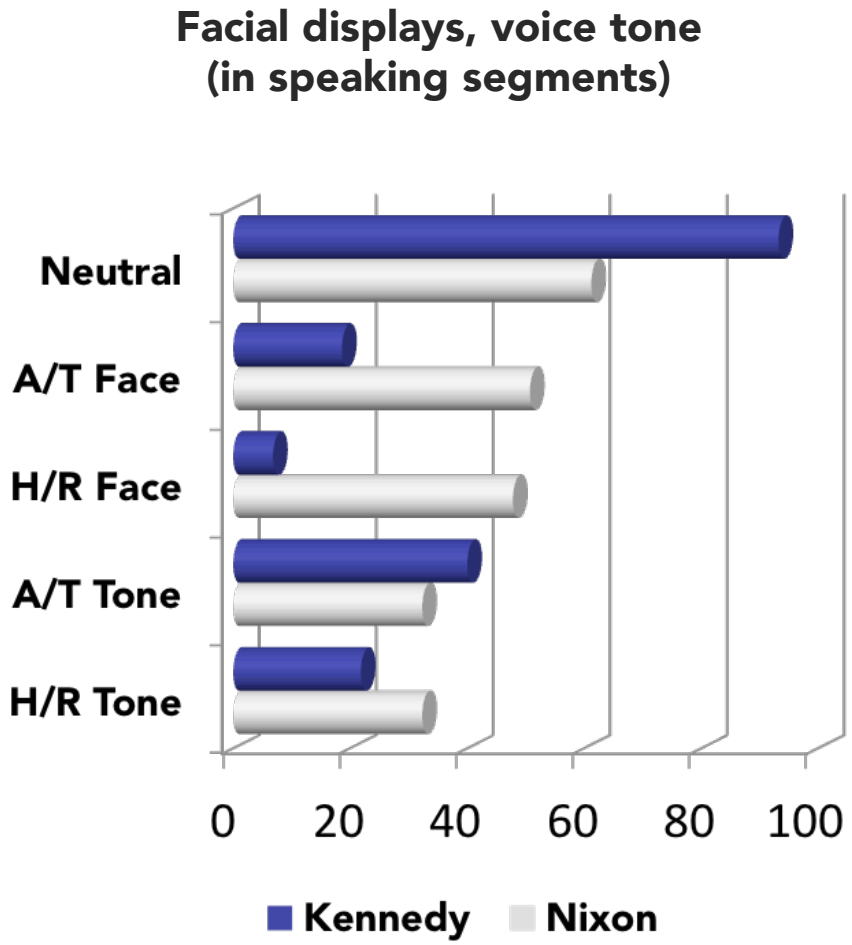
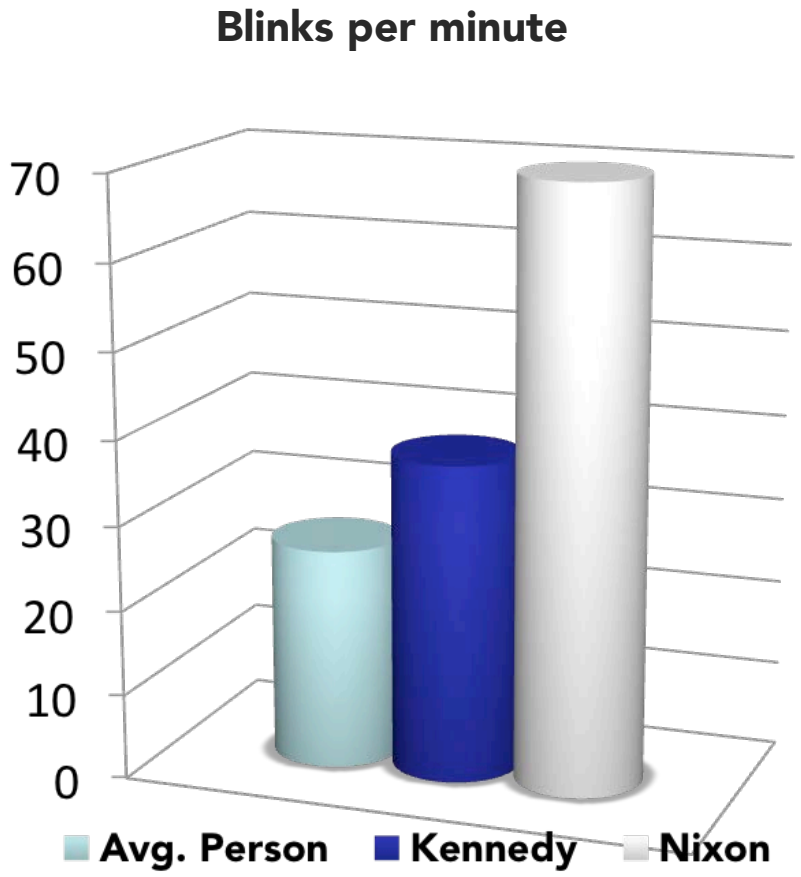
Facial displays, voice tone, blink rate

Debate 1, 1960





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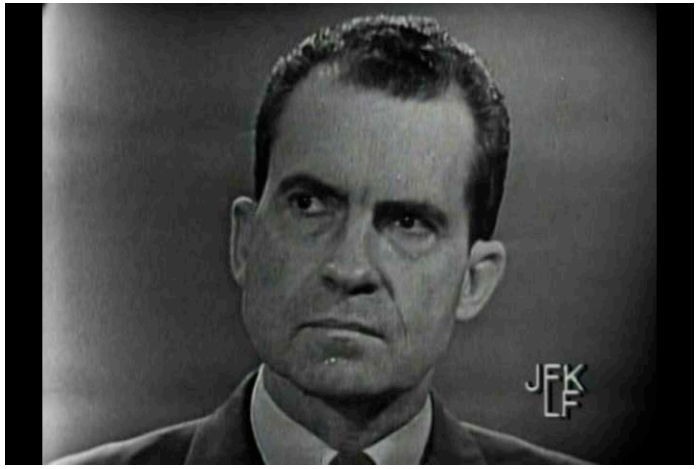
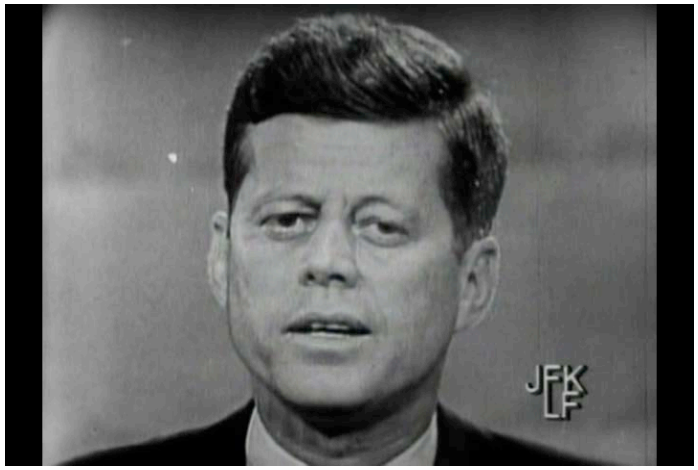
Focus group analysis

- Theme
  - ***Nonverbals as political information***

- Carla: “Of course it was one of the first debates, but the camera showed his eyes sort of going back and forth. So he looked like he was caught in the headlights, so to speak, and then he had no comments to make afterwards. And so that, you know, just seeing that would have impacted me as a voter, because he had no rebuttal.”

- John: “Not that I’m… anti-Nixon and pro-Kennedy, it just… Kennedy’s presentation seemed more vital, meaning alive and persuasive.”





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Focus group analysis

- Theme
  - ***Recognition of visual influence despite disdain for it***

- John: "I think at a certain level, of course it's going to affect me. The question is, am I going to be able to recover from that and step back from it afterward and say, 'well, what really happened?'"

- What *'really happened'* was that Nixon exhibited more **nonverbal bandwidth** (but did so awkwardly), plus more signs of **stress**, and **visibly perspired** while **looking uncomfortable** on camera
  - Ergo, there are biobehaviorally grounded reasons for the impressions that we have about his first debate performance

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2012: History repeats itself

- The 2012 presidential debates again accentuated the importance of nonverbal behavior
- Ironically, many of the things that Nixon struggled with in 1960 President Obama brought upon himself
  - Shying from confrontation and demurring to his opponent
  - In each case, the more experienced debater put in a subpar performance that made supporters fret—and critics pounce
- Prompting undecided and Independent voters to give the stronger debater another look

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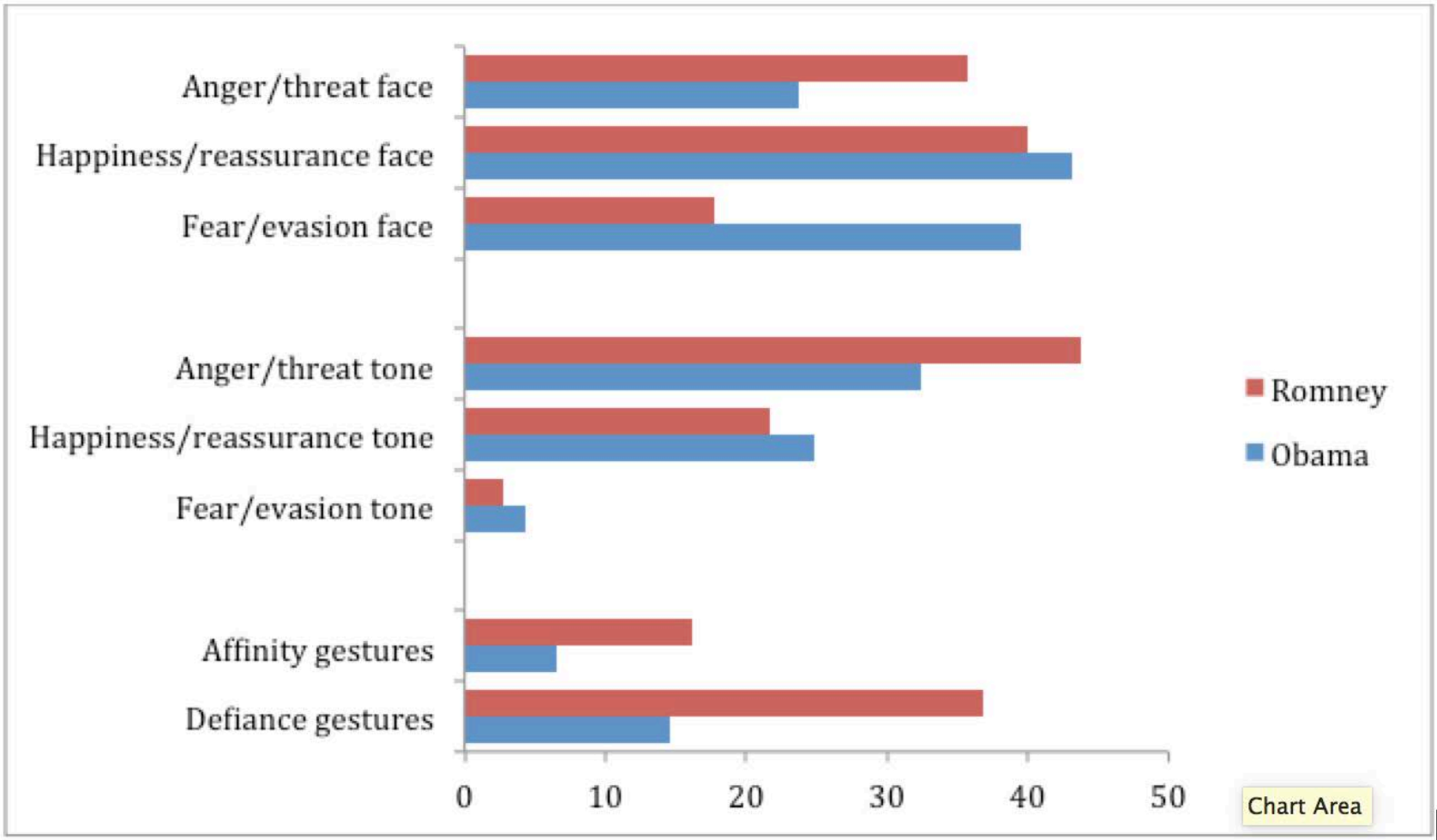
Look of losing, 2012 edition

Figure 3. Nonverbal Display Frequencies, Debate 1



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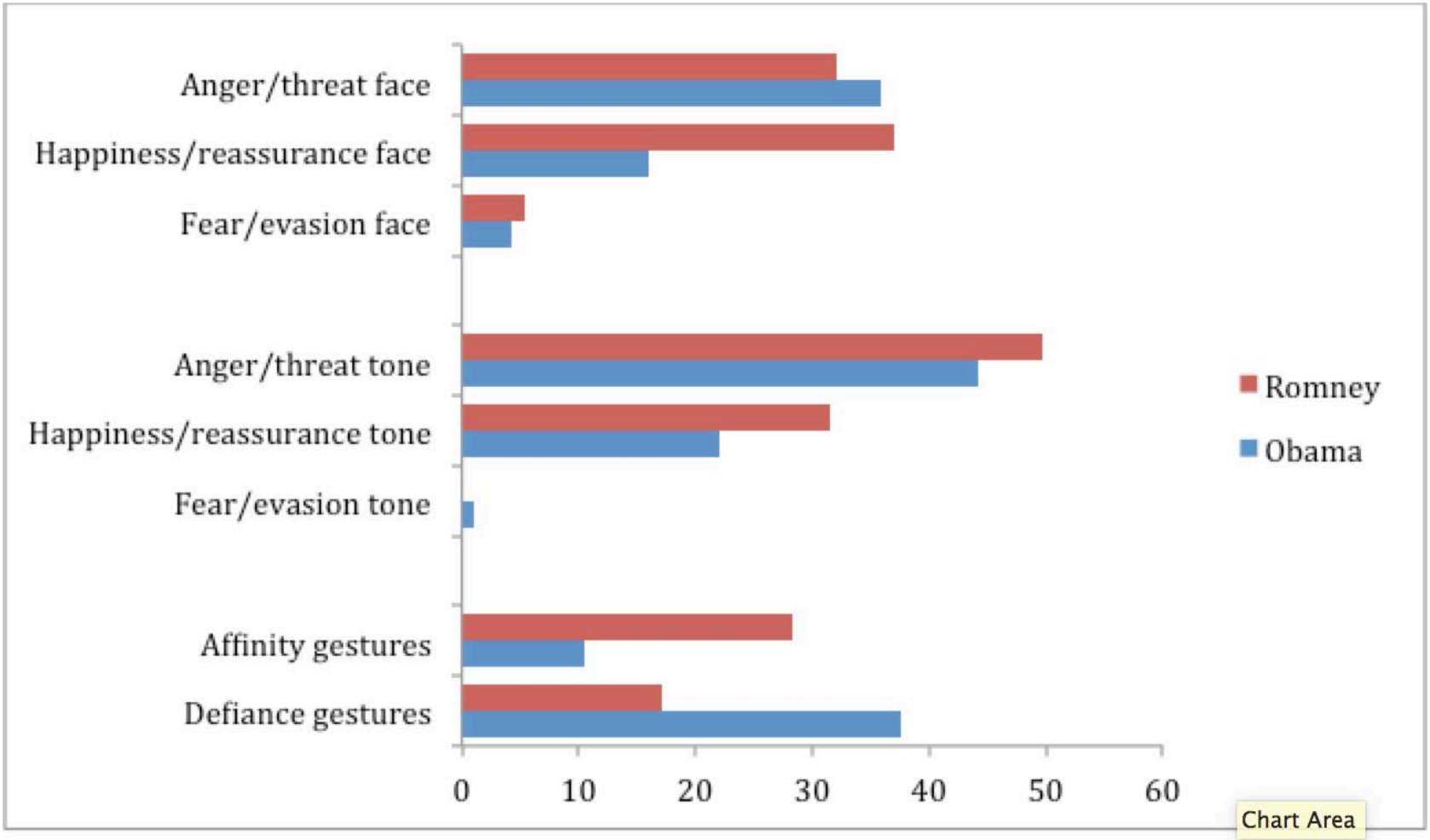
Look of losing, 2012 edition

Figure 4. Nonverbal Display Frequencies, Debate 3



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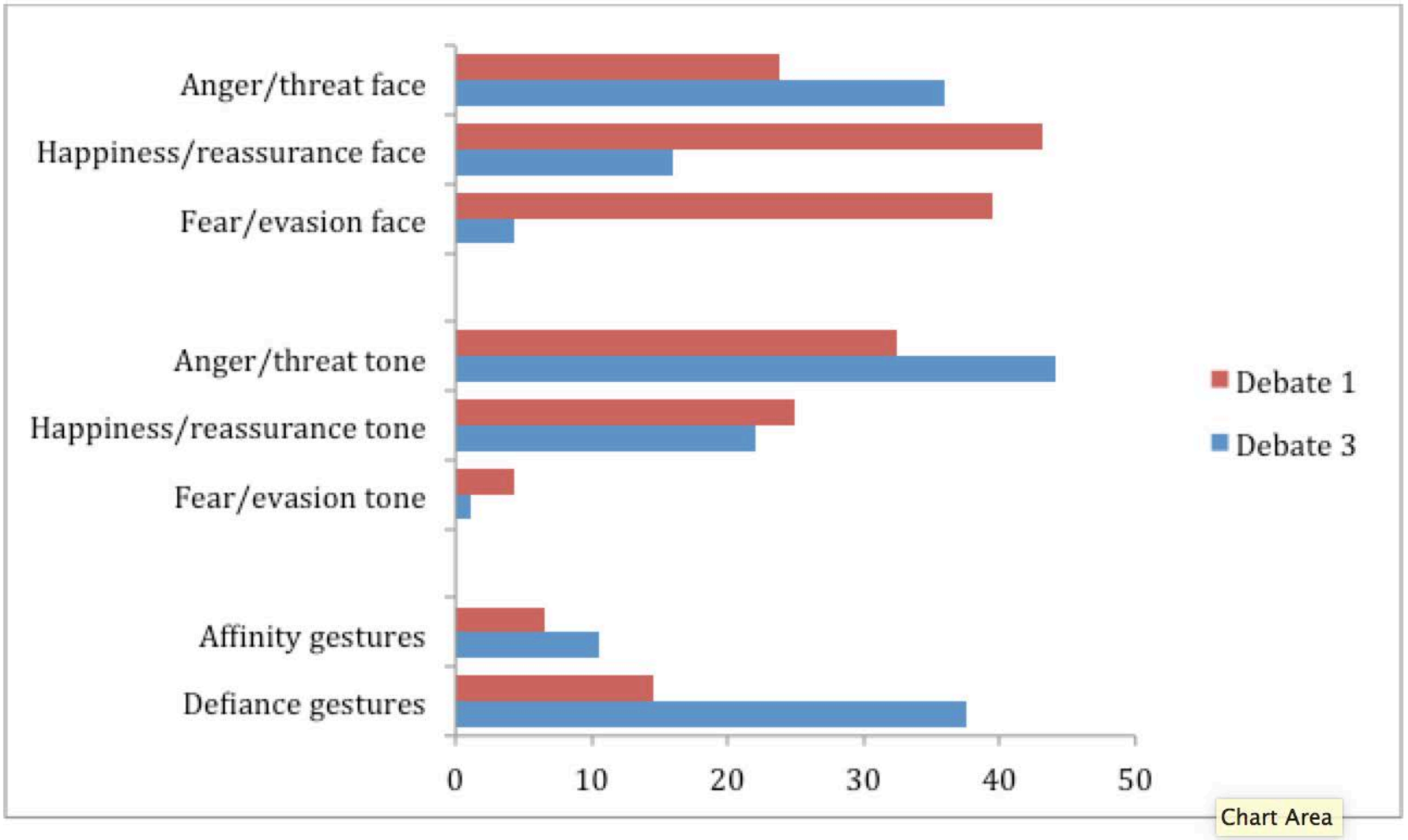
Look of losing, 2012 edition

Figure 5. Obama's Nonverbal Display Repertoire, Debates 1 and 3



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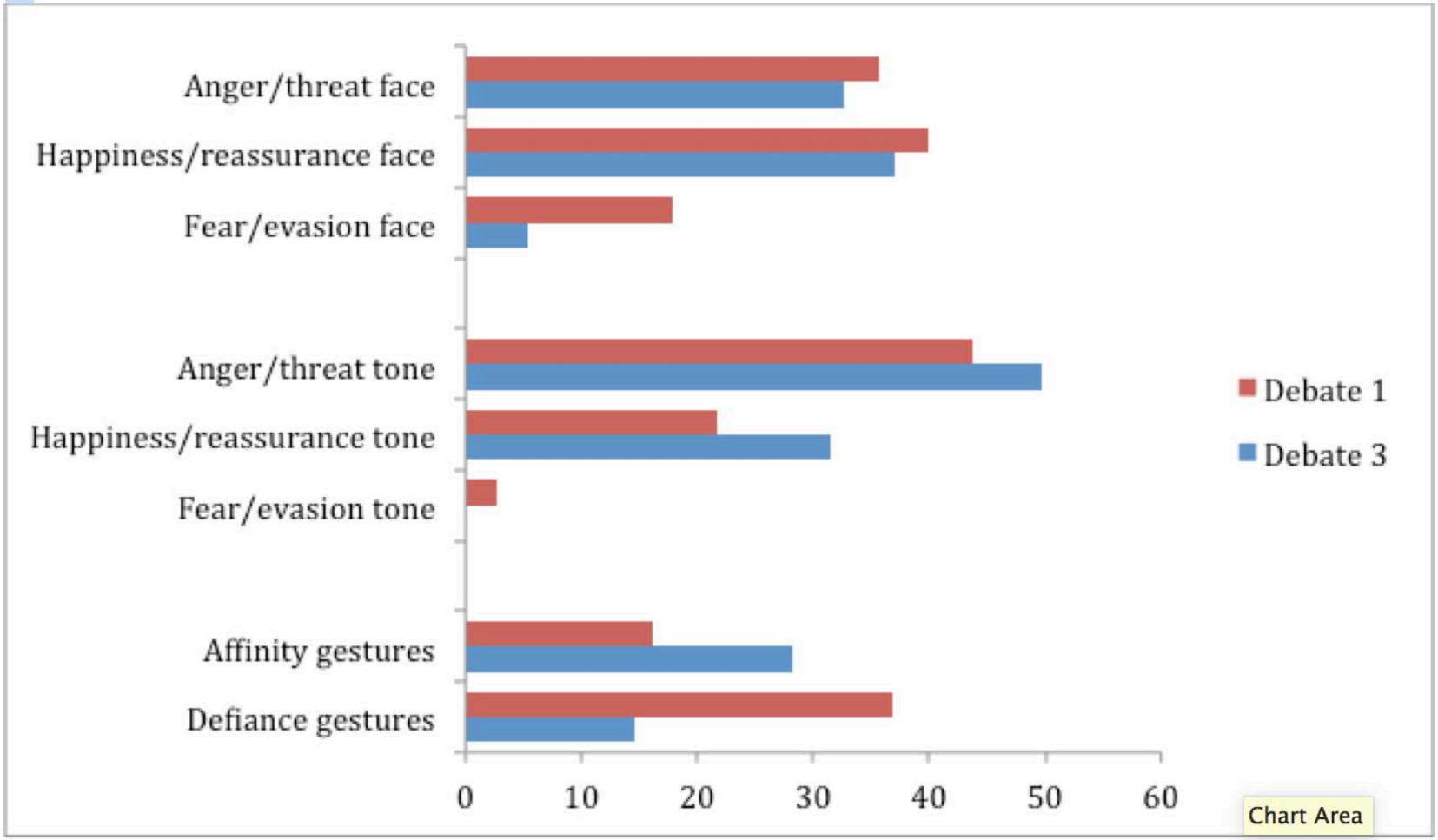
Look of losing, 2012 edition

Figure 6. Romney's Nonverbal Display Repertoire, Debates 1 and 3



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Tracking inappropriate displays

Study 2: Tracking Inappropriate Leader Displays

Objectives:

- Investigate the perceptual impact of nonverbal expectancy violations
- Test whether political behavior categorized as inappropriate leads to more visual attention and harsher evaluations than appropriate behavior
- Validate eye-tracking as a suitable tool for use in documenting effects of political nonverbal behavior
- Use a mixed-methods approach – again adding focus groups – to reinforce, elaborate experimental findings

36 minutes into Debate 1

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Tracking inappropriate displays

Study Assumptions

- **Gaze fixations** indicate what is being cognitively processed while **gaze duration** indicates the amount of processing
  - "Additional time spent on perception is not used to examine the secondary elements, but to reexamine the most important elements" (Yarbus, 1967, p. 193).
- Expectancy violations invite **closer scrutiny of the source** and cause viewers to initiate a series of cognitive appraisals about the violation (Burgoon & Hale, 1988)
  - Viewers should attend to inappropriate displays more frequently than appropriate displays

81 minutes into Debate 3

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Tracking inappropriate displays

Experimental Procedure

Multi-step data collection:

- First, a **visual content analysis** of the 2012 debates was conducted
  - Coded for visual and tonal variables, including display appropriateness
- 5 appropriate and 5 inappropriate clips, 2 min. in length were then **pre-tested using CRM and self-report**
  - Consistently higher ratings found for appropriate clips (N = 59)
- Next, an **eye-tracking experiment** was run
  - Within-subjects, each viewer shown 2 appropriate and 2 inappropriate clips
  - 54 participants (mean age = 21.7)
    - 21 Republicans, 23 Independents, 10 Democrats

Apparatus:

- An Applied Science Laboratories (ASL) EyeTrac 6 control unit with high-speed optics used
  - Camera located just below the participant's monitor and is non-invasive. Gazetracker software presented the stimuli and synchronized it with gaze data. The gaze data were sampled at a frequency of 120Hz.

Dependent measures:

- **Fixation frequency, gaze duration**
  - Within the Areas of Interest (candidate faces)
- **Display appropriateness (self-report)**
  - How appropriate, honest, trustworthy, in control, credible, and capable candidate is
  - 1-7 ratings combined into a scale
- **Aided and free recall**
  - Free recall question: list major themes and topics mentioned in the clip; 16 multiple choice questions
  - Asked after a 5-min. distractor task

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Tracking inappropriate displays

Nonverbal display appropriateness

Obama – Inappropriate Display

Debate 1: Positive low-intensity nonverbal reaction by Obama in a negative high-intensity rhetorical context.

Attack by Romney: "I've being in business for 25 years. I have no idea what you're talking about. I maybe need to get a new accountant. But the idea that you get a break for shipping jobs overseas is simply not the case." [37:14 – 37:24]

Obama – Appropriate Display

Debate 3: Positive low-intensity nonverbal reaction by Obama in a positive low-intensity rhetorical context.

Assertion by Romney: "I am a son of Detroit, I was born in Detroit… I like American cars, and I will do nothing to hurt the auto industry." [1:22:01 – 1:22:11]

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Tracking inappropriate displays

Appropriate Displays Rated Favorably

	Obama				Romney			
	CRM		Self-Report		CRM		Self-Report	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Appropriate	56.40	11.83	4.50	1.28	66.09	13.56	5.25	1.20
Inappropriate	48.79	12.61	3.14	1.41	52.32	13.11	4.49	1.26

CRM (t (59) = 6.25, p < .001), self-report evaluation (t (59) = 8.40, p < .001)

(Bucy & Gong, 2016)

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Tracking inappropriate displays

Gaze Fixations and Durations by Partisanship

		Political Affiliation		
		Democrat	Republican	Independent
Appropriate Displays	Mean duration (in seconds)	[26.25] (*SD* =22.45)	[30.37] (*SD* =16.89)	[38.44] (*SD* =14.45)
	Fixation Frequency	15.47 (*SD* =12.99)	16.50 (*SD* =8.52)	20.64 (*SD* =6.74)
Inappropriate Displays	Mean duration (in seconds)	[43.50] (*SD* =14.65)	[38.83] (*SD* =22.27)	[48.81] (*SD* =14.12)
	Fixation Frequency	23.90 (*SD* =8.81)	22.61 (*SD* =11.14)	26.12 (*SD* =7.16)

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Tracking inappropriate displays

Obama Heat Maps

Inappropriate Display

Appropriate Display

Heat maps as graphical representations of **fixation frequency**. Hot zones with higher density designate where viewers observed more frequently.

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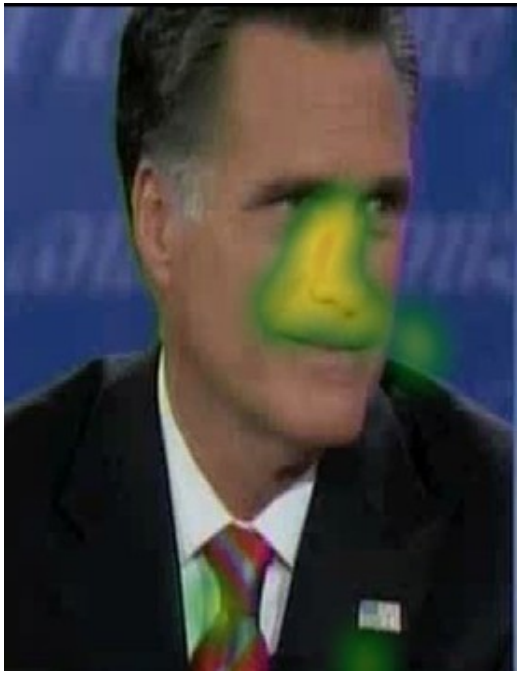
Tracking inappropriate displays

Romney Heat Maps

Inappropriate Display

Appropriate Display



Heat maps as graphical representations of **fixation frequency**. Hot zones with higher density designate where viewers observed more frequently.

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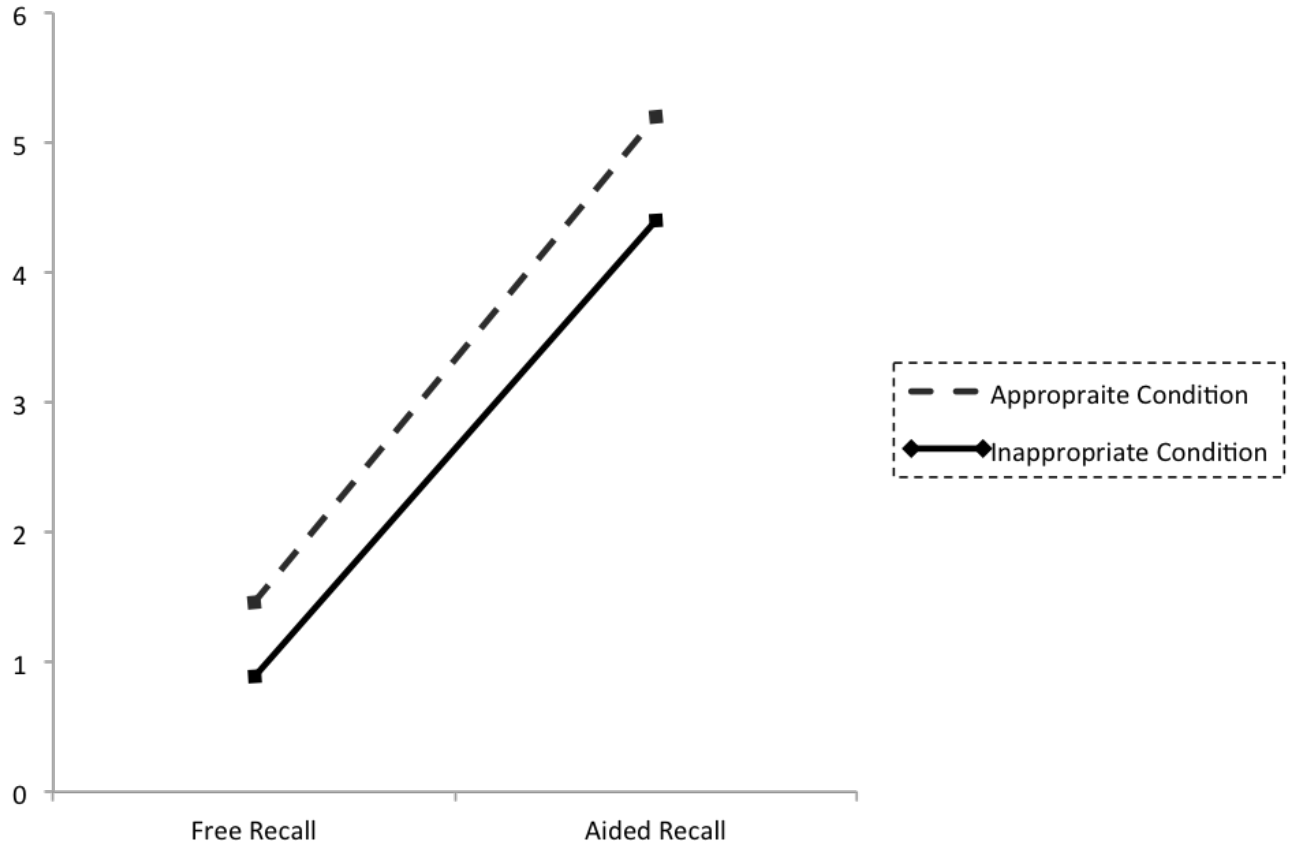
Tracking inappropriate displays

Main Effects of Display Appropriateness on Recall

(verbal recall higher in the 'as-expected' condition)



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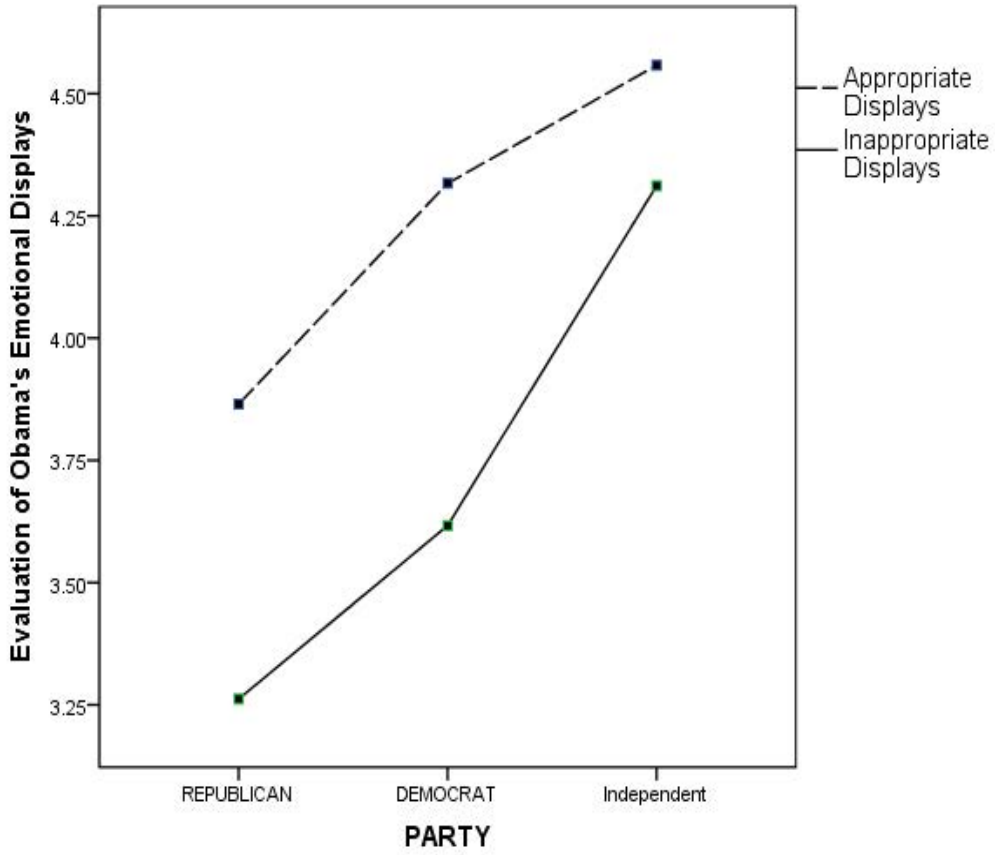
Tracking inappropriate displays

Effects of Partisanship on Evaluations of Obama



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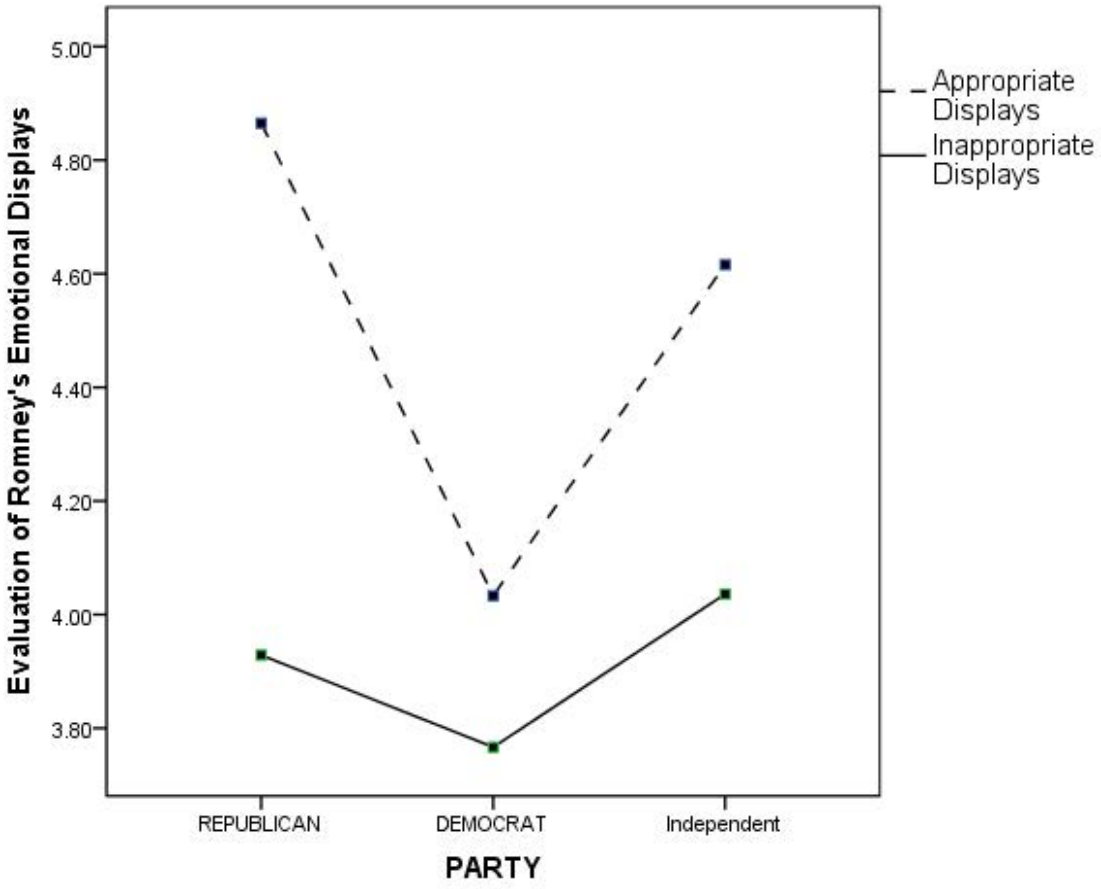
Tracking inappropriate displays

Effects of Partisanship on Evaluations of Romney



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Focus group analysis

- Theme
  - ***Disengagement as a form of dismissiveness***

- Douglas: "…because of his body language and his attitude—it was like you don't know what you're talking about and I don't care what you have to say. For me, he did not take what Romney was saying seriously."
- Francis: "From a visual standpoint, I …noticed that Obama was kind of smirking. That bothered me. He needed an attitude adjustment.
- Leah: "He came across like…he could care less about what Romney had to say."

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Focus group analysis

- Theme
  - ***Small visual and tonal cues speak relatively loudly***

- Bob: "Romney came across as being very phony and he clearly was just following a script and going through the motions…I think he could have cut probably 50 percent of what he said out and slowed down."

- Theme
  - ***Active auditing can signal dominance***

- Sarah: "Obama, even with his few words, was able to keep [Romney] in the lane of being a governor vs. being a chief commander."

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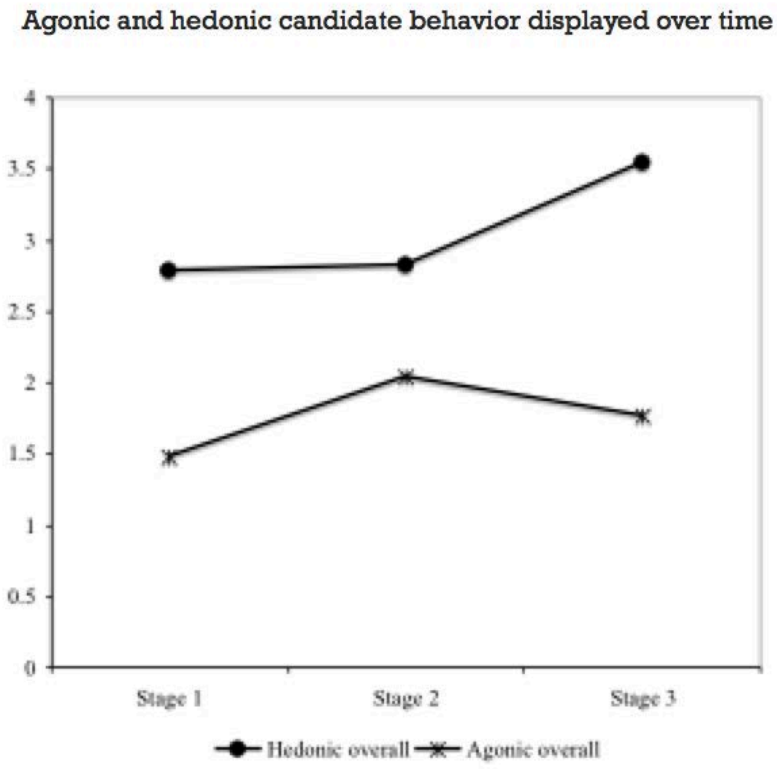
Key takeaways

- **Violations of nonverbal expectations** by both candidates elicited more attention and focus on the source of the violation
  - Yielding more negative evaluations than appropriate displays
  - And worsening verbal recall compared to appropriate displays
- Regardless of party affiliation viewers **evaluated** inappropriate displays **more critically**
  - Although partisans were less critical of their own candidate
- Obama's disengagement in Debate 1 was seen as both **avoidance *and* dismissiveness**
  - Active nonverbal auditing in Debate 3 as a sign of dominance



(Bucy & Grabe, 2007)

The debate phase of general elections typically sees increased aggression.

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A Reese's moment

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Social media and viewer response

- **Social media as a generator of Big Data**: Until recently, did not exist, at least in usable form
  - Allows real-time, moment-to-moment tracking of communication behavior by audiences
    - Particularly during moments of national focus and conversation, e.g., presidential debates
  - An outcome variable not restricted to the lab that enables continuous response analysis on a mass scale
- As with nonverbals, Big Data are not without their challenges
  - Defined not just by size or volume but complexity (and messiness)
    - Require APIs and algorithms to archive, structure, and analyze, beyond conventional data processing tools

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Second screens

- **Arrival of Big Data in media research is accompanied by the rise of "second screen" behavior**
- Use of mobile devices that allow media consumers to interact with each other, fan or #communities, or with programming directly
  - Enable human and/or media interaction in real time and enhance the viewing experience
  - A growing trend, fulfilling a need for sociality, contextualization, shared experience
- Gives the audience a voice (of sorts) it never had, with the potential to up-end traditional models of gatekeeping

Figure 4. Host Visually and Aurally Connecting Zones 1 and 2 on Mess TV, TVNorge, Norway.

Figure 2. *Blender*, NRK 2, Norway.

(from Beyer et al., 2007)

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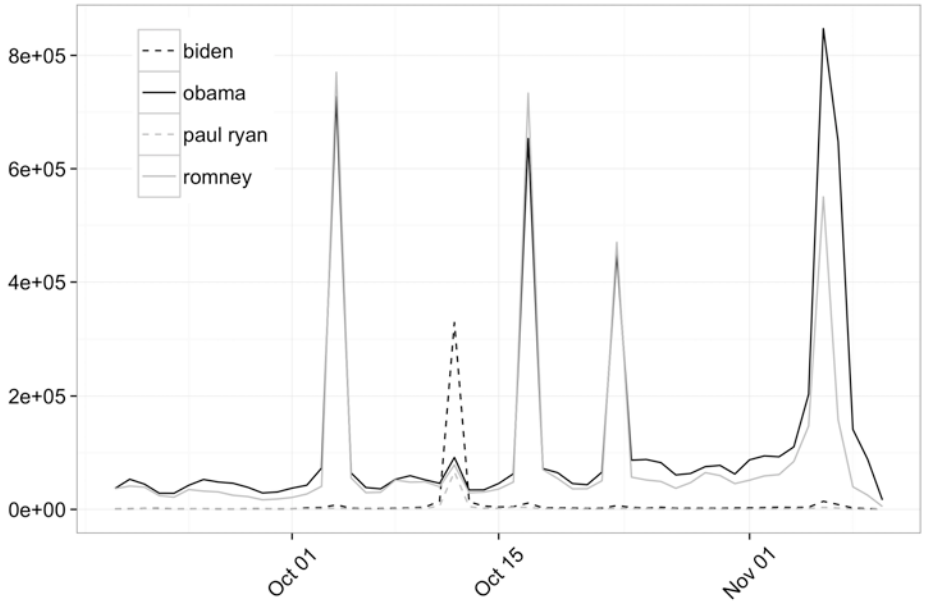
Election events & second screening

Study 3: Television Images in a Social Media Age

Objectives:

- Determine whether viewers respond to what's said, or what's seen, during televised debates
- Validate the use of micro-level visual coding with macro-level viewer response, to demonstrate a new kind of "debate effect"
- Test whether nonverbal elements of candidate behavior—voice tone, facial expressions, and gestures—explain differences in the volume and sentiment of online expression directed at each candidate
  - above and beyond what is accounted for by functional factors



(from Shah et al., 2015)

Candidate mentions on Twitter during 2012 general election

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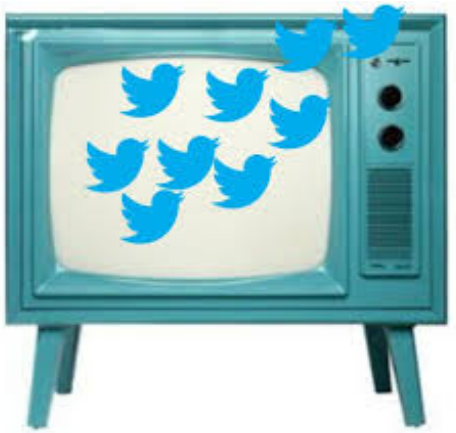
Considerations

- Coding for nonverbal and rhetorical elements during an entire debate
- Deciding on the key variables that show the most promise in predicting viewer response
  - Whittling a long coding instrument down to the essentials
- Addressing the technical issue of synchronizing the Twitter responses with our debate coding
  - Each segment's start/stop time indicated
- Determining the right "lag" or delay in response to fit an effects model to
- Running models in a hierarchical fashion so as to isolate the variance of different communication elements



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Coding of key variables

Debate Coding and Twitter Parsing

Visual and verbal coding:

- 90-min. debate was divided into 180 codable segments
  - most of 30-sec. duration, a few shorter
- Then, the key nonverbal elements of the 2012 debates were identified and coded
  - tone of voice (pos/neg)
  - display emotion (H/R, A/T)
  - gesture valence (affinity, defiance)
- Rhetorical elements of the debate were also coded: memes + Benoit's functional categories
  - attacks, contrast statements, responses, and personal narratives

Twitter harvesting and analysis:

- Colleagues at UW-Madison took a "garden hose" sample of tweets representing 10% of Twitter's 300+ million global tweets per day
  - Narrowed to tweets on Oct. 10, 2012 that mentioned Obama or Romney in the body text (fairly conservative approach)

Measures:

- **Volume of mentions**
  - Tweets that only mentioned Obama or Romney, not both
- **Sentiment of tweets**
  - Derived by subtracting total neg. words from total pos. words, then dividing by total words in the tweet. Scores varied from 1 (completely pos) to -1 (completely neg)

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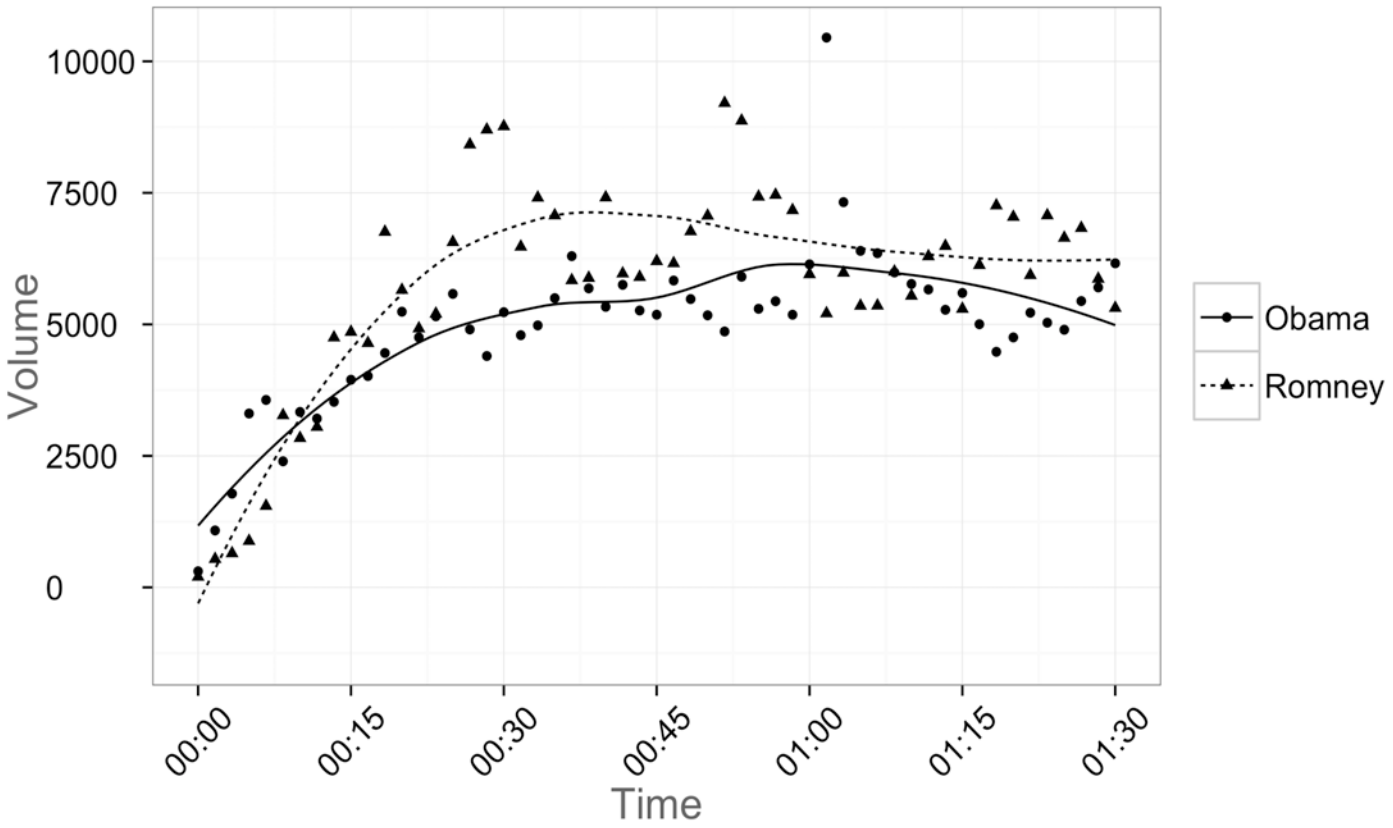
Linking biobehavior and Big Data

Volume of mentions per minute



Volume per minute by candidate, with LOESS regression smoothed average.
Highest volume points for both candidates coincide with memes and sparring over rules.

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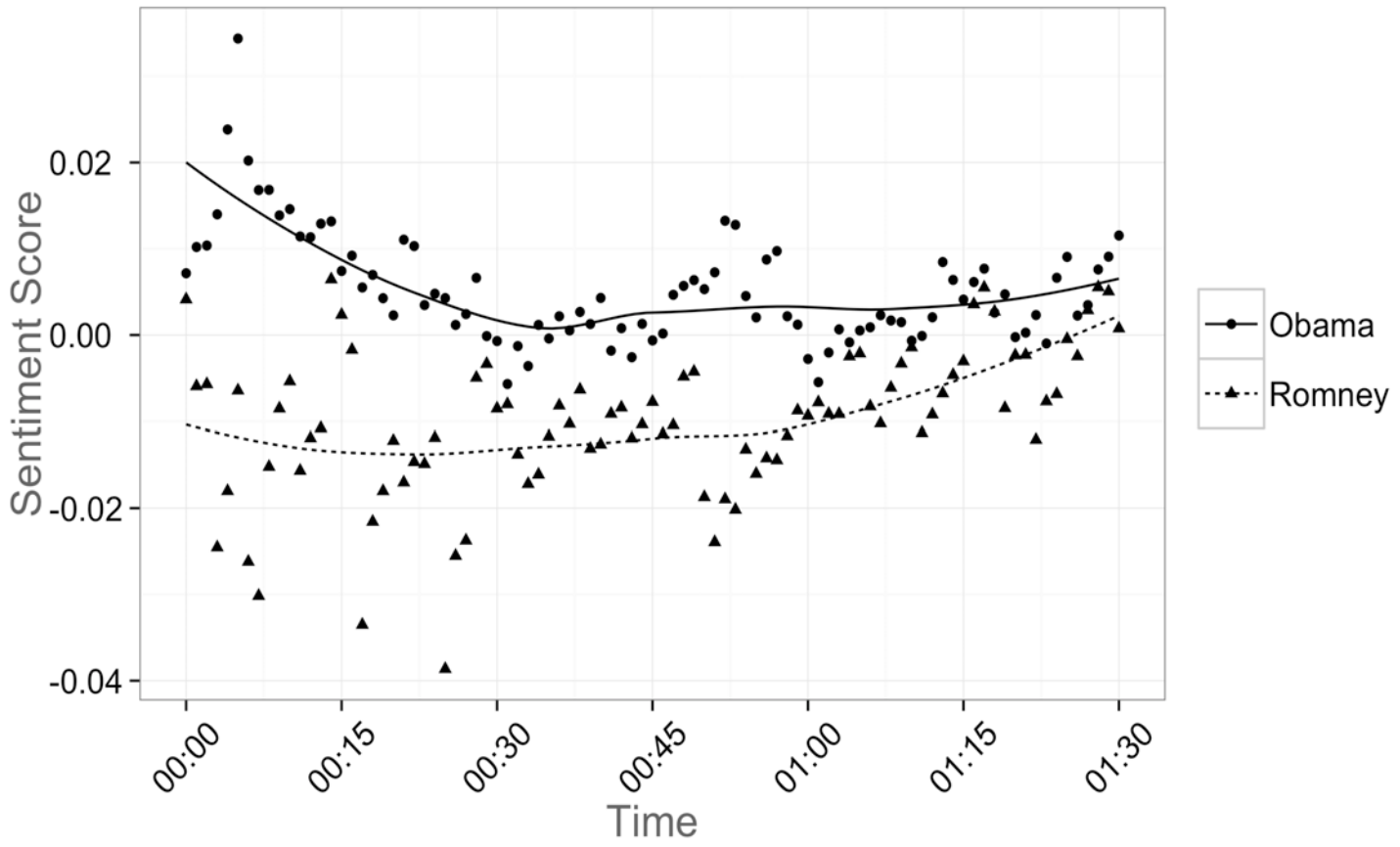
Linking biobehavior and Big Data

Sentiment scores per minute



Sentiment per minute by candidate, with LOESS regression smoothed average. Whatever advantage Obama had to start, the gap closes by the debate's end.

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Regression models for volume

Synchronized and lagged models predicting normalized outcomes

	No lag		15s		30s	
Model Summary						
Block	Adj. R2	FΔ	Adj. R2	FΔ	Adj. R2	FΔ
Functional	0.00		0.02		0.06	•
Functional + Tonal	0.24	•••	0.19	•••	0.18	•••
Functional + Tonal + Visual	(0.40	•••)	(0.36	•••)	(0.33	•••)

Obama mentions

Model Summary						
Block	Adj. R2	FΔ	Adj. R2	FΔ	Adj. R2	FΔ
Functional	0.02		0.03		0.03	
Functional + Tonal	0.07	•	0.12	••	0.18	•••
Functional + Tonal + Visual	(0.35	•••)	(0.40	•••)	(0.47	•••)

Romney mentions

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Regression models for sentiment

Synchronized and lagged models predicting normalized outcomes

	No lag		15s		30s	
Model Summary						
Block	Adj. R2	FΔ	Adj. R2	FΔ	Adj. R2	FΔ
Functional	0.04		0.06	•	0.08	••
Functional + Tonal	0.08		0.13	••	0.13	•
Functional + Tonal + Visual	0.28	•••	0.34	•••	0.37	•••

Obama sentiment

	No lag		15s		30s	
Model Summary						
Block	Adj. R2	FΔ	Adj. R2	FΔ	Adj. R2	FΔ
Functional	0.06	•	0.05	•	0.04	
Functional + Tonal	0.08		0.07		0.10	••
Functional + Tonal + Visual	0.19	••	0.21	•••	0.26	•••

Romney sentiment

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Key takeaways

- Rhetorical strategy accounts for *some*, but not a lot, of explained variance in these models
  - Contrary to the desires of high-minded educators everywhere
  - But this is consistent with theoretical expectations and experimental findings
- **Attacks generate more Twitter response than reassurance**
  - Romney's attacks on Obama and Obama's responses to attacks were linked to a greater volume of name mentions on Twitter
  - A similar pattern was observed with Romney's A/T expressions
- Memes also spark conversation
  - e.g., "I love Big Bird," or "I had five seconds"

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Key takeaways

- **In terms of sentiment, facial expressions were the big driver**
  - A/T displays by Romney meant higher sentiment for Obama, as did the president's use of affinity gestures
- When Obama showed reassurance, Romney's sentiment scores dropped
  - But Romney's own H/R displays seemed to hurt his sentiment
    - Viewers want the president to be a 'happy warrior,' not a passive leader or aggressive challenger
- **Obama's responses to attacks generated negativity for the president**
  - And when either candidate attacked or contrasted their record against the opponent, sentiment improved for the **target of the attack**

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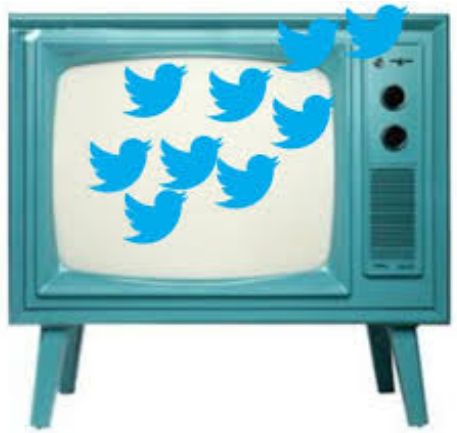
Key takeaways

- Consequences of debate performance can be observed in the volume and valence of public expression about the debate
- Twitter-using public **largely responds to the visual and tonal elements of the debate**, especially candidate facial displays and communicative gestures
  - Seems to be more reliance on social than factual information when responding to a tweet-worthy moment
  - Remains an open question whether the **content of user posts** concern these nonverbal elements, focus on candidate character—or address more substantive issues



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2016 and the Rise of Trump

- **Explanations for Trump's rise**
  - **Social**: by exploiting familiar fault lines of gender, race, and class
    - Support for dominant leaders a sign of widespread commitment to engage in collaborative aggression against outgroups
  - **Political**: an outsider candidate aided and abetted by the GOP establishment
  - **Media**: a made for cable 'news'—Twitter—Breitbart.com candidacy
    - Fueled by major media call-ins and $2 billion+ in free media
  - **Message**: Trump, convincingly to his own base, promises creation of untold numbers of new jobs
  - **Behavioral style**: still, he had to establish social dominance on the Republican primary debate stage
    - Via aggression and intimidation

Trump won the nomination with the early acquiescence of his opponents.

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Study 4 – appealing to undecideds

- **Can a threatening style 'trump' reassurance in 2016?**
- **Trump's display repertoires**
  - A predictable melange of threat, aggression and defiance punctuated by interruptions and protestations
    - Betrayed signs of stress in his sniffling and water gulping
    - Attempted to modulate the sound of his voice early in the debate but couldn't sustain it
  - Ultimately, a **challenger style**
  - Besides preparing for the second debate, Trump needs to have some sense of *appropriate aggression*
- **Clinton's display repertoires**
  - A softer, more fluid and reassuring style, more typical of **power holders**, e.g., the 'happy warrior'

Hillary embraces the 'happy warrior' style of campaigning, attempting to broaden appeal among undecideds.

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Study 4 – appealing to undecideds

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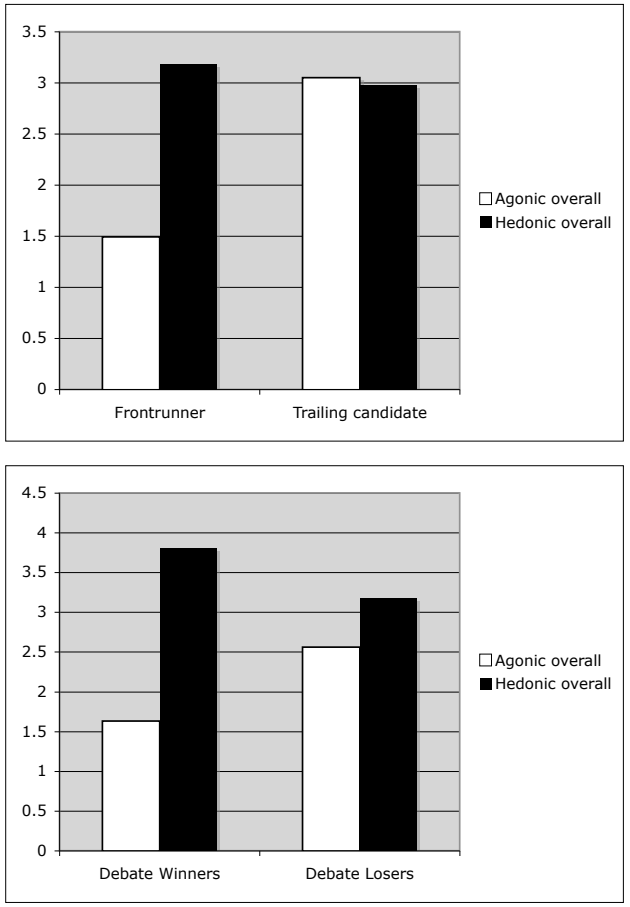

Front-runners and debate 'winners' more hedonic overall (Grabe & Bucy, 2009)

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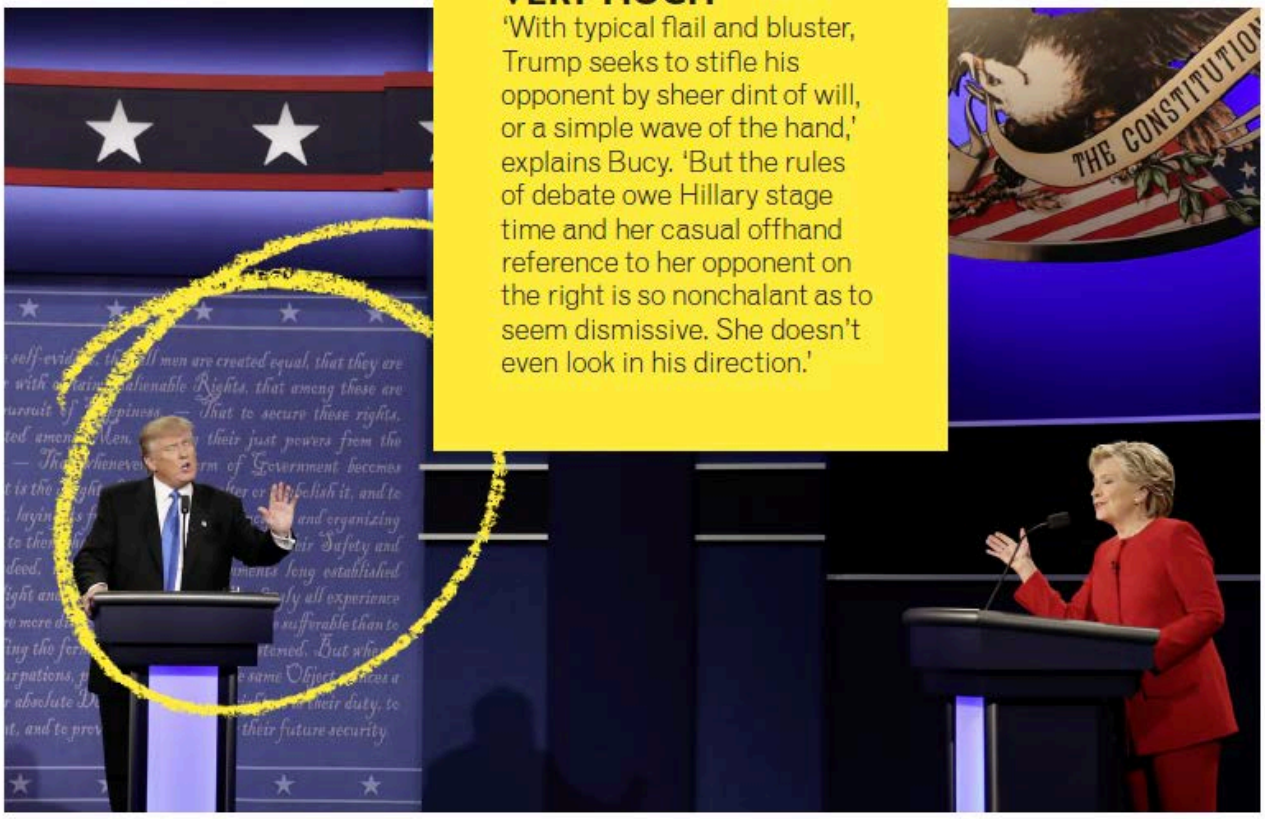
Trump asserts through interruption

From Bucy (2016)



THE STOP RIGHT NOW, THANK YOU VERY MUCH

'With typical flail and bluster, Trump seeks to stifle his opponent by sheer dint of will, or a simple wave of the hand,' explains Bucy. 'But the rules of debate owe Hillary stage time and her casual offhand reference to her opponent on the right is so nonchalant as to seem dismissive. She doesn't even look in his direction.'

Trump vs Clinton

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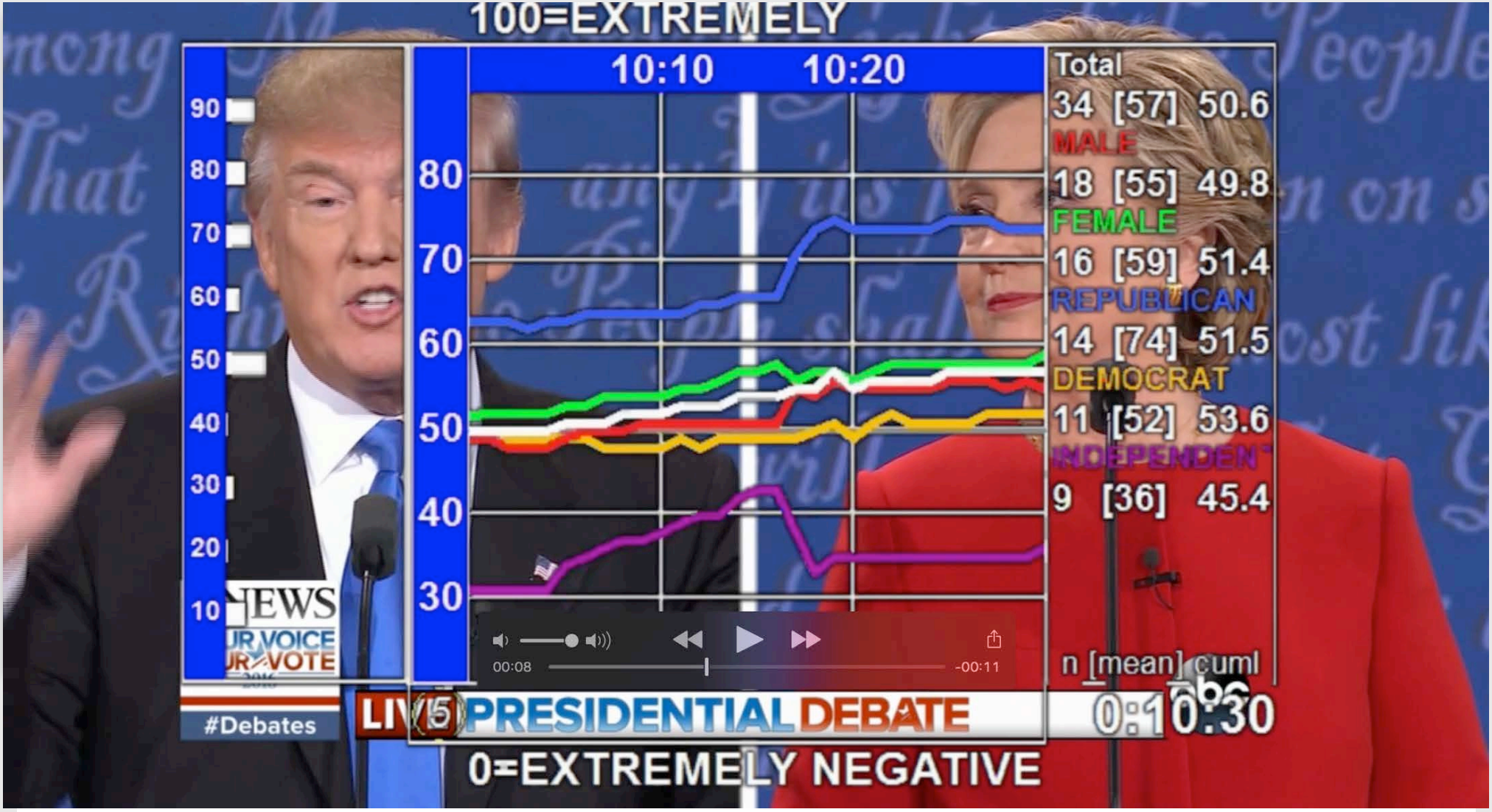
Trump aggresses, Clinton waits it out



From dial tests conducted at the CCR lab, College of Media & Communication, Texas Tech U., Lubbock, TX

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Clinton's long game prevails

From Bucy (2016)

THE 'SHE'S WON' PODIUM STEADIER

'Close visual inspection shows Trump's exasperation in the face of Hillary's verbal barrage. She is in full-throated attack mode, which he must unhappily endure. The water glass on Trump's podium is a reminder of his prodigious imbibing throughout the debate – a sign of dehydration and possible nerves. She never took a sip.'

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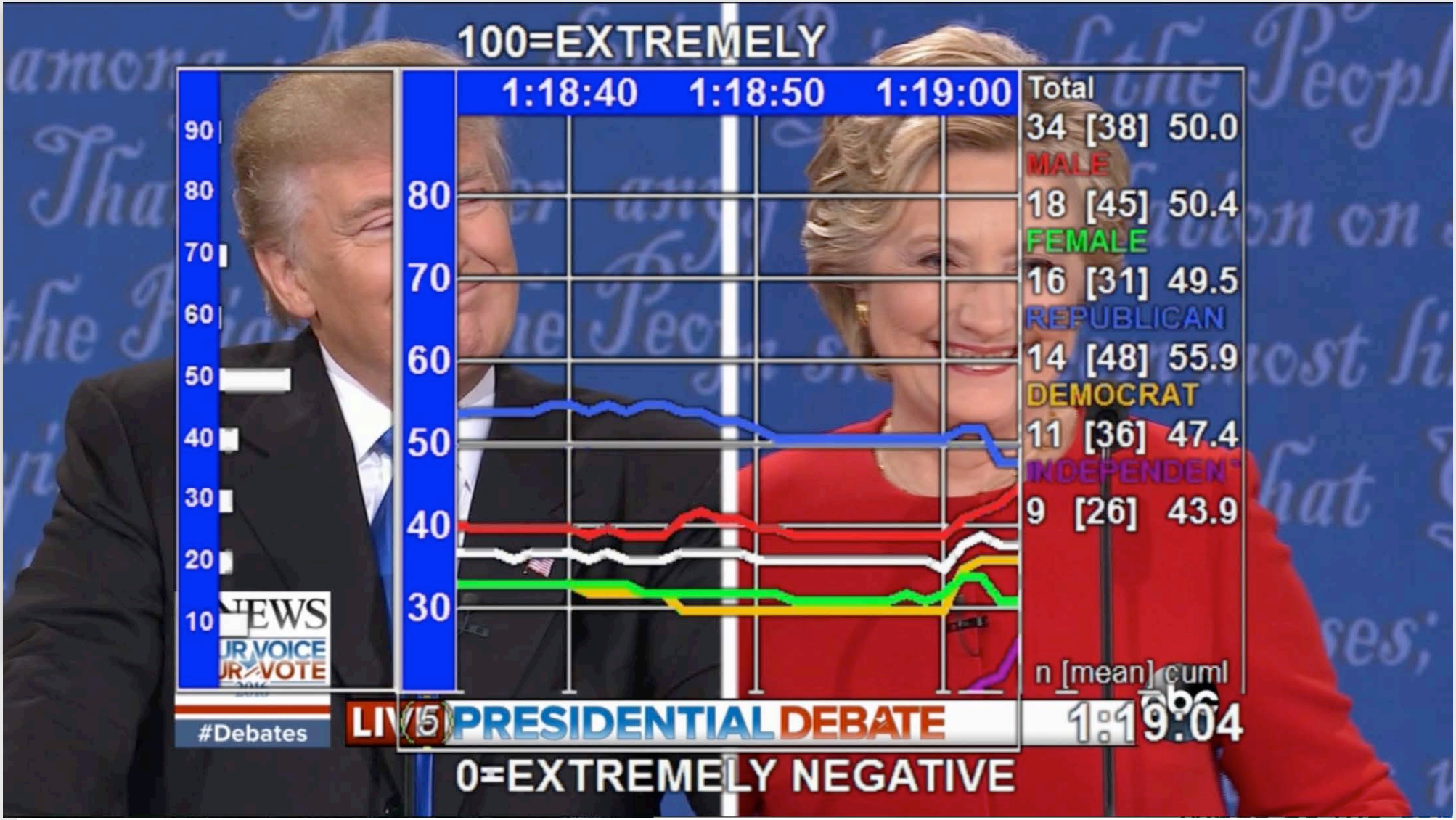
Surmising the shimmy



From dial tests conducted at the CCR lab, College of Media & Communication, Texas Tech U., Lubbock, TX

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Future directions

- Code at a **finer-grained level** of analysis, perhaps at 5-second intervals
- **Automate coding** of political nonverbals to enable moment-by-moment time-series analysis
  - And develop more nuanced, machine-learning techniques to parse Tweets
  - Look at other social media content, and search behavior
- Conduct **comparative studies** with political debates in other countries
  - Currently comparing the U.S. with France and South Korea
- Consider **other key events**, or mediated developments

Sound/image bite typology

	Modality	
Type	Sound	Image
Gaffe	Verbal Blunder	Inappropriate Display
Iconic	Memorable Moment	Signature Expression

(from Grabe & Bucy, 2009)

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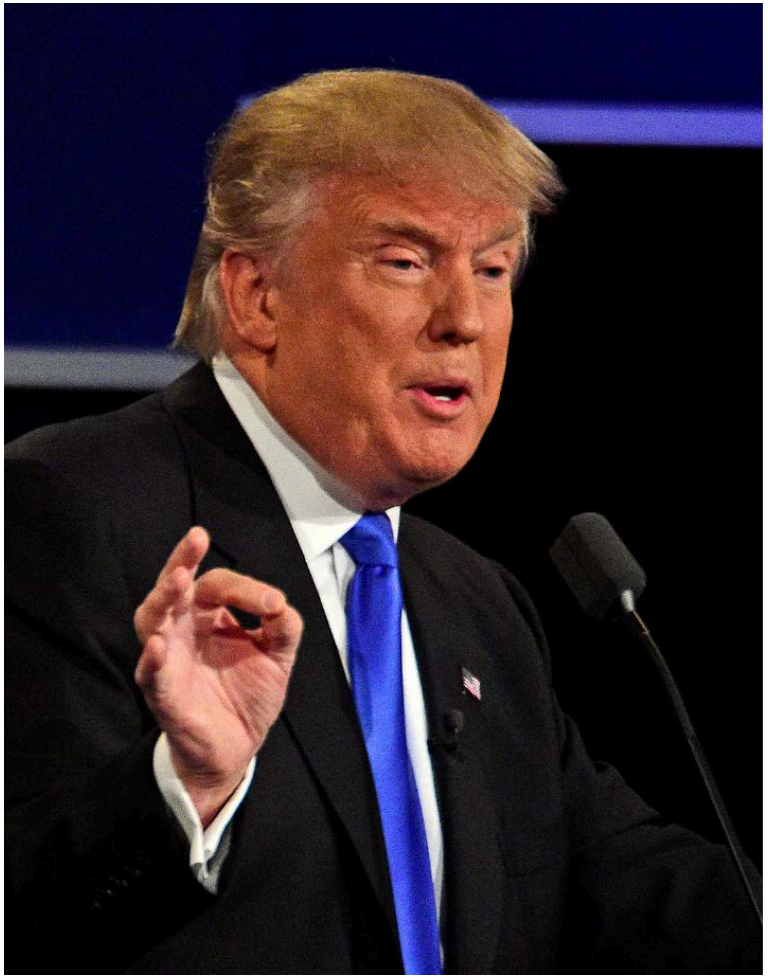
Collaborators



- Finally, this work suggests the **importance of collaboration** and team-based approaches to multi-methods research
- Key to finding new modes of communication influence
- Co-authors, collaborators, students
  - **Maria Grabe, Younei Soe, James Ball**
    - *Indiana University*
  - **Harrison Gong, Riley Davis, Shawn Hughes, Paul Bolls**
    - *Texas Tech University*
  - **Dhavan Shah, Chris Wells, Alex Hanna, Vidal Quevedo**
    - *University of Wisconsin, Madison*
  - **Patrick Stewart**
    - *University of Arkansas*

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Thank you.

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