"Happy warriors" revisited
Hedonic and agonic display repertoires of presidential candidates on the evening news

Erik P. Bucy, Ph.D.*
  ebucy@indiana.edu
Maria Elizabeth Grabe, Ph.D.*
  mgrabe@indiana.edu
Department of Telecommunications
Indiana University
1229 East Seventh Street
Bloomington, Indiana 47405
USA
*Corresponding authors.

ABSTRACT. Absent from most analyses of political news are detailed assessments of the candidates' nonverbal behavior, which has been shown experimentally to have considerable persuasive influence. Unlike attractiveness and other relatively stable aspects of appearance, facial displays are highly variable and reveal important moment-to-moment information about the emitter's internal state. In this paper we argue that facial displays are influential elements within political news and examine the character of televised candidate displays over four presidential election cycles. The analysis considers coverage of major party nominees shown during the general elections of 1992, 1996, 2000, and 2004 on the major broadcast networks (ABC, CBS, and NBC). To motivate our hypotheses, we draw on the biopolitics literature that has identified three classes of displays relevant to the study of nonverbal political behavior: happiness/reassurance, anger/threat, and fear/evasion. The analysis focuses on the relationship between the display types shown in election coverage, the context in which the displays are shown, and candidate standings in the polls.

Key words: biopolitics, hedonic and agonic behavior, network news coverage, nonverbal communication, televised leader displays

The press sometimes in the television age focuses a little bit more on style and a little bit less on substance than the American people would actually like... This campaign is not about the, the gestures I make in an interview. The campaign is about [the issues]. Not style — substance.

— Al Gore on 20/20, June 1999

Despite former Vice President Al Gore's claims to the contrary — and his personal struggle to appear comfortable in front of the camera during the 2000 presidential campaign — political campaign practices moved onto a visual footing with the rise of television as the dominant mode of campaign communication.[1] More than the nascent newscasts or political advertising that preceded them, the nationally televised Kennedy-Nixon debates of 1960 in particular stirred considerable interest in the relationship between television, nonverbal communication, and political behavior — and compelled subsequent candidates to

think more about their on-camera appearance and behavior. Kennedy, particularly during the first debate, was said to appear rested, suntanned, athletic, and articulate, whereas "Nixon's shadowy eyes, perspiring and brow-mopping, poor posture, inappropriate nodding, and other aspects of his appearance rather than his speech" purportedly cost him the election.[2] Television coverage continues to focus attention on the expressive behavior of presidential candidates, highlighting particularly masterful performances as well as conspicuous moments where norms of interaction and expected codes of conduct are violated.[3, 4]

The impact that the 1960 debates had on viewers, especially the perceived differences between those who viewed the debates on television and those who listened by radio, has inspired a voluminous literature about the political effects of television[5, 6] and the rhetorical strategies candidates employ in their mediated communications.[7, 8] Absent from most studies of the debates, or content analyses of political news generally, however, are detailed assessments of the candidates' nonverbal behavior, which has been shown experimentally to have considerable persuasive influence.[9, 10] Unlike attractiveness and other more or less stable aspects of appearance, facial displays are highly variable and reveal important moment-to-moment information about the emitter's internal state. Given their capacity to influence emotional, cognitive, and evaluative responses in observers,[11, 12, 13] candidate expressions are an important component of political influence that merit closer scrutiny. Indeed, Masters has characterized televised leader displays as "microlevel phenomena that form the elements underlying more diversified and elaborate political processes."[14]

A previous study examining visual aspects of broadcast network (ABC, CBS, and NBC) news coverage of the 1992–2004 presidential elections found that image bites, audiovisual segments where candidates are shown but not necessarily heard, constitute a greater percentage of total campaign coverage than sound bites, where candidates are shown and heard.[15] Over the four general election contests studied, candidates appeared in image bites an average of 22.99 seconds visually per story compared to 18.59 seconds verbally in sound bites. Even as average sound bite length continues to shrink over time, from 9.19 seconds per bite in 1992 to 7.73 seconds by 2004, total image bite time has *increased* in duration.[16] In this

paper, we argue that facial expressions and other nonverbal behaviors are influential elements within image and sound bites and examine the character of televised candidate displays shown on the evening news. To motivate our hypotheses, we draw on the "biopolitics" literature[17, 18] that has gainfully employed concepts from ethology and behavioral biology in the study of televised political behavior.

Expressive display types

Research on the televised nonverbal behavior of political leaders has identified three general categories of expressive displays recognized for their social significance: anger/threat, fear/evasion, and happiness/reassurance.[19] These categories draw on research from primate and human ethology, which has found that different patterns of display behavior are associated with distinct roles in rivalry for dominance.[20, 21] As composite terms, anger/threat, fear/evasion, and happiness/reassurance reflect the duality of the emotion being expressed (i.e., as *expressions*) and the social signals communicated (i.e., as *displays*).[22] Although we use these terms interchangeably, any content analysis of news coverage can only measure the visible display and can not assume the associated emotion was genuinely felt by the communicator.

Far from having trivial impacts, leader displays hold evolutionary significance for social organization and, by conveying emotion and transmitting important nonverbal cues, are instrumental in regulating status and power relationships.[23] Each composite term implies a corresponding behavioral intention — anger/threat to attack, fear/evasion to flight (or submission), and happiness/reassurance to social bonding. Exposure to reassuring and threatening displays generally strengthens dominance attributions, whereas exposure to evasive or fearful displays weakens them.[24] In nonhuman primate bands, where leaders are constantly observed by subordinates,[25] dominant individuals "use a combination of threatening and reassuring facial displays to form alliances and maintain social order,"[26] not unlike human societies.

Although the three display types are categorically distinct, they can be grouped according to two broader styles of interaction important to social organization and attention structure — agonic and hedonic.[27, 28] Whereas agonic interactions are characterized by competitive

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).

behaviors, namely, displays of threat and submission (or appeasement), hedonic interactions feature conciliatory gestures and reassuring expressions. Agonic encounters function largely to establish and regulate power relations; hedonic encounters, which are more relaxed and playful, tend to reinforce social status. Such expressive patterns apply to interactions of both adults and children, in which "the leader is more likely to exhibit reassuring displays, whereas second-ranking individuals — and, particularly in groups of children, those marginal to the group — more frequently engage in aggressive behavior."[29] Thus, facial displays and other nonverbal behaviors index what ethologists refer to as dominance hierarchies, with anger/threat and fear/evasion representing an agonic style of interaction and happiness/reassurance a hedonic style.

Analyses of network news broadcasts from the 1980s has documented how each of the three major display types, as widely visible instances of nonverbal leader behavior, occurs in presidential election coverage.[30, 31] Each display type can be reliably classified and documented using distinct coding criteria,[32, 33] which facilitates systematic measurement of candidate portrayals in election news through visual content analysis techniques. In this paper, we adapt coding criteria employed in earlier biopolitical research to carefully assess the nonverbal display repertoires of presidential candidates during the general elections of 1992, 1996, 2000, and 2004. Our investigation focuses on the relationship between the display types shown in network election coverage, the context in which the displays are shown, and candidate standings in the polls. Beyond

facial displays, the analysis also takes into consideration the verbal tone of candidate sound bites as well as the hedonic or agonic quality of hand gestures and physical embraces. The defining characteristics of each facial display are summarized in Table 1 and described below.

Happiness/reassurance

Characterized by a smile or relaxed mouth position, happiness/reassurance displays are relatively fluid, smooth, and flexible. In these expressions, the eyes may be wide open or just slightly closed. Also evident are raised eyebrows and visible upper, or upper and lower, teeth.[34] Eye contact may be brief, followed by a cutoff or change of gaze to avoid staring. In addition, "crow's feet" wrinkles may appear around the eyes, and the candidate's head might be tilted to the side, back, or in a nodding position. Functionally, happiness/reassurance displays facilitate a hedonic or friendly mode of social interaction and in most situations lower the probability of an aggressive or agonic encounter.[35] The exception is counterempathy, in which case a smile or other hedonic signal conveyed by a disliked other, e.g., a reviled politician or tormenting superior, may evoke a negative response in the observer.[36] For this analysis, we did not distinguish between Duchenne or "true" happiness smiles, as compared to a merely polite or fearful smile,[37] although as a clear sign of subordination, fearful smiles would have been coded as an instance of fear/evasion.

Anger/threat

A more rigid pattern of facial tendencies characterizes anger/threat displays, which may include a fixed

stare; vertical head orientation; raised upper, and tightened lower, eyelids; brows that are pulled down and drawn together; lower or no teeth showing; and lowered mouth corners.[38] In such displays the lips may be pressed firmly together or squared and tightened. The expression overall has a negative or tense quality about it and is coupled with a hostile communicative intent. Functionally, anger/threat displays are associated with agonic encounters, aggressive behavior, and challenges to dominance hierarchies. Whereas challengers and rivals are frequently aggressive, "the leader is usually the focus of attention, often engaging in hedonic or reassuring behavior."[39] As Howard Dean learned after his infamous "scream" in 2004, exhibitions of anger/threat may become the focus of media attention and quickly become characterized as "non-presidential."

Fear/evasion

Expressions that feature furrowed brows and gaze aversion, a lowered head position, abrupt movement, and, at times, side-to-side head turning are indicative of fear/evasion displays.[41] In some cases, the emitter's eyelids will be raised, as with the "deer caught in the headlights" look. Other times, the brows might be slightly furrowed and wrinkles may form in the middle of the forehead, suggesting worry; the lips may also stretch horizontally and the chin may be lowered.[42] An evasive expression communicates an intention to avoid confrontation. Functionally, fear/evasion displays are also associated with agonic encounters, but instead of indicating aggression they signal subordination, avoidance, and inferior status. Candidates who are forced to respond to allegations or difficult questions, who are reported to be trailing badly in the polls, or who are asked to justify contradictory statements might exhibit fear/evasion. Representative examples of hedonic and agonic candidate displays, captured from news coverage analyzed for this study, appear in Figures 1a and 1b.

In analyzing nonverbal displays and political leadership, it is important to distinguish between the stimulus characteristics or objective features of the displays themselves and their impressive significance as elicitors of emotional responses in others.[43] A given display does not have the same effects in all viewers but rather interacts with prior attitudes, the viewing context, and short-term perceptions to influence emotional, evaluative, and attitudinal outcomes,[44, 45, 46, 47] as well as voting intention.[48] In this way, facial displays convey

considerable social meaning and significance, depending on the context in which they are seen.[49, 50] Taking these factors into account, a substantial body of experimental research has documented the political effects of televised leader displays on viewers in both the United States and Europe across numerous election and crisis communication contexts.

The significance of televised leader displays

For viewers, televised leader displays serve as a heuristic, or judgmental shortcut, for assessing presidential performance[51, 52] and have been shown to predict election outcomes.[53] Recent studies of candidate photographs from U.S. Senate and congressional races[54] and 10-second video clips of gubernatorial candidates[55] have demonstrated the ability of viewers to accurately identify election winners based on "thin slice" exemplars of expressive behavior, which tend to be highly predictive of reactions to much longer exposures.[56] Interestingly, hearing the candidates speak only confuses matters: when excerpts of gubernatorial debates are shown to viewers with the sound on, the ability to predict electoral outcomes (vote shares) actually *declines* in comparison to a filtered (inaudible) sound condition or visual-only condition.[57]

Similarly, a common finding in the biopolitics literature concerns how the impact of different display types depends on the specific presentation modality. Image-only presentations elicit stronger responses, particularly to happiness/reassurance displays, than those accompanied by sound, i.e., those featuring the candidate's articulation of issue positions and policy information.[58, 59] These effects are evident in self-report questionnaires as well as psychophysiological measures of emotion, including facial electromyography, which provides a real-time readout of facial muscle activation.[60, 61]

Leader displays may also be evaluated for the personality or communicative traits they reveal about the source, including how appropriate, honest, credible, trustworthy, and potent (i.e., efficacious) viewers consider them to be.[62, 63] Compared to institutions and other political structures that are difficult to visualize, images of leaders "are easily recognized and function as effective information processing cues."[64] The communicative efficiency of expressive displays derives from the extraordinary sensitivity humans, beginning in infancy, show to differences in the facial
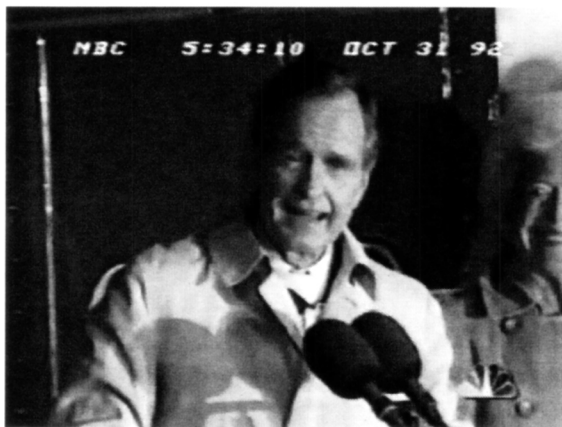
Hedonic Displays
(Happiness/Reassurance)

Al Gore
2000

John Kerry
2004

George H. W. Bush
1992

Bill Clinton
1992

Figure 1a. Screen captures from presidential campaign coverage showing hedonic displays.

behavior they observe.[65] The face, more than any other expressive feature, serves as the primary channel of emotional communication, conveying the affective state and behavioral intention of the communicator while transmitting important social signals to observers.[66]

Whether different displays will have political influence depends on at least two qualities of candidates themselves — political status and expressive ability.

High-status leaders are said to have an "attention-binding" quality that draws continued observance by other members of the social group, who monitor dominant individuals for motivational cues.[67] In campaign settings, front-runners typically enjoy advantages over candidates who are trailing in the polls, including heightened media attention, greater name recognition, and enhanced fundraising ability. A candi-
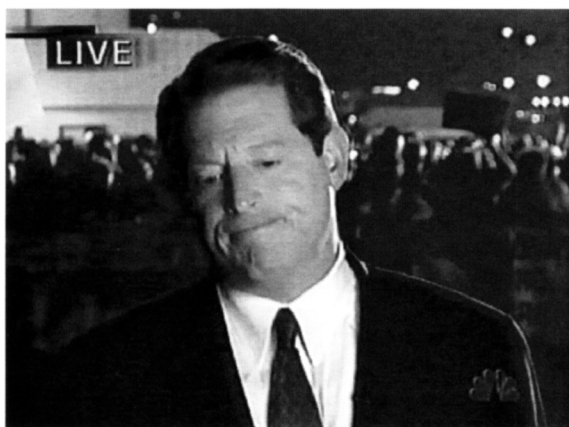
Agonic Displays
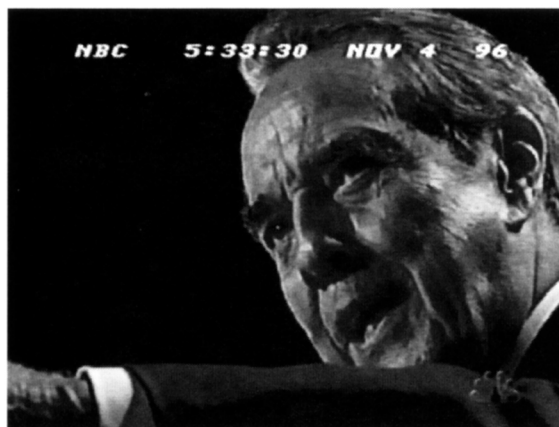### (Anger/Threat and Fear/Evasion)
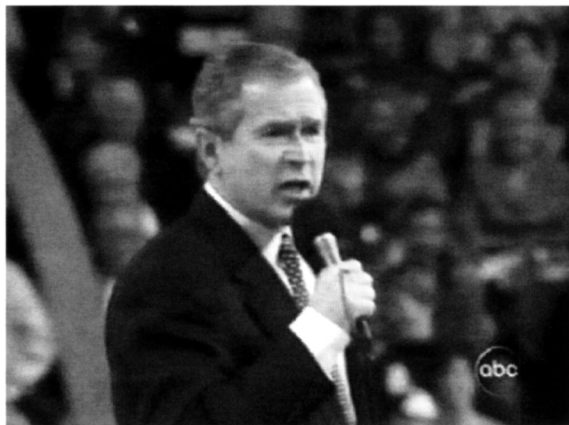
George W. Bush
2000
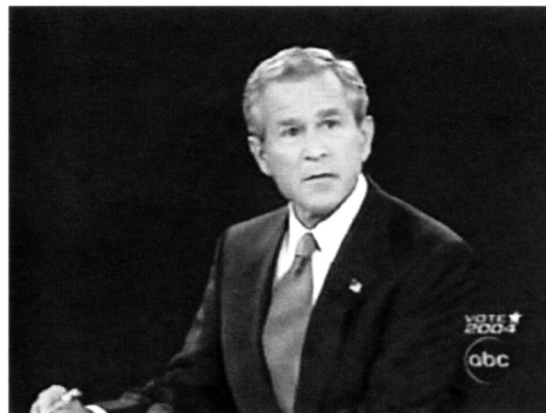
George W. Bush
2004

Al Gore
2000

Bob Dole
1996

Figure 1b. Screen captures from presidential campaign coverage showing agonic displays.

date's expressive ability also plays an important role. In American politics, candidates who are able to emit convincing displays of happiness/reassurance are generally regarded as effective communicators — "happy warriors," in the memorable phrase of Sullivan and Masters[68] — whereas those without much evocative ability last only briefly on the national stage, or experience low approval ratings while in office.

During both primary and general election settings, changes in viewer attitudes are more likely to be influenced by emotional responses to happiness/reassurance displays than party identification, issue agreement, or assessments of leadership ability.[69] Of course, poll standings and presidential approval ratings depend on a host of other important factors, both foreign and domestic, of which a candidate's communication ability

is but one.[70] Among other sources of influence, perceived favoritism in the facial expressions[71] and voice tone[72] of television newscasters when referring to presidential candidates has been associated with an increased likelihood of voter support for the favored candidate.

Sullivan and Masters' happy warriors study found a marked difference in the capacity of Ronald Reagan's smile to elicit strong positive emotions and favorable post-exposure attitudes compared to Walter Mondale (Reagan's opponent in the 1984 presidential campaign), whose happiness/reassurance displays "neither transmitted warm feelings nor contributed to post-test attitudes."[73] To explain the difference, they noted how the facial displays of Mondale were perceived as blended — partially positive but diluted by subtle signs of other expressive qualities — and not capable of evoking much enthusiasm or positive emotion. Displays perceived as mixtures of distinct cues and that evidence expressive "leakage" tend to elicit weaker emotions, are less likely to activate favorable opinions, and produce less attitude change than unblended displays.[74] Interestingly, the greater the perceived difference between a leader's neutral and happiness/reassurance displays, that is, the more distinct each display appears, the more that reassurance displays enhance emotional responses.[75] Another source of leakage is what Ekman has identified as a micro-expression — a facial movement lasting less than one-fifth of a second — that reveals, ever so briefly, "an emotion a person is trying to conceal."[76]

During the 1984 Democratic primaries, Mondale was more likely than his rivals to exhibit fear/evasion in his speeches and was less effective in communicating warm emotions to reinforce the support of favorably disposed viewers.[77, 78] Even though he managed to win the Democratic nomination over Gary Hart and Jesse Jackson, Mondale "failed to secure the focus of attention usually reserved for the winner [and] never successfully united the traditional Democratic constituencies."[79] In the general election debates with Reagan, the younger Mondale was rated as less expressive and less physically attractive than Reagan and exhibited a high rate of blinking — more than once per second, on average[80] — indicating nervousness and tension.[81] Bob Dole similarly exhibited a high blinking rate and was viewed as sour and visually unappealing in the 1996 presidential debates against Bill Clinton.[82]

As analyses of television news and public opinion have found, positive media coverage is associated with favorable presidential approval ratings.[83] Whether owing to their personal appeal or image management strategies, some candidates and office holders seem better able to attract and maintain favorable news coverage while others stumble in the national spotlight.[84, 85] Performances in nationally televised presidential debates, potentially critical campaign events where rivals for power square off for an extended period of time on the same stage, offer an important window of evaluation for undecided voters and weak partisans who are wavering in their support for a particular candidate. In instances where a clear debate "winner" (or "loser") emerges, shifts in public opinion in favor of the winner or against the loser usually follow. Consequently, we would expect an increase in hedonic portrayals of recognized debate winners and agonic depictions of recognized debate losers in the days and weeks following these shifts in poll standings.

Analysis of candidate photographs in print media has shown that increased popularity during campaigns is reflected by a greater occurrence of hedonic portrayals.[86, 87] A similar pattern was found in network news coverage of the 1984 Democratic primaries, where political success was generally associated with an increase in happiness/reassurance depictions and losing status with a tendency for candidates to be shown exhibiting more anger/threat.[88] Assuming that network campaign coverage has continued to frame leaders in a positive light and trailers in a negative light, it can be predicted that relative standing in the horse race will influence nonverbal communication such that:

> H_1: Leading candidates will exhibit more hedonic behavior (both visually and in verbal tone) than trailing candidates.

By contrast, we would expect that:

> H_2: Trailing candidates will exhibit more agonic behavior (both visually and in verbal tone) than leading candidates.

Communication setting

Particular communication settings may also influence the candidates' expressive behavior. In particular, speeches — a formal and somewhat impersonal mode of address — are likely to contain more anger/threat displays than interviews, whereas interviews, a more

personal and intimate form of communication, are more likely to show reassuring and upbeat candidate behavior.[89] During the 1984 Democratic primaries (the only election for which data of this nature are available), both leading candidates — Walter Mondale and Gary Hart — were twice as likely to be shown in close-up shots exhibiting happiness/reassurance displays when being interviewed than when delivering speeches, and both were pictured expressing anger/threat behavior almost exclusively in speeches.[90] Based on these findings, it can be predicted that, across election years:

> H_{3a}: Presidential candidates will be shown exhibiting more agonic behavior in speeches than in interviews.
>
> H_{3b}: Conversely, presidential candidates will be shown exhibiting more hedonic behavior in interviews than in speeches.

Display repertoires over time

Finally, a hypothesis is posed regarding the breadth of candidate display repertoires over time. Masters and colleagues found in their analysis of primary news that the candidates' expressive behaviors varied at different points in the campaign.[91] After the New Hampshire primary, both Mondale and Hart became more expressive, whereas Jesse Jackson appeared so only in speeches. As the campaign progressed, Mondale's anger/threat displays became much less frequent — and his happiness/reassurance displays more common. In the final phase of the campaign leading up to the Democratic National Convention, while endeavoring to avoid mistakes, Mondale's facial expressions in speeches were largely neutral, even though his interviews continued to frequently feature happiness/ reassurance displays.[92] Accordingly, it can be predicted that across election years:

> H_4: Agonic displays will decrease while hedonic displays will increase as Election Day approaches.

Method

To test the hypotheses posed for investigation, this study examined broadcast network (ABC, CBS, and NBC) news coverage of four recent presidential elections (1992, 1996, 2000, and 2004), focusing on the Republican and Democratic nominees during the general election campaign. These election years featured an assortment of strong and weak incumbent office holders, third-party candidates who were well funded or well known to the media, and represented elections that were focused on both domestic issues and external threats, so they are representative of a variety of election conditions.

Sample

The sampling frame stretches from Labor Day, the traditional kickoff date for the general election campaign, to Election Day for each year. The sample contained a total of 178 newscasts: 42 each for 1992 and 2004, and 47 for 1996 and 2000. For each election year, composite weeks of newscasts were constructed, with a different, randomly selected network newscast recorded each weekday. Network news coverage was selected for two reasons. First, it was the most widely used source of presidential campaign information over the course of our 12-year sample frame. Despite declines in network ratings and audience share, neither cable nor local television news content is as widely viewed as network news. In 2004, the last year of our sample, the audience size of the three networks combined was still double that of cable and Fox News combined.[93] Second, network news has remained stable in popularity among television viewers who are likely voters.[94]

Coding instrument

Individual candidates served as the unit of analysis. For each campaign story, multiple sound and image bites were documented for each candidate. A sound bite was defined as a piece of audiovisual material of a candidate in speaking mode, making comments to an individual reporter or larger audience. Image bites are individual shots of the candidate that visually cover the voiceover narration of the reporter.[95] For the analysis, four kinds of variables were used. First and most central is a group (described below) that assessed candidate displays of emotion in network news content. Second, daily tracking polls from Gallup and Rasmussen and post-debate polling data from CNN/USA Today were used to assess the front-runner or trailing status of each candidate for Hypotheses 1 and 2. A third class of variables included the identification of sound bite settings for Hypothesis 3. Fourth, a time variable necessary for testing Hypothesis 4 was constructed, corresponding to three different stages of the campaign.

Agonic and hedonic displays

At the heart of this study is the assessment of nonverbal leader displays. For this purpose, candidate expressive behavior was scrutinized in sound and image bites. In sound bites, facial displays and the candidate's verbal tone were analyzed separately. In image bites, facial expressions as well as other nonverbal behaviors signaling emotion were examined. The coding categories are described below.

Sound bites. The candidates' facial expressions were scrutinized closely during all sound bites. To familiarize coders with the agonic and hedonic styles of candidate behavior, the codebook included several still images that exemplified these categories. A verbal tone category was included to capture the emotional quality of the candidate's voice during sound bites. Tone was primarily determined by the *manner* in which the candidate communicated, that is, by any vocal intonation, pitch, or modulation that conveyed an identifiable emotional state. Secondarily, tone was determined by the verbal content of what was said, since voice inflections at times might remain relatively flat while the semantic content is emotion laden.

Agonic behaviors evident in sound bites included facial expressions of anger/threat and fear/evasion as well as voice tone reflective of these emotional states. The number of sound bites in which a candidate was shown displaying anger or threat was first documented. These expressive displays were identified using the descriptions of Masters, Sullivan, and colleagues mentioned earlier (see Table 1).[96, 97] Although more detailed coding procedures are available, such as Ekman's Facial Action Coding System,[98] the coding criteria of the Dartmouth group were derived from ethological analysis, have been successfully applied to news coverage of political candidates, and enable parsimonious analysis; therefore, they were much better suited to our purposes than the Ekman system. In deriving their classification criteria, the Dartmouth group borrowed from Ekman's approach in addition to ethologists such as van Hooff, de Waal, and Eibl-Eibesfeldt.[99]

The codebook emphasized that the overall sentiment expressed in an anger/threat display is negativity and hostility. Anger/threat was also assessed in terms of the verbal tone of sound bites. Overall, this tone was defined as menacing or hostile, often associated with challenges or boastful predictions about a speaker's dominance. In other words, an angry or threatening tone signaled attack: the candidate might have sounded enraged, feisty, bold, aggressive, or eager and willing to do political battle. The number of sound bites in which the candidate sounded angry/threatening in verbal tone was coded.

The second agonic expressive display is fear/evasion. The number of perceptible sound bites in which a candidate exhibited fear/evasion either facially or via verbal tone was logged. Displays of fear/evasion were again coded by employing the definitions of Masters, Sullivan, and colleagues.[100, 101] A primary marker for a fear/evasion display is avoidance of direct confrontation. Fearful/evasive verbal tone was defined as timid, unsure, or equivocal. A candidate's voice might tremble or he might stutter, misspeak, or be reluctant to answer a question. Sound bites evidencing fear/evasion reveal a tone of uncertainty, indecision, weakness, anxiety, uneasiness, apprehension, or agitation in response to a difficult situation.

Hedonic displays included depictions of happiness/reassurance. Coders documented the number of candidate sound bites in which happiness/reassurance was displayed facially and in verbal tone. Facial displays were identified using the above definitions. The overall sentiment expressed in hedonic facial expressions is positive, thus inspiring confidence and signaling affinity with the audience. Sound bites that were happy/reassuring in verbal tone were defined along the same lines: optimistic, cheery, full of hope, and channeling a positive feeling about what is likely to happen. In short, the tone of hedonic bites invited bonding with potential supporters.

Image bites. The same facial display categories and definitions used for coding sound bites were used for assessing facial displays within image bites. Three additional variables, one agonic and two hedonic, pertaining to nonverbal behavior other than facial displays were coded. On the agonic side of the ledger, coders logged the number of shots in which the candidate was shown using defiant hand or arm movements, signaling aggression. These negative approach gestures included finger pointing or shaking, punching the air, raising a fist to issue a challenge or signal a willingness to fight, and wringing hands to suggest mutilation of the opponent.

The two hedonic variables measured the frequency (number of individual shots) in which a candidate was shown using affinity hand gestures as well as engaging in physical contact with supporters or staff. Affinity gestures consist of movements that imply bonding or a friendly relationship between the candidate and his audience. These positive approach gestures included waving, thumbs up, fanning the crowd, George W. Bush's three fingers ("W" sign), the "V" for victory (or peace) sign, an informal salute, both arms raised upward, a wink to someone in the audience or to the camera, and tipping or waving a hat. Hedonic contact was categorized as physical embraces of various kinds, including hugging, hand holding, kissing, touching someone's cheek, shoulder or knee, or putting an arm around a supporter or ally as a type of bonding or reassurance display.

Poll data

To track candidate status throughout the general election, the analysis utilized daily tracking polls for each election year. A front-runner was defined as a candidate who was leading in the polls by one or more percentage points. Conversely, a trailer was defined as a candidate who was one or more percentage points behind the winner. If candidates were within one percentage point of each other in the polls, the race was treated as a dead-heat, and these cases were excluded from the analyses for Hypotheses 1 and 2.

Although most tracking polls have a three-point margin of error, we defined a front-runner as leading by one or more percentage points for two reasons, one practical and one perceptual. Practically, eliminating those days where there was less than a three-point difference between the candidates would have severely reduced the number of cases for analysis. Perceptually, we would argue that even a one-point lead has potential value to close observers of the campaign since media coverage reports on the horse-race standings, however close. Even if the margin of error is reported (to qualify poll standings in a close race), it is usually mentioned as a caveat or footnote while the actual numbers are displayed in bold relief.

For 1992, 1996, and 2000, tracking data from The Gallup Poll were used. Polling numbers for missing dates early in the 1992 general election campaign (7–28 September) were filled in with tracking data from various polling organizations summarized in *Public*

Perspective magazine, formerly published by the Roper Center.[102] In 2004, figures from Rasmussen Reports were used, since The Gallup Poll only tracked candidates at eight points in time during the general election that year. Although criticized for using automated calling procedures,[103] Rasmussen Reports was widely recognized as one of the most accurate polling organizations during the 2004 campaign season.[104, 105] For Election Day of each year, percentages of the final presidential vote tally were used in lieu of tracking figures since polling ends before the election.

Sound bite setting

To investigate the candidates' expressive behavior in different campaign contexts, the setting of sound bites was analyzed. The first category consisted of stump or podium speeches, where the candidate was featured delivering an address rather than answering questions. A key criterion of this category is for the candidate to be depicted primarily speaking to crowds, not journalists or other politicians. The second category documented personal interviews, featuring the candidate in conversation with a journalist (or talk-show host) rather than in speech mode. Here, anchors or reporters questioned the candidate one-on-one. Interviews can take place in a variety of settings, including in a television studio, the outdoors, or on a campaign bus or plane. Other sound-bite settings, including press conferences and debates, were not used in hypothesis testing. A final category, *other*, was included to document sound bites in settings not covered by the four above categories, e.g., sound bite excerpts from political advertisements.

Time

To examine expressive displays across different stages of the campaign, a three-level time variable was constructed, with each level representing a different stage of the general election. The first stage ran from Labor Day to the day of the first debate of each election year. The second stage captured the debate period, stretching from the day after the first debate to two days after the last debate for each election year. The third stage represented the final stretch to Election Day. This approach is similar to the analysis strategy of Masters and colleagues, who segmented the primary election into distinct phases for longitudinal analysis.[106] Table 2 summarizes the candidates, time periods analyzed, and

Table 2. Summary of the study sample.[a]

	Election Year			
	1992	*1996*	*2000*	*2004*
Candidates				
Democrat	Bill Clinton	Bill Clinton	Al Gore	John Kerry
Republican	George H. W. Bush	Bob Dole	George W. Bush	George W. Bush
Independent	Ross Perot	Ross Perot	Ralph Nader	Ralph Nader
Network campaign stories				
ABC	$n = 54$ (35.8%)	$n = 30$ (31.9%)	$n = 38$ (39.2%)	$n = 36$ (38.7%)
CBS	$n = 51$ (33.8%)	$n = 40$ (42.6%)	$n = 31$ (32.0%)	$n = 29$ (31.2%)
NBC	$n = 46$ (30.5%)	$n = 24$ (25.5%)	$n = 28$ (28.9%)	$n = 28$ (30.1%)
Total	$N = 151$	$N = 94$	$N = 97$	$N = 93$
Campaign stages				
Stage 1	Sept. 7–Oct. 9	Sept. 2–Oct. 4	Sept. 4–Oct. 3	Sept. 6–Sept. 30
Stage 2	Oct. 12–Oct. 21	Oct. 7–Oct. 18	Oct. 4–Oct. 19	Oct. 1–Oct. 15
Stage 3	Oct. 22–Nov. 3	Oct. 21–Nov. 5	Oct. 20–Nov. 7	Oct. 18–Nov. 2

[a]Note: Only those independent candidates who appeared on network news in our election sample are listed in the table. The sample excludes weekends.

number of individual stories by network for each year in the sample.

Coders and reliability

Two primary coders collected the data for this study, and two secondary coders served as reliability checks for the pretest of the coding instrument. Testing the categories and training coders extended over several weeks. During this time, refinements were made to the coding instrument. Overall, the pretest produced a reliable level of agreement (Krippendorff's alpha = 0.84) between the four coders. For the categories related to expressive displays the overall figure was 81%, whereas the identification of sound bite settings was conducted with 89% reliability. Although the pretest produced acceptable reliability figures, more training ensued before the beginning of data collection. Once the coding of newscasts was complete, a post-hoc reliability check was performed on 20% of the sample. Coders maintained an acceptable level of agreement (Krippendorff's alpha = 0.83), with a minimum of 79.7% and a maximum of 100% agreement on individual variables.

Analysis strategy

Most of the hypotheses in this study predict findings that would be supported by data that do not conform to the equal variance assumption. Indeed, we expect some types of candidate behavior to be low or nonexistent at certain points in the campaign and to feature prominently at other times, such as after a strong debate

performance or sudden dip in the polls. Not unexpectedly, standard deviations on some means suggest that certain variables do behave erratically. Thus, the Levene statistic is employed to assess equal variance within group means. In ANOVA tests where the homogeneity of variance assumption is violated, the Welch computation is used as a robust test of equality of means. Similarly, in *t*-tests the Levene statistic is employed to assess homogeneity of variance, and robust test of means were reported for variables where violations occurred.

Results

The starting point for this study is the "happy warriors" forecast that leading candidates would be shown engaging in more hedonic behavior, both visually and in sound bite tone, than trailing candidates. The investigation of the first hypothesis included *t*-test comparisons between front-runners and trailing candidates, as determined by daily tracking polls, across four groups of variables. Table 3 presents the means and *t*-test results. Overall, the means are in the predicted direction, with front-runners shown in more hedonic displays than trailing candidates, but the differences are not statistically significant. Looking at the four hedonic variables individually (facial displays during sound and image bites, the verbal tone of sound bites, reassuring hand signals, and bonding embraces) also did not produce significant results at the 95% ($p <$ 0.05) confidence interval.

Table 3. Hedonic and agonic representation of front-runners and trailing candidates.

Candidate Behavior	Front-runner			Trailing Candidate			df	t	p
	N^a	M^b	SD	N	M	SD			
Overall nonverbal behavior									
Hedonic	261	3.18	3.39	332	2.98	3.61	591	0.69	0.490
Agonic	261	1.49	2.39	332	2.03	3.05	590	−2.40	0.017^c
Facial display									
Hedonic face	261	1.63	1.82	332	1.53	1.78	591	0.71	0.479
Agonic face	261	0.79	1.32	332	0.95	1.46	591	−1.34	0.182
Verbal tone									
Hedonic bite tone	261	0.37	0.68	332	0.29	0.79	591	1.31	0.190
Agonic bite tone	261	0.47	0.83	332	0.68	1.33	566	−2.29	0.022^c
Candidate gestures									
Hedonic hand display	261	0.77	1.12	332	0.82	1.20	591	−0.51	0.611
Agonic hand display	261	0.25	0.65	332	0.41	0.90	586	−2.56	0.011^c
Hedonic contact	261	0.43	0.94	332	0.36	0.78	591	0.94	0.348

^{a}N = number of candidate image or sound bite appearances in news stories.

^{b}M = mean number of image or sound bites per candidate per story.

^{c}Homogeneity of variance assumption violated, equal variances not assumed procedure used.

Hedonic variables were next subjected to a "critical events" analysis, defined as general election debates in which there were clear perceived winners and losers, as determined by post-debate polls and media coverage of the debates. An examination of CNN/USA Today polling data revealed clear "winners" for at least one debate each election year: In 1992, Bill Clinton was regarded as the winner of the second debate, a town hall meeting format, over George H. W. Bush and Ross Perot on October 15; in 1996, Bill Clinton again prevailed in the second debate, also a town hall format, over Bob Dole on October 16; in 2000, George W. Bush was deemed the winner of the second debate over Al Gore on October 11; and, in 2004, John Kerry was widely considered the winner of the first debate against George W. Bush on September 30.

The question used to determine a debate winner was worded as follows: "Regardless of which candidate you happen to support, who do you think did the better job in the debate: [candidate A] or [candidate B]?" In the second debate in 1992, 58% of voters thought Clinton did a better job, compared to just 16% and 15% for Bush and Perot, respectively. In 1996, 59% of voters thought Clinton again performed better in the second debate, compared to 29% for Dole. In the second debate in 2000, 49% favored George W. Bush's performance over 36% for Gore. And, in the first debate of 2004, 53% of voters thought Kerry did the better job, compared to 37% for Bush. The poll was conducted for CNN/USA Today by the Gallup Organization (for a summary, see: http://www.usatoday.com/news/politicselections/nation/polls/2004-09-30-debate-poll.htm).

Obviously, determining a debate "winner" from flash poll results does not reveal the quality of an individual debate performance or which candidate had stronger rhetorical arguments. However, for the purpose of our analysis, a nationally televised presidential debate represents a critical event that attracts considerable media and public attention and has the capacity to solidify partisan support, inform viewers, and move undecided voters; hence, a pivotal debate can have electoral significance. We admit that declaring a debate "winner" or "loser" is somewhat reductionist; yet, our criteria for determining a debate winner was conservative — a clear consensus in subsequent press coverage *and* a clear separation (beyond the margin of error) of the candidates in post-debate opinion polls.

Table 4 summarizes the findings of post-debate analyses between winners and losers (from the day after the critical debate to Election Day), showing differences in hedonic and agonic depictions. All means are in the predicted direction: Clear debate winners were featured in more hedonic displays than losers, reflecting the tendency of dominant individuals to use reassuring facial displays to build alliances and maintain support. (Recognized winners might also have felt happy about the positive press coverage that attends a strong debate performance, with a corresponding

Table 4. Hedonic and agonic representation of debate winners and losers.

Candidate Behavior	Winner			Loser			df	t	p
	N^a	M^b	SD	N	M	SD			
Overall nonverbal behavior									
Hedonic	143	3.81	3.97	149	3.18	3.28	290	1.46	0.144
Agonic	143	1.63	2.53	149	2.56	2.99	285	−2.86	0.005^c
Facial display									
Hedonic face	143	1.87	1.93	149	1.73	1.77	290	0.63	0.532
Agonic face	143	0.87	1.46	149	1.30	1.63	288	−2.32	0.021^c
Verbal tone									
Hedonic bite tone	143	0.45	0.76	149	0.35	0.69	290	1.15	0.251
Agonic bite tone	143	0.52	0.87	149	0.78	1.11	279	−2.17	0.031^c
Candidate gestures									
Hedonic hand display	143	1.04	1.47	149	0.91	1.16	290	0.79	0.431
Agonic hand display	143	0.28	0.71	149	0.52	0.83	286	−2.61	0.010^c
Hedonic contact	143	0.45	1.05	149	0.23	0.64	231	2.07	0.040^c

^{a}N = number of candidate image or sound bite appearances in news stories.

^{b}M = mean number of image or sound bites per candidate per story.

^{c}Homogeneity of variance assumption violated, equal variances not assumed procedure used.

bump in their poll numbers.) However, only the hedonic contact variable was statistically significant. At most, this analysis lends weak support to the idea that debate winners will exhibit more hedonic displays than losers.

The second hypothesis proposed that trailing candidates would be presented in more agonic depictions, both visually and in verbal tone, than leading candidates. When analyzing agonic behavior, we included both anger/threat and fear/evasion displays, consistent with ethological categorizations. Both front-runners and trailing candidates exhibited far more anger/threat than fear/evasion. Of the total documented instances of agonic behavior (N = 882) recorded in our sample, including facial displays, sound bite tone, and candidate gestures, 85.4% (n = 753) consisted of anger/threat expressions and just 14.6% (n = 129) fear/evasion. For all election years combined, trailing candidates (n = 551; 62.5%) were shown in far more instances of agonic behavior than frontrunners (n = 331; 37.5%). These data were next subjected to tests of mean differences at the level of the individual news story.

Similar to the procedures for testing Hypothesis 1, a series of t-test analyses of mean differences were then run. As summarized in Table 3, trailing candidates were shown exhibiting agonic behavior in individual stories significantly more often than front-runners. To identify where these differences were located, facial display, sound bite tone, and agonic gesture variables were isolated for further analysis. Again, all means were in

the predicted direction. Differences between front-runners and trailing candidates were statistically significant for all analyses except the facial displays variable. These findings offer firm support for Hypothesis 2.

As with the first hypothesis, a critical events analysis was performed, comparing the level of agonic behavior between debate winners and losers. The results summarized in Table 4 offer further support for Hypothesis 2. All means were in the predicted direction, and each variable produced significant differences between debate winners and losers — including the facial displays variable. Given that both approaches to testing the hypothesis delivered a strong pattern of significant results, Hypothesis 2 is accepted.

Presidential candidates were also expected to exhibit more agonic displays in speeches than in interviews, as proposed in Hypothesis 3a. For this analysis, sound bites from personal interviews and stump speeches were segmented from press conferences and debates. The means of agonic variables for interviews and speeches were then compared using one-sample t-tests. The results are summarized in Table 5. There were no statistically significant differences in agonic displays between speeches and interviews and thus no support for this hypothesis. In fact, the direction of means for agonic variables fluctuated to such an extent that no clear pattern emerged.

Hypothesis 3b predicted that presidential candidates would engage in more hedonic behavior in interviews

Table 5. Hedonic and agonic representation of candidates in speeches and interviews.

Candidate Behavior	Speeches			Interviews			df	t	p
	N^a	M^b	SD	N	M	SD			
Overall nonverbal behavior									
Agonic sound bites	279	2.04	2.24	59	2.05	2.84	278	−0.05	0.959
Hedonic sound bites	279	0.92	1.35	59	1.66	2.11	278	−9.06	0.001
Facial displays									
Agonic face in bites	279	0.97	1.17	59	0.88	1.32	278	1.25	0.211
Hedonic face in bites	279	0.36	0.62	59	0.75	1.18	278	−10.49	0.001
Verbal tone									
Agonic bite tone	279	1.08	1.40	59	1.16	2.22	278	−1.01	0.316
Hedonic bite tone	279	0.57	0.97	59	0.92	1.50	278	−6.08	0.001

$^a N$ = number of candidate image or sound bite appearances in news stories.

$^b M$ = mean number of image or sound bites per candidate per story.

than in speeches. The same procedure was followed to test hedonic variables. The results from Table 5 indicate strong support for this hypothesis. All three measures (facial displays, verbal tone, and overall hedonic behavior) produced statistically significant differences in the predicted direction. Candidates were clearly shown exhibiting more hedonic displays in interview settings than in speeches.

Hypothesis 4 predicted that, over time, agonic displays would decrease while hedonic displays would increase as Election Day approached. For this analysis, the three time periods constructed for comparison were used as levels of an independent variable in one-way analysis of variance tests for agonic and hedonic behavior, using the Levene statistic for interpreting results. Since several variables violated the homogeneity of variance assumption, the Welch statistic was used as a robust test of mean differences between time periods. As shown in Table 6, the overall pattern across variables revealed an increase in news portrayals of hedonic behaviors and an initial increase followed by a subtle decrease in agonic depictions over the course of the election. These results offer support for the hypothesis.

Figure 2 visually represents the increase in hedonic and curvilinear pattern of agonic depictions over time for all four election years combined. As this figure shows, hedonic behaviors are stable from time 1 to time 2 but then sharply increase from time 2 to Election Day. Agonic behaviors, on the other hand, increase from time 1 to 2 then slightly decrease toward Election Day. Post hoc tests confirm this finding for hedonic depictions. Dunnett C tests (not assuming equal variance) show

a statistically significant ($p = 0.05$) difference between time 1 and 3. There were no significant differences between time pairs for combined agonic depictions or for the overall one-way comparison (see Table 6).

Closer scrutiny of individual variables reveals a consistent pattern of hedonic displays — facial expressions, sound bite tone, and hand gestures — increasing towards Election Day. In fact, visual depiction of hedonic contact between candidates and citizens was the only individual variable that did not steadily increase over time. Instead, these behaviors became less apparent in the debate period (stage 2) and then experienced a resurgence in the final stretch of the campaign. Post-hoc Dunnett C tests show that both the initial decrease and ensuing increase towards Election Day were significant ($p = 0.05$). The Dunnett C analyses also identified a significant ($p = 0.05$) increase in hedonic verbal tone in sound bites between stages 1 and 3. Tukey tests (since the variables meet the homogeneity of variance assumption) show the same increase at near-significant levels ($p = 0.07$) for hedonic facial displays and hand gestures.

Agonic variables, on the other hand, increased from the opening phase of the campaign to the debate period and then dropped off as Election Day approached. The drop off in the last stage of the campaign supports the prediction of Hypothesis 4, that expressive behavior would be more positive and less varied over time, with the added nuance that agonic displays increase in the debate period before tapering off towards the election. Of all the Dunnett C post hoc paired comparisons, only one was significant ($p = 0.05$), revealing an increase in agonic facial displays from stage 1 to stage 2.

Table 6. Hedonic and agonic representation over time.[a]

Candidate Behavior	Stage 1		Stage 2		Stage 3		df	t	p
	M^b	SD	M	SD	M	SD			
Overall nonverbal behavior									
Hedonic	2.78	3.38	2.83	3.30	3.55	3.81	2	3.17	0.043[c]
Agonic	1.48	2.32	2.04	3.07	1.77	2.85	2	2.29	0.103[c]
Facial display									
Hedonic face	1.40	1.82	1.57	1.83	1.75	1.81	2	2.45	0.087
Agonic face	0.72	1.23	1.07	1.63	0.84	1.41	2	2.85	0.059[c]
Verbal tone									
Hedonic bite tone	0.22	0.55	0.34	0.59	0.42	0.99	2	4.77	0.009[c]
Agonic bite tone	0.48	0.80	0.60	1.00	0.62	1.42	2	1.51	0.221[c]
Candidate gestures									
Hedonic hand display	0.72	1.04	0.71	1.21	0.95	1.22	2	2.99	0.051
Agonic hand display	0.28	0.67	0.37	0.91	0.35	0.77	2	0.94	0.393[c]
Hedonic contact	0.44	0.86	0.23	0.62	0.45	0.99	2	6.15	0.002[c]

[a]Note: Stage 1 runs from Labor Day to the day of the first debate of each election year. Stage 2 captures the debate period, stretching from the day after the first debate to two days after the last debate for each election year. Stage 3 represents the final stretch to Election Day. The exact dates for stages 1–3 are listed in Table 2.

[b]M = mean number of image or sound bites per candidate per story.

[c]Homogeneity of variance assumption violated, equal variances not assumed procedure used.

Discussion

Presidential candidates elicit feelings from potential voters in different ways — by distinctive rhetorical styles, through citizen responses to positive or negative policy outcomes, and by hedonic and agonic display repertoires communicated over television.[107, 108] This study investigated the latter phenomenon, answering calls for more systematic examination of the different modes of candidate behavior shown on network news and how coverage differs for individual candidates over time.[109, 110] Summarizing the prevailing attitude against studying news visuals, Graber has observed that "television's detractors have argued that the visual components of the story are trivial, adding very little to the substantive content."[111] The argument that audio-visuals carry little political meaning or electoral significance, however, simply cannot be sustained in light of existing research.

Inferences drawn from televised leader displays are particularly informative and affect both partisans and undecided voters. Happiness/reassurance and anger/threat displays have larger effects on supporters than critics,[112] indicating the close scrutiny that candidate behavior receives. Supporters tend to respond positively to hedonic displays of an admired leader and, in some cases, instances of aggression. Agonic behavior can be effective in bonding followers to leaders but is not reassuring to critics.[113] Instead, critics tend to respond negatively to anger/threat displays and are likely to report neutral or no emotional responses after viewing the smiling face of an unliked leader. Happiness/reassurance displays are thus capable of neutralizing the negative feelings of critics, a quality that agonic
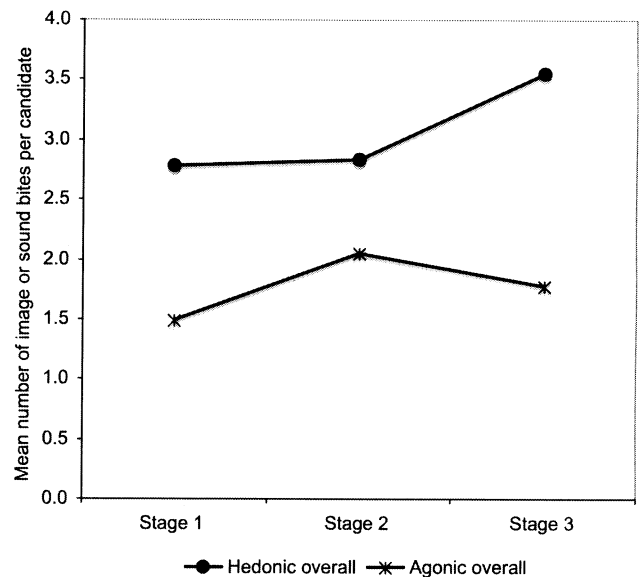

Figure 2. Hedonic and agonic candidate behavior displayed over time.

expressions lack. Fear/evasion displays, by contrast, elicit negative feelings from supporters and critics alike.[114, 115] Not surprisingly, the largest lasting effects of televised leader displays have been found for neutral viewers who lack a developed schema or clear preference for a particular candidate.[116]

Although this investigation did not examine the *effects* of leader displays — an area that merits renewed attention — our results confirm and extend what we know about media portrayals of presidential candidates. Departing from conventional approaches that analyze the verbal aspects of news coverage, this study examined the nonverbal dimensions of candidate behavior, identifying patterns in display repertoires over four consecutive general elections. Hedonically, there were few differences between front-runners and trailing candidates, with the exception that clear debate winners were shown engaging in significantly more physical embraces with supporters in the post-debate period following their commanding performance. Such a subtle form of favorable news coverage would scarcely register verbally, if at all, in a text-based content analysis but is readily apparent when coded visually. For the most part, however, the major party nominees were shown in roughly the same number of happiness/reassurance displays, as well as positive sound bites and upbeat gestures — a tendency that increased in the final stretch of the campaign. In the general election, candidates indeed came across as "happy warriors." This was especially true in interview settings, which featured significantly more hedonic depictions than did speech settings.

Agonic displays were less prominent in news coverage overall but were associated with trailing candidates and debate losers significantly more than front runners and debate winners. Candidates who were behind in the polls, in other words, were more often shown exhibiting anger/threat (or fear/evasion), making defiant gestures, and delivering statements that were negative in tone or hostile in intent than candidates who were ahead. This behavioral pattern is consistent with ethological observations that have documented aggression in second-ranking individuals or challengers to power. Agonic displays increased during the debate period, due to increased competitive behaviors and attacks by trailing candidates, but then decreased in the final stretch of the campaign when the campaign's strategic goal is to maximize the candidate's

popular appeal. The decrease in aggression and the embrace of a more positive, hedonic style of campaigning in the last few weeks of the election suggests candidates become much more focused on building their prestige with the electorate than dominating the opponent after the debate period. A certain amount of competitive (agonic) behavior persists to Election Day, but the competition becomes more focused on building support and less on direct political rivalry.

Sullivan and Masters argued that emotional reactions to facial displays and other nonverbal behaviors play an important role in producing the "momentum" that candidates develop over the course of an election.[117] Although a candidate's status derives from numerous factors, such as political reputation, fundraising ability, popularity, and elite opinion, televised portrayals play an influential role in regulating the esteem with which a candidate or office holder is held. This analysis cannot answer *why* expressive displays vary — because candidates behave differently or news framing is applied unevenly. But we would argue that the final news product represents an interplay between candidate tendencies (i.e., their communication style) and the political narrative that emerges for individual candidacies. Regardless of causality, the way in which leaders are depicted on television shapes and indexes their status such that political power in the contemporary era can no longer be fully understood without regard to television coverage.[118]

With the rise of television, a close-up medium, as the primary channel of political communication, the effects of expressive leader displays have become increasingly important to consider. Indeed, the communicative behavior of public figures has become central to evaluations of political effectiveness. Rivals for power who appear weak and overwhelmed on the one hand, or overly aggressive on the other, are politically disadvantaged. Consistent with this argument, unfavorable visual portrayals are now recognized as central to accusations of media bias.[119, 120]

The diffusion of widescreen and high-definition (HD) TV sets that offer enhanced visual resolution and, through the use of home theater systems, improved audio fidelity, augers a new era of even *closer* viewer scrutiny of candidate behavior. Compared to a standard televised presentation, the impact of presidential campaign coverage broadcast in high definition, where the communication style and expressive displays of leaders are seen with up to six times the image

resolution of conventional broadcasts, should have a noticeably stronger evaluative impact. Indeed, an experimental investigation comparing HD TV (with 1080 lines of vertical resolution) to a standard-resolution broadcast (with 480 lines) found a marked increase in self-reported social presence for the HD condition.[121] In particular, viewers of HD reported being able to observe facial expressions and body movement significantly better than those who observed the same scenes in the standard-resolution condition. Technological factors may thus play an important (and, in the case of HD broadcasts, unmeasured) role in viewer evaluations of political leaders.

Because expressive displays of highly recognizable political figures within newscasts are capable of evoking a range of responses, both favorable and unfavorable, that affect viewer attitudes and serve as dispositions to action, they warrant our continued attention. On television, these effects hold whether the leader's voice is heard, filtered, or overlaid with a reporter's audio narration.[122, 123, 124, 125] Thus, *how* presidential candidates communicate, and the quality of coverage they receive in national broadcast media, matters. News visuals are deceptive in the sense that they are processed with little conscious effort on the part of the viewer. Yet in electoral campaigns, as in the exercise of political office, leadership is closely associated with the capacity to capture the attention of important audiences.[126] Candidates who are effective nonverbal communicators have the advantage of utilizing this attention to affect the quality of news coverage they receive, thereby improving their political prospects.

Erik P. Bucy is Associate Professor in the Department of Telecommunications and Adjunct Associate Professor in the Department of Political Science and School of Informatics at Indiana University, Bloomington. A former newspaper reporter and press secretary, Bucy serves on the editorial boards of several leading communication journals, including *Communication Monographs, Human Communication Research*, and *The Information Society*. He has held visiting and research appointments at Dartmouth College and the University of Michigan. Bucy, who received his Ph.D. in Mass Communication from the University of Maryland, is the author, with Grabe, of the forthcoming book, *Image Bite Politics: News and the Visual Framing of Elections* (Oxford University Press).

Maria Elizabeth Grabe is Associate Professor and Director of Graduate Studies in the Department of Telecommunications at Indiana University, Bloomington, and a Research Associate of the Department of Political Sciences, University of Pretoria, South Africa. A former television news producer for the South African Broadcasting Corporation, she is the current chair of the Journalism Studies Division for the International Communication Association. Grabe, who received her Ph.D. in Mass Media and Communication from Temple University, is the author, with Bucy, of the forthcoming book, *Image Bite Politics: News and the Visual Framing of Elections* (Oxford University Press).

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