

NONVERBAL DISPLAYS AND POLITICAL LEADERSHIP IN FRANCE AND THE UNITED STATES

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Because contemporary theories of politics discuss the appeal of leaders primarily in verbal terms, it is often difficult to go beyond anecdotes when explaining the effects of televised appearances of leaders and candidates. Experimental studies of the way American viewers respond to televised excerpts of leaders were replicated in France shortly before the legislative elections of March 1986, using comparable expressive displays of Laurent Fabius (then Social Prime Minister), Jacques Chirac (Gaullist Mayor of Paris who became Prime Minister), and Jean Marie LePen (head of the Front Nationale). Although the results show striking similarities in the system of nonverbal behavior in France and the United States, there are cultural differences in the role of anger/threat (which elicits more positive responses from French viewers than Americans) as well as variations in the evocative character of the facial displays of individual leaders. These experimental findings clarify recent discussions concerning the evolution of the French party system, providing insights into the role of political culture as well as leadership "style" in the media age.

Emotion and nonverbal expressive style have been known to play a central role in relations between leaders and their publics at least since the ancient Greeks, but contemporary political science has generally ignored these nonverbal dimensions of rhetoric. In this paper, we develop a theoretical explanation of the way nonverbal displays of leaders affect observers, and present experimental evidence supporting it. Work started in the United States is extended to France, allowing us to compare viewers' cognitive and emotional responses to televised displays of political leaders in the two countries.

It is somewhat paradoxical that contemporary political science lacks a theory of political persuasion based on such variables as style and emotion. The communication of emotion by verbal and nonverbal means was an important element in Aristotle's science of rhetoric (Arnhart, 1981, esp.

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chap. 6), and training in this skill had a significant place in traditional manuals of public speaking. For example, William Scott's *Lessons in Elocution* (1820), subtitled *A Selection of Pieces in Prose and Verse for the Improvement of Youth in Reading and Speaking*, begins with lessons on "Elements of Gesture" taken from Walker's *Speaker*:

There is the language of emotions and passions as well as of ideas. To express the latter is the peculiar province of words; to express the former, nature teaches us to make use of tones, looks, and gestures. When anger, fear, joy, grief, love, or any other active passion arises in our minds, we naturally discover it by the particular manner in which we utter our words; by the features of the countenance, and by other well known signs. And even when we speak without any of the more violent emotions, some kind of feeling usually accompanies our words, and this, whatever it be, hath its proper external expression. Expression indeed hath been so little studied in public speaking, that we seem almost to have forgotten the language of nature, and are ready to consider every attempt to recover it, as the labored and effected effort of art. But nature is always the same; and every judicious imitation of it will always be pleasing. Nor can any one deserve the appellation of a good speaker, much less of a complete orator, till to distinct articulation, good command of voice, and just emphasis, he is able to add the various expressions of emotion and passion. (pp. 54-55)

To teach public speaking, therefore, the first lessons concerned a "system of gesture, suited to the wants and capacities of school boys" (*ibid.*, p. 9). In addition to general devices for holding the body in an appropriate manner, students were taught the facial gestures associated with human emotions:

Every part of the human frame contributes to express the passions and emotions of the mind, and to show in general its present state . . . Especially the face, being furnished with a variety of muscles, does more in expressing the passions of the mind than the whole human frame besides. (*Ibid.*, pp. 28-29)

Despite this tradition of including emotion and expressive behavior in the study of rhetoric, political scientists have only recently begun to consider such factors as more than passing anecdotes on the margin of their explanations of political leadership (cf. Lau and Erber, 1985; Marcus, 1988).

In experimental work in the United States, we have shown that emotional and cognitive reactions of viewers to politicians' facial displays of happiness/reassurance, anger/threat, and fear/evasion combine with pre-exposure attitude to shape politically relevant attitudes and beliefs. In a French experiment conducted shortly before the legislative elections of March 1986, viewers responded to happiness/reassurance, anger/threat, and fear/evasion displays by leaders of the two dominant political coalitions (Laurent Fabius, at the time the Socialist Prime Minister; Jacques Chirac, the Gaullist who became Prime Minister after the elections) as well as by an

extremist (Jean Marie LePen of the Front Nationale). These experiments show that expressive behavior has significantly different effects on voters depending on the cultural context, the leader, and the type of display—and that such variables are important in understanding the relationship between political leaders and citizens.

NONVERBAL COMMUNICATION, FACIAL DISPLAYS, AND SOCIAL BEHAVIOR

A theory of the process by which political leaders gain power, convey impressions of self-confidence or strength, and persuade the citizenry must explain the emotions and cognitions elicited by their gestures. Without denying the role of verbal messages, it is essential to include the presidential style of leaders and the emotions of their followers in any general theory of political persuasion. How, then, do verbal and nonverbal communication interact in the political process?

Before television, a leader's nonverbal cues were mainly seen by an audience that was physically present; when the general public learned of political discourse only through printed reports or by word of mouth, displays of emotion primarily had their effect by focusing the attention of influential opinion leaders, who then disseminated some statements rather than others to the mass. As long as printing was the main source of political communication, therefore, leaders' messages often appeared as verbal statements when they reached the average citizen.

Television, in frequently showing the general public close-up images of politicians in press conferences, campaign debates, and in newscasts, has transformed the way voters learn about politics and enhanced the importance of leaders' expressive behavior (e.g., Blumler et al., 1978; Ranney, 1983; Atkinson, 1984; Muller et al., 1986; Rosenberg et al., 1986; Iyengar and Kinder, 1987). The resulting changes have often been associated with a decline in partisanship as a determinant of election outcomes: "with the decline of political parties performance assessments are now much more clearly candidate centered than in the past" (Miller and Wattenberg, 1985, p. 366; see also Ostrom and Simon, 1979; Conover, 1981; Miller, Wattenberg, and Malanchak, 1982). Since television has increasingly exposed the citizens of all western democracies to close-up images of their leaders, it is of practical as well as theoretical interest to study the effects of facial displays in varied political systems.

Nonverbal cues are highly important in social interactions among nonhuman primates as well as for humans (van Hooff, 1969, 1973; Plutchik, 1980; Masters et al., 1986). From birth, human neonates recognize and imitate similar facial displays (Meltzoff and Moore, 1977), which subtly function to

modulate mother-infant interaction (Papousek and Papousek, 1976).¹ That this system of communication is requisite for normal social behavior is confirmed by studies of autistic children, who cannot interpret the emotions in the facial displays they see, perhaps because they focus attention on the lower portions of the face and do not attend to the eyes (Denckla, 1986). Such findings can be of practical importance: in teaching children who have other learning disabilities, complementarity in the facial display behavior of tutor and student is predictive of success, whereas matching of tutor and pupil on other personality variables is not (Sapir, 1985).

Facial displays are expressed and decoded in similar ways across different human cultures (Ekman and Oster, 1979; Eibl-Eibesfeldt, 1979; Keating et al., 1981). Emotional states and dominance cues can be defined reliably by objective criteria that are derived from social psychology and ethology; when videotapes of leaders' displays are chosen on the basis of these criteria, viewers accurately decode the nonverbal cues despite strong prior attitudes which might be expected to "bias" judgments (Masters et al., 1986; Sullivan et al., 1984; Mouchon and Masters, 1986).

Although facial display behavior clearly has universal aspects (Ekman and Oster, 1979; Eibl-Eibesfeldt, 1979), members of different societies exhibit somewhat different expressive behavior, especially in public settings. The political relevance of nonverbal cues therefore needs to be considered through cross-cultural research. Before describing recent experiments in France that explore cultural differences, we will summarize a general theoretical model of the role of facial displays in leadership and show that it is generally supported by the findings from experiments conducted in the United States.

A FRAMEWORK FOR STUDYING THE POLITICAL EFFECTS OF LEADERS' FACIAL DISPLAYS

The theoretical framework for studying the political impact of nonverbal displays is based on findings in a number of disciplines. Research in both ethology and political science indicates that a leader's status and leadership behaviors interact in evoking support among group members (Masters, 1976; G. Schubert, 1982; M. McGuire, 1983; de Waal, 1986; J. Schubert, 1987). From the perspective of social psychology, attitude change depends on both the reception of the message and the disposition of the viewer, and can be enhanced or reduced by the cues associated with the stimulus (W. McGuire, 1985).

A group member's response to another individual's attempt to gain leadership status is therefore very much dependent on the relative status and prior social experiences of the participants as well as on the nature of the leader's nonverbal behavior. Among the cues of importance, perhaps the

best studied are facial displays known to be capable of producing emotions in others (Ekman and Oster, 1979; Eibl-Eibesfeldt, 1979; McHugo et al., 1985; Masters et al., 1986). Using different techniques, social psychologists have experimentally demonstrated that identical behaviors by high and low status individuals evoke dominance attributions consistent with initial leadership status (Argyle et al., 1970; Andreoli and Worchel, 1978).

Several mechanisms may account for this finding. Ethologists have concentrated on the role of expressive displays in regulating relations among group members (van Hooff, 1969; Chase, 1980, 1982; McGuire and Raleigh, 1986). First, group members pay attention to the displays of high ranking members and, thus, their displays are more likely to be effective stimuli (Chance, 1976; Masters, 1976, 1981; J. Schubert, 1986). Secondly, leadership behaviors of high ranking individuals are more consequential for other group members than similar behaviors by low-ranking members (Barner-Barry, 1981, 1986). Among chimpanzees, for example, an anger/threat display by a high ranking group member will evoke a higher level of fear than a similar display by a low ranking member (van Hooff, 1969; de Waal, 1982; Goodall, 1983). In a similar way, research with human children confirms that a high ranking group member's reassurance display is more reassuring (relaxing) than a similar display by a low ranking group member (Montagner, 1978). Thus changes in leadership status modify the focus of attention in the group as well as access to group resources.

As it applies to the relationship between political leaders and adult citizens, the predictions from this framework require careful specification of the variables being studied. First, at a given time, *rank order in leadership status* (as indicated by some combination of incumbency and expectations of victory) should predict the intensity and content of emotional responses by group members to similar expressive behaviors by different leaders. Expressive displays by high ranking members should produce more generalized emotional arousal than those by low ranking members. Interest and attentiveness should reveal similar differences in the effects of expressive displays by low ranking and high ranking group members; the higher the rank of the individuals involved in exchanges of threat for the control of the group, the higher the level of fear in other group members.

Second, *the context* may influence the effects of a display. The dominant's reassurance display following assumption of dominant status should be more reassuring (fear and anger reducing) than similar displays by lower-ranking group members. Next in order of importance would be reassurance displays of the defeated rival, signalling the cessation of aggressive behavior towards the dominant group member or, conversely, an anger/threat display signalling that fighting will continue. The power of such displays, both in terms of generalized arousal and in evoking specific emotions, should be at

a maximum just before and after the competition has terminated. In politics, therefore, identical displays by high status leaders should become more evocative as an election approaches, whereas this effect is not to be expected for lower status leaders (Masters et al., 1985; Sullivan and Masters, 1988; Muzet and Masters, in preparation).

Third, *differences in the type of display behavior* should influence the nature and intensity of specific emotional responses in response to any one leader. Ethologists have argued that leaders use both agonic (threatening or competitive) and hedonic (reassuring) modes in regulating group relations and maintaining their status in the group (Chance, 1976). Characteristically, among human beings as among chimpanzees, the dominant male wards off rivals by threat displays and dissipates the fear that such displays arouse in the group by a reassurance display; expressions of fear by a dominant often indicate an impending loss of status (de Waal, 1982). Political scientists have often observed that after a bitter struggle over the presidential nomination, reassurance by the winner may help pacify the defeated rival and his supporters (Sullivan et al., 1974; and Nakamura and Sullivan, 1978). It follows that the effect of a reassurance display on other group members should be greatest for those who were most aroused by the competition between rivals for the control of the group.

Threat displays should have quite different effects. Among nonhuman primates and other mammals, once status within the group has been established, threat displays often function to strengthen the bond between dominant and subordinate individuals (Lorenz, 1966; de Waal, 1982). In human politics, we therefore predict that anger/threat displays will elicit positive responses from those who support a leader, whereas critics of the leader will not respond as positively to the same behavior. For followers, therefore, both happy/reassuring and anger/threat displays would elicit support; in contrast, fear/evasion displays should be relatively less effective for supporters (as well as critics) of a known leader.²

Fourth, *individual differences in facial conformation and performance style* should affect viewers. Among primates, as prolonged observations of chimpanzees and gorillas have made evident, there is a surprising degree of individuality in behavior and emotional response to similar circumstances (Schaller, 1965; Goodall, 1983, 1986). For humans, even still photographs of different faces produce variation in judgments of their attractiveness as leaders (Keating et al., 1981; Rosenberg et al., 1986). Dynamic features of nonverbal display, while more difficult to study, also show differences in performance style that are capable of producing varied emotional responses and attitudes (e.g., Ekman and Friesen, 1982; Frey et al., 1983).

In prior studies using videotaped excerpts of American political leaders, we have explored the effects of these variables in a series of experiments

(Lanzetta et al., 1985; McHugo et al., 1985; Sullivan and Masters, 1987, 1988; Masters et al., 1986). The basic assumptions in our theoretical perspective are that the viewers' emotional responses are determined by (1) the kind of facial displays expressed by the leader; (2) the style of performing these gestures; (3) the context and mode of presenting the stimulus; (4) the viewer's prior attitudes to the leader being observed and to politics more generally; and (5) the viewer's gender, party identification, political ideology, or views on the issues being discussed. Moreover, effects could differ somewhat at the levels of physiological reactions, verbal self-reports of emotion, and attitudes toward the leader.

While these complexities help explain the tendency of political scientists to ignore nonverbal behavior, careful experimental studies make it possible to distinguish the components of a process whose existence has been intuitively obvious to students of rhetoric for centuries. Findings in the United States have broadly confirmed the predictions outlined, indicating the feasibility of studying nonverbal behavior from a theoretical perspective combining ethology, social psychology, and political science.

VIEWER'S REACTIONS TO THE FACIAL DISPLAYS OF AMERICAN LEADERS

Based on criteria derived from social psychology and ethology, three kinds of facial display behavior—happiness/reassurance, anger/threat, and fear/evasion—can be defined objectively. (The term before the slash refers to the emotion expressed by the display, the term after the slash to its communicative significance.) These three types of display play a central role in social interactions among primates generally, are readily distinguished by humans cross-culturally, and are often observed in the behavior of politicians. While other facial displays are potentially important, these cues are the most obvious basis for experimental studies of the rhetorical impact of facial expressions (Masters et al., 1986; Sullivan and Masters, 1987).

Videotapes of President Reagan exhibiting the three different facial displays elicit different patterns of physiological response among viewers that do not depend on their attitude towards him (McHugo et al., 1985). In reporting their emotions, however, prior attitude interacts with display in eliciting responses, and anger/threat displays generate the strongest differences in emotional response between those who favored and those who opposed the President (Lanzetta et al., 1985). Although such an interaction between attitude and emotion was not observed at the psychophysiological level when Reagan was the only leader shown, supporters and critics differ even in autonomic and muscular reactions when

seeing displays of Reagan and a Democratic rival (Hart) in the same experiment (McHugo, Lanzetta, and Bush, 1987).

When experimental groups were shown videotapes of all eight Democratic candidates in the 1984 presidential campaign as well as of President Reagan, changes in attitude were more strongly associated with emotional responses to displays of happiness/reassurance than with agreement on issues, party identification, or assessment of leadership ability. Except for Walter Mondale, who seemed ineffective in eliciting warm emotional responses with his happy/reassurance display, these effects were not due to sight of the leader, but rather to the expressive display itself (Sullivan and Masters, 1988). While different leaders' nonverbal displays vary in their effects, changes in status can enhance the response to a given display. In this 1984 experiment, the same excerpts of Reagan elicited more positive emotion and greater attitude change in October, when his victory was assured, than in January; comparable excerpts showing other candidates whose status was unchanged did not vary in their effects between January and October (*ibid.*).

In another experimental design, videotapes of news stories were edited to insert images of President Reagan's displays in the background. Varied frequencies of happiness/reassurance, anger/threat, or fear/evasion displays in a set of such stories seen over two days produced differences in emotional responses, in trait attributions, and in attitude 24 hours after the experiment. In particular, males were more likely than females to describe accurately the frequency of displays seen and, if previously neutral toward Reagan, to change their attitude depending on the mixture of displays embedded in the newscasts (Sullivan et al., 1984). Females' emotional responses, but not those of males, depended on their attitude towards Reagan and the type of display seen (Sullivan and Masters, 1987).

These findings are confirmed by other lines of research on the importance of facial displays and nonverbal cues. Still photographs of an unknown candidate have different effects in eliciting positive voter response depending on the kind of facial appearance shown (Rosenberg et al., 1986). Nonverbal cues that are acoustic rather than visual—such as paravocal signs of emotion and status as pitch, rhythm, and amplitude while speaking—play a similar role in human politics (J. Schubert, 1986, 1987).

In the United States, the evidence therefore suggests that leaders' effectiveness is to some extent mediated by their nonverbal display behavior. In prior studies, President Reagan was found to be particularly effective in communicating positive emotions, thereby generating favorable attitudes in viewers (Sullivan and Masters, 1988). Archives of network television coverage of the 1984 campaign reveal, moreover, that candidates differed in the frequency of coverage and kinds of facial displays shown

(Masters et al., 1987). Hence it is not implausible to assume that effects like those observed in our experiments can influence political outcomes.

COMPARATIVE ANALYSIS OF FACIAL DISPLAYS BY LEADERS IN FRANCE AND THE UNITED STATES

We chose France as the first society in which to conduct experimental comparisons with the United States because it readily permits us to test hypotheses on how the cultural and political context influences the evocative power of leaders' facial displays. France has a highly centralized, multiparty political system in which political ideology is reputed to be of greater significance than in the United States. "The more the number of parties increases, the more their identification becomes a problem; and the remedy to which each party has recourse in order to be perceived as distinct is a punctilious ideological and principled rigidity" (Sartori, 1966, p. 159). According to the traditional view, therefore, political ideology or policy preference is more important than the personal characteristics of leaders as a source of emotion and commitment for French voters (Ehrmann, 1983; Gaxie, 1985).

In a multiparty system, the argument goes, voters can choose a party that represents quite precisely their own views on the issue or their general political preferences. Each party shapes voter preferences and sentiments by fashioning specific proposals that win warm support among party followers. Such a model predicts that ideological partisans will be strongly committed to their own party because it represents deeply felt views, and hence will rarely change their vote on the basis of the personal attributes of rival candidates (Ehrmann, 1983, pp. 209–18; Gaxie, 1985). This traditional interpretation leads to the prediction that nonverbal cues of leadership might be less salient—or at least less independent of party identification and ideology—for French viewers than for those in the U.S. Either viewers will respond emotionally to ideological and party appeals and ignore nonverbal cues or they will respond emotionally to facial displays as nonverbal signals of appropriate responses. If displays do have this signalling function, the emotions they elicit and their intensity will be a function of the viewer's relationship to the leader. Anger/threat displays against a common enemy may elicit pleasure in supporters, and frighten or make angry those toward whom the aggression is directed. In the same way, a shout of joy and a look of triumph by a winner will produce joy in supporters, and anger and fear in the defeated (Lanzetta and Orr, 1980).

An alternative hypothesis is, however, equally plausible. The institutional complexity and confusion inherent in a multiparty system might make

voters more responsive to the personal characteristics of political leaders. Even if parties in a multiparty system effectively represent the views of their supporters during election campaigns, the cost of gaining access to power is often to compromise each party's well-articulated policy positions. Most voters, especially if peripherally involved, would have difficulty identifying specific votes in parliament or government policies as consequences of a party's general positions during electoral contests. Insofar as voters have cognitive and emotional difficulty in linking political outcomes with the views of their own political party, they may rely on the personal characteristics of political leaders in relating to a multiparty system that is otherwise confusing and alienating (e.g., Ehrmann, 1983, p. 254). This model therefore leads to the prediction that nonverbal behavior could be even more salient than party identification or ideology in France than in a stable bipartisan system and could elicit emotional responses quite independently of the relationship of the politician to the observer. Facial displays could function to elicit emotional responses directly, or could serve as signals of pleasurable or painful outcomes. In such a person centered system, facial displays as signals would not be connected in such a clear way to the traditional variables of party and ideological identification.

This effect may be reinforced by what Pierce and Converse (1981) call "candidate visibility," the fact that French voters can name a higher percentage of national legislative candidates than can Americans. While acknowledging that in a multiparty system, there are a greater number of legislative candidates, they argue that the total number of candidates at all levels of government is much larger in the United States. Thus French voters may be more responsive than Americans to personal characteristics of their own legislative candidates. In fact, French legislators (73%) themselves are more likely to mention a personal characteristic—their own personal reputation—as an important factor in explaining why they won than are American legislators (57%).

The second of these two models of a multiparty system resembles that described in the American literature on "dealignment," except that the decline of party identification in the United States is thought to have produced a rise in the importance of a political leader's personal characteristics (cf. Stokes and Miller, 1966; Miller and Wattenburg, 1985), whereas there has been no corresponding decline in the incidence of ideological self-identification in France (Gaxie, 1985, chap. 9). Particularly in the age of television, the confusion of multiparty politics might well increase the importance of the personal characteristics of national political leaders and explain some of the departures from the traditional image of French electoral politics.

As a first step in the research project to see which hypothesis describes

the role of leaders' nonverbal cues in a multiparty system, two experiments were conducted in France with the support of the Maison des Sciences de l'Homme in Paris during February 1986. Several features of French political life in early 1986 made this study particularly useful. In the period leading to the French legislative elections of March 1986, attention was heavily focused on political rivalry between the Socialist government led by then-Prime Minister Laurent Fabius and the right-wing opposition (whose leader Jacques Chirac, the Gaullist Mayor of Paris, was subsequently named Prime Minister). Jean-Marie LePen, leader of the extreme rightist Front Nationale, had been openly disavowed by both right and left, yet was widely covered by national television. As a result, abundant television material was available for facial displays of competing leaders of the left, the right, and an extremist lacking general legitimacy. In addition, Fabius was the incumbent prime minister whereas his rival Chirac was Mayor of Paris and a former prime minister; while neither was the most popular leader of his coalition, each had relatively comparable status.

In this paper we report on the first of the experiments carried out in France in the winter of 1986, which was designed to parallel several of the American studies previously described. Close-up images of Fabius, Chirac, and LePen exhibiting displays of happiness/reassurance, anger/threat, and fear/evasion were selected from videotapes of a highly popular interview program, *l'Heure de Verité*, on which each had appeared; in this way, background and context were identical for all three leaders. Choice of excerpts was based on the same criteria as employed previously (Masters et al., 1986; Lanzetta et al., 1985), and each excerpt was edited to focus on a meaningful verbal statement while avoiding extraneous images of interviewers or the audience.

As in the earliest experiments conducted in the U.S., a set of displays was shown simultaneously to different groups of subjects in image-only, sound-only, or sound-plus-image media condition.³ A stimulus videotape, containing nine sequences (one of each display type for Fabius, Chirac, and LePen), was shown through monitors in three adjacent rooms. For the first three excerpts (one by each leader), subjects in the first room saw sound-plus-image, in the second room image-only, and in the third room sound-only. Monitors were then adjusted so that the media condition was changed for the next three displays, and again for the final set of three. In this way, each excerpt was viewed by one-third of the subjects in each media condition, and each subject saw one-third of the displays with sound-plus-image, sound-only, or image-only.

Before the experiment began, subjects completed a pretest questionnaire reporting attitudes towards the political parties, their leaders, and the media. Immediately after each excerpt, subjects described the leaders'

behavior on six-point scales like those used in our American studies, followed by self-reports of their own emotional responses during the same excerpt (again using similar six-point scales). Translation of the entire questionnaire was verified with several French scholars, after which the descriptive and emotional terms used in the rating scales were retranslated from French to English by a thoroughly bilingual French researcher; all terms that gave rise to ambiguities were dropped. With the help of Professor Jacques Gerstlé, the resulting scale had been pretested on a group of students at the Université de Paris-I: Sorbonne; results of the pretest, during which students rated previously used displays by President Reagan, confirmed that the scales were employed in a way parallel to that of our American subjects (Mouchon and Masters, 1986).

FINDINGS

Our French experiment makes three principal contributions to an understanding of contemporary politics: (1) televised excerpts of leaders exhibiting expressive behavior are described and elicit emotional responses along similar dimensions in both France and the United States; (2) there are important cultural differences between the two countries, since French subjects are less likely than Americans to be influenced by a leader's expressive behavior when they can hear a verbal message, and more likely to respond with positive emotion after displays of anger/threat; and (3) as in the U.S., the extent to which facial display behavior contributes to emotional responses in France differs depending on the leader. To avoid confounding questions of individual "style" with those of legitimacy, we focus primarily on the two major candidates, who differ because the displays of Chirac did not influence emotional response to the same degree as did those of Fabius. In short, our results suggest that an experimental approach can illuminate both cross-cultural similarities in nonverbal behavior and differences that depend on either individual leaders or cultural traditions.

CROSS-CULTURAL SIMILARITIES: DESCRIPTIONS OF EXPRESSIVE BEHAVIOR IN FRANCE AND THE UNITED STATES

Since the French experiment presented viewers with three different types of display exhibited by each of three leaders (Fabius, Chirac, and LePen), the first test of cross-cultural similarity was a simple measure of discrimination. For each of the nine displays, subjects described the happy/reassuring display as expressing more happiness than either anger or fear, the anger/threat display as expressing more anger than either

happiness or fear, and the fear/evasion display as expressing more fear than either happiness or anger (Masters and Sullivan, 1986). As in the United States, therefore, viewers distinguish accurately among expressive excerpts along lines parallel to the objective classification of nonverbal cues using criteria defined in terms of social psychology and ethology (Masters et al., 1986).⁴

These similarities do not necessarily mean, however, that expressive displays communicate similar information about leaders in different political systems.⁵ As was pointed out above, whether an expressor's display of happiness communicates reassurance, his anger signals attack, or his fear indicates evasion depends on the nature of the display, on the relationship between the expresser and the viewer, and on the context in which the expressive behavior takes place. It is well known that cultures vary in the norms of accepted nonverbal behavior, particularly in public settings (Birdwhistell, 1970); as a result, discrimination of happy/reassurance, anger/threat, or fear/evasion excerpts could well hide important differences in the "meaning" attributed to supposedly similar cues.

To assess the way displays communicate information about both the emotional state of a leader and his orientation toward others, we subjected viewers' descriptive ratings of the excerpts of Fabius and Chirac in all media conditions to factor analysis, using principal components analysis with varimax rotation and retaining only the two strongest factors.⁶ A comparable factor analysis of descriptions of President Reagan shows that French and American viewers use similar dimensions when describing the behavior of their leaders (Table 1). These similarities are all the more striking because the French viewers' descriptions were significantly influenced by their prior attitudes toward Fabius or Chirac as well as by the display, whereas the American descriptions of Reagan were only influenced by the display seen (and not by attitudes toward him).⁷

In both countries, the two principal dimensions underlying descriptions of expressive excerpts can be called *reassurance* and *dominance*. The first dimension has high positive loadings for anger and disgust (attack) and high negative loadings for joy and comfort; attributions of joy or of anger identify the expressive content of the display, whereas comfort or disgust indicate its communicative significance. In functional terms, therefore, this dimension reflects the extent to which another person is seen as reassuring or threatening to the viewer.

The second dimension has high positive loadings for strength and interest (*dominance*) and high negative loadings for fear, confusion, and evasion (flight); to be strong, one may be either happy or angry but must not appear fearful or confused. Unlike the reassurance dimension, in which each end is anchored by the attribution of an emotional state, the attribution of

TABLE 1. Factor Structure of American Viewers' Descriptions of Displays of Emotion by Reagan and of French Viewers' Descriptions of Chirac, and Fabius: All Media Conditions Combined ^a

Description	<i>Reagan</i> (<i>n</i> = 145)		<i>Chirac</i> (<i>n</i> = 65)		<i>Fabius</i> (<i>n</i> = 65)	
	Reassur- ance	Domi- nance	Reassur- ance	Domi- nance	Reassur- ance	Domi- nance
Angry	.89	.27	.87	.20	.82	.37
Comforting	-.73	.28	-.66	.35	-.68	.45
Joyful	-.71	.46	-.42	.27	-.59	.27
Disgusted	.88	.13	.84	.01	.76	-.08
Strong	.25	.84	.05	.88	.01	.86
Confused	-.05	-.88	.07	-.87	.08	-.81
Fearful	.09	-.67	.19	-.63	.22	-.61
Interested	-.51	.49	-.05	.75	.04	.76

^a Cell entries are factor loadings from a principal components factor analysis with a Varimax rotation of the two factors extracted. For Reagan the two factors accounted for 64% of the total variance, for Chirac 59% and for Fabius 60%. The reassurance factor accounted for 32% of the total variance for Reagan, 33% for Chirac, and 36% for Fabius, and the dominance factor, 33% for Reagan, 26% for Chirac, and 24% for Fabius.

Source: Descriptive responses of Fabius and Chirac: Experiment at Université de Nanterre (Masters and Sullivan, 1986); emotional responses to Reagan: Experiment #2 at Dartmouth College (Masters et al., 1986).

dominance is based on the positive assessment of strength and the negative assessment of an absence of fear or confusion. Since this second dimension reflects an assessment of the actor's social status, the factor analytic results confirm the ethnological proposition that displays of happiness or anger can, depending on context, signal either dominance or reassurance.

There are only minor differences in the usage of descriptive scales between France and the U.S. While Americans describing Reagan describe "interest" as if it is on both factors, the French use this scale primarily in conjunction with other traits of dominance. Conversely, American viewers only associated "evasiveness" with dominance, whereas this trait has a stronger loading on the reassurance scale for descriptions of both Fabius and Chirac. To see whether these patterns constitute significant cultural differences in viewers' responses to nonverbal behavior, it is necessary to focus on the perception of the excerpts in the image-only condition, where spoken messages cannot confound the analysis.

Figures 1a and 1b contrast the way French and American viewers attributed dominance and reassurance to happiness/reassurance, anger/threat, and fear/evasion displays, and Table 2 contains the results of a multiple analysis of variance of the effects of the different displays and of the

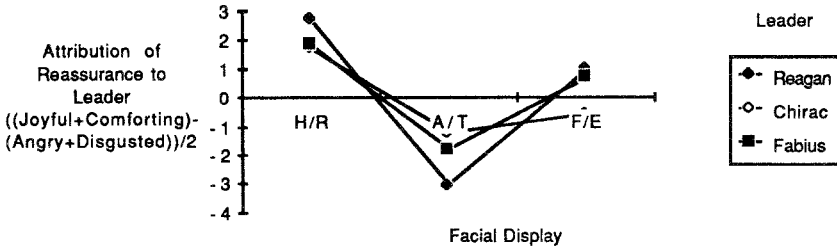


FIG. 1a. *Described reassurance.* Attributions of reassurance by French viewers in image only media condition to Chirac, Fabius, and by American viewers to Reagan. Note. Reassurance scales weighted by factor loadings (see Table 1). For Reagan the same 27 subjects saw the different displays and for Chirac and Fabius different experimental groups saw the different displays ($N = 17$ to 24).

viewer's attitude towards the leader on these descriptive ratings. Although the results show an unambiguous discrimination of all three kinds of displays in France as well as in the United States, the cross-cultural similarities are combined with several interesting differences. First, in both countries, viewers' perceptions of reassurance are significantly higher for happiness/reassurance and lower for anger/threat, whereas fear/evasion excerpts are intermediate between these extremes.

Secondly, although viewers describe the fear/evasion displays of all three leaders as lower in dominance than the other displays, they do not significantly distinguish between happiness/reassurance and anger/threat on this dimension. On the cognitive level, leaders can communicate dominance by their happiness/reassurance or anger/threat gestures even though their anger/threat gestures are seen as less reassuring.

The principal difference between the American and French results confirms the hypothesis that attitude would shape French more than American viewers' descriptions of the display behavior of their leaders. Whereas American viewers' attitudes towards Reagan did not affect their

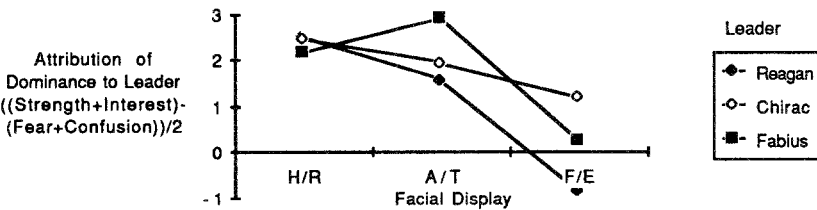


FIG. 1b. *Described dominance.* Attributions of dominance by French viewers in image only media condition to Chirac, Fabius, and by American viewers to Reagan. Note. Descriptive scale scores weighted by factor loadings (see Table 1). For Reagan the same 27 subjects saw different displays while for Chirac and Fabius different experimental groups saw different displays ($N = 17$ to 24).

TABLE 2. Effect of Prior Attitude and Display on Descriptions of Dominance and Reassurance in Image Only Facial Displays of Chirac, Fabius and Reagan: Image Only Media Condition ^a

	Statist. Signif.	<i>Chirac</i>		<i>Fabius</i>		<i>Reagan</i>	
		Reass.	Domin.	Reass.	Domin.	Reass.	Domin.
Attitude	F	8.06	1.26	10.60	.72	.37	2.10
	p	.01	.27	.02	.41	.55	.15
Display	F	18.87	.72	46.12	7.11	103.08	50.22
	p	.00	.49	.00	.00	.00	.00
Attitude by display	F	.47	1.05	1.57	1.17	.20	.16
	p	.63	.36	.22	.32	.82	.86

^a Dominance and reassurance scales constructed from raw emotional response scale scores multiplied by underlined factor loadings in Table 1 and averaged. Cell entries are *F* values with probability values directly below. For Reagan, *DF* for attitude *F*(1,57), display and interaction of display and attitude (2,57). For Chirac, *DF* for attitude *F*(1,59), display and interaction *F*(2,59). For Fabius, attitude *F*(1,53), display and interaction *F*(2,53).

descriptions of his display behavior, French viewers' attitudes toward Chirac and Fabius significantly affected their descriptions of each leader's behavior as reassuring (Table 2).

SIMILARITIES AND DIFFERENCES IN EMOTIONAL RESPONSE

To determine the relevance of such similarities in the perception of nonverbal cues, one must ascertain how French viewers react to expressive excerpts of political leaders. Two dimensions of emotional response to leaders—usually called positive (hedonic) and negative (agonic)—have been consistently reported in studies of the American electorate in public opinion polls (Abelson et al., 1982; Marcus, 1988) as well as in experiments (Masters et al., 1986).⁸

Self-reported emotional responses to Fabius and Chirac were subjected to principal components factor analysis, using varimax rotation and retaining factors with eigenvalues greater than 1.0 (Table 3). The results, for all media conditions combined, show a striking similarity in the structure of self-reported emotional responses in each country.⁹ Not only are the positive (hedonic) and negative (agonic) factors similar for French viewers, but each carries similar weight in accounting for the variance in using the eight emotional scales. Clearly, the instruments and procedures used in our French study are comparable to those used in the previously reported American experiments.

In past experiments in the U. S., attitude towards the leader and the

TABLE 3. Factor Structure of Emotional Responses to Happy/Reassurance, Anger/Threat, and Fear/Evasion Displays in France and U. S.: All Media Conditions Combined ^a

Scale	Reagan		Chirac-Fabius (combined)	
	Positive	Negative	Positive	Negative
Joyful	.65	-.44	.82	-.07
Interested	.81	-.07	.63	-.21
Comforted	.82	-.31	.89	-.09
Inspired	.83	-.22	.83	-.25
Angry	-.07	.83	.30	.75
Fearful	-.12	.81	.21	.69
Disgusted	-.25	.79	-.24	.86
Confused	-.20	.59	-.12	.80

^a U.S., $N=145$; France, $N=65$. Cell entries are factor loadings from principal components factor analysis retaining and rotating by Varimax factors with eigenvalues > 1 . The negative factor accounts for 33% of the total variance for Reagan and 32% for Chirac and Fabius; the positive factor accounts for 32% for Reagan and 34% for Chirac and Fabius. Italicized scales are used to interpret the factor.

Source: Emotional responses to Fabius and Chirac: Experiment at Université de Nanterre (Masters and Sullivan, 1986); emotional responses to Reagan: Experiment #2 at Dartmouth College (Masters et al., 1986). For the comparable factors for the French data when emotional responses to LePen are included along with Chirac and Fabius, see Masters and Sullivan (1986).

nature of the facial display each played an independent role in eliciting subjects' emotional responses (Lanzetta et al., 1985; Masters et al., 1986; Sullivan and Masters, 1987). To compare the reactions of French viewers to those of American subjects, positive emotional responses in both experiments were measured by averaging the four positive or hedonic emotional factor scales (the viewers' feelings of joy, interest, comfort, and inspiration), each weighted by its loading on the positive factor. Similarly, negative or agonic emotional responses were recorded as an average of the factor weighted scales for feelings of anger, fear, disgust, and confusion after watching the excerpts. Where a single indication of overall emotional response seemed appropriate, this negative score was subtracted from the weighted positive emotional factor to assess the "net warmth" of a viewer's feelings (cf. Sullivan and Masters, 1988).

In the theoretical section of this article, we presented two models of French multiparty politics. In the first model, party and ideological orientation, rather than attitude towards a leader and his personal characteristics, evoke net warmth in emotional response. In the second model, the fragmentation of the multiparty system confuses voters and makes them more responsive to their leaders' expressive styles. The first

model predicts that French leaders' expressive behavior will be less evocative than that of leaders in the more person-centered American party system, where even the effects of such traditional variables as ideology and party orientation will be mediated by attitude towards the leader. In contrast, the second model of French politics predicts that the evocativeness of a leader's gestures in the two systems will not be sharply different.

To explore these hypotheses, separate multiple regression analyses were done for each excerpt, with net warmth as the dependent variable and party orientation, ideological identification, and attitude towards the leader as independent variables.¹⁰ If party and ideological orientation controlled emotional responses, the results should be the same whether viewers were seeing a happy/reassuring, anger/threat, or fear/evasion excerpt. If, on the other hand, the leader's performance elicits the emotional responses, the results should differ for the different displays. The regression results for all three types of display support the hypothesis that political attitudes differ in salience for French and American viewers, but indicate that Chirac and Fabius differ markedly in the way they elicit emotional responses (Table 4).

First, the net warmth of the emotional responses of French subjects to either Chirac or Fabius is much more closely tied to political attitudes than are the comparable responses of American viewers after watching Reagan. Regardless of the nature of the excerpt, the variance accounted for by the combination of partisanship, ideology, and attitude towards the leader is much greater for French subjects ($r^2 = .40$ to $.58$) than for our American viewers ($r^2 = .07$ to $.30$).

Secondly, in France the three cognitive variables account for roughly the same percentage of variance in emotional response towards each political leader regardless of the nature of the excerpt (with only one exception, Fabius' display of anger/threat). Although the weights of the partial regression coefficients of the independent variables differ for the different displays, together they account for the same percentage of the total variance in emotion. In both countries, the coefficients for attitude toward the leader are highest for subjects exposed to happiness/reassurance displays and lowest for response to fear/evasion displays; in France, partisanship has a higher coefficient in regression equations for anger/threat and fear/evasion.

The absence of display effects in France, noted above, thus seems to result from a compensatory evocation of partisan attitudes. For American viewers the three cognitive variables account for substantially more of the variance in emotional response to Reagan's happiness/reassurance excerpts than to either his anger/threat or his fear/evasion excerpts. In contrast, as Table 4 shows, the weights of the partial regression coefficients for attitude towards the leader's party are *lower* (not higher, as in France) in predicting emotional responses to Reagan's anger/threat and fear/evasion excerpts.

TABLE 4. Party, Attitude Towards Leader, and Ideology as Determinants of the "Net Warmth" of Emotional Responses to Expressive Excerpts of Reagan, Chirac, and Fabius: All Media Conditions Combined ^a

	Reagan		Chirac		Fabius	
<i>Happy/reassuring excerpts</i>						
Constant	.18	(1.18)	-1.16	(.40)	-.86	(1.22)
Attitude	1.19**	(.27)	.56**	(.18)	.63**	(.24)
Party	.26	(.21)	.52**	(.16)	.26	(.20)
Ideology	.41**	(.19)	-.14	(.15)	-.11	(.18)
	n = 131		n = 63		n = 63	
Standard error of estimate	2.27		1.16		1.41	
Adjusted R ²	.30		.58		.40	
<i>Anger/threat excerpts</i>						
Constant	.03	(.95)	-1.49	(.44)	-.64	(1.00)
Attitude	.81**	(.22)	.12	(.20)	.51**	(.20)
Party	-.08	(.17)	.69**	(.18)	.33**	(.17)
Ideology	-.06	(.16)	.04	(.17)	-.18	(.15)
	n = 131		n = 63		n = 63	
Standard error of estimate	1.82		1.27		1.17	
Adjusted R ²	.20		.52		.54	
<i>Fear/evasion excerpts</i>						
Constant	-.07	(1.12)	-1.52	(.41)	-1.07	(1.09)
Attitude	.69**	(.27)	.00	(.16)	.26	(.16)
Party	-.02	(.21)	.70**	(.16)	.37**	(.18)
Ideology	-.12	(.19)	.10	(.16)	-.20	(.17)
	n = 131		n = 63		n = 63	
Standard error of estimate	2.26		1.19		1.26	
Adjusted R ²	.07		.53		.46	

^aCell entries are OLS unstandardized regression coefficients and their standard errors within parentheses; those with two asterisks are statistically significant, $p < .05$ by a one-tailed t -test. Net Positive Emotional Response is the Sum of the Factor weighted Positive minus the Negative Emotional Response Scale scores (see Table 3 for factor loadings). For ideological self-identification, 0 = very liberal and 6 = very conservative. For partisanship, American subjects reported their identification with the party, and French subjects their attitude toward each party, on seven point scales. For attitude towards Reagan, American subjects used a five point scale; French subjects used a -50 to +50 scale which was collapsed into five categories (+50 to +31, +30 to +11, +10 to -10, -11 to -30, -31 to -50) to make it comparable to the American scale. (For attitude distribution, see note 4.)

Display effects in the U. S. thus seem to reflect a weaker activation of partisan attitudes when viewers see expressive behavior that conveys either anger/threat or fear/evasion.

Thirdly, because party seems to express the voter's ideological views in France, attitude towards party apparently mediates the effect of ideological identification on emotional responses to Chirac and Fabius. In the French experiment, none of the coefficients for the direct effect of ideological self-identification on emotional response is significant, whereas in the American study of Reagan we found one significant effect for ideology (on responses to the happy/reassurance excerpt).

Although the regression results lend some support to the first or more traditional model of French multiparty politics, the emotional responses to Fabius are consistent with his image as a more media-based leader; in his case, unlike either Reagan or Chirac, both attitudes to the individual leader and to his political party are significant predictors of the viewers' net warmth. As a result, it could be argued that Fabius indicates the possibility of a trend in contemporary French politics toward the more candidate-centered, media politics that has become the norm in the United States.

FACIAL DISPLAYS AS EVOCATIVE CUES: DIFFERENCES BETWEEN INDIVIDUAL LEADERS

To analyze more precisely the differences between individual French leaders, it is necessary to focus on the effects of watching rival leaders without the sound. How could it be that display behavior that is decoded in a similar way by viewers in France and the United States did not have as much of an independent effect on the emotional responses of the French viewers? To what extent is this effect different for Fabius and Chirac?

Political attitudes and emotions seem to be so completely integrated in the French system that emotional responses to nonverbal cues depend, far more than is the case for American viewers, on the ideological-partisan relationship between the viewer and the leader whose expressive gesture is seen. But since the factor structure underlying the emotional responses is so similar in both countries, the precise effects of watching a leader's facial displays can indicate more specifically the way that various components of political cognition interact with nonverbal cues in producing viewer responses.

To explore this problem, emotional responses to Chirac, Fabius, and Reagan were analyzed in the image-only condition. Figures 2 and 3 show the average positive and negative emotional responses of subjects in the image-only media condition as a function of attitude (positive vs. negative)

and of the nature of the display (happiness/reassurance, anger/threat, and fear/evasion). Table 5 presents the analysis of variance results, giving the statistical significance of attitude, display, and the interaction between the two.

There is no significant difference in the intensity of French viewers' warm feelings when they see an angry/threatening or happy/reassuring leader without the sound (Figures 2a-c). Moreover, only for Fabius do his supporters feel significantly more warmth to his anger/threat than to his fear/evasion displays (Table 5). These results contrast sharply with past research in the U.S., where seeing facial displays of anger/threat consistently elicits weaker positive emotion than those of happiness/reassurance (McHugo et al., 1985; Masters et al., 1986). This tendency of Americans to respond more positively to happy/reassurance displays than to anger/threat displays is not limited to Reagan, since it has been observed in both psychophysiological responses and self-reports of emotion when seeing similar displays of Gary Hart (McHugo et al., 1987).

The cultural difference in the effect of anger/threat and fear/evasion displays is even more pronounced when considering negative or agonic emotional responses to excerpts seen without the sound (Figures 3a-c). For both supporters and critics of Reagan, image-only presentations of happy/reassuring displays elicit significantly less negative feeling than either anger/threat or fear/evasion (Table 5). In France, however, happiness/reassurance displays do not elicit significantly less negative emotion than do fear/evasion displays. For French viewers, the only significant contrasts were that Chirac's happiness/reassurance displays elicit significantly less negative emotion than his anger/threat, whereas Fabius' anger/threat elicits less negative feeling than fear/evasion (Figures 3b, c).

When seeing Chirac's displays without the sound, French viewers' feelings were significantly influenced by their prior attitude toward him, but display effects were limited to negative emotion (Table 5). After watching

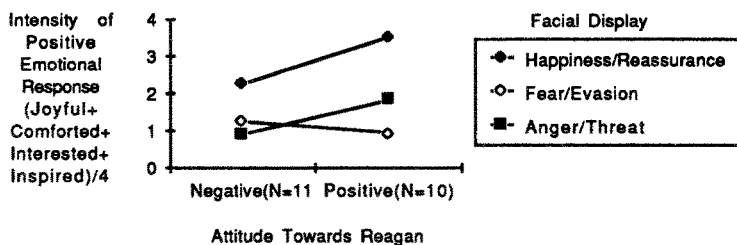


FIG. 2a. Viewers' self-reported positive emotional responses in the image only media condition by attitude to Reagan and by his HRV, A/T, and F/E facial displays. *Note.* Attitude towards Reagan on a 5-point scale with neutrals excluded. Response scales weighted by factor loadings (see Table 2).

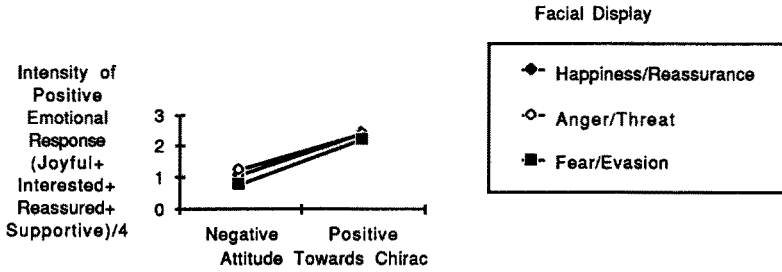


FIG. 2b. Viewers' self-reported positive emotional response in the image only condition by attitude towards Chirac and by his H/R,A/T and F/E Displays. *Note.* Attitudes toward Chirac on a -50 to +50 scale with neutrals excluded. Response scales weighted by factor loadings (see Table 2). Kind of display a between groups factor.

silent displays of Fabius, in contrast, both prior attitude toward the Socialist leader and the type of display had significant effects on emotional responses. It would appear that French viewers responded to Chirac in a more partisan or cognitive manner whereas their feelings when watching Fabius were also influenced by nonverbal cues. These results are consistent with the general impression of Chirac as a traditional party leader with stronger ideological roots, whereas Fabius was a technocrat propelled to status by the media. As in the U. S., therefore, individual "personality" or style can be assessed in part by the way nonverbal cues of different leaders effect the viewers' emotions and attitudes (Sullivan and Masters, 1988).

These results indicate an important difference in the effects of watching Fabius and Chirac that are best understood in the context of French political culture. When the French view their leaders, emotion and political

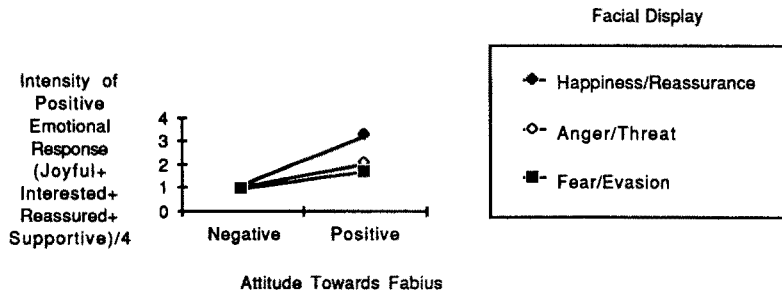


FIG. 2c. Viewers' self-reported positive emotional responses in the image only media condition by attitude towards Fabius and by his H/R,A/T, and F/E Displays. *Note.* Attitude towards Fabius on a -50 to +50 scale with neutrals excluded. Response scales weighted by factors loadings (see Table 2). Kind of display a between subjects factor.

TABLE 5. Positive and Negative Emotional Responses to Image Only Presentation of Expressive Displays of Fabius, Chirac, and Reagan

	Fabius		Chirac		Reagan	
	Positive Emotion	Negative Emotion	Positive Emotion	Negative Emotion	Positive Emotion	Negative Emotion
Prior attitude to leader:	$F(1,53) = 23$ $p = .00$	$F(1,53) = 13$ $p = .00$	$F(1,59) = 20$ $p = .01$	$F(1,59) = 8$ $p < .01$	$F(1,57) = 27$ $p = .00$	n.s.
Display (contrasts as indicated):	All	A/T vs. F/E	n.s.	All	All	H/R vs. A/T
	$F(2,53) = 4$ $p = .02$	$F(1,35) = 5$ $p < .03$		$F(2,55) = 3$ $p = .06$ H/R vs. A/T:	$F(2,57) = 25$ $p = .02$	$F(1,38) = 30$ $p = .00$ H/R vs. F/E:
Display × Attitude Interaction	$F(2,53) = 3$ $p < .08$	$F(1,35) = 5$ $p < .04$	n.s.	$F(1,36) = 5$ $p < .04$	n.s.	$F(1,38) = 15$ $p = .00$ A/T vs. F.E: n.s.
<i>Number of Subjects in Seeing Each Facial Display</i>						
Attitude:	H/R	A/T	F/E	H/R	A/T	F/E
Positive	10	16	10	14	14	10
Negative	10	6	7	10	6	11
				8	10	10
				13	11	11

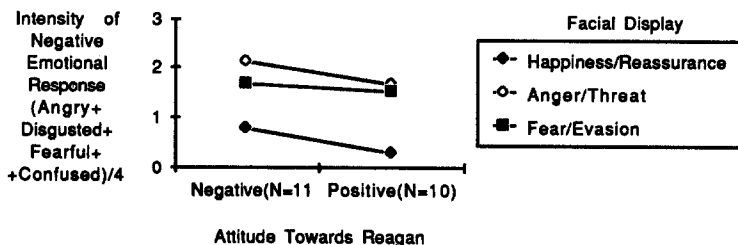


FIG. 3a Viewers' self reported negative emotional responses in the image only media condition by attitude to Reagan and by this H/R, A/T, and F/E displays. *Note.* Attitudes Towards Reagan on a 5-point scale with neutrals excluded. Response scales factor weighted by factor loadings (see Table 2).

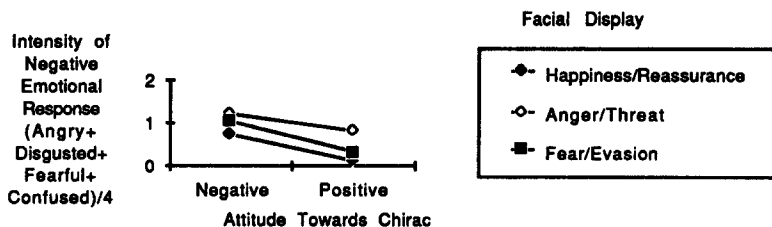


FIG. 3b. Viewers' self-reported negative emotional responses in the image only condition by attitude towards Chirac and by his H/R, A/T, and F/E displays. *Note.* Attitude on a -50 to +50 scale with neutrals excluded. Emotional response scores weighted by factor loadings (see Table 2).

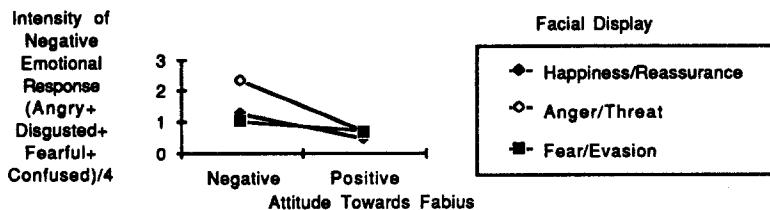


FIG. 3c. Viewers' self-reported negative emotional responses in the image only media condition by attitude towards Fabius and by his H/R, A/T, and F/E facial displays. *Note.* Attitudes towards Fabius on a -50 to +50 scale with neutrals excluded. Emotional response scales weighted by factor loadings (see Table 2). Kind of display a between groups factor.

attitude seem to be closely linked, whereas among American subjects prior attitude and the effects of watching expressive displays are more independent of each other. Since the feelings reported here occur when the excerpts are seen without the sound, they are not merely reflections of differing attention to verbal messages or ideological appeals.¹¹

The differences in the effects of prior attitude and types of display observed in this experiment are consistent with widely presumed views of the difference between French culture, with its more hierarchical norms, and the egalitarian style of the United States. Because of relatively small sample sizes and the restricted number of stimulus figures, however, further research is needed to determine that the differences in positive emotional response to anger/threat and in the integration of attitude and nonverbal cues are indeed cultural in origin (and not merely a reflection of responses to the specific leaders shown in these studies).¹²

CONCLUSIONS

The research described here utilizes theories from social psychology and ethology to explain French and American viewers' emotional and cognitive responses to televised expressive displays of their political leaders. Our experimental results show directly how emotional responses enter the process by which voters establish or change their attitudes toward political leaders and candidates. While the importance of emotions has been stressed by some recent studies of political cognition (e.g., Abelson et al., 1982; Lau and Erber, 1985; Marcus, 1988), these studies have largely been based on public opinion polls and are greatly enhanced by understanding some of the mechanisms directly influencing citizens as they watch today's leaders on television.

From a methodological perspective, this approach reveals the utility of experimental methods that have begun to be introduced to political science (Iyengar, Peters, and Kinder, 1982; Iyengar and Kinder, 1985, 1987). It also reflects, however, the importance of nonverbal cues of dominance and subordination that have been found to play a central role in organizing social interaction among nonhuman primates (Chance, 1976) as well as human children (Barner-Barry, 1981, 1986; Montagner, 1978). Along with parallel work on acoustic and paravocal cues (J. Schubert, 1986, 1987), research on facial displays as communicative signals thus makes it easier for us to understand many otherwise puzzling aspects of the political process.

Countless examples, from Muskie's "sobbing" to Oliver North's appearance in the Iran-Contra hearings, could be cited. In France during the period of the study reported here, for example, then Prime Minister Fabius' standing in public opinion polls plummeted after a disastrous debate with Chirac. While this was generally assumed to have been largely due to Fabius' apparent loss of self-control in an apparently unprovoked personal attack on his rival (see note 4), the magnitude of the shift and its nationwide character are best explained as a consequence of the emotional response of viewers to a leader's expression of culturally inappropriate nonverbal cues.

Similarly, there was a marked increase in the percentage of American voters not believing President Reagan's denial of trading arms for hostages after his press conference of November 19, 1986 (ABC Polls for November 13 and 19, 1986); during this appearance, as the videotape shows, Reagan repeatedly displayed fear/evasion and unprovoked anger/threat, generating an impression of loss of control and lack of sincerity.

While the studies reported here contribute to our understanding of the role of nonverbal cues in such media events, they also can be used to characterize differences in political culture and individual leadership styles. In France, controlled displays of anger/threat seem to be expected by viewers and generate warm feelings; with the exception of American women who support the leader (Sullivan and Masters, 1987), similar displays are less likely to produce favorable emotions among Americans. Awareness of such differences in expected display behavior can only improve our understanding of cultural contacts in diplomatic and business relations as well as in analyzing political events.

Finally, this experimental approach promises to provide useful insights into individual variations in the personality and style of rival leaders. In the French experiment, the displays of Chirac were relatively ineffective in transmitting positive emotion; much the same was noted in an experimental study comparing Walter Mondale to his rivals in the 1984 American presidential campaign (Sullivan and Masters, 1988). If we are to understand the dynamics of political leadership in the age of television, such obvious phenomena must move from the realm of anecdote to the center of careful research in the discipline of political science.

NOTES

1. Although human females seem to decode the facial displays of infants with greater accuracy than do males (Babchuk et al., 1985), it would be an error to assume that females always decode nonverbal cues more accurately than males (cf. Hall, 1978; Masters, forthcoming). On the contrary, in one experimental test of accuracy in recalling the precise mixtures of happy/reassuring, anger/threat, and fear/evasion displays by President Reagan in carefully edited news excerpts, males—not females—were more accurate in their recall (Sullivan et al., 1984). As Lorenz emphasized some time ago, the stimulus value of the sight of a conspecific depends greatly on the social context as well as on the attributes of the animal being observed (Lorenz, 1970). Also important, however, is the evidence of a gender difference in sensitivity to agonistic as compared to hedonic displays (Sullivan and Masters, 1987; Masters, forthcoming).
2. Context also affects responses to anger/threat displays. Apparently unprovoked outbursts of aggressiveness, especially in an interview context where such behavior is deemed inappropriate, are perceived as a loss of control and generate negative responses to leaders. In France, displays of this kind of Fabius in a major debate with Chirac in October 1985 had

dramatic effects, as Fabius lost five and Chirac gained seven points in national opinion polls (*Figaro Magazine*, November 9, 1985, pp. 126–127).

3. Participants in this first French study were students at the Université de Paris-X (Nanterre), where the experiment was arranged through the help of Professor Maurice Robin of the U.E.R. de Sciences Juridiques, Administratives et Politiques; this university was chosen because its student body provides an unusually representative sampling of political opinions, unlike many other French universities, thereby permitting us to conduct a study with college-age subjects similar to those used in the comparable American research on responses to different candidates during a campaign (Masters et al., 1985, 1986; Sullivan and Masters, 1988). That our French sample represented a reasonable variety of political opinions, comparable to the sample in the United States to which it is compared below, is clear from the following breakdown of pretest attitudes toward the leaders studied:

Scale	Fabius	Chirac	Scale	Reagan
+50 to 31	11% (7)	19% (12)	4	11% (14)
+30 to 11	31% (19)	24% (15)	3	27% (35)
+10 to -10	34% (21)	29% (18)	2	17% (22)
-10 to -30	16% (10)	14% (9)	1	40% (53)
-31 to -50	8% (5)	14% (9)	0	5% (6)

4. In a subsequent experiment in West Germany, replicating our methods with happy/reassuring and anger/threat displays of Kohl, Rau, and Strauss, viewers also discriminated clearly among displays (Flohr, Tonnesmann, and Pohls, 1986, and personal communication).
5. In the French experiment it is noteworthy that Fabius' happy/reassuring displays were described as having higher levels of fear than were those of either Chirac or LePen; in the American study which focused on the Democratic presidential candidates, the same was true of Mondale and Hollings (Masters et al., 1985, Table 6). Further research would be required—including frame-by-frame objective coding of stimulus material combining a version of the FACS system (Ekman and Friesen, 1978) with the real time methods of the "Bernese System" (Frey et al., 1981, 1983; Hirsbrunner, et al., 1981)—to discover precisely the contributions of culture, individual display behavior, and social context to these results.
6. If a third factor is extracted, it is consistently far weaker than either of the two factors reported here (with an eigenvalue less than the conventional 1.0 cut-off). Elsewhere, however, we have reported the three-factor solutions for descriptive ratings of all three French leaders, showing their remarkable similarity to the three factor solutions for descriptions of President Reagan (cf. Masters et al., 1986; Masters and Sullivan, 1986).
7. See Table 2 for the results of a multiple analysis of variance with descriptions of dominance and reassurance as independent and attitude towards leader, the nature of the display, and the interaction between the two as independent variables.
8. These same dimensions have been used to describe the organization of primate social behavior (Chance, 1976) as well as human personality types and the neurotransmitter systems underlying cognitive processing of environmental cues (Cloninger, 1987).
9. The parallel factor analysis of emotional responses to all three candidates was substantially identical, but for purposes of comparison to the American data on Reagan, we report the findings for the two "legitimate" rivals shown in our experiment; responses to LePen will be analyzed in subsequent reports.
10. In the two party American system, party identification is traditionally measured by the seven point self identification scale with the ends of the scale anchored by *Republican* and

Democrat with Independent in the center. Because respondents in the French multiparty system often confuse membership in and identification with a party, such a bipolar scale is not feasible. Because of these difficulties, a simple seven point attitude scale was used. Although our interpretation of the results is not affected by this procedure, care should be taken in comparing results based on the different measures.

11. The hypothesis that the emotional responses of French viewers are more dependent on their political cognitions and attitudes toward the leader than is the case in the United States can also be tested by a multiple analysis of variance of positive and negative emotional responses in the image only media condition. The three cognitive measures used in our study are: (a) party orientation, (b) ideological self identification, and (c) attitude towards the leader. In each analysis of variance, the independent variables were the nature of the display (happiness/reassurance vs. anger/threat, happiness/reassurance vs. fear/evasion, and anger/threat vs. fear/evasion), the viewer's score on the dichotomized cognitive variable, and the interaction of display contrast and the cognitive variable. For each of the three leaders, there are eighteen contrasts for a total of fifty-four for the three leaders. As the table below shows,

	Attitude to		Attitude to			
	Party	Display	Ideology	Display	Leader	Display
Reagan	17% (12)	67% (6)	42% (12)	67% (6)	25% (12)	67% (6)
French Leaders	42% (24)	17% (12)	42% (24)	25% (12)	38% (24)	08% (12)

American viewers' emotional responses to Reagan's facial displays were shaped independently by the nature of the display in two-thirds of the contrasts. There were no significant interactions between the nature of the display and party identification, ideological identification, or attitude towards Reagan in evoking emotional responses. In contrast, the emotional responses of French viewers were determined principally by a cognitive variable (partisanship, ideology, or attitude to the leader); there were also some significant interactions of a cognitive variable and the display contrast. Only in a small percentage of cases for negative emotional responses to Chirac did the nature of the display have an independent effect.

12. A major comparison of the nonverbal behavior of leaders in France, West Germany, and the United States that should clarify this point is now underway (Frey, 1987).

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