

# EMOTIONAL RESPONSES TO THE NONVERBAL BEHAVIOR OF FRENCH AND AMERICAN POLITICAL LEADERS

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**This paper summarizes the results of a series of experimental studies on the emotional responses of American and French viewers to televised excerpts of their leaders' facial displays. Using a combination of ethological and social-psychological theory it develops an explanation of such emotional responses.**

This paper reports the results of a comparative experimental program that extends to France the work of Masters and Sullivan on the evocative power of political leaders' facial displays seen on television (Lanzetta et al., 1985; Masters et al., 1986; Masters and Sullivan, 1989; Sullivan, et al., 1991).<sup>1</sup> The purpose of the French experimental program was to assess the external validity of the propositions based on the results of the American experiments.<sup>2</sup> Masters and Sullivan have developed their theoretical approach more fully elsewhere (Masters et al., 1986, especially Table 1; Sullivan et al., 1991).<sup>3</sup>

## THEORETICAL PERSPECTIVE

Ethologists since Darwin have emphasized the social signaling role of non-verbal gestures among nonhuman primates. While many animals communicate by postures and vocalizations, for primates facial gestures are central to the process by which they establish and maintain social dominance (Chance, 1976; de Waal, 1982; Van Hooff, 1969). For ethologists, a single element of an expressive display, such as raised eyebrows or a smile, can acquire multiple functional significance in communicating reassurance, dominance, and/or subordination (Eibl-Eibesfeldt, 1979; Van Hooff, 1969).<sup>4</sup>

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While some of the just cited studies treat the social signaling role of facial displays, others examine their communicative significance in terms of the emotions they evoke. For example, Englis, Vaughan, and Lanzetta (1982) use a conditioning paradigm to explore how a sender's "happy" face can come to evoke a "fear" emotional response in the receiver. Explanations of such results treat the facial display of the sender as a source of information for the receiver about "expected" pleasant or painful outcomes. Previous work suggests that a combined social psychological-ethological framework might be a useful way of incorporating expressive display variables in a theory of political leadership (e.g., Ekman and Friesen, 1976; Ekman and Oster, 1979; Lanzetta, Cartwright-Smith, and Kleck, 1976; Lanzetta and Orr, 1980; Plutchik, 1980).

Despite differences in approach, ethology and social psychology show an exceptional degree of convergence on two basic propositions. First, humans decode accurately the emotion that a specific, expressive facial cue represents both within cultures and across cultures (Ekman and Oster, 1979).<sup>5</sup> Second, three dimensions relating to attack, flight, and bonding or affiliation seem to underlie many of the differences in responses to human and nonhuman primate facial displays (Eibl-Eibesfeldt, 1979; Masters, 1976; Morris, 1956; Van Hooff, 1969).

France was chosen as an experimental site because traditional accounts of the French party system describe it as highly centralized and one in which political ideology is of greater significance than in the United States.<sup>6</sup> According to this view, 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 1985 more French (80%) than American (47%) voters identified themselves either as liberals or conservatives.<sup>7</sup>

However, revisionist accounts of French party politics show the two systems to be similar in ways that make the comparison a less rigorous test of the facial display's evocative power. As early as 1962, Converse and DuPeux show that the French citizen was no more likely than his American counterpart to hold ideologically intense opinions. They argue that the French multiparty system may confuse, rather than polarize, the electorate ideologically and that only on the elite level is it plausible to argue that the French are more ideological than the Americans (Converse and DuPeux, 1962). Further, Converse and Pierce show in more detail that most French citizens neither identify with a major party nor use ideological criteria in their vote choice (Converse and Pierce, 1986). Yet Percheron and Jennings (1981) show quite convincingly that French parents transmit ideological identification to their offspring as American parents transmit party identification to their offspring.<sup>8</sup>

## HYPOTHESIS

The work of Ekman as well as that of ethologists predicts that facial displays and the emotional responses they evoke are universal.<sup>9</sup> Such perspectives suggest that French and American viewers will respond similarly to similar displays of emotions by their own leaders.

The empirical work of Converse and DuPeux, Converse and Pierce, as well as that of Percheron and Jennings, suggests that the French elite sample—more than its American counterpart—will respond emotionally to the displays more by ideological identification and party support than by the nature of the display.<sup>10</sup> If so, display effects will be much weaker in the French than in the American experimental sample and, conversely, party support and ideological identification effects will be much stronger.

## PAST RESEARCH

The experiments have been based on the same fundamental paradigm. Masters and Sullivan selected televised segments from 20 to 120 seconds long from television news coverage of nationally known American political leaders.<sup>11</sup> The segments contained an intelligible verbal message of the leader and minimal interference from other visible cues, such as hand movements, so that subjects either see or hear the excerpts. Later experiments in the program monitored physiological signs of emotional arousal by measures of facial movement, heartbeat, and skin conductance.<sup>12</sup>

Broadly speaking, the research of Masters and Sullivan has demonstrated three main features of the way viewers respond to the experience of watching nationally known American political leaders on television. First, the emotionally arousing effects of nonverbal displays are real. Subjects in the United States accurately describe each of the three displays, and respond emotionally with a different pattern of self-reported and psycho-physiological response (Lanzetta et al., 1985; McHugo et al., 1985). Moreover, viewers and listeners of the expressive displays distinguish happiness/reassurance (H/R), anger/threat (A/T), and fear/evasion (F/E) and report consistently different emotional reactions to the each display (Lanzetta et al., 1985).

Second, in the United States, the verbal self-reports of emotional response have the same two-dimensional structure found in analyzing voters' emotions in survey research data (Abelson et al., 1982; Marcus, 1988). As a result, affect does indeed seem to be a phenomenon that is theoretically distinct from political attitude. Third, the type of display that has been seen or heard sometimes combines with prior attitude to elicit an emotional response. Finally, it has been shown that such emotional responses elicited by a political

leader's displays affect the viewer's attitude toward the leader (Sullivan and Masters, 1988).

## METHODS

The French and American elite samples are recruited from two university populations: the American sample was drawn in 1982 from an Ivy League university and the French sample in 1986 from a university outside Paris. In the American experiments small groups of college students and adults viewed, heard, or read transcripts of three display exemplars—happy/reassurance (H/R), anger/threat (A/T), and fear/evasion (F/E)—of President Reagan (Masters et al., 1986; Sullivan et al., 1991). Experimenters presented three excerpts of each kind of display to subjects randomly assigned to one of five groups. Group 1 saw and heard the excerpts (Sound Image) as they would have at home, Group 2 saw the same excerpts without sound, Group 3 heard the same excerpt without the image, Group 4 saw and heard the same excerpt with sound sufficiently garbled so that subjects could not understand the message, and Group 5 read a transcript of the excerpt. After each excerpt, subjects recorded on 0–6 scales how strong, joyful, comforting, angry, fearful, and confused Reagan was in the excerpt. Then they reported on 0–6 scales their feelings of joy, interest, comfort, sympathy, fear, anger, disgust, and uneasiness as they saw or heard the excerpt.<sup>13</sup>

For the French experiment, the experimenters selected close-up images of Fabius (then the Socialist prime minister), Chirac (Gaullist mayor of Paris and, after the 1986 election, prime minister), and LePen (the leader of the right-wing FLN party) that appeared on the highly popular interview program, *l'Heure de Vérité*.<sup>14</sup> They chose one exemplar of happiness/reassurance, anger/threat, and fear/evasion from the display sample for each leader using the same criteria as employed previously (Masters et al., 1986; Lanzetta et al., 1985). Each excerpt focused on a meaningful verbal statement while avoiding extraneous images of interviewers or the audience. Subjects described and reported their emotional reactions to each excerpt on translations into French of the scales used in the American experiments.<sup>15</sup>

With minor modifications the French experimental design replicated that of the earlier American experiment. The English-French translation of the descriptive and emotional response scales for the French experiment was validated by comparing the French to English and the English to French translation.<sup>16</sup> The French subjects saw or heard the soundtrack of a stimulus videotape, containing nine sequences (one of each display type for Fabius, Chirac, and LePen) through monitors in three adjacent rooms.<sup>17</sup> In contrast to the American experiments in which some subjects in one room saw the facial display while other subjects in another room heard the same expressive dis-

play, the French subjects in the different rooms both saw and heard different displays of their leaders. For the first three excerpts (one by each leader), French subjects in the first room saw and heard the displays, in the second room they only saw the displays, and in the third room they only heard the displays. For each successive set of three displays the media condition was changed. In this way, one-third of the subjects saw or heard one-third of the displays in the sound-plus-image, sound-only, or image-only media conditions.<sup>18</sup> After each excerpt, on 0–6 scales subjects first described the expressive display then reported their emotional reactions to it.<sup>19</sup>

Except for the French subjects' attitudes toward the extremist NLF party and its leader, LePen, levels of attitudes of the French and American subjects toward their major parties and leaders are roughly equivalent.<sup>20</sup> The French and American subjects are equally ideological; 79% of the subjects in each sample think of themselves as either liberals or conservatives. However, the French sample is more conservative ideologically than its American counterpart ( $p = .00$ ,  $F = 39$ ).

To test the hypothesized French and American differences in the structure of partisan, ideological, and candidate support in the United States and France, attitudes towards their leaders—Reagan in the United States and Chirac, Fabius, and LePen in France—are regressed on party support (party identification in the American case) and ideological identification (see Table 1).<sup>21</sup>

In both samples, the variables—party support and ideological identification—account for roughly 55% of the variation in attitudes toward the major party leaders and the regression weights for party support and ideological identification are remarkably similar. The regression results for attitude toward Reagan and for LePen are consistent with a model in which ideological identification and attitude toward party independently affect attitude toward candidate. In contrast, the regression results for the French major party candidates—Chirac and Fabius—are consistent with a model in which ideological orientations of the French subject shape their attitudes toward the parties which, in turn, affect their attitudes toward the candidates; the value of the partial regression coefficient for ideological identification and attitude toward either Chirac or Fabius is not statistically significant. These results also support the earlier mentioned argument of Percheron and Jennings that the French learn their ideological identification before deciding which party to support.<sup>22</sup>

Such a perspective does not assume that the parties are ideologically homogeneous only that citizens use ideological perspectives in thinking about them. The younger college-educated citizens in both cultures think politically in ideological terms but express their ideological convictions in different ways. If one accepts the analysis of Percheron and Jennings that ideological identi-

**TABLE 1. Subjects' Attitude Toward French and American Leaders by Their Support for Leader's Party and by Ideological Identification**

	Reagan	Chirac	Fabius	LePen
Adjusted $R^2$	.53	.59	.52	.38*
Values of Standardized Partial Regression Coefficients For:				
Party Support*	.35°	.45°	.39°	.73~
Ideological Identification	.32°	.19	.11	.35~

\*In the American case, party support is measured by the standard measure of party identification and in the French case by attitude toward party. For the American sample, ideological identification, 0 = Liberal and 6 = Conservative; for the French sample it was scored to be congruent with attitude toward the candidate, liberal for Fabius and conservative for Chirac and LePen. Asterisked regression coefficient values are statistically significant at  $p \leq .05$ . Because attitude toward LePen was extremely skewed, it was dichotomized and the regression coefficient values are produced by a logit analysis.

°Concentration coefficient value ~ = loglinear parameter estimates.

fications are learned prior to any disposition to support a party, the above results suggest that party support mediates the relationship between ideological identification and candidate support. In the more person-centered American system, citizens evaluate their leaders directly.<sup>23</sup> American subjects use both their party and ideological identifications in evaluating Reagan whereas the French express their attitude toward the candidates in terms of their support for his party and their ideological convictions shape their attitude toward party and through party their attitude toward the leader. These results are consistent with the work of Percheron and Jennings as well as that of Converse-DuPeux and Converse-Pierce.<sup>24</sup>

To compare the intensity of the emotional responses of opponents and supporters to the three kinds of displays, the index of viewer political support for each leader was constructed as the average of the three variables discussed above: attitude toward candidate, support for his party, and ideological identification. For the analysis of variance, the index of political support for each leader was dichotomized at its median value with subjects below the median support score labeled "opponents" and those with scores above the median "supporters."<sup>25</sup>

Although the fundamental design features of the two experiments are similar, there are sharp differences in their partisan context. First, the American experiments focus on a president during the early years of his incumbency. In contrast, the French experiments use the televised H/R, A/T, and F/E facial displays of three political leaders taken from the parliamentary election campaign television news coverage. Because the partisan context of the two experiments differs, the experimental results may not be precisely comparable.

Second, the reader should bear in mind that both experimental samples are from college student populations.

To resolve the question of the degree of similarity in French and American audience reaction to the expressive displays of their political leaders requires that we answer satisfactorily three preliminary questions. First, do the French and American subjects use the adjective scales in reporting their emotional responses to what they have seen or heard in the same way? The results indicate one positive or "hedonic" and one negative or "agonic" dimension. Separate factor analyses of the responses of those who saw, heard, or both saw and heard the expressive displays reveal similar dimensions. Even the specific weightings on these two factors are similar to those found in survey research factor analyses (Abelson et al., 1982; Marcus, 1988; Masters and Sullivan, 1989).<sup>26</sup> The pattern of results clearly shows that the French and American subjects do use the adjective pairs in the same way.

Second, do viewers distinguish the emotions expressed by their leaders in the same way? Viewers in both countries decode correctly the expressive displays of their political leaders. Both samples distinguish more clearly the H/R from either the A/T or F/E display than they did the A/T from the F/E display. Nine of 12 comparisons involving the three displays of each of the four leaders are statistically significant at  $p < .05$ . The results are quite consistent with Ekman's view that, broadly speaking, facial gestures of emotion are the same regardless of culture.<sup>27</sup>

Third, do French and American audiences attribute the same communicative significance to the different displays? The reader will recall that we distinguished the nature of the display (happiness, anger, and fear) from its communicative significance (reassurance, threatening, and evasive). Although French and American subjects attribute the same communicative significance to the displays of Chirac and Reagan respectively, they differ when the comparison is extended to the displays of Fabius and LePen. In contrast to American subjects, French subjects clearly discriminate the A/T and F/E displays of Fabius and LePen.<sup>28</sup>

The above results justify the construction of indexes of positive and negative emotional response for the French and American experimental subjects: for positive emotional response equals the average of the factor weighted scores for *positive* (joyful, comforted, and interested) and for negative emotional response equals the average of the factor weighted scores for *negative* (angry, disgusted, and fearful).<sup>29</sup>

## EMOTIONAL RESPONSES IN THE IMAGE-ONLY MEDIA CONDITIONS

Viewers' self-reports of their emotional response after seeing the image-only excerpt of a political leader are reasonable measures of the emotions

elicited by watching leaders.<sup>30</sup> As the analysis of variance results in Figure 1 indicate, American viewers differed significantly in the intensity of positive and negative emotional response to each display. Although the results for viewers' emotional responses to the displays of the French leaders are not as robust, the pattern of response is similar to that of the viewers of Reagan's displays.

Both the French and American subjects in the image-only media condition respond more positively to each major party leader's H/R than to his A/T or F/E display [Reagan HR vs. AT  $p = .00$ ,  $F = 76$ , HR vs. FE  $p = .00$ ,  $F = 47$ ] [Chirac HR vs. AT  $p = .09$ ,  $F = 3$ , HR vs. FE  $p = .05$ ,  $F = 4$ ] [Fabius HR vs. AT  $p = .00$ ,  $F = 11$ , HR vs. FE  $p = .00$ ,  $F = 13$ ] [Lepen n.s.]. However, they differ in responding to their leaders A/T and F/E displays. The American sample responds more positively to Reagan's F/E than his A/T display whereas the French respond more positively to Chirac's and Fabius's A/T displays than to their F/E display [Reagan  $p = .02$ ,  $F = 6$ ] [Chirac  $p = .05$ ,  $F = 4$ ] [Fabius  $p = .00$ ,  $F = 13$ ].

As Figure 2 shows, both American and French viewers respond less negatively to their major party leaders' H/R than to their A/T or F/E display [Reagan HR vs. AT  $p = .00$ ,  $F = 65$ , HR vs. FE  $p = .00$ ,  $F = 47$ ; Chirac HR vs. AT = n.s.; HR vs. FE = n.s.; Fabius HR vs. AT = n.s. HR vs. FE = n.s. LePen HR vs. AT  $p = .00$ ,  $F = 9$ , HR vs. FE n.s.].

In sum, French and American viewers respond similarly to the facial displays of their leaders and the experimental results provide modest support for the proposition that cultural and political factors do not mediate the effects of such displays. The paper now turns to three possible reasons for the differences in the French and American sample results.

### (1) Differences in Emotional Response by Party Support and Partisan Context

Traditional accounts of French party politics, as described at the beginning of this paper, suggest that the emotional responses of French opponents and

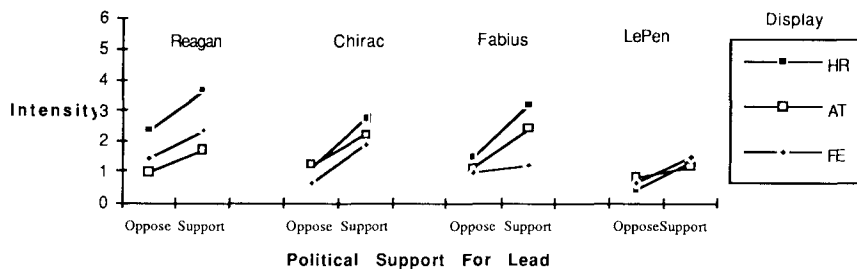


FIG. 1. Intensity of the positive emotional response of opponents and supporters to the image-only displays of Reagan, Chirac, Fabius, and LePen.



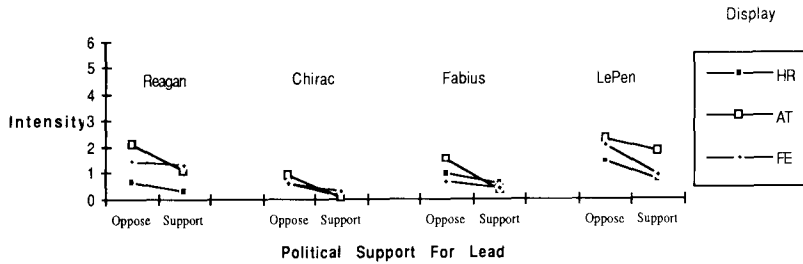


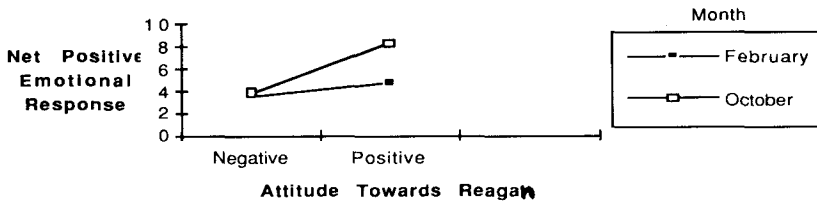
FIG. 2. Intensity of the negative emotional response of opponents and supporters to the image-only displays of Reagan, Chirac, Fabius, and LePen.

supporters to their leaders' expressive displays will be more polarized than those of their American counterparts and, as a consequence, reduce the magnitude of the display effects.

However, the evidence indicates that American opponents and supporters of Reagan differed as much in the intensity of their positive emotional response to Reagan's displays as did their French counterparts to the displays of Chirac and Fabius.<sup>31</sup> Yet there is some evidence that partisan context does heighten the effect of party support on the intensity of viewers' emotional responses. Masters and Sullivan conducted their American experiments in a variety of political contexts: the first series in the second year of a president's incumbency, a second series during the presidential primary season, and a third series in October of a presidential election year. Moreover, the American experiments were conducted in three successive presidential election years: 1984, 1988, and 1992. The 1984 experimental data on emotional responses to Reagan's H/R image-only display provides some support for such an interpretation. As Figure 3 shows, Reagan's October supporters report a significantly more net positive emotional response to the same H/R display that the February sample saw ( $F = 11.49$ ,  $p < .001$ ). Clearly, the campaign polarized the emotional responses of his opponents and supporters in a way that may account for the French and American sample differences reported in the body of the paper.

## (2) Differences in Emotional Response Intensity by Media Condition and by Sample

In all the Masters and Sullivan American experimental studies conducted since 1981, subjects respond more positively to a political leader's image-only than his sound-only H/R display. The pattern of the French subjects' image- and sound-only emotional responses is consistent with the American results (significance by an  $F$ -test of the difference in the intensity of sound- and



**FIG. 3.** Net positive emotional response to Reagan's image-only facial display in February and October of the 1984 election year.

image-only emotional response to the H/R sound- and image-only display) [Reagan  $p = .00$ ,  $F = 13$ ; Chirac  $p = .08$ ,  $F = 3.3$ ; Fabius  $p = .03$ ,  $F = 5$ ; LePen = n.s.] Moreover, subjects in both groups do not respond differently to the A/T and F/E displays in the image-only and sound-only media conditions.<sup>32</sup>

### (3) Differences in Emotional Response Because of Differences in the Evocativeness of Leader Displays

The robustness of the American sample results relative to those of the French sample may be due to the evocativeness of Reagan's H/R display. The image-only H/R displays of the French candidates are considerably less evocative than those of Reagan. The results of the 1984 American experimental work clearly show that the October sample viewers report significantly higher levels of positive emotion to Reagan's image-only H/R display than to that of any other candidate (Reagan = 3.90, Askew = 2.71, Mondale = 2.12, Jackson = 1.71, Glenn = 2.21, McGovern = 2.41, Hart = 2.88, Cranston = 2.01, Hollings = 1.26).<sup>33</sup>

## CONCLUSIONS

The experimental results in France and the United States show that both American and French subjects respond emotionally in similar ways to the image-only H/R, A/T, and F/E facial displays of their leaders. Although the French results are less robust than those of their American counterparts, both show that citizens' emotional reactions to their political leaders depend on the leaders' nonverbal cues. Yet the differences are instructive as well. American subjects respond more positively than their French counterparts to Reagan's Happiness/Reassurance display and, in contrast, the French respond more

positively to their leader's Anger/Threat displays and more negatively to their leaders' Fear/Evasion displays.

Both American and French experimental results suggest that theories explaining leaders' successes and failures in mobilizing the support of followers should deal with the role of nonverbal cues. There are two aspects of the theoretical problem. First, some leaders are more gifted than others in using their expressive nonverbal behavior to mobilize the support of their followers through eliciting appropriate emotional responses. Second, a leader may be more effective in mobilizing support by eliciting positive emotions whereas others may rely on mobilizing support by directing their anger and fear to appropriate targets. As the comparison of the emotional responses of the French and American subjects to their leaders indicates, the American leader was particularly effective at mobilizing support through eliciting a positive emotional response whereas the French leaders could rely on anger/threat as well as happiness/reassurance displays.<sup>34</sup>

## NOTES

1. A revision of a paper by Professors Denis G. Sullivan and Roger D. Masters presented to the Conference on "Reconsidering Democratic Theory," Williams College, July 1989. Research is supported by grants from the Rockefeller Center for the Social Sciences, Dartmouth College. Grants from the Harry Frank Guggenheim Foundation, National Science Foundation, Maison des Sciences de l'Homme (Paris) have supported the earlier research of Masters and Sullivan. Although Professors Roger D. Masters and Denis G. Sullivan designed the experiment and constructed the attitude scales, Professor Masters arranged and ran the experiment during the 1985 parliamentary election campaign. In addition, he was the co-author on earlier reports of the experiment described in this paper. The present author assumes full responsibility for the interpretation of the experimental results described in this paper and thanks Professor Masters for his support and Dartmouth College students and faculty colleagues for their help. The Manova reanalysis of the French and American data was done with SPSS-4.
2. For a discussion of experimental methods in social settings, see Campbell (1957), pp. 297-313. For a preliminary summary of the findings of the French experiment, see Masters and Mouchon (1986).
3. Sullivan and Masters (1994), pp. 237-274.
4. See Ekman and Oster (1979), pp. 527-554.
5. *Ibid.*
6. Recent work has shown that past work on voting behavior understated the importance of ideological identification in American voting behavior and even with the correction of past errors, the importance of ideological identification in explaining American voting behavior has increased. See Ch. 8 "Ideological Reasoning," pp 140-163, in Sniderman, Brody, and Tetlock (1995). For a useful discussion of the more person-centered American system, see Kinder (1986); Lodge, McGraw, and Stroh (1989).
7. During the first four years of the Mitterrand presidency, 49% thought the Left/Right split dated. See Jack Hayward, "Ideological Change: The Exhaustion of the Revolutionary Impetus," in Hall, Hayward, and Machin (1990), pp. 30-32. The book contains a number of essays

that document dramatic changes in French politics since 1968, especially in the structure of public opinion.

8. Percheron and Jennings (1981). Further, French children think of themselves in ideological terms before they develop attitudes toward parties.
9. See Ekman and Oster (1979), pp. 527–544.
10. See Percheron and Jennings (1981).
11. For a discussion of experimental program, see Masters and Sullivan (1993), pp. 150–182.
12. Before using the subject's report of an emotional response as an indication that feelings or passions have really been evoked, clearly it is necessary to confirm the difference between cognition—whether verbalized or not—and emotions. To address this issue, videotaped stimuli of leaders were presented to subjects while measuring physiological responses known to be associated with what is generally accepted as an emotional experience (Petty and Cacioppo, 1981).  
The experimental results do support the proposition that self-reports of emotional experience track physiological indicators of emotional arousal. (For a full description of the experimental methods and the findings, see McHugo et al., 1985.) Readers of earlier versions of this paper argued that the self-reported emotional responses to the leader's displays are simply another indirect measure of attitude toward the leader. The claim has little merit. For extended comments on the problem, see footnote in Sullivan and Masters (1988), p. 355.
13. In the first studies, viewers recorded their response on nine descriptive and eight emotional response scales, with each scale described in terms of a triad of terms known to be highly correlated (e.g., descriptions that the leader was "strong, determined, self-confident"; or emotional feelings that "I felt fearful, worried, anxious"). After validating all scales and finding that there were two robust factors (see below), our most recent studies have used only four descriptive scales (strength, happiness, anger, and fear) and four self-reports of emotion (joy, anger, fear, and comfort).
14. See Penniman (1988).
15. The experimenters validated the English-French translation of the descriptive and emotional response scales by comparing the French to English and the English to French translations.
16. See Osgood and Tannenbaum (1957) for a discussion of the validity of the procedure, pp. 170–176.
17. To make the French and American experimental results more comparable, the U.S. results are presented only for the first of three H/R, A/T, and F/E displays that subjects viewed or heard. In addition, the American results are not presented for the filtered sound and transcript media condition. For a fuller discussion of those results, see Lanzetta et al. (1985).
18. The assignment of subjects to the three rooms in the French experiment resulted in slight bias by sex with a higher percentage of females in one room. By a Kolmogorov-Smirnov 2 sample test, the difference is not statistically significant ( $K-S-Z = 1.13, p < .16$ ). In addition, the subjects in one room were slightly less favorable in attitude toward Chirac than subjects in the other two rooms ( $F = 2.47, p < .09$ ).
19. Both French and American experimental subjects generally recognized the emotions expressed in the expressive displays of their leaders.
20. Because of the differences in the structure of the two attitude scales, precise comparisons are not possible.
21. American opponents of Reagan were Democratic in party preference, liberal in ideology, and neutral or hostile to Reagan. French opponents of Fabius were anti-Socialist, conservative in ideology, and neutral or hostile to Fabius. The dissimilarity in the bases of support in the two cultures—and the contrast between Fabius and Chirac in France—strengthens the "external validity" of any similarities in the evocativeness of the leaders' displays.

22. See Percheron and Jennings (1981). Of course, an alternative interpretation is that the measures of party support for the French and American subjects differ.
23. In the early studies of American voting behavior, the major American scholars—Converse, Miller, and Stokes—conceptualized attitudes in terms of three dimensions of support. Of course, evidence does show that in the early 1980s Americans became more conservative ideologically, and as Sniderman, Brody, and Tetlock report, citizens become more emotionally intense about their ideological commitments. See Sniderman, Brody, and Tetlock (1995).
24. The paper's earlier review of the literature in France cites Converse and Dupeux as well as Percheron and Jennings. Although Converse and DuPeux show that French and American voters are equally indifferent to politics, they suggest that on the elite level the French voters may be more ideologically intense than their American counterparts. In fact, the intensity of ideological identification is significantly higher in the American than in the French sample ( $p = .06$ ,  $t = 1.9$ ). See Percheron and Jennings (1981), pp. 431–436, for a more extended discussion of the role of ideological identification in France.
25. For support scores of Reagan, Chirac, and Fabius, subjects below the median were categorized as negative in attitude toward the leader and those above the median positive in attitude toward the leader. The mean attitudes of "opponents" of Reagan =  $-1.20$ , Chirac =  $-21$ , of Fabius =  $-14$ , and of LePen =  $-50$ ; for "supporters" of Reagan =  $.74$ , Chirac =  $+29$ , of Fabius =  $+28$ , and of LePen =  $-27$ .
26. Because the American experiment had five media conditions (sound + image, sound only, image only, filtered sound, and transcript) and the French experiment the first three, the factor analysis of the American data was limited to data from the first three media conditions. The results of the factor analysis of emotional responses to LePen's displays reveal a third factor with high loadings for the emotional responses of fear and confusion, which accounts for 12% of the total variance in response. For another discussion of these results, see Masters and Sullivan, 1989.
27. Of course, the occasions in which displays of a particular emotion are appropriate do vary from culture to culture. Each culture may have different display rules. Second, there is some cultural variation in the precise form of each display of emotion (Ekman, 1981).
28. For the American subjects, in the image only condition, except for the difference between the communicative significance of the A/T and F/E displays ( $<.47$ ), all other differences were statistically significant by a  $t$  test at  $p = .00$ . For the French subjects describing Chirac, HR vs. FE,  $p = .00$ , HR vs. AT =  $.00$ , AT vs. FE  $p < .95$ . For Fabius, subjects distinguished the communicative significance of all pairs (HR vs. AT, HR vs. FE, and AT vs. FE at  $p = .00$ ).
29. The factor score loadings are taken from principal components factor analyses retaining and rotating Varimax factors with eigenvalues  $>1$ . For Reagan, Chirac, and Fabius, the negative and positive factors account for one-third of the total variance. See Masters and Sullivan (1989); Masters et al. (1986).
30. For further evidence on this point, see McHugo et al. (1985).
31. See Ehrmann (1983) and Gaxie (1985) for traditional accounts of the role of ideological commitment in French politics. The analysis of variance results comparing the intensity of emotional response of French and American opponents and supporters to the different displays show no statistically significant differences.
32. Subjects respond more positively to Reagan's F/E display in the sound-only than in the image-only media condition.
33. Significance by a  $t$ -test Reagan vs. Mondale  $p = .00$ ,  $t = 5.7$ , vs. Hart  $p = .02$ ,  $t = 2.38$ , vs. McGovern  $p = .00$ ,  $t = 5.54$ , vs. Hollings  $p = .00$ ,  $t = 6.75$ , vs. Jackson  $p = .00$ ,  $t = 5.31$ , vs. Glenn  $p = .00$ ,  $t = 4.6$ , vs. Cranston  $p = .00$ ,  $t = 6.7$ , vs. Askew  $p = .00$ ,  $t = 6.3$ .
34. Although the present study cannot explain such a difference, it may be due to the evocative-

ness of Reagan's image-only H/R display in comparison with those of Chirac and Fabius. Moreover, one should be cautious in generalizing the similarities and differences observed in the two elite samples to their respective general electorates. As Converse has observed, French elites are recruited from university populations in a political system that "encourages them to a multi-faceted ideological expression which is too complex for most of the public to encompass." Approximately two-thirds of the experimental subjects in both countries came from professional-managerial families to which Converse referred in the above quotation. See Converse and DuPeux (1962), p. 290.

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