



Parsimony and Complexity: Developing and Testing Theories of Affective Intelligence

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The theory of affective intelligence posits that an individual's emotions help govern a reliance on political habits or, alternatively, deliberation and attention to new political information. Some of the evidence adduced draws on the fact that voters who are anxious about their own party's candidate do not rely blindly on their partisanship but instead consider policy and personality when they vote. In a provocative paper, Ladd and Lenz (2008) argue that emotions reflect an evaluative judgment, akin to likes and dislikes, that has little to say about attention and habit. Here we examine the ANES data from 1980 to 2004 and find that the affective intelligence theory's original findings remain statistically robust. On closer examination, we also learn that Ladd and Lenz reformulated the theoretical test by using a different operationalization of affect and a different dependent variable and found results at variance from ours. We find it an inappropriate test. In the end, we agree with Ladd and Lenz that cross-sectional data cannot crisply test the short-term impact of emotions on attention and habit and concur that ultimately experiments will move the debate forward. We further observe that Brader's (2005, 2006) powerful field experiments explicitly test the special effect of emotions on attention and judgment and support the affective intelligence model.

The April 2008 issue of *Political Psychology* (29:2) published the article "Reassessing the Role of Anxiety in Vote Choice" by Jonathan Ladd and Gabriel Lenz. The article examines our work on the role of anxiety in voting behavior and questions whether anxiety has the guiding role assigned to it in the theory

of affective intelligence (Marcus, Neuman, & MacKuen, 2000). They analyze ANES data with an alternative dependent variable and critical modifications of our model and thereby conclude that a simpler model they label “affect transfer” works just as well as the affective intelligence theory. And they suggest opting for the simpler account. We welcome this opportunity to revisit these questions.

At first blush, it occurred to us that the extension of the data series to 2004 might have led to a difference in inferences—after all, the elections of 2000 and 2004 serve as “out of sample” tests of the theory. But this is not the problem. It turns out that the differences between our results and theirs is a function of three decisions Ladd and Lenz made in their test of the theory.

First, they opted to replace the dependent variable we used, vote intention, with a different dependent variable, an index constructed from comparative feeling thermometers of the Republican and Democratic candidates. Second, they made a series of seemingly minor decisions that reflect their presupposition that emotion is unidimensional, a matter of like and dislike. **And third, they ignored the centrally important variable of novelty in the theory** and as a result modified the measurement model in ways that distort its fundamental character. We take up the consequence of each of these decisions in turn.

The Theoretical Question

In *Affective Intelligence and Political Judgment*, we suggested that ordinary people use their emotions to help manage their attention to the political world. Extrapolating from neuroscience, **we posited that people have two distinct emotional systems: a dispositional system that incorporates people’s normal feelings about things and a surveillance system that manages their attention.** Dispositions are surely complex but they are guided by two affective dimensions, enthusiasm and aversion, which are engaged by clearly different circumstances: reward and punishment. The surveillance system relies on neurologically distinct emotions, most notably anxiety, fear, or uncertainty, to signal that something about the world is not routine and that conscious attention is necessary.

In the book we reported on a number of survey-based tests that demonstrated the plausibility of affective intelligence. These included an examination of attention and learning in presidential elections, a test of people’s understanding of a novel insurgent primary candidate, and Kinder and D’Ambrosio’s demonstration that emotional reactions to the first Gulf War affected people’s evaluation of George H.W. Bush’s presidency. Since that book’s publication, we and others have continued to test the basic propositions in affective intelligence with some progress being made on that front. (For some recent examples, see Brader, Valentino, & Suhay, 2008; Valentino, Hutchings, Banks, & Davis, 2008; and Huddy, Feldman, & Cassese, 2007.)

One part of our book's evidence lies in an indirect test. If people normally rely on routine "standing decisions" in politics we expect them to vote in accord with their partisan orientation. However, if affective intelligence operates then we expect those whose surveillance systems signal something wrong in the world—through the emotion of anxiety—will stop and reconsider their standing decision. They will take a closer look at the candidates' policy proposals and personal qualities and actively decide which offers the more attractive choice.¹ At the end of the day, they may go ahead and vote for their party's nominee if that candidate makes sense. Or the comparative advantage may go the other way, and they will deviate from their standing decision, from their partisanship.

We tested this implication by using a very simple voting model. It was not our intent to create a full-fledged representation of the vote choice; instead we used a bare-bones model that might be robust enough to handle our subtle expectation. Here we posited the vote choice to be a function of the individual's partisan orientation (partisanship), the individual's comparison of the two candidates' policy proposals and comparison of the two candidates' personal qualities. We all understand that because this model would be tested with survey data it could be neither a predictive nor a causal model. Voter reports on partisanship, candidate policies and candidate personal qualities, and vote intention are all highly endogenous—consciously or unconsciously, people adjust their political views toward consistency as the election campaign goes on. Rather than trace causation, the model shows the "end" relationships between vote intent and either a standing choice (partisanship) or contemporary conditions (issues and candidates). In this way, it reveals when habits rule and when active reconsideration is possible.

The elementary proposition is that *vote intention* is a linear function of *partisanship*, *comparative policy positions*, *comparative personal qualities*, and election-specific constants (to take out historically driven events). We model the individual's reported vote intention (rather than reported vote) as intention is measured in the same preelection survey as the emotional responses and the candidate evaluations.

The implication of affective intelligence is that when their surveillance system is stimulated people will diminish their reliance on habitual choice, partisanship, and pay more attention to matters of policy and personal character. Thus, our voting components should have relatively different weights for those stimulated and those not. We add in the affective intelligence tests in the form of multiplicative interaction terms to produce:

¹ We treat this phenomenon as though we had a cool-headed decision maker choosing an insurance policy. In fact, we expect the process to be much more haphazard—driven by casual conversations and unconscious realizations of what is at stake in a presidential race.

$$\begin{aligned}
\text{Vote Intention} = & \gamma_p [Anxiety_{oc} \cdot Partisanship] \\
& + \gamma_{cp} [Anxiety_{oc} \cdot Comparative Policy Positions] \\
& + \gamma_{cq} [Anxiety_{oc} \cdot Comparative Personal Qualities] \\
& + \beta_p Partisanship \\
& + \beta_{cp} Comparative Policy Positions \\
& + \beta_{cq} Comparative Personal Qualities \\
& + Year\text{-}specific Constants
\end{aligned}$$

where $Anxiety_{oc}$ is expressed anxiety about one's own candidate and $[Anxiety_{oc} \cdot Partisanship]$, $[Anxiety_{oc} \cdot Comparative Policy Positions]$, and $[Anxiety_{oc} \cdot Comparative Personal Qualities]$ are the multiplicative interaction terms.

The critical test lies in the coefficients associated with the interaction terms. Affective intelligence expects that γ_p will be negative and that γ_{cp} and γ_{cq} will be positive. That is, when anxiety about one's own candidate is high (when the surveillance system signals that something is wrong), people rely *less* on their standing decision and weight *more heavily* their direct assessments of relevant contemporaneous considerations, here, the candidate's policy promises and personal qualities.

We found this theoretically expected pattern when we analyzed the cumulated ANES data for the 1980–1996 election studies. Here we replicate² that analysis, now extended through the 2000 and 2004 elections, and report the results in the first column of Table 1. The coefficients for partisanship, candidate policy positions, and candidate personal qualities behave nicely and indicate that complacent voters vote normally.

Now, look at the coefficients associated with the interaction terms at the top of the table. The first one, the interaction between anxiety and partisanship, is -0.55 , a number that is both large and statistically identifiable. Going through the arithmetic, we see that partisanship's baseline impact is 0.74 while its impact for

² Any analysis of this sort involves many seemingly small decisions that might make exact replication difficult. Here we rebuild the entire data set and construct our models anew. *Vote intention* is Republican-Neutral-Democrat, with those supporting a third party or saying that they had not decided being scored in the neutral category and those saying that they were not going to vote being eliminated from the analysis. *Comparative policy* is the individual's perceived proximity to each candidate with the issues selected by the ANES staff equally weighted. (We scored any issues for which the individual indicated a personal preference and a perception of the two candidates' positions. Those who expressed no preference-perception data on any issue were scored zero—or indifferent on the *candidate policy* variable.) The *personal qualities* are the net positive minus negative comments offered in the open-ended candidate "likes-dislikes" responses with policy and party comments expunged. The variables are rescaled to the (0–1) interval for ease of comparison. Note that *partisanship*, *comparative policy preferences*, and *comparative candidate qualities* may move during a campaign and affect each other. The multivariate analyses statistically control for this interdependence—arguably isolating the trace elements of each independent of the other. Thus, we can see the trace effect of perceived candidate policies when we control for partisanship and perceived candidate quality. (We suspect that these controls are not truly sufficient but do help in the usual approximate way.) Anxiety is marked for the individual's own candidate as that marks a disturbance to normal expectations. (On this point, see below.)

Table 1. Affective Intelligence Interactions with Alternative Dependent Variables 1980–2004 ANES

	(1) Vote Intention	(2) Vote Intention	(3) Comparative Feeling Thermometer	(4) Comparative Feeling Thermometer	(5) Vote Intention
Anxiety · Partisanship	-.55* (.03)	-.26* (.03)	-.06* (.03)	-.55* (.03)	-.24* (.03)
Anxiety · Comparative Policy Preference	.61* (.08)	.42* (.07)	.18* (.06)	.45* (.07)	.37* (.03)
Anxiety · Comparative Personal Quality	.01 ^{ns} (.07)	-.10 ^{ws} (.07)	-.09 ^{ws} (.06)	.10 ^{ns} (.06)	-.08 ^{ws} (.06)
Partisanship	.74* (.01)	.49* (.01)	.28* (.01)	.62* (.01)	.41* (.01)
Comparative Policy Preference	.70* (.03)	.38* (.03)	.62* (.03)	1.04* (.03)	.19* (.03)
Comparative Personal Quality	.94* (.03)	.54* (.03)	.68* (.03)	1.18* (.03)	.33* (.03)
Comparative Enthusiasm		.22* (.01)	.24* (.01)		.14* (.01)
Comparative Anxiety		-.08* (.01)	-.17* (.01)		-.03* (.01)
Comparative Feeling Thermometer					.31* (.01)
N	9504	9504	9504	9504	9504
Adjusted R-square	0.67	.72	.79	.71	.74

Notes. Each column represents an OLS estimation equation with the dependent variable indicated at the top.

Entries are parameter estimates with standard errors in parentheses. * $p < .05$; ^{ns}not statistically significant; ^{ws}wrong sign.

Each model includes a set of annual dummy variables, not shown.

those disturbed by their own candidate is only 0.19 (0.74–0.55): partisanship becomes considerably less powerful when the surveillance system is active.

The term associated with the comparative policy position interaction (0.56) is positive and both statistically and substantively important. Citizens stimulated by anxiety will vote in accord with their sense of which candidate promises the best policy package—considerably more so than their less worried neighbors. Finally, the term for comparative candidate quality (0.01) is tiny and drops below the range of statistical significance. The power of different contemporary considerations, as we have recently shown (MacKuen, Marcus, Neuman, & Keele, 2007), varies from election to election. Here, we find that adding the elections of 2000 and 2004 muddies the water with respect to affective intelligence and candidate personal qualities.³

³ Caution should rule here. Background analyses suggest that sometimes affective intelligence affects the consideration of candidate qualities and sometimes it does not. Add another “personal quality” election to the mix and we might get a different result.

All considered however, the pattern sustains the affective intelligence prediction that the presence of anxiety—as a stimulus of the surveillance system—matters for how people approach electoral choice.

Ladd and Lenz suggest that it would be helpful to “control” for the linear direct effects of anxiety and enthusiasm on the vote.⁴ We add comparative enthusiasm and comparative anxiety to the mix, in column 2 of Table 1. The magnitude of all the coefficients, across the board, diminishes when we add in these direct emotional variables. It is hard to know what to make of this, of course, because voters’ emotional reactions to the candidates are both a consequence and a cause of the other factors. We are now adding variables to the end-of-campaign collinearity soup that makes our analysis murky from both a theoretical and a statistical point of view. Nevertheless, we include these variables in column 2 to see if controlling for the direct correlation of vote intention with emotions eliminates the theoretically predicted interactions. These added variables do not alter the fundamental conclusion. The interaction coefficients are diminished in about the same way that all coefficients are diminished. But they remain both substantively and statistically robust.

Thus, affective intelligence seems confirmed. Voters whose emotional signals stimulate attention appear to rely less on their routine partisan decision mode and turn toward candidate-election-specific matters.

So the question arises, why do Ladd and Lenz fail to find this pattern? One obvious possibility is that the many details of replication may obscure what is going on. Certainly, Ladd and Lenz use a different and defensible functional form. But that does not seem critical. Instead, it appears that their choice of dependent variable makes a world of difference.

Changing Dependent Variables

In their analysis, Land and Lenz choose to replace *vote intention* with a *comparative feeling thermometer*—the difference in the voter’s feelings about each of the major candidates. Such a choice is commonly made and has some attractive features. The comparative feeling thermometer has a quasi-interval scale with plenty of variation so that it can capture a more continuous assessment of the voter’s candidate preference. And it is highly correlated with vote intention. For present purposes, however, the *comparative feeling thermometer* has some characteristics that may lead to false inferences.⁵

⁴ It should be noted that their suggestion is not theoretically driven. Rather, it seems to be an argument that these alternative measures of feelings should be included so as to eliminate them as an alternative for the results we obtain. We did report this sort of precautionary analysis in our book—Ladd and Lenz might be excused from missing the buried footnote.

⁵ Some years ago we demonstrated that replacing the dependent variable, voting intention, with thermometer-based dependent variables, as done here, masks the distinct effects of the independent factors, enthusiasm and anxiety, on voting judgments (Marcus, 1988, p. 756).

When we switch dependent variables⁶ in our empirical analysis, we produce column 3 in Table 1. Importantly, we now see that affective intelligence's predicted interactions are considerably reduced and almost disappear from view. This is the sort of result that might lead one to believe that the interactions are not really all that important and a standard additive model of partisanship, policy preferences, candidate quality, and emotional reactions might do the job.

The new dependent variable, however, is not vote intention but instead comparative feelings. The two dependent variables are correlated but not the same thing. At least in nominal definitional terms, comparative feelings sounds a lot like comparative enthusiasm and anxiety—introduced at the bottom of the equation as a “control.” Are we simply explaining feelings with feelings and thus expunging any subtle interactions that actually affect the vote?

One way to answer this question is to leave the “controls” out of the equation—no longer running the risk that we are inadvertently explaining one measure of a phenomenon with another measure of the same thing. We repeat the analysis but this time drop the linear emotional terms to produce column 4. This omission makes an enormous difference. The interactions of anxiety with both partisanship (negative) and comparative policy preferences (positive) reappear as strong and statistically significant factors—just as the affective intelligence model expects. So the decision to substitute comparative feelings for vote intention is not, by itself, enough to obscure the interactions: one has also to “control” for emotions as well.

This confirmation is not entirely satisfactory. Ladd and Lenz believe that emotions drive the vote, and are driven by the vote, and worry that if we do not specify emotions as explicit linear terms their correlations will falsely enhance the interactions. Our worry is that when one substitutes comparative feelings for vote intention and then controls for comparative emotions a mistake is made.

One way around such a difficulty is to examine the vote intention model afresh to see if there is anything interesting about the vote decision that is not captured by the thermometers. We repeat the full vote intention model (of column 2) but this time we also include comparative feeling thermometers on the right-hand side. This statistical model of vote intention now “controls” for comparative feelings. Thus, we can examine the possible anxiety interactions when the direct impact of feelings is statistically eliminated.⁷

This is not a straightforward idea, but it does provide us with a test of whether there is something substantively interesting about vote intention that is not

⁶ We have explicitly limited these analyses to those cases that have data on *both* the *vote intention* and *comparative feeling thermometer* as well as all the emotion measures to ensure that our comparative inferences are based on the same cases.

⁷ The remaining coefficients are, of course, partial regression coefficients—those that would be produced if *vote intention* and all the variables were regressed on *comparative feeling thermometer* and the analysis conducted on the remaining residuals.

captured by the comparative feeling thermometer measure. If the thermometer is an adequate substitute for vote intent, then our including it on the right-hand side of the equation should effectively purge the dependent variable of substantive content. With only noise left to “explain,” the theoretically specified portion of the right-hand side should melt away into a pool of statistical insignificance. However, if the thermometer misses something substantively interesting in vote intention then we should see the theoretical components stand up against the new specification.

The results of this quirky regression appear in the last column of Table 1. The dependent variable is vote intention now statistically purged of the comparative feeling thermometer. To understand what we can learn, compare column 2 with column 5. The feeling thermometer’s inclusion in the second equation reduces the linear terms associated with policy preferences, personal qualities, and especially comparative enthusiasm and comparative anxiety, but they all remain substantial and statistically significant.

In the crucial test, the comparison shows that the impact of the anxiety interactions with partisanship and comparative policy preferences remain robust and hardly affected at all. (Compare -0.26 with -0.24 and 0.42 and 0.37 .) That is to say, the part of vote intention that is not captured by the feeling thermometer clearly reveals the operation of affective intelligence. Vote intention is substantively and importantly different than comparative feelings and that difference matters for theory.

Thus, again, we conclude that affective intelligence affects the way that people make their voting decisions. When everything is fine, people weigh partisanship, policy preferences, and candidate qualities about equally in their final choice. Those who experience anxiety about their candidate, however, are much less likely to rely on their partisan habits and instead turn to a reconsideration of the choice and weigh much more heavily the comparison of the candidates’ policy promises.

Are Affective Responses One Dimensional?

Ladd and Lenz (and in our experience many other thoughtful political scientists) are inclined to view affect and emotion as essentially one dimensional—ranging from positive to negative. It is entirely intuitive to think of emotions as being a matter of likes and dislikes. Indeed, the feeling thermometers were developed at a time when affect tags were thought to be fully described by a single valence dimension.

In fact, much of modern psychology treated affect this way until about a generation ago when it became apparent that people experienced measurably different emotions that had distinctive roots and consequences. Abelson and colleagues (1982) introduced political science to the idea that affect was truly multidimensional. Research in psychology has also led psychologists to understand

emotions as having multidimensional characteristics (Cacioppo, Gardner, & Berntson, 1997; Tellegen, Watson, & Clark, 1999). Over the years, a consensus has emerged that a one-dimensional conceptualization misses much about human experience (Marcus, 2003).

Firmly in this new wave, our own work has identified three dimensions of emotion that have distinctive effects on political attention: enthusiasm, aversion, and anxiety. These dimensions are not typically orthogonal—aversion and anxiety are often found together and opposed to enthusiasm. However, each has its own consequences. In particular, enthusiasm drives active participation, aversion pushes avoidance and the defensive reactions of motivated reasoning (Taber & Lodge, 2006), and anxiety triggers attention and learning (Marcus & MacKuen, 1993; MacKuen, Wolak, Keele, & Marcus, 2010).

We here conduct one more empirical test with these election-time survey data that will shed light on the multidimensional character of affect. Ladd and Lenz suggest, “If the interactions MNM find are artifacts of the direct connection between anxiety and evaluations, then replacing anxiety with any similarly coded measure of candidate evaluations should produce the same pattern of interactions in the vote choice models” (p. 295). Thus any negative assessment, rather than specifically anxiety, will serve as well as any other.

We turn to enthusiasm as such a similarly coded measure of evaluation. For parallelism, we reverse the coding and call it “disappointment”—meaning the lack of enthusiasm. Just as feeling anxious about a candidate leads to interactions, so, the argument goes, would any other negative assessment. We repeat the prior analysis and substitute disappointment for anxiety in the critical interactions. If any measure of liking and disliking serves equally well, then especially one that is measured in exactly the same format should reproduce the anxiety interactions of Table 1.

Column 1 of Table 2 reveals the results. Alongside we repeat Column 2 from Table 1 for ease of comparison. If candidate appraisal is one dimensional, any measure of appraisal will do about as well as any other. We should then see striking similarities between the two columns of Table 2. However, we do not.

Our focus is on the impact of affective appraisal on habitual behavior, the role of partisanship. Where the experience of anxiety diminishes partisanship’s part considerably (-0.26), mere disappointment has hardly any impact. (Note that 0.05 has the wrong sign and in any case is statistically insignificant.) With respect to the two contemporary considerations, the coefficients produced by disappointment interactions find that the comparative policy preference is cut in half, relative to that produced by the anxiety interaction while that of comparative personal quality remains wrong-signed and insignificant. The main point is that we do not see the expected equivalence of anxiety and disappointment: anxiety drives affective intelligence while disappointment does not. Anxiety and disappointment do not have the same consequences for attention, and they do not produce the same indirect consequences for voting choice.

Table 2. Affective Intelligence Interactions comparing Anxiety with Disappointment
1980–2004 ANES

	(1) Vote Intention Disappointment Interactions	(2) Vote Intention Anxiety Interactions
Anxiety · Partisanship		-.26* (.03)
Anxiety · Comparative Policy Preference		.42* (.07)
Anxiety · Comparative Personal Quality		-.10 ^{ws} (.07)
Disappointment · Partisanship	.05 ^{ws} (.03)	
Disappointment · Comparative Policy Preference	.22* (.06)	
Disappointment · Comparative Personal Quality	-.15 ^{ws} (.07)	
Partisanship	.42* (.02)	.49* (.01)
Comparative Policy Preference	.39* (.03)	.38* (.03)
Comparative Personal Quality	.57* (.03)	.54* (.03)
Comparative Enthusiasm	.22* (.01)	.22* (.01)
Comparative Anxiety	-.11* (.01)	-.08* (.01)
N	9504	9504
Adjusted R-square	0.72	.72

Notes. Each column represents an OLS estimation equation with the dependent variable indicated at the top.

Entries are parameter estimates with standard errors in parentheses. * $p < .05$; ^{ws}not statistically significant; ^{ws}wrong sign.

Each model includes a set of annual dummy variables, not shown.

Though this is an elliptical test, one viewed through the imperfect lens of survey-based voting behavior, we see that it is not possible to sustain a one dimensional understanding of affect.

Theory or Artifact

Let us now turn to a third factor. Ladd and Lenz appear to have an incomplete understanding of our theoretical argument. If this is due to our inadequate explanation, perhaps we can clarify matters. They state that “We suspect, however, that these findings are an artifact. . . . We begin by noting the unusual coding of

the anxiety variable. Instead of summing across both candidates, MNM (2000) code anxiety only with respect to the candidate of the respondent's party" (p. 284).

This coding is not "unusual" but instead follows directly from a core theoretical mechanism in the theory of affective intelligence. We suggest that people rely on their habits as a matter of course, a point that is not in much dispute in psychology (see also Bargh & Chartrand, 1999) or political science (Popkin, 1991).⁸ The claim specific to the theory of affective intelligence is that people rely on their habits unless something novel intrudes, the degree of novelty being signaled by a heightened sense of anxiety.⁹ And, so the theory argues, when anxiety increases, reliance on habits diminishes and the brain shifts to deliberative consideration of the new information.

Partisanship, or ideological orientation, serves as a reliable guide when people confront the kaleidoscopic buzz of political events, campaign claims, debates, Sunday morning talk shows, and so on. Reliance on heuristics enables them to easily marshal responses of what to say, how to judge, and how to respond. But that response depends on the familiarity of these recurring political circumstances and events. The theory of affective intelligence suggests that the surveillance system, a neural system, monitors the environment for incongruities.

The focus of this surveillance system is on the match between previously learned routines and the contemporary environment. Thus, the basis of comparison is the voter's habitual orientation toward "his" candidate or toward "her" party. Given the theory, it would be a mistake to form a measure of joint anxiety, summed across candidates of both major parties.¹⁰ This is not consistent with the theory of affective intelligence. Rather, reliance on one's own party, one's own ideology, one's own candidate, is for most citizens the normal habituated course of action and judgment. It is anxiety about *our* habits that initiates the active consideration

⁸ Indeed William James (1890) made this point quite eloquently in his chapter on habit: "The great thing, then, in all education, is to make our nervous system our ally instead of our enemy. It is to fund and capitalize our acquisitions, and live at ease upon the interest of the fund. For this we must make automatic and habitual, as early as possible, as many useful actions as we can, and guard against the growing into ways that are likely to be disadvantageous to us, as we should guard against the plague. The more of the details of our daily life we can hand over to the effortless custody of automatism, the more our higher powers of mind will be set free for their own proper work. There is no more miserable human being than one in whom nothing is habitual but indecision, and for whom the lighting of every cigar, the drinking of every cup, the time of rising and going to bed every day, and the beginning of every bit of work, are subjects of express volitional deliberation. Full half the time of such a man goes to the deciding, or regretting, of matters which ought to be so ingrained in him as practically not to exist for his consciousness at all. If there be such daily duties not yet ingrained in any one of my readers, let him begin this very hour to set the matter right" (p. 122).

⁹ We understand that novelty can come in positive packages as well, but have not yet discovered much empirical leverage in this domain. We have continued to emphasize anxiety is where the neurological and political scientific evidence lies. For an interesting and hopeful discussion of further possibilities, see Just, Crigler, and Belt (2007).

¹⁰ Note that expressed anxiety about the opposition party or candidate hardly represents novelty—people are pretty adept at being "horrified" by political opponents' stances.

of political life. Hence, it is what “our” party, “our candidate” is doing that is the focus of the surveillance system. Our coding is not an artifact but core theory. Modify the coding and you have a new theory to test. But that new theory is not our theory.

Conclusion

Ladd and Lenz have provided an interesting take on affective intelligence. They have shown that if one focuses not on the vote choice but instead on comparative feelings, and one controls for comparative emotions, then the pattern that affective intelligence predicts for the vote goes away. Part of their motivation stems from an implicit view that emotional experience is one dimensional, a common assumption that ignores a generation’s work in psychology. Their analysis productively suggests a test of that view—a test that indicates that unidimensionality will not carry the day. And finally, when they treat all negative feelings as one, they encourage us to emphasize more strongly the centrality of novelty for affective intelligence. In all this, they have been very helpful.

The main positive point that Ladd and Lenz wish to make is that emotion should be understood as endogenous to the entire process. We argue that emotion dynamically alters how people incorporate habitual and contemporaneous considerations into their political judgments. How the mix of partisanship, contemporaneously acquired information, belief, emotion, attention, and choice becomes integrated is not as yet fully understood. They are absolutely correct to suggest that we want to know much more about the mechanisms that produce the emotional triggers in affective intelligence.

And we agree with Ladd and Lenz that sorting out the endogenous from the exogenous, especially with survey data, will prove a daunting challenge. In fact, while attacking this very question with the same 1980 ANES panel, we concluded 15 years ago that pervasive endogeneity meant that by the time a presidential campaign ends it is nearly impossible to sort out the distinctions between affect and substantive judgment (MacKuen & Marcus, 1994).

To resolve the issue of endogeneity the better option is to turn to experimental design. In their article, Ladd and Lenz make frequent mention of Ted Brader’s path-breaking work (Brader 2005, 2006) that directly and explicitly tests the idea that emotional reactions are entirely endogenous, derivative of prior cognitive evaluations.¹¹

Brader executed a field experiment that exogenously manipulated the emotional cues embedded in political campaign messages. His experiment enables us

¹¹ The view that affective responses are the product of evaluations, hence purely endogenous, is itself a rerun of an old argument long since resolved in the neuroscience literature. When psychologist Robert Zajonc (1980, 1984) offered the argument rejecting “endogenous affect,” it was greeted with considerable debate. We need not revisit this debate here in as much as Brader’s study is decisive in testing and rejecting this alternative.

to determine the relative causal impacts of positive messages and negative messages—with and without affective cues. If simple “affect transfer” were correct, the first two conditions should have produced the same result as the last and, further, enthusiasm should have worked as well as anxiety. But, that is not what the experiment shows. Indeed Brader’s experimental results mirror to a remarkable degree the pattern we report: anxiety inhibits reliance on partisanship, and anxiety elevates the impact of issue positions and candidate qualities. Further, Brader includes a direct test of the claim that affect is merely a spurious consequence of cognitive assessments: he shows that messages intended to change candidate evaluations, absent affect, have no impact at all.

In their conclusion, Ladd and Lenz properly argue that parsimony should be a prominent consideration in determining which theoretical account to adopt. Unfortunately their empirical analysis pivots on alternate specifications of the model which mask the capacity of the emotion variables to interact with partisanship and policy preferences. In effect, they alter the theoretical argument and show that the alteration fails. Further, their work demonstrates the critical importance of experimental design to sort out the causal connections between emotion and political judgments. As it happens, the best extant experimental evidence shows that emotions do shape political judgments and that a simpler “affect transfer” model cannot account for the data. At the end of the day, their serious efforts make apparent that the task of science is not only to generate spare representations of reality but also to explore complexity where it enriches our understanding of the world.

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