Although the rational choice approach toward political behavior has been severely criticized, its adherents claim that competing models have failed to offer a more scientific model of political decisionmaking. This measured but provocative book offers precisely that: an alternative way of understanding political behavior based on cognitive research.

The authors draw on research in neuroscience, physiology, and experimental psychology to conceptualize habit and reason as two mental states that interact in a delicate, highly functional balance controlled by emotion. Applying this approach to more than fifteen years of election results, they shed light on a wide range of political behavior, including party identification, symbolic politics, and negative campaigning.

"Affective Intelligence and Political Judgment is a great read—beautifully written and elegantly crafted—which makes a major advance in the analysis of political learning. Moving beyond the standard dichotomy of reason versus emotion, the authors make a compelling case that emotions reinforce and complement rational calculations. Their results provide a more complete understanding of the nature of mass political campaigns with unsettling findings that will force civic reformers to rethink their premises."
—Sam Popkin, author of The Reasoning Voter

"Affective Intelligence and Political Judgment is a well-written and provocative book that should have a salubrious effect on the field."
—John T. Cacioppo, coeditor of Handbook of Psychophysiology

"For centuries, we were told that emotion should not supplant reason as the basis of a decision. Marcus, Neuman, and MacKuen pound this conventional wisdom with a pile driver. Drawing from research in the neurosciences, they show that emotions are the engine of reason and that emotions make rational choices possible. Their findings have important implications for many social science debates and merit broad attention. If you want to learn more about how living, breathing human beings make political decisions, then Affective Intelligence is a must-read."
—Arthur Lupia, coauthor of The Democratic Dilemma: Can Citizens Learn What They Really Need to Know?

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Affective Intelligence and Political Judgment

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Coming to Rational Choice

Affective intelligence is a theory about how emotion and reason interact to produce a thoughtful and attentive citizenry. We focus particularly on the dynamics between feeling and thinking through which busy individuals come to pay some attention to the hubbub of the political world that swirls around them. Most of us are not policy wonks, political activists, or professional politicians. Most of the time, most of us literally do not think about our political options but instead rely on our political habits. Reliance on habit is deeply ingrained in our evolution to humanity.

So when do we think about politics? When our emotions tell us to. We posit that individuals monitor political affairs by responding habitually, and for the most part unthinkingly, to familiar and expected political symbols, that is, by relying on past thought, calculation, and evaluation. But the central claim of our theory is that when citizens encounter a novel or threatening actor, event, or issue on the political horizon, a process of fresh evaluation and political judgment is triggered.

The term Affective Intelligence is meant to be provocative, to elicit a sense of the paradoxical, to draw the reader’s attention to the possibility that affect and reasoned intelligence need not be seen as incompatible modes of human perception locked in inevitable opposition. Much of the Western tradition in the arts and especially in the sciences emphasizes the tensions and disjunctions between the emotional and the rational. Further, the

1. Daniel Goleman (1995) used a similar phrase, emotional intelligence, to title his popularly praised book on emotional life. Goleman’s usage, however, is quite different than ours. His theme is emotional self-awareness, that is, being “intelligent” about the role of emotion in human life. He draws on much of the same literature in neuroscience as we do, but directs those insights toward the strategic end of managing emotions in attaining personal and professional goals.
Western tradition tends to derogate the role of affect in the public sphere. Being emotional about politics is generally associated with psychological distraction, distortion, extremity, and unreasonableness. Thus, the conventional view is that our capacity for rationality and willingness to engage in reasoned consideration is too often overwhelmed by emotion to the detriment of sound political judgment. As a result, theories of democratic practice proclaim the importance of protecting against the dangers of human passion and political facticity by building up institutions, rules, and procedures—all intended to protect us from our emotional selves.

Drawing on extensive sources in neuroscience, physiology, and experimental psychology, our research has led us to conceptualize affect and reason not as oppositional but as complementary, as two functional mental faculties in a delicate, interactive, highly functional dynamic balance. To idealize rational choice and to vitally the affective domain is to misunderstand how the brain works. The various challenges confronting human judgment require the active engagement and interactivity of both mental faculties, just as it does the contributions of the left and right hemispheres of the brain.

Opposition versus Interaction

Because the distinction between opposition and interaction is central to our argument we begin with an extended example from the physiology of sleep to illustrate our premise. Our story starts in France in the late 1970s when biochemists discovered a new stimulant called modafinil. It appeared they stumbled onto something of a wonder drug. It stimulated wakefulness without the well-known side effects and after effects of such traditional stimulants as amphetamines and caffeine. There was no evidence of anxiety from an overstimulated nervous system, no elevated heart rate and blood pressure, no crash after use or day-after hangovers, no pangs of drug dependency from repeated use. What was the secret?

The chemistry of modafinil is different. As Stanford psychiatric researcher Dale Edgar puts it (Goode 1998), “Modafinil selectively promotes wakefulness in a way analogous to the way the brain naturally wakes up.” Rather than stimulate the entire circulatory system, the drug selectively stimulates cellular activity in the area of the supachiasmatic nucleus, the brain’s circadian clock. The key insight here is a new understanding of the dynamic between sleep and wakefulness in the body and mind. Our traditional understanding is that after we have been awake for a long period of time we become increasingly tired and ultimately succumb to
sleep. The notion is inherently one-dimensional and oppositional. There is a state of wakefulness opposed by the need for sleep. But the insight that has emerged from recent neurochemical research is that there are two sets of signals working in a delicate balance, one set of alerting signals and another of sleep pressure as illustrated in figure 1.1.

If the two were simply in zero-sum opposition, a person who experienced more alerting signals would experience less sleep signals. But in fact, the two operate independently and interactively. One can be awake with high sleep and alerting signals present. Or one can be awake with low levels of sleep and alerting signals. And sleep may come not because sleep pressure has increased, but because alerting signals have declined more than sleep pressure. Such distinctions are lost in simple zero-sum notions of opposition.

We will argue in the chapters ahead that the oppositional conception of passion versus reason derives from a similar oversimplification and misunderstanding. As a result, what has remained hidden is an important dynamic by which the human mind uses emotional evaluations of threat and novelty to engage attention and rational calculation (Gibson 1998, Marcus, Wood, and Theiss-Morse 1998).

Why Willie Horton?

In the lore of campaign advertising there are some classic exemplars of powerful emotional communication. One such ad depicted a child

![Figure 1.1 Sleep Resulting from Two Dynamic Forces](source: Adapted from Goode 1998)
picking lower petals under threat of nuclear disaster and was shown only once during the Goldwater-Johnson race in 1964. Because it captured the Goldwater-anti-trigger-happy theme so powerfully, albeit indirectly, it has been identified as the most famous campaign ad of modern American political history. Running a close second is the Willie Horton ad in 1988.

Mr. Horton suddenly emerged from obscurity to become something of a household word. Like Roe, Miranda, Rodney King, and Monica Lewinsky. In fact, for some citizens dredging through the fading memories of that presidential race, the name Willie Horton may well be recalled before the name of a colleague of ours, currently a professor of political science at Northeastern University in Boston, one Michael Dukakis. Now is it possible that an obscure convict would perhaps become better remembered than the Democratic nominee for president? The answer, in our view, is that Willie Horton became narratively and visually a potent threatening symbol. Horton was a black man who had been convicted of first-degree murder. While on furlough from Massachusetts' prison during Dukakis' governorship, he escaped and stabbed a Maryland man and raped his fiancée. For the conservative PAC that sponsored the ad, Horton represented a particularly useful symbol of the threat of crime, of white racial concerns, and of Dukakis generally "liberal" stance on those issues.

Kathleen Jamieson's careful analysis of the ad and its political context in Dirty Politics (1992) makes similar observations. She points out that the campaign ad clearly implied that 268 first-degree murderers were furloughed by Dukakis to rape, kidnap, and murder. But in fact, no other furloughed first-degree murderer black or white, either murdered or raped. Of 67,378 furloughs for 11,497 convicts during Dukakis' tenure, 268 did escape, a figure roughly equivalent to that for the Republican predecessor of Dukakis in Massachusetts who had actually established the furlough program, Jamieson (1992, 16) is concerned about this use of deception and distortion in the campaign process and labels the visceral potency of Willie Horton as one of the "psychological quirks that characterize humans." We share her concern that fear makes people and events memorable; but now that the issue is raised, we want to explore whether this aspect of human perception and memory is more than just a quirk. If, following Jamieson, we aspire to raise the level of campaign discourse and meaningfully confront the cycles of public cynicism and political withdrawal, we need to better understand why Willie Horton ads work, why such ads sometimes backfire, and how we can better ground our aspirations for civic virtue in a realistic understanding of human emotion.
The Civic Ideal of Rational Choice

The reasons that scholars and pundits have been uncomfortable about and reluctant to tackle the dynamic interactions of passions and politics represent in themselves a relatively complex puzzle. We will take some time at various points in this book in attempting to unravel these strands as they are important to our thesis. We will not attempt an exhaustive literature review or an intellectual history. We are strategic in our analysis of the fashions and themes of recent social science. Indeed, we will turn to the rational choice school of modern social science as a contrasting case study to help understand the nature of Affective Intelligence.

The rational choice perspective is a widely recognized model of coherent, theoretically grounded, empirically informed, and productive scholarship. In the social sciences and especially within recent political science, the rational choice perspective is a paradigm of paradigm building. We use the word paradigm in the traditional Kuhnian sense—a set of theory-based assertions about human behavior matched with a methodological design to test various hypotheses derived from the overarching model (Kuhn 1962). This is normal science. The rational choice literature identifies a set of variables, a set of propositions about their causal linkage and a set of empirical indicators. There is much debate about what the numbers mean and how the numbers relate to the theory. And, at the margins, some scientists argue about whether the right variables have been included in the model.

From the beginning the rational choice school has been subject to criticism by outsiders who are uncomfortable with its disciplined and narrow focus on human behavior as interest-calculation (Somin and Peterson 1999). Rational choice theorists are familiar with and more than a little weary of this critique, and are apt to tentively respond "Yes, yes, we know, but our parsimonious model rewards us with testable hypotheses and the prospect of theoretical refinement." The rational choice response is, in effect, if you have a better model, let's see it. That is the challenge to which we respond. Whether the resulting integration of rational and emotional factors in studying human choice and political behavior is by any chance a better model we leave for our critics and successors to decide.

But why is the rational choice model so influential, increasingly exerting its influence beyond neoclassical economics to sociology, political science, and even psychology? Why is the rational choice perspective so self-disciplined in consistently excluding affect-related variables from its models? Is there any history of rational-choice researchers trying to draw
insights from the psychology of emotion into their modeling of human-choice behavior?

We will develop a response to the first two of these questions in the pages ahead. But the surprising answer to the last of these questions is yes, indeed. Herbert Simon (1967) anticipated many of the arguments of this book in a seminal but somewhat obscure article published in the Psychological Review in 1967. Simon is a Nobel-prize-winning social scientist of extraordinary stature, one of the founding fathers of the rational choice school, and an active scholar in the fields of economics, political science, administrative science, and psychology. The fact that his article and his continuing references to its central insight in numerous subsequent publications have not attracted much attention provides a clue to the continuing disjuncture between our understanding of rational choice and affective choice.

Simon came to this issue from a very different intellectual starting point. He was interested in what could be learned from comparing human and machine intelligence. One of the most interesting distinctions, of course, is the observation that human thought arises “in intimate association with emotions and feelings which is never entirely lost” (Simon 1967, 24, quoting Neisser 1963). This contrast between human and machine intelligence is deeply situated theme in artificial intelligence theory and as well a frequently repeated motif in popular culture and science fiction. (One thinks, for example, of “the Mr. Spock character and his successors” from the Star Trek series.) But Simon’s seminal paper is in a psychology rather than computer science journal and he quickly sets aside the man–machine comparison to turn to human psychology itself. One reason we cannot model the emotion–cognition link in our software, he argues, is that we have such a limited understanding of how it works in humans. Simon noted in 1967 that theories of human information processing were generally silent on the interaction of cognition and affect. The same was true when he returned to this issue in 1981 at the Seventeenth Carnegie Symposium on Cognition, and still true when he gave a similar address to the American Political Science Association a few years later (Simon 1985). Simon 1982. Each time he notes the lack of theory and points what he describes as a starting point for a theory of affect–cognition interaction.

The human nervous system, according to Simon, is primarily a serial processor of information. He reviews research on attention, temporal response intervals, and memory; to support this contention. Such serial processors require two support mechanisms, first a goal-terminating mechanism (Simon’s term is milestones) to redirect attention when goal-
oriented behavior has reached a satisfactory state in terms of an initial goal. Second, the human organism living in a demanding environment requires an interrupt mechanism to redirect human attention to higher priority real-time needs, no matter the ongoing effort to secure some antecedent goal. It is this second mechanism that lies at the core of our conception of Affective Intelligence.

Although Simon's own subsequent research focused on satisfying, he did not himself return to elaborate and test the interrupt-mechanism theory. Given his prominence and persuasiveness, it is puzzling why no one else has done so. We contacted Professor Simon and posed the question to him. He noted that despite now seven articles on these themes by his count,2 there has not been a noticeable reaction in the literature. He speculated that because most of his work has focused in other areas of economics and psychology and because he did not maintain personal relationships with the subset of researchers "in the emotion field," not much of a scholarly response should be expected. For us, that was the key to the puzzle. The interface between emotion and cognition falls outside the paradigm of each field of research.

Looking back on the 1981 Carnegie Symposium on affect and cognition, organizer Susan Fiske, now at the University of Massachusetts, mused that the "affect people in political science were just not interested in the functional impact of emotion on cognition, or on an evolutionary perspective. The cognition people primarily viewed emotions as excess baggage" (Fiske 1998). Yale psychologist Robert Abelson (1996) takes the argument further, noting what he calls the "tyranny of instrumentalism." Western political culture exalts rational, unemotional, means-ends calculation. Researchers look for it first, find it easier to measure and manipulate in experimental settings, and, when asked, subjects naturally justify their behavior in the instrumental terms their culture values.

The inattention to these issues that Simon and others have sought to point out is systematically reinforced and deeply grounded in Western culture and in the dominant research paradigms. Our task is to understand why behavioral research in political science and especially the dominant rational choice perspective is so persistent and successful in setting aside, subordinating, or simply ignoring human emotion. The better we understand why such questions have been ignored thus far, the better we can stimulate attention and much-needed debate concerning what is in effect a theory about theory-building. We will address this issue at length in chapter 2.

A summary of how modeling affective intelligence points research in new and different directions is presented in Table 1.1.

A central problematic is to better understand the interactions between psychiatric psychological states and accumulated psychological traits that give individual citizens their unique personal identity. We know that Republican and Democratic voters (traits, habits) siting next to each other watching a presidential campaign debate may come away with very different emotions and impressions (states), concerning who won and indeed what the debate was really about. We know that an image or phrase in a campaign commercial or political speech can powerfully alter voters to pay more attention to a candidate's state and over time change their political activism or their standing vote choices (traits) We seek to understand how that dynamic process works.

<table>
<thead>
<tr>
<th>Traditional Paradigm</th>
<th>Revised Concepts</th>
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<tr>
<td>Static concept of political attentiveness</td>
<td>Dynamic concept of affect and attention</td>
</tr>
<tr>
<td>Thoughtful and natural behavior blurred in concepts of attitude and party affiliation</td>
<td>Habitual behavior theoretically causal</td>
</tr>
<tr>
<td>Opposition between affect and cognition</td>
<td>Interaction between affect and cognition</td>
</tr>
<tr>
<td>Instrumental orientation to political behavior</td>
<td>Mix of thoughtless reliance on habit and explicit calculation of benefit</td>
</tr>
<tr>
<td>Idealized notion of citizenship</td>
<td>Political ideals and institutions informed by realism about psychological dynamics</td>
</tr>
<tr>
<td>AI political issues equivalent</td>
<td>Issue type a variable</td>
</tr>
<tr>
<td>Survey research dominates</td>
<td>Multimethod</td>
</tr>
<tr>
<td>Attractiveness assumed</td>
<td>Attention as a variable</td>
</tr>
<tr>
<td>Self-interest assumed</td>
<td>Self-regulate a variable</td>
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A Brief Summary of the Theory of Affective Intelligence— The Dual Emotional Systems of Disposition and Surveillance

Our research leads us to conceptualize affect and reason as two complementary mental states in a delicate, interactive, highly functional dynamic balance. It is common parlance to describe an individual confronting something new, say a new candidate or policy issue, as first thinking about the choice (cognition) and second coming to an emotional judgment (affect). Similarly, it is a long-standing presumption associated with the
founding research of William James that, even when dealing with the fa-
miliar and comfortable, recognition must precede emotional reaction
(James 1894). This think-first-and-feel-second ordering turns out to be a
central issue of some controversy in the psychological literature on
emotion. Psychologist Robert Zajonc (1965) was the first to openly chal-
enge this ordering, arguing that affective reactions often arise before con-
scious—that is to say, cognitive—awareness. We agree and argue that the
ordering actually works the other way around: affective systems manage
both our response to novelty or threat and our reliance on established
habits. More importantly, our work suggests that in addition to managing
our emotional reactions to things that are novel, threatening, and familiar,
affect also influences when and how we think about such things.

We begin by focusing on two systems associated with the brain’s limbic
region, the disposition and the surveillance systems, which are discussed
more fully in Chapter 4. These two brain systems manage “reinforcers,” that
is, stimuli that people learn to associate with either good or bad conse-
quences and thus guide (often unconsciously) strategic choices about be-
havior. The most important point to make about these dual system
functions is that they are mutually engaged in governing both thought and
behavior. Although they often function below the level of consciousness,
they are distinct information processing systems in their own right.

The Disposition System

The most commonly understood system of the limbic region governs be-
havior by monitoring primarily positive reinforcers and establishing dispo-
sitions. Strategic action, behavior designed to achieve a purpose, requires
an ongoing evaluation. That is, it demands an assessment of the effort, the
prospects of success, the current stock of physical and psychic resources,
and feedback on the success and failure of the sequence of actions. For hu-
mans, these strategic considerations are only occasionally governed by
conscious calculation. More often, these executive functions are done sub-
consciously.

Importantly, the emotions of the disposition system provide precisely
this guidance. When our feelings are focused on ourselves, changes in
mood from gloomy to enthusiastic tell us that we are bursting with confi-
dence, energy, and eagerness. Alternatively, when our mood changes in the
direction of depression, we conclude that we are exhausted and beaten.

3. As Siderman observes, “Discussions of affect and cognition seem to excite a cat-
and-dog fight over ontological priority” (Siderman, Bedy, and Tetlock 1991, 362).
Shifts in the direction of increased elation strengthen the motivation to expend effort and strengthen confidence in a successful outcome. Shifts in the direction of increased depression weaken the motivation to expend effort and undermine confidence that the outcome will prove successful. Accordingly, this emotional calculus is translated into a summative dispositional action toward the action.

The constellation of dispositions attached to previous experiences govern people's behavioral repertoires. People learn habits most profitably to get through their everyday lives and to deal with ordinary recurring situations. As they develop their skills, these repertoires become increasingly well stocked to deal appropriately with more complex and differentiated circumstances. The disposition system relies on emotional assessment to control the execution of habits: we sustain those habits about which we feel enthusiastic and we abandon those that cause us despair.

In the course of growing up we learn to walk without thinking. Some of us learn to dance, swim, tennis, and throw a baseball. Similarly, we learn to pick out our clothes, to order in a restaurant, and to more about a bookstore without having to think too hard about how to actually execute such routine tasks. In politics, we learn which newspapers, which ideas, and which political loyalties will reward and which ones will not. So, it is not surprising that empirical work shows that these dispositions are powerful predictors of the willingness to engage in previously learned actions.

The Surveillance System

Life, however, is full of surprises and two kinds of surprises are crucial. As we confront the world we come across new and unpredictable people and circumstances. And, at various times, there are people and circumstances that may be threatening. The disposition system provides people with an understanding, an emotional report card, about actions that are already in their repertoire of habits and learned behaviors. The second system, the surveillance system, acts to scan the environment for novelty and sudden intrusion of threat. It serves to warn us when we cannot rely on past learning to handle what now confronts us and to warn us that some things and some people are powerful and dangerous. This system uses emotion to signal the consequences of its ongoing analysis. It generates moods of calmness, on the one hand, and anxiety, on the other. Here we focus on its attentional properties.

Identifying two systems in the limbic region of the brain suggests that people rely on their feelings to assess how well they are doing, and they
rely on their feelings to scan for signs of threat and uncertainty. What is interesting about this second emotional system is that the onset of increased anxiety stops ongoing activity and orientes attention to the threatening appearance so that learning can take place. This turns out to be a particularly important dynamic process for understanding political judgment.

The surveillance system, like the disposition system, is a learning system. It is an active information processing, but not conscious, system. It produces behavioral and affective responses, not conscious thoughts (though, as this system is linked to "higher" conscious systems, it will provoke thinking). This system cycles continually to compare sensory information about the world with expectations obtained from the behavioral system. So long as the comparison shows no discrepancy between expectation and reality, the system generates a sense of calm and remains unobtrusive. When the system detects unexpected or threatening stimuli, however, it evokes increasing anxiety, it interrupts ongoing activity, and it shifts attention away from the previous focus and toward the intrusive stimuli.

The Organization of the Argument

Chapter 2 provides the context for our analysis by tracing the evolution of the intellectual polarity between passion and reason in the Western tradition. We also briefly review how these tensions have been incorporated in current research in political science. The persistence and richness of this polarized conception strike us as remarkable.

Chapters 3 and 4 turn to the neuroscience of the brain in an effort to develop testable models of the dual emotional systems of surveillance and disposition and their interaction with political judgment. As this may be new terrain for many readers we take some time at this point to carefully develop the linkages between physiology, psychology, and political thought in practice.

In chapters 5 and 6 we lay out the accumulated research findings in the political science tradition—primarily survey research but also some experiments and aggregate time series to test the model and the conditions under which it is operative.

The final chapter draws the strands together and sets forth an agenda for further research given our collection of preliminary conclusions and, as yet, unsolved mysteries.