

Theorizing Affect's Effects

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This book responds to a resurgent interest in the way emotion¹ interacts with thinking about politics and, as a result, the way citizens engage in or withdraw from political activity. We have come to conclude that there is indeed an *affect effect*, actually, numerous, diverse, and significant effects. Our explicit goal in this work is to draw focused attention to what had been a relatively neglected area in the study of mass political behavior.

We organize this introductory discussion around five spanning topics. The first is the varying *centrality* of emotional concepts in theorizing about political behavior. The second is the character of the phenomenon of emotion itself—in particular, the question of its *structure*. Third, and perhaps most important, is *functionality*—what role do human emotions play in a theory of political thinking and behavior, and how are affect and cognition structurally linked? Fourth, how is this phenomenon to be assessed—what are the available *methodologies*? And finally, we discuss *praxis*—a brief review of how what we know thus far of the dynamics of political affect might be applied in political practice and perhaps public policy.

It will become evident to even a casual reader of this book we have not yet converged on a singular theory of the role that emotions play in political thinking and behavior. In Part IV Lupia and Menning constructively chide us about the conceptual vagaries and inexplicit rules of scientific inference in this literature. They hold up the field of game theory as an instructive model of relative conceptual and inferential clarity. Some might question whether the phenomena at hand lend themselves to that sort

1. In this chapter we use the terms *emotion* and *affect* interchangeably, although some scholars attempt to make distinctions among those terms as well as the term *mood* (White 1993).

TABLE 1.1: Key theories of affect-cognition interaction

Key concept	Exemplary source	Relevant chapters	Brief definition
<i>Theories of cognitive primacy:</i>			
Appraisal theory	Lazarus 1991	2, 4, 6, 8, 9, 10, 15, 16	Emotions are elicited and differentiated on the basis of a person's subjective evaluation of the personal significance of a situation, object, or event. Thus, primary cognitive appraisal of threat or goal achievement precedes emotional state. A secondary cognitive appraisal of coping capacity modifies the level of significance and emotional reaction to a stimulus.
Social construction of emotion	Harre 1987	1, 2	Posits interpretations as intervening variables between stimulus and response. Since human interpretation relies on concepts, and concepts are social products that vary across social position, time, and culture, emotions will depend on such social variation. Thus, the triggering conditions for various emotions, at least, are socially dependent.
Selective attention/ Selective exposure	Sears 1967	4, 5	Posits that individuals are more likely to attend to information and information sources they judge to be familiar than to challenge existing beliefs and preferences
<i>Theories of affective primacy:</i>			
Affect-as-information	Forgas 1995	14	General affective state or mood substitutes for detailed information in heuristic appraisal of low-salience stimuli
Affect infusion model	Forgas 1995	4, 5	Affectively loaded information exerts an influence on and becomes incorporated into the judgmental process, entering into the judge's deliberations and eventually coloring judgment. Most likely to occur in the course of constructive processing that involves the substantial transformation rather than mere reproduction of existing cognitive representations; such processing requires a relatively open information search strategy and a significant degree of generative elaboration of the available stimulus details.
Affective intelligence	Marcus et al. 2000	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16	There are two systems that are responsible both for how we react to novel situations and how we use habitual behaviors. The <i>dispositional</i> system monitors habit, or scripts, and allows us to perform tasks without consciously considering them. When expectations are not challenged by new information, we can safely rely on habitual responses to incoming stimuli. The central emotions of the dispositional system are enthusiasm and aversion, the former for rewarding actions and the latter for punishing actions. From the perspective of affective intelligence, then, even the simplest of habits relies on affective processing. The <i>surveillance</i> system is activated when something unexpected is encountered, producing anxiety in such novel situations. Anxiety then drives conscious attention to a problem that in turn promotes learning. Thus, when new information is incongruent with habitual response or habitual response produces outcomes inconsistent with expectations, control is shifted to conscious awareness.
Affective primacy	Zajonc 1980	5, 7	The first response to the environment is affective. Affect is always part of cognition, whereas the converse is not true. An individual can like something or be afraid of it before he or she knows precisely what it is and perhaps without knowing what it is.
Affective priming	Bargh et al. 1996	5, 8	Affect influences the encoding, retrieval, and selective use of information in the constructive process of social judgment.
Elaboration likelihood model	Petty and Cacioppo 1986	4, 8	Emphasizing two distinctive patterns of information processing, the posited central route engages high levels of thinking and cognitive elaboration. The posited peripheral route, on the other hand, uses less thought and elaboration and is characterized by a reliance on peripheral and situational cues for evaluative judgments.
Symbolic politics	Sears 1993	5, 6, 8, 14, 16	In early life people acquire standing predispositions that influence their adult perceptions and attitudes. In adulthood, then, they respond in a highly affective way to symbols that resemble the attitude objects to which similar emotional responses were conditioned or associated in earlier life.

TABLE 1.1: *continued*

<i>Key concept</i>	<i>Exemplary source</i>	<i>Relevant chapters</i>	<i>Brief definition</i>
<i>Linkage models:</i>			
Affective tag	James 1884	5	A positive or negative affective linkage or tag associated with stimuli in the environment
Hot cognition	Abelson 1963	4, 5	Information about social objects is inevitably charged with affect, and the object cannot be activated without also activating this tag.
Symbolic psychologic	Abelson	1	Early provocative model that posited an affective logic along the lines of Heider's Balance Model which paralleled formal mathematical 'cognitive' logic
<i>Subliminal linkage models:</i>			
Automaticity of affect	Fazio 2001	4, 5, 6	Presentation of an attitude object has been shown to automatically activate from memory the evaluation that an individual associates with the object.
Dual process model	Deutsch and Gerard 1955	4, 14	A dichotomy between controlled and automatic mental processing. Dual-process models hypothesize two distinct cognitive and neural systems mediating, on one hand, the top-down, goal-directed, or endogenous control of thought and activity, and, on the other, mental processing that is bottom-up or automatic or exogenous (not controlled).
Heuristic/systemic model	Chaiken 1980	5	Holds that individuals will use one or both modes of information processing when attempting to evaluate information in order to arrive at a judgment that squares with relevant facts. Systematic processing is a high-involvement mode in which an individual actively seeks information and evaluates it in an effortful and structured manner. Heuristic processing is a more casual mode in which the individual relies on current knowledge or experience and utilizes mental shortcuts to evaluate information.
Mere exposure effect	Zajonc 1968	5	The propensity for individuals to judge familiar objects positively
Online processing	Anderson and Hubert 1963	5	Individuals use the affective content of information processed about a political figure to update the affective vector attached to the candidate and then forget the information at an exponential rate. Thus, when the individuals are asked their opinion of the political figure, the most readily accessible information is their emotional response. When asked the reasons for their opinions, they simply make use of whatever affectively congruent considerations are most accessible.
Recurrent multilevel appraisal model	Spezio and Adolfs (this volume)	4, 9	Emotional processing begins as the outcome of initial low-level evaluative processing in terms of autonormative outcomes, resulting in the activation of a set of automatic and sensorimotor processes in the body, such as the heart rate, pupillary dilation, changes in skeletal muscle tone, and the representations in the brain that mediate these activations. Emotional responses first influence downstream processing in the domains of selective attention, memory encoding and retrieval, associative learning, action planning, and thought. Second, they influence the evaluative processing functions due to changes in attention, memory, imagery, and semantic processing.
Somatic marker theory	James 1884	4, 9, 16	Emotional processing is prior to and contributes to the appraisal of events within decision making. Emotion is elicited by first categorizing an event and then activating a link between the event category and emotional signals. Both the categorization of the event and the activation of the appropriate acquired association between the event and the elicited emotion can and usually do take place outside of conscious awareness.
<i>Models of functional form:</i>			
Negativity bias	Cacioppo and Berntson 1994	1	The human brain has a greater sensitivity to negative or unpleasant information or stimuli.
Positivity offset	Cacioppo and Gardner 1999	1	Humans exhibit a positivity offset in which they are likely to interpret neutral surroundings as positive and encourages exploration of new environments.
Yerkes-Dodson model	Yerkes and Dodson 1908	4, 14, 16	The relationship of the emotion and behavioral performance depends on the level of emotion—often defined as arousal—such that performance is low at very low and very high levels of emotion and optimal somewhere in between.

of scientific precision and parsimony. Indeed, the complexities of mass political behavior are not likely to yield to a notion as straightforward as a singular, well-understood payoff matrix. But the challenge Lupia and Menning put before us is about clarifying the nature of the phenomena, the character of causal relations, and the principles of inference from data. This is not an inappropriate challenge but merely a difficult one.

Most of the contributors have known each other and have been reading each other's work for years now. We exchanged chapter drafts and commentaries electronically and met for a weekend workshop in Ann Arbor in the fall of 2004 to compare notes and, as much as possible, integrate our analyses for this book. But there is still much work to be done in clearing out the theoretical underbrush and clarifying the central ideas. By our count, there are 23 named theories, models, or central concepts used to explicate the interaction of affect and cognition at various points in this work, as summarized in table 1.1. Part of the terminological pluralism results from the different forms of empirical investigation and contexts of analysis undertaken. Part of it results from the fact that we are still early in the game, pre-paradigmatic, as Thomas Kuhn would characterize it. The contributors agree that, politically speaking, affects do indeed have effects. Bear with us as we try to work out exactly how and when. If we meet partial success in closing off some of the dead ends and clarifying a few urban myths, we will take it as evidence of the very important role that multiauthor volumes can play in moving scholarship forward.

THE CENTRALITY OF AFFECT IN THEORIES OF POLITICAL THOUGHT AND BEHAVIOR

There have been numerous studies of the cyclical nature of attention and inattention to the emotional side of the human condition. In the broader sweep of history the alternation between an emphasis on the natural expression of human yearnings and the need to constrain, redirect, or simply repress such appetites by religious or civil authority is a familiar theme. Norbert Elias's classic and influential *History of Manners* (in the original German: *The Process of Civilization*, 1939) is one prominent exemplar. Of course, fashions of scholarship usually trail these alternating cultural emphases, occasionally bucking the trend—one thinks, of course of Freud's response to Viennese Victorianism. Recently Peter Stearns (2004) has reviewed the extensive historical literature in this domain. Many comprehensive studies and textbooks about the psychology of emotion take note of such predictable cycles (Izard 1971; Damasio 1994;

Lazarus 1994; Goleman 1995; Cornelius 1996). A closer look, however, reveals some interesting insights into these patterns of public thought.

First, an increase or decrease in intellectual attention may or may not be associated with the corresponding cycle of the vilification and glorification of the emotional domain. Some analysts with long lists of the evils of emotional excess trailing behind them nevertheless argue that attention is due and that we must better understand this side of the human character. This is the school of emotionality and pathology, with particularly prominent examples in the nineteenth century of associating such human weakness with the feminine gender (Marcus 2002). Others (à la Elias) would argue that such topics are simply inappropriate for discussion in civilized company.

Second, changing definitions of what exactly an emotion is and what it is not complicate any attempts to trace the intellectual history of the concept. Michael Neble's chapter in this volume does an excellent job of tracking these complexities, and each chapter addresses the interaction of emotion and cognition. As in the history of this literature, when two ideas are characterized as deeply intertwined, to talk of relative emphasis on one or the other is not very meaningful, but, until we develop a more sophisticated model of these complex physiological dynamics, it is probably unavoidable.

The cycles of attention to emotion in the study of politics also have been the subject of detailed inquiry. Marcus, Neuman, and MacKuen (2000) review these issues in a chapter titled "Human Affect in the Western Tradition." As in the broader literature of human psychology, the emphasis is on pathology and the potential role of human affect in distracting from, distorting, or simply overloading the cognitive capacities of the citizen faced with difficult choices about personal and public interests. Marcus (2002) picks up and develops the historical analysis, raising the centrally important point that concerns about citizen irrationality are intimately intertwined with judgments about democratic practice itself. If citizens are easily distracted or their judgments distorted, it is better to turn to a philosopher king, or at least an elite-oriented form of representative government that insulates policy from the undulating passions of the madding crowd.

Two scholars have attempted to model the waxing and waning of attention to the political psychology of emotion in modern political scholarship. Bill McGuire (1990) posits three distinct stages. First, McGuire characterizes research in the 1940s and 1950s as dominated by the concept of personality and psychoanalytic approaches focusing on, for example, the authoritarian personality and the psychohistories of notable

political leaders. In the second stage, during the 1960s and 1970s, research focused on survey-based studies of voting behavior and spatial modeling of interest maximization. In McGuire's third stage, the 1980s and 1990s, scholars turned more to the attempt to understand the structure of political cognition, drawing on concepts of schema, belief systems, and ideology. Notably, theories of emotion played a major role in the first but only a minor supporting role the latter two stages of scholarship. This view is reinforced by Don Kinder's essay "Reason and Emotion in American Political Life" (1994). Kinder, however, adds two elements to what might be an emerging theory of cycles of attention to political affect. First, in his view, the early psychotheorists overreached a bit in explaining behavior on the basis of childhood experiences, the projections of personal feelings on public objects and, most famously, the rather grand pronouncements of *The Authoritarian Personality* (1950). Overextended and overtaxed theoretical constructions, unfortunately, may have driven younger scholars to look elsewhere for key explanatory variables instead of refining and reining in the predominant theory of the day. Second, Kinder notes that exciting new models stimulated by Anthony Downs's economically oriented work, focusing on rational choice and spatial modeling, became a magnet for scholarly attention. Some early critics believed this development to be an unfortunate "cognitive imperialism," but Kinder demurs and urges patience. There is no reason to diminish exciting new work because of its independent intellectual provenance. Let us see how far it can take us. When the limitations and incompleteness of rational choice modeling become increasingly evident, the importance of bringing the psychology of human affect back into the model will be abundantly clear. And, happily, Kinder asserts, that time has come. Indeed, Kinder (1994, 279) draws on a rather unusual word to characterize the current state of theory development as he asserts: "Theories of emotion are proliferating, and at a horrifying rate." Horrifying? (Graduate students, be forewarned.) Well, yes, there may be some danger of excess exuberance, as was evident with the F-scale, but perhaps we should simply relish the return of energy and attention to this neglected domain. We do agree, for example, that the existence of 23 independently named theories of affect effects represents undue terminological enthusiasm. But the underlying concepts are fewer in number, and the vocabulary and the direction of the findings are converging. The hard work of hammering out that integration, albeit only in part, is the essence of edited volumes such as this.

We may draw some encouragement from the broader literatures that track scholarly processes through history. Randall Collins's recent masterwork *The Sociology of Philosophies* (1998), for example, offers an

intriguing dynamic model that may assuage Kinder's unease. His work literally maps the rise and decline of hundreds of schools of philosophy and theology around the world from its early Hellenistic manifestations to modern philosophical scholarship. One of his major notions is the idea of a limited *attention space*. Scholarship, he argues, thrives on controversy, but a community of scholars can only manage a limited set of controversies at a time—he terms it "the law of small numbers." As the naturally limited scholarly attention space is taken up by new issues, old ones are ignored or, much better, incorporated into existing theories by means of simplification and reorganization. We strive for the latter—less controversy, no less attention. Collins comes up with an average of 4 to 6 major schools of thought per scholarly generation. Interestingly, such a number is not very far from Miller's now-iconic 7 ± 2 (1956). Our analysis, of course, is at a much finer-grained level of scholarly attention than entire schools of philosophy, but we may at least have stumbled onto a useful and possibly achievable goal: to move from 23 to 6 or 7 key concepts and models that attempt to capture the essence of the interaction of political passion and cognition.

THE STRUCTURE OF AFFECT

In the following two sections we struggle with what affect is and with how affect interacts with other elements of human behavior. Our focal point is political behavior, but, in both cases, we draw on the related broader literatures that attempt to make sense of the dimensionality of human emotion and the critical interactions of emotion and cognition.

What is affect? Modern definitions make it difficult to imagine why it had been so long vilified and ignored. *Affect* is the evolved cognitive and physiological response to the detection of personal significance. Scherer (2005, 314) puts it a little more formally: affect is "an episode of massive synchronous recruitment of mental and somatic resources to adapt to and cope with a stimulus event that is subjectively appraised as being highly pertinent to needs, goals and values of the individual." It would seem to follow that students of political behavior should pay particular attention to the ways in which citizens, through a mixture of impulse and calculation, reckon what is politically significant to them. This perspective is frequently demonstrated in this volume, in particular, the essays in part II and Doris Graber's chapter in part III.

With a working definition in hand, we turn to the issue of structure. Psychology has traditionally identified three dimensions of mind: cognition, affect, and conation, cognition focusing on perception, storage,

and processing of information, affect focusing on the evaluation of information, and conation on the interaction of cognition, affect, and actual behavior. The literatures of psychology and politics are replete with typologies, lists, catalogs, and models that attempt to capture the dimensional structure of each and its linkages the others. We focus first on the dimensionality of the domain of affect.. The basic analysis has been developed in more detail in Marcus, Neuman and MacKuen (2000 appendix A) and Marcus (2003).

We identify three schools of thought in characterizing the dimensionality of affect: discrete models, valence models, and multidimensional models. As the terminology implies, discrete approaches tend to identify a set of reliably identifiable emotional responses to unique circumstances without much attention their interconnection or dimensionality. Valence models focus on a single positive-negative dimension on which emotional states can be arrayed, frequently associated with the fundamental behaviors of approach and avoidance. Multidimensional models, which are more recent, represent an extension and reinterpretation of a valence model into multidimensional structure, sometimes identified as a circumplex.

Discrete models have the longest literary pedigree and represent perhaps the most commonsensical approach. The work of Descartes, Darwin, and James has influenced the thinking of generations about the diversity of emotional states. But most adults (and surely children as well) from virtually any culture in the world, if asked to list a dozen different emotional states, could probably do so quickly and without significant effort, such a list representing a naturally evolved component of most of the world's cultural and linguistic toolkits. The commonly used terms that describe discrete emotions in English number in the hundreds (Marcus 2003). Roseman's structural model of emotional responses to different circumstances of success and failure has been particularly influential. (See table 1.2.) He demonstrates that appraisals of unexpectedness (not unexpected/unexpected), situational state (motive-inconsistent/motive-consistent), motivational state (aversive/appetitive), probability (uncertain/certain), control potential (low/high), problem source (non-characterological/characterological), and agency (circumstances/other person/self) differentiate a large number of widely discussed emotions (Roseman 1984; Roseman, Antoniou, and Jose 1996). Lazarus's typology of goal satisfaction and frustration and the similar and widely influential OCC model (Lazarus 1991; Ortony, Clore, and Collins 1988) encourage thinking in terms of discrete emotions (table 1.3, figure 1.1). More recently, Paul Ekman's (1992) analysis of universally recognized facial

TABLE 1.2: An example of Roseman's structural model of discrete emotions

		Positive emotions Motive-consistent		Negative emotions Motive-inconsistent				
Circumstance-caused:	Unknown	Appetitive	Aversive	Appetitive	Aversive			
	Unknown	Surprise						
Uncertain	Hope		Fear				Weak	
Certain	Joy	Relief	Sadness	Distress, disgust				
Uncertain	Hope		Frustration				Strong	
Certain	Joy	Relief						
Other-caused:	Uncertain	Liking				Dislike		Weak
	Certain					Anger		Strong
	Uncertain	Pride				Shame, guilt		Weak
	Certain					Regret		Strong
Self-caused:	Uncertain	Pride				Shame, guilt		Weak
	Certain					Regret		Strong
	Uncertain	Pride				Shame, guilt		Weak
	Certain					Regret		Strong

Source: Roseman 1984; Roseman et al. 1991.

expressions has reenergized the study of discrete models. Several decades' worth of cross-cultural research converged on consistent evidence for the universal recognition of six emotions: anger, fear, disgust, sadness, happiness, and surprise. Some more recent analysis (Ekman and Rosenberg 2005) has suggested the possible additions of contempt and shame to this list.

The work of Don Kinder and Bob Abelson and colleagues on self-descriptive emotional reactions to political candidates has been particularly influential in emphasizing a discrete approach in political science. The early work assessed the discrete terms *hope*, *pride*, *sympathy*, *disgust*, *anger*, *fear*, and *uneasiness*, and those analytic concepts have become part of the National Election Studies tradition (Kinder, Abelson and Fisk 1979; Abelson et al. 1982).

TABLE 1.3: Richard Lazarus's appraisal model of six basic emotions

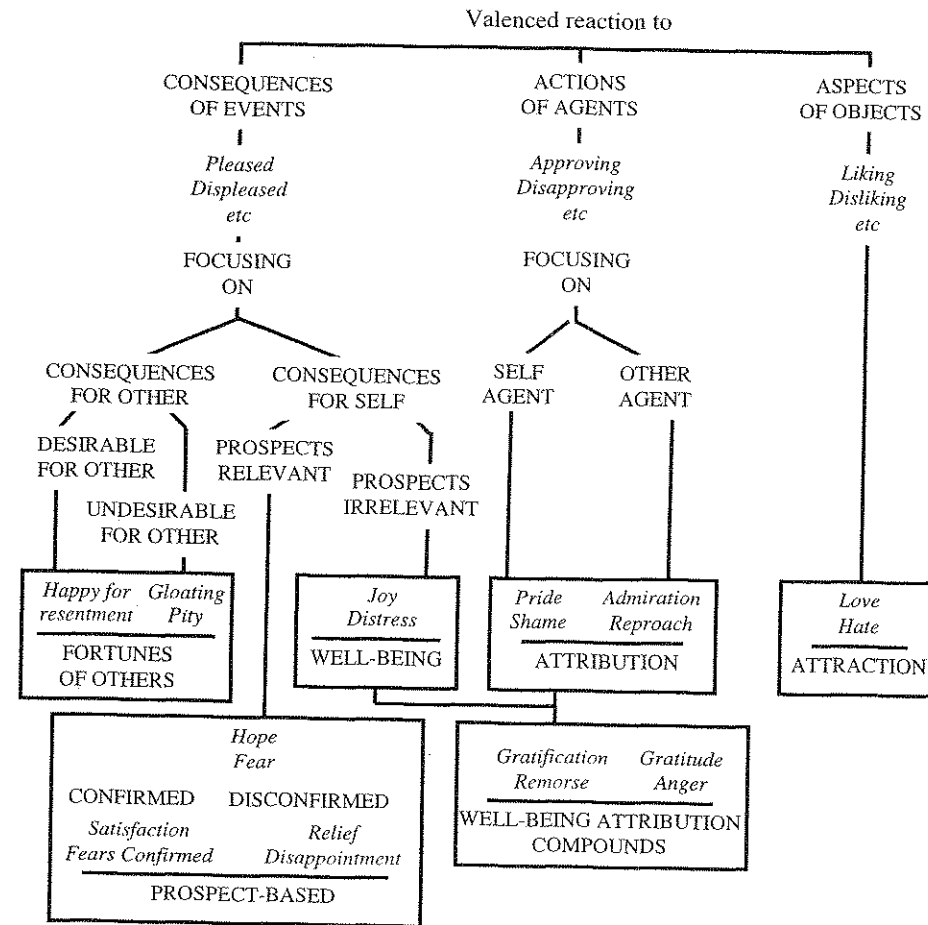
<i>Emotion</i>	<i>Core relational theme</i>	<i>Important appraisal components</i>
Anger	Other-blame	Motivationally relevant Motivationally incongruent Other-accountability
Guilt	Self-blame	Motivationally relevant Motivationally incongruent Self-accountability
Fear-anxiety	Danger-threat	Motivationally relevant Motivationally incongruent Low or uncertain (emotion-focused) coping potential
Sadness	Irrevocable loss, Helplessness about harm or loss	Motivationally relevant Motivationally incongruent Low (problem-focused) coping potential Negative future expectations
Hope-challenge	Effortful optimism, Potential for success	Motivationally relevant Motivationally incongruent High (problem-focused) coping potential Positive future expectations
Happiness	Success	Motivationally relevant Motivationally congruent

Source: Smith et al. 1993.

Valence models avoid some of the complexity of the structural-discrete models by focusing on a single bipolar dimension—positivity/negativity (approach/avoidance). The deep intellectual roots of this dimension in evolutionary theory and its cultural reinforcement in the demonstrated generality of the semantic differential, in addition to its simplicity, may reinforce its appeal.

But more recent empirical analyses have demonstrated that a multi-dimensional analytic structure more accurately captures the dynamics of human emotional response. Early work by Plutchik, Russell, and others dubbed this Cartesian space a “circumplex,” given the convenient capacity to organize emotional states in a meaningful circular structure. The extensive literature concerning this structure is reviewed in Marcus, Neuman, and MacKuen (2000) and in Marcus (2003). In one version

FIGURE 1.1: OCC MODEL OF EMOTIONAL STRUCTURE

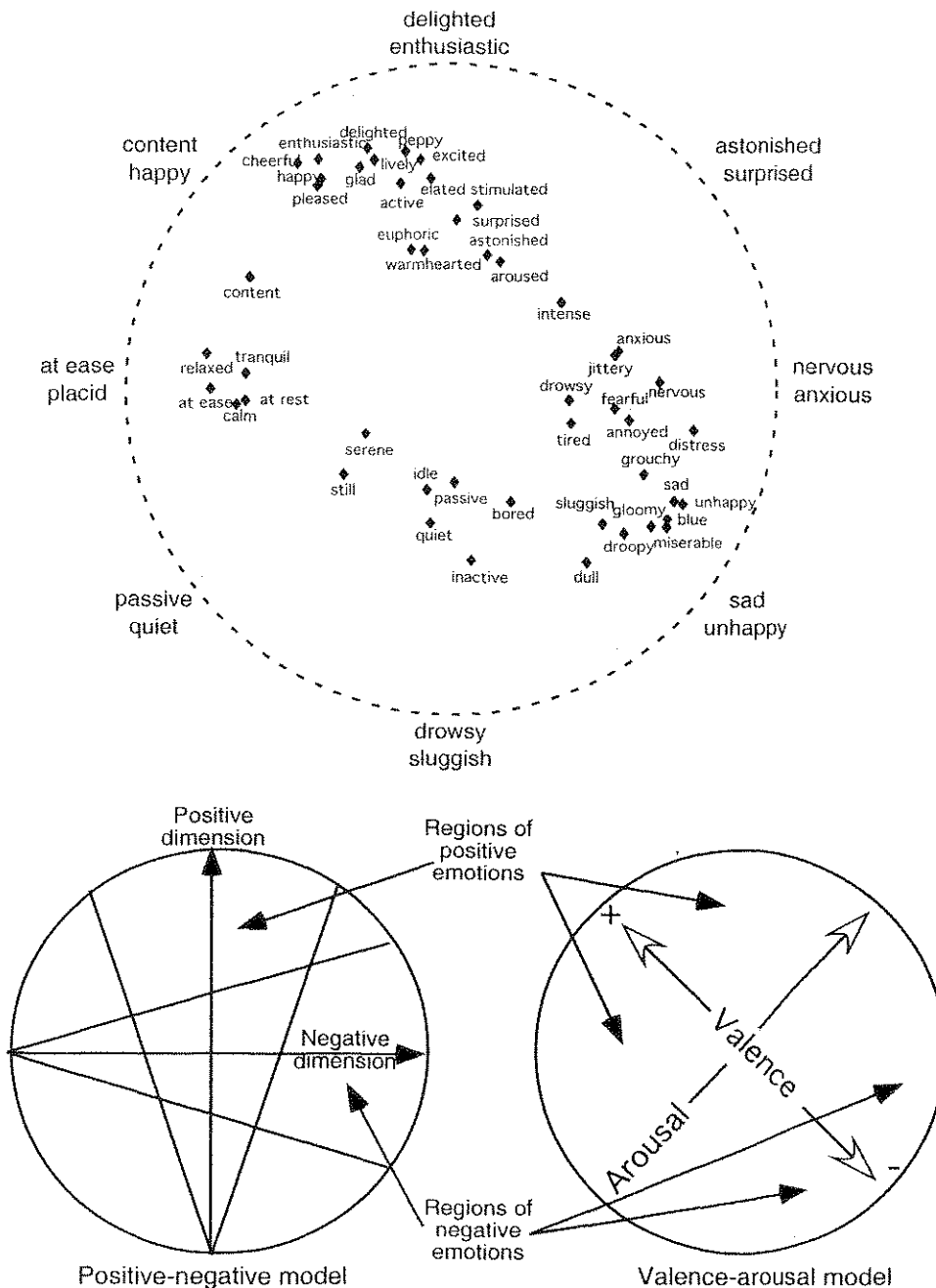


Source: Ortony, Clore, and Collins 1988.

of the two-dimensional scheme, one dimension is positivity-negativity, and the other represents level of arousal. In another variant positivity and negativity are defined as orthogonal dimensions, each varying in intensity. But each can simply be understood as a rotation of the defining orthogonal dimensions of the circumplex space. (See figure 1.2.)

We have reviewed three alternative approaches to organizing our thinking about different emotional states: (1) discrete emotions—sometimes a simple list with little structure, sometimes complicated structured models of emotional responses to success or frustration under different conditions; (2) valence models, which array emotional states along a

FIGURE 1.2: BIVARIATE CIRCUMPLEX MODEL OF EMOTIONAL STRUCTURE



Source: Marcus 2003.

single bipolar dimension of positivity and negativity; and (3) the circumplex model, which extends the valence model into multidimensional spaces. The positivity-negativity distinction is a staple of all three approaches. Each approach continues to have its champions. It is probably not the case that the true character of human emotion is akin to the famous case of light in quantum physics, possessing the characteristics of a particle and of a wave. It may simply be that the discrete, valence, and dimensional approaches are not entirely mutually exclusive and that an ongoing competition to determine which of the three leads to the most productive science is the optimal path. The contributors to this volume draw loosely on all three conceptions. Perhaps in time a convergence of the three or a synthetic fourth model will prove most productive. Notwithstanding that prospect, we can anticipate that as the field matures, the structure of affect, in its preconscious and conscious guises, will be a continuing focus of research. An additional challenge, most clearly raised in the chapter by Huddy, Feldman, and Cassese, is that the structure of affect is likely to be dynamic (that is, of changing dimensional structure and of changing interdimensional dynamics, more or less orthogonal as circumstances change). This brings us to the functions of affect.

THE FUNCTIONS OF AFFECT AND COGNITION

The role of affect in human behavior has been informed by the medical study of brain injuries and pathologies (for example, Damasio 1994) and by more general inference from evolutionary biology (Lazarus 1991; Cosmides and Tooby 2004). Two themes arise from this complex and rich literature. The first is the role of affect as the engine of behavior—the motivating, directing, prioritizing function of the brain. The second is the complex interaction of affect and cognition—the alternative conditions under which affective states may diminish or stimulate the capacity for deliberation. It is indisputable that several million years of differential survival in the grasslands and jungles has influenced the ways the human brain responds to its environment. Such issues of mind and body have engaged theologians, philosophers, and scientists for ages, and we will not rehearse the continuing drama again here. Interested readers are referred to Damasio (1994), Cornelius (1996), and LeDoux (1996) for particularly persuasive and accessible reviews of this tradition. How well genetic optimization for a life of hunting and gathering in small communities has prepared us for the era of instantaneously televised global economics, politics, and warfare is a difficult question. Indeed, it lends urgency to the scholarly challenge ahead of us.

We have advanced since Hippocrates and Galen's theory of the four humors that govern personality and physiology: the sanguine (associated with blood), the phlegmatic (associated with phlegm), the choleric (associated with yellow bile), and the melancholic (associated with black bile). But it is humbling to acknowledge that we are only a little more than a century beyond the practice of bloodletting in an effort to rebalance fluids for emotional and physical health.

Table 1.1 presents an informal list of the theories and models utilized by this volume's various authors with brief descriptions and chapter cross-references. It is not a battle of paradigms, exactly, but more a variation in emphasis on causal primacy and, of course, the usual terminological pandemonium. The models are grouped under five headings that describe different types of interaction between affect and cognition. Theories of cognitive primacy are those that emphasize a direction of influence from cognition to affective state, most notably the various appraisal theories, which posit an initial evaluation of threat or goal achievement followed by a corresponding affective response. The appraisal school of thought includes many complex, multilevel, and dynamic theories of cognitive-affective interaction and should not be characterized as a simplistic one-way causal model. Theories of affective primacy such as affective intelligence theory, in contrast, emphasize the critical importance of the affective state on the level and character of subsequent attentiveness to various stimuli. These labels, of course, represent a tip of the hat to the legendary Zajonc-Lazarus debate about the relative primacy of cognition and affect (Zajonc 1982; Lazarus 1999). Although, at the time, it was (incorrectly) defined by many as a great debate about the relative importance of cognition and affect, it was really about the different character of cognitive and affective processes, a concern that occupies virtually all of the authors of this volume. The categories "linkage models" and "subliminal linkage models" capture models that posit various mechanisms for interaction between cognition and affect without implying a particular primacy for one or the other. Finally Models of functional form include theories that emphasize asymmetries and nonlinearity in models of interaction.

Table 1.1 may reveal that we have a fair distance to go in terminological and theoretical integration. A few of the concepts are used by a majority of the chapters, but on average the number of concepts used per chapter is only 2.5. In a few cases different authors are using different terms that mean pretty much the same thing. The affective tag and the somatic marker are virtually identical, for example. And some authors cite the heuristic/systematic model and others its close offspring, the elaboration likelihood model. But a close examination of the table's apples and

oranges should motivate further integrative and metatheoretic efforts such as this book.

METHODOLOGICAL ISSUES

Social scientists are fond of drawing analogies from the physical sciences; a famous example is Thomas Kuhn's work on paradigms and scientific revolutions. Without the technical improvements in telescopic optics (read: methodology), we would have been long delayed in our transition from a geocentric to a heliocentric paradigm of the solar system. As the chapters by Spezio and Adolphs and by Schreiber demonstrate, neuroscience contributes a powerful and evolving array of methodologies for studying the brain in action. Yet as exciting as this new research and the promise it offers are, new means of measuring the activities of the human brain, even at the level of the individual neuron, present daunting measurement and theoretical challenges. The research reported in this volume covers an array of analysis ranging from the single neuron to adult populations numbering in the hundreds of millions. At one end of the spectrum, some of this research is concerned with describing the activity of individual cells, at the other, the political behaviors of very large groups of people (for example, partisan and social groups). In addition, the time scale of the various contributions in this volume ranges from milliseconds to many decades. And discussions located at various points along these temporal and spatial dimensions often do not meet at common points of reference.

Among the wide array of methodological strategies are aggregate studies such as those by Legee and Wald and by Nardulli and Kuklinski. These studies, conducted at the grandest temporal and spatial levels, have no direct measures of affect but rely instead on micro-models of affect to derive testable hypotheses to account for the historical dynamics they observe. Survey sampling studies (Huddy, Feldman, and Cassese; MacKuen, Marcus, Neuman, and Keele; and Just, Crigler and Belt) can generate large quantities of data with explicit measures of emotion. Such approaches most often rely on subjective measures of emotion, that is, they rely on the subject's ability to be introspective and accurately report on whatever emotional state is of interest to the researcher and respond to whatever stimulus object the researcher specifies. Doris Graber's use of content analysis provides another approach to determining the affect component, in this case that of major news stories, though the challenge remains, as with all methods, to ensure that the reactions of expert coders mimic the responses of diverse populations. Experimenters such as Brader and Valentino can choose from a variety of methods to assess

and validate emotional response; others use dynamic tracing of information gathering and decision making (Redlawsk, Civettini, and Lau). But there is a wider array of methodologies, from reaction time (Cassino and Lodge) to facial electromyographics, skin reactance, subjective response to affect scales, and even fMRI and measurement of evoked potential (Schreiber), and, we might add, some of the other techniques may make use of split brain subjects and subjects who have suffered some injury or illness that limits some neurological capacity. Although case studies can use any of these methodologies, they are also capable of using contemporary and historical documents, an approach seen in Blight's (1990) study of the role of emotion in accounting for American leaders' decision making during the Cuban missile crisis and Doris Graber's study of news stories. The research that adequately cross-validates each and all of these approaches has yet to be done.

But the challenge of measurement is not, perhaps, itself the greatest challenge. Measurements, even those with established reliability and validity, do not generate the theoretical account that connects concepts of thinking, feeling, and acting (at the individual and aggregate levels). Political psychologists who are interested in emotion have a rich array of theoretical sources including, as Neblo persuasively argues, the rich classical and modern philosophic traditions. But the long-standing interest in linear models (and the ubiquitous reliance on linear regression) may miss most of the important relationships.² If, as neuroscientists are increasingly asserting, brain activity is interactive and compensatory, then simple causal models will be inadequate. Linear models simply cannot describe brain behavior that is due to inhibitory processes as well as to excitatory ones, nor neural activity in one region (or module) that results in cascading consequences, with both feed-forward and feed-backward tuning (as when a sudden light not only shifts attention, a forward consequence, but also changes the visual focus, a backward consequence). To be fully specified models, these iterative brain functions will almost certainly require researchers to identify complex network and interactive functions to be described. And that will be necessary simply to model the complex neurological interdependencies that are already apparent.

Developing a macro-micro model that is provisionally adequate and then scaling it up to the temporal and spatial dimensions of individual action, group interactions, and the actions of large aggregations of people

2. Insofar as social scientists use nonlinear models, it is most commonly a decision resulting from the categorical quality of a dependent variable and the probit and logit modeling, rather than a theoretically driven choice.

(including leader and follower linkages) over sweeping periods of time is a challenge that will consume the energies of researchers in this field for many years to come. More likely, in the interim, is the development of more limited middle-range theories. We already have an array of theories that are parsed at different levels of analysis: neurological, personal, interpersonal, and societal. A parsimonious yet comprehensive theory of affect and politics will require measurement and theory that can account for and link biological actions at very intimate levels of brain function and the actions of leaders and followers as they engage with each other and with other populations in settings both pacific and antagonistic. We hope, however, that the rich sampling of contemporary work presented in this volume suggests the value of the enterprise.

PRAXIS

The chapters in part IV, "Next Steps in Research and Outreach," most directly in address the question of praxis: How would one put these insights into human psychology to work in executing successful efforts at political communication, in promoting democratic institutions around the world, and in adjusting political institutions and practices to take the changing technologies of communication into account?

The authors of a very long line of previous scholarship have also turned (usually also in their concluding paragraphs) to the issue of practical application. As before, the connection is not an easy one to make. There are, however, five relatively new developments that give these discussions a fresh energy and magnetism.

First, scholarship of more recent generations is not burdened by the need to first apologize for the human condition before addressing the difficult challenge of trying to understand it. No apologies are expected, and none are offered. There is no need to justify attention to the significant interaction of emotion and cognition. The case has been made and the argument won.

Second, when systematic effects or distortions in human judgments are made evident, there is no need to sermonize. Patriotic, civic, and perhaps religious exhortations for citizens to be more deliberative and attentive to the political world are welcome, of course, but no longer need be intertwined with the scholarly literature. The effort to understand the conditions under which one or another predictable emotional state interacts systematically with cognition need not lead to homily. Zajonc (1980) asserted that preferences require no inferences. We would add: scientific inferences require no exhortations.

Third, the new methodologies, especially those associated with brain functioning and convergent findings from multiple methodologies, add new gravitas and perhaps urgency to theory building and testing in this domain. We are still in the early stages of convergence, but the evidence and momentum are accumulating.

Fourth, an important nonacademic audience for this work (whose interests are captured in part in Schnur's chapter) is the practitioner. This should be a two-way street as real-world applications and systematic testing of alternative institutional designs provide further data for analysis and reflection. The work reported in this volume does not, for example, include a systematic analysis of alternative electoral systems drawing on what we know about the psychology of political information flow and citizen engagement. But that is exactly the sort of analysis that McDermott's chapter calls for.

Fifth, a new audience is the citizenry itself. Higher education and the popular press take pride from time to time in providing their respective audiences with critical thinking skills and the "inside scoop" to help them respond to the inevitable flow of persuasive messages and images in the public sphere. Ultimately, the citizenry may represent the most important and, in time, the most appropriately concerned audience for this research enterprise.

Part I, "Putting the Affect Effect in Perspective," introduces major concepts and methodological alternatives and puts them in historical perspective. The main body of the book, as indicated above, focuses first on micro and then on macro analytic tools, in most cases in the context of American electoral politics. The book concludes with three forward-looking essays on praxis and next steps for the communities of researchers, political professionals, and, lest we forget, citizens.