Social Intelligence THE COGNITIVE BASIS OF PERSONALITY

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The present chapter outlines a cognitive theory of personality based on the social intelligence that individuals bring to bear in solving personal life tasks. Our argument is derived from earlier cognitive approaches to personality, including the personal-construct theory of Kelly (1955) and the social learning theories of Rotter (1954), Mischel (1968, 1973), and Bandura (1977). Like these, it attempts to account for both constancy and change in social behavior with a single set of principles. As Allport (1937) put it, individuals are not all consistent in

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the same way; rather, individuals are consistent with themselves. People's actions are predictable from our knowledge of the meaning they ascribe to the situations in which they are located and the solutions they have favored in the past.

Although placing cognition at the center of a theory of personality is by no means new, the present approach seeks to extend earlier work by drawing on developments in the literature on social cognition (Showers & Cantor, 1985) and intelligence (Sternberg, 1982). The social cognition literature is now in a better position to specify the idiographic content and organization of individuals' personal constructs. Meanwhile, the intelligence literature has also been moving toward a more contextualist perspective, one that emphasizes the unique ways in which individuals frame problems and shape solutions to fit personal and cultural agendas. In both instances, attention is directed less toward characterizing primary abilities and commonly shared tasks and more toward capturing the particulars of individuals' problem solving in different life-task domains. The objective is no longer simply to show stability in the rank order of individuals on a select set of ability or style dimensions across standardized testing formats. Rather, investigators seek to demonstrate flexibility in the ways people approach the problems of everyday life.

Even with substantial improvements in the sophistication of our psychometric technology, many questions remain concerning the ontological status of personality traits and cognitive styles (Pervin, 1985). If the doctrine of traits is not entirely wrong, at least traits are not the powerful determinants and organizers of personality that we once thought them to be. However, there is also no reason to conclude that the dominant determinants of social behavior are situational in nature. Rather, the available evidence suggests that people are able to make even very subtle discriminations among their life situations, to give meaning to these situations through the operation of their cognitive processes, and to respond flexibly in terms of their goals to the constraints they encounter. Traditional trait theories of personality have little or nothing to say about this sort of behavioral variance. Yet it would seem that a complete theory of personality must be able to account for both interindividual and intraindividual variance in behavior.

Lawful intraindividual variability, especially across situations, is precisely the characteristic that we ascribe to intelligence. Intelligent action, as contrasted with the instinctual or the reflexive, is flexible rather than rigidly stereotyped, discriminative rather than indiscriminate, and optional rather than obligatory. It follows then—or so it seems to us—that a theory of personality may reasonably be centered on human intelligence, and especially on the intelligence that people bring

to bear on their social interactions. As Gould reminds us (1981, p. 331): "What is intelligence, if not the ability to face problems in an unprogrammed (or, as we often say, creative) manner?" The task for the personality psychologist is to demonstrate that two individuals are often prepared to see the same situation as presenting different problems to be solved, and even more important, that the same individual is prepared to construe two situations in very different ways.

In this chapter, we take an unabashedly mentalist position that places mental contents and processes at the center of social interaction. Expressed in terms of a problem-solving analogy, individual differences in social behavior reflect individual differences in people's interpretations of, and solutions for, their current life tasks. In formulating solutions to their problems, people draw on their repertoires of social intelligence. The organization and content of social intelligence includes much that is unique to each person. Thus, social intelligence can form the cognitive basis for personality.

SOCIAL INTERACTIONS AS PROBLEMS

We begin with an analogy between the thinking and problem solving that goes on in social interaction and that studied by mainstream cognitive psychologists (Newell & Simon, 1973). Every social interaction, whether mundane or monumental, can be represented as a problem—or rather a series of problems—to be solved. The social actor, who enters the problem situation with many prior conceptions about himself or herself, others in the interaction, and the event itself, works to set goals and find procedures that can achieve the desired endpoint. This is, of course, not so much a sequence as it is a cycle, with each element in the interaction influencing the other elements (Darley & Fazio, 1980). At each stage, however implicitly, the person must ask such questions as "What do I want here?" "What are the likely consequences of my actions?" "How can I get what I want here?" As he or she works to make sense of the social problem at hand, cognitive structures and processes are central: The actor's impressions, actions, and interpretations are influenced by the body of social knowledge and the repertoire of social interaction strategies he or she possesses.

Some social interactions present very well-defined problems, and people draw on consensually shared knowledge to arrive at similar interpretations of the best solution. For example, when meeting a stranger in our own country we all adopt relatively uniform conventions of greeting. These well-defined problems are the social equivalent of simple arithmetic, and their solutions involve highly scripted, seemingly

thoughtless behavior. Ill-defined problems, by contrast, require the thoughtful application of social intelligence. How do you greet someone in a foreign country when the normative rules are unclear to you? We suspect that many social interactions pose problems of this kind, and that an individual's personality is revealed through the way in which these problems are represented and solved. In fact, we purposely concentrate our empirical analyses on a set of social problems that are typically ill-defined, allowing for considerable variation in construal and solution from one person to the next. For example, when we ask college students about their pressing concerns, there is considerable uniformity at the abstract level of academic and social problems, but there is much diversity at the level of specific thoughts, feelings, and plans for working on these current life tasks (Cantor, Brower, & Korn, 1984). Even in the face of strong environmental demands, as in the life transition period from high school to college, people make these problems their own by drawing on social intelligence.

THE STRUCTURES OF PERSONALITY: CONCEPTS, EPISODES, AND RULES

Although there are a number of different viewpoints within cognitive psychology (Hastie, 1985), all share a focus on internal, mental representations of the environment, and transformations applied to these representations in the course of thought and action. From a cognitive viewpoint, personality may be construed in terms of individual differences in the mental structures and processes that guide social interaction. This repertoire of social intelligence is stored in memory as organized knowledge. This knowledge, in turn, forms the structural basis for personality.

In attempting to characterize this knowledge, we follow the practice in cognitive psychology and artificial intelligence of distinquishing between declarative and procedural knowledge, and between episodic and semantic knowledge (Anderson, 1983; Hastie & Carlston, 1980; Tulving, 1983). Declarative knowledge consists of facts concerning the nature of the physical and social world; procedural knowledge consists of the skills, strategies, and rules by which we manipulate and transform declarative knowledge. Within declarative knowledge, a further distinction may be drawn between episodic and semantic knowledge. Semantic knowledge is the mental lexicon of abstract, categorical information. Episodic knowledge consists of autobiographical memory—specific events encoded in the context of the self as agent or experiencer, and of the particular place and time in which they occurred. These

Declarative-Semantic	Declarative-Episodic	Procedural
Implicit personality theory Social categories: Self Other persons Social behaviors Situations Scripts	Person memory Autobiographical memory	Categorization Causal attribution Information integration Judgmental heuristics Hypothesis testing Encoding and retrieval Impression managemen Scripts

TABLE 1.1
Taxonomy of Social-Cognitive Structures and Processes

considerations yield a taxonomy of the mental structures and processes involved in social cognition: concepts, events, and rules (see Table 1.1).

Declarative-semantic knowledge in the social domain comprises what is called implicit personality theory (Schneider, 1973)—intuitive knowledge concerning the causes of human behavior, population norms for various attributes of personality, and the relationships among these attributes. More particularly, implicit personality theory consists of the categories we use to classify social stimuli: other people, ourselves, interpersonal actions, and the situations in which social interaction takes place (Cantor & Mischel, 1979; Cantor, Mischel, & Schwartz, 1982a; Hampson, 1982).

These social concepts contain a wealth of information about the typical behavior of particular types of people in their habitual social contexts—for instance, the behavior of "frat types at parties" and "nerds during classes." Embedded within these concepts is information about our evaluative reactions to such people and contexts (e.g., Fiske, 1982), and the actions and interaction scripts that characterize such events (e.g., Abelson, 1981). Some of us cringe at the mere thought of a frat type dressed in pink and green playing out a script from Animal House. Similarly, the self-concept—rather than being a monolithic, unitary mental representation of our personality—comprises the many "selves," past, present, and hoped for, that emerge in different social contexts (Kihlstrom & Cantor, 1984). Our current "yuppie self" may be far from the future "iconoclast self" we hope to attain. These self-conceptions record likes and dislikes, goals and aspirations, often in detail in very self-defining domains (Markus, 1983).

Declarative-episodic knowledge comes in two forms: our knowledge of the experiences, thoughts, and actions of other people, and our personal autobiographical record. In the study of social cognition, a great deal of attention has been given to the principles governing the encoding, organization, retrieval, and use of memory for other persons (Hastie, Park, & Weber, 1984). However, relatively little is known about these principles as they apply to autobiographical memory per se (Kihlstrom, 1981; Neisser, 1978). Autobiographical memory is important because it provides the basis for personal unity and coherence amidst flexibility and change. Through such knowledge we are reminded that the awkward adolescent of the past is not altogether gone in the suave urban professional of the present. Autobiographical memory is a continuous record of experience, thought, and action, the stream of consciousness linking what is happening now to what has gone before. and what will occur in the future (see Kihlstrom & Harackiewicz, 1982). It keeps track not only of specific events, but also of the individual's subjective impression of success and failure and affective reactions. These features serve to distinguish what is important from what is trivial. It is probably largely from such records that particular approach-avoidance tendencies become associated with aspects of the self. people, and situations. These evaluative associations can serve as the basis for future planning, channeling one's efforts in some directions and away from others. The subjective record of successes and failures may also contribute to the experiential basis of self-esteem and selfefficacy (see Harter, 1984).

The other component in the social intelligence repertoire, procedural social knowledge, consists of the social competencies, strategies, and rules by which we interpret situations and plan action. These are the rules that enable us to form impressions of others, make causal attributions, encode and retrieve social memories, and predict social behaviors (Smith, 1984). For example, recent research has identified some of the rules we follow in assigning people to social categories (see Buss & Craik, 1983; Cantor, Smith, French, & Mezzich, 1980). Studies of attribution show how we employ various kinds of information in order to assess the probable causes of events occurring in the social world (Jones, Kanouse, Kelley, Valins, & Weiner, 1974). More recently, there has been a great deal of attention given to the biases and shortcomings that influence memories and judgments about social events (Nisbett & Ross, 1980).

Procedural knowledge can also shape a person's plan of action in a social situation. People possess a great deal of knowledge about how to inculcate particular impressions of themselves in the minds of other people (Jones & Pittman, 1982). And, as Robert Abelson (1981) has suggested, we also possess scripts that govern our behavior in various kinds of social interactions. Scripts are especially interesting knowledge

structures because the information in them is organized both conceptually and sequentially, in terms of a canonical order in which the various exchanges occur. As semantic knowledge structures, they are used to help categorize the situations in which people find themselves, and to make inferences about what has happened in the past and will happen in the future; as procedural knowledge structures, they help to guide the behavior in the situation from start to finish.

Individuals act intelligently by using the concepts and procedures in their social intelligence repertoire to appraise problems, shape intentions, monitor actions, and evaluate outcomes (Baron, 1982). These executive skills enable the individual to see problems as they emerge and plan actions that are consonant with personal goals (as reflected in the concept repertoire). For example, a successful individual with underlying qualms about her "true abilities" in a domain may shy away from a diagnostic test of those capacities by engaging in self-handicapping (Jones & Berglas, 1978). The individual may decide to risk a less than optimal performance in favor of the safety provided by creating an ambiguous attributional environment. The effort involved in this "decision" is minimal, as the skills of goal-setting, means-end analysis, playing through potential outcomes and attributions operate quite naturally in these familiar achievement settings. However, the personal benefits of this intelligence can be substantial. The self-handicapper, highly attuned to the self-esteem implications of a poor performance, uses his or her knowledge intelligently to serve a self-protective end.

INDIVIDUAL DIFFERENCES IN SOCIAL-COGNITIVE STRUCTURES AND PROCESSES

From a cognitive point of view, individual differences in social interaction reflect individual differences in social intelligence. These individual differences take two general forms: in the base of declarative social knowledge in a particular domain and in procedural social knowledge in that domain. Although some work on these individual differences has been done in the personal construct tradition of George Kelly (Pervin, 1976; Rosenberg, 1977), comparatively little attention has been devoted to individual differences by social cognition researchers (Kihlstrom, 1981). Elsewhere, Kihlstrom and Nasby (1981; Nasby & Kihlstrom, 1985) have offered suggestions for the adaptation of contemporary social-cognitive experimental paradigms for the purposes of clinically assessing the maladaptive declarative and procedural knowledge presumed to underlie abnormal social behavior. Such techniques offer a means for mapping the individual's perceptions

of his or her social life, and for uncovering the cognitive processes that may guide the individual's social judgments and interactions. Along the same lines, a number of recent studies illustrate how individual differences in social cognition can be explored within the domain of normal personality.

Variation in the structure and content of semantic and episodic social knowledge provides a basis for individual differences in social problemsolving. For example, people have different domains of expertise about the social world (e.g., Fiske & Kinder, 1981), as well as specially elaborate conceptions of self in selected domains (e.g., Markus, 1977). Individual differences in the elaboration of knowledge in a particular domain are reflected in people's interpretations of situations. When a certain domain, such as extroversion or anxiety, is very self-defining for an individual, there is a strong tendency to turn a social interaction into a test of skills in that domain (Fong & Markus, 1982; Riggs & Cantor, 1984). Experts seem to see things that novices miss or find unimportant. And, as our expertise varies considerably across different domains of social life, we are each quite likely to give relatively superficial attention to some social problems while working on others in depth. Rather than rank order individuals as to degree of attentiveness to social stimulation (Witkin & Goodenough, 1977) or focus on a generalized reflective or impulsive problem-solving style (Baron, 1982), it may be more useful to look at each individual's activity in domains of relative "expertise" and "ignorance."

The evaluative content of these social concepts and memories also varies from person to person, providing another basis for different reactions to social events. For example, whereas one person has very positive feelings about family dinners, another views the same situation with anxiety derived from fierce sibling rivalry (Pervin, 1976). These two people are working to solve very different problems as they confront the occasion of a family dinner: One is concerned with affiliative goals and the other is striving to protect self-esteem. Their concepts of self-atfamily-dinners may differ in other ways as well. The former may feel very close to reaching his or her ideal "affiliative self" in such contexts, whereas the latter individual perceives a substantial gap between expectations for self-with-family and the reality of his or her actions, feelings, and reactions in that context, Self-ideal discrepancy provides another basis for individuals' unique interpretations of social situations (Higgins, Klein & Strauman, in press). In fact, individuals may be motivated to find situations in which the match between the self-concept and an ideal standard is a close one.

A study by Niedenthal reveals how individual differences in choice preferences for choice of a living unit among college students—are related to individual differences in declarative social knowledge, knowledge about oneself and others (Niedenthal, Cantor, & Kihlstrom, in press). At the time that they were deciding where to live for the next year, college freshmen completed an adjective checklist describing themselves, and then completed the same checklist describing their impressions of the kind of person who is happy and comfortable living in each of seven classes of housing generally available to undergraduates. For the subjects as a whole, but especially for those individuals who defined themselves in extremely narrow terms and who approached the choice of housing with interpersonal goals in mind, choice was associated with the degree of match between the self and prototypical others. Prototype-matching may be a general strategy for social decision making. When making important choices, people often seem to approach the problem by asking, "Am I the kind of person who ...?" If so, this is a strategy that people have in common. Individual differences in choice behavior reflect individual differences in the specific structure and content of the self-concept, and in the declarative knowledge about other people on which this common procedural knowledge operates.

Another set of studies illustrates individual differences in procedural knowledge used to achieve similar personal outcomes (Norem & Cantor, in press; Showers & Cantor, 1985). College undergraduates with histories of academic success reported on their performance expectations for forthcoming achievement tasks. Later, in preparing for achievement tasks, "optimists"—those students who set expectations in line with their prior record of academic success—used a strategy of playing through best-case outcomes ("How I'll feel when I do really well") and focusing upon positive attributes of their self-concepts ("I'm cool, calm, and confident"). This optimistic strategy contrasted sharply with the preparatory cognitive activity of other successful students, the "defensive pessimists." Despite an acknowledged history of success, the pessimists set low expectations for personal performance on forthcoming tasks, played through worst-case outcomes, and focused upon negative aspects of their self-concepts. Although their characteristic cognitive strategies differed, both the optimists and the pessimists worked hard at achievement tasks and performed equally well. Different procedures, serving to "psych-up" the optimists and calm the anxious pessimists, enabled them to reach common endpoints and feel happy about their records of achievement. These students quite intelligently developed cognitive strategies for preparation that were uniquely wellsuited to motivate their own best performances.

THE DYNAMICS OF PERSONALITY: LIFE-TASK PROBLEM-SOLVING

Having examined the structure of social intelligence, and some ways of characterizing individual differences in terms of social intelligence, it is appropriate to examine the manner in which it is utilized in actual problem solving. What are the relevant problems on which individuals work? And how can we study people as they work on them? In this regard we take our lead from some recent work on intelligence in which the objective is to find tasks that have functional significance for the individual in his or her current life environment (Baltes, Ditmann-Kohli, & Dixon, 1984; Sternberg, 1984). Actually, both the contextualist position, with its focus on tasks that reflect the everyday ecology of the individual's life, and emphasis on the pragmatics of intelligence have precedents within the literature on personality development. The contextualist position is represented in the personality literature by the nomothetic analyses of age-graded and history-graded life tasks that emerge over the course of the life span (Baltes, Reese, Lipsitt, 1980), whereas analyses of individuals' idiosyncratic projects and concerns explicitly focus upon the functional significance of personal life tasks (e.g., Klinger, 1975; Little, 1983). Our approach seeks to meet both the contextualist and pragmatist objectives by concentrating on the life tasks that individuals perceive to be central and important during a specified period of life transition.

Life tasks are the problems that individuals explicitly see themselves as devoting energy to solving at a particular period in life. At one time we may be obsessed with finding a career direction, only to find ourselves facing the dilemmas of a two-career marriage some years later. Life tasks reflect both the social demands of a period of life transition, as from college to professional life, and the idiographic meaning of each normative task. Often, when major transitions take place, people can articulate the way in which their attention has shifted from the old life tasks to new ones. (One of our single-minded colleagues once remarked: "Now that I have tenure, I want to get married.")

Imagine, for example, a quite nervous but excited high-school graduate embarking on the first year of college life. As part of a longitudinal analysis of the transition to college life, Cantor, Brower, and Korn (1984) questioned 44 such individuals about the life tasks they were facing during this period of transition. The inquiry began by asking subjects to describe their first-year experience: their expectations,

hopes, fears, and plans. Then the subjects generated a list of their most pressing life tasks and subsequently narrowed the list to the two tasks they perceived to be most important. Each student provided descriptions of the situations that tapped these life concerns; their affective reactions in these situations, plans for handling the situations, and the projected ease or difficulty of successfully carrying out these plans. Inspection of these freeform responses and structured ratings revealed some striking features of life tasks during a period of transition.

Periods of life transition, as in moving from high school and home to college and dormitory, seem to make life tasks very salient. The students clearly felt motivated to tackle demands presented by the new environment. They saw themselves working on new tasks, such as living without their families, and on old tasks in new ways, such as handling academic competition from other "ex-high school stars." They had no trouble generating these life tasks: An average of 8 to 9 such tasks came to each subject without much apparent effort. Nor was it difficult for them to place these tasks in the context of their everyday life activities at college. The students concentrated on a familiar set of basic interpersonal themes of identity, intimacy, achievement, and power, portrayed in the light of their college experiences. As we had expected, life tasks considered during a period of transition often have the interesting feature of tapping into old concerns situated in new contexts. They seem to constitute the "nonentrenched" yet personally involving tasks that intelligence theorists seek to study (Sternberg, 1984).

The life tasks themselves, at least for this particular period of transition, tended to be fairly uniform when viewed at a high level of abstraction. Fully 85 percent of the tasks selected as most important were easily categorizable in terms of five broad categories—the social tasks of making friends and living without family, the academic tasks of being successful at their studies and shaping their future careers, and the time-management task of balancing academic and social activities and priorities. At the same time, the situations or personal projects associated with these consensual life tasks were quite idiosyncratic. One student considered living without family to involve learning to handle the stress of personal failure without "dad's hugs," whereas another concentrated on the practical side of independence—"managing money, doing laundry, eating well." Life-task analyses reflect on the personal meaning of age-graded normative demands, thus encompassing the contextualists' desire for ecological validity and the pragmatists' focus on the functional significance of intelligent activity.

How then do we study social intelligence in life tasks? First, we choose a life period, preferably at the onset of a life transition—when individuals are motivated to tackle new life tasks or old ones in new

ways, and when there is likely to be some uniformity in the salient life tasks facing the research participants. (Although our analyses concentrate on the transition to college, others have worked productively with life tasks that characterize later stages of adult development; such as Ryff, 1982.) Second, we document the life-task issues relevant to this group and the unique construals of the members. Such data allow one to see how a common life task maps onto different activities, and elicits different patterns of affective reactions and coping strategies for different participants. The next step is to assess the self-concepts and social concepts, relevant past episodes, and rules of the individual, and to connect them with the problem-solving strategies that he or she employs to work on life tasks. Here it is important to include analyses of at least two life-task domains in order to see the flexibility of participants' problem-solving strategies.

For example, we designed our longitudinal study of the transition to college with these goals in mind. Based upon the earlier work described above, we chose to focus on academic and social life tasks that were likely to elicit different appraisals from the students and enable us to see the evolution of a variety of problem-solving strategies. At least half of the initial student sample had chosen one academic and one social life task when describing their most pressing concerns. These students uniformly described the academic task in harsh, pessimistic terms and the social one in a more positive light. Appraisals of the social life tasks indicated that the students typically felt in control of the likely outcomes in that domain; they didn't expect any great surprises. By contrast, most students seemed to anticipate feeling "out of control" and "over their heads" in the academic domain. Their plans reflected this difference in life-task appraisal. They showed a firm commitment to one (often familiar) course of action in the social domain and more experimentation and even wavering between options in the academic task situations. They seemed to think, for example, that well-established scripts from high school would work for the task of making friends, whereas getting good grades in college demanded a new set of procedures for studying, monitoring anxiety, setting goals, and so forth. Comparison of the students' plans and activities in academic and social life task domains over the course of their first few years at college should reveal intraindividual variation in problem-solving strategies across life task domains.

These differences in problem-solving approaches to social and academic life tasks derive, presumably, from differences in declarative and procedural knowledge. This assumption, a central one in the social intelligence analysis, must be tested. In the longitudinal study we include

measures of self-ideal discrepancy and plan complexity for each domain. These measures should be useful as predictors of problem-solving strategy and eventual satisfaction in the two life-task domains. Furthermore, as we know that students also differ among themselves in appraisals of each life task, it should follow that *interindividual* differences in appraisal, strategies, and performance will also be predicted from profiles of declarative and procedural knowledge.

There is another side to the social intelligence analysis. Although we expect to see consistency between an individual's declarative and procedural knowledge in a life-task domain and his or her appraisals and strategies in that domain, we also predict that the base of knowledge will change with experience. Life-task activities should feed back to the individual and elicit change in his or her concepts and rules. Interviews with older students, for example, suggest that the first-year novices will be in for some suprises as they work on social and academic life tasks. Those optimistic appraisals and highly scripted plans for social life activities may shift considerably in the face of the realities of college existence. And, if our assumptions are correct, students may increasingly reflect on a gap between their actual and ideal self in the social domain; their skills and plans may no longer seem so well-elaborated or wellsuited to the demands of this pressing task. Fortunately, in the case of these college students, there is clearly much room for growth in their ability to handle the tasks they set for themselves in college life. Tracking that growth is the crux of a social intelligence analysis at the level of individual development.

When we follow individuals' progress in problem-solving about life tasks, the goal is to demonstrate some central features of intelligent action. Intelligent problem-solving should be flexible. An individual should approach each life task differently because he or she has different goals derived from concepts and rules in the relevant domains. This focus on intraindividual variation in problem-solving sets the present model somewhat apart from theories of cognitive styles in personality (see Baron, 1982, for a review). We do not posit a few basic styles of problem solving, with each style utilized fairly consistently by individuals across tasks. We suggest instead that variation in the content and complexity of a person's repertoire across domains of social life encourages flexibility in his or her style of problem solving on different life tasks.

Intelligent behavior should also be malleable with training. Therefore, people's social intelligence for life tasks ought to evolve as they encounter new opportunities for social learning. The expectation for growth sets the present approach apart from the doctrine of trait

stability over time. Although this may seem to fly in the face of evidence for long-term stability of temperamental and stylistic traits (Costa & McCrae, 1980), it is more consistent with recent analyses of the development of social expertise and "wisdom on the pragmatics of life" over the life span (Baltes et al., 1984, p. 64). Changes in the array of social experience fostered by involvement in different social institutions may well be reflected in developments in social intelligence. We await the results of our own longitudinal study in order to provide one empirical test of these propositions. Yet, even as we wait, it should be clear that this perspective asks a slightly different set of questions about personality than has been characteristic of the cognitive style and trait traditions.

POTENTIAL MISUNDERSTANDINGS

At this point, it seems prudent to anticipate some potential misunderstandings. It is most important to understand that social intelligence is not social IQ. We have no interest in rating people on a single dimension from social moron to social genius. We are persuaded that human intelligence, both social and nonsocial, is too complex and multifaceted to permit ranking of individuals in terms of a single score. Moreover, the tasks of social life are far too ill-defined to permit a single ordering from good to poor solution. Rather, we label the cognitive repertoire for working on life tasks as social intelligence in order to underscore the flexibility and malleability also implied by the term "intelligent."

Nor do we have any interest in developing a taxonomy of people. In this respect, we depart from classic approaches to personality. People are too rich, too multifaceted to be captured by such classificatory schemes, except at a highly abstract level that obscures the flexibility and discriminativeness of experience, thought, and action that is central to human life. We assume, by direct analogy to language, that an infinite variety of individual differences can be produced by the interactions among a finite set of general principles of social learning, social cognition, and social interaction. The first task of a cognitive personology then, from our point of view, is to describe the general processes out of which individual differences are constructed.

The cognitive point of view is not a disguised situationism. A true interactionism, it acknowledges that people are creatures of the social environment—but also insists that people have a hand in actively creating these environments. People respond to the meaning of the

social situation, not the situation itself. This meaning, contra Skinner, is not determined wholly by the individual's past environmental history.

In discussing the role of cognitive processes in social interaction, we do not wish to imply that these processes are always conscious, deliberate, or rational. The literature on social cognition provides many demonstrations of heuristics, biases, and other shortcomings that lead to inaccuracies in social judgment. Many cognitive processes run off automatically and unconsciously; and the direction of thought can be influenced by priming effects and other processes that operate outside of awareness (Bargh, 1982). Along these same lines, investigations of hypnotic phenomena, such as amnesia and posthypnotic suggestion, appear to reveal a set of dissociative processes that can disrupt access to selfknowledge, limiting one's awareness of what one has done in the past, is doing now, or intends to do in the future (Kihlstrom, 1984). However, regardless of the effects of cognitive heuristics, the limitations on conscious control of behavior, or the barriers to introspective awareness, there is little reason to abandon a cognitive theory of personality (Kihlstrom, 1984; Showers & Cantor, 1985). The most routine and "mindless" social activity (Langer, 1978) is not devoid of cognitive work (Cantor, Mischel, & Schwartz, 1982b). Social intelligence is brought to bear even when people engage in behavior uncritically, without conscious reflection (Smith, 1984).

Although the social intelligence view emphasizes cognitive and social processes as determinants of individual differences, it does not ignore the role of other factors. People are creatures in a biological world, and are subject to that world's demands and constraints. There are certainly individual differences in temperament observed in neonates, and there are certainly psychological consequences of hormonal endowments that are correlated with such factors as sex and age. From our perspective, the interesting aspect of these biological predisposing agents rests in the variety of patterns of growth that emerge when cognitive, environmental, and biological factors interact—as illustrated by the experimental and clinical literature on gender dimorphism in identity and role (e.g., Money & Ehrhardt, 1974).

Similar considerations apply to affect. We do not wish to enter the debate on the primacy of affect or cognition (Lazarus, 1984; Zajonc, 1984). Nevertheless, it is clear that a great deal of social cognition is *hot* cognition. Problem-solving about life tasks is, by definition, a motivated cognitive activity. Emotional and motivational processes influence social cognition and social interaction; but we want to underscore the

reciprocal role of cognitive and social processes in the construction and control of emotional states (Showers & Cantor, 1985).

Finally, in leaving the consistency debate behind, we do not intend to shirk the responsibility of personologists to search for coherence in individuals' social behavior. We find much consistency in the ways in which individuals cognitively represent and behaviorally attempt to solve currently salient life tasks. Yet the search must be for "appropriate consistency," not rigid constancy. Neither the life tasks nor the strategies for working on them are likely to be powerfully fixed for one person over time or for different persons within a task domain.

SOCIAL INTELLIGENCE AND PERSONALITY THEORIES

We began this essay with the assertion that the study of personality is as much a study of learning and change as a testament to behavioral consistency. Individuals can change even their favored modes of problem-solving by learning new concepts and rules. After all, social intelligence is acquired through social learning, with the potential for change through direct experience, precept, and example. Given that the earliest developments in personality emerge from a complex interactive process, there is little reason to believe that the important outcomes are set in stone at the outset. Individuals, at least in principle, can use their minds to effect change in themselves as well as in their social and biological environments. Gould (1981, p. 324) made the argument at the species level: "Human uniqueness resides primarily in our brains. It is expressed in the culture built upon our intelligence and the power it gives us to manipulate the world. Human societies change by cultural evolution, not as a result of biological alteration." We will continue to try to make the argument at the level of individual social intelligence and personality development.

For too long, personality psychology has concentrated on debating the merits and demerits of the doctrine of traits. In so doing, positions have become dangerously polarized around the single issue of consistency versus change. This debate has perseverated without sufficient attention being paid to construction and testing of alternative conceptualizations. Now, through efforts at theory building, it may be possible to see whether other viable candidates can stand the test of empirical scrutiny and serve as centerpieces for a comprehensive theory of personality. New theories may better capture both coherence and change in individuals' social behavior. It is time to do more than hand-waving about alternatives. By taking cognitive-social psychology seriously, we hope to develop understanding of general principles from which human

individuality can be constructed, and achieve a modern personology that is both idiographic and nomothetic in nature.

REFERENCES

- Abelson, R. P. (1981). Psychological status of the script concept. American Psychologist, 36, 715-729.
- Allport, G. W. (1937). Personality: A psychological interpretation. New York; Holt.
- Anderson, J. R. (1983). The architecture of cognition. Cambridge: Harvard University Press.
- Baltes, P. B., Dittman-Kohli, F., & Dixon, R. A. (1984). New perspectives on the development of intelligence in adulthood. In P. B. Baltes & O. G. Brim, Jr. (Eds.), Life-span development and behavior. New York: Academic Press.
- Baltes, P. B., Reese, H. W., & Lipsitt, L. P. (1980). Life-span developmental psychology. Annual Review of Psychology, 31, 65-100.
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bargh, J. A. (1982). Attention and automaticity in the processing of self-relevant information. Journal of Personality and Social Psychology, 43, 425-436.
- Baron, J. (1982). Personality and intelligence. In R. Sternberg (Ed.), Handbook of human intelligence (pp. 308-352). Cambridge: Cambridge University Press.
- Buss, D., & Craik, K. (1983). The act frequency approach to personality. Psychological Review, 90, 105-126.
- Cantor, N., Brower, A., & Korn, H. (1984). Cognitive bases of personality in a life transition. Paper presented at the 23rd International Congress of Psychology, Acapulco.
- Cantor, N., & Mischel, W. (1979). Prototypes in person perception. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 12, pp. 4-51). New York: Academic Press.
- Cantor, N., Mischel, W., & Schwartz, J. (1982a). A prototype analysis of psychological situations. Cognitive Psychology, 14, 45-77.
- Cantor, N., Mischel, W., & Schwartz, J. (1982b). Social knowledge: Structure, content, use, and abuse. in A. Hastorf & A. Isen (Eds.), Cognitive social psychology. New York: Elsevier-North Holland.
- Cantor, N., Smith, E. E., French, R., & Mezzich, J. (1980). Psychiatric diagnosis as prototype categorization. Journal of Abormal Psychology, 89, 181-193.
- Costa, P. T., & McCrae, R. R. (1980). Still stable after all these years: Personality as a key to some issues in adulthood and old age. In P. Baltes & O. Brim, Jr. (Eds.), Life-span development and behavior. New York: Academic Press.
- Darley, J. M., & Fazio, R. H. (1980). Expectancy confirmation processes arising in the social interaction sequence. American Psychologist, 28, 404-416.
- Fiske, S. (1982). Schema-triggered affect: Applications to social perception. In M. Clark & S. Fiske (Eds.), Affect and cognition: The 17th annual Carnegie symposium. Hillsdale, NJ: Lawrence Erlbaum.
- Fiske, S., & Kinder, D. R. (1981). Involvement, expertise, and schema use: Evidence from political cognition. In N. Cantor & J. Kihlstrom (Eds.), Personality, cognition, and social interaction. Hillsdale, NJ: Lawrence Erlbaum.
- Fong, G., & Markus, H. (1982). Self-schemas and judgments about others. Social Cognition, 1, 191-204.
- Gould, S. J. (1981). The mismeasure of man. New York: Norton.
- Hampson, S. E. (1982). Person memory: A semantic category model of personality traits. British Journal of Psychology, 73, 1-11.
- Harter, S. (1984). Developmental perspectives on the self-system. In M. Hetherington (Ed.), Carmichael's manual of child psychology: Social and personality development. New York: John Wiley.
- Hastie, R. (1985). A primer of information-processing theory for the political scientist. In R. Lau (Ed.), Political psychology. Hillsdale, NJ: Lawrence Erlbaum.

- Hastie, R., & Carlston, D. C. (1980). Theoretical issues in person memory. In R. Hastie, T. Ostrom, E. Ebbesen, R. Wyer, D. Hamilton, & D. Carlston (Eds.), Person memory: The cognitive basis of social perception. Hillsdale, NJ: Lawrence Erlbaum.
- Hastie, R., Park, B., & Weber, R. (1984). Social memory. In R. Wyer & T. K. Srull (Eds.), Handbook of social cognition (Vol. 2). Hillsdale, NJ: Lawrence Erlbaum.
- Higgins, E. T., Klein, R., & Strauman, T. (in press). Self-concept discrepancy theory: A psychological model for distinguishing between different aspects of depression and anxiety. Social Cognition.
- Jones, E. E., & Berglas, S. (1978). Control of attributions about the self through self-handicapping strategies: The appeal of alcohol and the role of underachievement. Personality and Social Psychology Bulletin, 4, 200-206.
- Jones, E. E., Kanouse, D. E., Kelley, H. H., Valins, S., & Weiner, B. (Eds.). (1972). Attribution: Perceiving the causes of behavior. Morristown, NJ: General Learning Press.
- Jones, E. E., & Pittman, T. S. (1982). Toward a general theory of strategic self-presentation. In J. Suls (Ed.), Psychological perspectives on the self. Hillsdale, NJ: Lawrence Erlbaum.
- Kelly, G. (1955). The psychology of personal constructs. New York: Norton.
- Kihlstrom, J. F. (1981). On personality and memory. In N. Cantor & J. F. Kihlstrom (Eds.), Personality, cognition, and social interaction. Hillsdale, NJ: Lawrence Erlbaum.
- Kihlstrom, J. F. (1984). Conscious, subconscious, unconscious: A cognitive perspective. In K. Bowers & D. Meichenbaum (Eds.), The unconscious reconsidered. New York: John Wiley.
- Kihlstrom, J. F., & Cantor, N. (1984). Mental representations of the self. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 17). New York: Academic Press.
- Kihlstrom, J. F., & Harackiewicz, J. M. (1982). The earliest recollection: A new survey. Journal of Personality, 50, 134-148.
- Kihlstrom, J. F., & Nasby, W. (1981). Cognitive tasks in clinical assessment: An exercise in applied psychology. In P. C. Kendall & S. D. Hollon (Eds.), Cognitive-behavioral interventions: Assessment methods. New York: Academic Press.
- Klinger, E. (1975). Consequences of commitment to and disengagement from incentives. Psychological Review, 82 (1), 1-25.
- Langer, E. (1978). Rethinking the role of thought in social interaction. In J. Harvey, W. Ickes., & R. Kidd (Eds.), New directions in attribution research (Vol. 2). Hillsdale, NJ: Lawrence Erlbaum.
- Lazarus, R. (1984). On the primacy of cognition. American Psychologist, 39 (2), 124-130.
- Little, B. (1983). Personal projects: A rationale and method for investigation. Environment and Behavior, 15, 273-309.
- Markus, H. (1977). Self-schemata and processing information about the self. Journal of Personality and Social Psychology, 35, 63-78.
- Markus, H. (1983). Self-knowledge: An expanded view. Journal of Personality, 51, 543-565.
- Mischel, W. (1968). Personality and assessment. New York: John Wiley.
- Mischel, W. (1973). Towards a cognitive social learning and reconceptualization of personality. Psychological Review, 80, 252-283.
- Money, J., & Ehrhardt, A. (1974). Man and woman, boy and girl: Differentiation and dimorphism of gender identity from conception to maturity. Baltimore: Johns Hopkins Press.
- Nasby, W., & Kihlstrom, J. F. (1985). Cognitive assessment of personality and psychopathology. In R. E. Ingram (Ed.), Information-processing approaches to psychopathology and clinical psychology. New York: Academic Press.
- Neisser, U. (1978). Memory: What are the important questions? In M. M. Gruneberg, P. E. Morris, & R. N. Sykes (Eds.), Practical aspects of memory. New York: Academic Press.
- Newell, A., & Simon, H. A. (1973). Human problem-solving. Englewood Cliffs, NJ: Prentice-Hall. Niedenthal, P., Cantor, N., & Kihlstrom, J. F. (in press). Prototype-matching: A strategy for social
- decision-making. Journal of Personality and Social Psychology.

 Nisbett, R., & Ross, L. (1980). Human inference: Strategies and shortcomings of social judgment.
- Englewood Cliffs, NJ: Prentice-Hall.

 Norem, J., & Cantor, N. (in press). Anticipatory and post-hoc cushioning strategies: Optimism and defensive pessimism in risky situations. Cognitive Therapy and Research.
- Pervin, L. (1976). A free-response description approach to the analysis of person-situation interactions.

 Journal of Personality and Social Psychology, 34, 465-474.

- Pervin, L. (1985). Personality: Current controversies, issues, and directions. Annual Review of Psychology, 36, 83-114.
- Riggs, J., & Cantor, N. (1984). Getting acquainted: The role of the self-concept and preconceptions. Personality and Social Psychology Bulletin, 10(3), 432-445.
- Rosenberg, S. (1976). New approaches to the analysis of personal constructs in person perception. In A. W. Landfield (Ed.), Nebraska symposium on motivation (Vol. 23). Lincoln: University of Nebraska Press.
- Rotter, J. (1954). Social learning and clinical psychology. Englewood Cliffs, NJ: Prentice-Hall.
- Ryff, C. (1982). Successful aging: A developmental approach. The Gerontologist, 22, 209-214.
- Schneider, D. (1973). Implicit personality theory: A review. Psychological Bulletin, 79, 294-309.
- Showers, C., & Cantor, N. (1985). Social cognition: A look at motivated strategies. Annual Review of Psychology, 36, 275-305.
- Smith, E. R. (1984). A model of social inference processes. Psychological Review, 91, 392-413.
- Sternberg, R. (Ed.). (1982). Handbook of human intelligence. Cambridge: Cambridge University Press.
- Sternberg, R. (1984). Toward a triarchic theory of human intelligence. Behavioral and Brain Sciences, 7, 269-315.
- Tulving, E. (1983). Elements of episodic memory. Oxford: Oxford University Press.
- Witkin, H., & Goodenough, O. (1977). Field dependence and interpersonal behavior. Psychological Bulletin, 84, 662-689.
- Zajonc, R. (1984). On the primacy of affect. American Psychologist, 39(2), 117-123.

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