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## Social Thinking and Interpersonal Behavior *Classical Theories and Contemporary Approaches\**

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**H**omo sapiens is an intensely gregarious species. This book is about the ways that mental life and social life interact and influence each other. The sophisticated ability of human beings to engage in highly complex and finely regulated interpersonal behaviors is probably one of the cornerstones of the evolutionary success of our species and the foundation of the increasingly complex forms of social organization that our species has been able to develop. According to the “social brain” hypothesis, it was evolutionary pressures and the cognitive demands of managing increasingly large and ever-more complex social groups that drove the development of the human brain, that most amazing computational

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organ (Dunbar, 2007). The astounding development of humans' mental and cognitive abilities and their impressive record of achievements are intimately tied to the interpersonal demands of coordinating increasingly large social groups. In fact, we might argue that social thinking and interpersonal behavior are in a symbiotic relation: It is the demands of social life that drive sophisticated mental strategies, and social thinking is the necessary prerequisite for effective social interaction (Forgas, 1981; Sedikides, Schopler, & Insko, 1998). Interpersonal behavior is also the essential "glue" that holds families, groups, and even whole societies together.

The objective of this book is to survey recent developments in research on the way social cognitive processes shape and inform interpersonal strategies and the way interacting with others in turn influences social thinking. The four parts of the book will cover recent developments in (1) evolutionary approaches to interpersonal behavior, (2) the role of automatic and embodied mechanisms in social thinking and behavior, (3) affective and cognitive processes in interpersonal behavior, and (4) social and cultural approaches linking social thinking and interpersonal behavior. In this introductory chapter, we will review historical antecedents of this line of inquiry and discuss some of the major issues and challenges facing the field of social cognition and interpersonal behavior.

## SOME HISTORICAL REFLECTIONS: INTERPERSONAL BEHAVIOR THEN AND NOW

Understanding the various ways that people think about, plan, and execute their interaction strategies and the role of cognitive, motivational and affective mechanisms in these processes has probably never been of greater importance than today. As modern industrialized societies become ever more complex and impersonal and as social interactions increasingly involve people known only superficially or not at all, interpersonal strategies also need to become more sophisticated, elaborate, and complex.

Contemporary mass societies present people with a social and cultural environment that is far removed from the ancestral social world in which humans lived and to which they became adapted over thousands of years. Yet the mental habits that were honed by the evolutionary pressures of thousands of years of living in small group societies are still evident today (Buss, 1999; Sedikides & Skowronski, 1997), as several chapters in this volume illustrate (Galperin & Haselton; Kenrick et al.; Semin & Garrido; von Hippel & Trivers). However, interpersonal behavior in modern anonymous mass societies is far more problematic and demanding than was the case in earlier epochs. The last few hundred years in particular produced a form of social living that is profoundly different from the way human beings lived throughout previous centuries and imposes entirely new cognitive demands on them.

Evolutionary history could have scarcely prepared humans for life in the anonymous mass societies of today. Since the dawn of evolution, human beings mostly lived in small, close, face-to-face groups. From our earliest hunter-gatherer ancestors to life in small-scale villages that was dominant everywhere as recently as in the eighteenth century, human social interaction typically involved intimately known others, mostly members of a small and immediate group. The eighteenth

century brought with it a fundamental revolution in social relationships. Several historical factors contributed to the rapid disappearance of traditional, face-to-face society and the fundamental change in interpersonal behavior and social integration that occurred (Durkheim, 1956; Toennies, 1887).

It was the philosophy of the enlightenment that laid the conceptual groundwork for the idea of the liberated, self-sufficient, and mobile individual, freed from the restrictive influence of unalterable social norms and conventions. This ideology found its political expression in the French Revolution and the American Revolution. Industrialization produced large-scale dislocation and the reassembly of massive working populations as required by technologies of mass production and also provided the economic foundation on which this new kind of anonymous society consisting of liberated, self-seeking individuals could exist.

These developments had crucial consequences for the way people relate to each other to this day. In stable, small-scale societies social relationships are highly regulated. One's place in society is largely determined by ascribed status and rigid norms. Mobility is restricted, and social interaction mainly occurs between people who intimately know each other. Compare this with life in modern mass societies. Most people we encounter are strangers. Our position in society is flexible, personal anonymity is widespread, mobility is high. Yet interacting with others remains the cornerstone on which our ability to achieve our personal, social, and economic objectives rests in this fluid social environment (Kenrick et al., this volume).

The fact that most people we deal with are not intimately known to us makes the appropriate use of interpersonal strategies ever more problematic. It is perhaps no coincidence that the emergence of psychology, and social psychology in particular, as a science of interpersonal behavior so clearly coincided with the advent of mass societies. It is for the first time in human history that social interaction—once a natural, automatic process almost entirely enacted within the confines of involving relationships with intimately known others—has become uncertain and problematic and, thus, an object of concern, reflection, and study (Goffman, 1972). Although many interpersonal behaviors continue to be guided by deep-seated, embodied internal mechanisms (see chapters by Dijksterhuis; Macrae et al.; Semin & Garrido; von Hippel & Trivers; Winkelman & Kavanagh), the role of high-level reflective and inferential cognitive processes has become ever more important (see chapters by Eich et al.; Fiedler; Forgas; Johnson & Carpinella; Sedikides & Skowronski).

To be able to interact with unfamiliar others in an increasingly globalized, impersonal, and liberated world, people need to employ ever more sophisticated and elaborate cognitive and motivational strategies. Emile Durkheim (1956), the father of modern sociology, described this profound shift in social relations in terms of a change from mechanical solidarity (a natural by-product of daily interaction with intimately known others) to organic solidarity (based on the rule-bound cooperation of strangers). Mechanical solidarity refers to the complex web of face-to-face interdependencies and social interaction processes that provide cohesion and unity to small-scale, primary social groups. Mechanical solidarity is based on direct, personal relationships. Organic solidarity in turn refers to the indirect, impersonal, and disembodied web of relationships and interdependencies that characterize mass societies. People have come to depend on, and interact with,

strangers whom they hardly know, and their relationships are increasingly regulated by rules and contractual expectations that are no longer based on personal contact. Several of the chapters in this volume discuss the operation of social and cultural mechanisms that are essential for such impersonal interactions to work (Cooper; Jost & Kay; Kashima; Malle, Guglielmo, & Monroe; Waenke et al.).

### *Classical Approaches Linking Social Thinking and Interpersonal Behavior*

The close relationship between mental processes and interpersonal behaviors has long been recognized by writers and philosophers (Forgas, 1981). Indeed, much social philosophy from Plato to Kant consists of speculations about the interdependence of mental life and social life, the way internal "human nature" determines social relationships and social structures. Several classical social science theorists (discussed next) have also studied this issue, emphasizing the close interdependence between symbolic mental processes and direct interpersonal behaviors.

We would like to argue in this book that the currently dominant social cognitive research paradigm ought not to be confined to the study of cognitive processes and behaviors that take place solely within the individual person. Rather, we should aim to understand individual behavior in the context of superordinate social and ecological structures that transcend the individual as the sole unit of analysis. Groups, organizations, and cultures call for their own theories that are distinct from intraindividual theories (Cooper; Jost & Kay; Kashima, this volume) and situations and social episodes impose constraints on individual behavior (Forgas, 1982). Interpersonal behavior is thus always a genuinely socially and culturally embedded process, relying on common ground shared by different people.

A glance at the historical origins of social psychology reveals that many pioneers were well aware of the discipline's social and interpersonal scope. A number of then very prominent theoretical concepts (see discussion herein) testify to deliberate attempts to realize the ambitious original research agenda to create a genuinely social, supraindividual social psychology. However, regrettably, and rather interestingly from a historical perspective, the interpersonal approaches to social cognition that were so promising at the outset had a conspicuously small impact on the rapid growth of empirical research over the last several decades. Let us first consider some of those fascinating early conceptions, before we turn to the almost purely intrapersonal theories that have come to dominate current research and discuss reasons for the neglect of interpersonal social cognition.

**Symbolic Interactionism** Perhaps the first comprehensive theory of interpersonal behavior developed by George Herbert Mead, symbolic interactionism offers one important example of such an integrative framework for the study of social interactive processes. Symbolic interactionists assumed that to understand people's behavior toward objects in their environment we have to analyze the meanings that people associate with those objects through social interaction and interpretation. Rooted in American pragmatism, this perspective informed

the work of both Mead (1934) and his student Herbert Blumer. For Mead, social cognition and social behavior were not distinct, separate domains of inquiry, but were intrinsically related. Mead explicitly sought to reconcile the behaviorist and the phenomenological, mentalistic approaches to human behavior. He argued that interpersonal behavior occurs as a result of the symbolic mental representations and expectations formed by social actors based on their experience of past interpersonal episodes. Thus, cognitive representations of how to behave in any given situation are partly "given," determined by prior experiences and symbolic representations of past social encounters.

However, behavior is not fully determined; to some extent, social actors are free to deviate and to construct their encounters in unique, creative, and individualistic ways. According to Mead, it is the uniquely human ability for symbolic representations that allows the abstraction and internalization of social experiences, and it is such mental models that are the key to understanding social systems in general and interpersonal behavior in particular. Several of chapters in this volume describe research that is strongly reminiscent of Mead's emphasis on symbolic representations in explaining behavior (Cooper; Jost & Kay; Kashima; Malle et al.; Sedikides & Skowronski, this volume).

It is perhaps unfortunate that symbolic interactionism did not become an important theory within social psychology, probably due to the lack of suitable methodologies for studying individual symbolic representations at the time. The currently dominant social cognitive paradigm has changed much of this, as it essentially deals with the same kinds of questions that were also of interest to Mead: How do the mental and symbolic representations that people form of themselves and their interpersonal encounters come to influence their behaviors (Eich et al.; Fiedler; Forgas; Sedikides & Skowronski, this volume)? Recent social cognitive research has produced a range of ingenious techniques and empirical procedures that for the first time allow a rigorous empirical analysis of the links between mental representations and strategic behaviors (Bless & Forgas, 2000; Wegner & Gilbert, 2000). Several chapters included here provide excellent illustrations of how the merging of cognitive and behavioral approaches can provide important new insights into the intricate relation between social thinking and interpersonal behavior (Dijksterhuis; Forgas; Semin & Garrido; Macrae et al.; Winkielman & Kavanagh, this volume).

**Culture and the Individual** Another important yet frequently neglected historical approach that is highly relevant to contemporary theorizing about the links between social thinking and interpersonal behavior is associated with the name of Max Weber. Foremost among the classic sociologists, Weber was always interested in how social processes and individual cognitions interact. He assumed a close and direct link between how individuals think about and cognitively represents social situations and their actual interpersonal behaviors (see also Fiedler, this volume). For Weber, it was precisely these mental representations and ideas about the social world that provided the crucial link between understanding individual behaviors and the operation of large-scale sociocultural systems. The chapters here by Kashima and by Malle et al. offer an almost Weberian analysis of interpersonal behavior as a process that is properly located within the larger sociocultural

context. Perhaps the best example of Weber's cultural analysis is his theory linking the emergence of capitalism with the spread of the values and beliefs—and behaviors—associated with the protestant ethic. This work, linking the mental and the social realms, is profoundly social psychological in orientation, in that its key emphasis is on individual social behaviors as they are influenced by shared ideas and norms. These mental representations in turn create and are the foundation of large-scale and enduring social systems.

The social and economic system that surrounds people and exerts such a profound influence on their thoughts and everyday behaviors is, to a large extent, a product of the spontaneous and socially influenced behaviors of countless individuals and the choices and decision made by members of society as they affirm, modify, or neglect the cultural habitual practices of their milieu. Weber (1947) assumes that individual beliefs and motives—for example, the spreading acceptance of the protestant ethic—are the fundamental influence that ultimately shapes large-scale social structures and cultures such as capitalism.

The richness of Weber's approach linking social thinking, interpersonal behavior, and large-scale sociocultural structures is particularly well illustrated by his seminal work on bureaucracies. This analysis probes the intricate relation between the rigid external rules and norms that are an intrinsic feature of bureaucratic systems, and the internal representations and beliefs of the inhabitants of such systems, the bureaucrats themselves. On one hand, the explicit rule systems that define bureaucracies play a critical role in shaping and maintaining the mental world and behavior of the bureaucrat. On the other hand, the mental worlds of bureaucrats cannot but impact on the functioning of the bureaucratic organization. Role theory owes much to Weber in its analysis of how external constraints and internalized representations interact to determine interpersonal behavior.

Max Weber was also among the first to show that a clear understanding of the effects of social interaction processes must necessarily involve both the study of externally observable behavior as well as the subjectively perceived meanings that are attached to an action by the actor. Although rarely credited so explicitly, Max Weber is one of the originators of the kind of social psychological research that is becoming increasingly popular today and is also represented by several contributions to this volume (Jost & Kay; Kashima; Waenke et al.). This approach seeks to unify the insights derived from the social cognitive approach, with a genuine concern with real-life social behavior and its role in larger social systems.

Of course, Weber was not a social psychologist; because of his interest in larger social systems, experimentation was not one of his methods. However, he was a creative empiricist and pioneered a variety of ingenious techniques to obtain reliable empirical data about social processes. Several of this volume's chapters also feature innovative ways to study socially and culturally anchored interpersonal behaviors (Malle et al.; Sedikides & Skowronski; von Hippel & Trivers; Waenke et al.). These techniques will certainly enrich our methodological armory and create greater interest in the links between social thinking and interpersonal behavior.

**Microsociology** Even though the work of Max Weber and George Herbert Mead is rarely acknowledged by social psychologists, these pioneers nevertheless

exert an important, albeit indirect, influence on the discipline. The microsociological tradition represented by the work of Erving Goffman (1972) and others owes much to Weber's theories, and, in turn, it has had a definite impact on social psychologists. Goffman produced some illuminating analyses of the delicate interaction between the influence of externally imposed norms and roles on social behavior on one hand and individuals' thoughts, plans, and self-presentational strategies in public encounters on the other. Goffman used the metaphor of the theater to study interpersonal behavior, and his dramaturgical account of social influence strategies continues a unique tradition in the discipline.

**Phenomenology** Yet another important conceptual orientation that is highly relevant here is a rich phenomenological tradition. In fact, the work of classic theoreticians such as Fritz Heider and Kurt Lewin owed much to the phenomenological perspective. For example, Heider's (1958) thinking explored the kind of information-gathering strategies and cognitive processes on which social actors must necessarily rely as they plan and execute their interpersonal strategies. Heider's phenomenological theorizing produced some of the most productive empirical paradigms, including work on such key questions as attribution processes and person perception phenomena, balance and dissonance theories, and research on attitude organization and attitude change (Cooper, this volume).

The other great figure of classical social psychology, Kurt Lewin, was also profoundly committed to the study of interpersonal behavior, as it is influenced by the mental representations and motivations of individuals. Lewin's (1943) field theory in particular represents a framework that allows researchers to conceptualize interpersonal behavior in terms of the subtle influences that occur within the subjectively defined life space of individuals. Lewin saw field theory as a conceptual framework for examining patterns of interaction between the individual and the total field, or social environment. This approach emphasizes the joint determination of behavior by both the person and the environment. For Lewin, and other phenomenological theorists, what mattered was not the objectively defined and measured social situation but rather the subject situation as it was seen and interpreted by unique individuals (Forgas, 1982). The Lewinian approach affirms the principle that the way people mentally represent and experience social interactions should be the focus of social psychological research. This approach generated some of the most productive research paradigms, including much research on group behavior.

Mead, Weber, Heider, and Lewin represent just a few of the classic social science theorists for whom the internal and external world of social actors was integrally related. In referring to their work, we simply wanted to demonstrate that social psychology has an impressive tradition of theorizing that is directly relevant to the objectives of this book. The very same questions that occupied the minds of these authors continue to be reflected in the contributions to this volume.

There are several more recent theoretical frameworks and research paradigms in social psychology and related disciplines that also focus on the intricate interplay between social thinking and interpersonal behavior. *Social role theory* became another promising candidate for a theoretical framework that pointed to a level of analysis beyond the isolated individual. According to the role-playing metaphor

borrowed from the vocabulary of the theater, everyday activities involve the acting out of rights, duties, expectations, norms, and behaviors associated with socially circumscribed roles (teacher, parent, husband, consultant). Taking these role constraints into account should greatly enhance the predictability of behavior and produce a better understanding of how individuals think and behave in social situations.

Another supraindividual perspective is provided by *social exchange theory*, which has multiple roots in economics, psychology, and sociology. This theory is based on the strong assumption that human beings are essentially rational, selfish, and profit-maximizing creatures, a view that is strongly rooted in the eighteenth-century rationalist and utilitarian philosophies of Hume and Adam Smith. Social exchange theory posits that performing an interpersonal cost-benefit analysis (a kind of Humean "utilitarian calculus") is of fundamental importance to understanding the dynamics of social behavior. According to exchange theory, the basic interdependence between social individuals can be formalized in terms of payoff matrices (Thibaut & Kelley, 1959) that define suitable strategies for cooperative and competitive behavior.

The assumption of the rational, self-focused individual is also central to *game theoretical* attempts to capture mathematically those strategic moves that motivate and determine the behavior among animals and human beings, who are facing social dilemmas and tricky problem environments. Such situations often call for the adoption of broad-minded long-term strategies in contrast with narrow-minded short-term preferences. Soon after game theory was developed by von Neumann and Morgenstern (1944), it was also discovered by Morton Deutsch (1949) and other pioneers of social psychology, who applied it to the experimental analysis of interpersonal competition and negotiation tasks. Research rapidly established, however, that, when it comes to meaningful social behavior, purely selfish and rational behavior is rarely displayed in conflict situations. Rather, nonrational influences, such as concern with social norms, interpersonal approval and acceptance, and the personality of the interactants often come to influence peoples' behavior in antagonistic games. Even such fleeting mental states as positive or negative mood were recently found to exert a significant influence on people's behavior in economic games such as the dictator game and the ultimatum game (Tan & Forgas, 2010; see also Forgas, this volume).

## THE SOCIAL COGNITIVE APPROACH

What is the status of these interpersonal approaches in the presently dominant social cognitive paradigm? What attempts have been made to elaborate the old ideas theoretically? And of course, are there any fundamentally new approaches to genuinely interpersonal social cognition that were not anticipated half a century ago?

No doubt, the success story of social cognition as a metatheoretical approach is largely based on the empirical study of intrapsychic processes of attitude change, attribution, person memory, cognitive biases, motivated cognition, affective influences on social behavior, implicit social cognition, neobehaviorist approaches to explaining social behavior, and more recently social cognitive neuroscience. It seems fair to interpret these currently dominant trends as a special branch of



cognitive psychology that dares to deal with socially meaningful and affectively involving stimulus entities, like persons, groups, and goal-directed action.

This affinity to cognitive psychology is most clearly evident at the theoretical level. Although the study of cognitive contents is often reminiscent of genuinely social phenomena—such as stereotypes, social hypothesis testing, or self-esteem (Eich; Sedikides & Skowronski, this volume)—the theories and process assumptions used to explain these phenomena are hardly different from the intrapsychic theories of cognition, emotion, and motivation (Forgas, 1981). These intrapsychic theories are constructed from such basic cognitive modules as selective attention, top-down influences of expectations on perception and encoding, selective memory access, associative learning, capacity constraints, motivated response biases, and automatic versus reflective inferences (see also Dijksterhuis; Macrae et al.; Winkielman & Kavanagh, this volume).

Thus, although social cognition researchers have made many substantial contributions to interpersonal phenomena—aggression and prosocial behavior, projection and self-presentation, intra- and intergroup processes, cross-cultural psychology—the theoretical models and assumptions used to explain these phenomena remain deeply entrenched in an intrapsychic metatheory that emphasizes the internal cognitive world of the individual above all (Crouch, Milner, Skowronski, Farc, Irwin, & Neese, 2010; Fontaine, Tanha, Yang, Dodge, Bates, & Pettit, 2010). In a similar way, the individual's striving for social identity has been invoked as a suitable account to explain intergroup relations and conflict (Tajfel & Forgas, 1981). And individual attributions, excitation-transfer processes, and the study of attachment styles have been applied to offer sensible explanations of love and attraction. Indeed, the currently dominant intrapsychic accounts have turned out to be so flexible and commonsensical that they now naturally suggest themselves as the foundation for the explanation of interpersonal phenomena as well.

The very success and generality of intrapsychic theories offers a plausible explanation for the paucity of genuinely interpersonal theories and explanations. Even alluding to such alternative accounts may actually appear strange to some readers, because it may not be clear in the first place what an "interpersonal theory" is. The answer, however, is simple and straightforward, and it was actually anticipated in many of the earlier theoretical conceptions we reviewed.

An interpersonal theory is one that is not confined to causes and processes located entirely within individuals but also refers to the interdependence and the dialectic interplay between individuals, the social and cultural worlds that they inhabit, and their connecting structures and joint payoff matrices, environmental constraints, symbol systems used for communication and interaction, and the necessary prudence and constraints inherent in strategies that transcend individuals' insights and associations. Although these arguments were made over 3 decades ago, there is still a conspicuous neglect and paucity of social cognitive research and theorizing along these lines (Forgas, 1981).

To illustrate this point, let us first consider what happened to the classic theoretical ideas we previously surveyed. The idea of symbolic interactionism had remarkably little influence on empirical research in social cognition and in social psychology in general. It has virtually ceased to be cited or even mentioned. A check

on the PsychInfo data base yields four references to “symbolic interactionism” in the major social psychology journals altogether (two in *Journal of Personality and Social Psychology*, one in *Journal of Experimental Social Psychology*, one in *Personality and Social Psychology Bulletin*).

One notable exception is Snyder and Swann's (1978) work on social hypothesis testing, in which the authors explicitly located their work in a symbolic interactionist framework. Accordingly, the well-known tendency of social hypothesis testing to confirm rather than to disconfirm the focal cognitive hypothesis reflects an interaction process that is driven by the motive to get along with others and to cooperate in meaningful communication games. One might similarly interpret Kashima's work (this volume) on the role of communicability and shareability, as well as the related work by Schaller and Crandall (2004), as modern incarnations of an essentially symbolic interactionist approach. However, these notable exceptions are just that—exceptions. They can hardly distract us from concluding that symbolic interactionism has almost disappeared from modern research.

Social role theory, too, neither has become a prominent meta-theory nor has been substantially expanded and refined in contemporary social cognition. One principal feature of this framework lies in the assumption that generally defined (professional, political, institutional) roles, which are detached from individual persons and personalities, regulate and place constraints on routinized and institutionalized behaviors. Pertinent theories must therefore be multilevel theories, in which low-level individual behaviors are nested in higher-level social roles. Such theories are rarely if ever proposed, even though suitable methodological tools have now been developed (Kenny, 2004). For a prominent exception one might point here to Eagly and Steffen's (1984) role-theoretical account of gender stereotyping, which constitutes a distinct multilevel approach. To illustrate, even though being male does not correlate with being an effective leader at the level of individuals, a strong correlation does exist at the aggregate level of social roles or environments. Those professions or situations that entail strong leadership roles are typically occupied more by males than by females. It is interesting to note that Eagly's theory has been readily accepted and frequently cited, suggesting that interpersonal role theories can be welcomed by the scientific community and can be helpful for the author's scientific career. Yet, influential multilevel role theories in contemporary social psychology are still relatively rare.

Social exchange theory and game theory have been largely appropriated by other disciplines than social psychology. The basic idea of social exchange principles has played a critical role in cognitive psychologists' research on deontic reasoning (Cheng & Holyoak, 1985; Cosmides, 1989; Gigerenzer & Hug, 1992) or in the behavioral-economist idea of altruistic punishment (Fehr & Gächter, 2002), and there is wide consensus among biologists and decision researchers that deontic rules (related to promise and obligation) date back to the era of hunters and gatherers (von Hippel & Trivers, this volume). Game theory has become a major domain of economists, fostering a huge research program that has been decorated with many Nobel prizes. Students of social cognition, in contrast, have been reluctant in adopting explanatory constructs from game theory. A glance at social psychological textbooks reveals that concepts like *payoff matrix*, *Nash equilibrium*, *minimax*

*strategy, tit for tat, social contract, or cheater-detector roles* are hardly ever referred to in chapters on altruism, intergroup conflict, self-presentation, communication, and close relationships. The neglect of deontic, strategic, and utilitarian approaches in current social cognition may be one of the reasons an increasing number of scientists emigrate from social psychology to business schools and economics departments that harbor these flourishing research domains.

Lewin's (1943) field theory and group dynamics also failed to have a compelling influence on the construction of a new class of theories that link the structures of the environment and the mental worlds of individuals (Fiedler, 2007; Fiedler & Wänke, 2009; Gigerenzer, Fiedler, & Olsson, in press) or on behavioral laws that hold at the level of groups (Abele & Stasser, 2008; Stasser & Titus, 1985). Even the major paradigms of group research appear to be dominated by intrapersonal theories and motives and focus on cognitive abilities and motivations of individuals as the major explanatory devices. For example, interference of memory retrieval can explain the productivity loss in brainstorming groups (Diehl & Stroebe, 1991). Learning and memory processes and affective states seem to constrain the phenomenon of group polarization (Brauer, Judd, & Gliner, 1995; Fiedler, 1996). Finally, the cognitive and metacognitive ability to understand a hidden profile as well as the motive to please others can account for problems in group decision making (Hollingshead, Jacobsohn, & Beck, 2007; Mojzisch & Schulz-Hardt, 2006).

## FROM SOCIAL THINKING TO INTERPERSONAL BEHAVIOR?

Another feature of the currently dominant social cognitive paradigm is the assumption—albeit often implicit—that how one behaves depends on how one thinks rather than the other way around. In other words, the assumption is that the direction of causation flows from internal cognitive processes (social thinking, both conscious and unconscious) to observable external interpersonal behaviors. This view is in contrast to the more subtle, interactionist perspectives between the intrapsychic and interpersonal realms advocated by Mead, Weber, Lewin, and others. Such a unidirectional approach produces at best a partial explanation of complex interdependence of social cognition and interpersonal behavior. There are several examples illustrating such unidirectional approaches.

For example, research on aggression often suggests that intrapsychic cognitive processes are the antecedent cause of the aggressive response (Crick & Dodge, 1994). In this social information-processing model, a series of steps are identified as leading from cognition to behavior, such as encoding of cues, interpretation of cues, clarification of goals, response assessment, and, finally, response decision. There is ample evidence linking cognitive encoding biases and social information processing to aggressive behavior in children (Orobio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002), adolescents (Fontaine et al., 2010), and, more recently, young adults (Pettit, Lansford, Malone, Dodge, & Bates (2010), but the role of social and cultural forces in producing aggressive behavior is rarely

considered. Other research shows that hostile attributional bias leads to aggressive behavior (Orobio et al., 2002; Pettit et al., 2010).

Additional research suggests that child abuse can be explained in terms of cognitive mechanisms, as a result of parents' biased interpretation of their children's behavior. Thus, according to Crouch et al. (2010), greater accessibility of hostile cognitions leads to abusive parenting behavior. The link between social rejection and aggression has also been analyzed using a social information-processing model (DeWall, Twenge, Gitter, & Baumeister, 2009), suggesting that social rejection activates hostile thoughts. Rejected individuals are more likely to rate ambiguous words as aggressive, to complete word fragments with aggressive endings, and to interpret another person's ambiguous behavior as hostile.

Another area where the unidirectional "social thinking causes interpersonal behavior" approach has been adopted is recent research linking implicit attitudes at the level of associations to prejudice and discriminatory behavior (Greenwald & Banaji, 1995). The suggestion that not only conscious cognition but also implicit associations can be construed as somewhat responsible for prejudice and discrimination has been criticized on both theoretical and methodological grounds (Blanton, Jaccard, Klick, Mellers, Mitchell, & Tetlock, 2008; Fiedler, 2010; Tetlock & Mitchell, 2009). Critics of this approach point out that current research revolves around a few hard-to-interpret latency-based measures that define an attitude as a mere implicit association in semantic memory and are assessed using a single tool, the Implicit Association Test (IAT). The causal chain from implicit associations to explicit associations to behaviors is neither simple nor unidirectional. This intrapsychic approach makes diagnostic behavioral predictions based on test scores that may be prone to false alarms. Thus, IAT scores may reflect many attitude-irrelevant influences. In the absence of an empirically proven causal path that leads from implicit attitudes to explicit attitudes, to behavior intentions, and finally to actual behaviors, the use of this measure as a reliable indicator of prejudice is questionable (Blanton et al., 2009; Fiedler, 2010; Tetlock & Mitchell, 2009).

These examples illustrate that, although much can be gained by analyzing the cognitive determinants of interpersonal behavior, the view that assumes a unidirectional causal relation flowing from internal mental processes (social thinking) to external observable interpersonal behavior offers at best a partial explanation. In contrast with this view, several chapters in this volume show evidence for a complementary approach, highlighting the role of sociocultural factors in determining cognitive processes (Cooper; Eich; Kashima; Kenrick et al.; Malle et al.). Social thinking and interpersonal behavior are necessarily in a bidirectional, interdependent, and interactive relation (Fiedler; Sedikides & Skowronski, this volume), as suggested by such classic theorists of social behavior as Mead, Weber, and Lewin.

## CURRENT TRENDS IN INTERPERSONAL SOCIAL COGNITION

We believe that there are good reasons historically that social cognition has followed cognitive psychology more than microsociology, mathematical game theory,

symbolic interactionism, role theory, and linguistic pragmatics. Concentrating instead on approaches such as the attitude research program, attribution research, the person memory approach, and more recently implicit and automatic reactions and regulative functions within the individual may have been beneficial for the discipline's empirical growth and its methodological development (see also Dijksterhuis; Forgas; Macrae et al.; Semin & Garrido; Winkielman & Kavanagh, this volume). Exploiting the development of new research instruments that have characterized the last decades, the micro-computers, multi-media facilities, and software tools has certainly fostered intrapersonal paradigms more than interpersonal approaches. As commonly acknowledged by historians of science, rapid developments in computer technology and instrumentation have also been a major force in driving the adoption of ever more sophisticated techniques to analyze intrapsychic cognitive processes.

Nevertheless, we believe that it is important to become aware of the continuing neglect of interpersonal theories and their theoretical potential to open new insights and scientific progress way beyond what has so far been achieved relying on intrapsychic theories. With the advent of new instruments and technologies, such as the Internet, social networks, cloud computing, and the new globalization and mobility of populations throughout the world, we believe the time is ripe to reconsider some of the old theoretical conceptions and to look out for new ones.

Indeed, some interesting new trends toward interpersonal social cognition are already apparent on the horizon. For example, Grice's (1975) logical analysis of conversations has recently led to a fundamentally new interpretation of fallacies and anomalies in survey research, rational decision making, and cognitive illusions, based on the pragmatics on cooperative communication between language participants (Schwarz, 1996). The growing evidence on embodiment phenomena (Niedenthal, Barsalou, Winkielman, Krauth-Gruber, & Ric, 2005; Semin & Smith, 2008; see also Semin & Garrido; Macrae et al., this volume), on psychological distance (Trope & Liberman, 2010), and on information sampling processes (Fiedler & Juslin, 2006; see also Fiedler, this volume) has increased the attention given to how subtle environmental influences may impact interpersonal behavior. Finally, renewed interest in theories of motivational and affective regulation (Carver & Scheier, 2011; Gross & Thompson, 2007; Higgins, Cesario, Hagiwara, Spiegel, & Pittman, 2010; Higgins, Kruglanski, & Pierro, 2003) also highlights the interface of the organism's embeddedness in the social and physical environment as a new major paradigm.

Other major developments include the growing influence of evolutionary, functionalist theories emphasizing that social thinking and interpersonal behavior continue to be influenced by mental habits and adaptations shaped by the evolutionary pressures of the ancestral environment (Buss, 1999; Sedikides & Skowronski, 1997; see also chapters in Section I of this volume). Further, many of the higher cognitive and behavioral processes that make social living possible are based on the operation of more basic, automatic, spontaneous, and embodied mechanisms, such as the experience of space and time, and these links are also closely reflected in language and mental representations (see chapters in Section II of this volume). The objective of this book is thus to bring together the most recent research and

theorizing addressing the age-old question that has occupied philosophers and writers since time immemorial: What is the nature of the relation between mental life and social life, and, more specifically, how do social thinking and interpersonal behavior interact?

## THE PRESENT VOLUME

Contemporary research on the links between social thinking and interpersonal behavior is characterized by a number of exciting new developments. There is now belated acceptance that human social behavior is necessarily shaped by the distant evolutionary past and the mental habits and heuristics humans inherited from their stone-age ancestors. The chapters in this book were selected to represent a broad cross section of contemporary research linking social thinking and interpersonal behavior. Contributions are arranged into four sections:

Section I deals with evolutionary and adaptive aspects of interpersonal behavior.

Section II explores the role fundamental automatic and embodied mechanisms linking social thinking and interpersonal behavior.

Section III discusses the operation of cognitive and affective processes.

Section IV deals with the social and cultural variables.

### *Section I: Evolutionary Influences on Social Thinking and Behavior*

Kenrick, Li, White, and Neuberg argue that many heuristic influences on social decisions that may at first sight appear irrational are in fact based on a deeper rationality—including heuristics that were adaptive for human ancestors many years ago. They propose a model that links fundamental human motives (i.e., self-protection, mate acquisition, status, or affiliation) to simple cognitive processes (attention, encoding, memory) and downstream social behaviors (aggression, conformity, creative displays). The chapter reviews recent research using this model to explain various economic decisions and behaviors (e.g., conspicuous consumption, loss aversion, budget allocations).

Galperin and Haselton take an evolutionary perspective to explain some common judgmental and interpersonal errors, such as the common tendency for men to overperceive sexual interest in women and for women to underperceive commitment in men. They argue that these tendencies, although inaccurate, are not “errors” but can be understood as adaptations produced by evolution, a bias that may reduce accuracy but might maximize evolutionary fitness.

Von Hippel and Trivers look at the role of self-deception in strategic interpersonal behavior. They argue that self-deception evolved to facilitate interpersonal deception by eliminating the costly cognitive load typically associated with deception. Self-deception allows people to display more confidence than is warranted. Self-deception is achieved through a variety of dissociations of mental processes, including conscious versus unconscious memories, conscious versus unconscious attitudes, and automatic versus controlled processing.

Semin and Garrido outline an integrated model drawing attention to the adaptive, embodied, and dynamic nature of social cognitive processes. Abstract concepts such as time, affect, power, and valence are grounded by conceptual metaphors that involve concrete representations of action, space, and bodily experiences, and these links are explicitly reflected in language. For example, warm and cold act as central “traits” when describing people, and these concepts are closely linked to salient physical features of the environment.

### *Section II: Automatic Mechanisms Linking Social Cognition and Behavior*

Dijksterhuis explores how the subliminal influence of motivation and goal pursuit can influence intuitions. Although intuitions often feel as if they entered consciousness suddenly, there may be elaborate antecedent unconscious processes. The chapter reviews evidence showing that goals can set into motion unconscious thought processes, leading to shifts in attention and to changes in the accessibility of information relevant to goals, thus producing apparently unconscious intuitive insights.

Macrae, Miles, and Best are concerned with one of the most fundamental mental representations, the experience of time. They suggest that the symbolic ability to travel mentally through time may have sensory-motor grounding. This mental conflation between space and time appears bidirectional. Just as thinking about time entails associated movements in space, moving through space also shapes the temporal locus of mental activity. Thus, social thinking may be intimately linked and highly sensitive to the experience of space.

Winkielman and Kavanagh present recent studies that examine the influence of emotional stimuli on social thinking and interpersonal behavior and suggest that many of these emotional influences involve “embodiment”—an activation of somatosensory representations. For example, understanding and remembering pictorial and verbal emotional information involve bodily reactions, and social decisions are often biased by low-level bodily “spillovers.”

Wänke, Samochowiec, and Landwehr examine the spontaneous and automatic mechanisms involved as people form impressions based on observed or described behaviors and traits. The chapter discusses questions such as what are the inferred characteristics that influence voting, what physical characteristics trigger particular impressions, and how accurate are impressions based on facial and nonverbal cues alone? In particular, they present evidence that impressions based on faces and nonverbal behavior may often be more accurate than commonly assumed.

### *Section III: Cognitive and Affective Mechanisms*

Eich, Handy, Holmes, Lerner, and McIsaac suggest that the way people remember past events has a crucial role in how interpersonal behavior is constructed. They review the cognitive and social aspects of the first-person–third-person distinction in autobiographical memory and discuss recent functional magnetic resonance imaging (fMRI) evidence identifying the neural networks engaged by field versus

observer perspectives. Results also show that social and cultural variables play an important role in how people remember social events. Easterners take a more outside-in (observer) perspective, but Westerners take a more inside-out (actor) perspective. Although autobiographical memory is a quintessentially intrapersonal phenomenon, it seems that even such basic representations are influenced by social and cultural variables.

Fiedler argues that to understand intrapsychic processes we first have to understand how people sample environmental information. Often, the causal origins of behavior can be found in the biased samples provided by the environment. Fiedler describes a simulated sampling paradigm, the virtual school class, whereby participants play the role of a teacher who is to sample information about the students' behavior and performance. Biases in information search process, which lead to corresponding biases in final student evaluations, are shown to be a joint function of intrapsychic influences (e.g., teachers' hedonic preference for smart students) and external constraints imposed by the students' participation rate on the sampling process.

Johnson and Carpinella investigate how intersecting social categories may shape interpersonal judgments and interpersonal behaviors. For example, the gender typicality of faces may influence response latencies and mouse trajectories as judges make classifications, suggesting that the unfolding of category distinctions can be reliably measured online in terms of observable movements. Dealing with intersecting identities may be a fundamental aspect of the social categorization process and can have a significant influence on interpersonal behavior.

Forgas argues that affective states have a major influence on how social information is processed and on ensuing social behaviors. The chapter presents a series of experiments demonstrating the potentially adaptive and functional social consequences of mild negative moods. It turns out that people in a negative mood are less prone to judgmental errors, are more resistant to eyewitness distortions, and are better at producing high-quality and effective persuasive messages. These findings are broadly consistent with the idea that, over evolutionary time, affective states became adaptive or functional triggers eliciting information processing styles that are appropriate in a given situation.

Sedikides and Skowronski analyze the role of self-evaluation in interpersonal behavior and suggest that self-protection and self-enhancement are basic motives that manifest themselves through a large repertoire of cognitions, emotions, and behaviors. These self-enhancement and self-protection strivings play a major role in how individuals construe themselves and plan their social encounters. New evidence on priming effects on the judgment of the self and others suggests, however, that deliberative processing places limitations on self-enhancement and self-protection.

#### *Section IV: Social and Cultural Factors in Social Thinking and Interpersonal Behavior*

Kashima outlines a theory of cultural dynamics that puts interpersonal processes as the engine of microgenesis of culture and regards the transmission of cultural



information between people as a central mechanism of cultural evolution. In this view, most of the cultural transmission occurs as an unintended consequence of a joint activity, and culture acts as a tool for interpersonal coordination. Kashima also discusses what happens when this fluent interpersonal process is perturbed even by a minor culture inconsistent event.

Jost and Kay summarize their system justification theory, suggesting that people are motivated to defend, bolster, and justify aspects of the societal status quo at both conscious and nonconscious levels. Their work shows that system justification can operate as a nonconscious goal that is triggered by, among other things, feelings of threat or dependence on the social system. System justification is also linked to underlying epistemic, existential, and relational needs and serves a palliative function for its adherents. System justification also has important societal implications, motivating resistance to change in a variety of public policy domains.

Cooper's chapter analyzes the consequences of thinking as an individual or thinking as a group member on interpersonal behavior. Does this difference matter in the way that information is processed and attitudes are changed? The chapter argues that the consequences of the two perspectives matter in important ways. Using the lens of vicarious dissonance, the chapter proposes that attitude-discrepant behavior creates different opportunities for attitude change, depending on the perspective that is accessible in memory. Identification, motivation, and the direction of change depend on the individual versus group perspective that the individual adopts.

Malle, Guglielmo, and Monroe analyze the social psychology of blame and suggest that moral cognition is firmly grounded in unique properties of human social cognition. An intriguing implication of their analysis is that people can be blamed for not only intentional but also unintentional behavior, if they can be expected to foresee and prevent an unwanted event. In addition, however, the authors highlight the role of interpersonal communication and negotiation for blame and its social consequences.

## CONCLUSIONS

Understanding the relation between mental life and social life, the way social thinking is related to interpersonal behavior, has long been one of the key issues for social philosophy and more recently for social psychology. For some decades now, the social cognitive paradigm has dominated research in this area, focusing attention on intrapsychic processes and unidirectional causation where social thinking is assumed to determine interpersonal behavior. Despite the important achievements of this approach, it now appears that the paradigm is shifting, and a more realistic framework for studying interpersonal behavior is emerging. We argued in this introductory chapter that many classical theoretical frameworks could inform a more social and intrapersonal conceptualization of the genesis of interpersonal behavior, and several of the chapters here illustrate the potential of this approach (see Section IV, this volume). We also suggested that the emergence of evolutionary theories (Section I) and models emphasizing automatic, embodied processes (Section II) offer an important complementary perspective to the more traditional

social cognitive paradigm (Section III). Research on interpersonal behavior will always be a core topic for social psychologists. By advocating the adoption of a broader and more comprehensive theoretical framework, we hope that this volume will make a useful contribution to this important research domain.

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