

The social psychology of knowledge: its scope and meaning

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One way to stimulate new research directions in a field of science is to redefine or recategorize its topics of inquiry. Such seemingly semantic shifts may have profound consequences on research directions in the field for years to come. They often expand or reduce the scope of inquiry, refocus the research on new parameters of interest, and introduce different perspectives which may alter old conceptions and research paradigms. As an example, in the last fifteen years or so one field of social psychology has been significantly modified by two such redefinitions. Thus, in the late 1960s and the early 1970s the attribution field emerged, based on the seminal works of Heider (1958), Jones and Davis (1965), and Kelley (1967, 1971, 1972). Attribution research has been concerned with the question of how people in everyday life assign causality for their own behavior, to that of other persons, or to impersonal events in their environment (Frieze and Bar-Tal 1979).

Once posed, the attribution question engendered hundreds of studies on a broad range of social psychological topics (see for reviews Frieze *et al.* 1979, Harvey *et al.* 1976, 1978, 1981, Jones *et al.* 1972, Kelley and Michela 1980, Kruglanski 1980, in press). Attribution became a leading interest area in social psychology, and most contemporary textbooks in the field devote at least one chapter to the burgeoning research activity on attributional issues.

With the advent of the "social cognition" movement in the late 1970s, social psychology has witnessed a new transformation of its subject-matter. Broadly defined (Taylor 1981), social cognition deals with how people perceive their social world and relationships. This movement has been heavily influenced by the theories and research paradigms of cognitive psychology. It implies that the attribution question is only one among many of concern

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to the social cognition field (cf. Kruglanski, in press). Besides its considerable breadth, the new social cognition movement features a distinctive "information-processing" metaphor, as a result of the cognitive psychology influence. This introduced social psychologists to such new topics as encoding, organization, storage, and retrieval of social stimulus information. In turn, the new interests facilitated the development of appropriately rigorous and sophisticated research methodologies aimed at discriminating among such fine cognitive "microprocesses". While mainstream social psychology has been cognitive in some sense since the 1940s (cf. Scheerer 1954, Zajonc 1968), the new social cognition movement redefined the major issues to be confronted and drew social psychologists' attention to previously unheeded work in cognitive psychology proper. Highly dynamic and active, the social cognition movement provided a new research paradigm for social psychologists to approach their topics of inquiry, and has inspired intense research activity in the past decade (see e.g. Fiske and Taylor 1984, Forgas 1981a, Hastie et al. 1980, Higgins et al. 1981, Showers and Cantor 1985, Wyer and Srull 1984).

The focus on intrapsychological processes and the heavy influence of cognitive theories and methods fueled the continuing controversy regarding the distinctive nature of social cognition. While some social psychologists do not perceive substantial differences between cognition and social cognition (e.g. Simon 1976), others clearly differentiate between the two (cf. Forgas 1981b, Landman and Manis 1983, Zajonc 1980). The former emphasize that all cognitive phenomena are governed by the same processes. The latter identify specific characteristics of human beings (as simultaneous objects of cognition and cognizing subjects) that render social cognition and perception qualitatively distinct from the perception of inanimate objects. The social cognition movement has been criticized on several other grounds as well. Some authors objected to the dominance of the information-processing approach (e.g. Baron and Harvey 1980, McGuire 1983), others pointed to the narrow scope of social cognition research which neglects motivation, affect, or behavior (cf. Weary et al. 1980, Zajonc 1980), as well as the social context (i.e. social interaction. group behavior, culture) of cognitive phenomena (cf. Doise and Mackie 1981, Forgas 1981b, Neisser 1980).

One purpose of the present volume is to introduce the term "social psychology of knowledge" as a new way to look at the social cognitive domain. Let us consider how "social psychology of knowledge" differs from previous social cognitive paradigms, and along what paths it may guide future research in the area.



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We view knowledge in a subjective or intersubjective sense as the total sum of beliefs to which an individual or a group may subscribe. Beliefs are accumulated through years of human experience and are stored in the human mind. They constrain persons' reality and in this sense delimit human action. Knowledge is to some considerable extent relative, and what one person (group, culture) considers knowledge may be regarded as superstition by another. The contents of beliefs are of unlimited scope, therefore human knowledge has no a priori boundaries. Accordingly, it is possible to categorize knowledge in any number of ways. For example, Russell (1948) differentiated knowledge by acquaintance and knowledge by description; Ryle (1949) differentiated knowing *how* and knowing *that*; and James (1890) drew a distinction between knowledge of acquaintance and knowledge about.

The "knowledge" label covers such diverse social cognitive terms as "hypotheses", "judgments", "inferences", "attributions", "perceptions", "attitudes", "preferences", "values", "ideologies", "goals", or "intentions". All these could be considered as varieties of knowledge which persons may have. More broadly yet, "knowledge" denotes the shared realities of given communities (e.g. scientific ones) or cultures (see Bar-Tal, in press). In that latter sense, "knowledge", while subsuming "intrapersonal" cognitions, is at the same time thoroughly "interpersonal", or social. Even "intrapersonal" knowledge is social in an important sense. Much of any individual's knowledge is acquired from other people and is based on their beliefs and world views. The "facts" of our experience are social in an important sense. They depend for their meaning on previously constructed cultural concepts and categories in which terms "experience" is framed. In this respect, the acquired knowledge contributes to individual and group differences.

Social psychology of knowledge should, therefore, focus on the contents of knowledge as well as on the social and cognitive processes whereby knowledge forms and changes. In this sense, "social psychology of knowledge" is broader in scope than the field of "social knowing", which implies and emphasizes the *process* of knowing (cf. Baron 1981, McGuire 1983, Neisser 1980), or of "social knowledge", which implies a preoccupation with *contents* (e.g. of causal categories, as in attribution theory). The study of processes is important because it may uncover the general trans-historical and transcultural regularities whereby persons make up their minds on the basis of arguments and evidence. An investigation of knowledge formation processes would undoubtedly include not only informational processing mechanisms, but also affective and motivational factors that probably have impact on our thought processes and lend them



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intensity and direction (cf. Sorrentino and Higgins 1986). Furthermore, in view of the prevailing assumption that individuals act consistently with their beliefs, the study of social knowledge may open new avenues to the understanding of human behavior. The study of contents may have also other implications. It may allow mapping of individuals' and groups' knowledge, understanding the influence of individuals on other individuals, and explaining the effects of individuals' knowledge on their reactions.

The focus on knowledge may bring social psychologists into contact with alternative disciplines that have had a longstanding interest in explaining knowledge. Philosophers from Plato and Aristotle through Descartes, Locke, or Kant all the way to Russell and Popper have tried to assess the nature of knowledge and to determine its sources and validity. Most recently, non-justificationist philosophers (e.g. Kuhn 1970, Lakatos and Musgrave 1970) have noted the need to reconstruct major aspects of scientific developments in historical, sociological, and psychological terms, as compared to purely rationalistic (e.g. hypothetico-deductive) construction of science.

The latter developments in particular pose an exciting challenge to cognitive social psychologists. The social psychology of knowledge could, thus, provide us with concepts and methods for understanding scientific knowledge and scientific progress at the same time as it sheds light on lay knowledge and its development. Alongside sociologists of knowledge and of science (e.g. Berger and Luckmann 1967, Coser 1968, Merton 1957, Stark 1977), social psychologists of knowledge could make major contributions to interpreting the miracle of modern science. This promises to be a real "bootstrap" operation. Our theories about knowledge acquisition are in themselves types of knowledge, subject to the rules and regularities they themselves articulate. As in Escher's famous drawing, even as we move upward (toward abstractly explaining knowledge) we may finally reach the lowest plane from which we have just set out (i.e. that of knowledge to be explained). Such formal paradoxes only add challenge and excitement to the task of forging a social psychological conception of knowledge.

Themes of the present volume

Contributions to the present volume represent diverse perspectives on the phenomenon of human knowledge. Some chapters address aspects of social knowledge from the information-processing (the social cognition) perspective, others adopt historical, constructivist, ecological, problem-solving, and lay epistemic approaches. Despite the diversity, three general themes



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can be discerned which run through the volume as a whole, and which are touched upon by the various chapters: the nature of knowledge; the process—contents distinction in knowledge analyses; and the problem of validity of knowledge structures. In what follows we briefly indicate how these principal themes of our volume are addressed by the various individual contributions.

The nature of knowledge

Gergen sets out to elucidate the very concept of knowledge. He distinguishes between two contrasting conceptions of knowledge: the "dualistic" one viewed as representation, and the "monistic" one considered as social construction. According to Gergen the representational conception is essentially individualistic whereas the constructionist conception is inherently social. Furthermore, the representational conception is open to various criticisms (e.g. of infinite regress) and the absence of compelling criteria to distinguish the mental representation of objects from the objects as such. Gergen proceeds to describe recent lines of work within the constructionist perspective, including his own analysis of psychological discourse, as basically circular. Whether the latter conclusion will be widely accepted (or greeted with "lusty enthusiasm" as Gergen puts it), remains to be seen. Yet Gergen's ideas merit close consideration by social psychologists. For example, the implication that social cognition research is necessarily committed to a representational conception of knowledge need not go unchallenged. In fact, social cognition research could be conceived as articulating a view of social construction in which larger knowledge structures (e.g. associationist networks) are assembled from smaller bits of knowledge (the "stimulus information" being processed). Be that as it may, Gergen's arguments about knowledge (psychological or otherwise) are characteristically intriguing and provocative.

What Gergen calls "representational", Graumann calls "transcendental". Both conceptions allude to a relation between cognition on the one hand and external reality on the other. Unlike Gergen, however, who views contemporary social cognition concepts (e.g. schema) as committed to such a relation (hence as essentially representational), Graumann considers them as more nearly mentalistic or "immanentist". Furthermore, tracing the "cognition" concept from James's (1890) *Principles* to contemporary information-processing models, Graumann suggests that the earlier, Jamesian notion was explicitly more concerned with "knowledge", emphasizing as it does the reality aspect, ascertained via convergence of independent perceivers. Precisely for the latter reason, "knowledge" is a



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more social concept than "cognition", so the historical trend (which the present volume may help to reverse) has apparently moved the field from knowledge to cognition.

Baron contrasts two major types of knowledge: perceptual and cognitive. Perceptual knowledge takes ontogenetic and phylogenetic precedence over cognitive knowledge. Moreover, the two types of knowledge could be governed by different psychological processes. Perceptual knowledge could be gained via automatic processing, whereas cognitive knowledge could be gained via controlled processing. Perceptual knowledge concerns concrete particulars, whereas cognitive knowledge refers to general categories. Perceptual knowledge is direct whereas cognitive knowledge is constructed. The post-Gibsonian, dual mode epistemology proposed by Baron is reminiscent of other similar dichotomies, e.g. between affect and cognition (cf. Zajonc 1980), or between tacit and explicit types of knowledge (cf. Polanyi 1958).

Bar-Tal and Bar-Tal and Kruglanski define knowledge broadly as the totality of a person's beliefs on various topics. Other contributors do not explicitly define knowledge, yet suggest what knowledge is by dwelling on its particular examples. Trope and Ginossar analyze the acquisition and application of *statistical* knowledge, Zanna and Rempel discuss *attitudes* as knowledge structures; this allows them to integrate the historically incompatible, unidimensional versus tridimensional definitions of attitudes. Both Hamilton and Jaspars suggest that *causal attributions* are types of knowledge, and Ross and McFarland discuss memories of the *past* as types of knowledge.

The process and contents of knowledge formation

The diversity of knowledge types naturally raises the question of whether, in fact, they have anything in common. Put differently, can we hope to uncover a process of knowledge acquisition which applies to all knowledge types, or are these mediated by qualitatively separate processes? Contributors to this volume differ in their stands on this issue. Baron believes that perceptual knowledge is governed by a different process from conceptual knowledge. Gergen implies that a uniform theory of knowledge acquisition is possible, but that its specific nature would depend on the metatheory of knowledge one adopts: a representational theory of knowledge may emphasize the nature of mental processes, whereas a constructionist theory of knowledge may stress, instead, notions of social interaction, negotiation, and influence. This is not to say that the "representationist" and the "constructionist" models do not share important features. To mention one,



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both representationist and constructionist conceptions imply that knowledge ought to be *consistent* in some sense. For the representationist (or the transcendentalist, in Graumann's sense) the consistency refers to a *correspondence* between cognition and reality, whereas for the constructionist it refers to interpersonal consistency or social *consensus*.

Uniform approaches to knowledge acquisition are proposed by Bar-Tal and Bar-Tal, Kruglanski, and Trope and Ginossar. Bar-Tal and Bar-Tal start with the nonjustificationist assumption (cf. Bartley 1962) that knowledge (including scientific knowledge) is objectively unprovable. Therefore, a useful approach to the study of knowledge is to adopt a subjective or intersubjective perspective. Furthermore, Bar-Tal and Bar-Tal draw the distinction between particularistic and universalistic generalizations in social psychology, and outline several useful functions that a study of cognitive contents could accomplish: contents are indispensable for the testing of process models, they are necessary for predicting specific behaviors from general theories (see also Kruglanski and Klar, in press), and for implementing intervention measures in applied settings.

The distinction between contents of knowledge and processes of knowledge acquisition is also drawn by Kruglanski, who discusses the historical confusion between levels of analysis in previous social cognitive theories. But primarily Kruglanski outlines a judgmental model (the theory of lay epistemology) which integrates informational and motivational factors affecting the epistemic process. In Kruglanski's theory, these two types of factor are functionally complementary and jointly necessary for every bit of epistemic behavior. This is opposed to prevalent "two route" approaches whereby some knowledge is based on informational (or cognitive) influences, other on motivational influences.

A general model of human judgment is also proposed by Trope and Ginossar. These authors adopt the problem-solving perspective to judgment or knowledge acquisition. According to this perspective, a search for a sequence of productions ultimately transforms the initial state of knowledge about the problem into a state in which the goal is satisfied. Production rules are stored in long-term memory and are activated as a function of their accessibility (cf. Higgins and King 1981) and their perceived match to the judgmental problem in question. Systematic application of the problem-solving approach demonstrates that, contrary to previous implications, statistical judgments are governed by the same psychological factors as non-statistical judgments (or "heuristically" based judgments). Thus, the distinction between statistics and heuristics turns out to be one of cognitive *contents* rather than of *process* (see also Kruglanski and Ajzen 1983).

Aspects of the general judgmental process are elaborated in several fur-



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ther contributions to this volume. Zanna and Rempel advance the provocative proposal that attitudinal judgments can be variously based on cognition, behavior, or affect. This analysis is rich in researchable implications. It also raises several theoretical issues of interest. Do the different bases of attitudes fulfill the same function in the judgmental process? From the lay epistemic perspective, for instance (cf. Kruglanski, this volume), own behavior toward, or beliefs about, the attitude object could serve as types of "evidence" from which an attitude could be consciously deduced. By contrast, affect toward the attitude object is more likely to represent an unconscious motivational influence which may render a given attitude a desirable or an undesirable knowledge structure. If so, affect may selectively bias the memory search toward affect-congruent beliefs or past behaviors. Thus, Zanna and Rempel's "affect" could represent a "need for specific structure" influencing the formation of an attitude. In alternative cases, attitudes could be based on needs for "nonspecific" structure, based on the desire to act or orient oneself in one's environment. In this broad sense an affective (or a motivational) component might be part and parcel of all attitudes rather than representing a basis for some attitudes.

Higgins and Stangor discuss many ways in which the judgmental context affects the judgments rendered. Some such effects relate to the "informational" contents which serve as evidence for a given judgment. For instance, the context of a target's behavior may be taken as evidence against a dispositional attribution of her acts. Other context effects refer to the process of judging; they include context-driven accessibility of constructs for encoding stimulus information, and the effects of mood on categorization and reconstructive memory.

Reconstructive memory is also a focal topic for Ross and McFarland. Their data and theorizing could be interpreted to mean that judgments about one's own past differ in contents only from other possible judgments. As with all judgments, those of one's own past seem strongly affected by the accessibility of various constructs or categories. Ross and McFarland allude to such accessible constructs in discussing implicit theories of stability and change that people may adopt in regard to various topics. Other implicit theories could be similarly involved. One's theory of how Americans felt or behaved in the 1960s could affect one's memory of one's own feelings and behavior during that period. Furthermore, the same motivational factors which affect the rendition of all judgments could have impact on our recall of past events. In some circumstances one could be motivated to "freeze" one's extant theories about the past and be impervious to information inconsistent with those theories. Such freezing could stem from a "need for a nonspecific structure" regarding one's notions about one's past, or from the directionally biased "needs for specific structure". For



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instance, one could exaggerate the memory of past sins to highlight the magnitude of one's moral improvement. Alternatively, one could idealize past interactions in order to diminish current relationships. In short, the same informational and motivational factors which influence judgments of our present could also affect judgments of "the way we were".

A chapter by Devine and Ostrom examines the process of inconsistency management as investigated by "point on a continuum" models versus contemporary information-processing approaches. According to the authors, inconsistency management is essential to the attainment of coherent social knowledge. Point-on-continuum theories primarily stress the mechanism of discounting as a way of handling inconsistency. By contrast, information-processing models also imply the conditions under which discounting may occur, and suggest, additionally, the consequences of inconsistency management on such aspects of the perceiver's cognitive process as encoding and recall.

Hamilton's chapter examines inconsistency management "at the interface of attribution and person memory research". It is found that, as with other types of information processing, the more time-consuming and cognitively "difficult" the attributional activity, the more effectively it is represented in memory. Furthermore, items of information of which the (attributional) implications are inconsistent with those of other information are particularly likely to be recalled. Hamilton views attribution as a process that "occurs in conjunction with other processes in the course of comprehending, understanding, storing and using information". An alternative view compatible with Hamilton's research would be to regard attribution as representing the application of general information-processing principles to the specific *content domain* of causal judgments.

Jaspars outlines a model of causal attribution that combines subjects' prior "real world" knowledge with the information at hand. The information is encoded in terms of mental categories which the subjects construct, and which need not (although possibly they could) correspond to the "person", "time/modality", and "entity" categories assumed by the attribution theorists. Jaspars's model of causal inference thus appears to be "top-down" or deductive as contrasted with the "bottom-up" inductive models in the attributional literature (cf. Kelley 1967). In this sense at least, Jaspars's approach is not too dissimilar from the problem-solving or hypothesis-testing models proposed by Trope and Ginossar and Kruglanski respectively. Presumably such models apply to the formation of noncausal inferences as well as causal ones.

Similarity between different types of inference, notably scientific and lay inference, is also highlighted in the chapter by Wyer and Srull. These authors suggest that, just like lay persons, scientists go through several



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stages in processing empirical data. Furthermore, the factors that influence the processing at each stage could be similar for the scientist and the lay person. Construct accessibility, for example (cf. Higgins and King 1981), affects the scientists' interpretation of a phenomenon just as it may affect lay judgments and inferences. Moreover, the procedures lay persons and scientists use for data acquisition may heavily influence the conclusions drawn from the data. In this sense, then, the data can not "speak for themselves". All inferences are "biased" by pre-existing knowledge structures (theoretical hypotheses and methodological assumptions) that influence the data we collect and the way we interpret them.

The validity issue

By definition, the term "knowledge" refers to a state of affairs we hold to be true. Thus, the issue of validity should figure prominently in any discussion of the way social knowledge is acquired or modified. Indeed several chapters in the present volume touch on this theme, whether explicitly or implicitly. Furthermore, several authors discuss the "objective" validity of human judgments, whereas others address the subjective experience of validity. Among the former, Hastie and Rasinski devote a chapter to discussing the "logics" typically used in research on the "objective" accuracy of human judgments and make suggestions as to how such research might be improved. Higgins and Stangor suggest that contextually driven judgments and memories can be "objectively" valid, in the sense of faithfully reflecting the stimulus information on which they were based in the first place.

Objective validity of judgments and perceptions is also addressed by Baron from his "dual mode", neo-Gibsonian perspective. Social perception is assumed to be generally accurate, and to be tested against its pragmatic or behavioral consequences for the organism: the perception that an opening is sufficiently wide is tested by attempting to crawl through it. Baron contrasts such ecological criteria of veridicality with the cognitive models where accuracy is assessed in reference to logical or prescriptive criteria (as Bayesian theorem). Ross and McFarland discuss biases in recall as systematic and subjective deviations from objective facts (hence, as inaccuracies), influenced by individuals' implicit theories and/or their motivational states. Finally, Wyer and Srull imply that the validity of scientific theories is established via the exclusion of competing hypotheses, inconsistent with the theories at issue.

Several contributions to the present volume bear on validity as defined from the knower's subjective perspective. Devine and Ostrom deal with inconsistency management that presumably occurs in order to determine a