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Naive Psychology

See FOLK PSYCHOLOGY

Naive Sociology

Humans everywhere possess elaborate and often articulate knowledge of the social world. Central to this knowledge is the recognition of and reasoning about those groupings of individuals that constitute the social world. Naive sociology is the study of the cognitive processes underlying these everyday beliefs about human groups and human group affiliation.

That humans develop complex representations of society is not surprising. Humans almost certainly know more about other humans than they do about any other aspect of the world, and group living is a hallmark of human existence. Group living likely includes adaptation to the fact that humans may be the only species in which conspecifics are the principal predator (Alexander 1989). Since much of this predation is regulated by and implemented through social groups, cognitive skills, like the capacity to rapidly and accurately interpret the behavior and motivations of others, are critical for survival.

Human social groupings are more complex and more fluid than those of other social species. Consequently, the rapid and accurate appraisal of the social environment is both difficult to achieve and demanding of cognitive resources. Major tasks include the capacity to represent and to compute information about (1) large numbers of groups, (2) varied group affiliations, and (3) shifting coalitions between groups. A number of mechanisms underlie these capacities, and their precise nature remains a matter of some controversy.

Considerable research in social psychology, particularly group dynamics, has revealed and interpreted many processes pertinent to these capacities. Like the bulk of psychology, work in SOCIAL COGNITION tends to approach sociality from a domain-general perspective. Thus, representations of group-level phenomena, like social identity, are typically interpreted as instances of general cognitive strategies for processing categories. Patterns of inferencing associated with social categories (e.g., STEREOTYPING and prejudice), on this view, involve general category effects that simply happen to target person categories (Fiske and Taylor 1991; Hamilton 1981).

Other research in social psychology has identified mechanisms that specifically act on mental representations of human groupings. Research on stereotyping has contributed important insights into cognitions of group-level phenomena,

particularly insights into the relationship between ascribed group affiliation and explanations for the beliefs and behaviors of members of other groups (Hogg and Abrams 1988; Pettigrew 1979; Taylor and Fiske 1991; Miller and Prentice forthcoming).

Influential studies by Tajfel (1981) demonstrate that biases of this sort may be extremely general in the sense that they are not tethered to any actual group affiliation. Tajfel and his colleagues have shown that individuals, in virtually any situation, privilege members of their own group (ingroup) vis-à-vis members of other groups (outgroups). Thus, even when subjects know that the ingroup has no real-world group status (e.g., when the ingroup is composed of all persons whose social security numbers end in the same digit), they distribute pretend money more readily to members of their own group than to members of an outgroup. Biases of this sort are extremely resistant to change and attempts to inhibit spontaneous group-related favoritism have been largely ineffective (Miller and Brewer 1984; Gaertner et al. 1993).

These studies typically approach group-relevant cognitions from the perspective of the individual, both with respect to the individual who perceives group affiliation from the vantage point of him or herself and with respect to the individual as target of bias.

Evolutionary and comparative studies have been especially important in making clear that mental representations of group-level phenomena also include beliefs about groups themselves. EVOLUTIONARY PSYCHOLOGY, COGNITIVE ANTHROPOLOGY, AND ETHNOPSYCHOLOGY all speak directly or indirectly to the role representations of groups play in sociality (Alexander 1989; Dunbar 1988; Brereton 1996; Warnecke, Masters, and Kempter 1992; Fishbein 1996; Shaw and Wong 1989; Reynolds, Falger, and Vine 1987; Cosmides 1989; LeVine and Campbell 1972), as does comparative research on DOMINANCE IN ANIMAL SOCIAL GROUPS and SOCIAL COGNITION IN ANIMALS.

Much of this work reveals the importance of domain-specific and modular mechanisms to naive sociology. Evolution prepares all living things to resolve (or attempt to resolve) recurrent problems facing the organism. It is extremely likely that evolved adaptations emerged in response to recurring social problems that our ancestral populations faced (Baron-Cohen 1995). Relevant evolved adaptations include specialized mechanisms in both humans and nonhuman animals (particularly primates) such as a THEORY OF MIND; domain-specific devices for the recognition of faces, voices, and affective states; cheater detectors; and capacities for representing social dominance.

Other capacities that evolved to coordinate information relevant to nonsocial phenomena may have also been recruited to treat social group-level phenomena. Scholars in the domain-specific tradition, using beliefs about NATURAL KINDS as a point of departure, have proposed that concepts of human groupings are organized around principles that initially emerge in naive understanding of nonhuman groupings (particularly the folk notion of species). Strategies for classifying and reasoning about human groups are strikingly similar to strategies for classifying and reasoning about nonhuman species. It has been argued that notions that capture human diversity (e.g., race, ethnicity, nationality, and gender) may derive via analogy from the notion of species in FOLK BIOLOGY (Atran 1990; Boyer 1990; Rothbart and Taylor 1990). In much the same vein, other aspects of social reasoning (e.g., the willingness to interpret behavior in terms of traits and dispositions) have been attributed to theory of mind (Wellman 1990).

Hirschfeld (1995) and Jackendoff (1992) argue that mental representations of human groups are also governed by a distinct cognitive faculty of social cognition or naive sociology. Noam Chomsky (1988), in a discussion of bilingualism, implies something of the same when he observes that young children have theories of both language and society that they must coordinate in determining, among other things, the particular language to speak in a given context. The basic task of a faculty of social cognition is to develop an integrated picture of the self in society. Whereas the fundamental units of spatial cognition are physical objects in space, those of social cognition are persons in social interaction (Jackendoff 1992: 72). On this view, the notion of *persons in social interaction* involves at least two elements that set the domain of social cognition apart from other domains. First, the causal principles of social relations (e.g., consanguinity, group membership, and dominance) appear to be unrelated to those underlying other domains of knowledge. Second, the fundamental unit of social cognition, the person, is a singular conceptual entity. As already noted, humans have a number of highly specialized input devices that allow the identification of specific persons and the interpretation of their actions.

The concept of the person itself may be contingent on group-relevant cognitions. The image of a social person, for instance, may be a conceptual prerequisite for other individually oriented domain-specific competencies. Recent work with young children, for example, suggests that the notion *group* may developmentally preceed the notion of self (Hirschfeld 1996). Similarly, in theory of mind the person is the entity to which beliefs and desires are attributable (except in rare and pathological circumstances, like multiple personality disorder; see Hacking 1995). Yet belief/desire psychology, taken by some to be the backbone of social reasoning (e.g., Baron-Cohen 1995), may well be insufficient to account for social reasoning in that it is insufficient to account for representations of groups. For instance, it is a commonplace in anthropological analysis to proceed without reference to individuals at all on the belief that social groups and social affiliation are distinct from (and perhaps antecedent to) knowledge of individuals (Mauss 1985). Indeed, social analysis would be impoverished without invoking the notion of corporate groups (groups that are conceptualized as corporate individuals rather than collections of individuals; Brown 1976).

A major cognitive issue in this regard is the nature and scope of cognitive resources that human sociality demands. The social units with which any individual can affiliate are many and varied. A critical task for both children and adults is to develop skills at high-speed scanning of social contexts and high-speed identification of the appropriate (or strategic) affiliations and allegiances invoked in a given context. For example, choosing something as "simple" as the correct

register of speech for a particular situation depends on adequately parsing the social affiliations of the individuals in that context (Hirschfeld and Gelman 1997).

The complexity of the social environment led Hirschfeld (1996) to propose the existence of specialized knowledge structures dedicated to social group understanding. He argues that identifying and reasoning about "natural" groupings (i.e., groups such as race and gender that are considered immutable and derived from a unique group essence) rest on mechanisms unique to social reasoning. Thus, despite the predominant view that preschoolers are conceptually unable to reason beyond external properties (Aboud 1988), Hirschfeld found that even quite young children represent the social environment in terms of abstract principles and nonvisible qualities. For instance, even 3-year-olds distinguish "natural" human kinds from other ways of sorting people and attribute group membership to underlying and unique essences that are transmitted from parent to child.

In sum, cognitive science has provided important insights into the nature and scope of group living. Many questions remain open. What is the relationship between knowledge of group-level and individual-level phenomena? Given the marked variation in sociality, what role does the cultural environment play in shaping social understanding? To what extent does this marked variation preclude evolutionary accounts? If it does not, what kinds of adaptations evolved to treat social phenomena? What was the evolutionary environment like in which these adaptations emerged?

See also DOMAIN SPECIFICITY; ESSENTIALISM; NAIVE PHYSICS

—Lawrence A. Hirschfeld

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Narrow Content

According to some causal theories, the referent of a term like "water" is whatever substance bears the appropriate causal relation to the use of that term (Putnam 1975; Kripke