

Social cognition and social development

A sociocultural perspective

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8 Culture as a cognitive system: differentiated rule understandings in children and other savages

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For more than a century, from the early writings of Tylor (1871), Lévy-Bruhl (1910), and Hobhouse (1906) to more recent accounts by Lévi-Strauss (1966), Horton (1967, 1968), Gellner (1973), and Goody (1977), a contrast has been drawn between the savage (or primitive) mind and the modern (or domesticated) mind. There are striking parallels between these descriptions of a savage versus modern mind contrast and descriptions within cognitive developmental literature of a contrast between the child and the adult mind (Kohlberg, 1963, 1969, 1971, 1973; Piaget, 1954, 1932/1965, 1967; Werner & Kaplan, 1956). Unlike the differentiated, abstract, taxonomically minded, and concept-driven Western adult, both children and savages, it has been proposed, view the world in an undifferentiated, concrete, functional, and percept-driven way. Savage and child seem to provide reciprocal metaphors for one another.

Although the savage versus modern mind contrast has been drawn in various terms, the image of a conflated, undifferentiated mind shared by savage and child (or characteristic of the savage as child or the child as savage) is one of the most pervasive in the literatures of both cultural evolution and cognitive development. In this chapter we raise some doubts about the usefulness of "cognitive differentiation" as a general parameter for describing age-related, historical, and cross-cultural variations in social thought. We discuss evidence that young children possess quite differentiated criteria for distinguishing and identifying moral versus conventional versus prudential rules; indeed, we present evidence that

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the criteria possessed by children for classifying different elements of culture are as differentiated as the criteria possessed by adults. We then discuss the implications of this evidence for the understanding of savage cultural systems.

We advance an ancient Greek conception of cognition as "auto-normative" processing (Collingwood, 1972): "Any piece of thinking, theoretical or practical, includes as an integral part of itself the thought of a standard or criterion by reference to which it is judged a successful or unsuccessful piece of thinking. Unlike any kind of bodily or physiological functioning, thought is a self-critical activity." Thus, "the science of mind . . . must describe the self-judging function which is part and parcel of all thinking and try to discover the criteria upon which its judgments are based" (pp. 107-108).

Collingwood (1972, p. 109) labels this approach to cognition "criteriological," and it is this criteriological approach that we assume when discussing culture as a cognitive system. Following Geertz (1973), we view culture as a "historically transmitted body of meanings embodied in symbols, a system of inherited concepts expressed in symbolic forms by means of which men communicate, perpetuate and develop their knowledge about and attitudes towards life" (p. 89). Following Collingwood (1972), however, we emphasize that "the business of thinking includes the discovery and correction of its own errors" and that in every act of thought the thinker himself judges the success of his own act (pp. 109-110). By combining the "symbols and meanings" approach to culture with the "criteriological" approach to cognition we seek to bring back to center stage the self-critical activities of the schemer (child and savage) behind the interpretive scheme.

An autonormative, or criteriological, approach to cognition thus emphasizes the self-evaluative activities of the thinker. People's abilities to "communicate, perpetuate, and develop their knowledge about and attitudes toward life" (Geertz, 1973) presuppose the psychological processes of self-awareness and self-criticism by which one particular system of concepts, rather than others, is sustained. Or as Hallowell (1955) has written:

Any human society is not only a social order but a moral order as well. A moral order being one that is characterized by the fact that not only norms of conduct exist but organized or unorganized social sanctions to reinforce them [*sic*], an inevitable conclusion must be drawn: the members of such an order are expected to assume moral responsibility for their conduct. Such an assumption, in turn, implies self-awareness of one's own conduct, self-appraisal of one's conduct with reference to socially recognized standards of value, some volitional control of one's behavior, a possible choice of alternative lines of conduct, etc. (p. 83).

The very existence of norms for conduct and thinking presupposes actors' abilities to evaluate themselves in light of those norms; self-evaluations, in turn, presuppose evaluative criteria (e.g., the canons of propositional calculus, the rules of grammar, and in the case of the moral, prudential, and conventional judgments to be discussed in this chapter, evaluative criteria such as "obligation" and "importance").

If culture is to be viewed as a cognitive system, then an adequate "cultural account" must reveal the extent to which inherited concepts get partitioned, by the native, of course, into criteriological subsystems. Encouraged by recent evidence that the self-judging function of young children can be segmented into moral versus conventional versus prudential modes of appraisal, we suggest that the undifferentiated savage may exist more in the eyes of the ethnographer than in the mind of the primitive.

Cognitive differentiation: the savage and the child

Cognitive differentiation refers to the extent to which domains of knowledge or discourse are distinguished. Kant (1785/1959), for example, promoting a "cognitive division of labor" (Gellner, 1973, p. 169) with which we are all familiar, distinguished moral rules, which he viewed as "categorical," unconditional, and impersonally binding, from rules of skill (technical imperatives) and counsels of prudence (pragmatic imperatives), which were said to be "hypothetical," that is, conditional on variable purposes peculiar to particular individuals. For Kant, at least, efficiency and duty were not to be confused.

Gellner (1973), perhaps thinking of Kant, credits the modern mind with having accomplished the partitioning of knowledge or the uses of language into distinct types:

These types are generally defined in terms of the criteria of validity employed within each of them. . . . Propositions are classified into those which stand or fall in virtue of factual checking, those which stand or fall in virtue of formal calculation, those which stand or fall in virtue of consonance with the speaker's feelings, and those which have no basis or anchorage at all (p. 173).

Gellner (1973) suggests that an absence of such differentiation characterizes the magically enchanted world vision of the savage mind. A "lower functional specificity," he argues, is mirrored in the "systematic conflation of the descriptive, evaluative, identificatory, status-conferring, etc. roles of language." With modernity comes disenchantment and an irreversible "sense of the separability and fundamental distinctness" of the various functions of discourse.

Horton's (1968) influential account of cultural evolution likewise char-

acterizes the savage mind by the absence of a cognitive division of labor. For the savage, the aims of science are interwoven or confused with nonscientific aims such as those of politics and esthetics. In modern societies, in contrast, the realms of the empirical, the normative, and the transcendent are distinct; science and religion, morals and politics, and truth and power are potentially independent enterprises. A variety of separate criteria exist by which objects and actions are explained and assessed; empirical truth is segregated from moral rightness, esthetic value, or technical efficiency.

Many scholars, perhaps most notably Piaget (1932/1965) and Kohlberg (1963, 1969, 1971, 1973), have characterized social-cognitive development in these same terms. Young children, it is argued, lack moral understandings *per se* in that they confuse moral and nonmoral (scientific, prudential, conventional) forms of appraisal. Piaget (1932/1965), for example, characterizes the young child's respect for rules as "heteronomous": Any act in obedience to rules set down by adults is judged to be good, whereas any act that does not conform is judged to be bad. In the stage of "moral realism," the child views rules as sacred, unchangeable, and inherent in the universe, much like physical laws. This attitude toward rules, Piaget suggests, applies equally to all kinds of imperatives; in moral realism, the child applies the same criteria of validity to the rules of marbles and the rules of morality.

In a second, "autonomous" stage, Piaget proposes, the child differentiates the natural from the social world. The child realizes that rules are the formulations of people, not given in nature but rather the products of mutual agreement. The older child sees that rules are changeable, not rigid duties but instruments through which the purposes and ideals of cooperating equals become realized. In autonomy, "what ought to be," the ideal, becomes differentiated from "what is," the body of custom received from adults. Existing rules may be wrong if they violate ideals; their status as rules no longer ensures them unconditional respect. Piaget identifies the ideal of justice as the principle around which an autonomous moral orientation is formed.

Thus, according to Piaget, the sense of justice as a moral imperative grows out of the heteronomous respect for all kinds of rules. Young children have no sense of the greater importance or superiority of some rules over others; they do not appreciate the special authority of moral imperatives, or conversely, they do not appreciate the conditional or hypothetical status of the purposes behind other imperatives. Only in autonomy, Piaget proposes, does the child adopt a distinctively deontological approach, whereby moral rules, framed in the name of

justice, become distinct from, and superior to, pragmatic, technical, or conventional rules established in the service of efficiency, prudence, or custom.

Kohlberg's (1963, 1969, 1971, 1973) theory of moral development expands upon the Piagetian view. Early undifferentiated forms of understanding are replaced by increasingly differentiated forms. Kohlberg identifies three, rather than two, levels of moral understanding; each level is divided into two stages. Thus, individuals move from a pre-conventional morality (Stages 1 and 2), in which moral judgments are based on prudential considerations (punishment and reward), through conventional morality (Stages 3 and 4), in which judgments are oriented toward conformity and maintenance of the rules of society, to a postconventional or principled morality (Stages 5 and 6), in which principles of justice and respect for persons displace prudence and conformity as grounds for moral understanding. Hence for Kohlberg, moral development is viewed as a process of differentiation and replacement in which moral criteria are distinguished from prudential and conventional criteria and then supersede them. For both Piaget and Kohlberg, it is only at the most advanced developmental stages that the distinctions between physical law, convention, utility, and morality are mastered.

The image of a conflated, undifferentiated mind (an "enchanted" mind by some accounts, a "confused" mind by other accounts) shared by savage and child has not gone unresisted in the anthropological literature; resistance, however, has been fitful and not entirely successful. Both the romantic's article of faith that at least other cultures are enchanted and the developmentalist's article of faith that we possess what others lack add substantial ideological force to the view that what we separate, the savage blends, where we partition, the savage merges. Nonetheless, powerful objections to the image of a conflated savage mind have been raised. More than half a century ago Malinowski (1926/1976) criticized Hobhouse and other developmentalists for their failure to partition the domain of "savage custom" into such subsets as "law," "morals," "manners," and "practical utility." Discriminations of this type were routinely made, Malinowski argued, not only by Oxford dons and Continental philosophers but also by any Melanesian savage.

Malinowski addressed the question "Why are rules obeyed in savage society?" Criticizing past accounts for what he viewed as excessive emphasis on the habitual, traditional, and sentimental bases of social order (an emphasis also found in Piaget's characterization of "heteronomy"), Malinowski (1926) remarked that global noncognitive motives such as the "desire to satisfy public opinion" or "the force of habit" or "conformism"

or "the love of tradition" "account but to a very partial extent for obedience to rules" (pp. 50-54).

Malinowski offered ethnographic case material documenting the ability of Melanesian savages to think about and critically appraise the injunctions, prescriptions, and taboos of their culture according to a limited number of distinct criteria of validity. Thus some rules are obeyed, Malinowski argued, "because their practical utility is recognized by reason and testified by experience." Other rules are obeyed "because any deviation from them makes a man feel and look, in the eyes of others, ridiculous, clumsy, socially uncouth." Some rules are governed by self-interest; others are not. The rules for a game are appraised differently than the rules for a magical rite. Norms pertaining to things sacred are judged differently from norms pertaining to things profane. The rules of "law" are "one well-defined [i.e., differentiated] category within the body of custom"; if we attend to the criteria of validity, or principles, employed by natives for deciding whether or not to respect a rule, other well-defined categories, such as morals and manners, can be identified.

Malinowski's approach to savage culture implies that no single metaphor (society as ritual, society as a game, society as a marketplace, society as a church) is apt for all social life. Contrary to the predilections of some culture theorists, Malinowski argued that there may be no master plan or integrating code for a culture as a whole. Melanesian savages, like the Englishmen who study them, are differentiated in their orientation to rules. Ritual is not confused with sport, just as teatime etiquette is not confused with the rules of cricket.

More than thirty years after the publication of *Crime and Custom in Savage Society*, a position akin to Malinowski's was articulated in an important but curiously overlooked paper by Whiting and Whiting (1960). Two features of the Whitings' paper are noteworthy. First, like Malinowski, they argue for a partitioned view of "custom": the Whitings propose that techniques, ethics, and beliefs constitute three symbolic or cognitive subsystems of culture. Second, the Whitings offer a prescient symbolic approach to the study of culture. Although best known for their emphasis on behavior observations and the noncognitive origins of culture, in this remarkable paper the Whitings seem to anticipate later developments in cognitive and symbolic anthropology (e.g., D'Andrade & Romney, 1964; Schneider, 1968). "The essential feature of the concept of culture," the Whitings (1960) argue, "is in the formulation of the shared symbolic determinants of behavior".

Although . . . this concept is often used to include overt behavior, and even the products of behavior such as artifacts, we feel that its essential contribution lies in providing a method for coding and classifying the shared ideas of the members of

a society or group, rather than in describing norms [i.e., regularities] of behavior. (p. 918)

An emphasis on the cognitive or symbolic aspects of culture led the Whitings to propose cognitive criteria or tests of validity (e.g., efficiency, coherence, correspondence) for the partitioning of "custom" into subsystems; these criteria are, in addition, native criteria. Thus, according to the Whitings (1960), customs are "not a simple list of items but systems of techniques, beliefs, and values, each integrated with respect to its own principles" (p. 921). The rules of a culture, if they are to persist, must seem valid to the members of a culture, and no single test of validity will do.

A similar rebellion against the image of a conflated mind seems to be occurring in recent developmental literature (e.g., Nucci & Turiel, 1978; Turiel, 1979, 1980). Malinowski (1926/1976) suggested that distinct criteria of validity (moral, pragmatic, conventional, etc.) are equally available to both the Oxford don and the Melanesian savage. Recent developmental evidence suggests that an equally differentiated repertoire of cognitive criteria may also be available to the don's children. Both the intellectual world of the savage and the intellectual world of the child may be less enchanted and less confused than previously supposed.

Results of recent developmental studies on children's rule understandings suggest much earlier differentiation than proposed by Piaget and Kohlberg. American children as young as 5 years of age seem to distinguish moral versus conventional versus prudential rules; moreover, the distinctions they make seem to reflect patterns of formal features hypothesized to underlie these rule domains. Children's differentiation of the domains will be discussed later. First, a set of dimensions along which such differentiation seems to take place will be described. Several authors (see, e.g., Black, 1962; Collett, 1977; Kohlberg, 1971; Much & Shweder, 1978; Nucci & Turiel, 1978; Shweder, Turiel, & Much, 1981; Whiting & Whiting, 1960) have suggested criteria by which rules are differentiated and have hypothesized how moral, conventional, and other rules are perceived to differ on these dimensions. The set of dimensions or criteria in the following outline is thus a synthesis and elaboration of these various proposals.

Prescriptivity

Prescriptivity refers to the fact that rules recommend or require that conduct proceed in one way rather than another. Prescriptivity implies a cultural preference, either implicit or explicit; where rules are found, neutral attitudes are not. As Berlin (1956) has written, rules are general

instructions "to act or refrain from acting in certain ways, in specified circumstances, enjoined upon persons of a specified kind" (p. 305). Insofar as rules are "enjoined," they presuppose the possibility that one could defy the injunction; and, insofar as rules enjoined can be rules defied, they implicate the practices associated with sanctioning: accusing, criticizing, scolding, and punishing.

Moreover, insofar as rules are enjoined "upon persons of a specified kind," they entail that principle of appraisal known as generality, equity, fairness, or justice (i.e., "Treat like cases alike and different cases differently," Hart, 1961, p. 155). As Berlin (1956) aptly remarks:

To fall under a rule is *pro tanto* to be assimilated to a single pattern. To enforce a rule is to promote equality of behavior or treatment. This applies whether the rules take the form of moral principles or laws, or codes of positive law, or the rules of games or of conduct adopted by professional associations, religious organizations, political parties. . . . The rule which declares that tall persons are permitted to cast five times as many votes as short ones creates an obvious inequality. Nevertheless, . . . it ensures equality of privilege within each of the two discriminated classes—no tall man may have more votes than any other tall man, and similarly with short men (pp. 305–306).

The criterion of prescriptivity, its presupposed possibility of breach and sanction, and its entailed principle of justice distinguishes the "rules of conduct" from the "laws of nature," or what ought to be from what is. Natural regularities either do not require normative regulation or cannot be subject to it, which is one reason why (in this culture) a proscription such as "thou shalt not dream" is felt to be an absurdity.

The criterion of prescriptivity is, however, an exceedingly general criterion. It does not distinguish a moral rule ("Promises should be kept") from a conventional rule ("Do not eat rice with your hands") from a prudential rule ("Do not take freshly painted articles out in the rain"). The criterion also does not distinguish rules of wide application ("Promises should be kept") from rules with narrow application ("When playing bridge the dealer bids first"); the principle "treat like cases alike and different cases differently" implies neither that all cases are alike in relevant respects nor that they should be treated in like fashion (see Hart, 1961; Perelman, 1963).

Obligation

The criterion of obligation refers to the idea of duty: Some rules are perceived to be binding or required regardless of what anyone happens to want to do. Insofar as a rule is judged to be obligatory, it is perceived as *external* (impersonal or supra-individual), *unalterable*, and *ahistorical*.

A rule is perceived as external (impersonal or supra-individual) in that

what is right or wrong to do is thought to be right or wrong independent of one's existence as a moral agent and regardless of whether one recognizes it as such. Just as, for example, shape or mass are thought to inhere in an object irrespective of the presence of human perceivers, so too certain actions (e.g., committing incest) seem to be thought inherently right or wrong independent of human recognition of them as such. A rule is perceived as unalterable in that it is believed that what is right or wrong cannot be changed by consensus or legislation, and it is perceived as ahistorical in that, although the date of its recognition may be identifiable, it is believed that there is no point in secular time at which the validity of what is right or wrong changes (Shweder, Turiel, & Much, 1981).

The criterion of obligation is independent of, and cuts across, the criterion of prescriptivity. Thus both "laws of nature," or "truths" about what is (e.g., $E = mc^2$), and moral strictures about what ought not to be (e.g., "Thou shalt not kill") seem to be viewed as external, unalterable, and ahistorical. The criterion of obligation does, however, distinguish among different rules. Many rules (e.g., the convention "Don't wear white clothing to a funeral") are perceived as canons created rather than discovered and are thus viewed as relative, potentially alterable, and historical. What if, for example, everybody decided that the color white is to represent sorrow? Would that be all right? Many would probably say "yes." What if long ago, in the future, or in another country today there was, will be, or is a people whose mourning color was or is white? Was that, is that, would that be okay? Again many would probably say "yes." Thus, whereas some rules (e.g., the incest taboo) may evoke a sense of inherent rightness, others do not.

Importance

The criterion of importance has two aspects. First, it refers to the extent to which one can decline an interest in the conduct covered by a rule. Second, it refers to the extent to which a breach of a rule is considered *serious*. Thus, in the United States one can disclaim an interest in fashions, and it is considered rather a minor transgression to wear a dress 10 inches too long for the times. Disclaiming interest in harm to other people, on the other hand, is quite a different matter.

Prescriptivity, obligation, and importance: the child's view

American children seem to distinguish and identify moral versus prudential versus conventional rules using these same formal criteria of validity.

and they seem to agree with the adults of their culture about the moral versus prudential versus conventional status of particular rules.

Much and Shweder (1978), for example, conducted a sociolinguistic analysis of children's excuses in "situations of accountability" (i.e., when accused of wrongdoing). Much and Shweder did not directly ask children about their breaches but rather observed and recorded naturally occurring breach episodes in nursery school and kindergarten and then later analyzed children's excuses within those episodes. Episodes were classified as breaches of five rule types: morals (ethics), conventions (customs), regulations (school rules), instructions (prudential rules), and truths (beliefs). These five rule types were derived from Black's (1962) logicogrammatical analysis of adult language use. Episodes were classified according to various criteria of validity including obligation (namely, alterability and historicity) and prescriptivity (namely, the relevance of truth criteria). The classifications were treated as mutually exclusive, although it was sometimes disputable whether a breach event belonged to one category or another. Nevertheless, interjudge reliability was satisfactory (.83 for 171 cases; kappa coefficient of agreement, Cohen, 1960).

Much and Shweder (1978) found that preschoolers and kindergarteners excuse and justify their breaches differently for violations of the different types of rules. When violating regulations and conventions, for example, kindergartners most frequently make reference to "circumstances," "consequences," and "precepts." In attempting to be excused from the classroom regulation that everyone goes outdoors at a specified time, one child cited a competing precept: "If you're sick you can't go out." Moral breaches, in contrast, were associated with direct references to the "act," denials that the breach had occurred, attempts at redefinition to remove blameworthiness, or justification in terms of retribution for someone else's prior moral transgression. When accused of "stealing" a chair, for example, one child countered, "Nobody was in it and I sat in it," thereby disputing a "theft" interpretation of her action. As Much and Shweder (1978; also see Shweder, Turiel, & Much, 1981) suggest, the kinds of accounts given by children in moral breach (denial, redefinition, retributive justice) imply a perception of moral rules as unalterable, intrinsically valid, beyond negotiation. Similarly, the lack of reference to consequences and competing precepts also suggests the unconditional authority and respect that moral rules command.

Other researchers have directly probed children about the formal criteria of validity applicable to various types of rules. This method provides evidence whether or not, for example, moral rules, in contrast to conventional rules, are perceived to be external, unalterable, and important.

Obligation has been examined by asking children about the legitimacy of a behavior in the absence of an announced rule and by means of questions concerning the "relativity" and "changeability" of rules. Nucci and Turiel (1978) asked preschool children and adults to judge a set of 72 observed transgressions. Preschoolers were asked: "What if there weren't a rule in the school about (the observed act); would it be all right to do it then?" Adults were asked to classify the transgressions as moral or conventional using substantive definitions of the two domains. Preschoolers and adults agreed in their classifications 83% of the time: The preschoolers answered "yes" with regard to those acts that adults classified as conventional and "no" to those that adults classified as moral.

In another study by Turiel (1979), subjects were questioned about such matters as stealing (a moral issue), dress codes (a conventional issue), use of titles in school (a conventional issue), and so on. Queries were posed concerning the perceived relativity of various moral and conventional prescriptions ("Suppose there is another country in which no families have that rule. Is that all right?"). At all ages, from 6 to 17 years, subjects were discriminating in their responses and tended to agree with each other about which rules did or did not require unconditional respect. Although conventional and game rules are perceived as relative, a prescription about stealing is not. Damon (1977) also found that by age 8 or 9 the moral rule prohibiting stealing is regarded as inherently worthy of respect, whereas conventions are perceived as more optional. If conventions are governed by announced rules (e.g., a school rule that requires eating with a fork), they become more mandatory in the eyes of children, but the child continues to distinguish between "small rules," or "manners," and "real rules," or "laws."

Findings regarding the alterability of rules are somewhat more complicated. First, although a significant number of Turiel's (1979) subjects viewed both conventional and game rules as changeable, a majority of subjects also viewed all moral rules as changeable. Lockhart, Abrahams, and Osherson (1977) have reported similar findings: The first-, third-, and fifth-graders in this study were significantly less willing to change moral than conventional rules, but by fifth grade a majority viewed a rule prohibiting the taking of others' toys as changeable. These results suggest that the difference between moral and conventional rules may be not that one type is changeable whereas the other is not, but rather that a change in a moral rule is limited in the form it may take (i.e., a moral rule may be altered but not done away with entirely). The phrasing of the question "Can we change that rule?" leaves ambiguous the nature of the change; subjects who answer affirmatively may have in mind small changes (e.g.,

you can take people's toys but not their clothes), and subjects who answer negatively may be thinking of changes at a different level (e.g., can we do away entirely with the idea of private property?). Thus, although indicative of differences in the perceived changeability of moral and conventional rules, the Turiel (1979) and Lockhart, Abrahams, and Osherson (1977) studies also suggest that more in-depth investigation is needed.

Finally, Turiel (1979), Damon (1977), and Shantz (in press) have all examined children's views about the importance of moral and conventional rules. Turiel discovered that at all ages from 6 to 17 years subjects judged all moral rules to be significantly more important than conventional rules regarding dress, forms of address, or game rules. Damon (1977) likewise reports that by age 6 the rule against stealing is viewed as more important than rules concerning table manners and sex roles.

Shantz (in press) examined first- and second-graders' rankings of the seriousness of moral and conventional rule violations. Shantz found that, using mean rankings, all moral rule violations (hitting, not sharing, and stealing) were ranked significantly worse than convention violations (boys playing with dolls, not combing your hair). The children's rank ordering matched that of a group of undergraduates. In examining the consistency with which individual children ranked the violations, however, Shantz found that only 18 of the 48 children ranked all three moral violations as more serious than the two conventional violations. Thus Shantz warns that the consistent distinction between moral and conventional rules may not be typical for this age group. Damon's (1977) work indicates that indeed the sixth and seventh year may be transitional in this regard: 60% of the 6-year-olds, but 84% of 7-, 8-, and 9-year-olds in Damon's study viewed stealing as worse than poor table manners. Turiel (personal communication), however, discovered that his results hold up even at the individual level of analysis.

The extent to which the criteria of prescriptivity, obligation, and importance are sufficient to characterize perceived distinctions among rules is an empirical question; although the evidence just discussed suggests that American children do differentiate rules along these dimensions, this research has also suggested that the cultural domains underlying rules may be more complex or heterogeneous than researchers have imagined. Findings that, for example, some moral rules are perceived as alterable whereas others are not clearly indicate the need for more in-depth understanding of various domains. What beliefs or presuppositions about the nature of persons and their social interactions, for example, inform judgments about the relativity or alterability of rules regarding private prop-

erty, the incest taboo, or the proper way to dress for ritual occasions? Finally, whereas some rules seem to be clearly identifiable as moral, conventional, or prudential, others seem to overlap domains: Is wasting one's resources only one's own business (and imprudent), or is it also denying others (present and future) their due? The boundaries between various domains do not seem clear-cut.

Detecting schemata differentiation: the intuitive versus reflective knowledge parameter

Piaget's (1932/1965) and Kohlberg's (1963, 1969, 1971, 1973) accounts of moral development seem to conflict sharply with the evidence that children as young as 5 years of age distinguish moral versus conventional versus prudential rules, using adultlike formal criteria of validity. That conflict, however, may be more apparent than real.

Piaget and Kohlberg, for the most part, have examined the ability of subjects to articulate the formal criteria of validity that define the moral domain and distinguish morality from prudence and convention. Piaget and Kohlberg have traced the ontogenesis of reflective knowledge: They have equated "knowing" with the ability to propositionalize and argue. In contrast, recent moral development research suggests that to grasp a distinction, to have knowledge of a concept, is not necessarily equivalent to the ability to state what one knows (also see Nisbett & Wilson, 1977, on "knowing more than one can tell").

There are diverse ways of demonstrating that one has knowledge (and diverse ways of acquiring knowledge). By one standard, the modulation of excuse patterns when accused of wrongdoing, schemata differentiation appears relatively early (roughly 4 to 6 years). By a second standard, the ability to be systematically discriminating in one's answers to direct probes about obligation (alterability, historicity, etc.) and importance, schemata differentiation appears slightly later (roughly 6 to 9 years). By a third standard, consistently explicating a justification or self-reflectively volunteering a formal criterion of validity as a rationale for one's decisions, schemata differentiation develops quite late and often not at all. But no single one of these standards has a privileged status. Each standard gives us a different portrait of social-cognitive development. Each tells us about "knowing" in a different sense of "knowing." Children are not moral philosophers; nevertheless, their "intuitive" knowledge of rule types respects the distinctions between efficiency, duty, and consensus.

Recently, we have experimented with a fourth standard of knowing, the ability to apply ordinary language terms to appraise rule violations.

Any competent adult speaker of English employs a "vocabulary of appraisal," a set of terms and phrases for condoning and condemning conduct. This vocabulary of appraisal is exemplified by such terms as impolite, rude, disobedient, inefficient, impractical, unfair, immoral, cruel, unreasonable, and unauthorized. Such terms are applied when explicit or tacit prescriptions for conduct are breached or transgressed. It is the assumption of our recent research that the distinctions between, for example, morality, convention, and prudence are encoded in our natural language and are expressed in discriminated patterns of language use.

To what extent are children and adults differentiated in the way they apply adjectives of appraisal (rude, unfair, stupid, unauthorized, etc.) to evaluate breach episodes? And to what extent, and in what ways, are childhood and adult patterns of appraisal alike or different? To answer these questions we asked 10 children (7 to 9 years of age) and 10 adults to appraise 15 breach episodes using a corpus of 17 adjectives of appraisal. The 17 "adjectives" are listed in Tables 1 and 2. The 15 breach episodes were derived from observations of children's transgressions in a preschool setting (Much & Shweder, 1978) and were selected from a larger corpus to "represent" apparent breaches of moral versus conventional versus prudential versus "legal" norms. For example:

1. At snack time children are saying: "More milk, more cookies."
Philip: "More poo-poo." (laughs)
Rebecca: "Don't say 'more poo-poo,' dummy."
2. Michael and Alice are sitting at a table coloring. Michael presses very hard on his crayons and colors furiously. Soon Michael says: "My crayon broke."
Alice: "That's because you used it too hard."
Michael and Alice keep coloring. In a while Michael says: "Another crayon broke."
Alice: "You use them too hard."
3. Linda has made a bouquet of paper flowers and placed them in a milk-carton vase. Billy walks over to the flowers, takes the bouquet and puts the flowers upside down on his head.
Linda: "Stop it Billy. Look what you did, I'm telling teacher." (To teacher:) "Billy took my flowers and put 'em on his head."
Billy in the meantime is rearranging the flowers in the vase.

For each of 15 such episodes subjects were asked to judge on a 10-point scale the degree of applicability of each of the 17 adjectives of appraisal. Philip's behavior in Episode 1, for example, might be given a scale value of 8 for rude, 2 for unfair, 0 for cruel, and so on. Seven-year-old children had no difficulty using the scale: some, in fact, seemed to find the exercise mildly intriguing.

Having collected judgments on all 17 adjectives of appraisal for all 15

breach episodes from all of our subjects (10 children and 10 adults), we then constructed, for each subsample (child and adult), an aggregated 17 (adjectives) \times 15 (breach episodes) matrix. In each cell of the matrix was placed the average score (between 0 and 10), representing the collective judgment of the subsample about the extent to which the breach described in each episode was rude, unfair, cruel, stupid, and so on.

For each subsample (child and adult) a 17 \times 17 correlation matrix for all possible pairs of adjectives was then derived by treating the 17 columns of the original 17 (adjectives) \times 15 (breach episodes) matrix as variables and the 15 rows as subjects. This 17 \times 17 matrix represents in correlational form the degree of covariance of each pair of adjectives (e.g., rude-impolite) in their application across the 15 breaches. This derived correlation matrix for adjectives was then cluster-analyzed using the hierarchical cluster program described by Johnson (1967).

Using this method, adjectives are grouped together or differentiated in relationship to the degree of equivalence (i.e., correlation) of their distribution of scores across breach episodes. The primary clusters for children and adults and the pair-wise correlations for all adjectives are displayed in Tables 1 and 2. (Note: the correlation coefficients in Tables 1 and 2 have been scaled down to the nearest coefficient.) To measure the degree of similarity of childhood and adult patterns of language use in appraising breach episodes, the 17 \times 17 adjective-correlation matrices for children (Table 1) and adults (Table 2) were directly compared by intercorrelating (Pearson *R*) the 136 *parallel* cells (e.g., rude-unfair) of the two tables.

The cluster analyses in Tables 1 and 2 reveal that both children and adults partition the adjectives of appraisal into subsets; this information on differentiation makes it possible to examine in some detail the structure of childhood and adult understandings of rule types and to compare childhood and adult understandings. The cognitive structures of children (Table 1) and adults (Table 2) are noteworthy in several respects.

1. Both children and adults are differentiated in their evaluations of rule violations. Children distinguish among six relatively coherent patterns of appraisal; adults distinguish among four patterns of appraisal. The childhood clusters seem to represent manners (inconsiderate, bad manners) versus morality (mean, cruel, etc.) versus convention (rude, impolite) versus school rules (not allowed, etc.) versus prudence-intelligence (not reasonable, stupid, etc.) versus doesn't make sense. The adults distinguish convention (inconsiderate, rude, impolite, bad manners, not nice) versus morality (mean, unkind, etc.) versus prudence-intelligence (doesn't make sense, stupid, etc.) versus school rules (not allowed, etc.).
2. Childhood and adult rule understandings substantially overlap, at least as reflected in the ordinary language use of adjectives of appraisal. The

Table 1. Hierarchical cluster analysis of children's use of adjectives of appraisal showing differentiation of adjectives into six clusters and intercorrelations (Pearson R) among adjectives

	In	BM	Me	Cr	Unk	NN	Ru	Im	NA	BR	Unf	NO	NR	St	NB	Ha	DMS
Incon-siderate	100	86	84	82	62	74	74	72	36	52	46	22	14	30	00	14	-20
Bad manners	86	100	60	62	34	56	68	56	46	46	32	00	26	54	26	20	-20
Mean	84	60	100	88	82	80	58	64	22	54	64	28	12	16	-12	18	-18
Cruel	82	62	88	100	72	68	64	68	30	52	6	22	06	24	-12	16	-10
Unkind	62	34	82	72	100	84	68	76	04	18	44	26	-06	-18	-44	-04	16
Not nice	74	56	80	68	84	100	72	76	32	44	48	34	-12	-06	-34	00	-10
Rude	74	68	58	64	68	72	100	86	16	10	12	16	-06	10	-28	-12	-14
Impolite	72	56	64	68	76	76	86	100	16	18	10	-02	04	-44	-14	-02	-14
Not allowed	36	46	22	30	04	32	16	16	100	72	60	44	28	44	24	08	14
Breaking a rule	52	46	54	52	18	44	10	18	72	100	72	34	10	36	24	34	-18
Unfair	46	32	64	56	44	48	12	18	60	72	100	30	30	22	10	-06	16
Not obeying	22	00	28	22	26	34	16	10	44	34	30	100	10	-30	-24	-10	02
Not reasonable	14	26	12	06	06	12	06	02	28	10	30	10	100	54	50	-02	16
Stupid	30	54	16	24	-18	-06	10	04	44	36	22	-30	54	100	74	46	-10
Not using your brains	00	26	-12	-12	-44	-34	-28	-44	24	24	10	-24	50	74	100	44	-06
Harmful	14	20	18	16	-04	00	-12	-14	08	34	-06	-10	-02	46	44	100	-32
Doesn't make sense	20	-20	-18	-10	16	-10	-14	-02	14	-18	16	02	16	-10	-06	-32	100

Note: Column headings are abbreviations of the items listed in the left-hand column

Table 2. Hierarchical cluster analysis of adults' use of adjectives of appraisal showing differentiation of adjectives into four clusters and intercorrelations (Pearson R) among adjectives

	In	Ru	Im	Bm	NN	Me	Unk	Cr	NR	Unf	DMSSi	Ha	NB	NA	BR	NO
Incon-siderate	100	82	80	86	86	84	84	72	60	70	44	34	-16	28	20	12
Rude	82	100	90	86	88	84	86	72	60	54	36	16	-36	20	16	08
Impolite	80	90	100	96	90	66	70	56	42	42	32	08	-38	18	12	04
Bad manners	86	86	96	100	92	68	70	60	42	46	30	12	-36	26	18	08
Not nice	86	88	90	92	100	82	84	76	62	58	52	30	-22	24	14	06
Mean	84	84	66	68	82	100	98	90	78	70	48	32	-18	20	14	04
Unkind	84	86	70	70	84	98	100	90	78	62	50	32	-20	12	08	-02
Cruel	72	72	56	60	76	90	90	100	78	50	60	46	-08	18	04	-06
Not reasonable	60	60	42	42	62	78	78	100	44	76	72	56	-10	-20	-26	50
Unfair	70	54	42	46	58	70	62	50	44	100	34	16	-16	44	48	50
Doesn't make sense	44	36	32	30	52	48	50	60	76	34	100	72	36	-04	-20	-18
Stupid	34	16	08	12	30	32	32	46	72	16	72	100	68	-06	-24	-22
Harmful	56	34	24	36	50	54	52	66	56	36	48	68	100	44	22	12
Not using your brains	-16	-36	-38	-36	-22	-18	-20	-08	32	-16	36	64	28	-48	-62	-56
Not allowed	28	20	18	26	24	20	12	18	-10	44	-04	-06	44	100	94	90
Breaking a rule	20	16	12	18	14	14	08	04	-20	48	-20	-24	-62	94	100	96
Not obeying	12	08	04	08	06	04	-02	-06	-26	50	-18	-22	-56	90	96	100

Note: Column headings are abbreviations of the items listed in the left-hand column.

intercorrelation of the two correlation matrices in Tables 1 and 2 is .52 (Pearson *R*). Both children and adults seem to distinguish roughly similar clusters for morality, convention, prudence-intelligence, and school rules.

3. Children seem to distinguish between bad manners (probably table manners) and other varieties of conventional breach (politeness, rudeness). Adults, on the other hand, merge these two patterns of appraisal. Thus, in this evidence at least, children seem slightly more differentiated than adults!

The results of this vocabulary of appraisal analysis tend to converge with sociolinguistic analyses of children's excuse patterns (Much & Shweder, 1978) and cognitive-developmental examinations using direct interview probes (Nucci & Turiel, 1978). By investigating ordinary language use, in particular the application of adjectives of appraisal to breach events, we discover the existence in 7-year-old children of differentiated, adultlike schemata for classifying rule types and for distinguishing among morality, convention, and prudence.

Culture as a cognitive system: a challenge for ethnographers

Malinowski (1926/1976) warned us against an undifferentiated view of savage custom and called our attention to the cognitive side of an individual's respect for collective canons. "First of all," he noted,

if the rules of custom are obeyed by the savage through sheer inability to break them, then no definition can be given of law, no distinction can be drawn between the rules of law, morals, manners, and other usages. For the only way in which we can classify rules of conduct is by reference to the motives and sanctions by which they are enforced. So that with the assumption of an automatic obedience to all custom, anthropology has to give up any attempt at introducing into the facts order and classification, which is the first task of science (p. 50).

Despite Malinowski's admonitions, much contemporary ethnography is written as though the savage adult were Piaget's heteronomous child. The culture of the primitive is portrayed as a bloated normative order in which the claims of technical reason (prudence and efficiency), the claims of moral reason (duty and importance), the claims of conventional reason (consensus, constitutive process, and arbitrary code), and the claims of positive science are either denied autonomous status or comingle in an undifferentiated respect for "received wisdom," subserving an undifferentiated "symbolic function."

For some theorists (e.g., Firth, 1951), it is the moral category that is stretched to encompass all rules about what is right or wrong, thus obscuring the difference between morality, convention, and prudence. That distinction is obscured as effectively by those theorists (e.g., Sahlins,

1976) for whom "utility" and "belief" are dismissed as folk concepts peculiar to the modern Western mind. The distinction is overlooked as well by those theorists (e.g., Harris, 1968) for whom all aspects of culture (morality, convention, belief) are merely prudence in disguise. In each case the pluralistic coexistence of multiple modes of appraisal in the mind of the native is either denied or transformed into a monolithic conception of culture as *either* moral order, free will, communication, false consciousness, or tool. Take your pick!

The "heteronomous child," as we have seen, is probably a myth. Recent research on social-cognitive development suggests the early appearance of the distinction between morality, convention, and prudence. And given the intuitive ability of young children to appraise untoward conduct using formal criteria such as prescriptivity, obligation, and importance, it is not too fanciful to hypothesize that the distinction between various types of rules is universally available and that it is available because it is important. Indeed, it is worth considering the possibility that the undifferentiated savage is to be found more in the eyes of the ethnologist than in the mind of the primitive.

The issue, of course, is an empirical one, but it is an issue that will not get resolved unless native criteria of validity become objects of systematic ethnographic inquiry. More strongly, one might argue that no ethnography is adequate if it fails to explain why rules are obeyed, how they are appraised, how they are tested, and, "taking the native point of view," how they are validated. Taking the native viewpoint here means taking the perspective of self-monitoring individual others; it is self-critical others who make their way in the world by means of the collective ideational inheritance we call "culture," the same self-critical others who appraise their symbolic inheritance and either grant it or deny it the kind of respect ideas require if they are to persist. Not until we can explain the persistence of ideas will we have arrived at a satisfactory theory of culture, and to explain the persistence of ideas we have to link them to the patterns of reason that lend them authority. "The business of thought includes the discovery and correction of its own errors" (Collingwood, 1972, p. 110).

Finally, as ethnographers and students of culture, we need not be discouraged by the oft-reported lack of reflective awareness (Horton, 1967; Levy, 1973) in many savage societies. Young children cannot necessarily tell us about their knowledge of the formal criteria of validity that distinguish morality, convention, and prudence. They simply "know more than they can tell" (Nisbett & Wilson, 1977), and they display this knowledge in ways that are available to ethnographers of any primitive society, that

is, vis-à-vis excuse patterns, ordinary language applications of adjectives of appraisal, and so on. Complex cognitive structures preexist their own reflective representation. What the savage knows he may not be able to tell us, but what the savage himself is unable to say about what he knows is not necessarily a secret and is certainly not beyond our deliberate grasp.

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