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Edited by

Marc H. Bornstein
National Institute of Child Health and Human Development

Michael E. Lamb
Cambridge University

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2

CULTURE IN DEVELOPMENT

Michael Cole
University of California, San Diego

INTRODUCTION

Although it is generally agreed that the need and ability to inhabit a culturally organized environment are among the defining characteristics of human beings, it is a curious fact that until recently the role of culture in constituting human nature has received relatively little attention in basic textbooks, either of general or of developmental psychology. This situation seems to be changing (Dasen & Mishra, 2000; Lonner, 2003). Many specialized books and journals devoted to the topic have appeared in recent years (see Adamopoulos & Lonner, 2001, for a summary of recent publication outlets), and mention of research conducted in different cultures in introductory developmental psychology texts has increased markedly in the past decade.

Implicit in a good deal of the extant treatment of culture in the psychological literature is the notion implied by the phrase "research conducted in other cultures" that culture is synonymous with cultural *difference*. This assumption is made explicit by Hinde (1987, pp. 3–4), who argued that culture is "better regarded as a convenient label for many of the diverse ways in which human practices and beliefs differ between groups" (pp. 3–4). However, advocates of cross-cultural research have long argued that their goal was to study similarities and differences among cultural groups in the psychological processes manifested by their users. In the past decade, this emphasis on cross-cultural psychological approaches has been complemented by approaches emphasizing the fact that the capacity to inhabit a culturally organized, meaningful, environment is the universal, species-specific characteristic of *Homo sapiens,* of which particular cultures represent special, historically contingent, cases. This latter approach is currently referred to as *cultural psychology.* It starts with the premise that *humans are biologically evolved to create, acquire, and transmit culture.* As a consequence, "no sociocultural environment exists or has identity independent of the way human beings seize meanings and resources from it, while every human being has her or his subjectivity and mental life altered through the process of seizing meanings and resources from sociocultural environment and using them" (Shweder, 1990, p. 2).

There is currently some uncertainty about the relation between cultural psychology (in which culture is treated as the medium of human life within which people acquire and share meanings and practices) and cross-cultural psychology (in which culture is treated as an

antecedent or independent variable that acts on people). Berry (2000), for example, identifies cultural psychology as a subfield of cross-cultural psychology which, along with indigenous psychologies and the use of the comparative method, provides the "generic field." Others are more likely to see cross-cultural research as a specific method within the toolkit of cultural psychology (Greenfield, 2000; Shweder et al., 1998).

Whichever starting point one uses, the two approaches share a common interest in "the systematic study of relationships between the cultural context of human development and the behaviors that become established in the repertoire of individuals growing up in a particular culture" (Berry, Dasen, & Saraswathi, 1997, p. x). However, differences between the two approaches influence how their practitioners go about conducting their research. Greenfield (1997, p. 306) identifies the crux of the matter when she writes that "the ideal in cultural psychology is for problems and procedures to flow from the nature of culture, both in general and specific terms." By contrast, cross-cultural psychology relies more "on the methodological armoire of psychology, rather than on the nature and practice of culture." This difference corresponds to treating culture as a medium, rather than as an independent variable (Cole, 1996; Valsiner & Lawrence, 1997).

In order to cover the diversity of the topic, I organized this chapter as follows. The first section begins with a summary of three classical views about the nature of development and a fourth that places cultural mediation at its center. I then turn to examine alternative conceptions of culture used by psychologists concerned with culture and development, conceptions based largely, but not entirely, on the work of anthropologists, for whom culture is a foundational concept. I then offer a concept of culture, which I believe to be compatible with mainstream views, that holds special promise specifically for human development.

In the second section, I present informative examples of research on how culture enters into the process of development at different periods of the life span. This survey draws both on intracultural and cross-cultural studies to emphasize several points: (a) that culture and biology are intertwined in human development, (b) that cultural mediation of development is a universal process expressed in historically specific circumstances, and (c) that there are methodological opportunities and problems associated with the study of cultural constituents of development, both intraculturally and cross-culturally.[1] I end by returning to discuss the general theoretical and methodological implications of evidence about culture for psychological theories of development.

THREE DUALISTIC THEORIES AND A CULTURAL ALTERNATIVE

Figure 2.1 contains a schematic representation of the three dualistic positions that dominated theorizing about development for most of past century, along with a fourth approach in which the category of culture has been added as a "third force." The uppermost line in the figure represents the view articulated in the first half of this century by Gesell (1940), according to whom endogenous factors dominate development, which goes through a series of invariant stages. Each stage is characterized by a qualitatively distinctive structure of the organism and a qualitatively distinct pattern of interaction between organism and environment. Gesell (p. 13) wrote, for example,

[1]There have been several excellent and still up-to-date discussions focused on the methodological problems of conducting cross-cultural research on development (e.g., Bornstein, 1980; Greenfield, 1997; Rogoff, Gauvain, & Ellis, 1984). The strategy of this chapter is intended to complement, not replace, these earlier discussions.

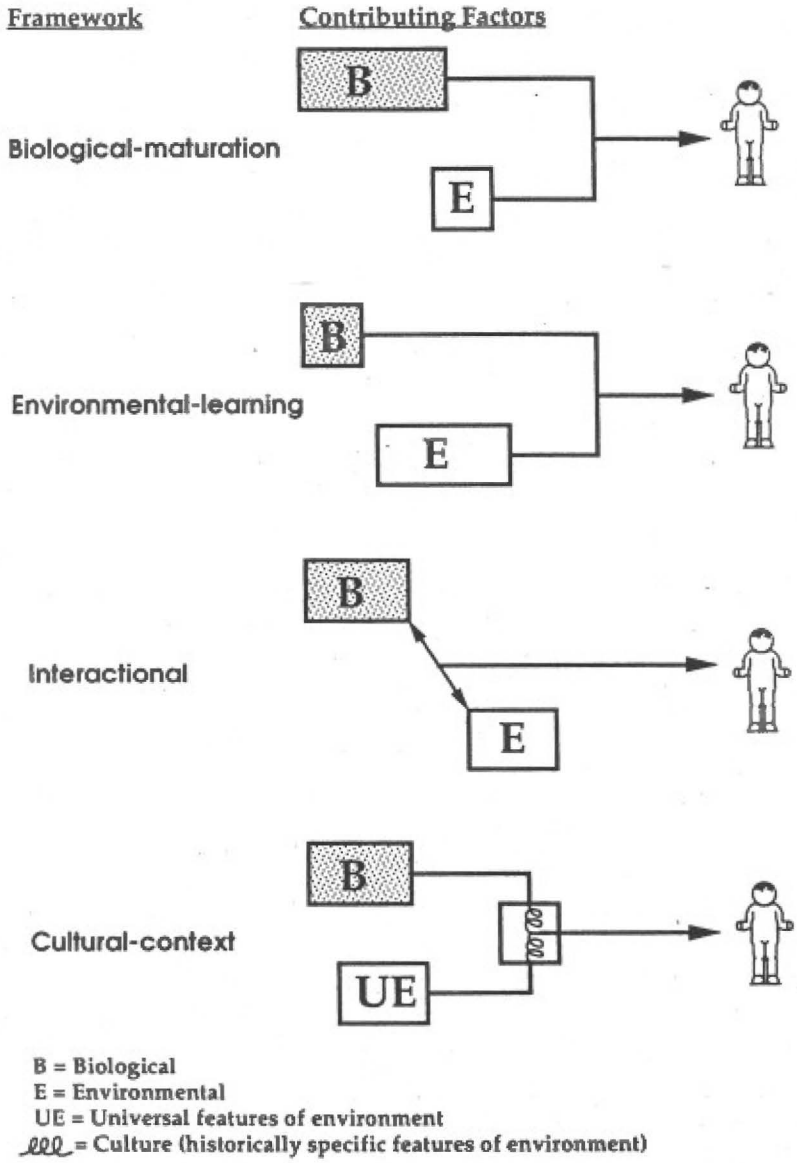

FIGURE 2.1 Four theoretical frameworks for interpreting the sources of development and the major ways in which they interact. In the first three frameworks, development is seen as the interaction of two factors. The theories differ in the weight they give to each and in the mode of their interaction. The fourth approach assumes that the two factors included in the first three frameworks interact indirectly through the medium of culture.

Environment... determines the occasion, the intensity, and the correlation of many aspects of behavior, but it does not engender the basic progressions of behavior development. These are determined by inherent, maturational mechanisms.

Elsewhere, Gesell (1945, p. 358) added:

Neither physical nor cultural environment contains any architectonic arrangements like the mechanisms of growth. Culture accumulates; it does not grow. The glove goes on the hand; the hand determines the glove.

Gesell's ideas went out of fashion in the 1950s, but recent years have witnessed a significant revival of interest in innate biological constraints on development (Bjorklund & Pellegrini, 2002; Pinker, 2002; Quartz & Sejnowski, 2002). Some of these approaches adopt the view that the role of the environment is restricted to "triggering" the realization of endogenous structures, whereas others emphasize ways in which culture is necessary to complete the process of development in any society and accumulate evidence that the causal relations between culture and development travel in both directions.

The view that the environment, both cultural and natural, provides the major influence on developmental change is represented in row two of Figure 2.1. An extreme version of this view was put forward by Skinner (1953, p. 91), whose approach was summarized in the following striking statement:

> Operant conditioning shapes behavior as a sculptor shapes a lump of clay. Although at some point the sculptor seems to have produced an entirely novel object, we can always follow the process back to the original undifferentiated lump, and we can make the successive stages by which we return to this condition as small as we wish. At no point does anything emerge which is very different from what preceded it. The final product seems to have a special unity or integrity of design, but we cannot find a point at which this suddenly appears. In the same sense, an operant is not something which appears full grown in the behavior of the organism. It is the result of a continuous shaping process.

In this view, it is not the past, coded in the genome, that is the active agent in development; rather it is the environment, the sculptor, that is the source not only of the minute changes that gradually modify the lump of clay but also of the new forms that emerge from this process in a continuous fashion. Contemporary psychologists sympathetic to an environmentalist perspective may consider Skinner's position somewhat exaggerated. The analogy between the organism and a lump of clay is especially unfortunate, because it implies a totally passive organism (contrary to Skinner's own principles!), but his emphasis on the dominant role of the environment in shaping development continues to have many adherents (e.g., Bandura, 2002; Jusczyk, 2003; Zimmerman, 1983). Moreover, insofar as the "sculptor" is a metaphorical embodiment of society, all of development is engendered by the contemporary sociocultural environment.

Piaget, perhaps the most influential developmental theorist of the 20th century, argued forcefully for the equal weight of endogenous and exogenous factors in development (Smith, 2002). On the one hand, he asserted that "Mental growth is inseparable from physical growth; maturation of the nervous and endocrine systems, in particular, continue until the age of sixteen" (Piaget & Inhelder, 1969, p. viii). At the same time, Piaget, like those who adopt an environmental shaping perspective, argued that the role of environmental input goes well beyond determining the occasioning, intensity, and correlation of behavioral aspects.

> The human being is immersed right from birth in a social environment which affects him just as much as his physical environment. Society, even more, in a sense, than the physical environment, changes the very structure of the individual.... Every relation between individuals (from two onwards) literally modifies them.... (Piaget, 1973, p. 156)

Piaget's view is often contrasted with the maturational and environmental shaping views by his emphasis on the crucial role of the active organism, who constructs her or his own development through attempts to adapt to the environment.

Although they differ in the weights that they assign to phylogenetic constraints and ontogenetic experiences as well as to the importance of children's active modifications of their

environments, the adherents of all three positions conceive of development as an interaction between *two* juxtaposed forces (nature–nurture, individual–environment, phylogeny–ontogeny). Gesell (1940, 1945), Skinner (1953), and Piaget (1972, 1973, 1995) all implicitly or explicitly suggest that the environmental side of the equation can be partitioned into cultural or social factors versus the physical environment, but these distinctions are not well developed in their writings. Moreover, when culture is identified as a factor in development, it is often conceived of as separate from the organism, an influence acting on it (Lucariello, 1995).

The fourth row of Fig. 2.1 explicitly includes culture as a separable constituent of development. According to this cultural–mediational view, the two interacting factors in the previously described approaches do not interact directly. Rather, their interaction is mediated through a third factor, culture, the accumulation of knowledge, experience, and learning of prior generations that forms the medium for development (Cole, 1996). Human development from this perspective is conceived of as the emergent process of biological–social–cultural change, in which none of the constituents is reducible to the other. In order to develop more fully this fourth perspective, which I use to guide the exposition of empirical issues in this chapter, it is necessary to pause briefly to consider the concept of culture as it is used in current academic discourse about development.

CONCEPTIONS OF CULTURE

In its most general sense, the term *culture* is used to refer to patterns of behavior that are passed from one generation to the next through extrasomatic means. It is the socially inherited body of past human behavioral patterns and accomplishments that serves as the resources for the current life of a social group ordinarily thought of as the inhabitants of a country or region (D'Andrade, 1996).[2]

When applied to human beings, the notion of culture ordinarily assumes that its creators, bearers, and users are capable of symbolic behavior. So, for example, Tylor (1874, p. 1), the titular father of anthropology, defined culture as "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society." Tylor's conception is echoed by Herskovitz's (1948, p. 17) widely used definition of culture as "the man-made part of the environment."

In trying to specify more carefully the notion of culture-as-social inheritance, anthropologists have historically tended to emphasize culture either as "something out there" as the term "man-made part of the environment" implies or as "something inside the head" as the terms "knowledge" and "beliefs" imply. As D'Andrade (1996) has noted, during the first half of this century, the notion of culture as something "superorganic" and material dominated anthropological thinking, but as a consequence of the "cognitive revolution" in the social sciences, the pendulum shifted, so that for several decades, the "culture-as-knowledge" view has reigned. This view is most closely associated with the work of Goodenough, for whom culture consists of "what one needs to know to participate acceptably as a member in a society's affairs" (Goodenough, 1994, p. 265). This knowledge is acquired through learning and consequently is a mental phenomenon. As Goodenough (p. 50) put it:

> Material objects people create are not in and of themselves things they learn... What they learn are the necessary percepts, concepts, recipes, and skill—the things they need to know in order to make things that will meet the standards of their fellows.

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[2]Note that when defined in this abstract fashion, many creatures besides human beings exhibit cultural modes of behavior (McGrew, 2002).

From this perspective, culture is profoundly subjective. It is in people's minds, the mental and symbolic products of the social heritage.

Shweder (2003, p. 11) offers a view of culture that also privileges the mental: "culture refers to community-specific ideas about what is true, good, beautiful, and efficient. To be cultural, these ideas about truth, goodness, beauty, and efficiency must be socially inherited and customary. To be cultural, those socially inherited and customary ideas must be embodied or enacted meanings; they must be constitutive of (and thereby revealed in) a way of life."

Other anthropologists, as well as psychologists, are seeking to transcend this "ideal versus material culture" dichotomy. For example, in an oft-quoted passage, Geertz (1973, p. 45) wrote that his view of culture begins with the following assumption:

> Human thought is basically both social and public—that its natural habitat is the house yard, the market place, and the town square. Thinking consists not of "happenings in the head" (though happenings there and elsewhere are necessary for it to occur) but of trafficking in . . . significant symbols—words for the most part but also gestures, drawings, musical sounds, mechanical devices like clocks.

My own way of transcending the ideal–material dichotomy with respect to culture is to think of the cultural medium as both material and mental. It is a species-specific medium in which human beings live as an environment transformed by the *artifacts* of prior generations, extending back to the beginning of the species (Cole, 1996; Geertz, 1973; Ingold, 2000; Leontiev, 1981; Luria, 1979; Sahlins, 1976). The basic function of these artifacts is to coordinate human beings with the physical world and each other; in the aggregate, culture is then seen as the species-specific *medium* of human development, as, so to speak, "history in the present." Because artifact mediation was present hundreds of thousands of years prior to the emergence of *Homo sapiens*, it is not appropriate to juxtapose human biology and human culture. The human brain and body co-evolved over a long period of time with our species' increasingly complex cultural environment (Plotkin, 2003; Quartz & Sejnowski, 2002).

Geertz (1973, p. 68) pointed out that, as a result of their tangled relations in the course of human phylogeny, culture and biology are equally tangled in the course of human ontogeny:

> Rather than culture acting only to supplement, develop, and extend organically based capacities logically and genetically prior to it, it would seem to be ingredient to those capacities themselves. A cultureless human being would probably turn out to be not an intrinsically talented though unfulfilled ape, but a wholly mindless and consequently unworkable monstrosity.

This long-term, phylogenetic perspective is important to keep in mind when considering the ontogeny of children, for it reminds us that causal influences do not run unidirectionally from biology to culture. Rather, human beings are hybrids of phylogenetic, cultural–historical, and ontogenetic sources (Clark, 2003; Wertsch, 1985)

For this perspective to be useful, it is essential to understand why the artifacts that constitute culture as medium are combinations of the conceptual, ideal, and material, because it is this combination that makes necessary the linking of phylogeny and cultural history in ontogeny. On the one hand, artifacts have mental, ideal, and conceptual aspects to them in that they embody goal-directed interactions of which they were previously a part and which they mediate in the present (e.g., the structure of a pencil carries within it the history of representing spoken language in a different medium, manufacturing processes, and communicative practices). They are material in that they are embodied in material form, whether in the morphology of a spoken or written or signed word, or in a solid object such as a pencil. D'Andrade (1986, p. 22) made this point when he said that "Material culture—tables and chairs, buildings and cities—is the

reification of human ideas in a solid medium." As a consequence of the dual conceptual–material nature of the systems of artifacts that are the cultural medium of their existence, human beings live in a double world, simultaneously natural and artificial. Hence, at birth, the environment into which children are born is more than a material world; both the mental and the material aspects of that world envelop the developing child.

This conception of the relation between culture and the special properties of human nature was expressed in particularly powerful language by the American anthropologist, Leslie White (1942, p. 372), half a century ago.

> Man differs from the apes, and indeed all other living creatures so far as we know, in that he is capable of symbolic behavior. With words man creates a new world, a world of ideas and philosophies. In this world man lives just as truly as in the physical world of his senses. . . . This world comes to have a continuity and a permanence that the external world of the senses can never have. It is not made up of present only but of a past and a future as well. Temporally, it is not a succession of disconnected episodes, but a continuum extending to infinity in both directions, from eternity to eternity.

Among other properties White attributes to culture in this passage, his emphasis on the way it creates an (artificial) continuity between past and future merits special attention, as I attempt to show later. It is also significant that both White and Soviet cultural–historical psychologists (e.g., Luria, 1928; Vygotsky, 1987) emphasize that, as mediators of human action, all artifacts can be considered tools. As White (1959, p. 236) expressed the relationship:

> An axe has a subjective component; it would be meaningless without a concept and an attitude. On the other hand, a concept or attitude would be meaningless without overt expression, in behavior or speech (which is a form of behavior). Every cultural element, every cultural trait, therefore, has a subjective and an objective aspect.

There are a great many suggestions about the forms taken by the artifacts in terms of which culture operates as a constituent of human activity. One well-known formulation offered by Geertz (1973) is that culture should be conceived of by analogy with a recipe or a computer program that he referred to as "control mechanisms." A complementary notion of artifacts constituitive of the medium of culture is offered by D'Andrade (1984), who suggested the term cultural schemes to refer to units that mediate entire sets of conceptual–material artifacts. In D'Andrade's (p. 93) terms:

> Typically such schemes portray simplified worlds, making the appropriateness of the terms that are based on them dependent on the degree to which these schemes fit the actual worlds of the objects being categorized. Such schemes portray not only the world of physical objects and events, but also more abstract worlds of social interaction, discourse, and even word meaning.

Finally, psychologists such as Bruner (1990) and Nelson (2003) identify event schemas, embodied in narratives, as basic organizers of both culture and cognition. Referred to as scripts by Nelson, these generalized event schemes specify the people who participate in an event, the social roles that they play, the objects that are used during the event, the sequences of actions required, the goals to be attained, and so on. Nelson's account of scripted activity is similar in many ways to Geertz's (1973) and D'Andrade's (1984) suggestions for basic units of cultural structure. Her emphasis on the fact that children grow up inside of other people's scripts, which serve as guides to action before the children are ready to understand and execute culturally appropriate actions on their own, leads naturally to her conclusion that "the acquisition of scripts is central to the acquisition of culture" (Nelson, 1981, p. 110).