Cultural Practices as Contexts for Development

Jacqueline J. Goodnow
Macquarie University, Sydney

Peggy J. Miller
University of Illinois, Urbana–Champaign

Frank Kessel
Social Science Research Council

EDITORS

the interrelationship of practices and the principles underlying them. There is, however, one major difference between this opening chapter and the others in the set. Developmental questions are not in the foreground of the paper on sleeping arrangements. Instead, the chapter covers adults' accounts of possible and impossible arrangements, using these as a way to articulate the principles that adults follow and that children may abstract and adopt in whole or in part. The next step is to ask, What does this kind of approach lead us to explore when it comes to children's viewpoints? Do children acquire some principles before others? How and when do they acquire a sense of the possible and the impossible? How and when do they acquire not only an awareness of the proper practices but also of the moral affect that goes with the sense of possible/impossible? These developmental questions are worth keeping in mind throughout the remaining chapters.

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The practice of determining who sleeps by whom in a family household is a symbolic action that simultaneously expresses and realizes some of the deepest moral ideals of a cultural community.

Who Sleeps by Whom Revisited: A Method for Extracting the Moral Goods Implicit in Practice

Richard A. Shweder, Lene Arnett Jensen, William M. Goldstein

The focus of this chapter is on the analysis of sleeping arrangements among high-caste families in the Hindu temple town of Bhubaneswar in Orissa, India, and among middle-class families from the Anglo-American culture region of Hyde Park, Chicago. Our central claim is that the universal practice of determining "who sleeps by whom" in a family household is a symbolic action, or nonverbal vehicle of meaning, that both expresses and realizes some of the deepest moral ideals of a cultural community. One aim of the chapter is to discuss methods for extracting the preferences, values, or moral "goods" implicit in the practice of arranging where family members sleep at night. A second aim is to make a substantive contribution to cultural psychology by tracing some interconnections between cultural practices, morality, ethnopsychological knowledge, and personality development.

We begin, however, with a discussion of a recent commentary by the renowned pediatrician T. Berry Brazelton on the topic of parent-child co-sleeping arrangements (Brazelton, 1990). Brazelton's didactic, self-conscious rumination

ponders the question, Who *ought* to sleep by whom in the human family? His candid reflections, although brief, are deep and revealing. They provide students of cultural psychology and Anglo-American cultural studies with a glimpse of the way ethnopediatric "wisdom," local moral sensibilities, culture-specific character traits, and historically evolved family practices reinforce each other—and perhaps even make each other up.

Brazelton's Conflict

Brazelton poses a fascinating and complex moral question: Should children be allowed (encouraged, required) routinely to sleep in the same bed with their parent(s)? For most middle-class readers who have grown up in the Anglo-American culture region, the answer to that question will seem obvious: children should be taught to sleep alone.

In the past, that was the answer Brazelton would have given to parents. More recently, however, he has had some conversations with pediatricians in Japan, where children typically co-sleep with their parents until they are adolescents. Now he feels "conflicted." On the one hand, Brazelton believes it is important to promote autonomy and independence in infants and young children by having them sleep alone. He also worries about the temptations and dangers of sexual abuse; and he cannot shake from his mind the picture of the sexual fantasy life of young children (desiring the mother, hating the father, dreading genital mutilation) as portrayed by psychoanalytic theorists. He even acknowledges his own inhibitions and his inability to sleep in the same bed with a small child, which he confesses are "due to deeply ingrained taboos and questions" from his past (p. 7).

On the other hand, Brazelton is well aware of all those apparently undamaged Japanese who have grown up co-sleeping with their parents. These days, he also finds himself faced with increasing numbers of American clients—for example, divorced or unwed parents—who feel a "need" to sleep in the same bed with their child. He concludes his remarks by asking, "Should we reevaluate our stance toward children's sleep?" Brazelton's remarks appear in *Ab Initio: An International Newsletter for Professionals Working with Infants and Their Families*. In such an international context, his roomy, inclusive reference to "our stance" is fascinating. It suggests one of the following: (1) that Dr. Brazelton did not ponder fully what it would mean to address such a question to a truly international audience, whose stance on this topic could not be taken for granted, (2) that the actual readership of the "international newsletter" is restricted to professionals from Europe and the United States, or (3) that one measure of being acknowledged as an international "professional" in the infancy field is the adoption of an Anglo-American stance on questions about parent-child co-sleeping.

In any case, before adopting any stance toward co-sleeping arrangements, we might find it helpful to look into the semantics (the form) and pragmatics

(the function and distribution) of sleeping arrangements on a worldwide scale. For "our stance," if it refers to the stance of the Anglo-American world, is rather unusual in the international context of family-life practices.

Co-Sleeping Here and There: The American Middle Class and Beyond

Although there have been few systematic studies of co-sleeping between children and their parents in the United States, there does exist a characteristic white middle-class practice concerning who sleeps by whom in the family. Litt (1981), in a pediatric study of 119 children (age six and under) from middle-class, two-parent white families in Cleveland, Ohio, found that only 3 percent of the children regularly slept in their parents' bedroom during the first year of life, and only 1 percent did so after their first birthday. Similar results from an urban sample in California can be found in Rosenfeld and others (1982) and Weisner, Bausano, and Kornfein (1983). Among members of the white middle class, routinized parent-child co-sleeping appears to be exceedingly rare. (Studies of occasional or intermittent parent-child co-sleeping in the white middle class report somewhat higher percentages: Lozoff, Wolf, and Davis, 1984; Mandansky and Edelbrock, 1990.)

Routine parent-child co-sleeping appears to be more common in other U.S. groups. Litt (1981) reports that in Cleveland 55 percent of African-American children less than one year of age co-sleep with a parent every night and all night and that 25 percent of African-American children one to five years of age do so (also see Lozoff, Wolf, and Davis, 1984; Mandansky and Edelbrock, 1990). Abbott (1992), working in a white, predominantly blue-collar community in Appalachian Kentucky, found that 71 percent of children between two months and two years of age and 47 percent of children between two years and four years of age co-slept with a parent. (Abbott does not explicitly state her definition of co-sleeping, although it appears to entail sleeping in a parent's bed or bedroom every night and all night.) Demonstrating that crowding and resource limitations are insufficient explanations of these co-sleeping arrangements, Abbott argues that many blue-collar Appalachian families prefer for parents and their younger children to co-sleep. That preference is articulated in terms of the moral view that the capacity to nurse and nurture are God-given blessings. Co-sleeping is justified as a palpable satisfaction and as an experience of profound "closeness" that enhances the long-term social bonds between parents and their offspring.

The limited research evidence suggests, then, that the sleeping practices of the white middle class have not been uniformly adopted by all groups in the United States. Nevertheless, it also seems reasonable to conclude what most members of the white middle class already know: there exists in white middle-class communities a family-life practice in which, after darkness falls, the bedroom of adults is a private space guarded with taboos against children of

all ages and is presumed to be "off limits" (except in the case of occasional medical problems and other emergencies). Children are expected to make it through the night alone.

Of course, anthropologists (see Burton and Whiting, 1961; Caudill and Plath, 1966; LeVine, 1990; Lozoff and Brittenham, 1979; McKenna and others, 1993; Whiting 1964, 1981) have long known that the ritualized isolation and solitude imposed on young children every night in the middle-class Anglo-American culture region are not practiced in most other regions of the world. In Whiting's 1964 survey of "customary" sleeping arrangements in 134 societies, infants and mothers were found to co-sleep most of the time. Commenting on the ethnographic record, Whiting (1981, p. 161) notes that "since in many cultures sleeping arrangements are a private affair, specific ethnographic reports are often lacking and judgments are often made inferentially. . . ." Nevertheless, of the scores of (mostly non-Western, mostly nonindustrial) communities around the world studied by anthropologists on which information is available (Barry and Paxon, 1971), there is not a single community in which infants customarily sleep alone.

Indeed, the historically evolved behavioral script calling for nighttime separation of children from parents that is reenacted on a nightly basis in middle-class American families is often perceived by adults in Africa, Asia, and Central America as a form of "child neglect" (see, for example, Morelli, Rogoff, Oppenheimer, and Goldsmith, 1992). Brazelton himself remarks that the Japanese think of Americans as "merciless" for forcing children to be off on their own and isolated in a dark room throughout the night. Adults in Orissa, India, express similar moral concerns about the practice, which they view as indicative of parental irresponsibility.

Advice Columns and the Moral Perceptions of the Anglo-American Middle Class. Of course, most middle-class Anglo-Americans do not view their own sleeping practices as abusive and immoral. Quite the contrary, they are convinced that their arrangements are sound, are healthy, and promote the moral good. They are disturbed by the practice of parents and children bedding down together at night and nervous about its consequences. They are prone to the view that parent-child co-sleeping is pathological and perhaps even criminal or sinful. Here are two examples of the kinds of queries and responses about parent-child co-sleeping that show up in "expert" advice columns in mainstream middle-class American newspapers such as the *Chicago Tribune*.

Dear Ann Landers: I have three children, ages 2, 3 and 5. Here's my problem: All three end up in my bedroom during the night. Usually I know they are there but I sleep right through it. . . . I'm newly divorced and there is no man in my bed, so the kids aren't disturbing anyone. . . . My mother tells me I must make the kids sleep in their own rooms. She says sometimes children who want to sleep with their parents need to be taken to a psychologist because their behavior indicates deeper problems. What do you say? Is it that big a deal when they are so young?

Dear Wondering: Usually, I tell parents to keep the kids out of their bed at night, but in your case I suspect the divorce has made them insecure. Talk to your pediatrician about the way to wean these kids away from this habit. You really do need professional guidance. . . . Good luck, dear. You have your hands full. [Jan. 14, 1992]

Dear Abby: I recently spent my first weekend at the home of my fiancé's parents. "Harold" warned me not to be shocked that his 14-year-old younger brother, "Nicky," sleeps in the same bed with their 50-year-old-mother. Needless to say I was appalled. I have always known that Harold's parents have had a troubled marriage and haven't shared a bedroom since 1980. Harold mentioned about a month ago that his younger brother hates sleeping with his mother, but that she threatens to spank him if he sleeps in his own bedroom. Harold has tried talking to his mother about this but she is very irrational and suffers bouts of depression. . . . Someone has to consider the interests of Nicky. I am honestly afraid that this sleeping arrangement could psychologically harm him. Would you please guide me on this issue?

Dear Really Worried: You are to be commended for caring enough to take a stand, because no immediate family member has been willing to become this boy's advocate. Clearly, Nicky is being emotionally blackmailed, and his mother's behavior is inappropriate. You should report her to Children's Services. The number in Texas to call is . . .[Apr. 21, 1992]

After reading about such incidents, a typical middle-class Anglo-American reader is likely to feel full of anxious concerns about issues of sexuality, excessive dependency, and the exploitation of children. Many middle-class Anglo-Americans will be prepared to accept without much reflection the presupposition that the quality of a marriage can be gauged by whether or not a wife and husband sleep together, which is implicit in Really Worried's remarks. Many readers will be offended by the perceived infringements on Nicky's autonomy. They will stigmatize the mother and harbor doubts about her mental health and/or sexual morality. That is a normative and a culturally acceptable response for middle-class Anglo-American readers.

However, it is not a normative or culturally proper response for readers from Japan. Even Dear Abby might be surprised to learn that Japanese parents feel morally obliged to provide their children with a parental sleeping partner; that husbands and wives are willing to separate from each other in order to do so; that approximately 50 percent of eleven- to fifteen-year-old urban Japanese boys and girls sleep in the same room as their mother or father or both; that Japanese fathers are just as likely to co-sleep with their daughters as with their sons; that only 14 percent of eleven- to fifteen-year-olds sleep alone (they sleep with siblings when not co-sleeping with parents); and that no Japanese observer of such practices worries about psychopathology or phones for help (Caudill and Plath, 1966).

The Japanese Case: Where Co-Sleeping Is Normative. The Japanese case is instructive as a lesson in the way cultural practices and individual psychological functioning are intertwined. The classic and most detailed anthropological study of sleeping arrangements is Caudill and Plath's 1966 research report entitled "Who Sleeps by Whom? Parent-Child Involvement in Urban Japanese Families." In their survey of 323 families from the cities of Kyoto, Tokyo, and Matsumoto, Caudill and Plath found that, over a lifetime, a typical Japanese person during the first sixty years of this century seldom slept alone.

It is important to note that the Japanese sleeping practices documented in 1960–1962 were not driven primarily by lack of available space. Caudill and Plath found that three-person households consisting of two parents and an infant did not disperse for sleep even when space was available. For households with more than three persons, variations in available sleeping space accounted for no more than 22 percent of the variance in utilized sleeping space. They concluded that the "Japanese prefer to sleep in clusters of two or three persons and prefer not to sleep alone."

Caudill and Plath suggested that co-sleeping is a source of satisfaction for Japanese children and adults, that Japanese sleeping arrangements "emphasize the interdependency more than the separateness of individuals," and that co-sleeping diminishes the tensions and separations between genders and generations. They even speculate that, given the way culture and psyche make each other up, the practice of sleeping alone is emotionally threatening to the Japanese sense of self and may be a cause of suicide and other psychopathologies.

Co-Sleeping and the Idea of Cultural Practices: Limitations in the Literature

The anthropological and pediatric literature on sleeping practices is not without limitations. The cross-cultural data tend to portray sleeping arrangements in terms of the nuclear triad of mother (m), father (f), and infant or young child (c), without detailed attention to the gender of the child or to the co-sleeping practices of older children. The literature also tends to represent each cultural community with a single "customary" sleeping arrangement, such as mc/f (mother and child co-sleep, father sleeps separately) or mcf (mother, father, and child all sleep together), as though the concept of culture required the investigator to characterize the traditions of a culture in terms of a single fixed sleeping pattern.

This is not the most satisfactory way to conceptualize a "culture" or to study the form and function of sleeping practices. The documentation of patterns of behavior—especially behaviors that are traditional, invested with a moral force, and passed on from generation to generation—is an important first step in the study of culture. However, the study of culture is not reducible to the study of behavior patterns per se. A culture is a way of life lit up by a series of morally enforceable conceptual schemes that are expressed and instantiated in practice. To provide a cultural account, then, one must establish a correspondence between behavior patterns and the preferences, values, moral goods, and causal beliefs exhibited in those behaviors. The entire exercise presupposes that values, meanings, concepts, idea(l)s, and causal beliefs are *analytically* external to and *theoretically* separable from the behaviors themselves. That is why, in the study of sleeping practices discussed below, we conceptualize each recorded instance of who sleeps by whom as a "choice" from a "logical matrix" of possibilities. The "choice" is constrained by a "moral grammar" (an ordered set of cultural preferences, values, and moral goods) that is expressed and realized through the sleeping patterns.

In the remainder of this chapter, we shall employ the following symbols for the designation of kinship statuses: f = father, m = mother, s = son, d = daughter, c = child, number = age in years, / = separate sleeping locations. Within any common sleeping location, the ordering of symbols indicates the ordering of bodies. For example, d7 s3 s8 indicates three co-sleeping children, with the three-year-old son sleeping between the seven-year-old daughter and the eight-year-old son.

We know from our own experience in Orissa, India, that even when there are well-defined cultural values expressed and realized through the practice of who sleeps by whom, there is no "locked-in" single, fixed sleeping pattern. For example, the nuclear relatives of different families might sleep as follows: f d6 / m d3 s4; or f m d4 d7 d9; or f / m d14 d8 s3 / s16.[1] One can, of course, engage in the kind of oversimplification characteristic of much of the previous research on sleeping arrangements by reducing this type of data to summary information about a prototypical nuclear triad (mother, father, child). However, even at that relatively more general level for describing kinship statuses, one still discovers that there is no single, fixed sleeping pattern that characterizes the Oriya community. In our record of single-night sleeping arrangements in 160 households, mcf, mc/f, and mc/fc patterns occur with about equal frequency (27 percent, 29 percent, 25 percent of cases, respectively), and even some instances of mf/c can be observed (12 percent of cases). (The other two possible patterns, m/c/f and fc/m, are rare.)

Nevertheless, as we shall see below, the many sleeping arrangements that do occur in the Oriya community can be coherently understood within the terms of an ordered series of moral goods that define and constrain the "grammatical" variations in behavior that are exhibited. Just as a grammar of a language constrains but does not determine the particular linguistic expressions uttered on any occasion, the moral goods of a culture constrain but do not determine the sleeping arrangements in any particular household.

In other words, the reality and unity of Oriya sleeping practices do not reside at the level of description where we characterize a particular arrangement of bodies on the ground. The reality and unity of the practices reside at the level of description where we characterize the preferences, values, and moral goods realized and expressed by particular arrangements of bodies on the ground. There is no a priori reason to assume that a single ordered set of

preferences, values, or moral goods requires all members of a cultural community to arrange themselves in beds in a single way. Furthermore, even when two communities adopt the same sleeping pattern, there is no a priori reason to assume that their behavior realizes and expresses the same moral goods. We shall return to this point later.

Should Parents and Children Co-Sleep? A Moral Debate Without Empirical or Conceptual Foundations

Perhaps the most fascinating feature of the existing literature on sleeping arrangements is that it is packed with moral assumptions and evaluations. Researchers such as Abbott (1992), Caudill and Plath (1966), Brazelton (1990), Gaddini and Gaddini (1970), and Burton and Whiting (1961) have lots of ideas about the consequences of particular sleeping patterns for moral goods such as autonomy, individuation, privacy, group cohesion, sexual freedom, healthy gender identity, and emotional, intellectual and physical well-being. These moral goods are not always explicated or consistently addressed, but they are always relevant to the formulations and explanations offered in the literature.

For example, Whiting (1964) argues that husbands and wives customarily co-sleep in cold climates for the sake of warmth. His analysis thereby presupposes that sleeping arrangements are designed or selected to promote certain moral goods, such as a reduction of physical harm or pain. He assumes that physical comfort (avoiding the cold) is a good reason for co-sleeping with a spouse and might even explain why people in cold climates stay in bed together through the night.

A few researchers go a step further and take an interest in the moral reasons people actually adduce as the motive for their sleeping arrangements (for example, Morelli, Rogoff, Oppenheimer, and Goldsmith, 1992). It is not unusual for anthropological researchers to contextualize cultural sleeping practices by presenting readers with some verbal justifications offered by a few local informants, although it is the rare study indeed whose central focus is the way members of a community think about the relationship between who sleeps by whom and the moral order. Abbott (1992, p. 34), for example, quotes a local Appalachian writer who morally justifies the practice of mother-child co-sleeping by remarking, "How can you expect to hold on to them in later life if you begin their lives by pushing them away?"

Other authors, such as Brazelton (1990) (and Ann Landers and Dear Abby, of course), express their own moral views about whether this or that pattern of co-sleeping is justified or not. This type of moral discourse seems unavoidable if we are to credit the bearers of a cultural tradition with agency and with the capacity for responsible and rational action, unless we are prepared to defend the antirationalist proposition that "the examined life is not worth living." When Brazelton asks, "Should we re-evaluate our stance toward children's sleep?" he is raising a Socratic question that no responsible and reflective participant in the life of a family can avoid. Although Brazelton's question should not be evaded, we think it is best to put off answering it for a while. There is no point in engaging in a full-blown moral debate about who should sleep by whom until some firm empirical and conceptual foundations for the debate have been put in place.

With regard to the empirical foundations that need to be put in place, both those who condemn and those who justify parent-child co-sleeping arrangements make many assumptions about objective means-ends connections. Yet systematic evidence is almost never presented (and may not exist) on whether co-sleeping in childhood per se in fact deepens long-term familial cohesion, whether sleeping alone since infancy per se in fact promotes independence and autonomy in adulthood, or whether witnessing the primal scene per se in fact is a cause of neuroses in adulthood. (For discrepant opinions of the dangers of viewing the primal scene, see Dahl, 1982, and Rosenfeld and others, 1980.)

It is conceivable that particular sleeping practices per se have no predictable long-term effects on individual psychological functioning and character formation. Sleeping practices may serve mainly as daily ritual enactments of the fundamental values of a group and/or as a measure used by insiders for determining who should be accepted as "normal" and "cooperative" members of that society.

It is conceivable that, even if sleeping arrangements per se have no long-term effect on individual psychological functioning and character formation, sleeping arrangements may have long-term effects that are predictable once the local meaning of the practice has been taken into account. In other words, the effects of a sleeping practice may be largely mediated by the moral meaning conferred on the practice by a group. Perhaps it is being confronted with a culturally deviant behavior in the bedroom (enforced isolation in a Japanese family; enforced co-sleeping in an Anglo-American family) that puts a child at risk.

It is also conceivable that any long-term effects of a particular sleeping arrangement on the emotional life of a particular individual are entirely idiosyncratic and involve a complex interaction between details of the practice and aspects of personal temperament (see Kakar, 1990, for a relevant clinical case from India). Unfortunately, given the state of the research evidence, no one really knows whether any of these conceivable alternatives are true. From an empirical point of view, international moral advisers on sleeping arrangements are simply explicating their local cultural intuitions while skating on thin evidential ice.

From a conceptual point of view, the foundations for addressing the question, Who ought to sleep by whom in the family? are no more secure. Those who condemn and those who justify parent-child co-sleeping arrangements make many strong and limiting assumptions about moral goods. Yet rarely are those moral considerations informed by a systematic examination of the range of moral values that are exhibited in the sleeping practices of different cultures around the world. Rarely is the problem of who should sleep by whom

conceptualized as a problem in choosing between alternative, and perhaps conflicting, moral goods. While the research to be reported below will not provide an answer to Brazelton's question about who ought to sleep by whom, it may supply some conceptual and empirical fuel for the moral debate already begun.

Who Sleeps by Whom in Orissa and Hyde Park?

Method and Data. Three types of data are discussed in the sections that follow: (1) the results of a "sleeping arrangement task" in which informants in Orissa, India, and Hyde Park, Illinois, sorted members of a hypothetical seven-person family into sleeping spaces under various hypothetical resource constraints; (2) the results of a "preference conflict task" in which informants in Orissa, India, and Hyde Park, Illinois, evaluated and ranked various culturally deviant arrangements of members of the hypothetical seven-person family in terms of the relative seriousness of the breach; (3) spot reports about who slept by whom on a single night in 160 households in the Hindu temple town of Bhubaneswar in Orissa, India.

Extracting Moral Goods: The Logical Matrix of the Sleeping Arrangement Task. In our view, sleeping arrangements are a joint product of cultural preferences (for example, the particular moral goods promoted by a people) and local resource constraints (for example, the amount of space available). Given our conceptualization of sleeping arrangements as symbolic actions, our main concern is to extract similarities and differences in cultural preferences, values, or goods as they are revealed in practice, while taking account of similarities or differences that are driven primarily by limited space.

Oriya and American informants were presented with a sleeping arrangement task. For this task, a hypothetical family was constructed consisting of seven members: f, m, s15, s11, s8, d14, and d3. Nineteen Oriya adults (eleven women and eight men) and nineteen American adults (nine women and ten men) were asked to arrange members of the family into separate sleeping spaces under different hypothetical resource constraints. You have one room. How would you arrange the seven family members? You have two rooms. And so forth through seven rooms. At each resource level, the informant was free to declare that no sorting was possible or desirable. Informants were also asked to select their most preferred resource level: How many separate sleeping rooms would be ideal for this seven-person family?

An important first step in the cultural analysis of the proposed solutions to the sleeping arrangement task given by Oriya and American informants is the elaboration of a "logical matrix." A logical matrix for the sleeping arrangement task is a characterization of all the logically possible ways to arrange the members of a seven-person family into from one to seven discrete sleeping spaces. In total, there are 877 logically possible ways to do that. Of course, there is only one way to sort seven persons into one room, and only one way to sort seven persons into seven rooms. But there are 63 logically possible ways

to sort seven persons into two rooms, 301 ways for 3 rooms, 350 ways for four rooms, 140 ways for five rooms, and 21 ways for 6 rooms. (See Table 2.1 [top half] for an example of the calculation of the logically possible ways to sort seven persons into three rooms.)

It is a crucial fact about the force of cultural constraints on the practice of who sleeps by whom that exceedingly few of the 877 logically possible solutions were selected by any Oriya or American informant. For example, no one ever proposed such four-room solutions as f d14 / m s15 / s8 d3 / s11 or m / f d3 / s15 d14 / s8 s11. No one ever proposed such a two-room solution as d3 / f m s15 d14 s11 s8. Indeed, perhaps 95 percent of the possible solutions in the logical matrix were (and would always be) ruled out as immoral, unacceptable, or otherwise "ungrammatical" by informants in both cultures. We would predict that even with a very large sample of informants, very few solutions (fewer than 15 or so out of 877) would be selected with any frequency by informants in either culture. We would also predict that the small subset of solutions selected by Oriya Indians would not be coincidental with those selected by Americans.

Consider, for example, the Oriya and American solutions to the sleeping arrangement task under the two-room constraint. Sixteen of nineteen Oriya informants offered a solution. Despite the fact that there are 63 logically possible ways to sort the family into two rooms, 75 percent of those Oriya informants selected one of two solutions: f s15 s11 s8 / m d14 d3 or f s15 s11 / m d14 d3 s8. In stark contrast, only seven of nineteen American informants were able to offer a solution at all under the two-room constraint. Almost all of them converged on a sleeping arrangement that no Oriya chose—namely, f m d14 d3 / s15 s11 s8.

Table 2.1. Distribution of Logically Possible Solutions and Actually Selected Solutions to the Sleeping Arrangement Task Under the Three-Room Constraint

Persons per Space	1/1/5	1/2/4	1/3/3	2/2/3
Number of possible solutions (Total = 301)	21	105	70	105
Frequency of Selection				
Oriyas	0	0	2	17
Americans	0	0	1	17

	Oriyas	Americans
Most Favored 2/2/3 Splits		
f m / d14 d3 / s15 s11 s8	8	15
f m d3 / d14 s8 / s15 s11	4	0
f s8 / s15 s11 / m d14 d3	4	0
f m / s15 s11 / d14 d3 s8	1	1
s11 s8 / s15 d14 / f m d3	0	1

Preferences, Values, and Moral Goods of Two Cultures. There is a small set of cultural preferences that can help us explain the many unselected possibilities from the logical matrix. At least one of those relevant moral preferences will be familiar to all students of family dynamics. That preference can be summarized under the principle of "incest avoidance": within the family, a sexualized unmarried males and females must not have sex with each other and should avoid all situations, such as co-sleeping, where there may be sexual temptations or even suspicions about sexual contact. It seems likely that incest avoidance is a universal moral preference, although allowances must be made for cultural variations in the scope of incest avoidance beyond the nuclear family and in the age of the people who must be separated.

Some of the other relevant moral preferences are more culture-specific. One such preference can be summarized under the principle of "female chastity anxiety": in a culture such as India, where it is important in the context of marriage arrangements for unmarried sexualized women to be chaste, young unmarried girls are constantly chaperoned. Thus they should not sleep alone at night. Another preference can be summarized under the principle of "respect for hierarchy": among sexually mature males, social superiority is expressed through deference and distance, which is incompatible with the intimacy, familiarity, and exposure of co-sleeping. Still another moral preference falls under the principle of "protection of the vulnerable": highly valued members of the family, such as children who are needy and fragile and should not be left alone at night.

There is also a preference that can be summarized under the ideal of "autonomy": highly valued members of the family, such as children, are needy and fragile and should be encouraged to be alone at night so that they can learn to be self-reliant and independent and to care for themselves. A final moral preference falls under the principle of "the sacred couple": when it comes to co-habiting adults, emotional intimacy, interpersonal commitment, and sexual privacy require that they sleep together and alone.

Each of these principles is a constraint on who sleeps by whom at night, although their interpretation and application leave room for local cultural discretion. For example, under Oriya interpretations, the incest avoidance principle requires separate sleeping space for at least these pairs: (f / d14), (m / s15), (s15 / d14). Under American interpretations, given the influence of certain ethnopsychological doctrines about the sexualized character of interactions between young children and adults, the moral preference for incest avoidance might require separate sleeping space for other pairs too: (m / s11), (m/ s8), (s11 / d14), (s8 / d14), and (f / d3).

For Oriyas, there are four moral preferences implicit in their choices on the sleeping arrangement task: incest avoidance, protection of the vulnerable, female chastity anxiety, and respect for hierarchy. Thus, for example, a logically possible sleeping arrangement such as that proposed by an American informant—m f / s15 / d14 / d3 / s11 s8—is ruled out by Oriya informants because it is inconsistent with two important local moral preferences: female chastity

anxiety (d14 cannot sleep alone) and protection of the vulnerable (d3 cannot sleep alone).

For middle-class Anglo-Americans, in contrast, there are three moral preferences, values, or goods implicit in their choices on the sleeping arrangement task: incest avoidance, the sacred couple, and autonomy. Thus, for example, a logically possible sleeping arrangement such as the one proposed by an Oriya informant—f / m s8 / d14 d3 / s15 s11—is ruled out by American informants because it is inconsistent with two important local moral preferences: the sacred couple (m and f should have exclusive co-sleeping space) and autonomy (each child should sleep alone).

Ordering of Moral Goods on the Preference Conflict Task. We are doubtful that the choices favoring a partitioning of sleeping locations in Oriya and American households are ever fully contravened by resource constraints. Even in a relatively confined space, members of a family can divide themselves into separate sleeping areas (using, for example, mats, beds, sections of a floor). Nevertheless, from an analytic point of view, it is useful to imagine occasions when sleeping space is limited and members of a culture must make choices among their moral preferences. The preferences for each culture can be arranged in a precedence order, as we have done below.

This ordering was determined by presenting informants with the preference conflict task. In this task, four Oriya adults and sixteen American adults were asked to rank a set of sleeping patterns selected to exemplify breaches of the various moral preferences or goods in each culture. All the offensive arrangements had reference to the same seven-person family used in the sleeping arrangement task. The preference conflict task was administered only after the groups' moral preferences and goods had been extracted by means of the sleeping arrangement task. Table 2.2 lists the various offensive arrangements presented to informants in Orissa and Hyde Park. They are ordered from "most offensive" to "least offensive," based on the aggregate or average results from the preference conflict task in the two cultures.

It appears that Oriya moral preferences can be listed in order of importance as follows: incest avoidance, protection of the vulnerable, female chastity anxiety, respect for hierarchy. For example, as shown in Table 2.2, a breach such as f d14 / m d3 / s11 s8 / s15 (a strong violation of incest avoidance) is judged by Oriyas to be more severe than a breach such as d14 / f / m d3 / s15 s11 s8 (a strong violation of female chastity anxiety), which in turn is judged to be more severe than a breach such as f s15 / m d14 d3 / s11 s8 (a strong violation of respect for hierarchy).

Given the content of middle-class American moral preferences and the structure of the seven-person family, it was not easy to select a neatly discriminating set of breaches for the preference conflict task. We recognize that the particular set of offending arrangements presented to American informants (and shown in Table 2.2) is not ideal for determining the full ordering of American moral preferences. Nevertheless, it is our hypothesis that middle-class American moral preferences can be listed in order of importance as follows:

Table 2.2. Culturally Offensive Sleeping Arrangements Ranked by Informants in Order of Severity of Breach

Orissa, India

f d14 / m d3 / s11 s8 / s15
d3 / f / m d14 / s15 s11 s8
s8 d3 / f / m d14 / s15 s11
d14 / f / m d3 / s15 s11 s8
m / f / d14 d3 / s15 s11 s8
d14 s11 / f / m d3 / s15 s8
f s15 / m d14 d3 / s11 s8
f s11 / m d3 / s15 / d14 s8
f s15 / m d3 / d14 s8 / s11

Hyde Park, United States

f d14 / m s15 / s11 / s8 / d3
f m / s15 d14 / s11 / s8 / d3
f s15 / m d14 / s11 / s8 / d3
f / m / d14 d3 / s15 s8 / s11

Note: All these arrangements are offensive or "ungrammatical" to some degree in the relevant culture. Rankings move from most morally offensive at the top to least morally offensive at the bottom.

incest avoidance, the sacred couple, autonomy. One source of support for part of this hypothesis can be seen in Table 2.2, where a breach such as f m / s15 d14 / s11 / s8 / d3 (a violation of incest avoidance) is judged by Americans to be more severe than a breach such as f / m / d14 d3 / s15 s8 / s11 (a violation of both the sacred couple principle and the principle of autonomy). A second source of support comes from the sleeping arrangement task, where American informants often sacrificed the principle of autonomy while honoring the exclusive sleeping rights of the conjugal couple as required by the sacred couple principle. More work needs to be done to establish the precedence ordering of American values, however.

The Cultural Component of Sleeping Practices: There Is More to Who Sleeps by Whom Than Resource Constraints. Notice that there are both similarities and differences in the preferences implicit in the judgments of informants from Orissa, India, and Hyde Park, Illinois. The single most important moral preference in both cultures is the same: incest avoidance. All the other moral preferences differentiate the two cultures. For example, the second most important preference for middle-class Americans—what we have dubbed the sacred couple—plays no part in the choices made in the Oriya culture. This American sacred couple principle alone places such a great constraint on possible solutions to the sleeping arrangement task that it rules out 92 percent of the 877 possible cells in the logical matrix; indeed, at certain resource levels, Americans can conceive of fewer solutions than the Oriyas. Thus many Oriyas are willing to accept a two-room solution that divides males (f s15 s11 s8) from females (m d14 d3) and honors the incest avoidance principle. But this arrangement violates the sacred couple principle for Americans, and thus most Americans find it unacceptable.

The results of our study make it apparent why in constructing an analysis of a practice it is imperative to distinguish between cultural preferences and resource constraints. Under particular resource constraints, the sleeping practices of two communities may look more similar than an analysis of cultural preferences would reveal. Thus, for example, Oriya Hindus and Hyde Park Americans tend to converge in their solutions to the sleeping arrangement task under the three-room constraint, despite the fact that their choices are regulated by somewhat different moral preferences. Under the three-room resource constraint, both Americans and Oriyas tend to favor f m / d14 d3 / s15 s11 s8. This is shown in Table 2.1 (bottom half). As indicated in Table 2.1, this arrangement is only one of 301 logically possible ways to divide seven persons into three rooms, and it is only one of 105 logically possible ways to divide the persons into a two-two-three person-per-room arrangement. Yet that one arrangement is preferred by a vast majority of American informants as well as by a plurality of the Oriya informants.

This particular sleeping arrangement is consistent with the two most important middle-class American moral preferences (incest avoidance and the sacred couple). Under a three-room constraint, most American informants seem willing to compromise on the autonomy of the children. The arrangement is also consistent with the three most important Oriya moral goods (incest avoidance, protection of the vulnerable, and female chastity anxiety). (While there is no sacred couple principle in force in Orissa, the local culture does not prohibit exclusive parental co-sleeping, as long as culturally relevant principles are honored.) Under the three-room constraint, Oriyas seem willing to compromise on respect for hierarchy, although it might be argued that that principle applies only to the relationship of f and s15, in which case the willingness to accept co-sleeping for s15, s11, and s8 may not be a compromise after all.

Under the three-room resource constraint, Oriyas do generate some solutions that middle-class Americans reject, such as f s8 / s15 s11 / m d14 d3 (see Table 2.1). Nevertheless, if one were to observe only the behavior of the two cultures at that one resource level, one might be misled into thinking that the two cultures were more or less the same. Only when one looks at behavior across a variety of resource constraints are differences in cultural preferences, values, and moral goods revealed. The implication of this finding is important enough to warrant restating: in the face of any particular resource constraint, two different moral preference systems may give rise to similar "on the ground" sleeping arrangements; therefore, mere "on the ground" observation is insufficient as a method for determining cultural differences.

Actual Sleeping Arrangements in the Temple Town: 160 Spot Reports. How relevant is our account of Oriya preferences to "on the ground" sleeping arrangements in the temple town? In order to answer this question, we tested the Oriya and American packages of moral preferences on our corpus of spot reports.

Interviews were conducted with 160 children (ages eight to twelve) and adults, who were asked to describe the sleeping locations of members of their family on the previous night. We relied on interviews rather than observations,

as it is not feasible to enter the interior spaces of a Hindu family compound to observe who sleeps by whom. We will treat these spot reports as though they were a behavioral case record, although ultimately we have no way to assess the degree of memory distortion, idealization, or error in this verbal record.

Twelve cases of nighttime sleeping arrangement, randomly selected from the data set, are listed in Table 2.3. As should be obvious from that table, the family co-sleeping networks in the temple town rarely fit the standard middle-class Anglo-American pattern.

Several decisions had to be made about precisely how to apply the various moral preference principles to the 160 cases at hand. These decisions were resolved in the following ways: (1) the Oriya female chastity principle is applied only to unmarried sexualized females, and the principle is not violated whenever an unmarried sexualized female shares a room with another family member, no matter who that is; (2) the Oriya respect for hierarchy principle does not apply between sons but only between father and son; (3) the incest avoidance principle does not apply to co-sleeping of grandparents and grand-children; (4) the principles of incest avoidance, female chastity anxiety, and respect for hierarchy are violated only if the child of relevance is thirteen years of age or older. Finally, in order to simplify our analysis, we treated all indige-nously recognized separations of sleeping space (different mats on two sides of a courtyard, different beds on two sides of a partition, different rooms) as equivalent separations.

In 87 percent of the Oriya households, sleeping arrangements were con-sistent with all four Oriya preferences. The most important principle, incest

Table 2.3. Spot Reports of Previous Night's Sleeping Arrangement in Twelve Oriya Households

Space	Sleeping Arrangement	Persons per Space
1	f d5 d7 m	4
2	f / s9 d6 d1 m	1/4
2	f / d12 s10 s8 d4 m s15	1/6
2	f / s5 m s4 d7 d10 d13 d16	1/7
2	f s4 s7 / m d10 fm	3/3
2	f s9 m s6 / s18	4/1
3	f / m d6 s10 / s16	1/3/1
3	f s6 / m s4 / fm	2/2/1
3	f m / s12 d7 d15/ ff	2/3/1
3	f s10 s6 / s20 / m (menstruating)	3/1/1
4	f / ff / m d10 d12 d14 / s12 s15 s16	1/1/4/3
4	f m d6 / s9 s14 / s16 s19 / fm	3/2/2/1

Note: The twelve households were randomly chosen from 160 spot reports. f = father, m = mother, s = son, d = daughter, fm = father's mother, ff = father's father, number following s or d = age of child, / = separation of sleeping space. Within a common sleeping space, the order of symbols is the order of sleeping positions.

avoidance, was violated in 8 of 160 households. An example of a violation of the incest avoidance principle can be found in Table 2.3 (line 3), where the mother and her fifteen-year-old son co-sleep, although in the presence of four other children (f / d12 s10 s8 d4 m s15). Based on the results of our sleeping arrangement task, members of the local Oriya community might well look askance at that particular arrangement, although within the terms of Oriya ethnopsychology it may not be easy to set precise age boundaries on the upper limits for nonexclusive parent-child co-sleeping. The second most important principle, protection of the vulnerable, was never violated. The third most important principle, female chastity anxiety, was violated in two households. The principle of respect for hierarchy was violated in twelve households.

It is a useful exercise to apply the package of American moral preferences to the actual Oriya sleeping arrangements. The American sacred couple prin-ciple was violated in 78 percent of Oriya households. Indeed, actual sleeping arrangements in the temple town were consistent with all three American pref-erences in only 11 percent of the cases.

Conclusion: The Meaning of Practice

We began this chapter by examining two questions posed by the pediatrician T. Berry Brazelton: Should we reevaluate our stance toward children's sleep, and who ought to sleep by whom in the family? It has not been our aim to answer these questions. Instead, we have tried to point to some of the con-ceptual and empirical work that needs to be done before these questions can be seriously addressed. Who sleeps by whom is not merely a personal or pri-vate activity. It is a social practice, like burying the dead or eating meals with your family or honoring the practice of a monogamous marriage, which (for those engaged in the practice) is invested with moral and social meaning and with implications for a person's standing in a community. Those meanings and implications must be taken into account if the issue of who sleeps by whom is to be treated not so much as a mindless habit or tradition-laden routine but as a deliberate act of rational choice motivated by an analysis of probable psy-chological and social costs and benefits.

In this chapter, we have presented a method (the application of a logical matrix) for identifying some of the moral and social meanings implicit in the practice of who sleeps by whom. We have examined similarities and differ-ences in the preferred moral goods (for example, incest avoidance, the sacred couple, protection of the vulnerable) of two culture regions (rural Hindu India and urban middle-class white America). Much work still remains to be done examining the effects, if any, of particular sleeping practices on the develop-ment of competence in various domains of psychological functioning (emo-tional, moral, interpersonal, cognitive) (see LeVine, 1990). Likewise, much work still remains to be done examining the developmental advantages, if any, of growing up in a family that engages in culturally consensual sleeping prac-tices (co-sleeping, if you are an Oriya child; sleeping alone if you are a middle-

class Anglo-American child). Nevertheless, on the basis of what we already know about the cultural meanings implicit in family-life practices, no informed discussion of parent-child co-sleeping can proceed unless those involved in the discussion first recognize that behavior per se is not what the action is about. The family order is part of the social order, which is part of the moral order—which is why (in Japan, in South Asia, even in the Anglo-American culture region) a cultural analysis of local preferences, values, and moral goods is a necessary first step in making sense of who sleeps by whom.

Notes

1. Oriya family households are either joint or nucleated. When they are joint, two or more adult brothers co-reside (with their parents, if the parents are still alive), and the brothers' wives and children all live together in a single patrilocal family home or compound. In our data, which were based on reports from children and adults, the co-sleeping network for a child almost never included that child's aunts, uncles, cousins, or father's father, although children did sometimes co-sleep with their father's mother. The father's father rarely co-slept with a child and most often slept alone, separated from his wife.

2. The first type of data was collected in 1983 (from Oriya informants) and in 1991 (from American informants). The second type of data was collected in 1991 from both Oriya and American informants. The third type of data was collected in Orissa, India, in 1983. (For a discussion of the moral basis of family and social-life practices in Bhubaneswar, see Mahapatra, 1981; Shweder, 1991; Shweder, Mahapatra, and Miller, 1987; Shweder, Much, Mahapatra, and Park, in press.)

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RICHARD A. SHWEDER is professor of human development and chair, Committee on Human Development, University of Chicago.

LENE ARNETT JENSEN is a doctoral candidate, Committee on Human Development, University of Chicago.

WILLIAM M. GOLDSTEIN is associate professor, Department of Psychology and Committee on Human Development, University of Chicago.