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13. Attachment in context

Abstract

New perspectives within attachment theory emphasize the broader contextual processes influencing attachment organization in infants and older individuals. Drawing on new viewpoints from evolutionary ecology, research on the cultural determinants of attachment functioning, and studies of the origins, stability, and sequelae of individual differences in attachment security, this analysis argues that consideration of context is essential to understanding attachment throughout the life span.

Introduction

Consistent with the longstanding interests of developmentalists from various theoretical traditions, attachment theorists have focused primarily on patterns of interaction within the mother-infant dyad - and especially the importance of maternal sensitivity - in their portrayals of the formative influences on the development of a secure or insecure attachment. Now that maternal sensitivity has been established as a reliable (if not entirely robust) determinant of attachment security (see Thompson, in prep.), it is important for attachment researchers to widen their conceptual nets to consider other influences, from beyond the dyad and even the family, that may also contribute to the growth of attachment organization. The incentives to do so come from many sources, including the findings of attachment research itself which, as it has been extended to diverse cultural and socioeconomic settings, has revealed broader contextual influences on the infant, and on the mother-infant dyad, that also assume importance in shaping attachment security. Moreover, theoretical incentives for viewing attachment in context come from new perspectives within evolutionary ecology and life history theory, each of which emphasize the nature of attachment in infancy as a facultative adaptation to various patterns of maternal care in the context of environmental threats and resources. The purpose of this paper is to briefly review these new contextual formulations, and their relevance to contemporary thinking within attachment theory.

Perspectives from Evolutionary Ecology

The emphasis of attachment theory on parental sensitivity has roots in psychoanalytic theory but is also sensible from the standpoint of natural selection. A parent's sensitivity and nurturance toward offspring can be regarded, in evolutionary terms, as important markers of parental 'investment' - that is, the parent's allocation of personal resources (e.g., time, energy) to the survival and growth of each particular child. As Bowlby recognized, parents vary significantly in their sensitivity, but within evolutionary theory, these variations arise not just because of

the differences in personality, early experiences, and other proximal influences that Bowlby emphasized, but also because of broader factors that affect whether the parent's investment of resources in this child or elsewhere (e.g., toward other offspring, or to personal survival) best promote the adult's own inclusive fitness. In the context of finite personal resources, in other words, organisms must (in a fitness sense) strategically allocate their investment to best ensure the reproduction of their genes in future generations. The factors that influence this discriminative parental solicitude toward offspring thus include the biological relatedness of offspring, the parent's age, health, and gender, the child's reproductive potential (including the child's age and health, and brood size), and environmental resources and threats. Taken together, therefore, it is apparent that within an evolutionary context, parental solicitude is not necessarily reliable, but is instead a highly contingent phenomenon that is based, in part, on the relevance of each child's nurturance and growth to the parent's inclusive fitness (Clutton-Brock, 1991; Daly & Wilson, 1995; Trivers, 1985).

In this light, it is essential for offspring to be capable of monitoring and predicting the parent's continuing investment in their survival in order to respond quickly and appropriately to promote their own reproductive success. A parent who cannot or will not provide adequate nurturance, owing to scarce environmental resources, exhaustion, or the allocation of parental resources to other activities or offspring, provides the child with information that is critical to determining how to improve her or his own chances of survival, either by seeking more strenuously to obtain needed investment from the parent, or by going elsewhere (e.g., to other kin), or in other ways (e.g., accelerated behavioral maturation or altered behavioral strategies). Moreover, to the extent that parental responsiveness provides information concerning other conditions that affect the child's chances of survival (e.g., environmental deprivation or threat), attention to the parent's current and continuing investment is also crucial to the child's subsequent actions to promote personal survival to maturity.

Attachment as a Facultative Adaptation

Chisholm (1994) has proposed that the three attachment classifications identified in the Strange Situation reflect facultative (i.e., contextually sensitive) adaptations to alternative patterns of parental investment. By applying formulations of life history theory, Chisholm portrays the securely-attached pattern as adapted to secure and responsive parenting that signals the parent's ability, and willingness, to provide nurturance and protection in a context of low environmental danger and adequate resources. In this facultative adaptation, therefore, the child's efforts can be redirected from promoting the parent's investment toward play and exploration, which have other adaptive benefits for offspring. By contrast, Chisholm portrays the insecure-resistant pattern as a facultative adaptation to the parent's inability to invest in offspring, which may arise from environmental scarcity, persistent danger, the adult's anxiety or exhaustion, or a combination of these and other risks. The attachment behavioral pattern that results from this adaptation coerces whatever resources the parent can manage to provide through persistently needy,

demanding behavior. In Chisholm's formulation, the insecure-avoidant pattern reflects, in turn, a facultative adaptation to the parent's unwillingness to invest in offspring, which may arise from the parent's strategic reallocation of resources to other offspring or to personal survival, and the behavioral pattern that results does not consist of needy, coercive behavior, but instead the precocious independence that may be a prelude to obtaining needed care from others, such as kin.

There is some evidence from the comparative literature that infant bonnet macaques raised with their mothers under various conditions of foraging deprivation developed insecure behavior with their mothers in a manner that provides some support for Chisholm's formulation (Andrews & Rosenblum, 1991; see Thompson, in prep. for a review). Although facultative adaptations are often developmentally somewhat labile because their sensitivity to changing environmental contingencies (such that as environmental resources improve, or parents reallocate their investment to younger offspring, earlier adaptations do not remain rigidly inflexible but rather adjust to changing contextual circumstances), there is also reason to expect broader, long-term consequences from these early adaptations. In the bonnet macaque research, for example, the infant monkeys raised under difficult foraging conditions with their mothers exhibited, as adolescents, greater problems in peer relations than did juveniles who had been raised under better conditions of environmental supply. This makes adaptive sense, since in conditions of environmental deprivation, the most successful offspring are not only those who are capable of coercing needed investment from parents or others, but who can also compete, rather than cooperate, with peers in obtaining needed resources, and who remain vigilant to signs of danger or threat in the environment.

Theoretical Implications

There are several implications of viewing attachment patterns as facultative adaptations that are contextually-sensitive, biologically-based adaptations to different styles of parental care. First, there is clearly no single, species-typical pattern of sensitive parental care that is the behavioral norm for humans, since alternative patterns of parental investment are equally adaptive from the standpoint of the adult's inclusive fitness. From the perspective of natural selection, therefore, parental sensitivity and insensitivity may be equally adaptive behavioral patterns that are responsive to the extent of environmental resources, danger and threat, and other contextual risks and supports that exist. Second, and complementarily, there is also no single, biologically adaptive pattern of infant attachment from which other infant patterns are deviations (see also Hinde & Stevenson-Hinde, 1990; Lamb, Thompson, Gardner, & Charnov, 1985). Instead, natural selection has equipped infants with a variety of behavioral options, the selection from which depends on the infant's detection and prediction of levels of parental investment - likely manifested in the adult's sensitivity and nurturance - that are adequate or inadequate to ensure the child's survival and growth. There is some reason to believe that these conditional behavioral strategies are manifested, in part, in alternative patterns of secure or insecure attachment. Third, the initial facultative adaptations emerging from the infant's

earliest perceptions of parental investment may be either stable or labile, depending on the degree of change in caregiving conditions that signal changes in parental investment. Comparative research on parent-child weaning conflicts from a variety of species suggests one kind of behavioral transition that may cause change in infant behavioral patterns in relation to the parent (Trivers, 1985).

Fourth, and finally, the analysis from evolutionary ecology and life history theory alerts us to the probability that infant attachment patterns are influenced not only by the extent of sensitivity experienced in direct interactions with the mother, but also by broader contextual features of the environment that may also provide important information concerning the environmental resources, threats, and supports that affect the infant as well as the mother. Thus it is not surprising that research reveals that attachment security is associated not only with the extent of sensitivity exhibited by the mother, but also with the degree of marital conflict or harmony in the home, the socioeconomic status of the family, the extent of social support the mother receives, as well as more severe stressors such as the infant's nutritional status in the context of family poverty (Belsky & Isabella, 1988; Thompson, in prep.; Valenzuela, 1990). Although the research that reports these associations is unclear about whether the effects on infant attachment are mediated through their impact on the sensitivity of maternal care, or directly affect the infant in various ways (e.g., through the emotional climate of the home, the irregularity or unpredictability as well as the quality of care, the physical ecology of the child's living circumstances, etc.), or have other indirect influences on the baby through elements of the family's physico-social ecology, it seems apparent that perspectives from evolutionary ecology warrant a broader contextual portrayal of the determinants of attachment security in infancy. Such a contextual orientation requires consideration not only of how various elements of the social ecology influence the development of a secure or insecure attachment, and the direct and indirect avenues by which these influences occur, but also how the intersection of different ecological influences affect attachment formation. The intersection of the various direct and indirect influences associated with maternal employment, for example, with the support experienced by the mother from family and friends, and her personal adaptation to the constellation of professional and caregiving expectations she faces (cf. Stifter, Coulehan, & Fish, 1993), illustrate how complex this constellation of ecological influences might be.

Perspectives from Culture

The importance of the broader ecological context of care, and its direct and indirect influences on both the infant and on those who care for the child, is also revealed in cross-national studies of patterns of attachment in the Strange Situation (and, more recently, using the Attachment Q-Sort). Although cross-national studies of attachment were initially conceived to determine the extent to which the secure pattern was universally normative (consistent with the earlier belief that this pattern reflected a species-typical norm), current views within evolutionary ecology have helped to shift the central question to an exploration of how cross-na-

tional similarities and differences in patterns of attachment reveal the multifaceted ecological determinants of security and insecurity.

Studies of attachment patterns in the Strange Situation with different nationalities have revealed that the relative distributions of secure and insecure patterns can vary not only between but also within national comparisons (see Table 1; see also reviews by Lamb et al., 1985; Thompson, in prep.; Van IJzendoorn & Kroonenberg, 1988). This is not surprising because nationalities are rarely homogeneous, and the ecological variations affecting parental care can differ significantly according to region, locality, and social class within any national grouping. Thus it is important to understand not only why there tends to be an over-representation of insecure-resistant attachments among Israeli and Japanese infants, and an overrepresentation of insecure-avoidant attachments among infants from Sweden, Germany, and the Netherlands, but also why there are variations in patterns of attachment within each of these national groupings that may be linked to socioeconomic status, geographical region, ethnic or subcultural group, and specific ecological circumstances of child care. Unfortunately, considerably more research is needed on these issues, largely because explanations for inter- and intranational variations in the distribution of attachment classifications have tended to be speculative rather than empirically evaluated.

Explanations for cross-national differences in attachment patterns have varied. Initially, investigators focused on the effects of the Strange Situation procedure itself in light of normative patterns of infant care that may have made this procedure unduly stressful for infants who were not raised according to middle-class norms in the United States. Japanese infants were, for example, believed to be highly stressed by the separation episodes because of cultural beliefs that foster mother-infant intimacy and cause infants rarely to be left alone, and Israeli infants were thought to be undermined by the repeated encounters with a stranger, especially when they were reared in the small, closely-knit kibbutz community (cf. Sagi, Lamb, Lewkowicz, Shoham, Dvir, & Estes, 1985; Takahashi, 1990). From this perspective, therefore, the Strange Situation may be viewed as an unsuitable assessment of attachment for infants from certain cultural backgrounds. However, there is diversity in attachment patterns within these cultures (e.g., Israeli city-reared infants also showed heightened rates of insecure-resistance; Japanese infants older than 12 months did not show heightened rates of insecure-avoidance, - nor did another independent sample of Japanese 12-month-olds studied by Durrett and colleagues), which suggests that such explanations may be too generalized. Although there is clear evidence that significant differences in the ecology of care can affect the relative distribution of attachment classifications - such as when insecurity is heightened in some kibbutz child-rearing arrangements where infants do not receive prompt care from communal custodians (see Sagi, van IJzendoorn, Aviezer, Donnell & Mayseless, 1994) - it is probably more misleading than helpful to attribute broad national comparisons in attachment patterns to the effects of the Strange Situation procedure itself.

Table 1. Cross-national comparisons of attachment classifications in the strange situation

STUDY		AGE	N	A	B	C	D	UNCLASSIFIABLE
Sweden								
Lamb et al., 1982		11-13 mos	51					
mother				11	38	2		
father				13	36	2		
Israel								
Sagi et al., 1985		11-14 mos						
kibbutz mother			83	7	47	28		1
kibbutz father			83	9	54	18		2
kibbutz metapelet			84	13	44	27		
city			36	1	29	6		
Sagi et al., 1994		14-22 mos						
kibbutz communal			23	0	11	12		
(alternate classification)				0	6	7	10	
kibbutz home-reared			25	0	20	5		
(alternate classification)				0	15	2	8	
Japan								
Takahashi, 1986, 1990		12 mos	60	0	41	19		
(Sapporo)		23 mos	60	0	49	11		
Durrett et al., 1984 (Tokyo)		12 mos	36	5	24	7		
Germany								
Grossmann et al., 1981								
(Bielefeld)	mother	12 mos	49	24	16	6		3
	father	13 mos	46	25	19	1		1
(Regensburg[1])		12 or 18	54	17	30	3		4
Beller & Pohl, 1986 (Berlin)		12 mos	40	7	31	2		

STUDY	AGE	N	A	B	C	D	UNCLASSIFIABLE
Netherlands							
Van IJzendoorn et al., 1985[2]	12-19 mos	41	14	27	0		
	20-25 mos	95	19	71	5		
United States (selected)							
Ainsworth et al., 1978	12 mos	106	23	70	13		
Thompson et al., 1982	12 1/2 mos	43	7	30	6		
(middle class)	19 1/2 mos	43	6	29	8		
Egeland & Farber, 1984	12 mos	212	46	118	48		
(low income, high risk)	18 mos	197	44	120	33		

[1] from Sagi & Lewkowicz (1987); see also Suess et al. (1992) and Wartner et al. (1994)
[2] see also van IJzendoorn & Kroonenberg (1990)

More insight may be gained from alternative approaches that focus on extending the theoretical network of hypothesized relations between antecedent care, attachment security, and psychosocial outcome to national samples outside the United States. This was the approach explicitly adopted by Klaus and Karin Grossmann in their studies of infants from Bielefeld, Germany, and their research has provided a provocative portrayal of similarities and differences in patterns of associations between antecedents of security and its sequelae when compared with the findings of Ainsworth and other U.S. researchers (Grossmann & Grossmann 1991; Grossmann, Grossmann, Spangler, Suess & Unzner, 1985). For example, although mothers of securely-attached infants from Germany were initially more sensitive than the mothers of insecurely-attached infants, these differences narrowed significantly over the first year during which, the Grossmanns' hypothesized, mothers began to institute cultural norms of independence-training that helped to account for heightened rates of insecure-avoidance in their sample. Thus maternal sensitivity was important (as predicted by attachment theory), but so also were culture-specific norms of child care. Nevertheless, the sequelae of these attachment patterns have generally accorded with the predictions derived from attachment theory and research in the U.S.: attachment security in infancy predicted individual differences in social skills and play at age 5, for example (Suess, Grossmann & Sroufe, 1992). By comparison, none of a variety of measures of antecedent parental attitudes and behavior, infant behavior, and parent-infant interaction succeeded in discriminating infants who became securely- from insecurely-attached in Sweden (Lamb et al., 1985) and, even within the United States, Fracasso, Busch-Rossnagel & Fisher (1993) found it was hard to distinguish securely- from insecurely-attached lower-income infants in the South Bronx based on earlier measures of mother-infant interaction, and speculated that values of the Hispanic culture within that community may have been why. Thus the

bases for the development of a secure or insecure attachment may be importantly affected by the sensitivity of maternal care, but additional influences may depend on the culture and ecology of early care.

Similarly, when predicting the later consequences of a secure or insecure attachment, the cultural context of these correlates must also be born in mind. This is provocatively demonstrated in a study by Oppenheim, Sagi and Lamb (1988), who assessed the social and personality functioning of the children from Sagi's original studies of kibbutz-reared infants when the children were between 4 1/2 and 5 years old. They discovered that earlier measures of infant-mother and infant-father attachment security failed to predict individual differences in measures of sociopersonality growth, contrary to theoretical predictions and the results of some studies in the United States. However, when the children's earlier attachments to their kibbutz caregivers were considered, the results accorded with their general predictions: securely-attached infants were later found to be more empathic, purposive, dominant, achievement-oriented, and independent than were those who had been insecurely-attached to their communal caretakers. Thus although these findings clearly fail to replicate, for kibbutz-reared infants, some of the theoretical predictions of attachment work (after all, mothers and fathers remain central attachment figures even for kibbutz-reared Israeli infants), the findings suggest ways that the conditions of care (e.g., attachment to a communal caretaker) may also alter the network of predictive relations that should perhaps be anticipated. In this light, although researchers in Japan (Takahashi, 1990) and the Netherlands (Van IJzendoorn, Van der Veer & Van Vliet-Visser, 1987) have also failed to confirm expected correlates of antecedent measures of secure and insecure attachment, more culturally sensitive examinations of what the predicted relations should be are warranted.

In the end, therefore, current findings from cross-national studies of attachment in the Strange Situation provide a variety of valuable hypotheses for better elucidating the linkages between ecological context, cultural values, and proximal patterns of infant care in the formation of attachment security, and the intersection between socialization goals, the context of development, and cultural values in predicting the consequences of attachment security. Central to future efforts to explore these linkages will be studies in which attachment researchers can examine more directly how members of a culture or subcultural group construe infant attachment behavior in light of the group's socialization goals, the context of child-rearing, and other processes associated with early development. In an exemplary line of inquiry, Harwood (1992; Harwood & Miller, 1991; Harwood, Miller, & Irizarry, 1995) compared the values of lower- and middle-income Anglo mothers with lower-income Puerto Rican mothers when these mothers were assessing various patterns of infant attachment behavior within the Strange Situation. Although mothers in both cultural groups preferred the securely-attached pattern (although for somewhat different reasons), their assessments of insecure attachments differed considerably based on each culture's values concerning desirable characteristics in young children. Anglo mothers valued individual autonomy and competence, for example, and

consequently commented most negatively about the clingy, dependent behavior of insecure-resistant infants, while Puerto Rican mothers, with their emphasis on familial love and respect, responded more negatively to the apparent indifference and independence of the insecure-avoidant infants.

Such findings underscore that it is important for attachment researchers, in considering the context of attachment, to move beyond speculation about how cultural child-rearing values and ecological conditions influence infant behavior within the Strange Situation, and to systematically explore in empirical research the relations between self-perceived cultural values, assessments and expectations of infant behavior, the ecological conditions of early child care, and the other demands on caregivers to strengthen our appreciation of the forces that result in a secure or insecure attachment, and the psychosocial outcomes of these attachment patterns within a particular context.

Stability and Correlates

Once formed, attachment patterns sometimes change and sometimes they remain the same (see Table 2). After more than 15 years of research on the consistency and consequences of individual differences in attachment security in the Strange Situation, this is the most confident conclusion one can provide. Since some of the earliest studies of the stability of attachment, when Waters (1978) reported that 96% of a sample 50 middle-class infants received the same attachment classification at 12 and 18 months, and Thompson, Lamb, and Estes (1982) reported that only 53% of their middle-class sample of 43 infants received the same classification over a comparable period, stability findings have varied considerably, but with a tendency toward lower estimates of stability in the most recent studies of middle-class and lower-income families (see Table 2; see also Lamb et al., 1985; Thompson, in prep.). When assessments other than the Strange Situation have been used, however, there have been reports of quite high stability in some longitudinal studies, such as continuity between infancy attachment and measures of child-parent attachment at age 6 (Main & Cassidy, 1988; Wartner, Grossmann, Fremmer-Bombik, & Suess, 1994). In general, however, it cannot be concluded that attachments in infancy are normatively stable over time.

The more important question is what accounts for stability and change in attachment classification, and this issue has not been systematically studied. Attachment patterns tend to change more often in socioeconomically stressed families, presumably owing to the impact of family stress and unexpected demands on family members, and there is evidence linking changes in attachment to altered life circumstances in both lower-income and middle-class families (cf. Egeland & Farber, 1984; Thompson et al., 1982). By contrast, greater consistency in attachment has been found in samples with relatively stable living circumstances. But other normative life events - such as the birth of a younger sibling - can also alter the security of attachment (Teti, Sakin, Kucera, Corns, & Das Eisen, in press), and maternal personality factors may also be relevant. Although researchers commonly assume that changing family cir-

Table 2. Stability of attachment classifications

STUDY[1]	SES	N	AGE AT TIME 1	AGE AT TIME 2	OVERALL STABILITY
Waters, 1978	m-c	50	12 mos.	18 mos.	96%
Thompson et al., 1982	m-c	43	12.5 mos	19.5 mos	53%
Main & Weston, 1981[2]	m-c		12 mos.	20 mos.	
mothers		15			73%
fathers		15			87%
Owen et al., 1984[3]	m-c		12 mos.	20 mos.	
mothers		59			78%
fathers		53			62%
Frodi, Grolnick & Bridges, 1985	m-c	38	12 mos.	20 mos.	66%
Takahashi, 1985, 1990	m-c	48	12 mos.	23 mos.	60%
Easterbrooks, 1989[4]	m-c	60	13 mos.	20 mos.	
mothers					58%
fathers					56%
Belsky et al., 1996[5]					
Penn State mothers	m-c	125	12 mos.	18 mos.	52%
Penn State fathers	m-c	120	13 mos.	20 mos.	46%
Pitt mothers	m-c	90	12 mos.	18 mos.	46%
Minneapolis study:[6]	l-i		12 mos.	18 mos.	
- Vaughn et al., 1979		100			62%
- Egeland & Sroufe, 1981					
maltreating subsample		25			48%
excellent care subsample		32			81%
- Egeland & Farber, 1984		189			60%
Lyons-Ruth et al., 1991	l-i	46	12 mos.	18 mos.	
with D classification					30%
without D classification					61%

STUDY[1]	SES	N	AGE AT TIME 1	AGE AT TIME 2	OVERALL STABILITY
Schneider-Rosen et al., 1985	l-i				
maltreated		12	12 mos.	18 mos.	42%
nonmaltreated		17	12 mos.	18 mos.	76%
maltreated		19	18 mos.	24 mos.	53%
nonmaltreated		23	18 mos.	24 mos.	70%

m-c = middle-class; l-i = lower-income

[1] Studies which did not use Ainsworth's classification system (e.g., Connell, 1976) are not included
[2] Includes stability of 'unclassified' subjects over time
[3] Strange Situations with mothers and fathers separated by 3-6 weeks.
[4] Sample equally divided between full-term and low-birthweight preterm infants. Term status unrelated to attach ment classification or its stability. Strange Situations with mothers and fathers separated by approximately 1 month.
[5] Penn State samples include exclusively firstborn sons. Pitt sample recruited for a study of postpartum depression; depression was unrelated to attachment classification or its stability (see Campbell & Cohn, in press).
[6] Stability estimates from these studies are based on overlapping samples

cumstances like these alter either the sensitivity of maternal care, or other familiar features of infant-mother interaction, toaccount for changes in attachment security, these linkages remained to be systematically studied and confirmed In general, research could be fruitfully devoted to exploring the connections between stress and change in family life, and the coping and support of parents, in predicting changes in parent-infant interaction and attachment in the early years of life. The associations between stability of attachment and its consequences also remain elusive. Although virtually all attachment theorists agree that the later consequences of a secure or insecure attachment in infancy depend both on continuity in the child's caregiving conditions as well as the child's emergent expectations and dispositions, few researchers have systematically examined the later correlates of earlier attachments in light of continuity and change in the ecology of care. When they have, they have often discovered that an early secure attachment followed by consistently sensitive care best predicts positive psychosocial outcomes, while poorest outcomes are yielded by early insecurity of attachment coupled with subsequent poor care (e.g., Easterbrooks & Goldberg, 1990; Erickson, Sroufe & Egeland 1985). Such conclusions suggest that psychosocial growth arises from an interaction of the foundation provided by attachment security, coupled with subsequent support provided by the quality and consistency of later care.

But infants are not passively responsive to the consistency and quality of care they receive; they also exert an important influence on those with whom they live through the expectations, competencies, and predispositions they bring to these relationships (cf. Sroufe & Fleeson,

1988). As Bowlby's powerful (but incompletely formulated) heuristic of developing 'internal working models' of self and relationships suggests, attachment security provides a set of relational assumptions for the young child that are provisionally applied to new encounters and, at times, may shape initial interactions with new partners. Although relatively little is known about the development of young children's representations of relationships and of 'self-within-relationship,' any account of the later correlates of attachment must take these developing conceptions into account in understanding the consequences of a secure or insecure attachment. It is especially important, in predicting the later correlates of a secure or insecure attachment, to understand at what age a child's emergent 'working models' are sufficiently well-established to guide other features of psychosocial functioning (Thompson, in prep.).

Challenges to Future Researchers

The greatest challenge to the next generation of attachment researchers, then, is to elucidate the developmental dynamic between continuity and change in context with emerging (and increasingly self-perpetuating) internal representations in the growth and stability of attachment organization in the early years of life. Such a task is even more challenging than may initially appear, for several reasons. First, we know relatively little about characteristics of the effective social context that are most significant for continuity and change in early sociopersonality functioning. While some attachment researchers have focused globally on the continuity of family care in relation to variables like maternal employment or family stressors, these serve primarily as marker variables of change in underlying interactional processes that have not been systematically studied in longitudinal analysis. In a sense, a descriptive mapping of elements of the child's social ecology (and its changes with the child's age) in terms of its influence on continuity and change in psychosocial growth is needed.

Second, we also know relatively little about the nature of the representations that increasingly mediate children's actual encounters with close partners and the internal dispositions that arise out of those interactions. It seems quite likely, however, that we must think of multiple kinds of representations, each of which exists in dynamic interaction within a child's conceptions of the social world and which also change developmentally, to adequately account for this complex network of thoughts and beliefs that arise from early experiences of sensitive and insensitive care (Thompson, in prep.). Early in life, for example, such representations may exist primarily in the form of person- and situationally-specific social expectations for the recurrent actions of familiar partners; they may also encompass broader anticipations of the actions of people, or of particular classes of people. During the second year, it seems likely that these expectations become part of simple representational networks that arise from the child's generalized event representations and episodic memory for specific events in the past, especially as these are elaborated and consolidated in parent-child discourse that forms an early bridge between experience and representation. It is only during the preschool years that one would anticipate these representations to become meaningfully self-referential and integrated into autobio-

graphical memory, and to become part of more enduring relational predispositions in young children's encounters with others. Even so, considerable flexibility and plasticity in these emergent representational systems would be expected because of the rudimentary quality of these belief systems in young children and the lack of systematic integration that, in adults, helps to internally reinforce and perpetuate conceptions of oneself and others. In general, therefore, a developmental account of the emergent 'internal working models' described by Bowlby would probably have to describe multiple representational processes, each of them changing over time, with each new transition in representational capacity bringing the opportunity for reorganization as well as consolidation. At present, this developmental account remains to be formulated.

Finally, any account of the developmental dynamics of continuity and change in attachment system functioning in the early years must also consider the importance of multiple attachments and their interactive and overlapping contributions to early psychosocial growth. It is now normative for young children in Western industrialized countries to receive considerable amounts of out-of-home care in which their attachments to caregivers in day care, preschool, and elsewhere are developmentally influential (cf. Pianta, 1992). Continuity and change in these attachments, as well as the nature of the ecological contexts in which they emerge and function (e.g., the quality of child care), are important to their developmental effects on children's emergent representations of themselves and of others. Moreover, it is crucial to understand how the psychosocial consequences of out-of-home relationships converge, or diverge, in relation to those arising from attachments created within the family (cf. Egeland & Hiester, 1995). Whereas attachment researchers have typically viewed multiple attachments as ordered along a hierarchy of relative influence - with infant-mother attachments having the greatest developmental consequences - it may be more appropriate to regard multiple attachments as having domain-specific consequences for the development of social skills, expectations, and dispositions in the young child. In this view, infant-mother attachments may be most crucial for the growth of a child's understanding of the nature of close, protective relationships, while attachments with out-of-home caregivers are most predictive of the child's representations of relationships in more diverse functional contexts.

In sum, issues concerning the stability and consequences of attachment security remain the most theoretically provocative for this field because of the importance of examining the convergence of the child's emerging representations of relationships with continuing influences from an increasingly diverse ecological context on early psychosocial growth. When these issues are combined with the provocative ideas emerging from studies of attachment and culture, and are theoretically integrated with ideas from evolutionary ecology and life history theory, there is a substantial research agenda remaining for attachment researchers to pursue.

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