

APPRAISAL:
BOWLBY'S CONTRIBUTION TO PSYCHOANALYTIC THEORY
AND DEVELOPMENTAL PSYCHOLOGY;
ATTACHMENT: SEPARATION: LOSS

L. ALAN SROUFE

Institute of Child Development, University of Minnesota, U.S.A.

JOHN BOWLBY'S attachment trilogy may well be judged by historians to be the most significant psychological work to appear during this period. The advancement of psychoanalytic theory, developmental psychology and developmental psychopathology by this effort is in each case fundamental. Bowlby's work has inspired new concepts, new methods, a new way of looking at basic phenomena in human development. As is always characteristic of development, whether in an individual or in a scientific field, Bowlby's work both integrates and transforms what went before, creating an alternative way of viewing the world without leaving behind critical insights contained in previous viewpoints. Basic truths are now seen in a new and more clear way. This is the essence of a scientific revolution, a paradigm shift (Kuhn, 1962).

Bowlby's work clearly falls within the framework of psychoanalytic theory. While indeed Bowlby is critical of certain aspects of the classic position, he retains and builds upon Freud's core clinical and developmental insights. Psychoanalytic theory always has been a developmental theory. Even in Freud's beginning work, hysteria was seen as due to *early* trauma (a situation to which the immature child had no adequate response), the consequences of which lay dormant until reawakened in adolescence. Bowlby retains and elaborates this idea of the critical importance of early experience and especially early relationships. He also builds upon the idea of unconscious processes being the key to the ongoing power of early experiences and the role of relationships in reworking such experience. Central to Bowlby, as with Freud, is the idea that even with development and notable change, early experience is not lost.

While Bowlby's work in many instances represents qualitative change in psychoanalytic theory, it nonetheless may be seen as a coherent part of the theoretical evolution begun by Freud and continued by others. The notion of developmental sequence ("stages") is retained, but the relevant issues at each phase are broadened and extended. Not amount of oral gratification but overall quality of care (availability, responsiveness) is the central issue for the infant. Moreover, fixation and regression are replaced by the concept of prototype. Regardless of the

Requests for reprints to: L. Alan Sroufe, Institute of Child Development, University of Minnesota, 51 East River Road, Minneapolis, MN 55455-0345, U.S.A.

Accepted manuscript received 17 February 1986

nature of early care, development proceeds, but it proceeds within the framework laid down by the previous pattern of adaptation. Later experience is structured and interpreted in the context of previously formed representations of self and other. In this way, Freud's most basic idea of early experience providing a foundation for later behavior is underscored. Finally, the mechanistic view of the person, motivated only by the desire to keep tension at its lowest possible level, is replaced by the view of the active person, adapting, coping and seeking syntheses of experience. This, too, is a direction discernible in Freud's later writings and has been emphasized by a series of theorists who followed. As pointed out by Bowlby (1969/1982) in his first volume, the mechanistic and energy concepts were not central to Freud's clinical observations; rather, they represented his efforts to make psychoanalytic theory consonant with the science of his time. Thus, paradoxically, Bowlby's metatheory may be more congruent with core psychoanalytic insights than was Freud's own metatheory (Klein, 1976). Bowlby, of course, had the advantage of access to Freud's treasure-house of insights, twentieth century advances in scientific theory and a half century of basic research in developmental psychology and comparative ethology.

The significance of Bowlby's work for developmental psychology is equally notable. For decades developmental researchers have struggled with the problem of continuity and change. Numerous developmental theorists, often inspired by psychoanalytic theory, retained the belief that there was continuity to experience and individual adaptation. Still, the problem proved to be empirically intractable, with rare but notable exceptions. Repeatedly, researchers turned up meager correlations between assessments of behavior over time and even across situations at the same time. Such a lack of apparent congruence led some to embrace prematurely the position that there is no continuity to development and, as a corollary, that early experience is of limited import (Clarke & Clarke, 1976; Kagan, 1984; Kagan, Kearsley & Zelazo, 1978).

Bowlby, and a handful of other developmentalists, including Mary Ainsworth, illuminated the path to the resolution of this perplexing problem. Individuals are not to be characterized by a collection of static traits which manifest themselves with constancy across time and situation. Rather, individual adaptation is an ongoing process in which the person reacts to and shapes his interpersonal environment in terms of inner working models of self and other. Basic beliefs concerning the self and others will be manifest in various and changing ways with development; nonetheless, there will be an apparent coherence in the underlying self structure. Coherence will be seen in the organization of social behavior as the person faces the succession of salient developmental issues. Early experience is of basic importance because each successive adaptation is a product both of the new situation and of development to that point. From Waddington, Bowlby drew the model of branching developmental pathways (a tree lying on its side) wherein change is always possible but is constrained by the branching pathways previously chosen. As will be discussed later, there is now abundant research support for Bowlby's basic developmental position.

Finally, Bowlby's three volumes are critically important for the emerging discipline of developmental psychopathology (Cicchetti, 1984; Sroufe & Rutter,

1984). The focus of developmental psychopathology is not just childhood disorders but the course of individual differences in adaptation, normal and pathological. Developmental psychopathologists seek to understand the developmental roots of adult disorder, experiences that leave individuals vulnerable or buffered with respect to stressful life circumstances, and the capacity of individuals to draw strength from available social support. Bowlby's work, emphasizing vital human relationships, the quality of early adaptation, attachment, separation and loss, and the connectivity in experience, is central to this enterprise. It provides a framework for looking at psychopathology in a truly developmental manner.

THE THREE VOLUMES

Bowlby's carefully crafted volumes are a coherent set, focused on three major aspects of a critical domain of human behavior—vital relationships. In particular he deals with (1) why and how the infant–caregiver attachment relationship is formed, (2) what maintains the relationship and especially how the parties respond to separation and threat of loss, and (3) the consequences of loss itself.

Attachment

In the first volume Bowlby (1969/1982) introduces a revolutionary view of the infant–care giver bond. Attachment is not a motive derived from mother's association with food, nor is it part of the human sexuality. Rather, the disposition to become attached is an independent system, built into primate biology to ensure survival. It requires no energy other than that which is part of all living systems.* Were infants and caregivers not disposed to seek and maintain proximity the helpless human infant would perish. Evolutionary history guarantees a strong disposition to organize proximity-maintaining behaviors around a specific other. All that is required is the availability of that other for interaction.

Within this view all infants, however treated, will be attached to available caregivers. Not the presence of attachment or even the strength of attachment, but the quality of the attachment is central. If the infant experiences caregiving which is reliably responsive, the infant will take forward confidence in the availability of care and, ultimately a deep inner sense of self-confidence and self-worth. In contrast, if responsive care is unavailable, hit-or-miss or disrupted, insecurity and, in particular, anxiety concerning close relationships may likely follow. Thus, with Freud, Bowlby assumes that the primary attachment relationship serves as a prototype for later social relationships. But Bowlby has underscored the centrality of the caregiver's responsiveness to infant signals and general availability for enactment of the infant's attachment behavioral system.

Separation

Bowlby (1973) elaborates this position in the second volume and develops three themes. First, he points out that, in the evolutionary framework, anxiety (as well

*As a bird will build a nest to completion, but will resume working on it countless times if disrupted, so infants will seek proximity until it is achieved and will maintain proximity within a tolerably limited distance in the manner of a goal-corrected feedback system. No drive or concept of expended energy needs to be postulated.

as anger) is a normal response to threats to the ongoing availability of the attachment figure. For the preverbal infant physical separations, at times even those involving only short distances, represent such a threat. Separation is a "natural clue" to danger. This is necessarily so. In our former "environment of evolutionary adaptiveness", such separation would leave the defenseless infant vulnerable to predation. Emotional reactions to separation lead the infant to seek proximity and to signal distress so that the caregiver likewise will seek reunion. Thus, they are an important part of normal adaptation. Anxiety is pathological only when it is pervasive, when it occurs in the absence of literal threat or when it does *not* lead to an activation of attachment behavior. Thus, if an infant is chronically concerned about the caregiver's availability, even when in fact in proximity, or if the infant fails to seek proximity when genuinely threatened (Ainsworth, Blehar, Waters & Wall, 1978), this would be pathological.

A second theme elaborated by Bowlby in Vol. 2 concerns the role of experience in determining degree of security or anxiety. Bowlby argues that by the end of the first year the infant has begun to develop internal working models of self and other. Based upon experience the infant will form a generalized expectation of the caregiver as available and responsive (or unresponsive) and, in turn, a complementary model of the self as worthy or unworthy of care. Thus, the infant that is anxiously preoccupied about the accessibility of the caregiver has probably experienced inconsistent care. The infant that fails to seek the caregiver when threatened probably has experienced chronic rebuff when needs were directed to that caregiver, and she or he will not expect responsiveness from others now. The social expectations built up by individuals are "tolerably accurate reflections" of their actual experiential history.

The third and related theme concerns the formation of personality; in particular the growth of self-reliance. The infant who has experienced responsive care will internalize a model of others as available and self as potent; that is, from responsive care comes the sense that I can elicit care and the more generalized sense that I can affect the environment. In time such children believe more generally that they can prevail even in the face of stress or adversity. Anxiously attached children, on the other hand, even those who have been pushed early toward "independence" for fear of spoiling, will be notably dependent in childhood. The child that is self-confident has an experiential base for that confidence; namely, a history of reliably responsive care.

Loss

In the final volume Bowlby (1980) addresses the topic of loss. Again, he shows how mourning is a normal reaction to the loss of a vital relationship, which derives logically from the importance of significant relationships. The loss of attachment figures must not be treated casually, for with such loss the primate infant is indeed at risk to perish. Lost figures must be sought and, if not recovered, an intense and prolonged emotional reaction necessarily follows. In time the survivor recovers and may form new relationships or deepen already existing alternative relationships. Thus, mourning, despite the intense psychic pain and the curtailing of functioning, is not pathological. Indeed, absence of mourning, as well as failure in time to

recover from mourning, is pathological. Both may be related to depression in adulthood.

Again, Bowlby would account for pathological mourning in terms of the individual's experiential history. When, for example, a child feels pathologically guilty over the death of a parent, routinely it is the case that the child has literally been told (or otherwise been led to believe): "You'll be the death of me", "You will be sorry when you have put me in my grave", and so forth. Likewise, a child who has been chronically threatened with abandonment, has never experienced emotional availability, or who has had a succession of disrupted attachment relationships, would be at risk for pathological mourning and depression. Most clearly, an early unresolved loss leaves an individual vulnerable to a depressive reaction to loss in adulthood (Brown, Harris & Bifulco, 1986).

RESEARCH SUPPORT FOR BOWLBY'S THEORY

In addition to the general proposition that attachment represents an independent, non-derived, biologically-based system, there are two central hypotheses in Bowlby's work: (1) that the quality of any attachment relationship depends on the quality of care experienced with that partner and (2) that the quality of primary attachment relationships strongly influences early personality organization, especially the child's concept of self and others. Both the general scheme and the two more specific hypotheses have been amply supported by empirical research.

While a variety of evidence may be brought to bear upon Bowlby's general thesis of the independence of attachment, perhaps some of the most persuasive work remains some now classic studies with non-human primates. The work of Harlow and his colleagues demonstrated that, in conditions of stress, infant macaques showed clear preference for cloth surrogate "mothers" over wire mesh "mothers", even though the latter were sources of food (Harlow, 1958). Thus, when frightened, these infants scurried to the "mother" they could clutch, rather than to the "mother" who fed them. Within Bowlby's perspective the interpretation of this finding is that the cloth mothers, promoting clasping and other attachment behaviors as they did, became the focal point of the attachment behavioral system. Not surprisingly, such attachments were not fully adequate. When mature such surrogate-raised infants showed notable sexual problems and, when impregnated, showed inadequate parenting with first offspring (Harlow & Harlow, 1966). One would suggest that there was a critical lack of reciprocity in the infant-surrogate attachment "relationship". Supporting such an interpretation is the finding that development is far more normal when infant monkeys are reared by female dogs (Mason & Kenney, 1974). For macaques, at least, the degree of reciprocity here seemed sufficient. From the human literature we would add the well-documented finding that youngsters commonly are attached to fathers, children [as in the case of the war orphans studies by Freud & Dann (1951)] and other involved persons who may rarely or never feed them. Moreover, infants are attached even to parents who mistreat them (Egeland & Sroufe, 1981), making it clear that need satisfaction is an inadequate explanation for attachment.

Concerning the first of Bowlby's more specific hypotheses, there are now some

half-dozen studies which have confirmed a link between caregiver responsiveness during the first year and security of infant attachment at 12 months. Many of these studies employ Ainsworth's scales for assessing sensitivity (for example, caregiver responsiveness to the infant's signals) and thus are directly relevant to Bowlby's hypothesis. In some cases (e.g. Blehar, Lieberman & Ainsworth, 1977) simultaneous assessments of infant characteristics were shown not to predict later attachment. This suggests that not infant characteristics but, indeed, quality of interaction underlies individual differences in attachment relationships (see Sroufe, 1985, for a review).

The consequences of individuals' attachment relationships for subsequent development have been the subjects of numerous studies, and the evidence supports Bowlby's second hypothesis in considerable detail. For example, secure attachment has been associated with later self-reliance. Sroufe, Fox & Pancake (1983) explicitly related secure or anxious attachment, observed in infancy, to overdependency in preschool, independently assessed in a variety of ways (frequency of sitting on teacher's lap in circle time, observed initiations of contact by children or teachers, observer ratings, teacher ratings, teacher Q-sorts). Dramatic differences were obtained. Children who had histories of anxious attachment, including those where this was manifest in avoidance of mother following brief laboratory separations (precocious "independence") were strikingly more dependent 3½ years later on every measure. Other studies have found young children with histories of secure attachment to be more persistent, more self-confident, more co-operative, more enthusiastic and affectively positive, more curious, and to have more "ego-resiliency" than children with histories of anxious attachment (Arend, Gove & Sroufe, 1979; Londerville & Main, 1981; Matas, Arend & Sroufe, 1978; Sroufe, 1983).

Bowlby's ideas concerning the formative influence of the attachment relationship on inner working models have been confirmed in a variety of ways. For example, both teacher ratings and observer ratings following laboratory assessments have indicated higher self-esteem in young children with histories of secure attachment (Arend, 1984; Sroufe, 1983). This also has been revealed in the play of preschoolers; in particular, children with a history of avoidant attachment (chronically unresponsive care) showed a marked absence of fantasy play about people (Rosenberg, 1984). They also showed a lack of positive resolutions to negative situations in their play.

The internal working models notion has clear implications for social relations, and this has been the most prolific area of research within the attachment field. In two separate studies conducted at Minnesota and one study at the University of California it was found that children with histories of secure attachment were more empathic and affectively positive towards others (Sroufe, 1983) and were more competent with peers, based on teacher judgments, observer ratings, discrete behavioral analyses and peer sociometric nominations (Arend, Gove & Sroufe, 1979; LaFrenier & Sroufe, 1985; Sroufe, 1983; Waters, Wippman & Sroufe, 1979). They also were judged to have deeper friendships (Pancake, 1985). They were neither victimized by nor did they victimize other children; in contrast, children with avoidant attachment histories commonly victimized others, and children with

histories of either form of anxious attachment were the victims of exploitation (Troy & Sroufe, 1986). In all of these studies outcome data are gathered independent from knowledge of attachment history. Relationships with preschool teachers also have been related to attachment history. Teachers, though they are without knowledge of attachment history, are warmly accepting of the secure group and have high expectations for them to behave appropriately and to comply with the classroom rules (Sroufe, in press). In addition, three studies have shown that parental attachment history, as inferred in a blind manner from interviews, is related to quality of attachment in the next generation (Main, Kaplan & Cassidy, 1985; Morris, 1980; Ricks, 1985). At the same time, parental understanding of their malevolent early relationships (and an altered internal model) can break up the perpetuation across generations (Main & Goldwyn, in press). Finally, we would cite another animal study. In an important experiment, Hinde & Spencer-Booth (1970) found that when infant macaques were separated from their mothers, those who had secure relationships more readily formed new relationships. Thus, rather than being handicapped by their attachment, the previous security apparently supported moving on to new relationships when this became necessary.

A variety of evidence also attests to the significance of attachment relationships for maladaptation and psychopathology. Retrospective data (life history interviews) and follow-back studies suggest that separations, loss and other relationship problems underlie conduct disorders, depression and various forms of disturbance. Indeed, such data inspired Bowlby's theoretical work initially (Bowlby, 1969/1982). In addition, numerous studies have suggested a link between certain characteristics of parenting and problem behavior in children (e.g. Hetherington & Martin, 1979). But it is only more recently that data have begun to emerge which examine this aspect of Bowlby's theory using a prospective approach; that is, where assessments specifically aimed at quality of infant-caregiver attachment, directly observed, are related to later problems in the same children. Suggestive relationships have been obtained between anxious attachment and various forms of emotional disturbance. Most suggestive are ties between Ainsworth's pattern of avoidant attachment and later aggression, conduct disorders and depressive symptomatology in young children (Lewis, Feiring, McGoffog & Jaskir, 1984; Sroufe, 1983; Sroufe, in press). Obviously, much further research will be needed to fully assess implications of attachment history for stress resistance and individual vulnerability to disorder; still, early results strongly encourage further work.

CONCLUSION

Since its inception psychoanalytic theory had represented the potential not only for conceptualizing and treating adult disturbances but also for understanding the origins and course of individual differences in adaptation more generally—a vital framework for conceptualizing human development. Yet, it was encumbered by mechanistic concepts and repeatedly critiqued with respect to its testability. Critics claimed that psychoanalytic theory could not be put into researchable form so that its major tenets could be publically verifiable in terms of the usual canons of science.

Bowlby with one stroke stripped away the mechanistic language and recast the

central premises of psychoanalytic theory into testable form. No longer does one need to choose between a vital but untestable theory and sterile, operationalized part theories which have dominated behavioral psychology. By pointing again to the centrality of vital relationships as the bedrock of human experience, and by reconceptualizing these within the evolutionary framework, Bowlby has led the way to a fully satisfactory theory of human behavior. This evolved psychoanalytic theory not only is testable but has received ample validation from empirical research. At the same time it remains a clinically rich theory, which does justice to the complexity and subtlety of the human animal. Bowlby's theory is certain to be a major part of the science of human behavior for years to come.

REFERENCES

- Ainsworth, M. D. S., Blehar, M., Waters, E. & Wall, S. (1978). *Patterns of attachment*. Hillsdale, New Jersey: Lawrence Erlbaum.
- Arend, R. (1984). *Preschoolers competence in a barrier situation: patterns of adaptation and their precursors in infancy*. Unpublished doctoral dissertation, University of Minnesota.
- Arend, R., Gove, F. & Sroufe, L. A. (1979). Continuity of individual adaptation from infancy to kindergarten: a predictive study of ego-resiliency and curiosity in preschoolers. *Child Development*, **50**, 950-959.
- Blehar, M., Lieberman, A. & Ainsworth, M. (1977). Early face-to-face interaction and its relation to later infant-mother attachment. *Child Development*, **48**, 182-194.
- Bowlby, J. (1969/1982). *Attachment and loss, Vol. 1: Attachment* (2nd edn). New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss, Vol. 2: Separation*. New York: Basic Books.
- Bowlby, J. (1980). *Attachment and loss, Vol. 3: Loss, sadness and depression*. New York: Basic Books.
- Brown, G., Harris, T. & Bifulco, A. (1986). Long-term effects of early loss of parent. In M. Rutter, C. Izard & P. Read (Eds), *Depression in young people* (pp. 251-296). New York: Guilford Press.
- Cicchetti, D. (1984). The emergence of developmental psychopathology. *Child Development*, **55**, 1-7.
- Clarke, A. M. & Clarke, A. D. B. (1976). *Early experience: myth and evidence*. New York: Free Press.
- Egeland, B. & Sroufe, L. A. (1981). Attachment and early maltreatment. *Child Development*, **52**, 44-52.
- Freud, A. & Dann, S. (1951). An experiment in young upbringing. *Psychoanalytic Study of a Child*, **6**, 127-168. New York: International Universities Press.
- Harlow, H. F. (1958). The nature of love. *American Psychologist*, **13**, 673-685.
- Harlow, H. F. & Harlow, M. K. (1966). Learning to love. *American Scientist*, **54**, 251.
- Hetherington, E. M. & Martin, B. (1979). Family interaction. In H. Quay & J. Werry (Eds), *Psychopathological disorders of childhood* (2nd edn, pp. 247-302). New York: Wiley.
- Hinde, R. A. & Spencer-Booth, Y. (1970). Individual differences in the responses of rhesus monkeys to a period of separation from their mothers. *Journal of Child Psychology and Psychiatry*, **11**, 159-176.
- Kagan, J. (1984). *The nature of the child*. New York: Basic Books.
- Kagan, J., Kearsley, R. & Zelazo, P. (1978). *Infancy: its place in human development*. Cambridge, Massachusetts: Harvard University Press.
- Klein, G. (1976). *Psychoanalytic theory*. New York: International Universities Press.
- Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- LaFrenier, P. & Sroufe, L. A. (1985). Profiles of peer competence in the preschool: interrelations between measures, influence of social ecology, and relation to the attachment history. *Developmental Psychology*, **21**, 56-69.
- Lewis, M., Feiring, C., McGuffog, C. & Jaskir, J. (1984). Predicting psychopathology in six-year-olds from early social relations. *Child Development*, **55**, 123-136.
- Londerville, S. & Main, M. (1981). Security of attachment, compliance, and maternal training methods. *Developmental Psychology*, **17**, 289-299.
- Main, M. & Goldwyn, R. (in press). Predicting rejection of her infant from mothers' representation of her own experiences: a preliminary report. *International Journal of Child Abuse and Neglect*.

- Main, M., Kaplan, N. & Cassidy, J. (1985). Security in infancy, childhood and adulthood: a move to the level of representation. In I. Bretherton & E. Waters (Eds), *Growing points in attachment theory and research. Monographs of the Society for Research in Child Development*, 50 (Serial No. 209), 66–104.
- Mason, W. & Kenney, M. (1974). Redirection of filial attachments in rhesus monkeys: dogs as mother surrogates. *Science*, 183, 1209–1211.
- Matas, L., Arend, R. & Sroufe, L. A. (1978). Continuity of adaptation in the second year. The relationship between quality of attachment and later competent functioning. *Child Development*, 49, 547–556.
- Morris, D. (1980). *Infant attachment and problem solving in the toddler: relations to mother's family history*. Unpublished doctoral dissertation, University of Minnesota.
- Pancake, V. R. (1985). Continuity between mother–infant attachment and ongoing dyadic peer relationships in preschool. *Biennial meeting of the Society for Research in Child Development*, Toronto, April.
- Ricks, M. (1985). The social transmission of parental behavior: attachment across generations. In I. Bretherton & E. Waters (Eds), *Growing points in attachment theory and research. Monographs of Society for Research in Child Development*, 50 (Serial No. 209), 211–227.
- Rosenberg, D. (1984). *The quality and content of preschool fantasy play: correlates in concurrent-personality function and early mother–child attachment relationships*. Unpublished doctoral dissertation, University of Minnesota.
- Sroufe, L. A. (1983). Infant–caregiver attachment and adaptation in the preschool: the roots of competence and maladaptation. In M. Perlmutter (Ed.), *Minnesota Symposium in Child Psychology*, Vol. 16. Hillsdale, New Jersey: Lawrence Erlbaum.
- Sroufe, L. A. (1985). Attachment classification from the perspective of infant–caregiver relationships and infant temperament. *Child Development*, 56, 1–14.
- Sroufe, L. A. (in press). An organizational perspective on the self. In D. Cicchetti & M. Beeghly (Eds), *Transitions from infancy to childhood: the self*. Chicago: University of Chicago Press.
- Sroufe, L. A., Fox, N. & Pancake, V. (1983). Attachment and dependency in developmental perspective. *Child Development*, 54, 1615–1627.
- Sroufe, L. A. & Rutter, M. (1984). The domain of developmental psychopathology. *Child Development*, 55, 17–29.
- Troy, M. & Sroufe, L. A. (unpublished). Victimization among preschoolers: the role of attachment relationship history.
- Waters, E., Wippman, J. & Sroufe, L. A. (1979). Attachment, positive affect, and competence in the peer group: two studies in construct validation. *Child Development*, 50, 821–829.

This document is a scanned copy of a printed document. No warranty is given about the accuracy of the copy. Users should refer to the original published version of the material.