Attachment, Bonding, and Reciprocal Connectedness

Limitations of Attachment Theory in the Juvenile and Family Court

amily and juvenile court judges are asked daily to determine child custody and visitation issues. These are among the most difficult decisions that judges face. They must consider numerous factors: parental competence to rear children, family dynamics, possibly the wishes of the child, and the overriding concern, the "best interest" of the child.1

It is no wonder that many judges turn to mental health experts²—psychiatrists. psychologists, marriage and family therapists, and social workers—for guidance in making these decisions.³ The law permits mental health experts to give opinions on many aspects of a case involving child custody and visitation issues. These include the mental status of family members, which living and visitation arrangements would be in the best interest of the child, and whether a parent-child relationship should be preserved or terminated.4

Several mental health concepts have crept into the legal vocabulary. An informal survey of judges in California revealed that many judges rely on mental health experts to give opinions on whether a parent or other caretaker is "bonded" or "attached" to the child and, conversely, whether the child is "bonded" or "attached" to the parent/caretaker.⁵ Some courts regularly order bonding studies, and attorneys on occasion ask for them to help guide the court's decision on what the future relationship between a child and a parent/caretaker should be. 6 Bonding studies are also used to assist courts in deciding questions regarding (1) permanency planning, (2) foster care, (3) a parent's capacity to form a nurturing relationship, (4) the advisability of continued group-home care, (5) custody disputes between parents or between a parent and other potential caretakers, (6) the termination of parental rights, and (7) other placement decisions.

The purpose of this article is threefold. First, it reviews the history of the clinical concepts of bonding and attachment. It then introduces the concept of reciprocal connectedness along with its forensic and neurodevelopmental rationale. Second, it presents representative examples of different current legal applications of the concepts of bonding and attachment. It discusses the limitations and pitfalls of using these concepts to make child placement determinations and suggests that the concept of reciprocal connectedness takes better account of the child's overall neurodevelopmental and emotional needs. Third, it offers some suggestions for how judicial officers might best use mental health expertise in child custody cases. In particular, it argues that the term "attachment" (as usually conceived) is too narrow to be of much use to the court because it focuses primarily on security-seeking on the part of the child. The article presents "reciprocal connectedness" as more suitable for judicial use because it comprises both the processes of bonding and attachment and the broader spectrum of human interactions necessary for normal brain and social



David E. Arredondo. EMQ Children and Family Services



Hon. Leonard P. Edwards Superior Court of California, County of Santa Clara

The terms "bonding" and "attachment" are used in legal proceedings to describe critical factors considered in child custody matters. The authors believe these terms have outlived much of their usefulness in the setting of juvenile and family courts. Because both terms point primarily to the responses of one person to another, they place insufficient focus on the reciprocity of relationships between persons. That reciprocity, the authors propose, should be the principal area of the court's concern. Furthermore, the categorical nature of attachment relations (as they are currently described) is inadequate to describe the spectrum of human relatedness seen in court. A review of relevant case law reveals that mental health evaluators, attorneys, and courts use the terms Continued on page 110

Continued from page 109

"bonding" and "attachment" loosely and casually. The authors suggest the term "reciprocal connectedness" to denote a construct that describes a spectrum of relationships between children and their caregivers. A summary of the history of attachment theory and a review of recent research in brain development lead to the conclusion that reciprocal connectedness is a broad, accurate, and useful concept. The authors also propose 14 points for consideration to maximize the reliability and usefulness of mental health evaluations in the setting of juvenile and family courts.

The authors wish to thank Judge William Jones, Jonathan Gould, Ph.D., Lyn Farr, L.C.S.W., and Jim Radcliff for their assistance in the writing, editing, and preparation of this manuscript. development. Its use will enable judges to assess more accurately the true condition of parent-child relationships and, thus, to make better decisions.

RATIONALE AND BACKGROUND

It could be reasonably asked why there is a need to introduce a new term (reciprocal connectedness) into the forensic lexicon. The reasons are multiple, but they can be summarized as follows: Attachment and bonding have evolved as concepts that focus on security-seeking (the desire for proximity to a caretaker) to the relative exclusion of other critically important aspects of human relationships in the context of development. The eminent British child psychiatrist Michael Rutter has perhaps stated this most succinctly:

One of the major achievements of the initial attachment concept was the careful distinction between attachment qualities and other features of relationships. Unfortunately, the attractiveness of attachment theory has been rather a neglect of these other features, together with an implicit tendency to discuss relationships as if attachment security was all that mattered. Both Sameroff and Emde and Dunn have drawn attention to the evidence that children's relationships with other people are complex and involve a range of different dimensions and functions. These include connectedness, shared humor, balance of control, intimacy, and shared positive emotions. If we are to understand the interconnections between relationships, it will be necessary for us to take into account the range of dimensions that seem to be involved. It seems unlikely that these will be reducible to a single process involving attachment security or any other postulated quality.⁷

Furthermore, once it is clearly understood that children can, do, and should have relationships with more than one caregiver or sets of caregivers,⁸ "[t]here is a need both to consider dyadic relationships in terms that go beyond attachment concepts, and to consider social systems that extend beyond dyads."⁹

Modern attachment theory addresses the dyadic nature of relationships but excludes the wider system of relatedness in which most children participate. It draws on historical and experimental psychological theory as its basis. Forensic mental health professionals, however, have extended the concept of attachment beyond its scientific and theoretical basis. When testifying about attachment, experts may thus inadvertently give the false impression that their subjective clinical impressions possess scientific validity. For example, the authors have heard experts declare that because a child was bonded to her foster mother, she could not be bonded to her biological mother.

This position assumes that a child bonds exclusively with one adult, that such bonds admit no degrees, and that the existence and intensity of bonds do not change as the child develops. All of these assumptions are dangerously misguided. Consider that, "[a]lthough secure attachments predominate in most general samples, they are far from universal. In American samples, they average about 60%. It would not seem sensible to regard 40% of infants as showing biologically abnormal development." 10 Yet that is exactly what attachment theory would lead a fact-finder to believe. If he or she accepts the testimony of experts on attachment, the fact-finder may decide that the bonding/attachment or lack thereof conclusively determines the quality of the relationship at issue. It is often the case, though, that the expert may have no insight regarding the actual connectedness between the adult and the child and little information on the *quality* of the child's relationship with that adult.

Forensic testimony based on attachment theory may mislead courts in three ways. First, the concept of attachment draws distinctions in black and white, whereas courts often need to decide questions in the gray areas of human rela-

tions. For heuristic purposes, theoreticians and research scientists classify attachments into four or five rigidly defined categories (secure, insecure-avoidant, insecureresistant, ambivalent, or disorganized).11 Though appropriate for research purposes, these categories are insufficiently subtle to describe in a forensic setting the rich and complex spectrum of dimensions of human interrelatedness. Forensic experts need to recognize and openly acknowledge this limitation of their testimony. The full range and complexity of human relationships and the developmentally dynamic context in which they occur do not permit categorization in a manner sufficiently valid to make them useful to juvenile and family court. In a forensic setting, attachment theory is critically limited because it describes attachment in terms of categories instead of more accurately conceptualizing interrelatedness as a *spectrum* of continuously distributed variables. 12 The concept of reciprocal connectedness openly acknowledges the difficulty of categorizing human relationships. Instead, it points to a *spectrum* of relatedness.

Second, attachment theory may mislead courts because it excludes from its scope the attitudes of adult caregivers—and those of most children, too. As applied, the concept of attachment implies a unidirectional process: A child bonds to an adult, with no action, or even awareness, required on the part of the adult. In addition, attachment theory is linked to a research paradigm with very narrow application.13 By contrast, the concept of reciprocal connectedness more sensitively characterizes the child-caregiver relationship. It purposely points out the bidirectional or reciprocal nature of a healthy relationship: Not only does the child connect with the caregiver, the latter acknowledges and actively participates in the relationship with the child. In addition, reciprocal connectedness allows recognition of the multifaceted character of a wide range of child-caregiver relationships.

Third, the concept of attachment is vague. As applied in both research and forensic psychology, the terms "bonding" and "attachment" have multiple meanings that sometimes diverge from their ordinary meanings. When several experts and child protection workers testify in court about attachment, each may use the term to mean something different from the others. This failure to converge on a single meaning can confuse and possibly mislead the court.

The new concept is also more compatible with the current state of developmental neurobiology and modern theories of personality and inborn temperaments. "Reciprocal connectedness" is a more apt term for describing contemporary conclusions about the requirement of two-way interaction for normal child development. Developmental neurobiology has shown the importance of both

reciprocity and connectedness for normal cognitive, emotional, and social development. It offers a method of approaching those issues that is essential for determining the best interest of a developing child. "Reciprocal connectedness" can help to capture and explain these findings for courts. Fortunately, one does not need to be a neuroscientist to understand it.

BONDING AND ATTACHMENT

As suggested above, "bonding" and "attachment" can possess several different meanings depending on context. One strain of meaning emerged with the development of psychological attachment theory in the mid 20th century. The research actually began by looking at human formation of bonds. For example, John Bowlby, the father of attachment theory, has stated: "Ethological theory regards the propensity to make strong emotional bonds to particular individuals as a basic component of human nature, already present in germinal form in the neonate and continuing throughout adult life into old age." 14

Tautologically, "bonding" would be the process of forming bonds. Over the years, the term has come to be used synonymously with "attachment." Thus, Bruce Perry and others describe "bonding" as the "process of forming an attachment." They explain:

The word attachment is used frequently by mental health, child development, and child protection workers but it has a slightly different meaning in these different contexts. . . . In the field of infant development, attachment refers to . . . the special bond that forms in maternal-infant or primary caregiver—infant relationships. . . . In the mental health field, attachment . . . has come to reflect the global capacity to form relationships. ¹⁶

Sometimes child protection workers, foster parents, and group home providers do not differentiate unhealthy dependency or emotional neediness from healthy "attachment." Failure to differentiate a healthy relationship from an unhealthy one is a principal reason that the term "attachment" (as used in practice) is too vague to be useful to a court. Unhealthy dependency and indiscriminate emotional neediness are two examples of situations that practitioners refer to as "attachments" even though they may reflect thwarted or distorted human development (as in the case of exploitative, neglectful, or grossly abusive relationships).

All primates are born with an instinctive desire to form bonds with available adults.¹⁷ This is a feature of their biological makeup and is independent of any characteristic of those adults.¹⁸ That is, bonding is unidirectional; it occurs independent of any special characteristics, behaviors, or efforts of those adults.¹⁹

Human infants and children likewise form attachments (bonds) to adults that can be strongly emotionally charged but are independent of the nature or quality of the care provided by those adults.²⁰ Sometimes these attachments form and are sustained despite the destructive quality of the relationship (as with an abusive parent).²¹ As with other primates, these attachments are essentially unidirectional.²² The biological drive for attachment resides within the child and is not fundamentally determined by the qualities or actions of the adults to whom the child is attached (in the usual and customary sense of the word "attachment").²³ This explains why many children are firmly attached to abusive or neglectful parents.²⁴

RECIPROCAL CONNECTEDNESS

"Reciprocal connectedness" paints a more comprehensive and subtle picture of relationships than do "bonding" and "attachment." In the context of decision making in the family court setting, we can define it as a mutual interrelatedness that is characterized by two-way interaction between a child and an adult caregiver and by the caregiver's sensitivity to the child's developmental needs. The concept is more useful than "attachment" to courts because it describes a child's requirements for healthy neurobiological, social, and emotional development and distinguishes them from simple dependency (securityseeking). It more closely approximates the knowledge necessary for a judge to make decisions about the neurobiological best interest of the child. This neurodevelopmental concept describes a phenomenon that does not reside within the child alone but depends on an available adult who interacts reciprocally with the child.25 Reciprocal connectedness is thus comparable to Bowlby's postulated "cybernetic system, situated within the central nervous system of each partner, which [has] the effect of maintaining proximity or ready accessibility of each partner to the other."26

The difference between this "cybernetic system" and the concept of reciprocal connectedness is that the latter is not limited to the goal of maintaining proximity (security). It encompasses a broader range of childhood needs, including interactive verbal and nonverbal communication, responsiveness, modeling, reciprocal facial expressiveness, social cues, motor development, and other dimensions necessary for normal neurodevelopment. Reciprocally connected adults sense and respond to the individual needs of developing children for responsive neural interaction *in addition to* proximity (security). These bidirectional, interactive dimensions are essential for the normal development of a child's capacities for empathy, compassion, and other higher-level human emotions and social skills.²⁷

THE HISTORY OF BONDING AND ATTACHMENT STUDIES AND THE CONTRIBUTIONS OF MODERN NEUROSCIENCE

Modern bonding studies trace their roots back to a landmark series of studies of "imprinting," "bonding," and "attachment" that began during the 1930s.28 In one of the most famous of these, Konrad Lorenz demonstrated that, during a particular time of early development (a developmental window), young goslings would "imprint" on cortical structures their impressions of his relationship to them and follow him exactly as if he were their mother.²⁹ Lorenz also found these results to be generalizable. The goslings would "imprint" to other animals, including his Labrador retriever, which happened to be present during that specific developmental phase.30 Thus imprinting, a simple form of infant-to-mother bonding, was demonstrated to be an innate and instinctive process with a specific and predictable developmental window for its occurrence.31 It was also an essentially unidirectional

John Bowlby was convinced that disruptions in the mother-child relationship led to psychological problems later in life.³² Another landmark set of studies regarding the fates of British war orphans led him to conclude that infants raised in institutions without stable and continuous relationships with caregiving adults grew up with deficits in cognition, language, attention, and the capacity for durable interpersonal relationships.³³ These findings were incontrovertibly supported by a 30-year follow-up study of 25 children, half of whom were moved to a more nurturing, stable, and interactive environment before the age of 3.³⁴ Ongoing, caring relationships, stimulation, and human interactions were demonstrated to be essential for healthy development.³⁵

A third extremely influential set of studies carried out by Harry F. Harlow involved infant rhesus monkeys.³⁶ In these dramatic studies, Harlow separated infant monkeys from their biological mothers and observed their attachment to inanimate surrogate mothers (wire monkey mannequins), demonstrating quite conclusively that in the absence of a living mother (or living mother surrogate), the infant monkeys would become quite attached to the mannequins.37 In some of the experiments, he attached feeding bottles to some of the mannequins and covered others with terrycloth. Although the infant monkeys would go to the uncovered wire mannequins for feeding, they would return to the terrycloth-covered mannequins to whom they had already become attached. This behavior demonstrated that the monkeys' desire for food was not the determining factor in their attachment to the surrogates. Harlow recognized that it would be extremely important to note what happened to these infant monkeys as they developed, especially in the context of John Bowlby's observations of British war orphans. The findings were similar—both monkeys and humans deprived of adequate mothering grew up to be grossly socially impaired.³⁸ Again, attachment to an inanimate surrogate mother was unidirectional. The monkey-child was psychologically attached to its wire mother without any reciprocity or nurturing interaction at all. The effects of this deprivation on subsequent social development were disastrous.

Mary Ainsworth and others carried out another set of studies of human infants during the 1960s and 1970s that supported and extended the work of Bowlby and Harlow.³⁹ These studies constitute the theoretical and experimental basis for the modern bonding and attachment studies that are most often presented in the context of juvenile and family court litigation.40 These experiments employed variations of a laboratory paradigm known as the Strange Situation Procedure. 41 In brief, a caregiver and her (or his) 12-to-20-month-old child would sit in a sparsely furnished playroom while a stranger entered and then left. Subsequently, the caregiver would leave and reenter. During the various permutations of presence and absence of caregiver and stranger, the researchers would observe the child for signs of distress, attachment, and exploratory behaviors. 42 Infants were eventually classified into secure, insecure-avoidant, and insecure-resistant categories. In highrisk groups, many children were categorized as insecurely attached. Whether a child falls into a particular category is an "either/or" proposition.

It is important to note, however, that under this paradigm 40 to 50 percent of abused and neglected children were classified as securely attached to their maltreating parent.⁴³ This indicates that bonding or attachment studies alone are insufficient to differentiate nurturing and reciprocally involved parents from indifferent, abusive, or uncaring parents. A further limitation in the context of the family court is the attempt by some experts to use attachment theory to reduce the entire spectrum of human relatedness into a limited number of discrete categories. However useful this approach is for research (and it is useful for research), it is of limited value in the context of the juvenile and family court—especially when the myriad of special-needs children and families are taken into account.

RECENT CONTRIBUTIONS OF DEVELOPMENTAL NEUROBIOLOGY

The last 40 years have seen an exponential increase in our understanding of the human brain and the vicissitudes of its development. David Hubel and Torsten Wiesel did some of the most influential work at Harvard during the sixties and seventies. 44 By meticulously mapping the brain

of developing mammals, they demonstrated conclusively that brain development depends heavily on experience and, specifically, that enduring features of the brain depend heavily on early experiences. An example of this phenomenon is the learning of a second language. Before the age of 10, most children can pick up a new language easily. As they grow older, this developmental window gradually begins to close. The window never closes completely, but it becomes more difficult to access the brain's capacity to acquire a new language as the child approaches adulthood. The same holds true for the acquisition of musical, mathematical, verbal, and athletic abilities.

In terms of evolution, the cerebral cortex is the part of the brain that was last to appear and the part that is most quintessentially human. In addition to language and speech (e.g., reading, comprehension, writing), it is home to mathematical abilities. More important to decision makers such as judges, however, is the fact that the cortex is the home of conscience, abstract reasoning, empathy, compassion, moral development, and social skills.

The developing cerebral cortex is exquisitely sensitive to external experiences. In other words, early childhood experiences in interaction with the outside world will, in part, determine the child's subsequent capacities in the higher human faculties. It is the bidirectional interaction (reciprocal connectedness) with a responsive external environment that supports the development of internal brain capacity for higher mental functions such as interpersonal sensitivity, empathy, compassion, and resilience.⁴⁹

DIMENSIONS OF RECIPROCAL CONNECTEDNESS

As discussed above, reciprocal connectedness is a mutual interrelatedness characterized by reciprocity and developmental sensitivity. To assess the health of caregiver-child relationships, the developmental age and particular needs of a child must always be taken into account because developing children have different needs and express their relatedness to caregivers in very different manners. Furthermore, the temperaments of both child and adult must be considered because of the inherent sensitivity of such a relationship. To facilitate accurate assessments of relationship health, reciprocal connectedness is conceptualized as a continuous spectrum of many variables including, but (unlike attachment) not limited to, the child's instinctive search for security and the caregiver's instinct to possess and/or protect.

Dimensions of reciprocal connectedness with younger children include:

- Frequency and quality of eye contact
- Frequency of affectionate touching or soothing

- Spontaneous anticipation of the child's needs or desires
- Empathic response to the needs of the child for attention
- Spontaneous smiling in both directions
- Bilateral initiation of affectionate interactions
- Understanding the child's unique temperament
- Affectionate speech or "cooing"
- Singing, reading, and playing with the child

Dimensions with older children might include:

- Recognition of the child as a unique individual
- Recognition of the particular needs of the developmental stage of the child
- Valuing the child for who he or she is
- Trying to understand the child's world from his or her perspective
- Trying to teach the child
- Trying to learn from the caregiver
- Seeking guidance or comfort from the caregiver
- Sharing positive experiences
- Maintaining a relationship that allows the child some measure of control while setting limits and maintaining boundaries

Of course, all these dimensions must be examined in a context that is familiar with the norms of the familial and larger social culture in which they take place. Put simply, child-caregiver relationships must be considered with sensitivity to cultural and ethnic differences. The connectedness between a truly loving caregiver and child is not based on intellectual understanding and is never forced or contrived. It is easily recognized by anyone who has witnessed a child being lovingly raised.

USES OF BONDING AND ATTACHMENT CONCEPTS IN JUVENILE AND FAMILY COURTS

When faced with decisions involving child custody, lawyers and judges often turn to mental health professionals for assistance. Among the many issues that these professionals address is the quality of the relationship between a parent figure and a child. The quality of the parent-child relationship may determine the nature and extent of the custody or contact that the court will award the parent figure.

The majority of reported cases in which bonding and/or attachment is discussed are in juvenile dependency court. Discussions of bonding/attachment studies can be found when a psychologist testifies to the extent of a child's bond to a parent, a foster parent, or a prospective adoptive parent, and to the potential consequences of placement with or removal from one of these persons. In addition, there are cases in which a different type of professional—a social worker, for example—offers an opinion to the court on whether there is bonding in a relationship. The judge may also state, with or without an explanation, that a parent-child attachment exists.

In some cases, the psychologist or other mental health expert testifies about the significance of bonding/attachment. In a few cases, the legal issue is whether the court erred in ordering or not ordering a bonding study. In others, the court is asked to order a bonding study or the method of conducting the bonding study is under scrutiny. The vast majority of cases involve the court discussing or simply mentioning bonding or attachment with or without explaining what is meant by either term.

CASES INVOLVING PARENT-CHILD RELATIONSHIPS

A series of cases raises the issue whether a parent-child bond or attachment is so significant that, in spite of legal grounds sufficient for termination of parental rights, the court should maintain the parent-child relationship. According to California law, a trial court must terminate parental rights at a permanency planning hearing if it finds that the child is adoptable, unless it also finds one of three exceptions. The most significant of these exceptions is found in section 366.26(c)(1)(A) of the California Welfare and Institutions Code, which states that termination should not take place if the parents have maintained regular visitation and contact with the child and the child would benefit from continuing the parent-child relationship.⁵¹ This exception has been the focus of substantial litigation and appellate case law.

In re Autumn H.

The leading case clarifying the meaning of this section is *In re Autumn H.*⁵² In this case, the trial judge changed the permanent plan for the child from long-term foster care to adoption and terminated the father's parental rights. The court found that the child was adoptable and that terminating the father's parental rights would not be detrimental to the child. The court further found that the father did not have a father-daughter relationship with the child, but only a "friendly visitor" relationship.

Autumn had been removed from her father's care in September 1991 because he was seriously physically abusing her. During the reunification period, her father visited Autumn on a weekly basis. At the 18-month review, the father was not in a position to have Autumn returned to his care. The court chose as a permanent plan to place Autumn in long-term foster care. Six months later, in October 1993, the Department of Social Services requested that the judge change the plan for Autumn to adoption.

The father had visited with Autumn 22 times in 1993. A court-appointed advocate who had observed some of the visits testified that the father's interaction with Autumn was that of a family friend. The social worker agreed, stating that the father had not developed a father-daughter relationship with Autumn. The foster mother testified that the father attended about half of the visits offered, that he did not ask her about Autumn's needs but focused on his own problems, and that he was more a playmate for her. The adoption social worker referred to the father as a "friendly visitor." The father testified that he resisted having Autumn for overnight visits because he saw no reason for them.

The Court of Appeal affirmed the trial court's decision, finding that the trial court had properly interpreted the law. First, it examined section 366.26(c)(1)(A), which permits a trial court to forgo the preferred permanent plan of adoption and retain parental rights when "the parents or guardians have maintained regular visitation and contact with the minor and the minor would benefit from continuing the relationship." The Court of Appeal found that those terms were not unconstitutionally vague: "benefit" within the child dependency scheme means that the relationship promotes the well-being of the child to such a degree as to outweigh the well-being the child would gain in a permanent home with new, adoptive parents. The Court of Appeal observed:

Interaction between natural parent and child will always confer some incidental benefit to the child. The significant attachment from child to parent results from the adult's attention to the child's needs for physical care, nourishment, comfort, affection and stimulation. The relationship arises from day-to-day interaction, companionship, and shared experiences. The exception applies only where the court finds regular visits and contact have continued or developed a significant, positive, emotional attachment from child to parent.⁵⁴

Second, the Court of Appeal found that such an attachment did not exist. It further found that Autumn was "bonded to her foster family" and would suffer if that placement were disrupted.⁵⁵

In re Elizabeth M.

The appellate court in *Autumn H.* set a standard that other California courts have followed. Thus, when deter-

mining whether the parent-child relationship is of such a nature that it prevents the termination of parental rights under the California statute, most often the appellate courts follow an analysis similar to that undertaken in the *Autumn H.* case.

For example, in the case of *In re Elizabeth M.*,⁵⁶ the juvenile court examined the same question at a termination-of-parental-rights hearing. The mother had regularly visited Elizabeth during most of the reunification period except for the last six months. Several professionals testified that, during the visits, the mother did not occupy a parental role; at best, she occupied a pleasant place in Elizabeth's life. The court found that this relationship was insufficient to invoke the statute and permit the court to find that the "child would benefit from continuing the relationship." The Court of Appeal affirmed the order terminating the mother's parental rights.

In re Zachary G.

Another apt example is *In re Zachary G.*⁵⁸ The child had been taken into protective custody at birth because his father had seriously physically abused one of his older siblings. He was placed with his maternal grandmother, and the parents were offered family reunification services. At the six-month review hearing, the mother was homeless and staying with friends. She had an off-and-on relationship with the father, living with him from time to time. The juvenile court continued to offer family reunification services. At the 12-month review, the social worker's report said that the mother was not attending therapy regularly, that her relationship with the father continued, and that a psychologist opined that the mother was unlikely to protect her children. The court terminated services and ordered a permanency planning hearing pursuant to section 366.26.⁵⁹

Just prior to the hearing, the mother filed a petition to modify the juvenile court order terminating her reunification services with Zachary. She alleged in her petition that she had changed her life, that she had been visiting the child regularly, that she had had weekly in-home services for a newborn sibling, and that she had engaged in biweekly therapy sessions. A therapist's report indicated that the mother had shown no inclination to return to the child's father and was capable of caring for and safeguarding the child. The social worker's assessment report indicated that the mother and Zachary enjoyed regular visits, but that Zachary did not look to his mother for his needs. Instead, he turned to the foster parents for his needs 90 percent of the time during supervised visits. The social worker recommended termination of parental rights and adoption.

At the hearing on the petition to modify, the mother filed additional evidence in the form of a bonding study performed by a psychologist, Dr. Jesse, a few days before the hearing. According to that study, Dr. Jesse had observed the mother's interaction with Zachary during a single office visit and approved of it. She also opined that Zachary showed a psychological bond selective for his mother because of his reactions upon being separated from her. When the mother left the room where the meeting was taking place, Zachary cried and did not seek comfort from the caretaker grandfather. He had no similar reaction when the caretaker left while the mother stayed in the room.

The court denied the motion to modify and terminated parental rights; the mother appealed. The appellate court affirmed the trial court's findings and orders, stating that there was no showing in the motion to modify that the change in plan would have benefited Zachary or that his best interest would have been served. The appellate court did not comment on the procedures followed by Dr. Jesse in conducting the "bonding study" or the weight that should have been given to them.

Cases in Other States

In other states, trial and appellate courts have faced similar issues involving the parent-child relationship. In *O.R. v. State*, ⁶² the Alaska trial court terminated parental rights based upon parental abandonment. The social worker's testimony was that the child did not have "any attachment [to her parents] other than [as] someone she comes to visit." An expert witness concluded that lack of contact during the first nine months of the child's life "had destroyed the parent-child bond." On appeal, the Alaska Supreme Court affirmed the trial court's decision and agreed with the finding that the parents' lack of contact with the child during the first nine months of the child's life had destroyed the parent-child bond. ⁶⁵

In the Maine case of *In re Peter M.*, ⁶⁶ the trial court terminated the parental rights of the mother, finding that she had been unwilling to take responsibility for her son in a timely fashion and that termination was in the best interest of the child. In affirming the trial court, the Supreme Court of Maine indicated that, in determining whether termination was in the best interest of the child, the trial court should consider "the child's age, the child's attachment to relevant persons, periods of attachment and separation, the child's ability to integrate back into the parent's home and the physical and emotional needs of the child." Examining these criteria, the Supreme Court found that the termination was proper because the child had a strong attachment to the caretaker and virtually no contact with his mother.

In the Nebraska case of *In re D.*, 68 the court terminated the parents' rights with regard to D., finding that the parents were not interested in maintaining contact with their child and not interested in rehabilitative programs

offered by the welfare department. Noting that the child had developed a sound, affectionate relationship with his foster parents and only minimal emotional attachment to his parents, the Supreme Court found that termination of parental rights was in the best interest of the child.

In *In re Mr. & Mrs. J.M.P.*, 69 the mother surrendered her child for private adoption. She was assisted by the same attorney who arranged for the adoption with the adopting parents. She appealed her surrender, and the Supreme Court of Louisiana reversed and remanded the case to the trial court. The Supreme Court did not find that the surrender was improper because of the attorney's dual representation; instead it addressed child development considerations, instructing the trial court to consider the psychological relationship between the child and parent or parent figure, stating: "The court should prefer a psychological parent over any claimant (including a natural parent) who, from the child's perspective, is not a psychological parent." 70

In summary, the court rulings in these cases appear to focus on child development principles as a basis for their decisions. While the terms "bonding" and "attachment" are used throughout the decisions, it appears that the courts are using them in their unidirectional sense. That is, the courts are focusing on the child's relationship to a parent and not on the relationship or reciprocal connection between them. In addition, courts seem to use these terms in an all-or-nothing manner—either the child is bonded or attached or the child is not. They do not acknowledge the spectrum of intensity in relationships. From a neurodevelopmental point of view, the courts' use of these terms is imprecise.

CASES INVOLVING FOSTER PARENT-CHILD RELATIONSHIPS

In proceedings for termination of parental rights, some courts have found that the relationship between the foster or adoptive parent and the child is critical to determining the best interest of the child and whether the child should be removed from the foster or adoptive parents.

In re Colby E.

In *In re Colby E.,*⁷¹ the trial court terminated parental rights even though the parent was not found to have committed any wrongdoing. The child had been in the same foster home for over 40 months, since he was 19 months old. The evidence supported the conclusion that the child would be in jeopardy if removed from the foster home. The Supreme Court affirmed, finding that if removed from the stable foster home environment, the child "would likely suffer severe emotional trauma and be inhibited in his ability to form personal attachments in the future."

In re Guardianship of J.C.

In this case, 73 the trial court terminated the parents' rights because of its finding that the children would be harmed by removal from the foster parent. The trial court had heard extensive psychological testimony concerning the children's bond to their foster parents. The evidence was contradictory, and on appeal the New Jersey Supreme Court reversed, finding that the evidence did not support the statutory and constitutional standards that govern the termination of parental rights. The Supreme Court remanded the case to the trial court so that it could determine whether the children had bonded to the foster parents and, if so, whether breaking such bonds would cause the children serious psychological or emotional harm.

In re J.L.D.

In *In re J.L.D.*,⁷⁴ the trial court terminated parental rights and the incarcerated father appealed. The North Dakota Supreme Court affirmed, noting that the child had developed "strong emotional attachments with his foster family,"⁷⁵ and that adoption would provide the child with an opportunity to live a normal life in which love and care were provided on a consistent basis. The court noted that continuing foster care indefinitely would only solidify and magnify his attachments to the foster family, making his eventual dislocation more traumatic and placing his later assimilation into a permanent home at greater risk.⁷⁶ The Supreme Court concluded that the child would probably suffer serious mental or emotional harm if parental rights were not terminated.

In re Blunk

In the case of *In re Blunk*,77 the parental rights of the mother of seven children were terminated because of abandonment and failure to provide and because the children had been placed in foster and adoptive homes for two years and had developed attachment and love in those homes. The mother asserted that she had reformed, but the trial court found that that was insufficient given the children's current situation. The Supreme Court of Nebraska affirmed the trial court, indicating that the children's attachment to the adoptive home was sufficient to support the termination of parental rights, stating: "[I]t would be unconscionable to wrench these three children away from their adoptive parents and the other four from the Nebraska Children's Home Society during their impressionable years and restore them to their mother upon the mere representation that she had reformed."78

In re J.K.S.

In *In re J.K.S.*,⁷⁹ the trial court terminated parental rights and authorized adoption by the caretaking family. In

proving a portion of its case, the State established that removing the child from the foster parents would result in serious physical, mental, moral, or emotional harm. The Supreme Court affirmed, noting:

There was overwhelming evidence that J.K.S. has established strong bonding and attachments to her foster parents and foster brother with whom she has resided for the past five years. ... [E]ven a gradual change from the foster home to G.S.T.'s home would be emotionally traumatic to J.K.S. and there would be a very significant risk of permanent emotional damage if J.K.S. were removed from her foster home. That testimony clearly supports the conclusion that J.K.S. would be harmed by the lack of bonding or emotional attachment in G.S.T.'s home.⁸⁰

In re William L.

In the case of *In re William L.*,⁸¹ the trial court terminated the parental rights of one mother to her three sons and another mother to her daughter. Both mothers appealed. In the former case, the mother's inability to raise her sons and long periods of separation from them formed the basis for the termination. In affirming the decision, the Supreme Court pointed out that a biological parent's claim can be weakened by long separation, "causing the parent's relationship with the child to dwindle, while the child develops other, more stable ties." ⁸² Citing authority, the court stated:

[A] child will become strongly attached to those "who stand in parental relationship to it and who have tenderly cared for it. Its bonds of affection [may] have become so strong that to sunder them suddenly may result not only in the child's unhappiness, but also in its physical injury. ... Nothing could be crueler than the forcible separation of a child from either its real or foster parents by whom it has been lovingly cared for and to whom it is bound by strong ties of affection.⁸³

In re Baby Boy Smith

In *In re Baby Boy Smith*,⁸⁴ the baby's mother moved to annul her surrender of parental rights. The trial judge denied her motion, finding in part that the child's best interest would be served if he were to remain with the prospective adoptive parents. The testimony at trial included that of Dr. Jepson, who explained that the bonding process occurs during the first six to eight months of life and "lays the groundwork for all future interpersonal relationships," and that disruption of that process will interfere with interpersonal relationships later in life. Dr. Jepson further testified that he had observed the child with the prospective adoptive mother and that the child had fully bonded with her. Dr. A. James Klein testified further about the bonding process, stating that removal of

the child from the prospective adoptive parents could have catastrophic consequences affecting every aspect of the child's functioning.⁸⁷ The Louisiana Supreme Court affirmed the trial court's decision, citing an early decision in which the court said: "[I]f the adoptive parents are fit, and the child has formed a psychological attachment to one or both of them, the adoptive parents should be preferred so as to avoid the grave risk of mental and emotional harm to the child which would result from a change in custody."⁸⁸

In re Ashley A.

In the case of *In re Ashley A.*, ⁸⁰ the trial court terminated the rights of both parents regarding Ashley and the mother's rights regarding half-siblings. The parents appealed the decision and the Supreme Court of Maine affirmed. The Supreme Court analyzed the statute and found that the best interest of the child "may be determined by considering such factors as the needs of the child, attachment to relevant persons, periods of attachment and separation, ability to integrate into substitute placement or back into parent's home, and the child's physical and emotional needs." ⁹⁰

These cases involving the relationship of foster parents to children reflect a judicial consensus on a number of issues:

- 1. Parental absence can reduce any bond/attachment between that parent and the child.
- 2. Children can become bonded/attached to foster parents.
- Children suffer emotional harm by removal from homes in which such bonding/attachment has developed.
- Removal in some cases can lead to lifelong problems, including the inability to form attachments with others in the future.
- Reciprocal connectedness is tacitly relevant in determining whether termination of parental rights is appropriate.

As in the parent-child relationship cases discussed above, these courts stress child development consequences in their decisions. They, too, refer to "bonding" and "attachment" as unidirectional concepts, focusing on the child's relation to the caregiver and not on the caregiver's relation (connectedness) to the child. The use of such imprecise language has led to decisions in which important questions about the quality of the relationship between the caretaker and the child have gone unanswered.

PSYCHOLOGICAL/DE FACTO PARENT

The term "psychological parent" first came to prominence in Goldstein, Freud, and Solnit's landmark publication, Beyond the Best Interests of the Child. Perhaps no book has had a greater impact on judicial decision making in child custody cases. In the book, the authors focus on child development and its implications within the court system, defining several terms that have become important in child custody litigation. They make a distinction between biological and psychological parents: the former is the parent who biologically produced the child, and the status of the latter is developed through "day-to-day attention to [the child's] needs for physical care, nourishment, comfort, affection, and stimulation." Of course, the same person can be both the biological and psychological parent, but in some situations the biological parent can be a stranger to the child and a different person can be the psychological parent.

The authors explain the psychological complexities of the parent-child relationship. If the parent figure provides care only for the child's bodily needs, the child may remain involved in his own body "and not take an alert interest in his surroundings." When, however, the adult becomes personally and emotionally involved with the child, interaction between the two will occur, focusing the child's attention on the human object and the outside world. These first attachments form the basis for further relationships that meet the child's demands for affection, companionship, and stimulating intimacy. When someone can respond to these needs reliably and regularly, the child-adult relationship can develop and provide a strong basis for emotional, social, and intellectual development.

The authors point out that the parent-child relationship can be very complex: "Children may also be deeply attached to parents with impoverished or unstable personalities." Such relationships may be a threat to the healthy development of the child. Indeed, children may have emotional ties to the "worst" of parents. The authors note that, in extreme cases, state intervention may be necessary. Yet, if there is interference with the child–psychological parent relationship, however unhealthy that relationship may be, it will be emotionally painful for the child. 96

The concept of psychological/de facto parent developed by Goldstein, Freud, and Solnit has been applied by a number of courts in different types of child custody litigation, including the *Autumn H.* case.⁹⁷ It was first recognized in California in the case of *In re B.G.*⁹⁸ In that case, the mother sought to regain custody of her children, who had been placed with foster parents after their father had died. The trial court would not permit the caretaking foster parents to participate in the legal proceedings to determine custody. The California Supreme Court acknowledged that the foster parents had legal standing to appear as parties in the proceeding. In making its finding,

the California Supreme Court cited *Beyond the Best Interests of the Child* and observed that biological parenthood

is not an essential condition; a person who assumes the role of parent, raising the child in his own home, may in time acquire an interest in the 'companionship, care, custody and management' of that child. ... We conclude that de facto parents, such as the foster parents in this case, should be permitted to appear as parties in juvenile court proceedings. ¹⁰⁰

Other appellate courts have applied the concept.¹⁰¹ The California Legislature codified it in 1969, 102 and juvenile courts adopted it in their rules. 103 In juvenile dependency proceedings, the de facto parent has become an important part of the legal process. Substantial case law defines who may be a de facto parent and what is the appropriate level of participation in the legal proceedings by that parent. The leading case on this issue is In re Kieshia E., 104 in which the stepfather who had been found to have sexually abused the minor asked to have the status of de facto parent. He claimed that he had a close bond with the child despite the sexual abuse. An expert witness testified that the sexual molestation might or might not damage the child or destroy the bond, and that while the victim and perpetrator should be separated until the perpetrator stabilized in therapy, the ultimate goal should be reunification. The trial court agreed with his position. On appeal the California Supreme Court reversed the de facto parent finding, stating that any adult who causes the onset of dependency proceedings by sexual or other serious physical abuse has betrayed and abandoned, not embraced, the role of parent. That person lacks the inherent rights of a parent and forfeits any opportunity to attain the legal status of de facto parent.105

EXPERT TESTIMONY

In many cases in which the court is asked to make custody decisions, private or court-appointed experts write reports or testify on the child's best interest. An expert witness is one who has specialized knowledge, experience, or training that can assist the trier of fact. Often experts are asked to give opinions about the parent-child or caretaker-child relationship. On occasion, they will refer to bonding and/or attachment or the lack thereof as the basis for their opinions.

One reported case from Illinois stands out as an example of the different developmental theories a court might encounter in deciding whether to terminate parental rights. In *In the Interest of R.B.W.*, ¹⁰⁶ the state brought an action to terminate a mother's rights over her child. The trial court denied the action and directed that the child be returned to her mother. On appeal the appellate court

reversed the trial court's decision and held that the mother had deserted her child when she sold him and that the trial court should have considered termination of parental rights and adoption.

The appellate court reviewed the extensive expert testimony at trial. Judith Ingram, an adoption specialist, testified about mother-child visitation and her observations of the child with the foster parents. She stated she believed that the child had bonded to the foster parents in that

R.B.W. gives them preference over anyone else in a group and he calls them mommy and daddy. These are the people to whom R.B.W. shows his insecurities. These are the people he chooses to help him when he falters or when he is hurt. These are the primary people he performs for in the park and from whom he needs recognition. He has an obvious preference for them. He is very comfortable and happy in their presence. ¹⁰⁷

Ingram testified that she saw none of these things in the relationship between the child and his natural mother. 108

After several experts had testified, Sue Moriearty, a clinical psychologist, testified as an expert in the field of psychology for the purpose of evaluating the testimony and reports previously presented to the court. In addition, she conducted a literature review and interviewed others regarding attachment issues. She gave extensive testimony, quoted in part by the appellate court, stating that children or infants in institutional settings or who experience multiple homes with too many caregivers have difficulties in bonding. Furthermore, she said, children with exposure to too few caregivers may have difficulty adapting to school or other environments when their primary caretaker is absent. In her report, she quoted Mary D.S. Ainsworth, calling her "one of the pioneers in attachment research":

It is usual for an infant to form more than one attachment even in the first years of life. . . . [T]he evidence does not necessarily suggest that it is essential or even optimal for mother and child to form an exclusive dyad. Indeed, a spreading of attachment relationships over several figures may be healthy and may, under some circumstances, prove to be highly adaptive. In one sense, "multiple" mothering is an insurance against separation disturbance. 109

The report also reviewed psychological literature on infant attachment and psychopathology, addressing the concept of infant temperamental variables as a predictor of attachment behavior. It concluded that, based upon the child's ability to form attachments even after two separations, the child's temperament indicated his ability to form other attachments. The report recommended that the child be given the opportunity to develop a relationship with his natural mother while remaining with his current

caregiver. Following the recommendations of the report, the trial court denied the petition to terminate parental rights. On review, the Illinois Court of Appeal reversed the trial court and, focusing instead on timely permanency for the child, ordered that court to consider out-of-home placement and adoption by the foster parents.¹¹⁰

In summary, reciprocity of connectedness, the possible desirability of multiple caregivers, and the influence of temperament on relationship formation are significant developmental considerations that properly interest courts and that mental health professionals and expert witnesses should take into consideration.

REQUESTS FOR BONDING STUDIES

Because the parent-child relationship can be critical to determining whether a court will terminate parental rights, some parties in the juvenile dependency process have asked for "bonding studies," expert mental health evaluations addressing that relationship. For example, in the case of In re Lorenzo C., 111 the juvenile court had commenced a permanency planning hearing at which the court was going to determine whether to terminate the parent's rights over the child. The parent asked the court to order a bonding study so that the court could better decide whether the parent-child relationship was so strong that termination of rights should not be ordered. The court denied the motion, stating that once the court has determined that a child is adoptable, it is the burden of the parent to prove that termination of parental rights should not take place by demonstrating a parent-child relationship worthy of preservation. The Court of Appeal affirmed the trial court's denial of the mother's motion for a bonding study, finding that the request was untimely and unnecessary given the clear evidence of the child's bond to the foster parents.

Similarly, in the case of *In re Richard C.*, ¹¹² just prior to the termination of parental rights trial, the mother made an oral motion for a bonding study with an experienced psychologist and offered to pay for the study. The children's counsel opposed the motion, saying that it would be cruel to put the children through psychological testing and a bonding study involving interviews with a stranger. The court denied the motion, finding that the children were bonded to their current foster parents. Later in the proceedings, the mother filed a written motion for a bonding study. Again the court denied the motion, noting that at such a late stage in the proceedings there was no right to develop evidence on the issue.

Some courts regularly ask for expert mental health input at the time when termination of parental rights or another permanent plan is going to be considered. The expert can be asked to give an opinion on the relationship between the child and the parent, the child and the potential caretaker, and/or the mental status of one of the parties. Such information can be useful, particularly if both the expert and the questions to be answered are carefully selected.

EVALUATING MENTAL HEALTH EXPERT TESTIMONY

The court may decide to order a psychological evaluation or may, in the context of the hearing, receive expert mental health evidence. When courts consider mental health studies concerning parent-child relationships as evidence, they should understand the inherent difficulties faced by the evaluator. Many of these difficulties arise from three sources and should never be minimized or trivialized.

First, there are legitimate questions regarding the idea that there is, a priori, a single set of psychological or de facto parents. Current thinking indicates that gradations in attachment and connectedness exist. De facto parenthood in some cases may not be a dichotomous variable—that is, the question of de facto parents is not a question that can always be answered yes or no.¹¹³ There is commonly a spectrum of psychological relatedness not easily articulated in either legal or psychological terms.

Second, a clear distinction must be made between "emotional pain" and "permanent emotional damage." Both "pain" and "damage" are loaded words when they are applied to a child. There is much potential here for rhetoric to displace reason in an emotion-laden context. No one wants to think of a child being hurt, much less "permanently damaged." It is here that an experienced, highly trained, and unbiased mental health expert can be of the most use to the court. The judge should ask specifically if a particular decision will cause permanent emotional damage or (relatively) temporary emotional pain to a child. This question should be followed by a thorough inquiry into how the expert came to his or her opinion. The expert should also be queried about his or her opinion of "hurt versus harm" in every scenario that the court must consider. When possible, both a short and a long view should be considered for each scenario.

Third, while it is quite possible (even likely) that the child is connected to more than one set of caregivers, it is not unusual for young children, when prompted, to call different sets of caregivers "mommy" or "daddy" at different times. Young children have not developed the dualistic "either/or" thinking that characterizes the older child. Sometimes a child's stated preference hinges on the last set of experiences he had with a given caretaker or on fears based on a misunderstanding of adult concepts.¹¹⁴ It is important not to project adult thinking patterns onto

children, who have a very different set of cognitive abilities and may be operating from cognitive constructs based on childhood distortions. The importance of evaluating the child in a developmental context is critical.

While keeping these concepts in mind, a judge should ask a series of practical questions when evaluating a mental health report: 116

1. What qualifications and experience does the expert have?

There are differences in the expertise of a psychologist, a psychiatrist, a social worker, and a marriage, family, and child counselor. For example, only a psychologist can conduct certain tests, and only a psychiatrist can evaluate psychotropic medications. The professional's education and training, licensing and certification, professional work history, publications, status in the profession, and experience, including testimony in prior court cases, will indicate the weight that the court may wish to give to his or her opinions.

Related to this question is whether the expert is familiar with any of the professional standards that have been developed for child custody evaluations. These standards include the Practice Parameters for *Child Custody Evaluations*, by the American Academy of Child and Adolescent Psychiatry;117 Guidelines for Child Custody Evaluations in Divorce Proceedings, by the American Psychological Association;118 A Report of the Task Force on Clinical Assessment in Child Custody. by the American Psychiatric Association; 119 Model Standards of Practice for Child Custody Evaluations, by the Association of Family and Conciliation Courts;120 and Specialty Guideline for Forensic Psychologists, by the Committee on Ethical Guidelines for Forensic Psychologists. 121 These standards recommend best practices in child custody evaluations in both juvenile and family court settings and, if followed, will lead to a higher quality of report in the courtroom.

2. What background information was reviewed, and when was it reviewed?

The expert must provide the court with a list of all reports and documentation he or she reviewed as well as when the expert reviewed them.

3. Which family members did the expert interview or see, and in what combinations?

The mental health expert should have face-to-face interviews with all relevant family members. The expert should inform the court about how he or she decided which family members to interview. The court should also be told which family members were not interviewed and why.

In addition, the expert should tell the court which interpersonal interactions he or she observed and in what settings these observations took place. It is critical to observe adult-child interactions when making evaluations of reciprocal connectedness. Ideally, there should be observations in natural (as opposed to office) settings.

4. What language was used during the evaluation interviews? Was the evaluation conducted in an ethnically sensitive manner?

The court must know what language the child and parents use between themselves and what language was used during any observations and interviews. If the adult-child or expert–family member communications were in a different language, the court should know what accommodations were made to ensure an accurate transfer of information. The court should be told what allowances were made for ethnic and cultural differences between the expert and those evaluated.

5. How many sessions were there, how long was each session, and where did the sessions take place?

Evaluating a person or a relationship takes time. Some time is necessary to develop a relationship with the subject. Taking this time is particularly important with a child, for whom several sessions may be necessary. Again, it is preferable to make observations in a natural, as opposed to an office, setting.

6. How did the expert gather information?

Did the expert make observations of interactions? Were individual temperaments considered (e.g., some children and adults are much more introverted than others)? Did the parties know that the expert was present? Did they know that the observations might be used in court? What questions were asked of whom? Were they age/language/culturally/developmentally appropriate? Did the expert utilize psychological tests? What tests were administered and why were they chosen? Who administered the tests? Who interpreted them? How reliable are they? How subjective is their interpretation? Could they have been interpreted differently?¹²²

7. What tools did the expert use?

Toys, sand trays, drawings, dolls, and other tools are often used in child interviews. Understanding which tools were used, what training the expert had in utilizing them, and the interpretations that can be drawn from them are all important for the court to know. Additionally, the court should inquire about the subjectivity of the interpretations. For example, intelligence testing

is usually considerably less subjective than projective tests such as the Rorschach.

8. What were the questions asked of the expert, who asked them, and how were the conclusions and recommendations reached? Are the conclusions admissible as evidence?

The court should know what questions the mental health expert was asked and the process by which the expert reached any conclusions or recommendations. Often the expert will answer questions that have not been asked or will misunderstand the questions and answer them differently from the way in which they were posed. If the court was responsible for approving the questions to be addressed, it is in an excellent position to review these issues with the expert.¹²³

In this regard, the practice in Charlotte, North Carolina (Mecklenburg County), is exemplary.¹²⁴ In that jurisdiction, the questions to be addressed by the mental health expert are written at a case conference that includes the judge, the attorneys, and the mental health expert. By writing the questions before the evaluation starts, the evaluator can focus on narrowly defined questions that all parties agree are critical to the custody determination.

In addition, the court should be certain to determine the basis for any expert opinions. In a number of areas, courts must be careful about the conclusions reached by experts based upon certain observed behaviors. For example, a child's play with anatomically correct dolls and a child's disclosure of or failure to disclose sexual abuse¹²⁵ may not be admissible as evidence that the child was sexually abused. ¹²⁶

9. What were the subject's responses to the interview(s)?

It is important for the expert to inform the court about the quality of any interview. Was the subject comfortable? Was the expert able to develop any rapport with the subject? This is particularly important when interviewing a child. In this context the court should inquire whether the expert believes that the evaluation was adequate to answer fully the questions posed.

The court should not assume that the expert is satisfied that the evaluation is thorough enough to be conclusive.

10. What child development concepts did the expert rely upon to form the basis of his/her opinions?

The "best interest of the child" implies attention to what is the best result for the child from the child's perspective. This necessarily involves attention to child development principles. The court should determine which principles the expert relied upon, how they affected the way in which the evaluation was conducted, and how the developmental stage of the child influenced any conclusions drawn from the interactions. This would include an opinion about the weight given to the desires expressed by the child. In addition, any impact of differences or similarities of temperament should be considered.

11. Were the expert's opinions consistent with the child's interest?

It must never be forgotten that the purpose of an expert's opinion is to offer to the court a plan to meet the best interest of the *child*.

12. Have the child's relationships with his or her siblings been examined?

Adults who tend to see the best interest of the child from their own perspective sometimes overlook the importance of sibling relationships in both the short and long term.

13. Who hired the expert? To whom is the expert responsible?

It is always relevant to determine who hired the expert and who is paying the expert.¹²⁷ It is preferable for any mental health expert who appears in juvenile court to be hired and paid for by the court.¹²⁸

14. Is the expert also involved with the child or parent as a therapist?

Therapeutic and forensic roles are fundamentally incompatible. 129

By being conscious of these questions and considerations, the court will be able to assess more accurately the weight that should be given to any expert opinion.

CONCLUSION

However useful they may be for research purposes, the terms "bonding" and "attachment" are of limited use in the juvenile and family court. There are several reasons for this:

- They are terms that are used loosely and with different meanings by different mental-health-care professionals, attorneys, experts, and judges.
- Attachment theory divides child and caregiver relationships into a limited number of types, which suggests that they are categorical variables. Furthermore, these types are generally treated as "either/or" propositions.
- 3. They do not explicitly address the issue of different child and caregiver temperaments.

- 4. The concept of attachment does not differentiate pathological dependency and emotional neediness from developmentally healthy human relatedness. In the authors' experience, this has led to situations detrimental to children. In particular, children have remained in group-home settings longer than necessary or desirable because the counselors mistook their dependence (and hence compliance) for developmental progress. Other situations have arisen in which counselors have mistaken a child's dependence on neglectful, exploitative, or abusive caretakers for "attachment" and weighted it inordinately in custody or visitation decisions. Some of these placement decisions never appear in court for judicial review and thus never appear in case reporters. It is therefore important that other decision makers, including social workers, probation officers, counselors, and placement workers, are aware of the dangers of relying upon "attachment" in making placement decisions.
- The terms "bonding" and "attachment" refer primarily to the security- or proximity-seeking aspects of a child's relationship to a caregiver. They disregard other important developmental needs.

Reciprocal connectedness is a broader concept, including, but not limited to, security needs. By definition, it refers to a spectrum of interrelatedness that is inherently tied to the developmental stage of the child. It focuses the court on the reciprocity of relatedness that contemporary neurobiology shows us is so critical for healthy child development. Reciprocal connectedness exists as a *spectrum* of interrelatedness and is too broad a concept to be reduced to a limited number of categories. Hence, it more closely approximates the issues that are important to the court: Are the child's neurodevelopmental and emotional needs for reciprocal interactivity being met?

A child bonds or attaches *to* a caregiver. A child reciprocally connects *with* a caregiver. The question then becomes not only "To whom is this child attached?" but also "With whom is this child connected?"

Judges and attorneys need to approach all concepts referring to human relatedness with caution. Terms are not well defined in either statutory or case law, and their use in any case raises a number of questions. The cases reviewed in this article demonstrate that "bonding" and "attachment" are terms used loosely by attorneys, experts, and judges. They are not necessarily of positive valence when they refer to parent-child relationships. Although all language is subject to distortion of meaning, we believe that reciprocal connectedness is a more useful concept for courts to consider when making decisions concerning children and their parents or other caretakers. It affirms

the bidirectional nature of relationships between children and caretakers and emphasizes the spectrum of the intensity of those relationships instead of reducing them to the all-or-nothing categories implied by attachment and bonding.

Whether a court should turn to mental health expertise to assist it in making custody decisions is an issue to be addressed on a case-by-case basis. Courts should consider ordering adult-child reciprocal connectedness evaluations only in circumstances where it appears to be necessary. If the parents have visited regularly and appear to have a positive and reciprocal relationship with the child, it may be appropriate to order such a study prior to a hearing to terminate parental rights in order to determine the qualities of those relationships. Whenever an expert opinion is offered, it is hoped that addressing the issues and questions presented in this paper will assist the court in determining the weight to be given to that opinion.

- 1. The focus of a child custody evaluation is "to assess the individual and family factors that affect the psychological 'best interests' of the child." American Psychological Ass'n, *Guidelines for Child Custody Evaluations in Divorce Proceedings*, 49 Am. PSYCHOL. 677 (1994).
- 2. "If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may otherwise testify thereto in the form of an opinion or otherwise." FED. R. EVID. 702.
- In California, a "person is qualified to testify as an expert if he has special knowledge, skill, experience, training, or education sufficient to qualify him as an expert on the subject to which his testimony relates." CAL. EVID. CODE § 720(a) (West 1995).
- 3. Stephen P. Herman, *Child Custody Evaluations and the Need for Standards of Care and Peer Review,* 1 J. Center For Children & Cts. 145 (1999).
- 4. See, e.g., In re Alexander K., 18 Cal. Rptr. 2d 22, 24–25 (Cal. Ct. App. 1993); see also George J. Alexander, The State's Use of Mental Health Experts in Dependency Cases, 24 PAC. L.J. 1465–83 (1993); Veronica Serrato, Note, Expert Testimony in Child Abuse Prosecutions: A Spectrum of Uses, 68 B.U. L. Rev. 166 (1988).
- 5. In the survey, both authors discussed mental health evaluations with a selection of California's juvenile court judges during 1998 and 1999.

NOTES

- NOTES 6. John C. Stokes & Linda J. Strothman, *The Use of Bonding Studies in Child Welfare Permanency Planning*, 13 Child & Adolescent Soc. Work J. 347–68 (Aug. 1996).
 - 7. Michael Rutter, Clinical Implications of Attachment Concepts: Retrospect and Prospect, in Attachment and Psychopathology 26 (Leslie Atkinson & Kenneth J. Zucker eds., Guilford Press 1997) (citing Judy Dunn, Young Children's Close Relationships: Beyond Attachment (Sage Publications 1993); Relationship Disturbances in Early Childhood: A Developmental Approach (Arnold J. Sameroff & Robert N. Emde eds., Basic Books 1989)).
 - 8. Especially as children get older, it is to their social and neurodevelopmental benefit to interact with more than one person.
 - 9. Rutter, supra note 7, at 25.
 - 10. *Id.* at 29 (citing Joseph J. Campos et al., *Socioemotional Development*, *in* 2 HANDBOOK OF CHILD PSYCHOLOGY: INFANCY AND DEVELOPMENTAL PSYCHOBIOLOGY 783–915 (Marshall M. Haith & Joseph J. Campos eds., Wiley 4th ed. 1983)).
 - 11. Mary D.S. Ainsworth & B.A. Wittig, Attachment and Exploratory Behaviour of One-Year-Olds in a Strange Situation, in 4 Determinants of Infant Behaviour 113–36 (Methuen 1965); Mary Main, Cross-Cultural Studies of Attachment Organization: Recent Studies, Changing Methodologies, and the Concept of Conditional Strategies, 33 Human Development 48–61 (1990); Judith Solomon & Carol George, The Measurement of Attachment Security in Infancy and Childhood, in Handbook of Attachment: Theory, Research, and Clinical Applications 287–316 (Jude Cassidy & Phillip R. Shaver eds., Guilford Publications 1999).
 - 12. Frank J. Dyer, Psychological Consultation in Parental Rights Cases 178 (Guilford Publications 1999).
 - 13. Indeed, the procedure is invalid when applied to children outside the age range of 12 to 20 months. *See infra* notes 39–42 and accompanying text.
 - 14. JOHN BOWLBY, A SECURE BASE: PARENT-CHILD ATTACHMENT AND HEALTHY HUMAN DEVELOPMENT 162 (Basic Books 1988).
 - 15. Bruce D. Perry, Bonding and Attachment in Maltreated Children: Consequences of Emotional Neglect in Childhood, 4 CHILD TRAUMA ACAD. PARENT & CAREGIVER EDUC. SERIES 1–10, at www.bcm.tmc.edu/cta/attach_ca.htm (Oct. 1999) (adapted in part from Bruce D. Perry, Maltreated Children: Experience, Brain Development and the Next Generation (W.W. Norton & Co. forthcoming 2000)).

- 16. Id.
- 17. Stephen J. Suomi, *Attachment in Rhesus Monkeys, in* HANDBOOK OF ATTACHMENT, *supra* note 11, at 181–97 (citing John Bowlby, *The Nature of the Child's Tie to His Mother*, 39 INT'L J. PSYCHO-ANALYSIS 124 (1958)).
- 18. *Id.* at 181–97 (citing Harry F. Harlow et al., *The Maternal Affectional System of Rhesus Monkeys, in* MATERNAL BEHAVIOR IN MAMMALS 254–81 (Harriet L. Rheingold ed., Wiley 1963)); Harry F. Harlow & M.K. Harlow, *The Affectional Systems, in* 2 BEHAVIOR OF NONHUMAN PRIMATES 287–334 (Academic Press 1965).
- 19. Jude Cassidy, *The Nature of the Child's Ties, in* HANDBOOK OF ATTACHMENT, *supra* note 11, at 12.
- 20. Rutter, supra note 7, at 21.
- 21. Id. at 29.
- 22. Id. at 21.
- 23. Cassidy, supra note 19, at 12.
- 24. Charles H. Zeanah & Robert N. Emde, *Attachment Disorders in Infancy and Childhood*, *in* CHILD AND ADOLESCENT PSYCHIATRY: MODERN APPROACHES 490, 494 (Michael Rutter et al. eds.. Blackwell 3d ed. 1994).
- 25. David E. Arredondo, Essential Information on the Developmental Neurobiology of Children: Implications for Social Services, Juvenile Probation, and the Family Court (Apr. 1999) (unpublished paper presented at the Child Abuse Awareness Month Workshop); *see* Futures Committee, TERM, Parenting Adequacy in Child Maltreatment Cases: Assessment, Interventions and Recommendations 25 (TERM, Oct. 1999) (discussing Dr. Arredondo's presentation of the concept of reciprocal connectedness).
- 26. BOWLBY, supra note 14, at 162 (emphasis added).
- 27. STANLEY I. GREENSPAN, BUILDING HEALTHY MINDS: THE SIX EXPERIENCES THAT CREATE INTELLIGENCE AND EMOTIONAL GROWTH IN BABIES AND YOUNG CHILDREN 85–129 (Perseus Book Group 1999); STANLEY I. GREENSPAN, THE GROWTH OF THE MIND: AND THE ENDANGERED ORIGINS OF INTELLIGENCE 110–32 (Addison-Wesley 1997).
- 28. BOWLBY, *supra* note 14, at 161.
- 29. *Id.* (citing Konrad Z. Lorenz, 83 Der Kumpan in der Umvelt des Vogels (1935), *translated in* Instinctive Behavior (Claire H. Schiller ed. & trans., International Universities Press 1957)).
- 30. PSYCHOLOGY: THE STUDY OF HUMAN EXPERIENCE 154 (Robert Ornstein & Laura Carstensen eds., Harcourt

NOTES

Brace Jovanovich 3d ed. 1991) (citing ECKHARD H. HESS, IMPRINTING (Van Nostrand Reinhold Co. 1973)).

- 31. Id.
- 32. Cassidy, *supra* note 19, at 3 (citing John Bowlby, *Forty-four Juvenile Thieves: Their Characters and Home Life*, 25 Int'l J. Psycho-Analysis 19–52, 107–27 (1944)).
- 33. Rutter, *supra* note 7, at 23 (citing John Bowlby, Maternal Care and Mental Health (World Health Org. 1951)).
- 34. Zeanah & Emde, *supra* note 24, at 492 (citing HAROLD M. SKEELS, ADULT STATUS OF CHILDREN WITH CONTRASTING EARLY LIFE EXPERIENCES (University of Chicago Press 1966) (Monographs of the Society for Research in Child Development series 105, vol. 31, no. 3)).
- 35. MICHAEL RUTTER, MATERNAL DEPRIVATION REASSESSED (Penguin 1972).
- 36. Harry F. Harlow, *Mice, Monkeys, Men, and Motives*, 60 PSYCHOL. REV. 23–35 (1953); Harlow & Harlow, *supra* note 18, at 287–334.
- 37. Harlow, *supra* note 36, at 23–35; Harlow & Harlow, *supra* note 18, at 287–334.
- 38. 3 JOHN BOWLBY, ATTACHMENT AND LOSS: LOSS: SADNESS AND DEPRESSION (Hogarth Press 1980); Rutter, *supra* note 7, at 19 (citing BOWLBY, *supra* note 14, at 162).
- 39. Rutter, *supra* note 7, at 21 (citing Mary D.S. Ainsworth et al., Patterns of Attachment: A Psychological Study of the Strange Situation (Erlbaum 1978)).
- 40. Stokes & Strothman, supra note 6, at 347-68.
- 41. Solomon & George, *supra* note 11, at 289 (citing AINSWORTH ET AL., *supra* note 39).
- 42. *Id.* at 290 (citing AINSWORTH ET AL., *supra* note 39); Ainsworth & Wittig, *supra* note 11, at 113–36.
- 43. Zeanah & Emde, *supra* note 24, at 490-504.
- 44. David H. Hubel, Effects of Distortion on Sensory Input on the Visual Cortex and the Influence of the Environment, 10 Physiologist 17–45 (1967); David H. Hubel & Torsten N. Wiesel, Receptive Fields and Functional Architecture in Two Nonstriate Visual Areas of the Cat, 28 J. Neurophysiology 229–89 (1965); see Anita M. Turner & William T. Greenough, Differential Rearing Effects on Rat Visual Cortex Synapses: I. Synaptic and Neuronal Density and Synapses Per Neuron, 329 Brain Res. 195–203 (1985).
- 45. Daniel J. Siegel, The Developing Mind: Toward a Neurobiology of Interpersonal Experience 1–22, 276–82 (Guilford Publications 1999).

- 46. Fred R. Campbell & Craig T. Ramey, *Effects of Early Intervention on Intellectual and Academic Achievement: A Follow-up Study of Children From Low-Income Families*, 65 CHILD DEV. 684–98 (1994).
- 47. Id.
- 48. Greenspan, Building Healthy Minds, *supra* note 27, at 2–14.
- 49. Greenspan, The Growth of the Mind, *supra* note 27, at 1–53.
- 50. See supra note 25 and accompanying text.
- 51. Cal. Welf. & Inst. Code § 366.26(c)(1)(A) (West 1998 & Supp. 2000).
- 52. *In re* Autumn H., 32 Cal. Rptr. 2d 535 (Cal. Ct. App. 1994).
- 53. Cal. Welf. & Inst. Code § 366.26(c)(1)(A) (West 1998 & Supp. 2000).
- 54. Autumn H., 32 Cal. Rptr. 2d at 538–39 (citing Joseph Goldstein et al., Beyond the Best Interests of the Child 17, 19 (Free Press 1973)).
- 55. Id. at 539.
- 56. *In re* Elizabeth M., 60 Cal. Rptr. 2d 557 (Cal. Ct. App. 1997).
- 57. *Id.* at 560; *see also In re* Brittany C., 90 Cal. Rptr. 2d 737, 742 (Cal. Ct. App. 1999).
- 58. *In re* Zachary G., 92 Cal. Rptr. 2d 20 (Cal. Ct. App. 2000).
- 59. Cal. Welf. & Inst. Code § 366.26 (West 1998 & Supp. 2000).
- 60. Zachary G., 92 Cal. Rptr. 2d at 26.
- 61. For our view, see *infra* text accompanying notes 113–29.
- 62. O.R. v. State, 932 P.2d 1303 (Alaska 1997).
- 63. Id. at 1309.
- 64. *Id*.
- 65. Id.
- 66. In re Peter M., 602 A.2d 1161 (Me. 1992).
- 67. Id. at 1163.
- 68. In re D., 352 N.W.2d 566 (Neb. 1984).
- 69. In re Mr. & Mrs. J.M.P., 528 So. 2d 1002 (La. 1988).
- 70. Id. at 1013.
- 71. In re Colby E., 669 A.2d 151 (Me. 1995).
- 72. *Id.* at 152; see also *In re* David C., 546 A.2d 694 (Pa. Super. Ct. 1988), in which the trial court concluded that

NOTES a child-great grandmother relationship and bond were so strong that the child's mother could not be permitted to take custody in order for the child to be adopted.

73. *In re* Guardianship of J.C., 608 A.2d 1312 (N.J. 1992).

74. In re J.L.D., 539 N.W.2d 73 (N.D. 1995).

75. Id. at 79.

76. Id.

77. In re Blunk, 174 N.W.2d 194 (Neb. 1970).

78. Id. at 197.

79. In re J.K.S., 356 N.W.2d 88 (N.D. 1984).

80. Id. at 92-93.

81. In re William L., 383 A.2d 1228 (Pa. 1978).

82. Id. at 1241-42 n.22.

83. Id.

84. In re Baby Boy Smith, 602 So. 2d 144 (La. 1992).

85. Id. at 148.

86. Id.

87. Id.

88. Id.

89. *In re* Ashley A., 679 A.2d 86 (Me. 1996).

90. Id. at 89.

91. GOLDSTEIN ET AL., supra note 54, at 17.

92. Id.

93. Id. at 18.

94. Id. at 18.

95. Id. at 19.

96. Id. at 20.

97. *In re* Autumn H., 32 Cal. Rptr. 2d 535 (Cal. Ct. App. 1994).

98. In re B.G., 523 P.2d 244 (Cal. 1974).

99. GOLDSTEIN ET AL., supra note 54.

100. B.G., 523 P.2d at 253-54 & n.18 (citations omitted).

101. See In re Kieshia E., 859 P.2d 1290 (Cal. 1993); In re Rachael C., 1 Cal. Rptr. 2d 473 (Cal. Ct. App. 1991); In re Patricia L., 11 Cal. Rptr. 2d 631 (Cal. Ct. App. 1992). Recently, the New Jersey Supreme Court adopted a 1995 Wisconsin test to define the de facto parenthood relationship. The test requires the petitioner to prove four elements: (1) that the biological or adoptive parent consented to and fostered the establishment of a parent-like relationship with the child, (2) that the petitioner and the

child lived together in the same household, (3) that the petitioner assumed the obligations of parenthood without expectation of financial compensation, and (4) that the petitioner as been in a parental role for a length of time sufficient to have established with the child a bonded, dependent relationship parental in nature. *See* V.C. v. M.J.B., 748 A.2d 539 (N.J. 2000).

102. Cal. Civ. Code § 4600 (West 1990) (repealed 1992 Cal. Stat. 162).

103. CAL. R. CT. 1401(a)(6), 1412(e).

104. Kieshia E., 859 P.2d 1290.

105. Id. at 1297.

106. In re R.B.W., 548 N.E.2d 1085 (Ill. App. Ct. 1989).

107. Id. at 1089.

108. Id. at 1089.

109. Id. at 1096-97.

110. Id. at 1098.

111. *In re* Lorenzo C., 63 Cal. Rptr. 2d 562 (Cal. Ct. App. 1997).

112. *In re* Richard C., 81 Cal. Rptr. 2d 887 (Cal. Ct. App. 1998).

113. See Rutter, supra note 7, at 26.

114. Id.

115. Id.

116. The suggestions made in this section of the article borrow heavily from Ian Russ, *Evaluative Issues, in* CHILD DEVELOPMENT: A JUDGE'S REFERENCE GUIDE 29–31 (National Council of Juvenile and Family Court Judges 1993).

117. American Acad. Child & Adolescent Psychiatry, *Practice Parameters for Child Custody Evaluations*, 36 J. Am. Acad. Child & Adolescent Psychiatry 57S (Supp. 1997).

118. American Psychological Ass'n, *supra* note 1, at 677.

119. American Psychiatric Ass'n, Child Custody Consultation: A Report of the Task Force on Clinical Assessment in Child Custody (American Psychiatric Ass'n rev. ed. 1988).

120. ASSOCIATION OF FAMILY & CONCILIATION COURTS, MODEL STANDARDS OF PRACTICE FOR CHILD CUSTODY EVALUATION (Association of Family & Conciliation Courts 1994).

121. Committee of Ethical Guidelines for Forensic Psychologists, *Specialty Guidelines for Forensic Psychologists*, 15 Law & Hum. Behav. 655–65 (1991).

- 122. On the general use of psychological testing in child custody evaluations and on the limitations of the tests usually utilized in these evaluations, see Randy K. Otto et al., *The Use of Psychological Testing in Child Custody Evaluations*, 38 FAM. & CONCILIATION CTS. REV. 312–40 (July 2000).
- 123. This is the procedure utilized in Santa Clara County, California. All mental health evaluation questions are submitted to the court for approval and signature after the parties have reviewed them. Usually this review takes place in open court with all parties present.
- 124. See Jonathan Gould, An Interdisciplinary Collaborative Model for Developing Psycholegal Questions in Court Ordered Child Custody Evaluations, 50 Juv. & Fam. Ct. J. 43–51 (Winter 1999).
- 125. For example, an expert opinion that a child's apparently sexualized behavior with an anatomically correct doll showed that she had been sexually abused could not form the basis for a court finding that the child was sexually abused. *See* Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993)); *In re* Amber B., 236 Cal. Rptr. 623, 625–26 (Cal. Ct. App. 1987) (citing Frye v. United States, 293 F. 1013 (D.C. Cir. 1923)).
- 126. For cases in which similar expert testimony was admitted into evidence, see People v. Beckley, 456 N.W.2d 391 (Mich. 1990); Keri v. State, 347 S.E.2d 236 (Ga. Ct. App. 1986); People v. Gray, 231 Cal. Rptr. 658 (Cal. Ct. App. 1986); People v. Luna, 250 Cal. Rptr. 878 (Cal. Ct. App. 1988). For cases in which such testimony was not admitted into evidence, see Johnson v. State, 732 S.W.2d 817 (Ark. 1987); Lantrip v. Commonwealth, 713 S.W.2d 816 (Ky. 1986); People v. Bowker, 249 Cal Rptr. 886 (Cal. Ct. App. 1988); State v. Hazeltine, 352 N.W.2d 6723 (Wis. 1984).
- 127. "The compensation and expenses paid or to be paid to an expert witness by the party calling him is a proper subject of inquiry by any adverse party as relevant to the credibility of the witness and the weight of his testimony." Cal. Evid. Code § 722(b) (West 1995).
- 128. Marc J. Ackerman, American Psychological Association Guidelines for Child Custody Evaluations in Divorce Proceedings, 8 Am. J. Fam. L. 129–34 (1994) (Guideline 15); Committee on Prof'l Practice & Standards, APA Bd. of Prof'l Affairs, Guidelines for Psychological Evaluations in Child Protection Matters, 54 Am. Psychol. 586–93 (1999) (Guideline 16).
- 129. GERALD H. VANDENBERG, *Qualifications of the Forensic Psychologist, in* Court Testimony in Mental Health: A Guide for Mental Health Professionals

AND ATTORNEYS 97–98 (Charles C. Thomas Publ. 1993); Committee on Prof'l Practice & Standards, *supra* note 128, at 586–93 (Guidelines 4 & 8); American Psychological Ass'n, *supra* note 1, at 677 (Guideline 7); *see also* Ackerman, *supra* note 128, at 130; Paul S. Applebaum, *Ethics in Evaluation: The Incompatibility of Clinical and Forensic Functions*, 154 Am. J. Psychiatry 44–46 (1997); Association of Family & Conciliation Courts, *supra* note 120, at 2; Theodore Remley, Jr., & Judith Miranti, *Child Custody Evaluator: A New Role for Mental Health Counselors*, 13 J. Mental Health Couns. 334 (July 1991).

NOTES