Classifying Mother-Toddler Attachment Relationships in the Interesting-but-scary Paradigm: Scoring System for Interactive Behaviour

Lindsey Forbes, University of Western Ontario
Sandi Bento, University of Western Ontario
Carey Anne DeOliveira, University of Western Ontario

Available at: https://works.bepress.com/gregmoran/3/
CLASSIFYING MOTHER-TOODLER ATTACHMENT RELATIONSHIPS IN THE INTERESTING-BUT-SCARY PARADIGM:

Scoring System for Interactive Behaviour

Compiled by Lindsey Forbes in collaboration with Sandi Bento and Carey Anne DeOliveira for Moran-Pederson Child Development Research Group
Department of Psychology
University of Western Ontario
London, Ontario
© 2003
TABLE OF CONTENTS

PROCEDURES FOR ASSESSING THE ATTACHMENT RELATIONSHIP .............3

ORGANIZED ATTACHMENT RELATIONSHIPS ...........................................4

CLASSIFICATION SYSTEM FOR MOTHER-TODDLER ATTACHMENT
RELATIONSHIPS IN THE INTERESTING-BUT-SCARY PARADIGM ...................5

1. AVOIDANT RELATIONSHIPS .................................................................5

2. SECURE RELATIONSHIPS .................................................................7

3. RESISTANT OR “COERCIVE” RELATIONSHIPS ..................................10

4.1 Disorganization/Disorientation Classification Scheme ................................15
    Major Considerations of Disorganization/Disorientation ................................15
    Indices of Disorganization/Disorientation ......................................................15
    I. Sequential Display of Contradictory Behaviour Patterns ............................16
    II. Simultaneous Display of Contradictory Behaviour Patterns ......................17
    III. Undirected, Misdirected, Incomplete, and Interrupted Movements and Expressions .................................................................19
    IV. Stereotypies, Asymmetrical Movements, Mistimed Movements, and Anomalous Postures .................................................................22
    V. Freezing, Stilling, and Slowed Movements and Expressions .......................24
    VI. Direct Indices of Apprehension Regarding the Parent ..............................26
    VII. Direct Indices of Disorganization or Disorientation .............................28

4.2 Directions for Determining whether Infant is to be Assigned to Disorganized/Disoriented
    Category .......................................................................................................30

4.3 Disorganization/Disorientation Rating Scale ............................................31
Procedures for Assessing the Attachment Relationship

The Ainsworth Strange Situation (Ainsworth, Blehar, Waters & Wall, 1978) provides a powerful context for assessing the attachment relationships of 12- to 18-month old infants, creating a mildly stressful situation that activates the infant’s attachment system while allowing the caregiver to act as a secure base for exploration. The Strange Situation was inspired by Bowlby’s (1969/1973) notions of the protective function of attachment figures and Ainsworth’s emphasis on the caregiver as a secure base for exploration. The perception of stress, from both the stranger and the separations, is intended to activate attachment behaviour while new, interesting toys trigger exploratory behaviour. The manner in which the child balances the two systems of autonomous exploration and attachment and uses the attachment figure as part of the strategy for coping with stress are of special importance. If the strategy is successful, the attachment behaviour will decrease and the child will confidently explore the environment.

The Interesting-but-Scary paradigm was designed to be a developmentally-appropriate parallel to the Strange Situation to assess the attachment relationship and the interactions of mothers and their 24-month old toddlers. Briefly, the procedure involves a reunion following a 10-minute separation from the mother, a 5-minute free-play period, during which the mother and toddler are free to interact with an array of toys, and, most importantly, the 3-minute introduction of a potentially fear-evoking remote-controlled toy spider. This paradigm is similar to the Strange Situation in that it activates several of the same behavioural systems. First, the separation from the mother and the introduction of the toy spider should activate the attachment behavioural system, leading the toddler to seek proximity to or contact with the mother; if not physically at 24-months, then emotionally or verbally. Further, the toddler must balance the desire for caregiver protection with interest in the novel toys and toy spider, which should typically activate exploratory behaviour. The toy spider is unique in that it serves as a stimulus that is both inherently interesting and potentially anxiety-provoking. Thus, the toddler may be interested in exploring the novel toy, while simultaneously experiencing fear and/or anxiety. Thus, how the child balances the two systems of exploration and attachment and how the attachment figure is used as part of the strategy for coping with the stress are of special interest. If the strategy is successful, the toddler’s attachment behaviour will decrease and the child will be free to confidently explore the environment. Finally, the toddler’s fear/wariness system also should be activated, as the toy spider can be conceived of as one of the “natural clues to danger” identified by Bowlby (1973). This is analogous to the presence of the stranger in the Strange Situation, and Bowlby also noted that “strangeness” or unfamiliarity constitutes a major clue to the threat of danger. However, unlike the Strange Situation, the mother’s behaviour is not constrained and she is free to act in a more naturalistic fashion. The novel spider is introduced while both mother and toddler are together in the room and, thus, the manner in which the dyad manages this strange stimulus is readily measurable.
Organized Attachment Relationships

From the Strange Situation, distinct patterns of infant behaviour have been observed, each reflecting a unique strategy for enlisting the caregiver to alleviate distress (Ainsworth et al., 1978). *Strategy* refers to the repeated patterns of behaviour that serve a consistent function for children in the attachment relationship (Main, 1981). These patterns indicate how the child has resolved the dilemma of maintaining access to the attachment figure during periods of perceived danger, while retaining the opportunity to explore the environment when not threatened. *Secure* infants use their mother as a secure base for exploration, showing a desire for proximity or contact and/or a wish for interaction. They freely explore the environment in their mothers’ presence, with occasional visual, verbal and/or physical contact. Although their exploration may decrease during separation, they respond with positive greetings upon reunion and are effective in obtaining comfort from the mother, ultimately returning to exploration.

In contrast, there are two non-secure categories: Avoidant and Resistant. *Avoidant* infants show little or no desire for proximity, contact or interaction with their mothers. They typically explore with little reference to their mothers, show little distress at separation, and visibly ignore or avoid her on reunion. These infants tend to focus primarily on exploration, and monitor and maintain proximity without expressing their attachment needs directly to their caregivers. *Resistant* infants tend to be preoccupied with their mothers, are reluctant to explore even in her presence, and become extremely distressed by her departure. Upon reunion, these infants display strong efforts to make contact, while simultaneously resisting comforting efforts, and are characterized by an angry or passive emotional quality. They fail to use their mothers as a source of security and, thus, they are unable to resume exploration (Ainsworth, Bell & Stayton, 1971). Based on several decades of research, infant behaviour in the Strange Situation is said to provide insight into the stable organization of infants’ representations of the specific caregiver with whom they are seen in the strange situation (Belsky, 1999; Solomon & George, 1999).

At 24-months, the quality of the attachment relationship can be assessed using categories that are parallel to the infant classifications obtained via the Strange Situation coding system. However, descriptions of different toddler-caregiver relationships must incorporate age-relevant distinctions and elaborations pertaining to the unique, transitional stage of early toddlerhood. Further, the qualitative categories must be devised with specific reference to the contextual nature of the Interesting-but-Scary paradigm. To this end, the following descriptions of toddler-caregiver attachment relationships are based on the Strange Situation classification scheme (Ainsworth et al., 1978), the home classification system devised by Pederson and Moran (1995, 1996), as well as the preschool attachment categories introduced by Cassidy and Marvin (1991) and Crittenden (1992). Consequently, the following classification system is able to account for the unique, transitional nature of early toddlerhood by incorporating modifications appropriate to both the age and context of this new paradigm.
Classification System for Mother-Toddler Attachment Relationships in the Interesting-but-Scary Paradigm
(Ainsworth et al., 1978; Pederson and Moran, 1995/1996; Cassidy and Marvin, 1991; Crittenden, 1992)

1. Avoidant Relationships

Toddlers in these relationships show a pattern of avoidance (often more subtle at 24-months of age) and/or a mixed response to their mothers. Their goal is to contain negative affect (e.g., fear) most often by accepting independent responsibility for monitoring the environment and regulating their emotions. Rather than use the mother as a partner in managing or resolving their fear/interest dilemma with respect to the spider stimulus, they resort to self-regulatory strategies such as distraction via toy play, or they may actually attempt to remove the spider from the room. These behaviours may be effective for some Avoidant toddlers. For such toddlers, their autonomy and independence overrides bids for a partnership with the mother in the interaction.

Toddlers in Avoidant relationships may display false or overbright affect during the IbS paradigm. At this age they can better manipulate their affect to avoid displaying fear in the presence of the mother. Because they do not want to alert mom to the presence of their negative emotions, they may deny feeling afraid and employ a false, positive affect during the interaction. Toddlers in Avoidant relationships typically try to initially contain their negative affect independently, often by self-soothing or distraction techniques, although some are more successful than others.

For other toddlers in Avoidant relationships at 24-months, attempting to contain these negative emotions (e.g., fear) completely independently may be maladaptive. The toddler may be so overwhelmed by his or her fear that the initial avoidant strategy coupled with self-soothing or distraction techniques may not be fully effective in alleviating his or her fear and the toddler may be forced to resort to seeking contact or proximity with the mother for help regulating negative emotions. Thus, secure base behaviour may inevitably result, which is not compatible with their underlying avoidant strategy, and the toddler will then display disorganization on approach to mom, when attempting to contain their affect independently, and/or when in contact with the mother.

AVOIDANT (A) RELATIONSHIPS:

- The goal of an A relationship is to contain negative affect in the context of the relationship. The child has learned skills of affective control. Child will distract self or find ways to comfort self. Mother responds to child’s overtures for comfort by distracting the child, redirecting attention outward, both emotionally and often physically.

- Child physically and affectively avoids parent. Characterized by blunted communication and avoidance of parent. (Note that this avoidance may become more covert as the child progresses beyond infancy). Child ignores parental verbal initiatives and parent-child discussions are often short and “go nowhere” (i.e., there is little elaboration by one partner of topics initiated by the other).
- Child avoids close contact or bids for close contact with an attachment figure who generally behaves in an interfering or rejecting manner. Because the goal is to maintain physical proximity without causing the mother to become angry, A children do not make demands, signal that the relationship poses a problem, or deny maternal bids for attention. These children may use more covert avoidance, appearing focused on other acceptable activities (e.g., toy play), which allow them both to remain in proximity to their mother and to be so sufficiently and justifiably occupied that the mother could not expect them to interact closely.

- Aim is to maintain protection during periods of perceived danger (e.g., often in response to the toy spider) without alerting the attachment figure to the child’s true feelings or desires for proximity, both of which might arouse the attachment figure’s anger. A balance is sought between the threat provided by the attachment figure’s anger and the threat of not having access in times of danger.

- Children avoid focusing on the relationship or on feelings and accept responsibility for monitoring the environment, maintaining access to the attachment figure, and regulating emotions.

- In the context of inhibition or distortion of affect, the child’s behaviour fails to culminate in joint communication and planning. Displays of false affect may be common and tend to be sudden, fleeting and intense, and periods may occur where true affect “leaks” out.

- Occasionally, the child may resist imposed physical intimacy by squirming or pushing away as a last ditch effort to avoid closeness. When resistance does occur, it is likely, upon achievement of greater distance, to be followed by apbehaviour.

- Typically little if any protest or distress during separation from the parent.

**A1 (general):**

- Conspicuous avoidance of mother, including ignoring her altogether and may involve pointed looking away, turning away or moving away.

- If there is a greeting when mother enters it tends to be a mere look or smile.

- Shows little or no contact-maintaining, proximity-seeking behaviour.

**A1a (teaching relationship):**

- Mother and child often function well together in the restricted area of cognitive tasks, although even here child may turn away if mother pushes too hard.

- Although the relationship is focused on the cognitive domain, there is surprisingly little affective sharing initiated by the child (vs. a B1 relationship).

- Mother tends to be regimented with her own program for the child. Affection is expressed via verbal praise that is clearly contingent on child’s performance. These mothers are often (subtly) intrusive. Mother is obviously devoted to child, perhaps too much so.
A1b (ignoring relationship):

- Child is rather competent in controlling affect. If distressed will attempt to contain tears. Child may cry, but will not seek contact unless very upset.
- Child is very independent of mother, little or no affective sharing, contact or interaction.
- Mother redirects child’s overtures for contact outwardly. If she responds to child’s fusses, she does so in a way to distract child from the feeling, by offering diversions.
- Sometimes it is difficult to get a sense of the relationship since both mother and child operate effectively independently. A1b dyads function smoothly, neither party in the dyad seems dysfunctional.

A2:

- Unlike A1 relationships, A2’s are not smooth. Child tends to be fussy, and will sometimes approach mother for contact (other times tries to comfort self). Mixed response to mother upon reunion, with some tendency to greet and approach. *Note: depending on the context, this approach-avoidance conflict may indicate disorganization.
- The approaches are not satisfactory for either mother or child. At times the child tries too hard to get comfort and mother is unresponsive, and at other times mother is responsive and child is cool and unresponsive.
- Fussiness does not have an angry quality that interferes with settling (like with C1’s). A2’s try (unsuccessfully) to settle themselves and attempt to use mother as a source of comfort—it’s like they’re trying to be A1’s but can’t contain their negative affect. They differ from C1’s in that the fussiness appears to be elicited by factors outside the relationship—e.g., frustration with toys, rather than by the relationship.

2. Secure Relationships

Although toddlers in these relationships may exhibit age-appropriate non-compliance and/or more autonomous exploration, this is clearly balanced by the effective use of the mother in managing the stress of the novel situation. Secure toddlers may first attempt to cope with and explore the novel spider stimulus alone and, if necessary, will be able to readily seek physical or emotional comfort, contact and reassurance from the ir mothers as needed. Often the toddler and mother will explore the novel spider together and the toddler’s negative affect typically will be alleviated to some extent by such maternal scaffolding, reassurance and effective contact or proximity.

SECURE (B) RELATIONSHIPS:

- Although B relationships come in various forms, coherence is the key marker for all of them. Both the mother and child are relatively easy to describe both individually and as a couple. There is very little of their behaviours that seem puzzling or dissonant.
Assessing Attachment in the IbS Paradigm

- They are characteristically relaxed, mutually enjoyable parent-child interaction. The child obviously obtains a sense of security from mother and mother is clearly interested in and responsive to child.

- The child either wants proximity and contact with mother or interactions with her and is active in seeking it. The child enjoys proximity to attachment figure yet explores more widely and needs less contact to reassure them than infants. Unless child is very distressed, distal interaction and subtle gravitating or drifting toward attachment figure with engagement in play and only brief touching are more common than direct and immediate approaches with requests for body contact.

- Responds to mother’s return in reunion with more than a casual greeting. Upon reunion, even if they are upset, they quickly resolve their feelings by finding comfort and satisfaction in close and intimate contact with the attachment figure. Using their attachment figures as a secure base, B children can move onto other activities.

- Little to no tendency to resist contact or interactions with mother. Little to no tendency to avoid mother.

- Engage mother in goal-corrected partnership that allows them to maintain proximity during stressful conditions and to explore widely during periods of felt security. Child shares with attachment figure the responsibility for appraising potential danger, communicating with the attachment figure about plans for protecting children and about feelings regarding these plans, and behaving in ways that increase children’s feelings of felt security.

- Accurately display both positive and negative feelings. Trust attachment figure’s willingness to communicate with them, take responsibility for regulating their own affect, explore the environment and affiliative relationships.

**B1:**

- Characterized by independent exploration and little proximity seeking.

- Most seem extroverts and are outgoing with mother. They engage in a lot of affective sharing over a distance with vocalizations and smiles directed to mother. Unlike A1’s, B1’s clearly have a rich affective repertoire. They take the initiative in involving mother in play or conversation, but engage in little close proximity to mother.

- Greets mother, smiling, upon her return, and shows initiative in interacting with her across a distance, however the child does not especially seek proximity to her or physical contact.

- The child may mingle some avoiding behaviour (turning or looking away) with interactive behaviour, but shows little or no resistant behaviour. Child’s feelings are not as mixed as an A2 baby.

**B2:**

- Greets mother upon her return, tends to approach her and seems to want contact with her, but to a lesser extent than a B3 child. Some seek proximity in pre-separation episodes and then only at most stressful point, and then perhaps only after some delay.
May show some proximity avoiding early on during the reunion and play episodes, which gives way to proximity seeking in the later (more stressful) novel stimulus episode. Note: The change in proximity seeking is dramatic for these dyads. Do not count subtle shifts towards increased contact with mother because the child may be stressed by the novel spide, and increased contact may be normative.

- The child does not especially cling or resist release if held. Little to no resistance to contact or interactions and shows less mixed feelings than A2’s.
- Like B1’s but more likely to seek proximity.

### B3:

- Secure base behaviour is obvious. The child explores away from the mother, and there is a lot of affective sharing, both over a distance and in close proximity.
- If child is upset, contact provides comfort. Both the mother and child are interested in being sure the contact is effective. If child shows little distress, he or she clearly is more active in seeking contact and reassurance than are B1 and B2 children.
- Mother takes delight in child, knows her child. Mother monitors child, but does allow independent exploration.
- Most show strongest proximity seeking and contact-maintenance in most stressful episode. Occasionally, child will be content with mere interaction and proximity to her, without seeking to be held.
- Shows little to no sign of avoiding or resisting proximity, contact, or interaction with mother.
- Are open with their attachment figured regarding separations and/or reunions but do not require extensive plan-making or reassurance.
- Provide evidence of a presumed trust in their attachment figure’s whereabouts and willingness to communicate with them regarding their mutual set-goal.
- Display feelings without distortion and are particularly competent at regulating these feelings and resolving discomfort.
- Likely resolve any discomfort upon reunion by sharing some form of intimacy with attachment figure (e.g., long eye contact, emotionally intimate dialogue, coordinated and close body positioning).
- They are the most relaxed, calm and comfortable.

### B4:

- Child needs a lot of contact, but unlike C1’s is very happy when in contact. Sometimes will be fussy but the fussiness has a feisty tone, rather than an angry or passive quality.
- It may be difficult to determine differences between B3 and B4 since many B4’s explore away from the mother. Note amount of contact maintenance needed as well as heightened fussiness for B4’s over B3’s. Mothers tend to encourage dependency. B4’s tend to want more reassurance and closeness than B3’s.
- They present their feelings openly, yet express some doubts regarding their own competence and request more help with affect regulation than other B’s. Thus, they...
may seek physical proximity even in less stressful episodes, and tend to engage in less exploration than other B children.

- Openly seek mother in resolving their fears and concerns. Themes of anger, fear and helplessness may be present. Child presents fears directly to attachment figure and either resolves the issue independently or seeks and receives assistance from attachment figure, as necessary.
- Child often wants contact, and seeks it approaching, clinging, and resisting release. Child is less active in these behaviours than are most B3 children, especially during increased stress.
- Child seems preoccupied with mother throughout the interaction. Child gives the impression of feeling anxious throughout and seems distressed during presence of spider.
- Child may show some resistance to his mother. Since he or she also shows strong contact-seeking behaviour, the impression is of some ambivalence, although not as much as C children.
- Behaviourally, will often seek proximity even in non-stressful episodes, are quite likely to cry when left alone, and tend to engage in less exploration than other B children.
- They are unlikely to be persistently pouty or dependent.

3. Resistant or “Coercive” Relationships

Negative affect is predominant for these toddlers who display maladaptive ambivalence towards their mothers. Toddlers in Resistant relationships typically alert the caregiver to the presence of a problem and to their responsibility for resolving it. They have had no experience in having their mother effectively resolve their distress and they are increasingly vulnerable to being overwhelmed by negative emotions.

Resistant toddlers accept little to no responsibility for regulating their own affect, have a history of insensitivity and inconsistency with mom and possess a limited means of resolving problems. They exhibit ambivalence regarding both how to resolve the novel situation and regarding their attachment figure. This ambivalence may be reflected in disorganized behaviours such as sequential or conflicting behavioural patterns. Exaggerated displays of affect may not be easily terminated and their distress may continue to escalate throughout the interaction. Such extreme displays of affect may lead the toddler to be too distraught to effectively communicate anything specific regarding the cause of their distress. Thus, they may be unable to seek contact or reassurance from their mother because they are overwhelmed by their fear. Their organized strategy may ultimately break down due to these extreme displays of affect, and disorganized behaviours may then be apparent. Autonomy and independence typically are overshadowed by an increased reliance on the mother, although this partnership is ineffective in alleviating their distress. Resistant toddlers display obvious signs of distress and of wanting and needing the mother to assist them in dealing with the fearful situation.
Crittenden (1992) has suggested the concept of coercive relationships where toddlers often display maladaptive behaviour (e.g., angry, threatening, conflictual, passive, helpless) to force the attachment figure into compliance with their desires. These toddlers may attempt to coerce a reluctant attachment figure to meet the child’s demands of constant availability.

**RESISTANT (C) RELATIONSHIPS:**

- Negative affect seems to dominate these relationships. Child is angry and difficult to settle. Affect interferes with much of the child’s functioning and thus, child shows poor exploration away from mother. The intensity of their feelings is apparent from their inability to engage in alternate activities (e.g., exploration, affiliation) until access to their attachment figure is restored. Interactions between parent and child often seem to interfere with child exploration.

- Most are preoccupied with their caregivers, who do not provide a secure base from which the child can confidently explore; thus, most are preoccupied with their attachment figures. This preoccupation is shown as an inability to explore the environment productively (e.g., child is hyperactive or aimlessly drifts from object to object).

- Child seems unable to settle on an activity and demands constant adult involvement in immature play (i.e., “What’s this?” sequences).

- Displays conspicuous contact and interaction-resisting behaviour. Child also shows moderate to strong seeking of proximity and contact and seeking to maintain contact once gained. Thus, he gives the impression of being ambivalent to his mother. Child displays ambivalence regarding how to repair the situation and also holds conflicting feelings with regards to their attachment figure.

- Child shows little to no tendency to ignore his mother in the reunion episodes or to turn or move away from her or avert his gaze.

- Tends to display “maladaptive behaviour”. Child tends to be more angry or conflictual or passive or excessively immature than other groups. Exaggerated displays of affect are the predominant means to force attachment figures into compliance with their desires. The child may become preoccupied with the display if affect is so exaggerated that it is not easily terminated. The child may be too distraught to communicate anything specific regarding the cause of his or her distress.

- Child attempts to coerce a reluctant attachment figure to meet child’s demands of constant availability. Child displays anger to alert attachment figure to the presence of a problem and to their responsibility for resolving it. Child accepts little or no responsibility for regulating their own feelings and, instead, they substitute demanding and/or helpless behaviour for more productive efforts to resolve their feelings of anxiety.

- Although such behaviour encourages greater involvement of attachment figures with children, the use of such limited means of resolving problems combined with the children’s experience of their attachment figure’s insensitivity tends to increase both their feelings of anxiety and anger and also their actual vulnerability.

- Mix of “cutey” babyish behaviour and subtle signs of resistance toward caregiver, which in turn impedes the child’s ability to use the parent as a base to explore.
C1:

- Versus A2, C1’s are more overtly angry and do not seem to attempt to contain their anger. Both the mother and child have periods of anger and anger seems to be in the context of the relationship.
- There may also be moments of coming together. The interactions are often confusing since there seems to be little coherence in the behaviour of the mother or of the child.
- Proximity seeking and contact maintaining is strong and is more likely to occur in the less stressful episode than with B children; However, resistant behaviour is also particularly conspicuous.
- Mixture of behaviour has a particularly angry quality and an angry tone may characterize behaviour even in the less stressful episode.
- Child may use angry behaviour (e.g., poutiness, whining, openly displayed anger) to threaten attachment figure into compliance with their wishes. Such behaviour serves as a powerful deterrent to noncompliance by attachment figures.

C2:

- Passivity is the striking feature here. The child seems to have given up on being instrumental in meeting his or her attachment needs. Child will sit and fuss with a helpless, pathetic cry. Often this style spills over to other aspects of their behaviour so that their exploration is very unorganized and immature. The child seems to have an over-riding sense that life is too negative and overwhelming and that there is nothing that can be done to make a difference.
- C2 mothers are inconsistent in their interactions with their children. At time they are responsive, and other times, for no discernible reason, they seem to be oblivious to the child.
- The child’s exploratory behaviour is limited throughout and interactive behaviours are lacking in active initiative.
- In reunion, they want proximity and contact with mothers but tend to use signalling behaviour rather than active approach and protest against being put down rather than actively resist release.
- Resistant behaviour tends to be strong, but in general not as angry as the C1 child.
- The child uses coy and winsome behaviour to bribe the attachment figure into rescuing the child. This behaviour ranges from shy (e.g., standing with head down, thumb in mouth, fiddling with clothes), to sweetly flirtatious (e.g., coy looks, whispered entreaties, high babyish tone), to seductively disarming (e.g., sudden glorious smiles). In all cases, however, there is evidence of an underlying struggle to meet children’s wishes on the child’s terms.

4. Disorganized Attachment Relationships

More recently, Main and Solomon (1986) introduced *Disorganized/Disoriented* attachment, a third category of non-secure infant attachment to accommodate dyads in high-risk or
maltreating populations that failed to meet criteria for the three original organized classifications observed in the Strange Situation. They observed sequences of rather odd patterns of infant behaviour, in the presence of caregivers in the strange situation, apparently without an obvious goal or explanation. These behaviours made more sense if they were interpreted as signs that the infant had confused expectations or was fearful of their caregiver (Main & Solomon, 1986/1990). Thus, such infants are unable to maintain a consistent strategy for ensuring protective access to a caregiver, giving rise to an unusual pattern of behaviour. Unlike the aforementioned categories, Disorganized/disoriented infants do not appear to have an organized strategy for coping with the stress of the situation.

As noted, the Interesting-but-Scary paradigm serves as a parallel to the Strange Situation at 24-months and similar strategies of behaviour can be observed within the different contexts, while accounting for unique age-related distinctions in toddlerhood. Further, the same behaviours that Main and Solomon (1986) described as disorganized/disoriented can be readily observed within the new paradigm. Thus, their coding system for classifying relationships as disorganized can be applied to observations of behaviour in the Interesting-but-Scary paradigm. The final section in this manuscript includes specific comments regarding the different categories of disorganized/disoriented behaviours devised by Main and Solomon (1986), pertaining more specifically to the application of this coding scheme to the new paradigm (Carlson, 2002, personal communication).

The Interesting-but-Scary paradigm is an excellent opportunity to investigate how effectively the toddler is able to balance his or her budding autonomy with continued bids for a partnership with the mother. Typically, the toddler will be curious of and interested in the spider when it is introduced and will often stare at it and try to make sense of it on his or her own before referencing or going to their mother. This curiosity often turns to wariness or fear and, at 24-months, the toddler may not be able to handle the situation completely independently. Thus, he or she may typically be forced to turn to their mother or seek help with affect regulation or reassurance and protection, regardless if this is in accordance with the toddler’s primary strategy; This clearly allows us to investigate whether the toddler is inhibited from approaching their caregiver and/or is “fearful” of her. Contradictory behaviour patterns are often apparent as the toddler may lack a clear behavioural strategy for dealing with the stress of the immediate situation. Thus, the toddler may clearly be stressed and fearful of the spider without being able to use the relationship to effectively deal with this stress and disorganized behaviours may result.

The coder must be careful not to code disorganized behaviours that occur as a direct response to the spider stimulus; it is normative to exhibit fear in response to the spider. Fearful behaviours are only coded if they are clearly in relation to mom and indicate that the child is fearful of the mother and/or inhibited from approaching her, particularly when afraid of the spider. Disorganization may be coded at any point in the toddler-caregiver interaction but the highest stress points occur upon reunion and during the 3-minute spider period. Following from the Strange Situation, disorganized behaviours may be coded throughout the entire 8 minutes when the mother and toddler are in the room together.
Stemming from the principles outlined by Main and Solomon (1986) behaviours can only be coded as disorganized if they are 1) inexplicable with respect to the immediate context (rule out appropriate fear of the spider) and/or 2) indicate the lack of a behavioural strategy for dealing with the immediate situation. If the toddler is frightened or distressed by the spider it may not be appropriate for them to regulate this fear entirely on their own. If this occurs, we assume they do so because they are 3) fearful of or apprehensive towards their attachment figure, and/or 4) inhibited from approaching their attachment figure.

Avoidance tends to break down when the toddler’s distress or fear of the spider is so overwhelming or intense that he or she must resort to using mom as a “safe haven”. This frequently results in disorganized behaviours, which are commonly observed in the toddler’s approaches (or obvious lack of approaches or referencing) to the caregiver. Further, many toddlers who are forced to seek contact or proximity with their mothers because of the emotions resulting from the spider will continue to display disorganized behaviours because this contact is not effective in alleviating their distress. Although the negative emotions that may result from the introduction of the spider may increase the toddler’s overt security, leading more children to seek contact with their mothers, this departure from their underlying strategy may further stress the toddler and disorganized behaviours may result.

It is necessary to decrease the D-score for individual behaviours if the toddler eventually becomes organized enough to go to the caregiver and get comfort/contact. The coder must keep in mind: 1) how long it took to get there as this may indicate more extreme inhibition of approach, 2) what the toddler did beforehand, 3) behaviour on approach, 4) as well as whether their fear-related or D-like behaviour persisted or increased while in contact with the mother. As noted, although security will inevitably increase because of the toddler’s experience of fear it does not necessarily imply an organized strategy.

Typically a child can be indecisive about whether to go to his or her mother or whether to engage in the environment but he or she can’t be indecisive once the decision is made. This lack of orientation to the decision may interfere with an approach to mother and contradictory behavioural patterns may result. Further, the decision of whether or not to go to mother should not be as tedious when the toddler is clearly frightened or wary of something in the environment. That is, the fear of the spider should override this contemplation. If frightened, the toddler does not likely want to continue exploring the environment and seeking their safe haven is the only option. If the toddler is not clearly frightened, there is more of a balance between the attachment system and exploration of the environment.
4.1 Disorganization/Disorientation Classification Scheme
(Main & Solomon, 1990)

Major Considerations of Disorganization/Disorientation

The major considerations regarding the classification of disorganization/disorientation are:

1. Is the behaviour inexplicable (no evidence of immediate goal or rationale) OR is the behaviour explicable only if we presume:
   a. the baby is afraid of the parent
   b. the baby is inhibited from approach without being able to shift attention to the environment?

2. Timing of the appearance of disorganized behaviour:
   a. Stronger index of disorganization if occurs in first moments of reunion.
   b. However, even D-like behaviour appearing in less-stressful periods may yield a D classification.

3. Consider what the baby does next, namely, if baby goes to the parent as though for comfort after a little bit of disorganization (i.e., stereotypies and then comforted). (If they became organized quickly, discount the D behaviour).

Indices of Disorganization/Disorientation

The particular indices of disorganization/disorientation are as follows:

I. Sequential Display of Contradictory Behaviour Patterns
II. Simultaneous Display of Contradictory Behaviour Patterns
III. Undirected, Misdirected, Incomplete, and Interrupted Movements and Expressions
IV. Stereotypies, Asymmetrical Movements, Mistimed Movements, and Anomalous Postures
V. Freezing, Stilling, and Slowed Movements and Expressions
VI. Direct Indices of Apprehension Regarding the Parent
VII. Direct Indices of Disorganization or Disorientation

As noted, Main and Solomon’s (1986) system for coding disorganization in the Strange Situation can be applied directly to the Interesting-but-Scary paradigm because very similar behaviours can be observed within both contexts. Thus, the following essentially clarifies the application of these standardized criteria to the novel paradigm at 24-months. The coder can apply Main and Solomon’s (1986) system for coding indices of disorganization, as well as the overall level of disorganization, ensuring that the following notes are accounted for.
I. Sequential Display of Contradictory Behaviour Patterns

A. Very strong displays of attachment behaviour or angry behaviour suddenly followed by avoidance, freezing, or dazed behaviour.

1. In the middle of a display of anger and distress, the infant suddenly becomes markedly devoid of affect and moves away from the parent.

2. Immediately following strong proximity-seeking and a bright, full greeting with raised arms, the infant moves to the wall or into the center of room and or freezes with a "dazed" expression.

3. Infant cries and calls for the parent at the door throughout separation: immediately upon reunion, however, the infant turns about and moves sharply away from the parent, showing strong avoidance.

B. Calm, contented play suddenly succeeded by distressed, angry behaviour.

1. Infant calm and undistressed during both separation from parent, but becomes extremely focused upon the parent, showing highly distressed and/or angry behaviour immediately upon reunion.

NOTE: These behaviours are common when the toddler is unsure about what to do in response to the spider (i.e., distress over the spider followed by avoidance of mother) as the toddler lacks an organized strategy for managing their negative affect because he or she may not be able to use mother as a secure base.
II. Simultaneous Display of Contradictory Behaviour Patterns

A. The infant displays avoidant behaviour simultaneously with proximity-seeking, contact-maintaining, or contact-resisting.

1. While being held or holding onto parent, infant shows avoidant of parent such as the following:

   - infant sits comfortably on parent’s lap for extended period but with averted gaze, ignoring parent’s repeated overtures;
   - infant holds arms and legs away from the parent while held, limbs stiff, tense and straight (starfish);
   - infant clings hard to parent for substantial period while sharply averting head/gaze (Note: disorganized only if infant if clinging hard while looking away; may turn head away while holding on lightly after pick-up)

2. Infant approaches while simultaneously creating a pathway which avoids and moves away from parent, and this cannot be explained by a shift of attention to toys or other matters. Thus, from its inception the infant’s “approach” seems designed to form a parabolic pathways.

3. Movements of approach are repeatedly accompanied by movements of avoidance such as the following:

   - infant approaches with head sharply averted;
   - infant approaches by backing toward parent;
   - infant reaches arms up for parent with head sharply averted, or with head down.

4. Distress, clinging, or resistance is accompanied by marked avoidance for substantial periods, such as the following:

   - infant moves into corner or behind item of furniture while angrily, openly refusing or resisting parent;
   - infant cries angrily from distance while turning in circles and turning away from parent (Note: Arching backwards with flailing arms and throwing oneself backwards on the floor are part of normal infant tantrum displays and are not necessarily considered disorganized).

5. Extensive avoidance of parent is accompanied by substantial distress/anger indices such as: infant silently averts head and body away from parent who is offering or attempting pick-up but makes stiff, angry kicking movements and hits hands on floor.

6. Crying and playing with toys and turned away from mom.
B. Simultaneous display of other opposing behavioural propensities. For example:

1. Infant’s smile to parent has fear elements (very strong index if marked, see VI).

2. While in apparent good mood, infant strikes, pushes or pulls against the parent’s face or eyes. (These usually subtle aggressive movements are sometimes preceded by a dazed expression, or may be accompanied by an impassive expression).

3. Infant strikes, pushes, or pulls him- or herself—hitting or pulling on head or face (Note: may be accompanied by dazed expression).

NOTE: It is necessary to exhibit caution when coding simultaneous behaviours and avoidance in contact, such as approaching while backing into mom or sitting in mom’s lap with head averted. It is often appropriate for the toddler to want to continue to monitor the feared spider while simultaneously going to mom and, thus, it is not necessarily disorganized. It is necessary to rule this out before scoring it as a disorganized behaviour. Further, looking at previous approaches or behaviour while in contact with mother (e.g., during play as well as during the spider episode) may help to clarify whether this may be a pattern for the dyad or whether it is merely a response to the child’s wariness and interest in the spider.

In this novel paradigm, contradictory behaviours are often apparent because security tends to increase (i.e., seeking help and contact from the mother may increase) due to the high level of stress that many toddlers experience. Thus, even toddlers in Avoidant relationships may be so stressed by the spider that they need to seek contact and then tend to display disorganized behaviours upon approach or in contact with the mother because this strategy is not compatible with their primary strategy of avoidance. Approach movements may be partially but unsuccessfully inhibited through the simultaneous activation of avoidant tendencies. Thus, contradictory patterns are activated but are not sufficiently inhibitory to lead to the complete overriding of approach movements. In the same respect, incomplete movements are common, particularly on approach to mom, and may be contradicted before completed, or repeated, hesitant, start-stop approach or reach movements as the toddler struggles to maintain an organized strategy for dealing with the stress.

This also includes unsuccessful avoidance and distress and avoidance of mom, such as when the toddler is crying but refuses offered contact/comfort. Angry behaviour may be directed away from mother, such as throwing blocks, striking at mom’s face, pulling her hair, or striking at self. Such behaviours may be observant when avoidance is breaking down and the toddler is unable to effectively contain negative affect independently.
III. Undirected, Misdirected, Incomplete, and Interrupted Movements and Expressions

A. Seemingly undirected movements and expressions (many could also be considered misdirected or redirected). For example:

1. Upon becoming distressed, infant moves away from rather than to parent. (Note: do not consider brief moves away from parent disorganized when an infant had been crying and displaying desire for contact for a long period and has parent failed to satisfy infant. Infant may briefly move away while crying in response to frustration in these circumstances, coming back to parent to try again, without being disorganized).

2. Infant approaches parent at door as though to greet, then attempts instead to follow stranger out of the room, perhaps actively pulling away from the parent. (This pattern seems more misdirected or redirected than undirected: See VII for similar behaviour).

3. *Initiation of extensive crying in parent’s presence without any move towards or look towards the parent.* (Note: this is not necessarily disorganized if parent is already nearby and attentive. It is also not disorganized if the infant, having already been crying and focused on the parent for an extended period, simply does not look at or move closer to the parent for a few seconds).

4. Any marked failure to move toward the parent when path is not blocked and infant is clearly frightened (Note: *Italicized if abruptness is marked or extended delay*).

5. Similarly, expression of strong fear or distress regarding an object while staring at it, without withdrawing from it or looking towards parent. (Note: sense of absorption).

6. *Extensive or intense expressions of fear or distress accompanied or followed by moves away from rather than to parent, as, infant appears frightened of stranger in parent’s presence, moves away and leans forehead on wall.*

7. *Infant cries at stranger’s leavetaking, attempts to follow her out of room (This behaviour pattern may be more misdirected or redirected than undirected: See also VII).*

8. *Infant highly distressed and becomes prone or simply collapses.*

B. Incomplete movements. For example:

1. Movements to approach parent are contradicted before they are completed, e.g., infant moves hand towards parent and withdraws hand quickly before touching parent, without rationale. Or repeated, hesitant, stop-start approach movements (or reach movements) towards parent.
2. Exceptionally slow or limp movements of approach to parent, as though the infant is resisting the movements even while making them (“underwater” approach movements). See also V.

3. Exceptionally slow, limp, movements of striking at, pushing at, or pulling at the parent’s face, eyes or neck (“underwater” movements). The subtle but definite aggressive intent is almost indiscernible because of the incomplete, slow nature of the movements (See also V).

C. Interrupted expressions or movements. For example:

1. After a long period of contented play, sudden out-of-context crying or displays of distressed anger without rationale.

2. Infant interrupts approach to parent on reunion with a bout of angry behaviour, directed away from the parent, then continues approach. Or begins strong approach upon reunion but interrupts approach to look away and strike hand on floor with angry sounds, then completes full approach.

3. Infant rises or begins approach immediately upon reunion, but falls prone in “depressed” (huddled) posture.

NOTE: The coder must be cautious about coding “absorption” or failing to look to or reference mom when distressed by spider. It is appropriate for the child to stare at the spider and to attempt to make sense of it at first, without necessarily looking to mom. The spider is simultaneously very interesting and potentially fear-evoking. The toddler may be attempting to assert age-appropriate autonomy by investigating the spider on his or her own in the beginning. It is necessary to distinguish between interest, exploration and curiosity, and fear/wariness. Watch for the transition when the toddler starts to more clearly show wariness and how he or she then attempts to manage this. Some indicators of fear/wariness in response to the spider are D-like in some respects (e.g., stereotypies, fear expressions, tensed shoulders) but they are in response to the novel stimulus and should not be coded as disorganized. However, they indicate the toddler’s experience of fear/wariness and the coder can then note what the toddler does in response to this experience of fear and whether the behaviours that follow are disorganized in any respect.

If the toddler seems absorbed in spider the coder can look at behaviours in response to the mother’s vocalizations or the mother’s actions or attempts at interaction. A lot of the time the toddler will be absorbed in the spider and it is common for the mother’s vocalizations to occur simultaneously with stereotypies, anomalous vocalizations or postures, or other indicators of heightened fear in the toddler.

In this paradigm, the undirected theme of distress and avoidance or failing to go to mom is highlighted in particular. The spider represents a novel stimulus that typically induces
negative emotions such as wariness and fear in the toddler who, at 24-months, is typically unable to regulate this emotion in an entirely independent manner. Failing to go to mom for comfort when the path is not blocked, failing to reference mom when clearly showing fear/distress, and moving away from mother when distressed are clear indices of disorganization and can be clearly elucidated within this novel paradigm. Thus, the observer is readily able to determine whether or not the toddler is inhibited from approaching his or her mother, which is one of the key principles inherent within Main and Solomon’s (1986) concept of disorganization.

Further, it may be common for a toddler to show out-of-context affect, or interrupting approach to mom with angry behaviour (e.g., throws toys), particularly if they are attempting to maintain their avoidant strategy.
IV. Stereotypies, Asymmetrical Movements, Mistimed Movements, and Anomalous Postures

A. Asymmetries of expressions or movements. For example:

1. Asymmetries of movement on approach to parent (asymmetrical creeping, heavy or fast on one side only), with or without sudden, unpredictable changes of direction.

2. Asymmetries of facial expression directly upon the appearance of the parent, e.g., an extremely swift “tic” which lifts only the left side of the facial musculature.

B. Stereotypies. For example:

1. *Extended rocking, ear-pulling, hair twisting, and any other rhythmic, repeated movements without visible function.* (Note: Do not include “stereotypies” that make sense in immediate context: rubbing eyes in a tired infant, or initial ear- or hair-pulling in the stranger’s presence).

2. Marked stereotypies while being held by the parent. (Note: Do not include rubbing eyes if infant has been crying, or brief continuation of previous stereotypies while in arms in an infant who showed the same stereotypies during separation).

C. Assumption of anomalous postures and anomalous movements. For example:

1. *Repeated assumption of uninterpretable postures such as head-cocking with arms crooked over head.*

2. *Assumption of huddled, prone, depressed-posture for more than 20 seconds, unless infant is clearly tired.*

3. Any posture which is stereotyped for a particular baby, as closing eyes and holding hands forward at shoulder height for several seconds in response to reunion.

D. Mistimed movements. For example:

1. Unpredictable bouts of activity or movement which seem to lack normal preparation time for initiation, and/or have a jerky, automaton-like (unmonitored) quality. For example, a sudden burst of jerky arm and leg activity in an infant who had been sitting tense and immobilized a second prior.

2. (General frenetic activity).

E. Anomalous vocalizations (e.g., screeching quality, odd cries, odd breathing). (Note: Be cautious with the category as may be an indicator of disorganization).
NOTE: Stereotypies (e.g., waving hands or picking at clothing without an apparent function) are stress signals that are appropriate when they occur in response to the potentially fearful spider. Such behaviours should not be coded as disorganized when they occur in response to the spider. Disorganization occurs within the relationship with the mother and such behaviours are expressions of fear that are merely normative if occurring in response to the spider. The mother’s presence should relieve these behaviours and should not cause them to increase. However, contact may cause the toddler to become even more dysregulated and he or she may display such behaviours while in contact with mom or when approaching her or in close proximity. Many toddlers who seek contact because of the negative emotions elicited by the spider will continue to display disorganized behaviours, such as stereotypies, because this contact is not effective in alleviating their distress.

These stereotypies, asymmetries, mistimed, or anomalous movements typically occur when the toddler attempts to approach mom when distressed or as the toddler attempts to independently contain their experience of fear/distress of the spider, without seeking contact/proximity.

Be cautious with anomalous vocalizations because they are commonly exhibited in response to the spider. The coder should try to distinguish whether they increase because of mom’s vocalizations or if they are so exaggerated and the toddler is not going to mom. Under such conditions, these behaviours may indicate a difficulty regulating emotion and may reflect the toddler’s attempts to contain fear independently.
V. Freezing, Stilling, and Slowed Movements and Expressions

“Freezing” is identified as the holding of movements, gestures, or position in a posture which involves active resistance to gravity. For example, infant sits or stands with arms held out waist-high and to sides. “Stilling” is distinguished from freezing in that infant is in comfortable, resting posture which requires no active resistance to gravity. Freezing is considered a stronger marker of disorientation than stilling.

A. Freezing and stilling suggestive of more than momentary interruption of activity. For example:

1. **Freezing lasting 20 seconds or more, and stilling lasting 30 seconds or more,** accompanied by dazed or trance-like facial expression. For example, freezing accompanied by tense, smooth closing of the lids or lifeless stare.

2. ** Interruption of a bout of resistant or distressed behaviour, freezing (10 or more seconds) or stilling (20 or more seconds) is accompanied by a dazed or trance-like expression.**

3. **Freezing lasting 25 seconds or more, and stilling lasting 35 seconds or more, while held by parent unless infant has recently been engaged in hard crying.**

B. **Slowed movements and expressions suggesting a lack of orientation to the present environment.** For example,

1. Markedly apathetic or lethargic movements as though infant is without purpose in moving forward.

2. Slack, depressed, dazed or apathetic facial expression especially when unexpected, as accompanying approach to parent on reunion ending in raised arms. (Note: Consider only expressions specified above. Neutral or impassive expressions are not considered indicative of disorientation).

Notes: (1) Context should be considered. (2) Do not consider stilling during the first 30 seconds of reunion if the infant is being held by parent, has been crying hard, and is clearly simply in transition from crying. (3) Infant should not be considered to be freezing or stilling if infant is watching something with lively interest, as, watching stranger demonstrate working of a toy. (4) The C2 infant is passive by definition: general passivity should not be confused with stilling.

---

NOTE: In extreme cases, freezing or stilling may occur and the toddler seems “stuck” in that he or she cannot escape the feared spider and simultaneously cannot go to mom. Thus, the toddler is forced to unsuccessfully attempt to self-contain this fear/distress, an act which may
be overwhelming for the toddler because such independence may not be age-appropriate. In such instances, the toddler is overwhelmed by negative affect and cannot resolve this by either seeking contact from their mother or withdrawing from the feared spider. There is no solution to their experience of negative affect and their organized strategy may break down. The toddler’s fear system is not functioning to allow for the simultaneous avoidance of the feared spider and proximity seeking of mother, clearly demonstrating the “irresolvable paradox” inherent in disorganization.
VI. Direct Indices of Apprehension Regarding the Parent

A. Expression of strong fear or apprehension directly upon return of parent, or when parent calls or approaches. For example:

1. **Immediate responses to noting parent’s entrance such as the following:**
   - jerking back, with fearful expression;
   - flinging hands about, over, or in front of face, or over mouth, with fearful expression;
   - dashing away from the door/parent upon reunion, with hunched or tucked head and shoulders

2. Other expressions of fear or apprehension soon following reunion, such as **fearful facial expression on pick-up.**

B. Other indices of apprehension regarding the parent. For example:

1. Moving behind chair or behind furniture without immediate rationale (pursuit of toy, interest in object behind chair, or brief exploration), especially when infant is then out of reach or out of sight of parent.

2. Following a hesitant, seemingly cautious approach to the parent with a rapid, tense, “away” movement.

3. Offering objects to the parent with tense arm and over an usual distance, as though avoiding parental “reach” space.

4. Raising or tensing shoulders when approaching or in contact with parent.

5. Highly vigilant posture or appearance when in presence of parent. Movements or posture tense, infant gives impression of being hyper-alert to parent even or especially when parent positioned behind her.

6. Overbright greeting.

---

**NOTE:** Behavioural indices of apprehension are commonly observed within the IbS paradigm. Toddlers may move behind furniture or toys when distressed by the spider rather than going to mom, and may openly resisting contact and/or comfort from mom when offered. This indicates the toddler is inhibited from approach and is fearful or apprehensive of mom, particularly when already afraid of the spider.
Overbright greetings are more common than was the case in infancy because toddlers are better able to manipulate their affect than they were as infants. Avoidant children, in particular, may show distortions of affect, especially when near mom, as they attempt to contain negative affect or display false affect. Switches in affect may be frequent and abrupt when the toddler is in close proximity to the mother or in contact with her because the toddler may not wish to alert the mother to the presence of a problem. It is common for many toddlers to openly deny their negative feelings of fear and wariness regarding the spider stimulus although, behaviourally, their negative affect is apparent.
VII. Direct Indices of Disorganization or Disorientation

A. Any clear indices of confusion or disorganization in first moment of reunion with the parent. For example:

1. Raising hand or hands to mouth directly upon the return of the parent without accompanying confused, wary or fearful expression. (Do not include thumb or finger sucking, putting objects in mouth or removing objects from mouth. Do not include if hands already near face).

2. “Greeting” stranger brightly at the moment of reunion with parent, i.e., approaching stranger with raised arms immediately as parent enters. (Note: distinguish from the bright or happy look to stranger made by many infants at the moment of the parent’s return, often accompanied by pointing to parent to further mark the event).

3. Flinging hands over, about, or in front of face directly upon the return of the parent, and in clear response to return of the parent.

4. Raising hand or hands to mouth directly upon the return of the parent with a clearly confused or wary expression.

5. Confused or confusing sequences of very rapid changes of affect in first few seconds of reunion with parent, as (a) rapid movement of withdrawal, (b) accompanied by confused cry-laugh, (c) succeeded by approach movement.

B. Direct indices of confusion or disorientation beyond the first movements of reunion with the parent. For example:

1. Falls while approaching the parent when infant is a good walker. Similar unexplained falls when parent reaches for infant, or when parent calls from outside door.

2. Disorganized wandering, especially when accompanied by disoriented expression.

3. Rapidly pursuing parent to door, protesting departure, then smiling at door as though in greeting as door closes.

4. Disoriented facial expression. Sudden “blind” look to eyes, where infant has previously used eyes normally.

NOTE: This includes confusion/disorganization in first moments of reunion and beyond. Confused or confusing changes of affect more common at this age, particularly as the toddler is attempting to self-contain his or her negative affect, without alerting the mother to the presence of a problem in the environment.
This category also includes disorganized wandering, such as when a toddler turns in circles and appears confused as to what to do in the paradigm because he or she is distressed by the spider but cannot go to mom.
4.2 Directions for Determining whether Infant is to be Assigned to Disorganized/Disoriented Category

(Main & Solomon, 1990)

1. Attempt to assign an Ainsworth (A, B, C) classification and sub-classification. If infant is unclassifiable (U/ABC), two or more best-fitting A, B, or C attachment classifications must be assigned in order of descending fit (priority).

2. Can the infant’s behaviour be described as fitting into one or several thematic heading or behavioural examples?

3. Make a written record of behaviour seeming to qualify as indices of disorganization or disorientation, specifying social, behavioural and temporal context.

4. If any of these are strong indicators (in italics) occurring without immediate explanation or rationale, the infant is assigned to D.

5. If there are no italicized indicators, the worker must decide whether the recorded indices are sufficient to warrant placement in the D category in the basis of the following categorical decisions. D attachment status is assigned if behaviour appears inexplicable with respect to the immediate context in which it is observed; and/or if the infant appears to the observer to be without a behavioural strategy for dealing with its immediate situation; and/or if the behaviour can be explained only by the assumption that the infant is either fearful or the attachment figure, and/or is fearful of approaching the attachment figure.

6. Assign a rating to the infant for degree of disorganization, utilizing a simple 9-point scale.

7. If the infant has been assigned to D attachment status because of only one type of behavioural display, the worker may assign a tentative D sub-category.

8. Review final attachment classification. Each type will ultimately be assigned to one of 5 major categories (A, B, C, D, or U) in conjunction with best-fitting categories where necessary. With respect to infants who cannot be directly classified using the traditional A, B, C system, some infants will be D while being otherwise classifiable (D/A1); many will be D as well as being unclassifiable, and a few will be simply unclassifiable.
4.3 Disorganization/Disorientation Rating Scale
(Main & Solomon, 1990)

1. No signs of disorganization/disorientation. Any behaviours that initially seemed to be indices of disorganization/disorientation have been explained in other terms.

3. Slight signs of disorganization/disorientation. There are some indices of disorganization or disorientation, but the worker does not even begin to consider placement in a D category.

5. Moderate indices of disorganization/disorientation which are not clearly sufficient for a D category placement. No very strong (italicized) are present, and the indices that are present are not frequent enough, intense enough, or clearly enough lacking in rationale for the worker to be certain of a D category placement. The worker using a 5 will have to force a decision regarding whether the infant would be assigned to a D category.

7. Definite qualification for D attachment status, but D behaviour is not extreme. There is one very strong indicator or disorganization/disorientation, or there are several lesser indicators. There is no question that the infant should be assigned to D status, even though exhibition of D behaviour is not strong, frequent, or extreme.

9. Definite qualification for D attachment status. The indices of disorganization/disorientation are strong, frequent, or extreme. Either several very strong indicators are present, or one very strong indicator and several less intense exhibitions of one or several other indices.