

# Infancy in Uganda

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### PATTERNS OF ATTACHMENT BEHAVIOR

The development of the baby's attachment to his mother was the center of interest in our study of infant development. As the research took shape in the field, the original focus of the study on the infant's responses to weaning and to separation shifted to the development of attachment. At the beginning our interest in the infant's attachment to his mother was specifically as a base line, in terms of which his response to weaning and separation could be evaluated. Thus, for example, it was expected that a baby who had formed a strong attachment to his mother would be more distressed when separated from her than would a baby whose attachment was weak or non-existent. In order to assess the strength and nature of this attachment it seemed desirable to observe the baby's relations with his mother for some months in advance of weaning and separation. From the beginning, therefore, infant mother interaction was the chief focus of observation and had a major place in our interviews as well.

The newborn baby is not attached to his mother or to anyone else. He may be taken from her and given to a foster mother without any apparent distress or disturbance. But in the course of the first year of life he forms an attachment to his mother, and after this attachment had developed he is distressed if he is separated from her and he protests the breach of ties. How does this attachment develop? What factors facilitate this development or delay or prevent it? What are the criteria which enable us to judge that an attachment has been formed?

Since distress at being separated is an obvious criterion, I was careful to observe and to inquire about the baby's response to the separation situation in everyday life. Did the baby cry when his mother left the room? Did he follow her? Did he cling to her to try to prevent her going, or did he greet her return by clinging? In this sample, however, there were some babies who seemed clearly attached to their mothers, who did not dependably cry, follow, or

cling when their mothers seemed about to leave them. Were these babies less attached than the children who clung to their mothers and would not let them go? Or were they perhaps simply more secure in their relationships with their mothers?

These questions led me to re-examine in detail the notes from my field visits in an attempt to specify the behavior that had given me a clear impression that a baby was attached to his mother in the relative absence of distress in everyday separation situations. I arrived at a catalog of behavior patterns that seemed characteristic of babies who could be judged to be attached to their mothers.<sup>1</sup> The list of patterns of attachment behavior is as follows:

1. Differential crying
2. Differential smiling
3. Differential vocalization
4. Crying when the mother leaves
5. Following
6. Visual motor orientation
7. Greeting through smiling, crowing, and general excitement
8. Lifting arms in greeting
9. Clapping hands in greeting
10. Scrambling over the mother
11. Burying the face in the mother's lap
12. Approach through locomotion
13. Embracing, hugging, kissing<sup>2</sup>
14. Exploration away from the mother as a secure base
15. Flight to the mother as a haven of safety
16. Clinging

Perhaps it would be unjustified to infer an attachment from any one of these responses. In particular, the differential responses crying, smiling, and vocalization may occur when the baby is still so young that it seems doubtful that he has yet formed a firm attachment to his mother, although certainly he can discriminate her from other people (and this is a necessary first step toward attachment). But further reflection led me to the hypothesis that it is through these responses that the infant develops his attachment and that the responses serve to mediate his attachment once it is formed. Therefore, a longitudinal examination of these behavior patterns was undertaken in order to elucidate the development of attachment.

It is now proposed that we consider each of the behavior patterns in turn to see how frequent it is in the sample, at what age it first appeared, and to trace its developmental course. In so doing I have had to rely upon my field notes, both the record of my observations and the interview record. It must be remembered that I was not specifically searching for the occurrence of most of these patterns' and hence did not regularly inquire about them; I may well have failed to note instances of their occurrence. Both because of this and because the infants were admitted to the sample at varying ages rather than being observed from birth, it is certain that the first time I noticed a pattern was unlikely to have been a reliable indication of its first occurrence. Nevertheless, a study of the ages at which each pattern was first observed or reported yields some interesting information.

The first three patterns imply little more than discrimination of the mother from other people and differential responsiveness to her.

### **DIFFERENTIAL CRYING**

Crying was judged to be differential if the baby cried when held by someone other than the mother and stopped crying when taken by her; or when the baby cried and continued to cry when someone else attempted to comfort him, but stopped crying immediately when taken by the mother. For example

*Samwendi* (nine weeks) was restless when I held him, despite my efforts to quiet him. When Mrs. Kibuka held him he was restless also, despite several shifts of position, and finally he cried violently. He stopped crying as soon as his mother took him. She did not give him the breast.

*Petero* (eleven weeks) protested when his mother handed him to me to hold but stopped crying

immediately when she took him back. She did not give him the breast then, although she did a while later in response to a demand from him.

*Alima* (fifteen weeks) had been used to being held by other people. At this age, however, if crying, she would stop when picked up by her mother, but she would not stop if anyone else picked her up. Her mother said: "Now she has started noticing me; she doesn't care about other people at all."

The earliest occurrence of this pattern was noted at nine weeks. It may conceivably have occurred in younger Ganda babies, but there was only one baby we observed earlier than the age of eight weeks *Namitala* and she failed to develop any differential responses during the four months we visited.

Two other instances might be classified as differential crying. Thus, if a baby cried more when left with other people than with his mother, this seemed to indicate some discrimination, even though the baby did not yet cry at the moment of his mother's departure.

*Senkumba* (eight weeks) was said to cry very little when he was with his mother but usually to cry when he was left with other people while his mother gardened. Nevertheless, when I visited at this time he was alone in the front room and was crying when we arrived. He stopped crying when I picked him up.

Furthermore, if a baby cried when his mother put him down but did not protest being put down by someone else, this too could be considered differential. We have no clear record of this in the youngest babies of the sample, but it was certainly observed in some of the older babies but long after other signs of attachment were clear cut.

### **DIFFERENTIAL SMILING**

Smiling was judged to be differential if the baby smiled more frequently, more readily, and more fully in response to his mother than in response to another person. This was one of the patterns of behavior that we did not set out to observe from the beginning. Indeed, smiling was noted only when it was particularly striking. In our American households the parents, loving relatives, and interested visitors alike bend over the baby as he lies in his crib, presenting him a smiling face, and waggle their heads and talk to the baby in an effort to coax a smile. This kind of face to face confrontation was not observed to occur in this Ganda sample. Indeed, it was rare for an adult even to hold a baby so that

there could be a face to face confrontation, for the baby was, at least from about eight weeks on, usually held in a sitting position on the adult's lap, facing outward and leaning back. Therefore, the differential smiling that we noted occurred without exception after the baby was old enough to smile across a distance, to initiate smiling without requiring the stimulus of a face to face confrontation, or to manage the face to face confrontation himself by twisting his head or body in the direction of the adult. I mention this because in a subsequent study of American infants it is quite clear that differential smiling in response to a face to face confrontation emerges very early and is one of the first differential responses. In the Ganda sample the earliest instance occurred in Muhamidi.

*Muhamidi* (ten weeks) kept tipping his head up to smile at his mother as she held him. Once he smiled at me from across the room. All of these smiles were given on his own initiative.

Differential smiling was specifically observed in several other cases Alima (twenty six weeks), Aida (twenty weeks), Samwendi (nineteen weeks), and again Muhamidi (twenty two weeks). Had we properly searched for it, it would undoubtedly have emerged more commonly. .

### DIFFERENTIAL VOCALIZATION

Vocalization was judged to be differential if the baby vocalized more readily and more frequently in interaction with his mother than in interaction with other people. This is another pattern of behavior to which we were not alert during the field visits and which we noted only when it was particularly striking. What these mothers did when they were alone with their babies we do not know, of course. During our visits their attention was chiefly directed to the visitors, and we noticed no instance of the mother attempting to elicit a vocalization from the infant until the end of the first year of life when there was sometimes an attempt to coax the child to demonstrate his knowledge of a new word. Therefore, again, differential vocalization emerged during our visits in terms of the baby's own spontaneous vocalizations. However, there is also some interview evidence

*Aida* (twenty weeks) was said to make cooing noises, especially in response to her mother when she spoke to her. She squealed when excited, laughed aloud, and made "much noise."

*Petero* (twenty weeks) was dependent on vocal contact with his mother. He would accept being left

in a room alone provided that his mother talked to him from a distance. He uttered many sounds in response. Hz and his mother "talked" to each other from room to room. We also noted that when picked up face to face with his mother he responded to her vocally.

For the most part, however, our observations of differential vocalization occurred well after other signs of attachment had clearly emerged.

The next group of patterns have in common a concern on the part of the infant for the whereabouts of his mother a concern that implies the use of distance receptors, especially vision.

### CRYING WHEN THE MOTHER LEAVES

The baby cries when his mother leaves his visual field and cannot be brought back into it through visual motor adjustments. An example of this situation is when his mother leaves the room, in contrast with times when she merely moves to another part of the same room. The earliest age at which this response was observed in this sample was fifteen weeks.

Babies younger than fifteen weeks sometimes cried when put down or when left alone. When the mother left the baby alone, having just previously put him down, it was not clear whether the baby was protesting the cessation of contact, the departure of the mother from his visual field, or being left alone. Therefore, it was of particular interest to observe whether the child cried when his mother left him when he was not left alone, and whether he cried when he had not been in recent physical contact with her. The chief criterion was, however, that the crying was prompt when the mother left the room. Usually, a child at this point in development cries promptly, as soon as he sees his mother depart, although sometimes, if he is occupied with something else, he may not notice her go, and may cry only when, after some delay, he looks up, finds her gone, looks around for her, and cannot find her.

*Rlima* (fifteen weeks) had begun to cry whenever her mother left the room, although she was never left alone in a room except when asleep.

*Aida* (twenty two weeks) was likely to cry when her mother left the room and to try to follow her, especially when she was hungry. At twenty four weeks, during our visit her mother left the room for a little while. Aida cried as she left and continued to cry until she returned, when she stopped at once. A little later in the visit her mother left again and again

Aida cried. Mrs. Kibuka picked her up and tried to comfort her, but she did not stop crying until her mother returned and took her. Her mother confirmed that she now invariably cried when left with someone else, even a familiar person although after a while she would usually stop and accept the attentions of another caretaker.

*Nakalema* (twenty four weeks) was said to cry a great deal. She invariably cried when her mother left the room, regardless of with whom she was left.

*Petero* (twenty four weeks) had begun to cry when his mother left the room, even when left with his brothers and sisters, although he soon stopped crying and accepted their attentions. Whereas previously (twenty weeks) he could be reassured by the sound of his mother's voice from an adjoining room, he now required her to be where he could see her.

*Paulo* (twenty nine weeks) was very rarely left by his mother, but when she went out of the room, even for a moment, he invariably cried, whether left by himself or with another member of the household. During our visit at thirty weeks his mother left the room while he was being held on Mrs. Kibuka's lap. He immediately yelled and continued to do so until his mother returned.

The instances quoted above suggest invariability of crying when the mother leaves the room. Some children, however, accepted being left with a favorite person, although they cried if left alone or with someone else.

*Alima* (twenty six weeks) cried promptly whenever her mother left her alone or with a child, even one familiar to her. She did not cry, however, when left with her father, who often held her and played with her, or with the senior wife in the household, who sometimes shared in her care.

*Samwendi* (twenty four weeks) had begun to cry when his mother left the room, but only if he were left alone or with someone he did not know well; he accepted being left with a familiar caretaker.

### FOLLOWING

In this sample the babies, once they were able to crawl, not only cried when the mother left the room, but also attempted to follow her.

*William* (twenty four weeks) began to crawl and to try to follow his mother whenever she left the room, letting out an immediate cry.

*Muhamidi* (thirty two weeks) wanted to be with his mother all the time. Whenever he was parted

from her even for a moment, he cried and tried to follow. He was said to have been doing this ever since he could crawl (twenty weeks). At thirty four weeks I tried to photograph him by himself, but whenever his mother moved away, he cried and tried to follow her.

Some babies cried and followed the mother under certain circumstances, but not under others.

*Kyimba* (thirty seven weeks) had been accustomed to being left with his grandmother and did not cry or follow his mother when left with her, although he did when left alone or with anyone else; he had been doing so ever since he had begun to crawl at five months of age. When alone with his grandmother he cried and followed whenever *she* left the room.

*Mutebe* (thirty nine weeks) was used to being left with his grandparents, and did not follow his mother when left with them. But if she left him either alone or with less familiar people, he usually cried and tried to follow her.

As the babies became older some of them tended to follow without crying, perhaps because their locomotion was more efficient and they could keep up with the mother as she moved away. But if such a child were frustrated in following, either because the mother closed a door behind her or because she outdistanced him, he would usually cry.

*Senkumba* (thirty seven weeks) followed his mother if she left him alone in a room, usually without crying. He often did not follow her if he had been left with familiar people.

*Sulaimani* (thirty six weeks) followed his mother wherever she went, often without crying.

*Lusiya* (fifty one weeks) followed her mother whenever she left the room but she did not cry. If her mother did not want her to follow, she closed the door. Even then she usually did not cry, but banged on the door.

*Nakiku* (twenty eight weeks) followed her mother without crying whenever she left her alone in a room, although she was content to stay with her father or with Pantaleo. At fifty two weeks, and after the first stage of weaning had begun, she was much the same, although she sometimes cried if she was prevented from following her mother by a closed door.

*Maryamu* (forty six weeks) followed her mother whenever she left the room, hurrying to keep up, but

not crying. Her mother said she had been following ever since she could crawl at forty one weeks. At fifty weeks, after weaning, she still followed whenever her mother left her alone for a moment, but she cried only if she had difficulty keeping up with her. When left with other familiar people she usually did not follow.

### VISUAL MOTOR ORIENTATION

This is another pattern of behavior through which the baby expresses his concern for the whereabouts of his mother. After the baby can sit by himself, if placed on the floor at some little distance from his mother, he tends to keep track of her whereabouts, glancing at her occasionally, and perhaps smiling if he catches her eye. On the other hand, he is likely to show interest, curiosity, and perhaps apprehension of other people present, and, since he tends to watch a stranger, one cannot consider visual fixation or even visual following as an unequivocal manifestation of attachment. Indeed, under these circumstances, the fact that the baby's glances at his mother manifest attachment becomes clear only when she gets up to leave the room and he cries or follows, or both.

Nevertheless, there is one set of circumstances in which visual-motor orientation seems clearly to manifest attachment. If the child is held on one's lap, at some distance from his mother, he may keep his eyes on his mother and be tensely oriented toward her.

*William* (eighteen weeks) was given to me to hold. He smiled at his mother across the room. He became increasingly restless, giving me the impression of wanting to get to his mother, with every muscle oriented toward her, although he did not cry. Once back on his mother's lap he gave me a brilliant smile.

*Nakihi* (twenty eight weeks) sat for a while on the lap of a woman who was visiting. She was much quieter than she had been when on the floor. Whereas previously she had looked around at the visitors, gurgling and smiling, now she kept her eyes fixed on her mother, reserving smiles for her.

*Muhamidi* (thirty one weeks) was given to me to hold at the clinic while his mother helped comfort and control another child who was being examined. Nluhamidi sat on my lap without protest, but he was tense, with his whole body oriented toward his mother, whom he watched intently.

### GREETING RESPONSES

Babies can express their attachment not merely by a concern for the mother's whereabouts and by protesting when she departs, but also by giving her a warm welcome when she returns. Some babies who are accustomed to being put down by their mothers and left alone to sleep, and some who are accustomed to being left with another familiar person, show their attachment more by the enthusiastic greeting they give the mother upon her return than by a protest when she departs.

These greeting responses are not stereotyped patterns, but rather seem to combine behavior that appears also in other contexts. The earliest type of greeting to appear usually combines *smiling, vocalizing, and general bodily excitement*. In my observations of American babies the earliest greetings seem to come when the mother approaches the crib to take the baby up from his nap. The baby, still too young to sit or to pull himself up, smiles, crows, and jiggles about in excitement, jerking his arms and legs. The conditions of my observations of Ganda babies did not permit me to observe this early response, although it undoubtedly occurred and occurred earlier than the reports we obtained during the interviews. Although smiling was sometimes mentioned as with Alima at twenty six weeks more usually the report was less specific: "He is very happy to see me."

Soon *lifting the arms* is reported as part of the greeting response.

*Senhumba* (twenty one weeks) was said to accept being left with the senior wife in the household and not to cry when his mother left; but when his mother returned he lifted his arms and vocalized loudly in greeting.

*Aida* (twenty two weeks) was said always to greet her mother after an absence by smiling and lifting her arms.

Although I have often seen American mothers attempt to evoke this response by standing in front of a child before picking him up, offering her outstretched hands to him, I did not notice Ganda women doing this. American mothers, moreover, usually pick a baby up by placing the hands on the baby's trunk under the armpits, in a way that encourages an anticipatory movement of lifting the arms. Ganda women, on the other hand, tend to pick a baby up quickly, grasping one upper arm near the shoulder. I am inclined to believe, therefore, that the

lifting the arms in greeting at least among Ganda babies is a gesture of reaching toward a desired object rather than an imitative gesture or a mere anticipatory response.

*Clapping the hands in greeting* occurred frequently in this Ganda sample, although I have not observed it in my American sample. Pat a cake is one of the first games an American mother plays with her baby. I inquired carefully about this among Ganda mothers, and they denied either playing pat a cake with a baby less than a year old or trying to teach the baby to clap his hands. My best guess is that the Ganda express delight by clapping the hands, and that babies imitate this gesture of delight, presumably in delayed imitation. I did not witness a Ganda adult expressing delight in this fashion, however; their greetings were formal when we visited and their behavior tended to be too dignified and inhibited to permit such a spontaneous expression. In any event, however they acquired the response, Ganda babies clapped their hands in greeting.

*Aida* (thirty one weeks), who earlier had smiled and raised her arms in greeting her mother, now clapped her hands in delighted greeting.

*William* (twenty eight weeks) greeted his mother after an absence by clapping his hands and then putting his arms up to her.

*Mutebe* (forty four weeks) always greeted his mother's return by crowing and clapping his hands.

*Kasozi* (forty eight weeks) showed his delight upon his mother's return by clapping his hands.

After locomotion was achieved, *approaching* became part of the greeting pattern.

*Muhamidi* (thirty three weeks) was brought into the room by a young girl and put down on the floor. He immediately crept to his mother, smiling and crowing with pleasure.

*Nabatanzi* (thirty seven weeks), who had not protested when left with the visitor, greeted her mother upon her return, creeping to her quickly and crowing with delight.

*Paulo* (forty one weeks) had been left with us while his mother went out for a moment. His uncle came into the room; Paulo scuttled quickly across the room to him and crowed with glee as his uncle picked him up. At forty four weeks he gave us a similar welcome when we arrived in the car, but we suspected that it was the car rather than we who aroused his enthusiasm.

*Lusiya* (fifty one weeks) always greeted the return of either her mother or her father by laughing, clapping her hands, and then approaching as quickly as possible.

*Naltihu* (fifty two weeks) also was said to greet both parents by laughing joyously and approaching quickly at a trot.

As may be seen from these examples, toward the end of the first year, greeting responses are given increasingly to other favorite people and not exclusively to the mother.

Thus, attachment is shown by concern for the loved person's whereabouts, by protest at her departure (or an attempt to keep her from increasing the distance), and by delight when she returns. It is also shown by several behavior patterns that occur in the mother's presence, which involve a desire for proximity to her although there is no impending threat of separation. Approach through locomotion, already mentioned in conjunction with greeting, may occur also as a flight toward the mother as a haven of safety. On many occasions, however, approach is exclusively a sign of the baby's desire to be close to her. Scrambling over the mother is another pattern of attachment behavior which implies no anxiety. Finally, burying the face in the mother's lap or in some other part of her person often implies no anxiety, although at times it may emerge in response to the presence of strangers. Let us first consider scrambling.

### SCRAMBLING

Even before the baby is able to crawl and hence to follow or to approach, he nevertheless can take the initiative in making contact with his mother when on her lap or when placed on the floor beside her. One of the ways in which he can do so is to climb up onto her and over her, exploring her person and playing with her face, her hair, or her clothes. On occasion he may behave in this way with another person, but since he much more frequently scrambles over his mother or over another favorite person to whom he has become (or is becoming) attached this differential response is included in our catalog. This behavior pattern differs both from an attempt to find the breast, which has a purposiveness that is unmistakable, and from an effort to maintain a close and continuous physical contact. It appears to be a pattern of exploration, as though the baby cannot be sated in his investigation of a figure even one as familiar to him as his mother.

*Muhamidi* (twenty two weeks) spent most of our visit scrambling over his mother. He frequently smiled at her, vocalized a great deal, and sometimes hid his face in her lap. He responded readily to our advances but smiled more frequently at his mother. He was able to crawl but did not leave his mother's side.

*Juko* (thirty weeks) scrambled over his mother cheerfully when held on her lap, before taking off to explore the room. Again at thirty-two weeks he crawled over his mother at one point, exploring her person; this occurred in sharp contrast to the times he sought her breast in a directed way.

*Petero* (thirty four weeks) scrambled over his mother, vocalizing continuously, and occasionally smiled across the room at us. Later he stood on his mother's lap, buried his face in the angle between her neck and shoulder, and in this position bounced around. Still later he scrambled over me when I held him, but somehow less intimately than with his mother.

*Muhamidi* (thirty two weeks), after playing with the other children for a while, moved close to his mother and began to play with her hair, standing behind her. Then he chewed her hair. At thirty six weeks he was fussy and scrambled over his mother for the entire visit, showing no interest in anyone or anything else.

*Mutebe* (forty one weeks) spent the entire visit on his mother's lap, scrambling over her part of the time.

### **BURYING THE FACE**

The baby, whether in the course of scrambling over the mother, or having returned to her after exploring the world at some distance from her, buries his face in her lap or elsewhere in her person. This behavior was observed only in relation to the mother. Some examples have already been cited in conjunction with scrambling. Here are a few more.

*Nakiku* (twenty eight weeks) sat near her mother on the floor, bouncing about, smiling, and gurgling, and then crawled to her mother and buried her face in her mother's lap.

*Maryamu* (fifty weeks) stood smiling, occasionally bobbing over in a squatting position. She vocalized a great deal and imitated sounds that I made. Then she burrowed her head in her mother's lap. She stood for a while again, then burrowed some more, and repeated this over and over. She approached me and accepted being held for a while; then she ex-

plored the room; finally she returned to her mother and spent the rest of the visit crawling over her.

*Lusiya* (fifty one weeks) sat close to her mother for a while, her head on her mother's lap, bouncing her bottom up and down; occasionally she smiled up at her mother and babbled.

*Paulo* (fifty three weeks) went exploring outside for a while, then sat beside his mother, burying his face in her lap. Later he was very active outside and when brought back, again sat beside his mother and again hid his face in her lap.

*Magalita* (fifty two weeks) first sat on her mother's lap, then got down on the floor, buried her head in her mother's lap, and wiggled her bottom back and forth in the air.

### **APPROACH THROUGH LOCOMOTION**

After the child is able to crawl, he characteristically terminates his greeting responses by crawling to the loved person as quickly as he is able; also, if apart from his mother when frightened, he crawls to her as quickly as possible. But approach can also occur simply to increase proximity, without any implication of anxiety.

*Nakiku* (twenty eight weeks) was said always to crawl to her mother when placed on the floor apart from her, and to try to crawl up onto her lap. There was no implication of anxiety in this response.

*Yuko* (thirty weeks) was cheerful when held on Mrs. Kibuka's lap. When he was put down, however, he crept vigorously to his mother.

*Nabatanzi* (fifty one weeks) also was cheerful when held by Mrs. Kibuka. When put down she walked across the room to her mother with arms outstretched.

Other instances have been included in the examples cited to illustrate scrambling and burying the face.

### **KISSING AND HUGGING**

In our society affection is ordinarily expressed both ritually and spontaneously by a hug, a warm embrace, and perhaps a kiss. Many mothers encourage their babies to give them a hug and a kiss or to hug and kiss the father or a brother or sister. By the end of the first year of life, babies in our society are able to return an embrace or kiss when it is given to them, perhaps clumsily, but in distinct response to the adult's affectionate advance.<sup>3</sup> That this is largely a culture bound pattern of response whether learned

through reinforcement or through imitation is suggested by the fact that Ganda babies very rarely manifest any behavior pattern even closely resembling European affection, and, indeed their mothers did not try to elicit hugging or kissing in the baby, although they themselves occasionally nuzzled the baby while holding him.

*Nakiku* (twenty eight weeks) was held standing by her mother. Her mother kissed her repeatedly and tenderly, on the cheek or the back of the neck, seemingly absent mindedly. But we never observed *Nakiku* reciprocating.

*Lusiya* (about six months) was brought by her aunt to visit me. The aunt seemed very fond of *Lusiya*, holding her on her lap, often putting her face close to the baby's, nuzzling and giving little kisses.

*Nakalema* (thirty five weeks) began to reach to feel my face after I had been holding her for a while. Twice she put her lips to my throat, and later I observed that she did the same thing when her mother held her.

We had no evidence that *Nakalema* had been taught to kiss; it may be that she was merely exploring with her mouth. In any event, *Nakalema* was the only baby observed to give anything remotely resembling a kiss, and none of the babies were observed to hug.

The fact that Ganda babies do not hug and kiss, whereas Western babies who are encouraged to hug and kiss do so, suggests that this pattern of attachment behavior is of a different order than the other patterns considered in this chapter is much more contingent upon a specific learning process.

### **USE OF THE MOTHER AS A SECURE BASE FOR EXPLORATION**

When most babies are able to crawl, they do not always stay close to the mother but rather make little excursions away from her, exploring other objects and interacting with other people, but returning to the mother from time to time. The mother seems to provide a secure base from which these excursions may be made without anxiety. The child who is attached to his mother, if he is secure in this attachment, does not need to maintain constant proximity or contact with her. He is content to move away, as long as he knows that she is there. He can even leave the room on his own initiative, and his aplomb in so doing is sometimes in sharp contrast to his consternation when his secure base gets up and

moves off. Indeed, one could scarcely identify this as a pattern of attachment were it not for the fact that the child still is concerned about his mother's whereabouts.

*Juko* (thirty and thirty two weeks) did much cheerful exploring, even out the front door of the house. Especially at thirty two weeks, he kept returning to his mother and seeking the breast before taking off on another jaunt.

*Nakiku* (thirty three weeks) crept about very actively during our visit, occasionally returning to her mother for contact.

*Aida* (thirty four weeks) wanted to be close to her mother at first but then she became active, crawling about, exploring, returning to her mother occasionally.

*Senkumba* (thirty seven weeks) played actively on the floor during our visit, made excursions away from his mother, but then returned to lie back against her and smile up at her. His mother said that he was quite willing to leave her to cross the room when someone else invited him to play.

*Paulo* (forty two weeks) sat on his mother's lap for the first half of our visit. When his two sisters got up and left the house he scrambled down from his mother's lap and followed them as far as the doorway. He stood up, holding onto the doorjamb. Then he became more active, creeping about, playing with a little string of celluloid balls happily and noisily. Occasionally he smiled across the room at his mother. The girls returned, but twice more they left the house, and he crawled out after them, only to be retrieved by his mother, who did not like to let him out of her sight. And yet *Paulo* often made a big fuss if his mother left the room and he was prevented from following.

The use of the mother as a secure base from which to explore the world manifests itself under circumstances in which danger is absent and the child does indeed feel secure. When a threatening element enters the situation the child does indeed seek close proximity to his mother, but in an intense way, which may be distinguished easily from his seemingly casual use of her as a secure base. When he feels secure he leaves his mother, returning to her only occasionally, and perhaps only glancing at her from time to time. When he is frightened or insecure he flees to her as to a haven of safety and clings, protesting any attempt she makes to release him.



### FLIGHT TO THE HAVEN OF SAFETY

Both Bowlby and Harlow<sup>4</sup> describe infants and young children human and monkey as fleeing to the mother, as a haven of safety, when faced with a fear producing stimulus or when in a strange situation. The strange situations in which we observed these Ganda infants were mainly the clinic visits and, at home, being taken outside to be photographed. The chief fear producing stimuli were ourselves as strangers.

*Aida* (thirty four weeks) was put down by her mother in the middle of the room, halfway between me and the place where her mother was sitting. She immediately crept back to her mother and buried her head in her lap.

*Sulaimani* (twenty eight weeks) was distressed when left alone on a mat to be photographed. When his mother moved closer he crept toward her and stopped crying as soon as she took him up.

*Paulo* (thirteen months) was outside the house by himself when we arrived in the car. He became quite excited when he saw us and ran inside to his mother.

*Kyimba* (forty weeks) tolerated being held by me for a while, but he was very tense. As soon as I put him down he scuttled to his mother as quickly as he could.

When one attempts to identify the use of the mother as a haven of safety one realizes how interlocked all these attachment patterns are and how the same general behavior may mean different things in different contexts. Thus, for example, the child, when put down on the floor, may crawl to his mother in a purposive but non anxious way. If she arrives after an absence, he may greet her enthusiastically and creep toward her. If he has been exploring, he may occasionally return to her and make contact. But all of these approaches can be distinguished from the flight to her as a haven of safety, perhaps more because of context than because of actual behavior although there is both speed and absence of delight in the flight. Similarly, a baby may scramble over his mother and occasionally bury his face in her person, and the impression that is given in affectionate attachment. He may venture around the room, return to her, and bury his face the impression is the same. But he may also *bury his face* and give the distinct impression that he is using his mother as a haven of safety. For example

*Juko* (thirty weeks) buried his head in his

mother's shoulder and would not look at me when I approached him early in the visit offering him a piece of candy.

*Aida* (thirty four weeks) scuttled to her mother when I invited her to come to me and buried her face in her mother's lap.

### CLINGING

Studies of subhuman primates suggest that clinging is the major way in which the infant manifests his attachment to his mother.<sup>5</sup> The infant monkey maintains contact with his mother or with any object placed on his ventral surface but he clutches it tightly. Although subhuman infant primates hold onto the mother with arms and hands and often also with legs and feet from their earliest days, human infants are unable to cling tightly in this fashion until later in the first year of life. Nevertheless, Bowlby<sup>6</sup> has suggested that clinging is one of the component instinctual responses which underlie the child's attachment to his mother. It seems likely that the prototype of the clinging response in the human neonate is his postural adjustment reflex;<sup>7</sup> when he is picked up by an adult, with his ventral surface held against the shoulder chest breast area of the adult, he cuddles closely.

My observations of Ganda babies took place before much of this theoretical interest in clinging as a possible instinctual response in humans appeared in the literature. I did not have the opportunity to observe neonates with one exception but even with a child of two or three months of age or older I paid no special attention to his postural adjustment or to the circumstances under which he held onto his mother; I noted only conspicuous instances of clinging. Those instances in which clinging occurred so intensely that it forced itself to my attention tended not to occur until toward the last quarter of the first year of life. In some cases this intense clinging occurred in response to strangers or to a strange situation.

*Mutebe* (forty one weeks) spent the entire visit on his mother's lap, either clinging to her or climbing over her. He seemed apprehensive of me, watching me warily from the shelter of his mother's arms. At forty six weeks he again seemed very shy of the visitors and clung to his mother. Whenever I looked at him he cried and clung to her. At fifty two weeks he was clinging to his mother as she brought him out after his nap. His mother started to hand him to me, but he cried immediately, and spent the rest of the visit clinging to her.

*Magalita* (fifty two weeks) wanted to be close to her mother always. When we went out to take photographs her mother tried to put her down on a table. Magalita screamed and clung, resisting being put down.

*Paulo* (forty three weeks) had accompanied his mother to the hospital when she was ill. When we visited them there, Mrs. Kibuka picked him up from his crib and held him for a while. When she tried to put him down again in his crib he caught onto her and would not let go.

In some instances clinging seemed to occur as a manifestation of insecurity in times of illness or following weaning rather than as a response to a specifically frightening situation.

*Kasozi* (fifty seven weeks) responded to the dropping of his daytime breast feeding by crying a great deal and clinging to his mother.

*Lusiya* (fifty nine weeks) was still disturbed by the final weaning that had taken place seven weeks before. During our visit she was close to her mother the whole time, either clinging while sitting on her lap or staying close to her on the floor and leaning back against her. Her mother left her behind when she worked in the garden, but when she returned Lusiya clung to her and would not allow her mother to move away for a moment.

*Nabatanzi* (forty eight weeks) had suffered a severe burn on her foot. Throughout our visit she sat on her mother's lap, fussing, and frequently clutching her mother.

Finally, there is the kind of clinging usually implied when one describes a child as "clingy" a child who seeks constantly to maintain close physical contact and is distressed when put down, even though he may not actually clasp his mother with his arms or hold onto her.

*Sulaimani* (forty weeks) cried immediately when his mother put him down but stopped when she picked him up again. Again she tried to put him down; he screamed, and did not stop this time even when she took him up again. Later he permitted her to set him down on the floor but he played in a desultory way and protested whenever she moved away.

*William* (forty three weeks) was ill and very subdued and "clingy." Throughout our visit he sat on his mother's lap, leaning back against her breast, sucking his thumb.

*Magalita* (forty nine weeks) sat on her mother's lap, snuggled in, her head on her mother's breast, sucking her thumb and seeming very much the little baby. This was said to be quite characteristic of her, and her mother believed that it was because she was ill so much of the time.

## CONCLUSION

These, then, are the patterns of behavior by means of which an infant shows his attachment. Their importance is greater, however. They are the patterns of behavior *through which attachment grows*. The baby is not attached to anyone at first. He does not somehow become attached and *then* show it by smiling at the loved person and crying when she leaves him. He gradually becomes attached through smiling and crying and through adjusting his posture to his mother, suckling her breast, looking at her, listening to her, vocalizing when she talks to him, scrambling over her, approaching her, following her, and clinging to her. The course of development of attachment behavior will be described in Chapter 22.

## NOTES

1. The author has published two earlier accounts of these patterns of attachment behavior: The development of infant mother interaction among the Ganda, in Foss (ed.), *Determinants of Infant Behaviour*, 11, 67-112, and Patterns of attachment behavior shown by the infant in interaction with his mother, *Merrill Palmer Quarterly*, 1964, 10, 51-58.
2. No Ganda infant was observed to hug, kiss, or embrace. Nevertheless, this pattern is included in the list since it does occur with babies in Western societies.
3. Ruth Griffiths places this response at eleven months in her Infant Intelligence Scale (*The Abilities of Babies*).
4. John Bowlby, The nature of the child's tie to his mother, *Internat. J. Psychoanal.*, 1958, 39, 1-34; H. F. Harlow, The development of affectional patterns in infant monkeys, in Foss (ed.), *Determinants of Infant Behaviour* (London: Methuen, 1961), pp. 75-100.
5. Harlow. The development of affectional patterns in infant monkeys) identifies the "contact clasp reflex" in neonatal monkeys as the basic response out of which the subsequent infant mother affectional pattern develops.
6. The nature of the child's tie to his mother.
7. Helen Blauvelt and J. McKenna (Mother neonate interaction: Capacity of the human newborn for orientation, in B. M. Foss [ed.], *Determinants of Infant Behaviour* [London: Methuen, 1961], pp. 3-35) describe this orientation reflex, although most of the paper describes the orientation of the head and face in response to tactual stimulation