# Body Language and Birth Memory\* Jeane Rhodes, PhD

Abstract: Two phases of research into birth memory are presented here: 1) interviews with  $2\frac{1}{2}$  -  $3\frac{1}{2}$ -year-old children regarding their prenatal life and experience of birth, and 2) the results of dissertation research using body language to identify echoes in the body of prenatal and birth experiences.

The initial study upon which this paper is based was undertaken in 1990, at the suggestion of Thomas Verny, the founder of APPPAH, as part of a graduate course in pre- and perinatal psychology. This led to the second study five years later, which was originally planned as a follow-up, broader, and more in-depth interview project. As this was my dissertation, my committee had to approve the design and felt that the verbal reports of young children would not be academically respected, so a re-design using body language was implemented. The second study took place in Denver, Colorado, from 1995-1997. Both studies are described in more detail below.

## Preliminary Research: Study No. 1

This research report was previously published in the Pre- and Perinatal Psychology Journal (Rhodes, 1991a), where you can find a more complete description of the research protocol. Interviews were conducted with 29 children, 19 in preschool or day-care settings, 10 in the child's home. Although a list of questions were prepared, this varied somewhat with each child as following the child's lead seemed to be indicated in most cases. After briefly getting acquainted with the child, I told them that I wanted to ask some questions to which only they knew the answers. The first question was, "Where were you before you were born?" The following list is representative of the responses to this question.

The most frequent response, "In Mommy's tummy," could not really be considered "positive" according to the criteria established for the study. That criteria was that the child made a statement or statements that were clearly from their own point of view and did not seem to reflect something that they might have heard from someone else. The following reports do meet this criteria.

### Interview #4: A 3-year-old boy

- Q: What did you do when you were in Mommy's tummy?
  - A: I played.
  - Q: When you decided to come out, how did you get out?
  - A: There was a hole down there.
  - Q: What was it like?
  - A: It was long and there was light.
  - Q: Was it hard to get out?
  - A: Yes. (Holding his head with both hands at the temples and nodding)

\*In later talking with this boy's mother, it was reported that he was delivered by forceps.

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# Interview #5: A 3 <sup>1</sup>/<sub>2</sub>-year-old girl

- Q: What happened when you came out of Mommy's tummy?
- A: The man wiped that stuff off of me and wrapped me in a blanket.

\*This child's mother reported a later conversation with the child in which the child replied to the same question with the response, "The man cut that thing off me," indicating her belly button.

# Interview #10: A 3 <sup>1</sup>/<sub>2</sub>-year-old boy

- Q: What was it like in Mommy's tummy?
- A: Things bumped me.
- Q: Could you hear anything?
- A: It's like fish, gluck, gluck.
- Q: That's wonderful, can you tell me anything else about it?
- A: They pushed me out.
- Q: Who pushed you out?
- A: Man (Man?) Yes, Mans.
- Q: What happened when you were pushed out?
- A: I hurted.

## Interview #21: A 3-year-old-girl

- Q: What did you do while you were in Mommy's tummy?
- A: Nobody, I was all alone.
- Q: When you decided to come out of Mommy's tummy, how did you get out?
- A: Mommy told the doctor to get me out.
- Q: When you came out, what was the first thing you saw?
- A: A piece of balloon.
- Q: Where was it?
- A: It was backwards.

\*My guess - behind her - the amniotic sac

## Interview #22 - A 3 <sup>1</sup>/<sub>2</sub>-year-old-boy

- Q: What was it like in Mommy's tummy?
- A: It was like the light was turned down.
- Q: What else can you tell me about that?
- A: It was like looking for fish. It was kind of hot in there.
- Q: How did you get out?
- A: Mans pulled me out.
- Q: How did that feel?
- A: It kind of hurted. I was kind of crying, but I was laughing.

\*This child was delivered via cesarean section

## Interview #1: A boy just under 3 years old

The results from this interview were felt to be important not so much from the actual narrative as from the child's reaction to the questions. As we got into the questions concerning his birth, he became increasingly sad and very quiet until the interviewer felt it necessary to apologize for making him sad and asked if he would like to hear a story. The interview was terminated after the story. In the later telephone contact with his mother, she reported that he had experienced a very difficult birth.

### Body Language and Birth Memory: Study No. 2

Moving forward to my next major project – PhD Dissertation (Rhodes, 1997). My original thought was to replicate the interview study using video of the interviews to capture the body language. However, as mentioned previously, this was discouraged, particularly by one of my degree committee members, who asked why I would want to waste my time when it was not accepted that the memories of young children were reliable. In rethinking the possibilities, I decided to use body language rather than verbal reports. The resulting study was a mixed-method phenomenological research project.

#### **Preliminary Study of Yoga Postures**

Once the decision was made to use body language, my thinking then led me to consider yoga postures to study body language as I had been teaching yoga for fifteen years and my master's thesis (Rhodes, 1991b) was a literature search looking at psychotherapeutic applications of yoga postures. I decided that using five-to-nine-year-old children for this study might work well as they would be able to understand the instructions and would still be young enough that life experience would not have layered over as much the echoes in the body of prenatal and birth experience.

Ancient yogic texts state that we have all done yoga in the womb of the mother, and other researchers had found connections between prenatal life and yoga postures. For example, Ianniruberto & Tajani (1981) did an ultrasonographic study of fetal movements and observed a fetus in a lotuslike posture. This evidence that yoga postures might actually have become familiar in the womb of the mother further convinced me that using yoga postures to study echoes of prenatal and birth experiences was a good choice.

But, which postures? I first used my own daily practice, with careful observation and journal notes to choose five postures that would include movements of the spine in forward bending, back bending, twist, side bending, and a modified inversion. This was followed by work with a group of eight adults who met for a series of six weekly sessions to work with the selected postures. With the postures selected I could now move on to work with the children. To avoid any influence of my own or another model's body language, I used an articulated figure, posed the figure in the five selected postures, and photographed each one. These photographs were then mounted on a board so that all of the children would receive exactly the same input about what they were expected to do.

#### **Research Design and Stage One Implementation**

The basic research design consisted of videotaping 22 children, ages five to nine years, in the process of completing the five selected postures. This was followed by analysis of the videotapes, collection of birth stories, and comparison of the two sets of data to identify parallel themes.

All of the videotaping was done in one location, my office. Each child was seen individually with parents waiting in the next room. All of the children seemed to understand what was expected and asked few questions. Once all of the videotaping was complete, analysis was begun. This was an intense process as there was an overwhelming amount of information to record and process.

According to van Mannen (1990) for studies based on observation of *lived experience*, three approaches to uncover isolated thematic aspects are recommended. 1) The holistic, in which effort is made to identify a phrase that might capture the fundamental meaning as a whole. 2) The selective, in which the effort is highlighting particularly essential or revealing phrases (in this case a unique way in which the body might present itself in a particular posture). And 3) The detailed or line-by-line approach (in this case, careful observation of each movement and facial expression).

In the analysis of the videotapes, all three approaches were used. Three volunteers in addition to myself were recruited to analyze the videotapes. These volunteers were a fellow yoga teacher, a

massage therapist, and an authentic movement practitioner. All were chosen for their expertise and knowledge of the body and skills of observation. They were asked to make notes about anything they noticed about each of the postures, i.e., the speed with which the subject moved through the postures, and to provide a one or two word phrase that would describe the subject. For example, "anxious" or "confident."

My own analysis was more in-depth and thorough, involving the line-by-line, micro-movement by micro-movement, analysis. This analysis involved making detailed notes on all physical movements observed and emotional reactions inferred. Slow motion and still-frames were employed in this viewing. This detailed analysis included notes for each of the children on all of the following:

- 1. Initial impression of affect and overall impression of the child.
- 2. Posture assumed during initial viewing of the photos.
- 3. Use of time, including total time, initial time viewing photos, time in each posture, and time in closing comments.
- 4. Use of space (contained or expansive).
- 5. Details of movement and position in each posture.
- 6. Preference for right or left turns.
- 7. Transitions between postures.
- 8. Notable facial expressions.
- 9. Observed breathing patterns.
- 10. Verbal Comments.
- 11. Sequencing of postures.
- 12. Notable differences in researcher instructions or comments.
- 13. Posture preferences as demonstrated by sequencing, facial expressions, amount of time in posture, and comments.
- 14. Posture assumed upon completion.

At this point, a recap was done, moving back to the selective approach. These aspects were highlighted for each child.

- > Time, three aspects: total time, most time in which posture, and least time in which posture.
- Most Striking: Note a minimum of three observations for each child (this is similar to identifying themes with verbal qualitative research).
- > Other: Use of space, researcher comments, congruence with other reviewers notes.

All of these notes were then set aside until after the birth interviews were completed.

## **Stage Two: Birth Interviews**

The child and mother were interviewed in all 22 cases. Interviews with fathers were completed for 17 of the children. All interviews were in-person, with the exception of two of the father interviews and one interview with another person present at the birth, which were completed by telephone. In two cases, both a grandmother and friend of the mother who were present at the births were interviewed. In two cases, a maternal aunt who was present at the births was interviewed. In one case, it was not possible to obtain an interview with someone other than the mother and the child.

Different formats were used for interviewing the child, the mother, the father, and others present at the birth. All participants in each category were asked the same questions. However, the questions were somewhat open to allow for individual differences in the quantity of information gathered. All interviews were audio-taped, with the exception of the three telephone interviews and one case when the recorder did not function. In those exceptions, notes were taken and typed as soon as possible after the interview was completed. Transcripts of the interviews, in all cases, were sent to the families for any corrections or additions. A review of the interview transcripts revealed the following general information:

Fourteen families were involved; seven families with one child participating, six families with two children participating, and one family with three children participating. Of the children, nine were boys and thirteen were girls. Three of the children were a few months under age five, four were age five, three age six, four age seven, five age eight, and three age nine. Two were only children, seven eldest, six middle, and seven youngest. Fifteen of the pregnancies were planned and seven unplanned. Of the seven unplanned, two were reported as unwanted by both parents and five as unwanted by the father and welcomed by the mother. One mother reported debating the possibility of abortion.

Pregnancy symptoms reported included excessive nausea (8), bleeding or spotting (4), back-pain (1), bed-rest due to pre-term labor (2), and stressful living circumstances during the pregnancy (6). Reported weight gains by mothers during pregnancy varied from 10 to 50 pounds. Complications during birth included unusually long labors (5), shoulder dystocia (2), prolapsed cord (1), toxemia (1), posterior presentations (5), breech presentation (1).

Interventions reported included episiotomy (10), epidural anesthesia (9), other anesthesia (7), amniotomy (7), induced labor (3), forceps (2), emergency Cesarean (2), and scheduled Cesarean (2).

One on-time delivery was reported, twelve early (from one to five weeks), and three late (a few days). Birth weights ranged from 5 pounds, 4 ounces to 10 pounds, 7 ounces. Bonding interruptions (significant separation from mother after birth) were reported in six cases. There were significant health complications after birth for six of the children. The fathers of 19 of the children were involved with their births. Of the nine boys, six were circumcised after birth.

## Phase Three: Bringing it All Together

This phase of the analysis began by identifying what was most striking from the video recap, then listing important events from the birth interviews (identifying themes), and proceeded to theories about possible connections between the two.

An overall general theme was identified for each child. This involved an effort to select a word or phrase that seemed to capture a major element of the child's approach to life as reflected in the video session. There was surprising accord among the reviewers of the video tapes—a phrase common to at least two reviewers, and usually three or all four, was found for each child. Here are some examples of the themes assigned based on the video observations

- ✓ Repetition
- ✓ Collapsed
- ✓ Confident
- ✓ Becoming Small
- ✓ Hesitation

In the case of the child with the repetition theme, the birth interview revealed repetition of traumas: unwanted conception, pregnancy complications, bonding trauma, circumcision, and surgery at four months.

Three children were labeled "confident;" all three were planned conceptions, uncomplicated pregnancies and births.

#### **Results Specific to Selected Postures**

**The Forward Bend** seemed to elicit womb experience. It also seemed related to the frank breech presentation with one of the children in the research. The forward bend has long been considered a calming posture (Bates, 1986; Rhodes, 1991b; Swami Radha, 1987). This, perhaps, indicates an early womb experience. In the preliminary adult research group, it evolved to images of contacting the umbilical cord and feeling connected to mother. In phase one of the research, one girl did the forward bend with no effort, simply laying forward onto her legs. The birth interview revealed that she had been a frank breech.

The Arch (Cobra) posture brought forth the most significant finding of this study. Of the nine boys in the study, four of those who had been circumcised did not place their hips on the floor during the Arch. The other two who had been circumcised exhibited some hesitation in placing the hips on the floor. The three who had not been circumcised placed their hips on the floor without hesitation, nor was this hesitation noticed with the girls in the study. This observation, that boys who had been circumcised tended to not place their hips firmly on the floor in this posture, was an unexpected and very interesting result of this study. In one case, a boy who had been circumcised and also had abdominal surgery at four months had his hips hovering at least a foot above the floor.

**The Seated Twist** varied considerably among the 22 children, the most distinct difference noted was whether or not the torso was turned. Tinctures for all of those children who did not turn could be identified. None of the three children whose birth experience included induction of labor turned. The two who experienced forceps-assisted deliveries did not turn.

Five others did not turn: the two planned Cesareans; a girl who perceived a boy was wanted (this girl was also labeled "hesitant" and experienced a very long labor); a child who slowed the progress of labor in stage one, allowing the parents an enjoyable day together; and a child who protested loudly at the cutting of the cord and who had excess vernix, both indications of lack of readiness for birth.

The two planned Cesareans missed the stage of birth in which the body needs to revolve. The other three, while distinctly different experiences, have in common some delay of or resistance to the birth process.

One child, who, in her interview, stated that she was sometimes not glad that she was born skipped this posture entirely.

**Seated Side Bending,** in the preliminary research, was associated with the first process of separation and individuation, that time *in utero* when the implanted blastocyst differentiates into placenta and embryo. This experience is echoed in birth with separation from mother. The children in this research exhibited hesitation to really moving the spine into a side curve. It is possible that this pose, like the twist, could evoke feelings of moving through the birth canal.

**Hare Pose (modified inversion)** revealed a difference between the two planned Cesareans and the two emergency Cesareans with regard to position of the head in the Hare pose. The two planned Cesareans placed their heads on the floor without hesitation, perhaps having never experienced this head down position as a prelude to a stressful experience. The two emergency Cesareans did not place their heads anywhere near the floor.

# **Current Relevance of this Research**

### Parents

For parents, knowing that their child's physical movements may provide clues to their prenatal and birth experience, allows one more "way of knowing" their child. This truth can be held and "pondered in the heart" rather than trying to verbalize.

## **Birth Workers**

Whether working in a hospital setting or at home, obstetricians, nurses, midwives, doulas, and childbirth educators can use the results of this study to validate that what happens prenatally and during birth has an impact on the individual coming into this world.

### Therapists

The most important application may be for therapists. My master's thesis was called, "Mind Made Visible: Psychotherapeutic Applications of Yoga Asana" (Rhodes, 1991). In it, the use of postures in psychotherapy was explored. This study of body language and birth memory pinpoints some postures that might reveal echoes of experience from birth and before. To present one example, the Arch (Cobra) seemed to indicate trauma stored in the body as a result of circumcision. The therapist who includes a birth interview as part of their intake procedure, would know whether or not a male client had been circumcised. Pairing that with observation of lack of mobility in the pelvic area, the therapist could work with the client to "play the edges" with this posture, asking the client to begin in a plank position with knees on the floor, then gradually moving the hip toward the floor, being careful to notice the "edge" when discomfort begins, hanging out there, then challenging the "edge" just slightly, over time becoming comfortable in the completed posture. It has been my clinical observation that interventions at any level of our being—physical, mental, or emotional—have impacts on all levels. Depending upon the type of psychotherapy or body work practiced, the information gleaned in this research could be applied in a variety of effective ways.

## **Future Directions**

There are many possibilities for further research. The following short list is just a starting place

- A direct replication of this study with a different population
- Replication using different postures
- Follow up with a new generation
- Follow up on the circumcision finding
- Case Studies using specific postures

The adventure of life continues, each ending making way for the next beginning.

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