

CHAPTER THIRTEEN

## A research methodology for the study of symbolic activity in infants<sup>i</sup>

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This paper describes a research methodology for studying the interplay between maternal reverie and the development of symbolic activity in infants aged 0 to 18 months. A pilot study was made, after we began collecting data to analyse the pre-verbal symbolic capacity in the context of the mother-baby relationship. The project used information from 212 observation reports describing 19 mother-baby dyads, each observed by a psychoanalytical observer over the course of two years.

The observation reports that constituted our material were comprehensive and detailed narratives of early mother-baby relationships, following the observational methods of Esther Bick. From the reports we selected moments that showed the baby dealing with situations of frustration, since these are indicative of the development of his symbolic capacity as demonstrated

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through play. We are referring here not to cognitive development but to the emotional capacity to deal with frustration by creating “something” to replace the absent object. Taking Bion’s concept of tolerance to frustration as foundational to the ability to think and symbolize, we constructed a category denominated “frustration episode”, and in this context we recorded the children’s interaction with their mothers and the environment.

Each report was supervised in a weekly seminar group, and in total 224 frustration episodes were identified.

### *Theoretical background*

Esther Bick’s observation method may not seem at first sight suited to the requirements of empirical research: the observer is subjective, the record is informal, and the material similar to a clinical report in depth and substance. The focus is on the emotional interaction between mother and baby, not solely on the baby. This kind of observation requires strict discipline on the part of the observer, only possible when the observing function has been internalized. In clinical practice psychoanalysts are at least partially protected from interference by the physical setting they establish (the consulting room). During the observation visit however the observer needs to maintain this setting the entire time. The disadvantages of having a human observer as a “scientific instrument of observation” are considered when the observation material is examined during supervision. The advantage of the method is that it provides access to mother-child interactions and permits the recording of transformations within the mother-baby communication.

The theoretical background for the research project is Bion’s “Theory of Thinking” (1962), in which he proposes the pre-existence of thoughts and the need to develop an apparatus for thinking. In their early stages of development, thoughts begin as very primitive sense impressions and emotional experiences related to concrete experience. In his idea of thinking, Bion includes proto-thoughts, pre-conceptions, conceptions, thoughts, and concepts.

We will take the mother-baby relationship as a model to illustrate these categories. For the baby, incorporating milk, warmth and love is equivalent to incorporating a good experience (a good breast). Bion believed that the baby has an innate pre-conception of a breast although he is not conscious of his need for satisfaction. Pressed by hunger he experiences a need that is not satisfied, a frustration (experienced as a bad breast) that he tries to rid himself of (expulsion). The actual experience with the breast provides the baby an opportunity to get rid of the bad breast. The mother not only provides food but also functions as a container for the baby's feelings of discomfort and unpleasantness.

Bion calls the maternal capacity to function as a container "reverie". The mother's mental function of transforming the baby's communication (crying, kicking, shouting, shivering, etc.) into something that helps her understand her baby also becomes meaningful to the baby and calms him down. This is the maternal "alpha function". According to Bion, the capacity to tolerate frustration is innate to the baby's personality. It is of great importance in the formation of symbols and, consequently, to the development of his capacity to think. When faced with frustration, the baby may respond by tolerating it and using mechanisms to modify it (termed in this study "solution attempt"). However, the baby may not be able to tolerate the frustration and so try to get rid of it ("expulsion"), or else avoid it entirely, for example, by withdrawing from contact or suddenly falling asleep ("avoidance").

### *Research procedure*

The categories used in the research emerged from an attempt to address: our interest in investigating the relationship between maternal reverie and the baby's symbolic activity; the difficulty inherent in a direct investigation of the capacity for symbolization in children aged 0 to 18 months, especially during the first twelve months; and Bion's view of tolerance of frustration as an

indicator of the capacity to symbolize (to deal with the absence of satisfaction).

A “frustration episode” was defined as the period from when behaviour denoting frustration began until that behaviour stopped. By studying the interaction sequence and the context in which it occurred, we were able to identify possible factors that unleashed frustration. The baby’s response to frustration was noted and evaluated in terms of expulsion, avoidance, or attempt at solution. The environmental response to the baby’s frustration was also recorded.

The observer’s account, together with further reflection during the seminars, allowed us to follow the mother’s attitude to the baby’s frustration during the episode. This was categorized as “reverie” or “non-reverie”. Reverie is when the mother is receptive, welcomes the communication of frustration on the baby’s part and tries to understand him, responding to his physical and psychic needs. Non-reverie is when the mother does not receive the baby’s communication or behaves in a way that is invasive, indifferent, or focussed exclusively on physical needs.

The form given to codifiers comprised: identification data; environmental context (physical and social); behaviour indicating frustration; possible factors in unleashing frustration; the child’s response to frustration; the response of the mother and those around to his behaviour; evaluation of the episode.

Frustration episodes were numbered according to the format dyad/visit/episode. We transcribed each of the 224 episodes in two columns: the baby’s behaviour, and the environment, including the mother’s response. The correlation between maternal reverie and the development of the baby’s symbolic activity could thus be investigated.

Below are some of the detailed categories used by the codifiers:

*Behaviour indicating frustration*

Observable signs of frustration included:

- 1) Starting, or showing fear

*Examples:* expression change (from peaceful to serious; opening eyes wide; distant look; deviation of glance; pouting); shivering; crying, whimpering; rigidity; refusing physical advances.

2) Searching for attention or physical contact

*Examples:* seeking actively physical contact with the mother or attachment figure; extending arms or body towards the mother; searching with eyes or mouth, followed or not by grumbling, whimpering, crying, yelling.

3) Expressions of rage or refusal

*Examples:* throwing objects; hitting objects or persons; biting, spitting, regurgitating; refusing food or objects that are offered; moving away; crying or yelling; refusing physical approaches; aggression towards the self (hitting his/her head, knocking himself, pulling his hair, throwing himself at objects); motor restlessness (contortions, kicking).

4) Expressions of physical or psychic discomfort

*Examples:* sucking, biting, regurgitating; crying, yelling, grumbling; rigidifying of parts of the body; shivering; motor restlessness; facial expressions (pouting, displeasure, becoming suddenly serious).

*Possible factors in unleashing frustration*

These included:

1) Invasion of the child's autonomy

*Example:* preventing the child from keeping or taking hold of an object.

2) The relation to the attachment figure

*Example:* separation from the mother or caregiver; lack of special attention from her; or lack of response to a search for contact.

3) The presence of outsiders: in the absence of the mother; or in her presence.

## 4) Unpleasant feelings

*Examples:* hunger; cold; tiredness; hiccupping; nasal congestion; pain or cramps; fear; being startled; needing physical contact.

5) External hostility, such as aggressive handling by a sibling.

## 6) Environmental changes

*Examples:* waking up; going out; getting in the car or lift; being put in the bath; dressing or undressing; being handed to another person; the arrival of another person.

*The child's response to frustration*

This was coded as an attempt at solution, an expulsion (evacuation), or as avoidance. In our sample we found only a few examples of avoidance behaviour, when the baby suddenly fell asleep when faced with frustration. Below are examples of a solution attempt and of expulsion:

## 1) Solution attempt by a three-month-old boy

The baby is being changed. He keeps his gaze on his mother. He smiles when she talks to him and when she talks to the psychoanalytic observer. The baby moves his hands toward his mouth. His mother goes out of the room leaving the baby lying on the parents' bed. The baby moves his arms and legs and tries to grasp the pillow. He turns his face to the wall and seems to stare at something. He turns his face again, looking as though he is about to cry, then yells. He looks around and stares at the TV, which is on with the volume turned down. After a few minutes he becomes agitated, looks at the ceiling, yawns and rubs his hands over his face with his eyes shut. He opens his eyes again and moves his hands as if wanting to fit one into the other. He then puts them into his mouth. He gradually calms himself down and falls asleep.

## 2) Expulsion response by a seven-week girl

When the mother undresses the baby, she starts to cry. The mother talks to the baby who continues to cry. The mother picks

up the baby to put her in the bath. The baby's crying diminishes, but soon increases and becomes more intense. During the bath the baby stops crying for a while when staring at something, but soon resumes. When the mother takes the baby out of the bath, the crying diminishes for a moment, but starts again when she is laid down to be dressed. When they finish the mother picks up the baby, who stops crying. The mother offers the baby the breast and she feeds. After 15 minutes, the mother takes her off the breast and the baby seems calm. The mother puts her in the pram. The baby grumbles and starts crying again.

In this last example, no manoeuvres aimed at dealing with the frustration – such as putting a hand in the mouth or sucking an object – were observed in the baby's behaviour.

#### *The mother's response to the child*

This was coded as either reverie or non-reverie. Reverie refers to when the mother is receptive, welcomes the communication of frustration on the baby's part and tries to understand him, responding to his physical and psychic needs. Non-reverie is when the mother or her substitute does not receive the baby's communications, or receives but does not understand them. As a result her reaction may be invasive (reacting according to her own needs rather than the baby's, or at a speed that does not synchronize with the baby's request); indifferent (she does not respond or delays her response, or is absent when needed); or she may respond only to physical or practical needs and emergencies.

#### *Review*

Some questions about methodology, mainly regarding quantification, were raised by the research community and psychoanalyst colleagues. Objective measuring was useful in structuring our sample and facilitated our qualitative analysis. We wished to present the data in a format that would allow further analysis, not only by the authors, but by colleagues who might be interested in this kind of research.

We are now studying whether the quantitative data is representative and significant in relation to the qualitative analysis for each dyad. In other words, we are investigating whether it would be possible to generalize the quantified results of the analysis of frustration episodes in the dyad's longitudinal development (over a period of time). The qualitative analysis cannot be restricted to the frustration episodes; all the material needs to be considered. The examination of each report also includes the "episodes of attunement", or the babies' reciprocity with the mothers.

We concluded that mother-baby observation allows for the possibility of collecting useful data for research owing to the access it gives to the continuing transformations of the interaction between mother and baby. The ground is laid out for a systematic record and follow-up study investigating the correspondence between maternal reverie and the development of symbolic activity in babies.