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Rhythmicity in infants' experiences and their development

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ABSTRACT

This article deals with the importance of rhythm in infants' experiences, underscoring its function in relation to sense of being and the continuity of that sense. Although some discontinuity is inevitable, and indeed necessary for development, it can expose infants to chaotic experiences if there is no underlying rhythmicity. Observations of infants have highlighted their ability to manage their experiences of discontinuity (providing these are not too disorganizing) by finding supports and manufacturing a rhythmicity that enables them to remain open to self and to the world. Rhythmicity of experience is important not just in infant development, but also - and more generally - in learning contexts and psychological care settings. In every situation, external rhythms must be attuned to the individual's inner one.

1. Rhythmic experiences

Rhythmicity concerns at least three types of experience, as far as infants are concerned: the alternation between openness to the world and withdrawal, interactive and intersubjective exchanges, and the object's presence and absence. All three types of experience can be rhythmic, and indeed have to be, if they are to ensure infants' secure and harmonious development.

1.1. Openings and closings

It is through the alternating movements of openness and retreat that experiences are internalized. The withdrawal that follows a period of exchange and contact with the world allows individuals to "replay" their shared experiences, internalize them and, by so doing, construct subjectivity.

1.2. Interactions and requests

Interactive exchanges also need to be rhythmic, insofar as they must respect the infant's own rhythm in order sustain the process of internalization described above and avoid overexcitement. Continuous and permanent exchange, permitting of no retreat, overexcites the infant and, according to some authors, triggers abnormally long periods of withdrawal (Decerf, 1987). This is what happens, for instance, when parents find their infant's withdrawal intolerable. They experience it as a form of abandonment or rejection - possibly replicating rejection they suffered in their own childhood, and this feeling infiltrates and charges the parent–infant bond. The greater the sense of abandonment experienced by parents in the past, the more they will interpret their infant's withdrawal as the repetition of the withdrawal, avoidance and coldness exhibited by the objects to which they were once attached, and the more this will compromise not just their development as parents, but also the development of their infant, by disrupting its movements of internalization and subjective construction. Parents must therefore respect their infant's rhythmicity in all their interactions.

Some interactionists, such as Daniel Stern (1977, 1985) have described mother–infant interactions as dances, or choreographies. The purpose of the attunements and adjustments that take place during these dances is to locate or create the rhythm needed to subtend the intersubjective encounter and sharing of experience.

There will be many "wrong moves" during a dance or encounter of this sort, and it is no coincidence that one of the chapters of a book by Stern is entitled "Missteps in the Dance" (Stern, 1977). Microanalyses of such interactions have shown that approximately three quarters of them take the form of synchronization (Tronick and Cohn, 1989), and a mere quarter consists of genuine communication – or perhaps we should say "communion".

Given that an infant aged 3–4 months has a mutual visual attention span of 5 seconds on average, compared with 20 s for a mother (Stern, 1974), it makes sense for the infant to control mutual visual attention. If, on occasion, a parent does refuse to relinquish control, the result is encroachment, overexcitement and, ultimately, curtailment of the interaction. As we saw earlier, this is exactly what happens when parents experience their infant's withdrawal as a form of rejection both of themselves and of their attempt at bonding.

Careful, fine-tuned analyses of interactions have shown that in protoconversations, such as when a mother talks to her infant in a singsong voice, the infant produces movements that not only accompany her baby talk, or "conversation", but actually precede her changes in intonation. The infant can thus be likened to a music

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conductor (Trevarthen and Aitken, 1997). Here, it is the infant that leads the dance, and it is important for the dance partner to follow the infant, by moving and keeping to its rhythm.

This does not mean that the mother (or partner) cannot introduce variations to stimulate the infant's interest and maintain its attention. For example, if she is singing a nursery rhyme, as she nears the end of a verse, she can create tension and build suspense by suddenly changing the tempo, adopting a mock tone of surprise (Trevarthen, 1989). As a result, the end of the verse becomes a sort of dramatic and exciting apotheosis. But what is exciting in this mounting tension is the promise it holds out. For instead of marking an ending, which would be tantamount to abandonment or desertion, the punctuation contains the promise of reunion. Rhythmicity is a key characteristic of playful interactions, and is what makes them so pleasurable.

More specifically, according to Daniel Marcelli (1986, 1992, 2000), playfulness relies on dysrhythmia or discontinuity – it is the "thwarted expectation" that generates the joy and excitement shared by mother (or partner) and infant. It is as though the mother had created a rule, recognized by the infant (e.g., in a tickling game, the rule might be "we tickle each other at a particular time in a particular place"), only to break it (e.g., by tickling the infant in a slightly different place just before or after it was expecting it). The playful jubilation therefore springs from these breaches and thwarted expectations.

These dysrhythmias, discontinuities, thwarted expectations and exciting punctuations can, however, only generate play and playfulness if there is a basic continuity, a basic trust and a basic rhythm to the exchanges.

Rhythmicity therefore concerns all the interactions, and all the adjustments and attunements, that take place within the bonds we develop with infants. External rhythmicity must be in step and in tune with the infant's inner rhythm if the latter is to engage with its partner in the dance or choreography of their encounter. Dysrhythmias, or wrong moves, are an inevitable feature of this encounter, and may even generate playful jubilation and excitement prior to reunion. These are, however, moderate dysrhythmias that are played out (or danced) against a backdrop of permanence ensuring a basic sense of security.

1.3. Presence/absence

The object's presences/absences must also be rhythmic, if the infant is to keep that object alive within it. Absences are, of course, inevitable, and infants by nature and of necessity experience interruptions and discontinuities. Observations have shown that infants make a great deal of effort to maintain continuity – while being fed, for instance.

A mother is spoon-feeding her infant, which remains motionless while the spoon is in its mouth, but becomes restless and agitated between spoonfuls (the presence/absence of the spoon triggers a separation/reunion experience). The infant calms itself down by looking at the observer, not letting him out of its sight (if the mother's hand comes between the infant's and observer's faces, the baby twists in its seat to restore visual contact). Once the infant has recovered a measure of security, it can turn back to its mother's face and engage in playful babble and exchange with her.

We can see here that once the infant's gaze has been freed from its task of latching onto and maintaining permanence, it can once again be used for the purposes of communication.

Other examples of how infants manage discontinuities include the departure of a parent, in which case the infant will look for clues to its parent's presence, and a parent turning his or her attention away from an instance of communication. When an interruption of this kind occurs, the infant may well show an interest in that which interests its parent, engaging in a bodily replay of the scene taking place before it with either its hands or its mouth. Through this process, dubbed "intracorporeal identification" by Haag (1990, 1997), the infant literally "incorporates" the situation.

The infant will also look for support in "hardness", seeking out "hard" sensations and avoiding the "softness" that represents the frailty inherent to the experience of loss. According to Frances Tustin (1981), these sensory explorations become associated with the infant's bisexuality, or what I prefer to call its "*psychic bisensuality*" (Ciccone, 2011). The supportive hardness sought by the infant is one of the poles of this bisensuality, the other being softness, of course. For the infant to have a feeling of inner security, these two poles must be articulated and combined. This articulation is most noticeable in general body tone, where the infant is held upright by a firm, hard backbone but is enveloped in soft and supple skin that allows it to stand up and go forth into the world with a feeling of inner security. The firmness provides support, while the suppleness absorbs the shock of encountering the world.

This psychic bisensuality can also be discerned in the "prosodic tone" of protolanguage, as we can see in the following example.

A 7-month-old infant ensconced in its baby bouncer is "conversing" with its mother. In rapt concentration, it observes every movement of its mother's mouth. It then produces sounds like "oh, oh, euh!...", in other words, vowels. The infant smiles and gurgles with pleasure, stretching its arms in its mother's direction and pushing on its legs. But the mother suddenly moves away to fetch something. The infant's movements in its mother's direction stop just as suddenly, its arms drop to its sides, its mouth stays wide open, not uttering a sound, and it gives the female observer a wide-eyed stare, as if to convey or share its surprise and incomprehension.

We now fast-forward to where the infant is sitting on a carpet, engaged in a "conversation" with its father, this time crouching beside it. Once again, the infant produces vowel-like sounds ("oh, heu, ha..."). It then attempts to stand up, pushing on its arms, with a very serious expression on its face. The infant's father comments on its efforts, suddenly then interrupts their conversation. The infant starts to whine. It then falls over and cries. The mother, who was not far away, comes over and talks to the infant, saying that everything's fine, that it will be soon be able to stand up again. She comforts the infant, taking it gently in her arms and sitting it on her knee, facing her. The infant then takes hold of one of the mother's fingers and clutches it firmly with both hands. Looking intently at the mother, it now babbles "ta ta ta!".

The vocalizations that accompany communication with another person and movement towards an object are therefore made up essentially of "soft", sensitive vowels ("ho", "ha", "heu", etc.). When the object moves away, interrupting the contact and imposing dysrhythmia and discontinuity, the infant experiences a fall that is both literal and metaphorical (halting its movement towards the other person, letting its arms drop, leaving its mouth hanging open, opening its eyes wide and toppling over just as it was attempting to stand up) and feels incomprehension or distress. It then looks for a supporting object (e.g., the observer in the room, the consoling mother) and, more specifically, for something that is "hard" or "firm" – the tightly clutched finger, the intense gaze. The infant articulates its search in its protolanguage, eschewing soft vowels in favour of hard consonants ("ta, ta, ta!") that both symbolize and internalize this support.

A great deal of psychic work is therefore needed to handle and resolve absence, and to lessen the feelings of separation, loss and discontinuity.

Although separations, breaks and discontinuities are inevitable, they must not last too long. There appears to be a point beyond which the object ceases to survive in the infant's psychic space, and collapse and absolute despair become inevitable. The object must not break the promise of reunion, and that reunion must be