ON THE FIRST DAY - EXPECTING CONNECTION

In first moments after birth, an infant may look and listen attentively for confirmation of human feelings, already seeking knowledge of others’ being, with expressive body.

DAY FOUR AND AVA IS READY TO SHARE A STORY

Story-making, from first conversations, to the fun of games, and then to cooperation in tasks and acts of meaning, becomes language, to name important objects and actions.


New Zealand 10-week-old, ‘lectures’ her mother, with open gaze and lively face, sharing mind time.
CYCLES OF ENGAGEMENT WITH OTHERS’ VITALITY, MOTIVES & EMOTIONS

Human psychological life begins mouths before birth, in communication with the mother’s body and her behaviour. There are preparations for both intimate engagement with other bodies, and elaborate systems for sharing motives and experiences in later life, for learning to recognise companions and then for sharing meanings of a culture.

THE BEGINNING OF MOTOR INTELLIGENCE
A 22 week foetus sucking a thumb, moving with rhythmically coordinated intentions. The eyes will open soon - but there will be little to see. Hearing is working well, listening for the mother’s voice. Soon will come a smile, or a pout of disgust, emotions with a human face. The cerebral cortex is very immature, but underneath is an expectant human mind.

REGULATING HUMAN SOCIAL BEING
From conception, the pulse of life is shared. At first the egg is part of the mother’s body, then the embryo forms itself but remains attached. The foetus grows to shape a separate human person but one attached by a placenta, joining the new vitality to the mother’s life in amphoteronic ‘shared regulation’. In the last months the foetus gets ready to communicate intentions and feelings with her by expressive signs, syn-rhythmically, ‘in synch’. Then family and community can share the creation of experience with the infant, too.
AMPHOTERONOMIC (MUTUAL AUTONOMIC) REGULATION: The foetus is in a protective world. Soon it will begin to move. The mother’s body and foetus communicate first physiologically.

HOW A FERTILISED EGG BECOMES A PERSON
“The whole astonishing process ... making ... a new individual is ... an organized adventure in specialization ... of countless cooperating units. ... This particular [species] we have followed ... will make no other kind. ... It is not only man but it is the man John Brown, or the woman Mary Smith, whose exact like never was yet. ... An explanation once offered for the evolutionary process traced it to 'memory' in the ancestral cell. But such an explanation rests ... on a misapprehension. It would be imagination rather than memory which we must assume for the ancestral cell; memory could not recall experience it never had.”

Sherrington, C. S. (1951). Man On His Nature 103-104

ORGANS EXPECTING COMPANY
Seeing Emotions
Calling & Speaking
Gesturing
Kicking ‘Dancing’

At 8 weeks a foetus is made for seeing, hearing, touching and speaking in company before the brain is active

Hearing
Emotions
Speech
SYNCHRONIC REGULATION: Mother and infant can communicate psychologically, regulating sympathy by expressions of emotion.

Passing expressions of face, voice and hands back and forth, rhythmically, imagining each other, sharing feelings.

Telling and acting out stories with emotion, listening to thoughts and imitating actions is how humans learn -- in shared vitality and awareness.

Stephen Porges

"We present a biobehavioural model that explains the neuro-biological mechanisms through which measures of vagal regulation of the heart are related to infant self-regulatory and social engagement skills.

...as [cortical regulation of the brainstem] improves during the first year of life, reciprocal social behaviour displaces feeding as the primary regulator of physiological state."


ASYMMETRIES OF INTERSUBJECTIVITY

In both Mother and Baby the Right Hemisphere is more receptive and sensitive. The Left Hemisphere is more assertive and intentional.

Iain McGilchrist

"The Master and his Emissary"

The most comprehensive review to date of findings from study of differences in consciousness, motives and emotions in the two hemispheres of human beings, and their significance for our understanding of ourselves, and of the modern technical world.

See http://www.iainmcgilchrist.com/
In the long development of the human brain, through gestation and many years of postnatal growth, the left and right cerebral hemispheres show different periods of growth related to the balance between self-regulation of well-being in the world and adventurous action to know use its resources. These include the vital resources of inter-personal and social life with other persons, including cultural skills and language.

Aesthetic

Moral

Innate Feelings

Three Functions of Emotion for a Human Being.

How Purposes of the Moving Self are Regulated, and Shared -- with Feelings, in Sympathy

Proprioceptive/Autonomic

A Map of Human Motives and Emotions in Relationships

Play, Joy
Social Affection
Separation Distress
Social Bonding

Pride

Exploration

Feeling

Shame

The Deep Integrative Functions of the Self:

"The nature of the self has been one of the central problems in philosophy and most recently in neuroscience. Here, we suggest that animals and humans share a "core self" represented in homologous underlying neural networks. We argue that the core self might be constituted by an integrative neuronal mechanism that enables self-related processing (SRP)."

[With the pulse of vitality, which can be shared]


"It is commonly believed that consciousness is a higher brain function. Here we consider the likelihood, based on abundant neuro-evolutionary data that lower brain affective phenomenal experiences provide the "energy" for the developmental construction of higher forms of cognitive consciousness. . . . all of consciousness may be dependent on the original evolution of affective phenomenal experiences that coded survival values. . . . From this perspective, perceptual experiences were initially affective at the primary-process brainstem level, but capable of being elaborated by secondary learning and memory processes into tertiary-cognitive forms of consciousness."


"Aesthetic"
At birth the human brain is one third the size of an adult brain, but has all parts in place for a creative human life, including unique human face, eyes, voice and hands for sharing emotions, intentions & states of consciousness. They wait for bright company.

I

THE INTERSUBJECTIVE SELF
CONSCIOUS IN ACTION & COMMUNICATION FROM BIRTH.

Neonatal Imitation
Is intentional, imaginative and seeking sympathetic exchange of rhythmic projects of moving that become propositions with value in expression, to be shared.

THE: NEWBORN

Hand active with Visual Fixation,
Two Eyes Accommodated for Shared Foveal Fixation
Looking at Other’s Eyes, Face or Hands.

A newborn in Hyderabad, a person alert to the world, though with little knowledge.

Twenty minutes old, and eagerly tracking a lively ball moved by a nurse. The world is to grasp, and it communicates.

Dr. Leboyer’s newborns are expressive with body, face and hands — enjoying the feelings of life in movement.
Young awake infants are visibly active mentally -- thinking and ‘talking’ with ‘mimesis’.

They show gestures of the hands relating to feelings in their bodies, to orientation of their interest to events in the world, and to the sympathy they have for other persons who may respond to their signs, thinking with them.

Infant hand gestures are part of a rich display of expressions by posture and attitude of the head and eyes, and intricate movements of the face.

At 30 mins. old, Shamini imitates mouth opening and tongue protrusion.

Other persons’ actions are worth copying, to share meaning.

Dr. Emese Nagy in Szeged, Hungary, with Newborn

Emese, as experimenter, shows index finger protrusion

Baby imitates with his right hand
WHY DO BABIES IMITATE?

What Emese found when she waited for the baby’s turn.

"Searching for the mechanism of neonatal imitation resulted in the discovery of a neonatal imitation capacity, called "provocation." 

Newborns spontaneously produced previously imitated gestures while waiting for the experimenter’s response."


15 seconds of dialogue with a baby less than 2 days old
Infants are much cleverer than we had thought at discriminating musical rhythms and tones of human sounds.
They hear and learn musicality of mother's talk and simple tunes before birth.
A two-month-old can be a skilled performer in an improvised vocal duet or protoconversation, a shared story over tens of seconds.

A child is born with body & brain ready to move in company - musicality is innate - it conducts our mental drama & shares it.

The rhythms of speech are innate

Even a premature infant can share vocal ideas. A video of Naseera, who was born 3 months premature, was made by Saskia van Rees in an ICU in Amsterdam. She makes videos of birth, neonatal care, communication with infants and children with special needs. See her website: Saskia van Rees Stichting lichaamstaal (Body Language Foundation); Secretariat: Scheyvenhofweg 12, 6093 PR Heeheyuwe, The Netherlands; Internet: http://www.stichtinglichaamstaal.nl/ Email: info@stichtinglichaamstaal.nl

The voice of an immature newborn

Naseera, 3 months premature, "kangarooing" - chats with Father. Sharing tone with vocal expression, and making up a "story"
A cycle of imitations of Mouth Opening with a female infant 20 minutes after birth.

Recorded a maternity hospital in Heraklion, Crete in 1983 by Giannis Kagiumitzakis for his PhD research at the University of Uppsala.

A (0 sec.) The researcher presents a wide open mouth for the first time to the infant, who is focusing on his mouth and with slightly closed eyes and pursed mouth.

B (+ 6.3 sec.) The infant opens his mouth for the fourth time. The neonate continues to observe his mouth with evident interest. The right hand moves up.

C (+ 0.8 sec.) The researcher opens the infant's mouth wide for the fifth time. The neonate imitates him once, synchronously while watching his mouth. The right hand closes.

D (+ 1.8 sec.) The infant imitates a second time looking up at the researcher's eyes as he waits. Right hand moves down and opens.

E (+ 1.8 sec.) Both pause, waiting. The infant is still looking at his eyes.

F (+ 0.6 sec.) The infant makes a third large imitation while looking at the researcher's mouth.
"The old model of thinking of the newborn infant as helpless and ready to be shaped by his environment prevented us from seeing his power as a communicant in the early mother-father-infant interaction. To see the neonate as chaotic or insensitive provided us with the capacity to see ourselves as acting 'on' rather than 'with' him."

Dr. T Berry Brazelton
1979 Evidence of communication during neonatal behavioural assessment, p. 79.

A remarkable lesson from fancy technology, showing us something of what we feel is intuitively right about the flow of innate motives, but is difficult to explain 'logically'.

The impulses are not 'cognitive' – they are emotive, provoking dynamic thoughts and dreams, telling stories.

To understand them requires a different science of mind – not of fate and fact, but of hope and value in moving, of Intelligent motives expressing interests and feelings.

"The Newborn Infant: A Missing Stage in Developmental Psychology"

"Although neonatology, the study of the newborn is well established in medical science, psychological research on the newborn is relatively scarce. Can we justify this period as a distinct stage of human development in Psychology? ... the neonate’s early social preferences and responses indicate a unique, sensitive, experience-expectant stage of development."

FREUD AND PIAGET GOT IT WRONG!

Arm moves of a hungry newborn were recorded
Red marker, left arm: Green right arm

They match the music of "Wee Willie Winkie", a traditional Scottish lullaby sung by Sheena Wellington. Baby's mood changes with his mother's care.

THE RHYTHMS AND PHrasing OF THE NEWBORN'S HAND MOVEMENTS MATCH THOSE OF THE 'NARRATIVE' IN A FAMOUS SCOTTISH LULLABY

Wee Willie Winkie runs through the town,
Up stairs and down stairs in his night gown,
Tapping at the window, crying at the lock.
Are the children in their bed? for it's past ten o'clock?

Hey, Willie Winkie, are you coming in?
The cat is singing purring sounds to the sleeping hen,
The dog's spread out on the floor and doesn't give a cheep,
But here's a wakeful little boy who will not fall asleep!

From "The Connected Baby"
A film conversation Dr. Suzanne Zeedyk & Jonathan Robertson, who matched the song with the baby's movements
suzanne@suzannezeedyk.com
http://suzannezeedyk.com
**INTRODUCTION**

Ben stirs, looks at his hand, and gestures.

**DEVELOPMENT**

He moves and gestures more vigorously, and smiles.

Baby Ben is one month premature. He tells a story of self-awareness in movements of his body, and is accompanied by his mother’s voice.

*They make music and poetry together.*

Mother greets Ben, and invites him to talk.

She is delighted, and congratulates him.
CLIMAX

He makes a huge two-handed movement, twice, with smile and vocalization.

RESOLUTION

He withdraws for a moment, then does a 'coda'.

THE ENERGY OF BEN'S NARRATIVE CYCLE

Expressing a surge of life processes in the body as movements are imagined by the Brain/Mind, — over tens of seconds. These movements seek, and respond to, approval. They are propositions.
FREE MOVEMENT HAS PACE.
FORM & TONE. LIKE MUSIC

'Musicality' may be defined as the Human Way of Moving with Rhythm and Expression —

It Creates Action of the Body with Emotion, and It Communicates Stories of Purpose, Thought and Feeling — Driven by Time in the Brain in a CHRONOLOGICAL SPECTRUM OF RHYTHMS

TIMES OF THE MIND (AND OF MUSIC) ARE INNATE

Basic rhythms, and their emotional qualities, are the same in infants and adults.

This makes communication of the shared vitality of intentions, interests and feelings possible -- before 'facts' of shared knowledge about actions and objects are identified in speech.

WHAT RHYTHM IN THE MIND IS FOR: The Brain Thinks, Imagines and Remembers in Time, With the Rhythms of an Intrinsic Motive Pulse, the IMP -- and these rhythms communicate

Rhythmic movements result from predictive motor images generated in the brain to 'use' and 'feel' the forces of the periphery (Bereczkei, 1967)

SHORTEST PERCEPTIBLE & CONTROLLABLE EVENTS - 0.01 TO 0.2 SECONDS

The present moment of conscious acting, 0.2 to 6 seconds.

(A) Pre-reaching 23 days after birth.
   (A) Vertical displacement of the center of the wrist. I held part open at the elbow.
   (B) Acceleration showing pulling or stepping.
   (C) Frequency histogram of intervals between lifts of the object for four newborns has a main period of 0.3 to 0.4 sec.
   (D) Successive postures while an infant tracks an object moving slowly to her left.
THE INSIDE STORY GOES ON SLOWLY WHEN YOU ARE ASLEEP IMAGINING AND REMEMBERING

THE RHYTHM OF ENERGY IN THE BODY CAN BE SHARED IN WAVES OF INTIMATE VITALITY

PHYSIOLOGICAL SYNCHRONICITY Sharing dreams of breathing and heartbeat.

Tea is 1 year old and sleeping with her Mother.
II
CHATTING AT 2 MONTHS.
(Mary Catherine Bateson’s Protoconversations)
Primary Intersubjectivity
Mutual regulation of chatting and sharing emotions
Recorded in Harvard, 1968

What Mary Catherine Bateson saw in films of interactions of an infant 7 to 14 week old with the mother: "... the mother and infant were collaborating in a pattern of more or less alternating, non-overlapping vocalization, the mother speaking brief sentences and the infant responding with coos and murmurs, together producing a brief joint performance similar to conversation, which I called 'proto conversation.' The study of timing and sequencing showed that certainly the mother and probably the infant, in addition to conforming in general to a regular pattern, were acting to sustain it or to restore it when it faltered, waiting for the expected vocalization from the other and then after a pause resuming vocalization, as if to elicit a response that had not been forthcoming. These interactions were characterized by a sort of delighted, ritualized courtesy and more or less sustained attention and mutual gaze. Many of the vocalizations were of types not described in the acoustic literature on infancy, since they were very brief and faint, yet were crucial parts of the jointly sustained performances."

Bateson concluded.

"The development of the capacity for participation in complex sequenced behavior must lay the groundwork for participation in games and for the development of playful patterns of imitations, and so the study of such performances can shed light on a variety of types of learning, including language acquisition."

Karl Lashley. 1951. Serial order in behavior

"Generality of the problem of syntax
I have devoted so much time to discussion of the problem of syntax ... because the problems raised by the organization of language seem to me to be characteristic of almost all other cerebral activity. There is a series of hierarchies of organization: the order of vocal movements in pronouncing the word, the order of words in the sentence, the order of sentences in the paragraph, the rational order of paragraphs in a discourse. Not only speech, but all skilled acts seem to involve the same problems of serial ordering ... Analysis of the nervous mechanisms underlying order in the more primitive acts, may contribute ultimately to the resolution even of the physiology of logic."

IN EARLY WEEKS A BABY SEEKS INTIMATE CHATS

At 7 weeks Tea is very interested in communicating.

TWO TO FOUR MONTHS
Clever at Dialogue, and beginning to explore further into space and time
Accuracy reach to touch
Stereo acuity: precision seeing in 3D
Eye-head- arm coordination
Looking away from mother
Right arm gestures (girls first).
A mother and 9-week-old boy, showing the pattern of dialogue. The infant leads. The matching of expressions of excitement, feeling, and interest result from the mother imitating the infant. *Harvard Center for Cognitive Studies, 1967*, with Jerome Bruner, Perry Brazellon and Martin Richards.

Leanne 6 weeks, Edinburgh 1979

Expressing interests and feelings to her sympathetic mother

Laura, 6 weeks, with Mother, at Edinburgh University, 1979. share a Proto-Conversation of 27 seconds.

She waves her right hand, while following her mother's talk

The sounds of Laura's little story composed with her mother were given precise analysis by musician and acoustics expert Stephen Malloch, using sophisticated computations to derive spectrographs and pitch plots of their vocalizations.
**THEORY OF COMMUNICATIVE MUSICALITY**
Malloch, 1999

Music (e.g., of the mother’s voice) communicates with an infant because it engages an *Intrinsic Motive Pulse* (IMP) (Treharthen, 1999) generated in the brain. The sense of ‘musicality’ comprises:

1. **Pulse**: A rhythmic time sense of syllables, the beat, phrases and longer elements;
2. **Quality**: Sensitivity for the temporal variation in intensity, pitch and timbre of tone of voices, and of instruments that mimic the human voice;
3. **Narrative**: Perception of the emotional development of the melodic line, which supports anticipation of repeating harmonies, phrases and emotional forms in a vocal or musical performance.

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**Narrative ACTIONS WITH PERSUASIVE FEELING**

- Pulse and Quality are combined in the forms of emotional narrative, which allow two persons to share a sense of purpose in passing time.
- We examine the musical companionship that is created with her baby as a mother shares a protoconversation or chants a nursery rhyme.
- We conclude that Communicative Musicality is vital for companionable parent/infant communication.

- Stephen Malloch (1999)
Communicative Musuality
Exploring the Basis of Human Companionship

Stephen Malloch
and
Colwyn Treharthen

Oxford University Press 2009
Paperback 2010

Lynne Murray’s Test of the Infant’s Sensitivity --1975

(Treharthen, Hubley and Sheeran, Scientific Foundations of Paediatrics, 1551)

EXPERIMENTING WITH THE FINE TIMING OF EMOTIONS
Lynne Murray’s Double Television Communication, 1973-1980

Baby Room 1: Week 1, in one Room, Her Mother is Another
Three, see, and hear, Each Other on Television

Live and in communication. Replay: Out of touch. Avoidant.

The happy minute of Shona’s mother is replayed.
Shona is out of touch, withdrawn, sad when mother is just a recording

III
THINKING, SEEKING, MANIPULATING, AND PLAYING GAMES - SHARING MUSICAL STORIES AS RITUALS TO CELEBRATE COMPANIONSHIP.

Person-Person Games and Songs.
Person-Person-Object Games and Tasks
A FAVOURITE ACTION SONG

Round and round the gar-den,
Ran a ted-dy bear,
One step, two step,
Tic-kl-y un-der there.

Leanne, 4 months: Enjoying a song. Reaching for a ball.
Looking about. Ignoring mother.
"If it's your food you want, here!"

Jack, 4 Months, learns to say, "AAH BOO", and when he does it, his mother says, "You get a kiss for that!", and she kisses him on the forehead.

Leanne, 5 months. "Round and round the garden", with Interest and Pleasure.
Clapping hands:

Emma, 6 months: Clapping hands: touching Mother's tongue
Her pride is clear when she looks at herself in the window.

Clapping hands with shared joy: imitating, watching own tongue

Emma responds to "Clap Handies" (She is left-handed).

Emma, 6 months, on father's knee.
Her mother says, "Clap handies!"
Emma 'shows' or 'performs' to the photographer, with intent look and a proud grin.
(Father is proud too)
That's pride!

But, with a stranger she is worried, 'ashamed'--he does not 'get it'.

SHAME
Escaping
Mis-understanding
With a Stranger,
Hiding Confusion
Emma at 6 Months

Even infants sense strangers sometimes do not share their understanding, and this worries them. It's not fear--they have anxiety of meaninglessness. Such feelings make teaching of ideas and practices a moral task. Shame and anxiety stop learning.

MORE TEASING AND SHARING FUN

Tracy, 6 months, wants the toy, but her mother pokes it under her chin.

She watches her mother while pulling the string to make the puppet move.

Shona, 2 months
Out of touch, frightened

Emma, 6 months, Facing strangers

Lonely and hiding, confused with SHAKE

Paul and Andrew, 10 months, Alone with strangers
GIRLS 7 AND 8 MONTHS. GAMES WITH MOTHER

Left: Touching finger tips: feeding wooden doll to mother with sympathetic open mouth.

Right: A different "Round and round the garden": mother creep to her over the table, then tickle her under the arm.

SUBTLE MOODS OF SELF-OTHER CONSCIOUSNESS

Emma. 7 months, shows clapping to the mother; and bravely offers clapping to an uncomprehending stranger.

Andrew, 1 year, pulls a silly face to the window as his mother is sitting "blank-faced": he looks sadly at a stranger, then cries.

CLEVER GAMES AND JOKES AT NINE MONTHS

Eve shares a 'wrinkle nose' joke with her mother.

Andrew chases a ping-pong ball. Alex pokes his tongue out to the mirror after his mother asks him to imitate.

BUILDING ARTFUL 'PROTO-HABITUS'

Research on songs for infants in many languages shows how we share story-telling beyond the spoken word - in body impulses.

Songs and action games, chants and poems are quickly learned and remembered.

They become favourite messages of friendship, emblems of the infant's identity or membership of a group; a source of pride to be shared with admirers.
SHARING STORIES IN SONG AND GESTURE

Japanese Boy, 10 Months Old.
With His Mother, Appreciating Her Performance, with Humour. He watches her rhythmic hand play to a nursery song, and bows respectfully with her at the end.

A CHILD IS BORN WITH BODY & BRAIN READY TO MOVE IN COMPANY - MUSICALITY IS INNATE IT CONDUCTS OUR MENTAL DRAMA & SHARES IT

Infants are much cleverer than we had thought at discriminating musical rhythms and tones of human sounds. They hear the musicality of mother’s talk and learn simple melodies before birth.

A two-month-old can be a skilled performer in an improvised vocal duet or protoconversation, a shared story over tens of seconds.

And movement time combines the senses -- it is 'amodal'.

A Mother Sings to Her Daughter, Blind from Birth

Five-month old blind baby Maria conducts her mother’s songs with her left hand. Her hand at times moves 1.3 second before the melody of her mother's voice, making graceful gestures, telling a story she knows well.

The story-shape of another famous baby song

INTRODUCTION DEVELOPMENT to CLIMAX and RESOLUTION

AN EXAMPLE OF TRANSMODAL MEANING IN MOVEMENT

A POPULAR SWEDISH BABY SONG

Mors lilla Olle

Mother’s little Olle meets a bear and feeds him blueberries
The baby’s finger, dancing to the music, at key moments moves about 0.3 seconds before the mother’s voice. At other times she synchronizes. She knows the ‘performance’.

The Rhythms and Tones of a Story. There are 8 different rhyming vowels

Mors lilla Olle

Brommafrun, vem lever 
Bukarna knuska. En hand viit du 
Luvig är poljen. Mors Olle blänker 
»Ä, en känsla, det var bra, se gudet!

Klappar så ljusen med händerna 
räcker fram korpen: »Se där, smålår
Nalle han skadar mest allt vad där
»Hör du, jag tror, att du tycker om

Mör fick nu se dem, gav till er
Björnen sprang bort, nu är leken för
»Ä, varsådär skände du undan nu
Mör lilla, bcd honom komma.

IV
THE SHARED VALUE OF MEANING AT ONE YEAR, AND HOW THIS COMMON SENSE GROWS.

To Share a Task
Discovery of cooperative awareness and acts of meaning

Penny Hubley, Edinburgh, 1974

"Master Baby" by Sir William Orchardson, Scottish National Gallery, Edinburgh. A one-year-old with her mother, sharing fun in a Person-Person-Object Game.

Joint Attention (with convergent interest)

Mutual Attention (with sympathetic feeling for and with the other)

Secondary Internsubjectivity. Easy cooperation. The mother accompanies and teaches the baby, sharing the value of actions and objects. (Trevathan & Hubley, 1978)
"Put the Doll in the Truck" Task

Emma. 7 months
Is bright, but she
doesn’t get her
mother’s message

"Don’t chew it.
Put it in there!"

For Basilic. 12 months, it is easy and amusing.

"Here, put this one in the truck!"

No problem!

"Oh, what a clever girl!" (Yes I am good, aren’t I)

Hubley’s findings with 5 girls. They rarely imitate
what the mother does, but, after 9 months, comply
with requests to complete a shared purpose

Social Interaction During Infancy. New Directions for Child Development 4: 57-86.

IMPERATIVE, SELF-ASSERTING COMMUNICATION
CHALLENGING RESPONSIBILITY IN A SHARED TASK

Basilic, at one year, insists that her mother must put the
doll in the truck, while her mother points to the truck
saying, with emphasis, “You’re meant to put it in!”
Basilie pointed and vocalised a 'protolanguage' request for the magazine. Her mother said, "Oh, she recognizes the National Geographic by its yellow cover, and likes to look at the pictures."

Children Are Story Sharing Creatures, From Birth That is why a book and a telephone bill are both interesting for a one-year-old in Edinburgh.

Adegbenro, Lagos, likes to play his piano with his mother.

Mother and uncle in A's Zone of Proximal Development.

But Adegbenro is a capable and proud performer on his own.

Adegbenro asks for his rattle. His mother gives it to him.
"Look what I've got!"
Mother smiles.

(Photos: John and Penelope Hobbs, 1978)

Emma
27 Months.
Reading,
Counting
&
Having
Tea

Imaginary hot tea and cake. It is the ritual that matters.

Caring for doll, having sympathy, mostly.

Leanne
3 years.
Knowing
The
Names
For
Cup
Spoon
Fork
Knife
Saucer

ALICE, 20 MONTHS, SHARES THE STORY
WITH FATHER, PRACTICING HER WORDS.
THE PRESCHOOL WORLD IS ONE OF THE RICHEST TIMES OF LEARNING WITH OTHERS

Toddlers seek friendships with parents, brothers and sisters, peers, grandparents -- people of all ages -- and want to take part in the serious fun of what companions know and understand. Learning at home and at school can be compared to follow the growth of self-confidence, interests and personality of each boy and girl -- their personal story.

Sisters share the imagination of a story, enjoying learning at home.

Cameron House Nursery, Edinburgh.

Lilian Katz, Professor Emerita of Early Childhood Education, University of Illinois at Urbana-Champaign

"We are doing earlier and earlier to children what we shouldn't do later."

These words of wisdom were offered by Lilian Katz -- in reference to the current trend of aligning curriculum and programs in an effort to prepare children for the next step in their education.

http://illinoisearlylearning.org/ask-dr-katz.htm

THE CHILD'S CURRICULUM
What is the Role of Early Childhood Education and Care?

www.childscurriculum.org.uk
Royal College of Physicians of Edinburgh
Saturday 12th September 2010
"Human sense is understanding how to live in the human and physical worlds that children normally develop in the first few years of life. It is learned spontaneously in direct encounters with these worlds that arise unavoidably everywhere, transcending cultural differences. The learning is always informed and guided by emotion - that is, by feelings of significance, of value, of what matters. And it is highly stable and enduring, once established. It is the foundation on which all that follows must build."

(Donaldson, Children's Minds, 1978)

THE STORIES ARE TOLD WITH FEELING

Jerome Bruner "Why are we so intellectually dismissive towards narrative? ... Storytelling performs the dual cultural functions of making the strange familiar and ourselves private and distinctive. If pupils are encouraged to think about the different outcomes that could have resulted from a set of circumstances, they are demonstrating usefulness of knowledge about a subject. Rather than just retaining knowledge and facts, they ... use their imaginations to think about other outcomes. ... This helps them to think about facing the future, and it stimulates the teacher too."

WE ARE BORN TO LEARN BY SHARING STORIES

It is surely the case that schooling is only one small part of how a culture inducts the young into its canonical ways. Indeed, schooling may even be at odds with a culture's other ways of inducting the young into the requirements of communal living... education is not just about conventional school matters like curriculum or standards or testing. What we resolve to do in school only makes sense when considered in the broader context of what the society intends to accomplish through its educational investment in the young. How one conceives of education, we have finally come to recognize, is a function of how one conceives of culture and its aims, professed and otherwise.

(Jerome S. Bruner The Culture of Education. 1996, ix-x)

AUTOPHOSIS AND CONSENSUALITY OF HUMAN EDUCATION IN PLAY
Life is expectant, adapted to know its effects. An embryo becomes 'self-aware' as its cells form a body; a foetus knows its vitality with first movements, aware of its own life and of the mother's - or a twin's. The moving Self builds projects cooperatively with other vital selves by 'consensuality'. Human culture is created with the willing agency of young children who learn meanings and skills in vital engagements with companions of all ages by moving human bodies with affection and hope.

Children gain knowledge in different social worlds, by 'collaborative learning', helping to make imaginary and meaningful things in companionship with good teachers, those who share intentions and ideas generously.

Barbara Rogoff is Prof. of Child Development, at UC, Santa Cruz in California.
Toddlers play with and explore an imaginative 'unreality' that others may believe has beauty and practical value, and want to share.

On their own, and with friends, young children make practical sense of the world creatively, sharing the pleasure of knowing and doing. In play with dancing voice and body they create what the Norwegian musicologist Jon-Roar Bjørkvolde calls *Children's Musical Culture*.

We all need this Muse Within, for we are what I shall call muséal beings. To lose our musicality would be to lose a profoundly essential part of our humanity. (p. xviii)
The mother stimulates the child and the child stimulates the mother in such a way that the result is far more meaningful than either could have produced alone. ... Mother and child “swing” together in a common rhythm, and in so doing strengthen each other’s identity. (pp. 12-13)

(Jon-Roar Bjørkvold, 1992, “The Muse Within”)

This little social being dramatically enlarges his or her world during the first year of life. At every step of the way, bodily movement, rhythm, and the intonation of language are of decisive importance. ... During the second year of life the child’s interest turns increasingly toward other children, especially those of similar age. ... First there is one playmate, then a large group; first one game, then many. A magical new chapter opens for the child during the third year of life, one of companionship as well as loneliness in the company of other children in play. (pp. 16-19)

(Jon-Roar Bjørkvold, 1992, “The Muse Within”)

There are many skills to be mastered: body language, the subtleties of spoken language, humour, songs. All the keys that will open the door to the fellowship of child culture, a muse-ical community of friendship and bickering, warmth and coldness, play and rivalry. (p. 22)

(Jon-Roar Bjørkvold, 1992, “The Muse Within”)

"Two-and three-year-old children have such a strong sensitivity to their language — to its many inflections and suffixes — that the words they construct inventively do not seem at all distorted and freakish but, on the contrary, extremely apt, beautiful, and natural."

Kornel Chukovsky (1968)
From Two to Five, Berkeley and Los Angeles: University of California Press. Page 4

The first 30 months of human life. Phases of human social consciousness that have been charted in the period before language.

A: Developments from conception to 18 months after birth at full term. Formative, latent and nascent consciousness in utero, and the first elaborations of emergent consciousness in infancy. Every stage depends on interaction with the accessible human world, and the processes are transformed by the developing motives of the child, first inside the mother's body, then in communication with her and other persons (Trevathan & Aiken 2005; Trevarthen et al. 2006).

B: Stages in the acquisition of communication and language, or "learning how to mean" (Halliday 1975).

C: Forming senses of the self, according to Stern (2000).

D: Developments in and infant's communication with the mother (Sander 1964).

E: Actions and awareness in the three months of gestation (Piontelli 2002; Trevarthen et al. 2006).

Social Functions of Speech, Beginning in Proto-Language.

Learning How to Mean: Explorations in the Development of Language. London: Edward Arnold, 1975

M. A. K. Halliday

For Halliday, language is a "meaning potential" and linguistics is the study of how people exchange meanings by 'language'. Halliday's grammar is systemic functional. He argues that language evolved to carry out certain critical functions as human beings interact with their ... "eco-social" environment.

"Forms of Vitality: Exploring dynamic experience in psychology, the arts, psychotherapy, and development."

Daniel N. Stern M. D. Oxford, Oxford University Press, 2010

Vitality dynamics are psychological, subjective phenomena ... felt as aliveness ... designed to fit the workings of the human world. They are... shapes of expressive movement. They concern the How, the manner, the style, not the What nor the Why.

"This book attempts to create a dialogue between the infant as revealed by the experimental approach and as clinically constructed, in the sense of resolving the contradiction between theory and reality" (Stern, 1985, p. ix).
Consider the following list of words.

exploding  surging  accelerating
swelling  bursting  fading
drawn out  disappearing  fleeting
forceful  powerful  weak
cresting  pulsing  tentative
rushing  pulling  pushing
relaxing  languorous  floating
fluttering  effortful  easy
tense  gentle  halting
 gliding  swinging  tightly
holding still  loosely  bounding
and many more.

These words are common, but the list is curious. Most of the words are adverbs or adjectives. They are not emotions or motivational states … pure perceptions … sensations -- they have no modality. They are not cognitions or acts, as they have no goal state and no specific means. They fall in between all the cracks.

They are the felt experience of force -- in movement -- with a temporal contour - and a sense of aliveness: … shapes of expressive movement. They concern the How, the manner, the style, not the What nor the Why.

“Vitality dynamics are the child of movement … Movement is our primary experience and vitality dynamic experience is the most primitive and fundamental of all felt experience.”

In the introduction to the 2000 edition of The Interpersonal World Stern says, “One consequence of the book’s application of a narrative perspective to the non-verbal has been the discovery of a language useful to many psychotherapies that rely on the non verbal. I am thinking particularly of dance, music, body, and movement therapies, as well as existential psychotherapies. This observation came as a pleasant surprise to me since I did not originally have such therapists in mind; my thinking has been enriched by coming to know them better.” (Stern, 2000, p. xv).

Nigel Osborne and student at a summer music camp near Sarajevo, BiH, 2009
"The Love of Special Companions and the Importance of Prizeful Play"

Even newborns have a sense of convivial humour, and it grows quickly with human powers of activity and awareness. Vital well-being for her baby is the first concern for a mother’s love, but she is a playmate too, and very soon she is joined by others of the family in this important role that responds to the infant’s zest for life, with fun. Even solitary play seems a sociable activity, a display of the joyful curiosity and inventiveness of intelligence that can be judged from without with different appraisals. A smile signals something worth sharing with pride. A grumpy or sad face indicates a feeling of shame that can turn to distress or anger. These are the important moral feelings that guide cooperation in relationships. I will describe the stages of development of playfulness and pride in early childhood and how it is greeted by others’ admiration, and the harm that may be done by the fearful feeling of shame, when one fails to get a response, or ‘behaves badly’. I believe parental care, learning with others, and therapy are all tested by self-feelings of pride and shame, made evident by subtle signals of ways of moving, as well as by explicit signals of reaching out with joy, or turning away with anxiety and pain. We are born to share adventures with imaginative invention, to find meanings in projects we make together, the success of which will be remembered with pleasure. The ritual of an old baby song or action game offers just that joy in sharing.

Colwyn Trevarthen, September, 2014

REFERENCES:


