

 scottish universities insight institute
 Inspiring Achievement for a Better Scotland

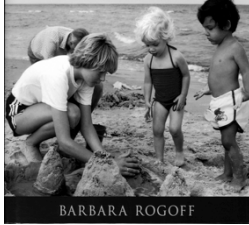
The Pinkie Resilience Project:
Enhancing Equality, Boosting Wellbeing and
Realising Potential in Scottish Schools
 Kings Manor Hotel, Mussekburgh, 25 April, 2015

Protecting Joy and Pride In Early Education,
 for a Self-Confident Future

Prof. Colwyn Trevarthen,
 Department of Psychology, University of Edinburgh, Scotland


PERCEPTION, MOVEMENT
 & ACTION RESEARCH
 CENTRE (PMARC)
 
 INSTITUTE FOR MUSIC IN
 HUMAN & SOCIAL
 DEVELOPMENT (IMHSD)

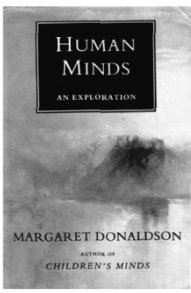
THE CULTURAL
 NATURE
 OF HUMAN
 DEVELOPMENT


 BARBARA ROGOFF

HUMAN SENSE
 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 the vital experience of intentions and ideas generously, and sympathetically.

Barbara Rogoff is Prof. of Child Development, at UC Santa Cruz


 By Donald Sinclair Swan
 Date painted: 1989
 National Galleries of Scotland


 HUMAN MINDS
 AN EXPLORATION
 MARGARET DONALDSON
 AUTHOR OF
 CHILDREN'S MINDS

Professor Margaret Donaldson

1992


“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,)

‘COOPERATIVE OR *SYMPATHETIC* EMOTIONS’

In this learning, creative works are appreciated for their elegance or beauty, *aesthetically*. The most powerful ‘self-conscious’, ‘sociable’ or *moral*, emotions are **‘pride’** and **‘shame’**, which regulate shared actions, experience and tasks from infancy. They become adapted by learning to regulate intimate, public, educational, productive and institutional or ‘official’ actions in society.

***Self-Other-Conscious* emotions lead to **friendship in cultural skills, including language, which connect generations**. If not appreciated and shared they can change to painful loneliness, anxiety and depression.**


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>



There's hope for childhood. Despite a perfect storm of hostile forces that are robbing children of a healthy childhood, courageous parents and teachers who know what's best for children are turning the tide.

Johann Christoph Arnold

"Sympathy In Movement"

The Infant Self & 'Inter-Subjectivity', Revealing Human Motives & Emotions.

Our research tries to find the creative processes of intelligence that generate and regulate human actions, and the communication and learning of cultural experience and social awareness with love, joy and pride.

How, in strong relationships, motives of play and cooperation make possible transmission of meanings, beliefs, rituals and skills, and willing conformity to arbitrary rules of family and community.

Thomas. J. Scheff, 1988.

University of California at Santa Barbara
Shame and conformity: the deference-emotion system.
American Sociological Review, 53, 395-406.

"Depending on its intensity and obviousness, rejection usually leads inevitably to the painful emotions of embarrassment, shame, or humiliation. By the same token, when we are accepted as we present ourselves, we usually feel rewarded by the pleasant emotions of pride and fellow feeling. ... Disgrace subsumes both public and private sides—outer demotion and inner self." (p. 396).

THE SOURCES OF SHAME: BIOLOGICAL & SOCIAL
"In *The Expression of Emotions in Men and Animals* (1872), Darwin devotes a whole chapter to blushing and its relation to shame. He states his thesis quite simply: blushing is caused by "shyness, shame, and modesty, **the essential element in all being self-attention.**" ... "It is not the simple act of reflecting on our own appearance, but the *thinking what others think of us, which excites a blush.*" His discussion suggests that blushing may be caused by perceptions of other people's evaluation of the self, whether positive or negative. ... The second statement, however, contains the basic proposition for the whole theory: **shame is the social emotion, arising as it does out of the monitoring of one's own actions by viewing one's self from the standpoint of others.**" (Scheff, 1988, p. 397).



A proud, healthy family in a remote forest in Canada. Sampson and Leah Beaver with their daughter Frances Louise in 1907. As Blackfoot Indians they lived with little technical culture, not even using canoes. They are close to nature, rich in art, and very fit.



In the 18th Century, **Francis Hutcheson**, Professor of Moral Philosophy at Glasgow University, scandalised many in the church with the assertion that morality should be judged by the feelings of happiness it engenders in others.. He held that sympathy and morality were innate principles in humankind, not dependent upon reason. Hutcheson's pupils **Adam Smith** and **David Hume** were influenced by this teaching and elaborated it, though in different ways.

"As a disposition to imitate is natural to mankind from their infancy, so they universally receive pleasure from imitation. ... Another important determination or sense of the soul we may call the *sympathetic*, different from all the external senses; by which, when we apprehend the state of others, our hearts naturally have a fellow-feeling with them. ... We see this principle strongly working in children, where there are fewer distant views of interest. ... This sympathy seems to extend to all our affections and passions. They all seem naturally contagious." (Francis Hutcheson, 1755, *A System of Moral Philosophy*, Vol. I, Chapter 2)

Smith described morality as the principle by which relations are given emotional value in terms of **positive or negative sympathy**.

This is a very different view from the belief that moral understanding can only come as a slow acquisition in the child of self-awareness, of that rational mastery of social rules, permissions and prohibitions that Freud called a super-ego, gained by processes such as identification and social learning, **crude innate impulses of self-protection being coerced by training in how one should behave, and by modeling of the actions and beliefs of exemplary individuals**.

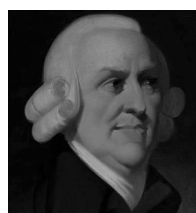
"Sympathy ... may ... , without much impropriety, be made use of to denote our fellow-feeling with any passion whatever." (p. 10, 5)



"A smiling face is, to every body that sees it, a cheerful object; as a sorrowful countenance, on the other hand, is a melancholy one." (p. 11, 6)



The Theory of Moral Sentiments (1759) by Adam Smith (who was much more than an economist).



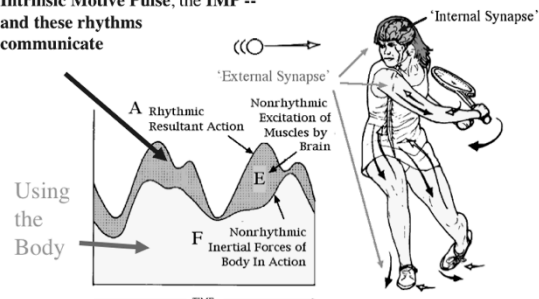
When I endeavour to examine my own conduct, when I endeavour to pass sentence upon it, and either to approve or condemn it, it is evident that, in all such cases, **I divide myself, as it were, into two persons**

... The first is the spectator, whose sentiments with regard to my own conduct I endeavour to enter into, by placing myself in his situation, and by considering how it would appear to me, when seen from that particular point of view. The second is the agent, the person whom I properly call myself, and of whose conduct, under the character of a spectator, I was endeavouring to form some opinion. The first is the judge; the second the person judged of. **Adam Smith TMS**, p. 182

AND HOW WE IMAGINE MOVING AS ONE 'ME'

Building on Charles Sherrington's discovery of the neural mechanisms of proprio-ception, or *self-feeling*, and his theory of how actions of many body parts are composed by the brain into movements of a single coherent person, the Russian physiologist **Nicholai Bernstein**, in the 1930s, made a brilliant study of *how human movements are generated*. We control movements by *imaginative motor images*, planning in time to coordinate rhythmic actions with a body of many parts and many 'degrees of freedom', or ways of moving them.

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 (Bernstein, 1967).

THE MELODIES OF ACTION FEEL GOOD AND ARE SOCIABLE, SHARING JOY



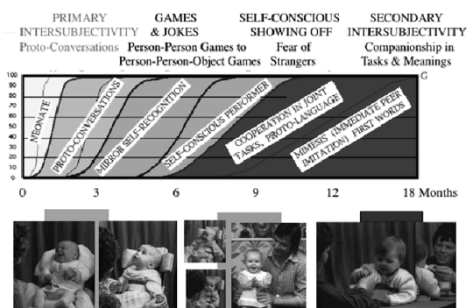
Music Moves
Us, Together,
from Birth.

This Is a
Challenge for
Psychology
& for
Neuroscience

We have learned about the animation of
intimate and open communication
between persons by studying videos of
infants with parents.

Here are the lead actors
and how they shared their stories
in affectionate companionship, with
LOVE, in PLAY and for WORK

INTIMATE LOVE INVENTIVE PLAY INFORMATIVE INSTRUMENTAL WORK



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.



IN EARLY WEEKS A BABY SEEKS INTIMATE CHATS

At 7 weeks Téa is
very INTERESTED in
communicating.



ON THE FIRST DAY – EXPECTING CONNECTION

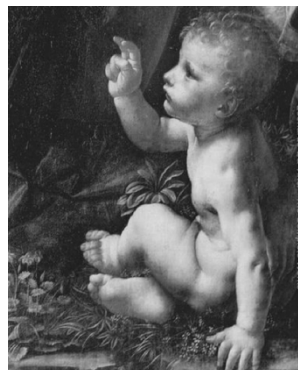


In first moments after birth, an infant looks and
listens attentively to confirm human feelings, seeking
contact with an others' being, with expressive body.

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, naming important objects and actions

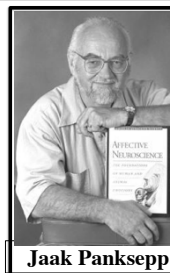


Infant Jesus blesses the infant Saint John, his playmate in the *Virgin of the Rocks* by Leonardo da Vinci, painted 1483-1486.



Virgin of the Rocks Leonardo da Vinci 1483-1486

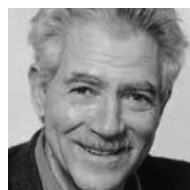
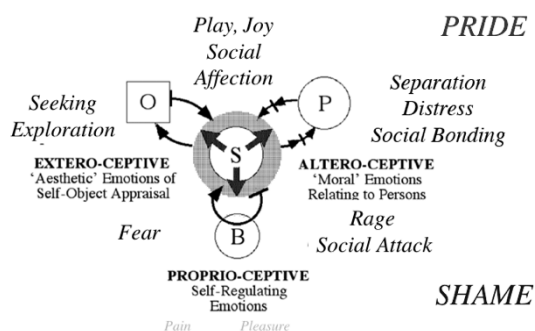
The Discoverer of Rat Laughter "It is commonly believed that consciousness is a higher brain function. Here we consider ... that lower brain affective phenomenal experiences provide the "energy" for the developmental construction of higher forms of cognitive consciousness. ... Perceptual experiences were initially affective at the primary-process brain-stem level, but capable of being elaborated by secondary learning and memory into tertiary-cognitive consciousness."



Jaak Panksepp

Solms, M. and Panksepp, J. (2012). The "Id" knows more than the "Ego" admits. *Brain Sciences*, 2, page 147.

A MAP OF HUMAN MOTIVES AND EMOTIONS IN RELATIONSHIPS



"FORMS OF VITALITY:
Exploring dynamic experience
in psychology, the arts,
psychotherapy,
and development."

Daniel N. Stern M. D.
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.

Goodrich, B. G. (2010). We do, therefore we think: Time, motility, and consciousness. *Reviews in the Neurosciences*, 21, 331-361.

“This article is a philosopher’s expanded review of two recent books on neurophysiology: Rodolfo Llinás’s *I of the Vortex* and György Buszák’s *Rhythms of the Brain*.

Researchers such as these are converging on a view of consciousness as **originating in motility and as inherently temporal** due to the brainwave oscillations that underlay it.”

Young awake newborns 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.

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

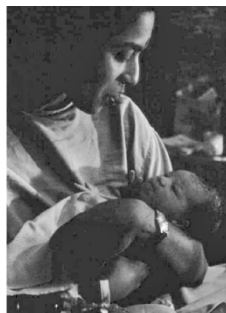


SHE IS VERY EXPRESSIVE



Maria, a Musician’s Daughter, 6 Hours Old

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



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

TIMES OF THE MIND AND OF MUSIC ARE INNATE AND APPEAR IN THE MOVEMENTS OF INFANTS

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

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

The rhythms of speech are innate

Even a premature infant can share a conversation.

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

Stichtinglichaamstaal (Body Language Foundation)

Secretariat: Scheyvenhofweg 12, 6093 PR Heythuysen, The Netherlands.

Internet: <http://www.stichtinglichaamstaal.nl/>

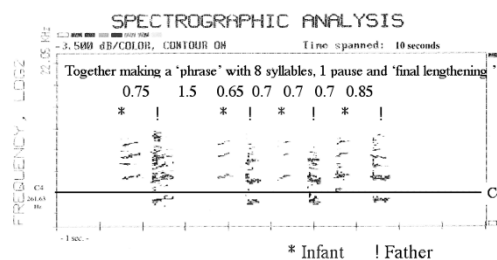
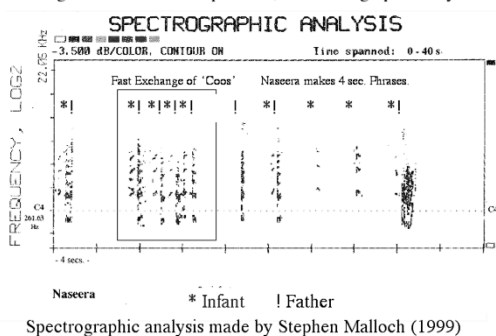
Email: info@stichtinglichaamstaal.nl/

Naseera, born 3 months early, kangarooing with father at 32 weeks. The infant leads a conversation.

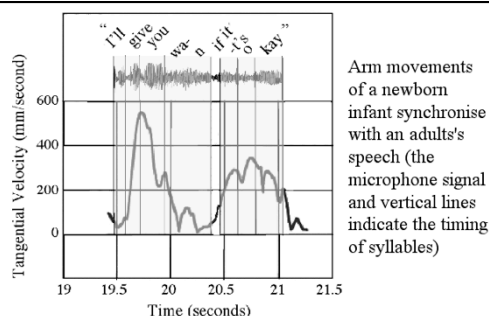


The voice of an immature newborn

Naseera, 2 months premature, 'kangarooing', 'chats' with Father. Sharing time with vocal expression, and making up a 'story'.



The rhythm of sounds is very regular, near 0.7 seconds (*andante*), until the last, when the father comes in late. Each interval corresponds to a *syllable*, and the group (c. 4 seconds) approximates a *phrase* in speaking. The last interval corresponds to the normal increase in duration of the last syllable in a spoken phrase (*"final lengthening"*).



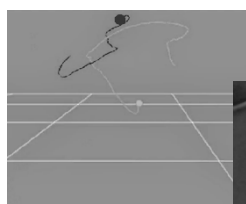
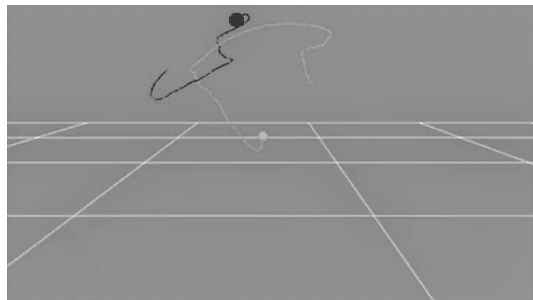
Trevarthen, C., Delafield-Butt, J. and Schögl, B. (2009). Psychobiology of musical gesture: Innate rhythm, harmony and melody in movements of narration. In Gritten and King, (eds.), *Music and Gesture 2*. Aldershot, UK: Ashgate.

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.

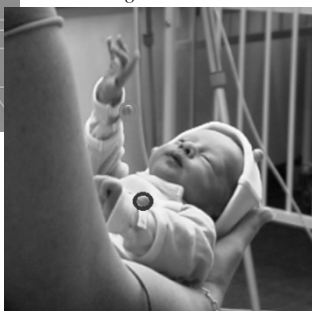
To understand them requires a different science of mind – not of fate and fact, but of **hope and value in moving, of intelligent motives expressing interests and feelings**.

Baby Bailey is male, 1 week premature, and hungry. His hands move imaginatively, in dialogue, and with 'narrative musicality' of feelings, shared with mother.



Arm moves 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



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**!

the connected baby

A film conversation by
Dr. Suzanne Zeedyk & Jonathan Robertson



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/>

The Newborn Infant: A Missing Stage in Developmental Psychology Emese Nagy (2011) *Infant and Child Development*, 20: 3–19.

"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."

Dr. Emese Nagy in Szeged, Hungary, with a Newborn



Emese, as experimenter, shows her index finger



Baby imitates with his right hand 00:15:50:06



Two fingers – experimenter



Two fingers – baby



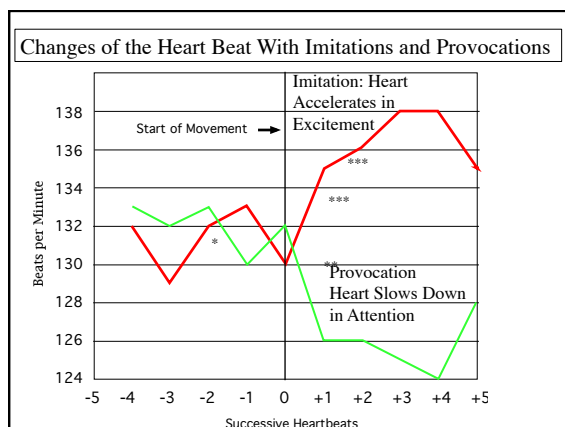
WHY DO BABIES IMITATE?

What Emese found when she gave the baby a turn.

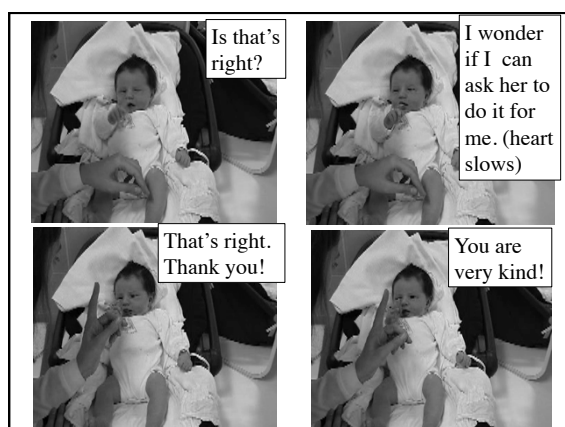
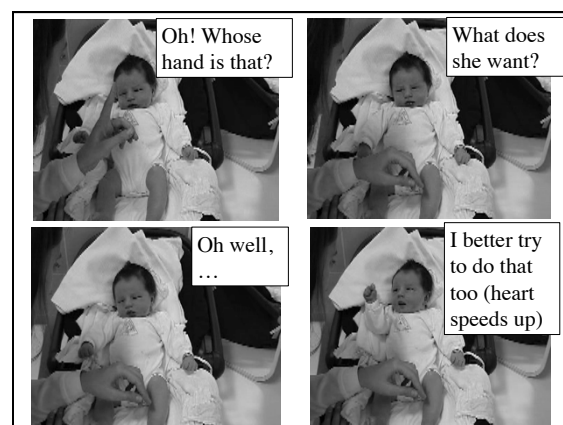
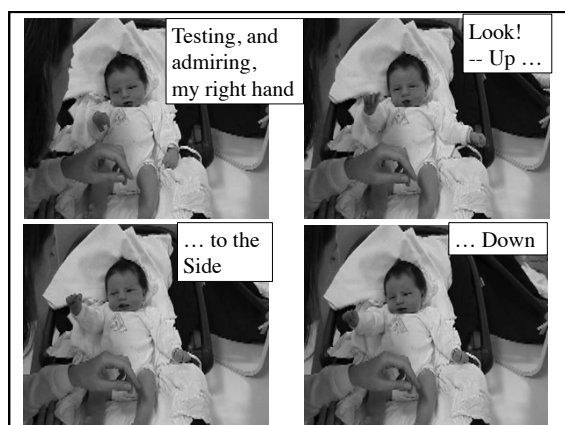
“Searching for the mechanism of neonatal imitation resulted in the discovery of a neonatal initiative capacity, called “provocation”.

Newborns spontaneously produced previously imitated gestures while waiting for the experimenter's response.”

Nagy E, Molnár P (2004) *Homo imitans* or *Homo provocans*?: Human imprinting model of neonatal imitation. *Infant Behavior and Development* 27, 54–63



15 seconds of dialogue
with a baby less than 2 days old

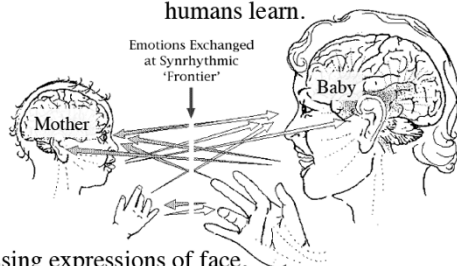


“The old model of thinking of the newborn infant as helpless and ready to be shaped by his environment prevented us from seeing his power as a communicant in the early mother-father-infant interaction. To see the neonate as chaotic or insensitive provided us with the capacity to see ourselves as acting 'on' rather than 'with' him.”



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

Telling and acting out stories with emotion,
listening to thoughts and imitating actions is how
humans learn.



Passing expressions of face,
voice and hands back and forth, rhythmically,
imagining each other, participating in feelings

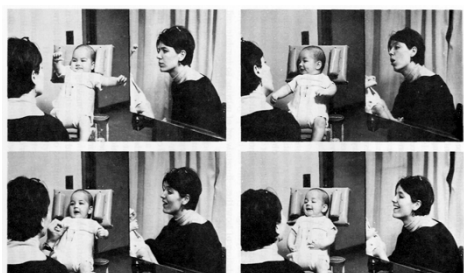
Infants are much cleverer than we had thought
at discriminating *musical rhythms and tones of
human sounds, and appreciating a story.*

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.

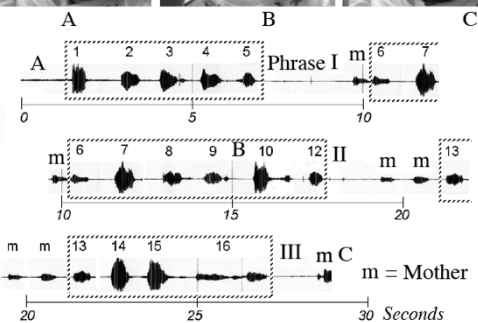
A CHILD IS BORN WITH BODY & BRAIN
ABLE TO MOVE IN COMPANY - MUSICALITY
IS INNATE - IT CONDUCTS OUR MENTAL
DRAMA & SHARES IT

THE BABY LEADS THE DANCE OF INTERSUBJECTIVITY
Jody, 9 weeks old, and his mother at the
Center for Cognitive Studies, Harvard University, 1969



Research Project on Infant Communication with Prof. Jerome
Bruner, Dr. T. Berry Brazelton and Dr. Martin Richards

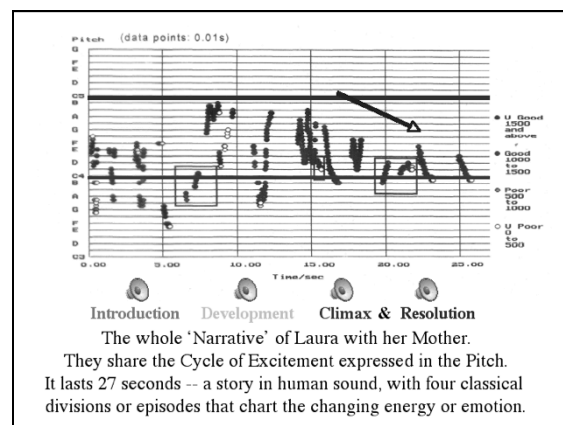
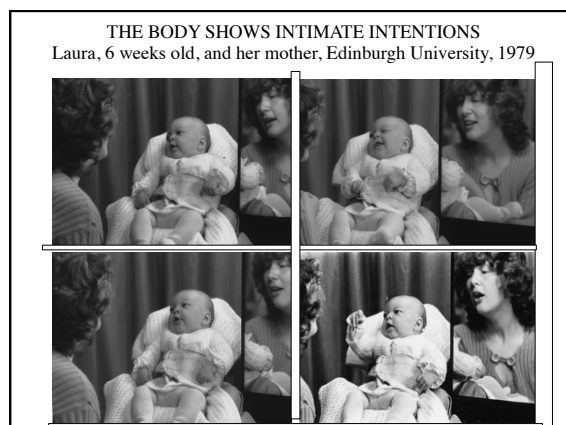
New Zealand baby, 10 Weeks old Old, 'lecturing'
with more lively gaze, sharing vocal mind time.



We tell one another our intentions, interests and
feelings from birth, by **moving in sympathy** --
creating stories of life with people we love.



The Prosser Family in Edinburgh, 1979



LANGUAGE

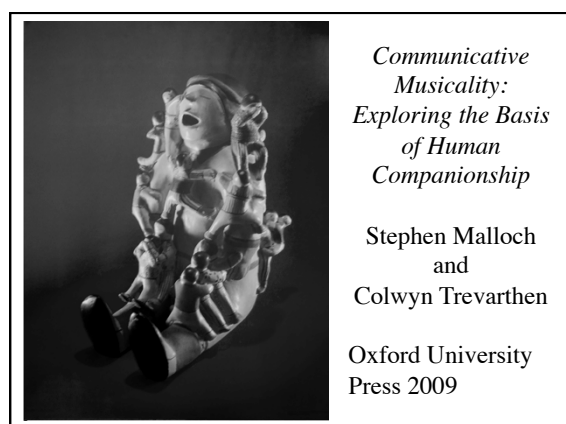
What the Mother Says: A Different Layer of Communication With the Same Narrative Melody -- the Same Rhythmic Sense of Purpose in Time And she ends without words, imitating Laura

INTRODUCTION	DEVELOPMENT	CLIMAX	RESOLUTION
1 Come on	7 Oh yes!	10 Tell me some more	15 Ch ch
2 Again	8 Is that right?	then	+ ***
3 Come on then	9 Well tell me	11 *	16 Ahgoo
4 That's clever	some more then	12 Ooorrh	17 Goo
5 *		13 Come on	
6 ***		14 Ch ch ch ch	
		+ **	

INTERSUBJECTIVE CHRONOBIOLOGY

The rhythms, expressive qualities and narrative making in movements of dialogues or 'protoconversations' with 2-month-old Laura in Edinburgh led to Dr. Stephen Malloch, a violinist and music acoustics expert, to a theory of **Communicative Musicality**

This explains how we communicate by sensing messages and their importance in the expressive **vitality**, or 'flow' of energy, in human movements. *The theory is explored in a book with contributions from musicology, developmental psychology, therapy, education and brain science*



"As I listened, intrigued by the fluid give and take of the communication, and the lilting speech of the mother as she chatted with her baby, I began to tap my foot. I am, by training, a musician, so I was very used to automatically feeling the beat as I listened to musical sounds. ... It suddenly dawned on me that I was tapping my foot to human speech—not something I had ever done before, or even thought possible.

I replayed the tape, and again, I could sense a distinct rhythmicity and melodious give and take to the gentle promptings of Laura's mother and the pitched vocal replies from Laura." (Malloch, 2009)

COMMUNICATIVE MUSICALITY (Malloch, 1999)

Music communicates because it engages an **Intrinsic Motive Pulse (IMP)** in the brain.

The sense of 'musicality' comprises:

- (1) **PULSE**: A rhythmic time sense (syllables, the beat, phrases and longer elements);
- (2) **QUALITY**: Sensitivity for the temporal variation in intensity, pitch and timbre 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.

Narrative

- 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 communication between mother and infant.

Stephen Malloch (1999).

The proto-conversational story becomes a life story.



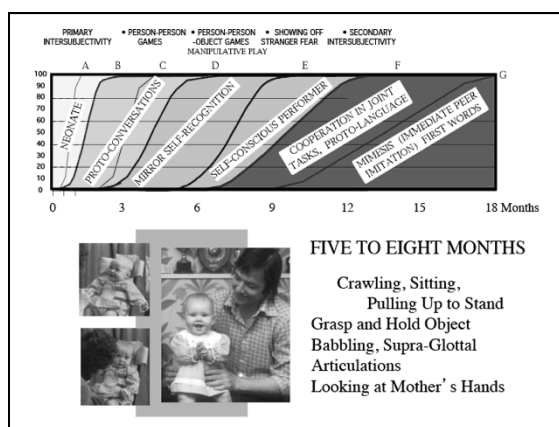
Thirty Years Later in Vancouver

'Musicality' may be defined as the Human Way of Moving, with Self-sensed Rhythm and Expression -- to Create Action of all the Body, and to Communicate Stories of Purpose, Thought and Feeling.

It is active in all the 'imitative arts', which play with *the pulse and melody inherent in movements, however they may be transmitted -- in sound, by acting and dancing, by drawing and painting, and by speaking and writing* -- all are 'musical' in form and meaning for those who are moved by them.

GAMES & NARRATIVE RITUALS, WITH PEOPLE AND WITH THINGS

Person-Person,
with a performer's pretence
then
Person-Person-Object with 'toys'.



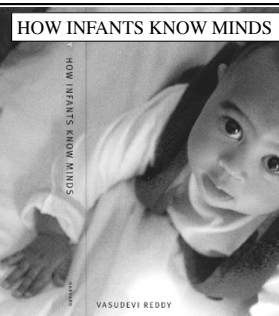
'SELF-CONSCIOUSNESS' AT 3 MONTHS



Vasudevi Reddy's study of babies' 'coyness' in front of the mirror began her interest in 'other awareness'.

Harvard University Press 2008

"There are precious ideas here, well worth sharing with behavioral science, philosophy, anthropology and related disciplines."
Jerome Bruner



Vasudevi Reddy's book, on 'Second Person Psychology' She is an expert on babies "joking, teasing and mucking about" in friendships

The rhythms and vitality dynamics of music are for all the senses – feeling in the body, seeing, and hearing.

A blind Swedish 5-month-old baby conducts her mother's singing, though she has never seen her own hands, or anyone else moving to music.

A WONDERFUL EXAMPLE OF TRANSMODAL MEANING



Mors lilla Olle



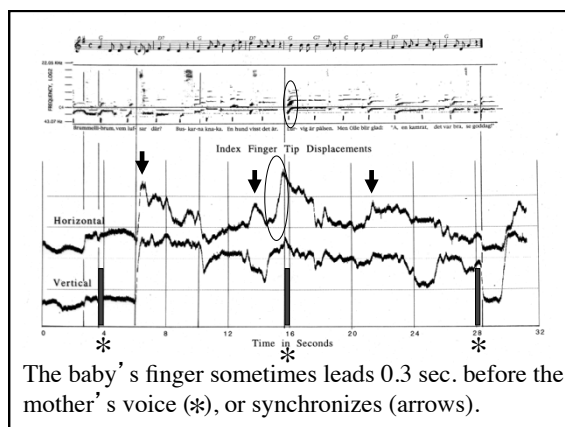
Humanslamm, vasa lilla Olle
Bullarna kollar. De kollar oss när de
ligger i gräset. Mors Olle lilla glädje
Å, så härligt, det var inte så gulligt.
Klipper åt ljuten och kläder och,
skakar fram korgarna. Åh Olle, smaka på!
Buldrar från skogen och ut till oss
åtta du jag oss, att du rycker oss till!
Mors lilla, vad du gör, gör till oss alla.
Himnen springer över oss, för Mors Olle!
Å, vad för skanda du vadar över oss!
Mors lilla, vad härligt hälsas oss!

Mother's little Olle meets a bear and feeds him blueberries

While Mother Sings, Baby Lifts Her Left Hand



This five-month old blind baby girl conducts her mother's songs with her left hand, which sometimes moves 1/3 second before the melody of her mother's voice, making graceful gestures to a musical story she knows well.



The Rhythms and Tones of the Story

In all 4 verses there are 8 different rhyming vowels

Mors lilla Olle

Text och musik: Alice Tegnér



Brummelibrum, vem lufsar (låd)
 Buskarna knaka. En hund visst det är
 Lurvig är påsen. Men Olle blir glad
 »Å, en kamrat, det var bra, se goddag!»

Klappar så björnen med händer (små)
 räcker fram korgen: »Se där, smaka (på)»
 Nalle han slukar mest allt vad där är
 »Hör du, jag tror, att du tycker om (bär)»

Mor fick nu se dem, gav till ett (skri)
 Björnen sprang bort, nu är leken fö (bi)
 »Å, varför skrämde du undan min (vän)
 Mor lilla, bed honom komma igen»

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.**

Music and Dance cultivate human motives for action and affective time in movement, for their own sake.

They make stories from the **Natural Language** of the body – *from inside the human spirit, in the time of its life.*

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.



DEVELOPMENT OF GAMES WITH PEOPLE & WITH THINGS

Infants first become attracted to **Person-Person games**, and show a performer's pretence.

Then, as their bodies become stronger, and they start exploring with their hands, they are attracted to **Person-Person-Object** games with 'toys'.

Play is regulated by two kinds of emotion, shared intimately in different ways of moving the body –
AESTHETIC, with energy and grace, and
MORAL with sympathetic responsibility

Leanne, 4 months:

Enjoying a song.

Reaching for a ball.



Looking about.

Ignoring mother

"If it's your foot you want, here!"

About 4 months baby action songs begin in every society, to attract and share the infant's growing self-awareness in movement.

The baby soon learns the rules of play, joining a poetic culture that becomes more and more practical, sharing manipulation with objects.

The rhythms and melodies of actions and tones will help hearing what sounds of speech mean while making sense of others' gestures and actions, feeling **movements of meaning** in all their forms, and making more imaginative stories.

Leanne, 5 months. "Round and round the garden", with *Interest* and *Pleasure*.



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.

• ' • ' • -

Emma, 6 months: Looking at self, touching Mother's tongue. Her look of pride is marked by the circles.



Clapping with joy; imitating, watching own tongue

A POPULAR SCOTTISH CLAPPING STORY

Clappa, clappa handies,
• ‘ • ‘ • •
Mommy’ s at the well,
• • ‘ • • -
Daddy’ s away to Hamilton,
• ‘ • ‘ • • ‘ •
To buy wee Megan a bell.
‘ • ‘ • ‘ •

Emma, 6 months: “Clap Handies!” (left-handed).



Emma, 6 months,
On father’s knee.

Her mother says,
“Clap handies!”

Emma ‘shows’ or
‘performs’
to the camera,
with intent look
and a proud grin.

(Photo © John and Penelope Hubley, 1979)

That’s pride!



They all smile
with the same
emotion of PRIDE
IN SHARING

But, With a Stranger Emma is worried
and ‘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. Its not fear - they have *anxiety of meaninglessness*. Such feelings make teaching of ideas and practices a moral task. *Shame and anxiety stop learning*.

Shona, 2 months
Out of touch,
frightened



Lonely and hiding,
confused with
SHAME

Emma, 6 months. Facing strangers

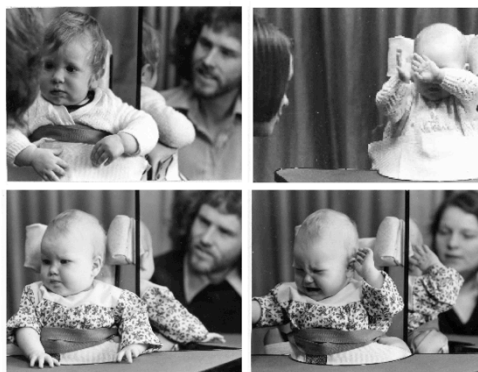


Paul and Andrew, 10 months.
Alone with strangers

Even a nice stranger is hard for a 10-month-old to bear.



Even a nice stranger is hard for a 10-month-old to bear.



And Mother gets told off!

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

7 AND 8 MONTHS, GAMES WITH MOTHER



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

Right: "Round and round the garden"; mother creeps over the table, then tickles.

CLEVER GAMES AND JOKES AT NINE MONTHS



Esme 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.

DEVELOPMENT OF COOPERATING IN TASKS

One-year-olds are beginning to share the endless game of cultural stories, meanings, tools and jobs to do with parents and family. It all depends on the child's eagerness to have the same imaginative purposes and experiences as good companions. It takes a few months to know what in the world people are interested in, besides how it feels to be alive and sharing what to do. It is called 'joint attention' to things. I call it '**shared experience**'.

Leonardo
*The Benois
Madonna*



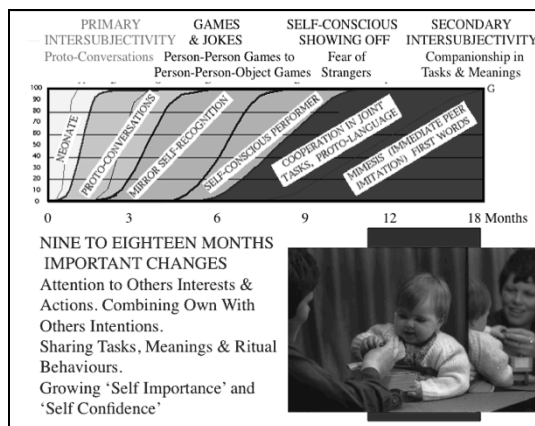
Jesus is intent upon the flower, and Mary has an affectionate smile

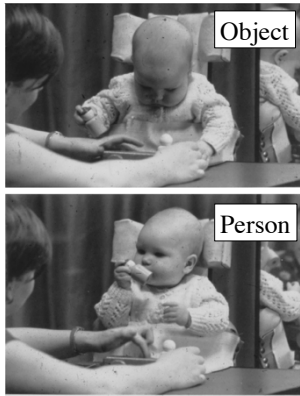
Secondary Intersubjectivity, Sharing Tasks
In Friendship = 'Cultural Learning'

At about 9 months a change in the infant's motives and interests begins **cooperative practical learning**.

The baby's curiosity about what other people are doing, and the things they use, leads to **following directives, trying to make conventional messages and trying to use objects -- as tools -- doing things in the proper way**.

This is vital preparation for learning language to name meanings. *Language is built in shared action.*





Object


Person

BEFORE 9 MONTHS
TWO ATTENTIONS
“Put the man in the truck!”

Emma, 7 months
Is bright, but she doesn’t get her mother’s message.
She is too young to share the purpose of a task.

“Don’t chew it.
Put it in there!”

For Basile, 12 months, it is easy and amusing.
“OK, If that’s what you want me to do.”




“Here, put this one in the truck!”

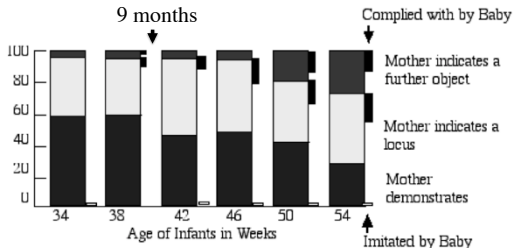
“No problem! Easy!”



“Happy?”.




“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* .

Hubley, P. and Trevarthen C. (1979). Sharing a task in infancy. In, I. Uzgiris (Ed.) *Social Interaction During Infancy, New Directions for Child Development*, 4: 57-80. San Francisco: Jossey-Bass

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



Basile, at one year, insists that her mother must put the doll in the truck, while her mother points to the truck insisting, “You’re meant to put it in!”

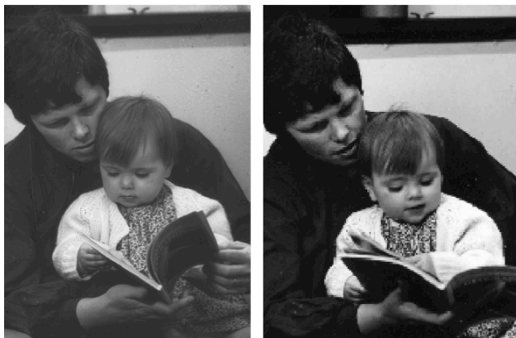


Basilie at One Year Is also a Clown,
Not Just a Proud Companion in Work.
Laughing When Her Mother Pulls a Sad Face

After working for our video
Basilie pointed and vocalised a
'protolanguage' request for a
magazine on the lab. shelf.

Her mother said,

"Oh, she recognizes the
National Geographic by its
yellow cover, and likes to
look at the pictures."



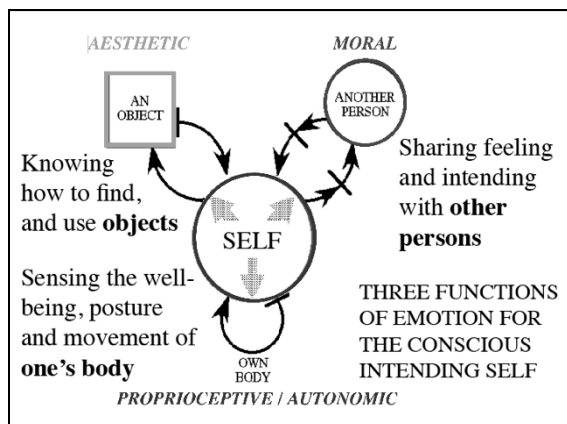
Sharing meaningful things with a best friend

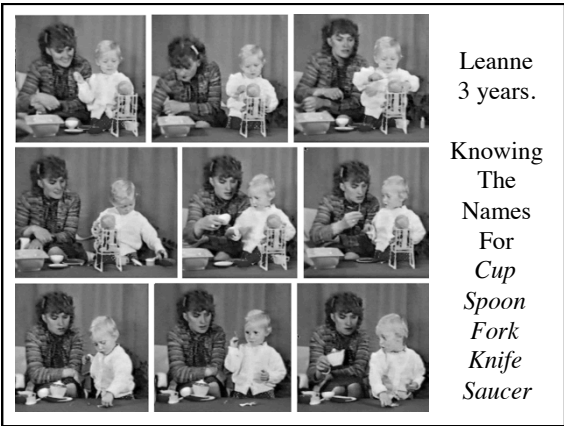
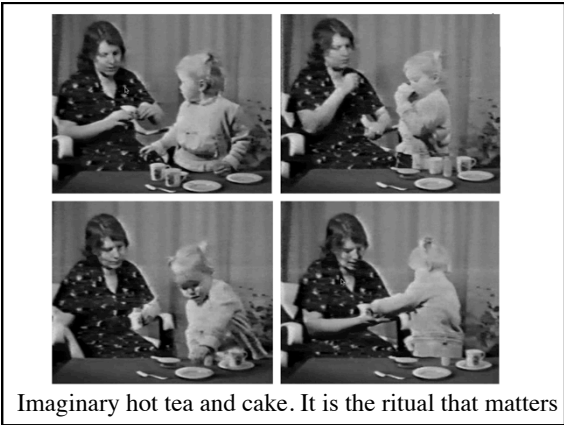
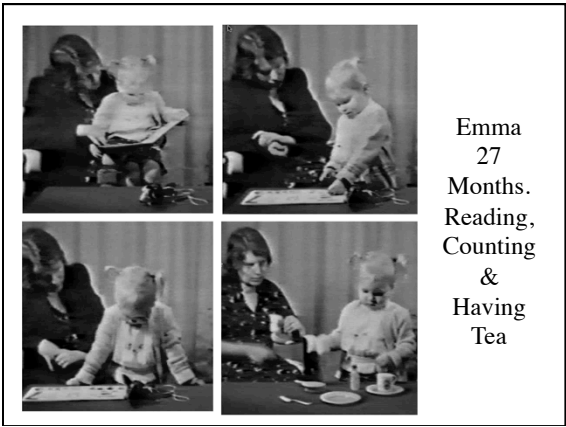
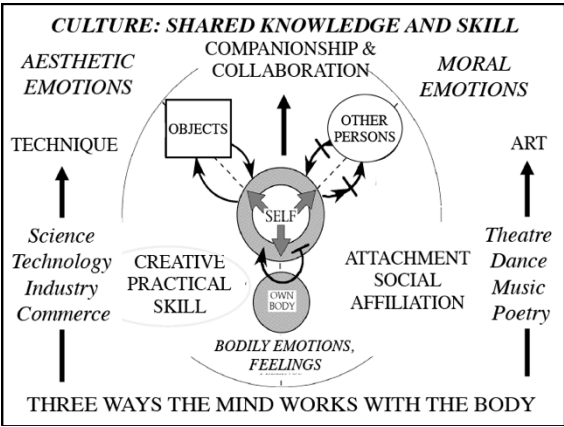


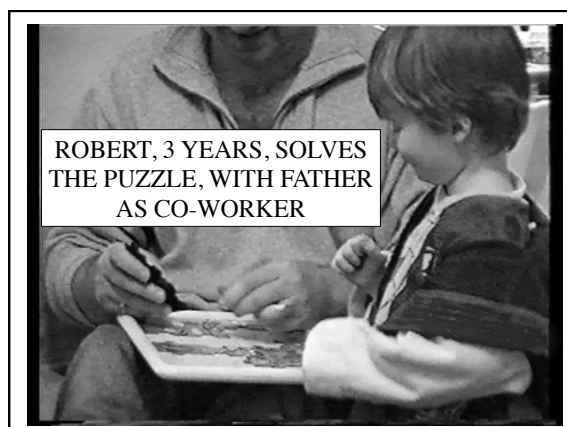
Children Are Story Sharing Creatures, From Birth
That is why mother's telephone bill is more interesting
than her book for one-year-old Basilie in Edinburgh.



She Sits on the Floor and Reads the Bill –
Because Her Mother Studied It So Carefully

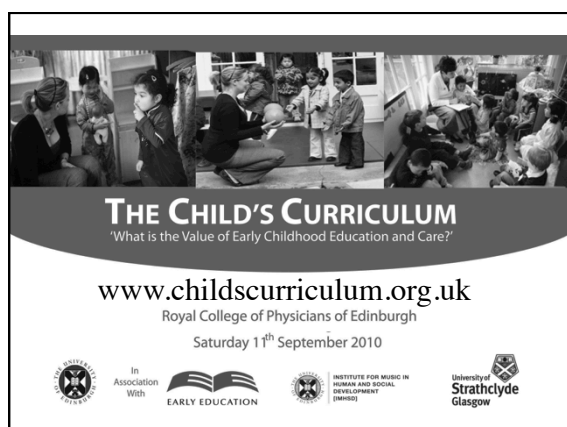
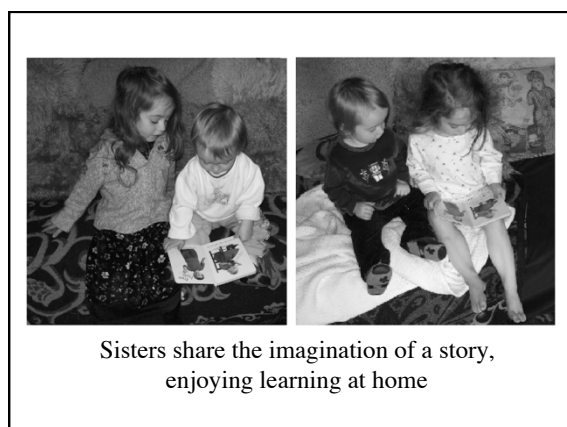






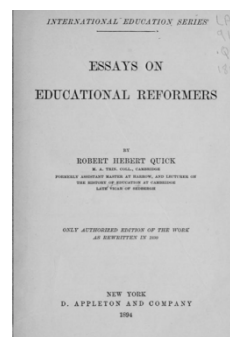
THE PRESCHOOL WORLD IS ONE OF THE RICHEST TIMES OF LEARNING WITH OTHERS

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



Classics on Education of the Young Child

Robert Herbert Quick
(1868/1890/reprinted 1910)
Essays on Educational Reformers.
New York: D. Appleton



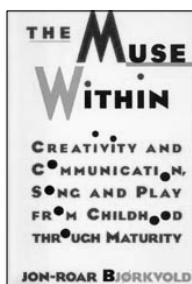
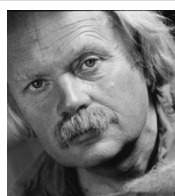
*Weaving Te Whāriki –
Aotearoa New
Zealand's Early
Childhood Curriculum
Document in Theory
and Practice* (2nd ed.)
Edited by Joce Nuttall
NZCER Press (New
Zealand Council for
Educational Research)
2013



<http://www.nzcer.org.nz/nzcerpress/weaving-te-whariki-aotearoa-new-zealand-s-early-childhood-curriculum-document-theory-an-0>

The only volume to bring together New Zealand and international commentary on the history, implementation, and influence of Aotearoa New Zealand's groundbreaking early childhood curriculum framework. This new edition contains substantial updates of the chapters in the first edition, plus four new chapters: on Pasifika perspectives, working with infants and toddlers, transition to school, and perspectives on play. Authors from New Zealand, Australia, Denmark and the United Kingdom offer their analysis of Te Whariki in ways that will be accessible to student teachers, early childhood educators, academics, and policy makers alike.

Jon-Roar Bjørkvold,
Prof. of Musicology,
University of Oslo

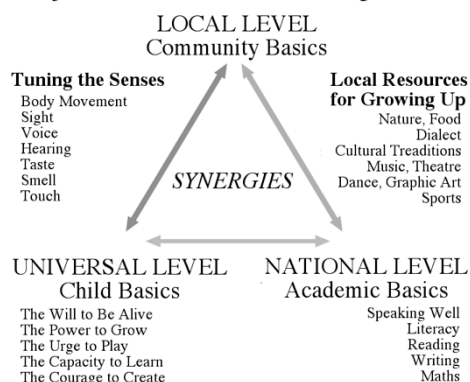


We all need this Muse Within, for we are what I shall call *muse-ical beings*. To lose our *museicality* would be to lose a profoundly essential part of our humanity. (p. xviii)



a will to survive
a power to grow
a musicality to move
an urge to play
a courage to create

The Bjørkvold Model of "Mother Tongue Learning



Titian - "The Fall of Adam"

The Apple in Eden: How We Share Meaning Before Words.

Infant psychology teaches us that *knowledge is shared creativity in the experience of moving in a human body, and sensing others moving*. We are born for a cultural world of actions, beliefs and material creations, *all works of imaginatively conscious, Self-sensing bodies in movement*.

Cultural knowledge and skills are *learned with aesthetic feeling, and moral sensibility, in the 'narrative musicality' of polyrhythmic moving*. Was the apple a baby song?