

A Commentary on Sally Goddard Blythe's article 'The body learns too'

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In her recent article 'The body learns too', Sally Goddard Blythe (2020), a psychologist and Director of the Institute for Neuro-Physiological Psychology (INPP) – created in 1975 by Peter Blythe, a psychologist who had worked in psychotherapy and taught applied psychology and education – has given us an optimistic and vital account of how a partially formed 'immature' brain of a healthy young child learns to 'grow up' to maturity in engagements of the body with the world. How use of body movement builds the time-space arena of a cultivated physical and social environment. Through practice of our body movement, directed in a brain aware of the environment offering what James Gibson identified as the 'affordances' for a healthy and creative life, we become contributors to an inheritance of human work. The principles of the neural theory of mastery of movement – for independent locomotion, use of the agile and cleverly balanced trunk and head vigorously moving about on two feet with delicate and expressive hands, inquisitive head with ears, eyes, face, mouth and voice – must be directed to explain how, from birth, we flourish in intimate communication which builds plans and rich memories as stories for making use of the world.

I share Sally's conviction that our life as human persons with human brains is a creation of motives for muscular vitality, and that our education must strive for a co-operative and inventive life in enjoyment of moving, in sport, the arts, literacy and technical work. But my work as a developmental psychologist has been focused on the beginning of ideas of shared experience, before the child can walk or talk, not the aims of training in activity.

For human living – moving the body with hope of enjoyment, anticipating rewards in comfort and fearing risks of bodily harm or disease and loneliness in the space and time of the immediate world – we join the story of a culture in kinship. In my home country New Zealand it is legally confirmed that two ancient cultures can share education of modern customs and laws in two languages, English and Maori. The curriculum for schooling in all parts of New Zealand has been made more natural, liberal and creative by basing its principles of the innate creativity and sociability of children before and through schooling (Richardson, 1964), a philosophy promoted by the Maori tradition of *Te Whāriki*, a metaphor which conceives education as weaving the child's gifts into the fabric of the community,

letting 'the child lead the way' (Peters et al., 2018).

By nature, the human world is both *physical* or material, in each individual's self-centred imagination, and *social* – created and regulated by shared feelings about growth of each other's life in companionship of families and communities. These feelings have evolved from the affections of social animals to define and elaborate both *aesthetics* of grace in energy of the muscular Self, and *morality* of recognition with other persons in the present moment and through a lifetime (Panksepp, 1998; Panksepp & Biven, 2012). They describe in the history of a culture with its schooling 'truths' in religion, practical/industrial reasoning and philosophy. Jerome Bruner, leader of the Harvard Center for Cognitive Studies in the 1970s – when the social imagination of infants became a topic of importance in a psychology that attends to affective as well as cognitive purposes, and guide to a more natural philosophy of education (Bruner, 1973, 1983, 1996) – calls this *Making Stories: Law, Literature, Life* (Bruner, 2003)

Thus, we live to compose a story or narrative for sharing purposes and their consequences in projects of activity that are both practical and ideal, and either joyful and beautiful or sad, cruel and ugly. Goodness and badness are defined by how consciousness of life in the body and in the imagined companionship goes on with pride or shame, and how these values are talked or written about. In two classic books, *Children's Minds* (1978) and *Human Minds* (1992), Margaret Donaldson follows the path of education of the nature of *human sense* to the schooling of a cultural *common sense*.

Of course all our learning is about how to move, how to make the body do an infinity of clever things, how to win awards for success – either the whole of it leaping, running, dancing, posing, or using a set of clever appendages grasping, choosing, transforming, mastering matter and using objects composed of it as tools. I like the idea of a young child as an immature sportsman or woman, proud of winning in competitive play and ashamed of losing, making jokes of the rules and opportunities, testing 'degrees of freedom' when trying to do the nearly impossible. But this creature is from birth an

imaginative and convivial agent – as the prophetic Scottish philosopher John Macmurray (1959, 1961) described the mind of the infant as *The Self as Agent* and in a community of *Persons in Relation* (Trevarthen, 2002).

Sally presents the young child as an 'immature' or unfinished performer needing stimulation of healthy practice in movement to grow like a sports performer both strength in muscle agency and a special shared intelligence to describe its forms. This is a knowing how to move in prescribed ways for learning graceful and seductive art, of dance, song, instrumental music, drawing and painting or inventive technical skill using clever tools and machines. She dares to ask the famous question in philosophy, science and the arts, 'What is the human mind?'. She wants to understand it as the knowing of how to use the life forces of the body with its limbs, eyes, face and mouth as organs of expression for states of mind.

She is right. A brain formed to command limbs of a whole body in integrative projects of sensation for skilled movement are inseparable elements of any species of animal organism (Sherrington, 1906) – from the first shaping of the embryo as a creature that will move head-forward accepting locomotor guidance with the affordances of their environment from organs of sense and action exquisitely placed and shaped by evolution of species or kinds of creature for different healthy ways of existence (Trevarthen, 1973). A life in movement requires rule by 'prospective control' with coherence of rhythms and gestures in an innate sense of accessible time and space (Bernstein, 1967, 1996; Trevarthen, 1984; Buzsaki, 2006). All that is done by a human baby from the first exercises with feeling of the last trimester fetus in the mother's body is imagining future effects (Reissland & Kisilevsky, 2015). This wisdom is gained first immediately and then on though memories of the years of an inquisitive lifetime. In the unique human case, playful ideas of what to do are shaped by articulate or 'digitised' strategies in symbolic codes (Bernstein, 1996), which are made by education managers into ruling prescriptions that impose rational limitations on what is

accepted as fact and reason from the childish fun of experiment. Historically this focusing has come with the development of an industrial culture with measured wealth of ambitious projects and products.

Psychology has been directed to make a science of experience or how we seek knowledge, giving favoured attention to measureable events taken as 'responses' produced by patterns of stimuli. This originated in an effort of the French government to measure intelligence for industrial work and policy by a catalogue of tests developed by a psychologist Alfred Binet early in the twentieth century, and enriched in practice by the researches of Jean Piaget (1951). In the recent half-century we have learned a different phenomenology by studying the ambitious projects and selective values of different movements of body expression by charting in detail what happens in the first few years – before schooling, where a manuscript curriculum is imposed by teachers. I belong to a group of natural scientists or human biologists, following Charles Darwin, who have tried to uncover the secret powers of the 'immature' mind with brain and body as one growing life form (Darwin, 1872, 1877). Most informative about consistent principles of embodied awareness are the transitions of the first two years after birth of an alert, sensitive, imaginative and sympathetic human person, recognised by Berry Brazelton (1961, 1979, 1984).

Looking for a unified theory of how education serves development of the minds of children and the whole society, we need to form hypotheses of how imagination for life is formed in systems, the components of which have rhythmic impulses with complementary and mutually supportive roles that generate development and its cultivation.

We believe humans move under the coordinated and integrated control of a time keeping, energy regulating Intrinsic Motive Pulse (IMP) (Trevvarthen 1999). The brain is a network of dynamic systems all obedient to a scale of rhythms that flow in unison, orchestrating their effective actions to fulfil the future-sensitive (motivated) desires and recollecting past experiences of being. There is

no other way all these muscles of my body could work in collaborative efficiency, initiating and executing their forces in synchrony and succession in the present moment, modifying inclinations and desires for the future that are founded on experiences past. This is the way intentions come to be, and it is also the way they are perceived in others. We can only cooperate in relationships or social groups by sympathetic harmonization and synchronization with this time-creating IMP, dancing together 'in one time' with its rhythms and respecting the qualities of its tensions and future-oriented impulses and melodies which we share. (Malloch & Trevvarthen, 2009, p. 8)

I finish by recalling the benefits of some phenomenological accounts of how strong systems have received special recognition as creative of child life in families and communities. Three leaders of imaginative exploration of their own experience of life with evidence from receptive exploration of the emotions in 'inner life' of the body have stated their belief that emotional regulation of body activity in sympathy with companions is the foundation for thought, reason and logic. Karl Lashley (1951) concluded that animal life depends on the economic regulation of animal movement and on precise 'serial ordering' of actions of body parts, and that this must be the foundation of logical thinking. A philosopher Susan Langer, presenting 'Philosophy in a New Key' (1942), noted that the 'inner life', proprioceptive and visceral, has the measures and qualities of music. In his life's work, paediatrician and psychoanalyst Louis Sander (2012) described how mother and infant constitute complementary interactive parts of a single system regulating human vitality (Trevvarthen, 2019).

I suggest we need to be more clear about how generative processes of the mind's action and awareness in body movement are propelled by emotions for individual life and for sympathetic guidance of co-operative attachments and teams of affectionate companions. Pragmatic judgements in relational systems of active brains, bodies moving and communities using the environment well 'ecologically' are dependent on positive and negative feelings in systems of

sympathetic enterprise. I suggest that in every human group of whatever size, care for affections must match care for actions and their tangible products and emotive effects.

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