

Meaning from movement

'Meaning from movement' is an expression Waldon used constantly; it is foundational to his theory of learning. Waldon believed that movement is the most consistent and regular source of experience and provides the structure of understanding, which develops alongside the movements. Objects, or the environment, are said to 'inherit' interest from movement; without bodily integration and organized movement patterns, children will not be able to develop the usual capacity for action and subsequently for more abstract thinking.

The Waldon Approach was developed in the 1970s but many of Waldon's ideas have since been validated with increased appreciation of the role that movement plays in development. Researchers like Stern (2010), Gallese and Lakoff (2005) and Sheets-Johnstone (1999), among others, confirm this. Even Einstein said that, for him, thinking in mathematics involved sensations of bodily movement (quoted in Stern, 2010: 20).

Stern continued: 'Movement is our most primitive and fundamental experience. Many thinkers have long argued that besides the fact that movement comes first in animate evolution and in development, it has a primacy in experience throughout life' (2010: 20).

Professor Maxine Sheets-Johnstone (2009: 168) writes: 'Though we may have forgotten what we first learnt of the world through movement and touch, there is no doubt but that we came to know it first by moving and touching our way through it, in a word, through our tactile-kinesthetic bodies'.⁴

Jonas Torrance, a dance and movement psychotherapist in the Oxfordshire Service for Autism, said:

'although I did not meet Geoffrey Waldon I have read various things he has written and agree with him that movement is the foundation of understanding and that all understanding has its origin in movement. I put Waldon's teachings within that context of movement analysis which was originally pioneered by Rudolf Laban'.⁵

Bodily integration

Waldon hypothesized that understanding is derived from effortful movement and that the earliest learning is derived from the infant's earliest movements. He calls the fundamental drive to move 'motivation' and infers that this 'motivation' is in some way self-reinforcing, possibly from the pleasure children experience in performing the movements. These rhythmical early movements generate regular patterns of activity from which new patterns, that is, new experience, may be developed, leading to the development of what he called General Understanding (1980).

From birth, and probably even before birth, babies explore and make sense of their environment, by moving their bodies. Soon they are able to move their

heads and limbs. In the early weeks babies get bigger, stronger and heavier and are changing shape as their limbs get longer in proportion to their trunk. They move more during their waking time which is also getting longer. As they grow larger and gain more control, their movements expand to fill the available space. As they grow, the effort required to move against gravity increases so the amount of motive power required gets progressively greater day by day. Waldon suggests that the movements themselves provide reinforcement which in turn leads to an increased supply of motivation. The larger and more effortful the movement, the more feedback or reinforcement it provides, and the better it is for this purpose.

By six months babies are capable of focusing interest through their head, eyes, ears, arms and hands into one direction. At about this time they start to put their hands on things in a very deliberate way, guided by head and eye movements. By the end of the first year babies can both sustain and vary the focus of interest at will. They can easily shift attention from the area of space on one side of the body to the other, or from near to further space and back again. Their bodies are becoming integrated.

Spontaneity

Babies move spontaneously and for the evident pleasure that they derive from the activity. They move effortfully and the effort forms a part of the pleasure. Babies will start to act on objects in the environment as a by-product of their repeated and rhythmical patterns of movement.

They can grasp things dangling or lying on surfaces around them; they learn to roll over and then to crawl, all the time expanding the space available for exploration. As they explore, objects are encountered and pleasure is found in picking them up and putting them down.

They may by chance find that a distant object can be manipulated by some other nearby object and so find that an object can act as a limb extension. They repeat the action. They bang something on another object and enjoy the noise, or the feeling, or the movement, or the result. Perhaps they reproduce the movement for pure pleasure. They may place one object on top of another. It may stay or it may fall off. Later they pile up many objects. All the time they learn, especially through actions which do not have quite the expected result, and as they notice the discrepancies they continue to learn. The limbs reach across the midline discovering the regions of space normally inhabited by the contralateral limb as they explore the available space using both sides of their body on both sides of their environment.

Early child development

Gradually they will develop the rhythmic and ongoing repetitive behaviours which are crucial to later development. They will learn to combine the use of different body parts, for example head and eyes with head and ears, arm with

hand, eye with hand, etc., and to develop the ability to shift the focus of attention from one area of their reachable space to another.

In a rhythmic manner babies reach things, get hold of things, then transfer attention away from the hand doing the holding so that that hand releases the object, and so on. Over the second six months children will learn to reach into the whole region of their own space, discover more about that space while fixing on and, both manually and optically, 'acquiring' different objects. Children reach for objects, lose interest in them and release them, picking a second thing up, and so on. At around six to eight months children are able to hold on to two objects and a bit later are able to transfer an object from one hand to the other; not in a very deliberate way, but rather one hand reaching for the object beside the other hand and the object very often getting transferred across.

There is reaching and picking up, but not putting down or deliberate dropping at this stage; but a great deal of picking up and translating with the object often released in a different place from where it was first picked up. As children's capabilities in holding on to objects increase they will frequently reach for an object without previously releasing an object already held by the hand, as if they had forgotten this first object. So the first object drops against the second object.

Beginnings of tool use

Before long we actually find children experimentally pushing and pulling, tapping and scraping other objects with a held object. Waldon saw this as being the beginning of all hand tool usage.

Children actually handle a variety of objects, which stick out of the hand, may have heavy ends, and so on. By the time they are about nine months they can hold a projecting object and touch other objects with it as if it has become an extension of the hand. At this time the tool use is generalized and one can see it as knocking on objects or banging and holding one object firmly against other items.

During this time the objects are generally in the children's hand, within their grasp, and this occurs in many different ways. Children learn to vary the hand pressures and to use different parts of the hand in accordance with the shape of the object and the direction in which it happens to be held. They have to get used to a very wide range of grips and uses of fingers and fingertips. All this is going on in the second half of the first year and by the end of the first year children will typically have an enormous capacity to use both hands separately and to use an object held in both hands together.

From the accidental holding of an object that may turn into a tool for more distant exploration they start to hold objects in a sustained way and deliberately use them to produce specific effects. So a rake may be used to bring distant objects closer or a spoon used to create a banging sound against a metal object.