

Embodied Awareness: a New Anatomy 2011

Course content is not specified in detail but brief extracts from the Compendium indicate the nature of the reading material which form the basis of discussion and then experiential work. Course fees include the cost of the Compendium, which is made up of monthly handouts which include illustrations and material from a variety of authors.

Seminar 1: Ways into the body: breath, sensation, movement, image, sound, affect, impulse, transitions.

21 January 2011, Friday 6.45-9.45pm

Embodied awareness is made up of various skills: the ability to detect sensation, to direct awareness, to self-regulate, to allow affect and tolerate physical discomfort, to remain steadily curious, to differentiate nuances of felt experience and to compare states so that one learns to know what a particular feeling means for you. People access their body in different ways. For example: through images, identifying affective tones, colour, variations of pain or numbness, breathing patterns; through movement, detecting impulses, touch (including self-touch), using the chair, cushions, or lying down to heighten sensation.

Embodied awareness is not a linear process of going inside to identify sensation, image or affect and then bringing it to light. It is a more circular process of both directing attention and attending to what emerges. Sometimes these perceptions emerge more easily while we have another focus, and we are not aiming too directly at the object of our perception. This is why it is valuable to practise different ways of accessing information from the body, as they are like entry points into a complex body-brain-environment feedback loop. The course will offer many pathways into this rich process.

Seminar 2 : The development of the body schema: infant-adult movement patterns and the organisation of the body

25 February, 2011 Friday 6.45-9.45pm

The body schema is an innate framework which enables us to know where our body is in space and what it is doing. It is based on the sense of proprioception - meaning literally 'to receive oneself' - which links information from receptors in the muscles and joints to mapping systems in the brain. It is different from our body image, which is more subjective, and emotionally and culturally shaped.

The body schema acts as a foundation for consciousness, action and awareness in relation to others and the environment. It is developed intensively in early infancy and consolidated by experience of movement in all planes, and a range of positions. We will try out some of the early developmental movement patterns to see how they resonate within our adult body schema.

As we listen to the client's narrative, our own body schema gives us a foundation on which to build an embodied understanding of the client's communications. When we are seated in face to face therapy our attention will be focussed on the client's eyes, mouth, facial expression, and probably chest and hands too, whilst also monitoring the periphery of the client's body. We are both visually and kinaesthetically tracking micro-movements in their body and imaginatively elaborating them in our own body.

Seminar 3: The skeletal system – our basic structure – and the feeling of being 'in' bone

25 March 2011, Friday 6.45-9.45pm

The skeleton is our framework. It mediates our relationship to gravity, a constant force affecting our lives. It effects and is a reflection of our capacity to co-ordinate, balance, and articulate in spatial, perceptual and conceptual fields. It contributes to the organisation of our thinking.

Through spinal movement we discover our vertical axis – we can orient ourselves in our outer space, turning towards or away from objects. The spine can be used as an internal reference point for centering when attention has become scattered, or when the therapist is operating within a particularly intense interpersonal field. Cohen comments that spinal movements 'underlie the qualities of strength or lightness in our movement and are the ground from which we develop our inner and outer attention'. (Cohen 142)

Seminar 4: Muscle and the action systems: posture, gesture, intentionality and agency

27 May 2011, Friday 6.45-9.45pm

Human movement, in its huge variation and complexity, accounts for the major part of brain activity, and movement is essential for the development of all brain functions. All responses and behaviours are in essence some sort of movement, whether it is movement of our eyes tracking an object we are looking at, postural shifts, speaking or movement in space.' (Aposhyan 166)

So our muscles, which enable movement, become the convergence zone for habits, skills, and emotional learning. Muscle is the vehicle of action and reaction, of revealing or inhibiting. Patterns and textures in muscle tone embody conflicts and resources which tell the unique story of an individual. More recently we have learned that mirror neurons which register movement in others make our own bodies extremely sensitive to the influence of the acts and goals of others.

Seminar 5: The fluids : forms of vitality, affect and flow.

25 June 2011, Friday 6.45-9.45pm

Anatomy books usually describe body fluids under different systems, such as the cardiovascular system (blood), the immune system (lymph), the cranium (cerebro-spinal fluid), or connective tissue (cellular fluid). Following Bonnie Bainbridge Cohen's system however, I am considering them together, because, as she points out, "All the fluids in the body are essentially one fluid – largely made up of water – that changes properties and characteristics as it passes through different membranes, flows through different channels and interacts with different substances." (Cohen: 67)

The fluids impart a sense of flow (or stagnation, or build up of pressure); and the panoply of neurochemicals travelling via the fluids of the body contribute to the substrate of our feelings, sensation, motivations and thoughts. They are linked with our sense of vitality, rhythmicity and affective aliveness.

The synthesis, release and regulation of neurochemicals is intimately bound up with our relationship to the social and physical environment, as well as to intrinsic rhythms and cycles. The secretion of neurochemicals may be triggered by eye contact and other visual stimuli, by touch, smell and sounds, as well as movement and imagination.

Weekend seminar 6

Skin, touch and spatial sensing

The proximal senses: taste, smell, & tactility

The human social engagement system: face, eyes, ears, voice, hands

16th-17th July 2011, Saturday and Sunday, 10-5.30pm

Skin, touch and spatial sensing

The skin is the body's envelope, demarcating the boundary between inner and outer. It helps regulate body temperature; it keeps harmful substances from getting into the body; and it is one of the exits for toxic substances to leave the body. The skin is the vehicle for tactile sensing. As Anzieu notes, 'tactile experience has the peculiarity ...of being at once.... active and passive.' (ibid 63). Skin receptors are capable of very refined perception, registering changes in temperature, pain, pressure. Areas which are particularly richly endowed with sensory receptors – the finger tips, the mouth– are also densely packed with peptide receptors, which add emotional colour and intensity to the act of tactile sensing.

The state of the skin may reflect vulnerability, pleasure or excitement; it may be red or white with anger; drawn with grief, soft with tenderness. When we have a

heightened sense of being exposed - embarrassed, touched by something, sexually aroused, self-conscious, or extremely sensitive - we may experience it directly as an energetic charge in the skin. Conversely, when people close down in order to protect themselves, it may be felt at skin level: a withdrawal of energy deeper into the body is characteristic of shock, or withdrawal and deep depression.

The proximal senses: taste, smell, & tactility

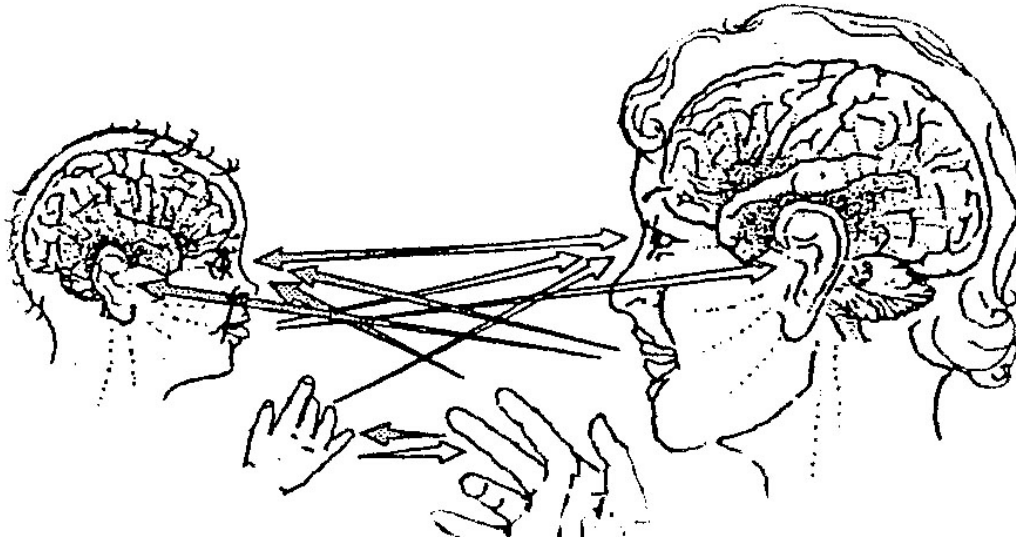
Smell, an ancient sense which has decreased in importance as humans evolved, was the basis of an early form of social communication via pheromones. The limbic system, sometimes known as the emotional brain, actually evolved out of a system for evaluating smells; it was a 'smell brain' and smell is the only sensory information to directly enter the limbic system via olfactory bulbs in the nose. Smells are often potent memory stimulators, as they evoke multi-sensory images, and their associated feelings. Pheromones secreted by special scent glands are involved in bonding, influencing each others moods, and synchronising the timing of menstrual cycles. (Cozolino 2006: 100)

The proximal senses include taste, which is closely connected to somatic sensation in the tongue. Taste is a form of direct chemoception which partners with the less direct sense of smell in the brain's perception of flavour. Disgust and desire are emotional responses that are linked to smell and taste; and can be a hidden or acutely conscious element in our evaluation of others.

The human social engagement system: face, eyes, ears, voice, hands

As humans we have a capacity for highly tuned engagement and communication via our face, eyes, ears and hands. Work by Porges, Trevarthen and others is now showing how these interactions have an immediate impact on the nervous system, shaping crescendos and descrescendos of arousal involving the viscera, heart and lungs.

Diagram: Social engagement/ proto conversation



Source: Trevarthen 2001:

Attuned face to face interaction and sounds enhances the action of the 'vagal brake' – the flexible regulation of energy that enables us to participate in pausing and turn-taking in human conversation. It keeps the individual in a contactful state within an optimal range of heart-rate, respiration and blood pressure This process of interactive regulation enables the individual to shift between states of excitement and reflection, between an outward focus on the other and a more internal state, between conversation and pausing.

Seminar 9: The autonomic nervous system : cycles and states of arousal, restoration, dissociation and engagement

23 September 2011, Friday 6.45-9.45pm

The central nervous system is subdivided into the somatic (or muscular-skeletal) nervous system and the autonomic nervous system. In evolutionary terms the ANS is older than the central nervous system and its anatomical circuitry is broadly dispersed, creating a general response, quite unlike the highly specific pathways and response of the CNS. The autonomic nervous system has two branches, which regulate the viscera, sense organs, glands, muscles and blood vessels. In standard physiology the two parts of the ANS have been perceived as functioning reciprocally: the sympathetic governing arousal, the fight or flight reaction and the parasympathetic involving relaxation, recuperation and digestion.

The autonomic nervous system (ANS) is a core structure involved in the management of basic body states – that is, the metabolism of energy, the regulation of affect, and the survival and health of the organism. There has been a spectacular increase in interest in the ANS linked with the emergence of neurobiological trauma theory and affective neuroscience. (Panksepp 1998,

Schore 1994, Damasio 1994;) One of the critical discoveries is that the ANS is not simply autonomous but regulated through interaction with others, and that repeated interactions in infancy and childhood are laid down as internalisations at every level of the microstructure of brain and body. (Schore 1994)

Seminar 10: Head, heart, belly, pelvis : A differentiated dialogue

21st October 2011, Friday 6.45-9.45pm

Brain systems play a critical role in representing and organisation information from the body about the body, but the brain's role as necessarily an executive one, at the top of a hierarchy of command systems, has been called into question. Traditionally the central nervous system (CNS) has been seen as the conductor of the body, directing the performance of the body orchestra. Recent research however suggests a different metaphor: the nervous system is one of a group of players engaged in jazz improvisation. This more accurately reflects the complicated and highly structured dynamic interactions between brain, body and environment. (Chiel & Beer 1997)

There is not yet a widely recognised equivalent of the Chinese system of identifying psychological functions for the organs of the body. However researchers now recognize the existence of an 'enteric brain', ie a self-regulating nervous system located in the gut. This 'brain' in the belly can send and receive impulses, record experiences and produce neurochemicals that influence mood and brain activity. For example, 95 percent of the body's serotonin is found in the bowels. The process of detecting information from the gut is called 'interoception' and the ability to do this enhances our awareness of our own and others emotional processes.

The idea that centres in the body – in the pelvis, the belly, the solar plexus, the heart, the throat – have their own psychological properties is implicit in the idea of 'Chakras' and was used by Reich in identifying the characteristics of body segments. (Totton 1998 reprinted 2009). Though the results of research are complex and inconclusive, the project of elaborating a new truly holistic anatomy is well under way.