

## Hands on the back of a chair: MATTS Notes 29/02/2024

### “SHAPING OF THE ORTHOGRADE THORAX.

Many occasions in the arboreal life of a monkey arise when branches have to be clutched by the hands and the whole weight of the body supported from the arms. The muscular slings which attach the shoulder girdle to the body in these circumstances take on a new action; the thorax of the animal now becomes compressed between the ventral and dorsal muscular slings and so tends to be flattened in a back to-front direction.” Sir Arthur Keith, ‘Man’s Posture: Its Evolution and Disorders’. *BMJ*, March 31, 1923: 546.

My understanding is that Mankind’s predecessors were tree clamberers using their hands and arms to manoeuvre among branches, sometimes resting back on their haunches to free up their hands for feeding or grooming etc. See ‘The Emancipation of the upper limbs’ in *Alex J.* 27, Spring 2019: 48-59.

Alexander wrote in ‘The Golfer’ chapter (*UOS*): “This primary control, called by the late Professor Magnus of Utrecht the “central control,” depends on a certain use of the head and neck in relation to the use of the rest of the body . . .” You must not quote this! Alexander got into trouble for asserting this during the South Africa libel case and Magnus’ observations are now out of date and highly questionable – the effects of severing the spinal cord.

What Alexander observed in himself and others is similar to the “total pattern” of reaction described by George E. Coghill, who wrote the ‘Appreciation’ for *UCL*. His work has also probably been superseded (shown not to be relevant to more complex organisms), so be careful when citing it. He studied the development stages of a species of salamander (*Amblystoma*) from tadpole to maturity. He found that, as the number of cells increased, a nervous system “invaded” to integrate behaviour into an organized animal with a total-pattern reaction – at first a side-to-side flexion when tickled by a camel-hair brush. This side-to-side action is seen in most fish as the basis of a swimming movement and land animals as quadrupedal action. Later, *individuation* allowed the limbs to move more independently – partial patterns. The point being that partial patterns are subservient to the total pattern. Don’t let the tail wag the dog! Coghill coined the phrase: “head leads, body follows”. He wrote, *The Problem of Behaviour* – the problem being how does the complex organism integrate into an organized, purposeful creature?

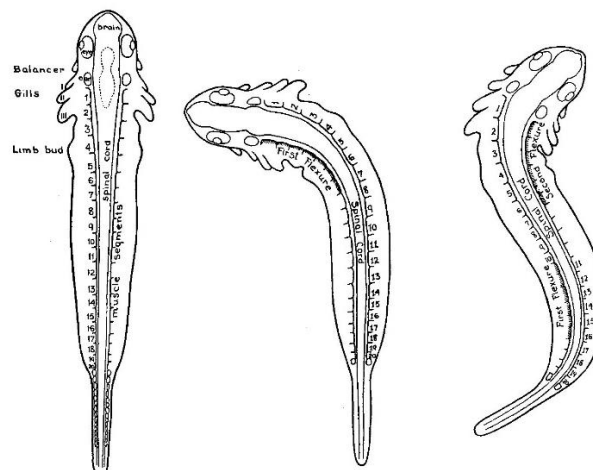


Fig. 1. A diagram of an amblystoma embryo showing muscle segments (here numbered 1–20) as seen from the dorsal side. Actual length is approximately 7 mm.

Fig. 2. The first flexure proceeding from head to tail. The embryo is here 36 hours old.

Fig. 3 The origin of the swimming movement is obtained when a second flexure starts on the side opposite to the first flexure.

Alexander wrote (and you can quote this):

“I would refer my readers back to Chapter I, where I described the experiments which led to my discovering that there is a primary control of the use of the self, which governs the working of all the mechanisms, and so renders the control of the complex human organism comparatively simple.” (The Golfer)

At the Manchester Conference (1998), Walter said that when someone is asked to do something they invariably stiffen their arms and legs. This habit likely disrupts the organization of total pattern and primary control is a way of restoring its working.

My understanding is that the arms are in a ‘neutral’ position when they are extended in an attitude of reaching forward for a higher branch (or top shelf) and then pulling to the elbows (with assistance from legs extending) to move the human creature forward. Not having a convenient branch in his Edwardian teaching room, Alexander used the rail of a mahogany dining chair instead. It was probably an adaptation of an army exercise for expanding the chest to improve breathing, but no one knows for sure.

An Illustration, CCCI. Hands on the back of a chair.

MW 2/03/2024