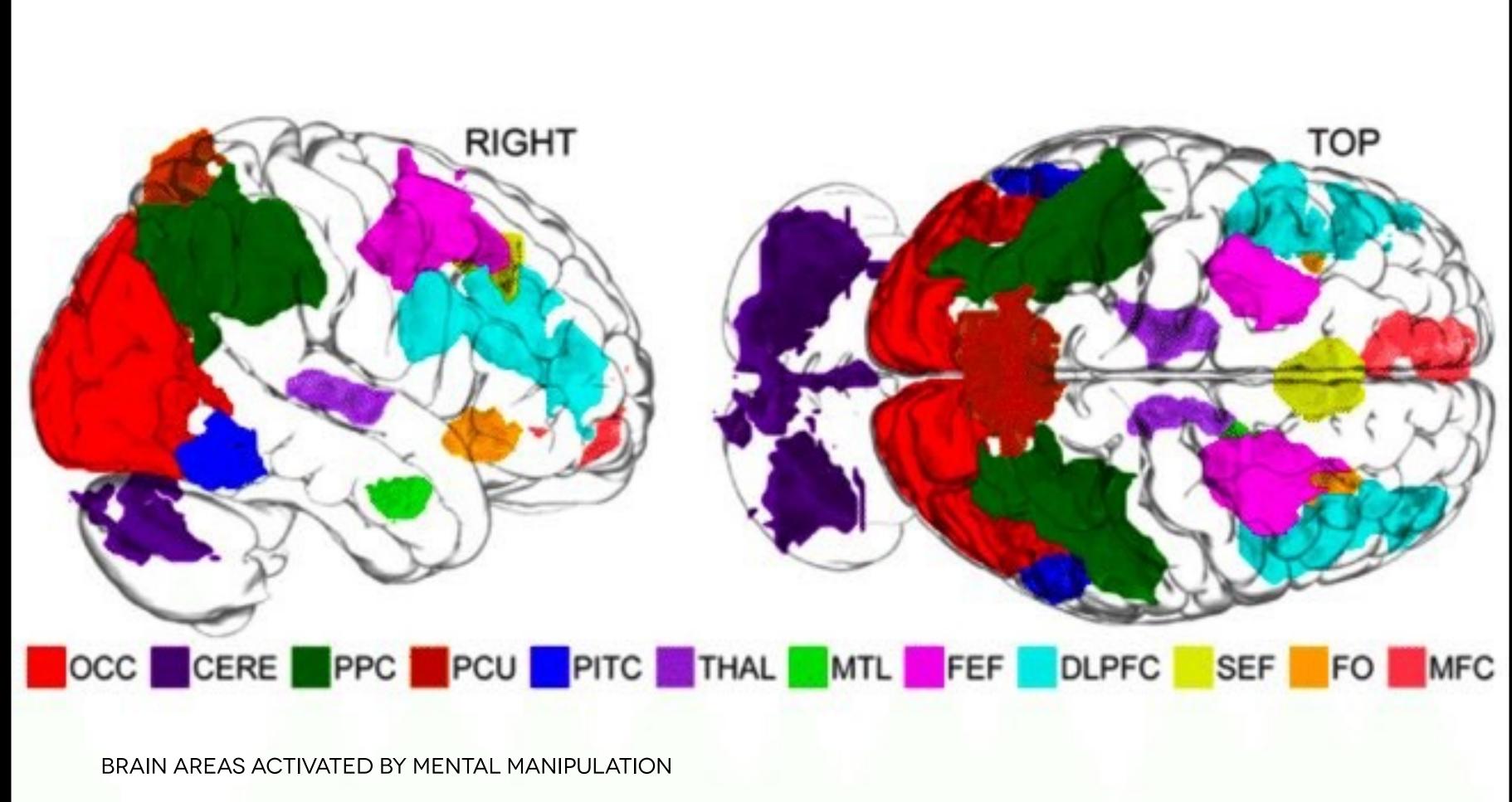
DESIGNING FOR THE SOMATIC IMAGINATION

SUSAN PLOETZ

WHAT IS IMAGINATION?

THE FACULTY OR ACTION OF FORMING NEW IDEAS, OR IMAGES OR CONCEPTS OF EXTERNAL OBJECTS NOT PRESENT TO THE SENSES. IMAGINATION IS A COGNITIVE FUNCTION THAT HELPS MAKE KNOWLEDGE APPLICABLE IN SOLVING PROBLEMS AND IS FUNDAMENTAL TO INTEGRATING EXPERIENCE AND THE LEARNING PROCESS.



SCHLEGAL ET AL.

WHAT IS COGNITION?

THE MENTAL ACTION OR PROCESS OF ACQUIRING KNOWLEDGE AND UNDERSTANDING THROUGH THOUGHT, EXPERIENCE, AND THE SENSES



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COGNITION There Is No Such Thing as **Conscious Thought**

Philosopher Peter Carruthers insists that conscious thought, judgment and volition are illusions. They arise from processes of which we are forever unaware

By Steve Ayan on December 20, 2018



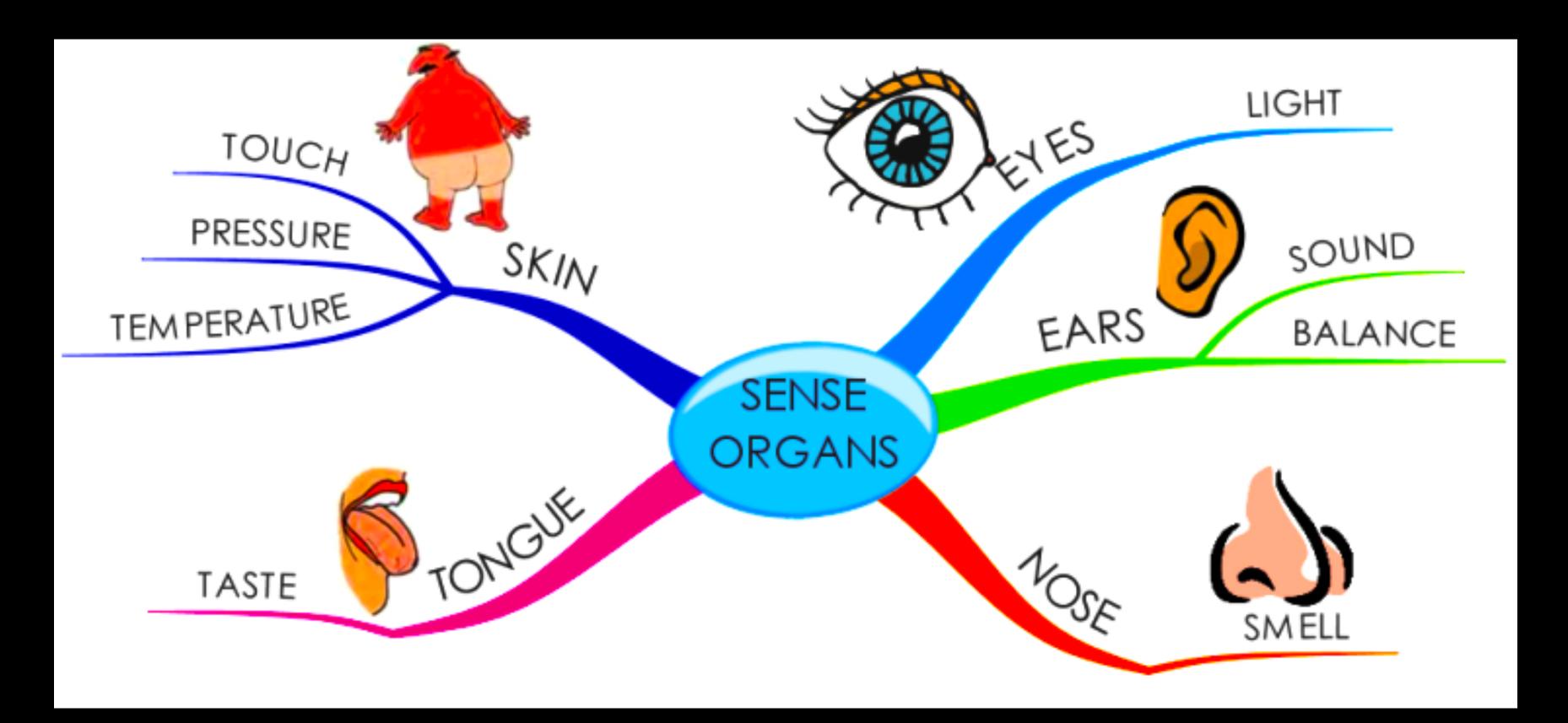
much more specific sense. In this view, thoughts include only nonsensory mental attitudes, such as judgments, decisions, intentions and goals. These are amodal, abstract events, meaning that they are not sensory experiences and are not tied to sensory experiences. Such thoughts never figure in working memory. They never become conscious. And we only ever know *of* them by interpreting what does become conscious, such as visual imagery and the words we hear ourselves say in our heads.

So consciousness always has a sensory basis?

I claim that consciousness is always bound to a sensory modality, that there is inevitably some auditory, visual or tactile aspect to it. All kinds of mental imagery, such as inner speech or visual memory, can of course be conscious. We see things in our mind's eye; we hear our inner voice. What we are conscious of are the sensory-based contents present in working memory.

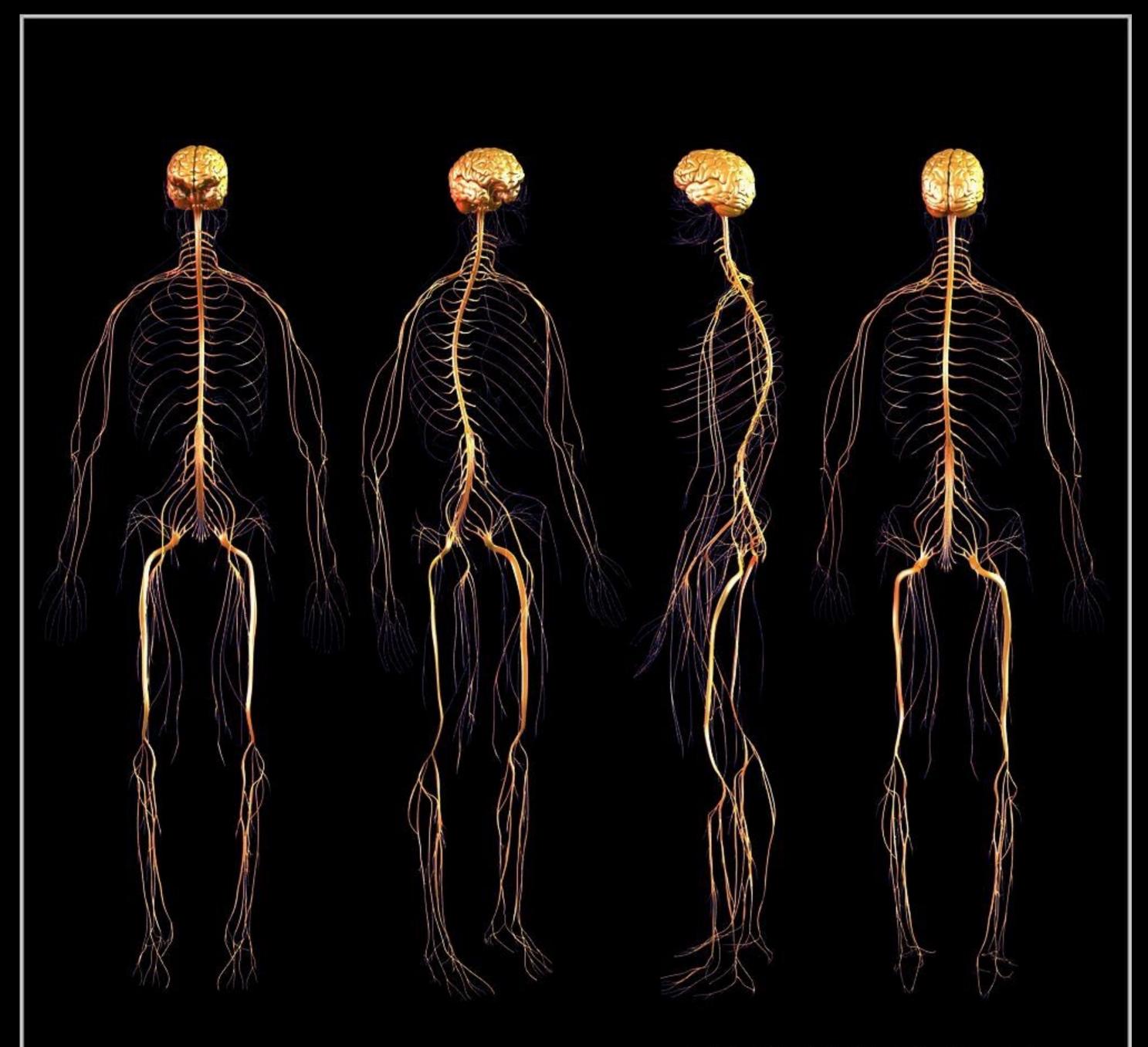
In your view, is consciousness different from awareness?

That's a difficult question. Some philosophers believe that

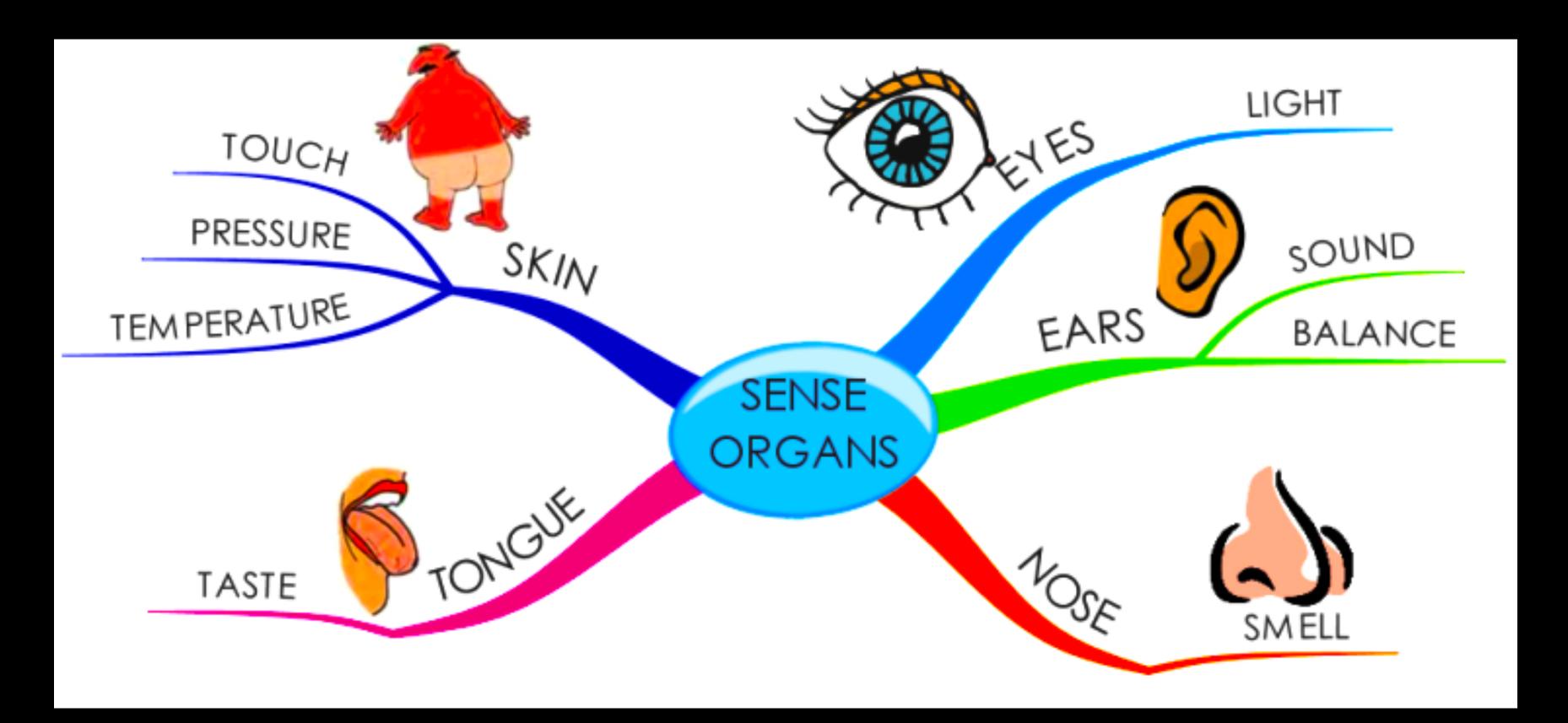


THE EMBODIED NATURE OF COGNITION

AND/OR THE MYTH OF THE MIND-BODY SPLIT THAT WESTERN CULTURES SEEM TO STUBBORNLY CLING TO



BRYAN BRANDENBURG





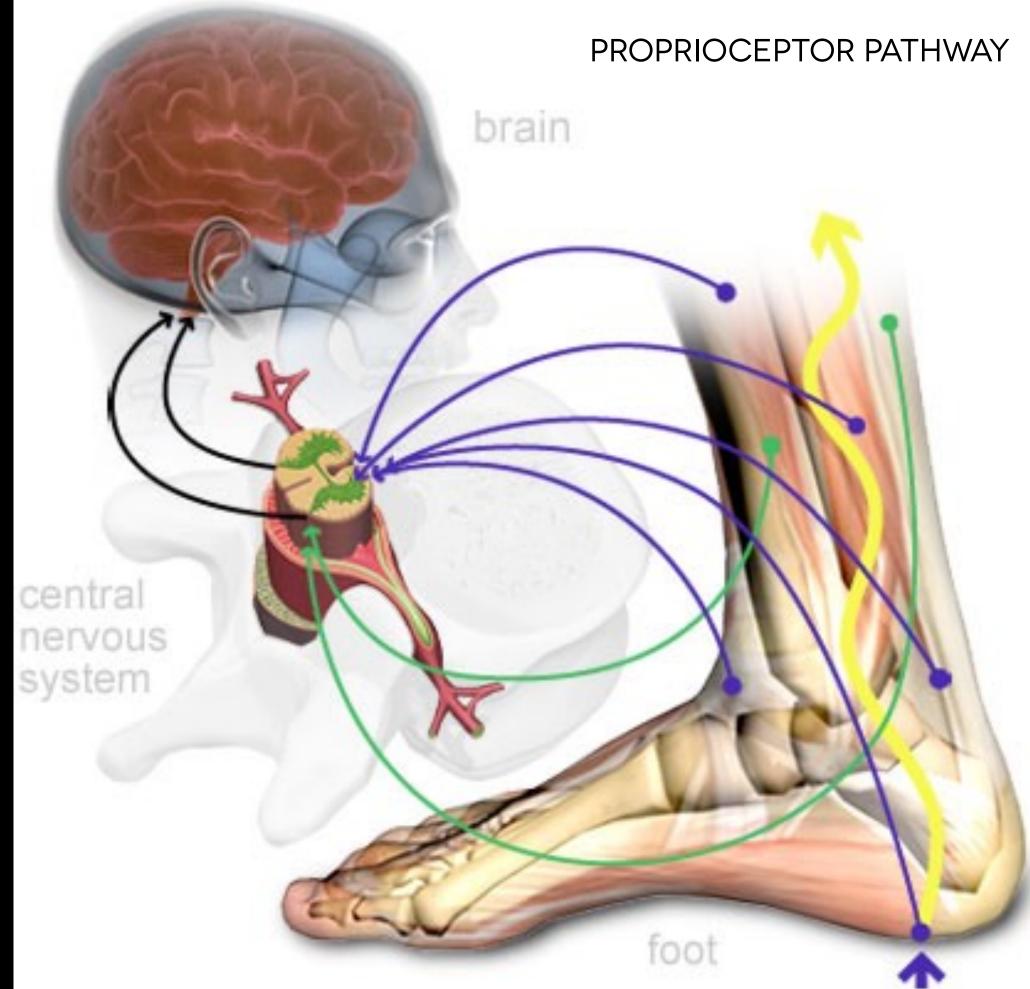
Proprioception

The Brain receives and interprets information from multiple inputs:

Vestibular organs in the inner ear send information about rotation, acceleration, and position.

Eyes send visual informtion.

Stretch receptors in skin, muscles & joints send information about the position of body parts.





SKIN A synthetic sandalwood odorant activates olfactory —

receptors in the skin, causing epidermal cells to migrate and proliferate faster, which enhances regeneration and wound healing.



SPERM Olfactory receptors in sperm cause them to be attracted to the

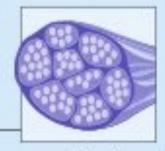
synthetic scent of lily of the valley flowers. These receptors could play a role in guiding sperm towards the egg, although the receptors' natural ligand in the body is still not known.



CANCER

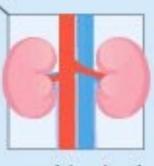
Olfactory receptors are highly expressed in many different types of cancer cells, and stimulating these

receptors can cause tumors to shrink in cell culture.



MUSCLE The same olfactory receptor found in sperm is also found in the muscles of mice, where it directs

muscle migration by attracting muscle cells toward a particular scent. Overexpressing this receptor improves regeneration, and without it muscle fibers are more prone to injury.



KIDNEY

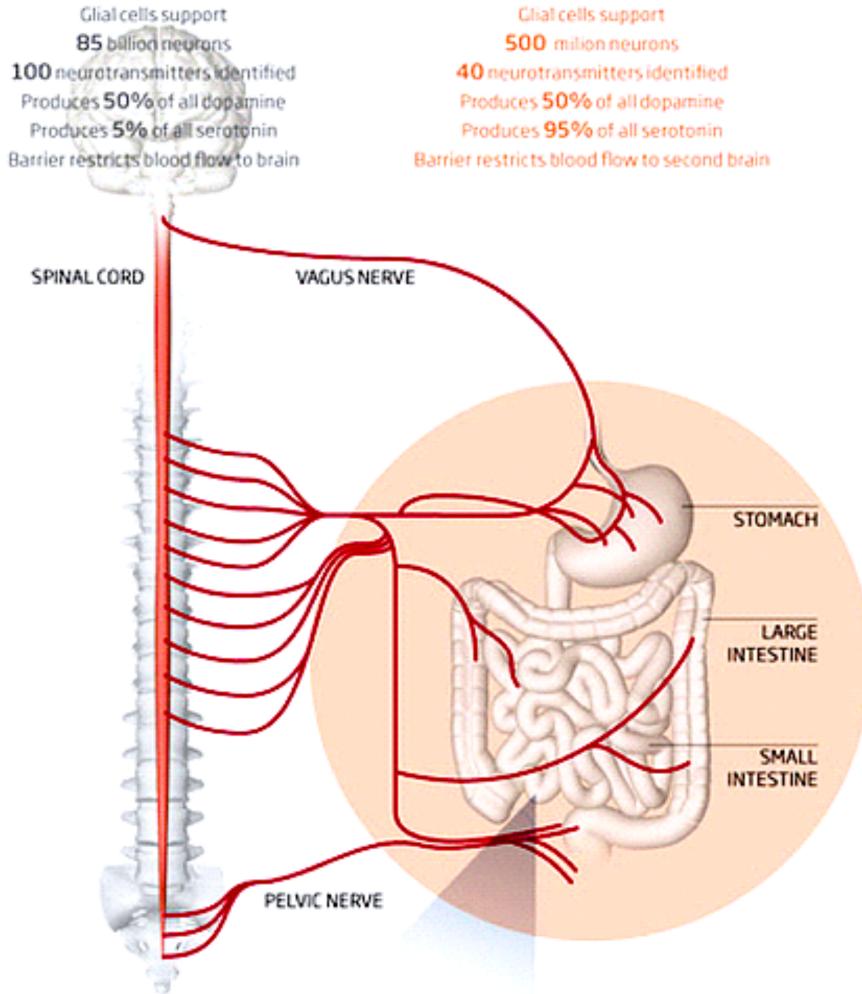
Short-chain fatty acids produced by gut bacteria can activate an olfactory receptor found in mouse kidney cells,

resulting in changes in blood pressure. This receptor may act in conjunction with a nonolfactory receptor to buffer against swings in blood pressure as fatty-acid levels fluctuate.

Two brains in one body

The enteric nervous system in the gut, or "second brain", shares many features with the brain in your head. It can act autonomously and even influences behaviour by sending messages up the vagus nerve to the brain

BRAIN



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SECOND BRAIN



An Introduction of the to Body-Mind Centering Body Moving

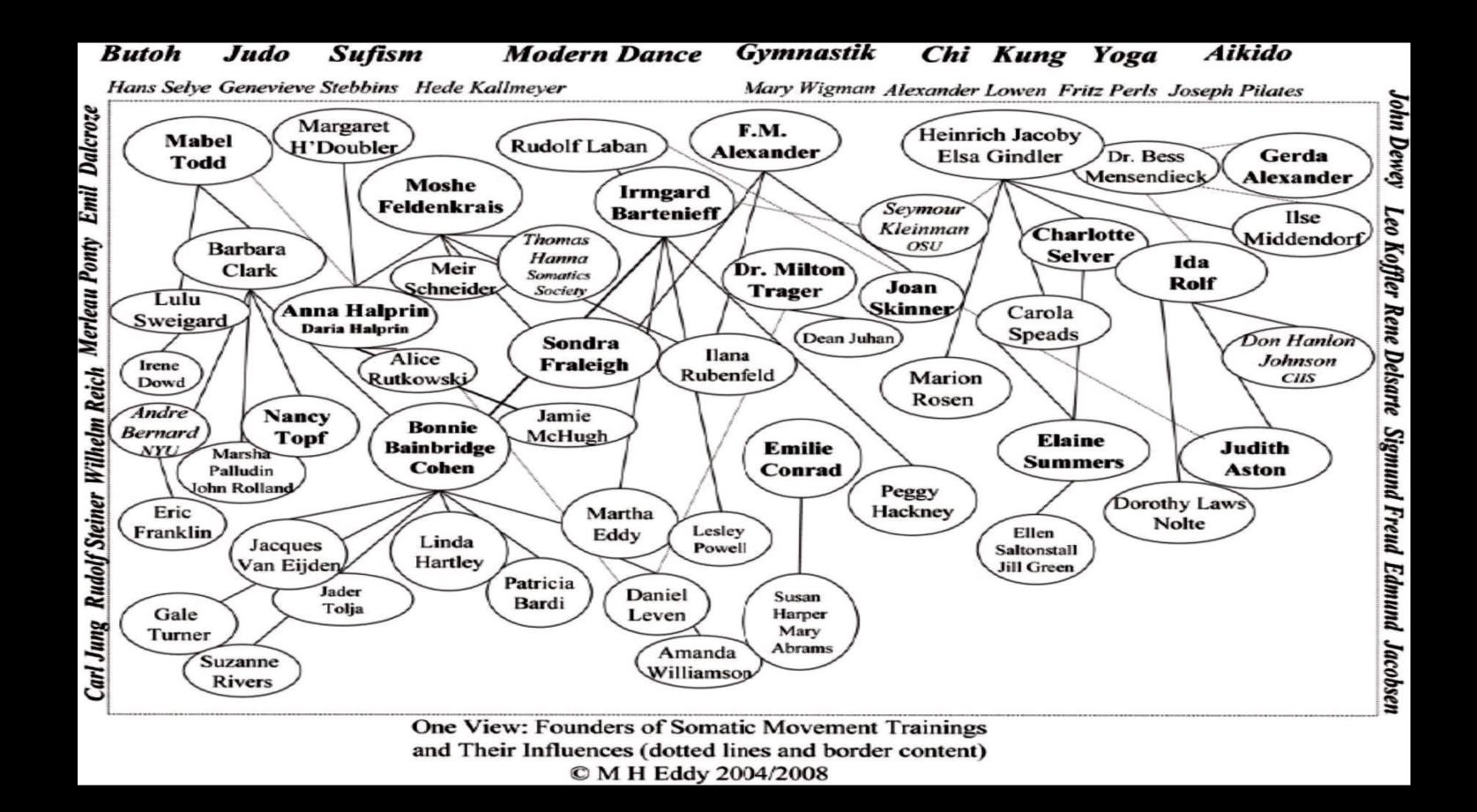




Linda Hartley

WHAT IS SOMATICS?

A FIELD WITHIN BODYWORK AND MOVEMENT STUDIES WHICH EMPHASIZES INTERNAL PHYSICAL PERCEPTION AND EXPERIENCE. THE TERM IS USED IN MOVEMENT THERAPY TO SIGNIFY APPROACHES BASED ON THE SOMA, OR "THE BODY AS PERCEIVED FROM WITHIN," INCLUDING ALEXANDER TECHNIQUE, THE FELDENKRAIS METHOD, BMC, ROLFING...





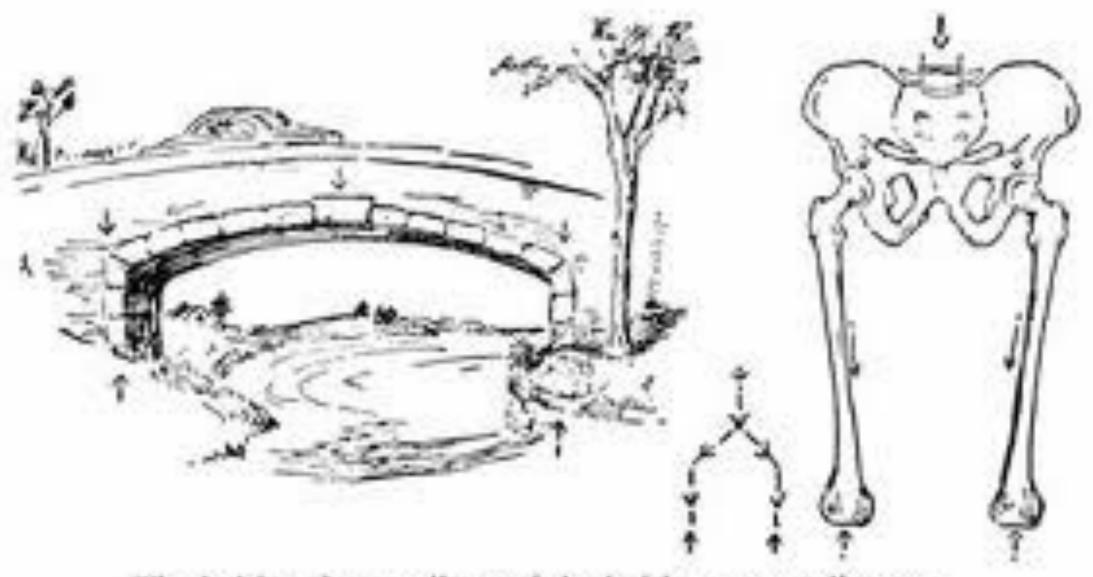






The arms and legs as tassels

IDEOKINESIS



The bridge that walks and the bridge you walk over



"The key is where the movement is initiated from and how it sequences through the body" - "Sensing, Feeling and Action" by B.B.C.

PREVERTEBRATE PATTERNS: (water-based patterns)

- Breathing: internal respiration (and external
- Navel radiation
- Mouthing

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-- Pre-vertebral (notochord)

VERTEBRATE PATTERNS: (earth-based patterns)

Method of Propulsion

Pattern

YIELD AND PUSH

Spinal Head Tail

Homologous Upper Extremities Lower Extremities

Homolateral Upper Extrer Lower Extren

REACH AND PULL

Spinal Head Tail

Homologous Upper Extremities Lower Extremities

Contralateral Upper Extremities 7-9 months Lower Extremities 9-11 months Most mammals when walking. Humans

N.B. Crawling is with the belly on the floor, Creeping is with the knees on the floor.

Overview of the Patterns

1)	Age In utero	Species/Phylogeny Amoeba/ ovum
	In utero	Starfish
	Prebirth \rightarrow early	y infancy, Tunicates

Prebirth \rightarrow early infancy, Lancelet Amphioxus

Species/Phylogeny

	Prebirth → early infancy Inchworm, caterpillar	
:s :s	Birth to 3 months 3-5 months	

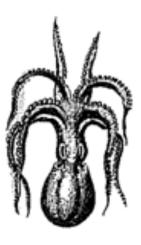
Age

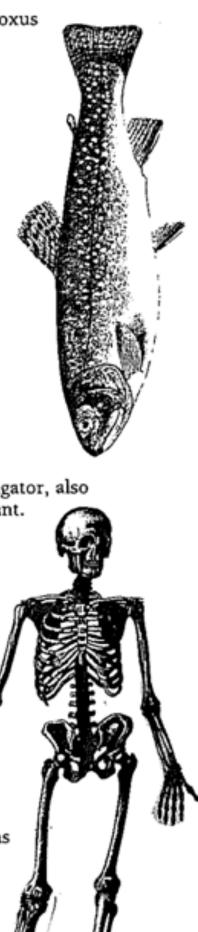
Amphibians, rabbit, kangaroo

	-
emities	5-6 months
emities	6-8 months
	Amphibians and reptiles, e.g. lizard, alligator, a
	mammals such as the camel and elephant.
	-

Prebirth \rightarrow early infancy Fish

5-7 months Frog leaping, squirrel

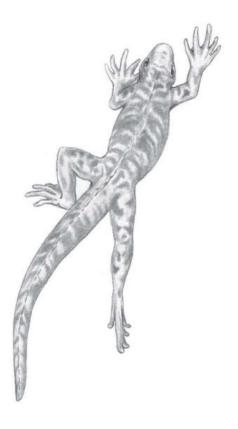




Lizard Homolateral Crawling

This sequence starts from the bottom.

3. The lizard has just moved forward by completing Homolateral Yield & Push from the right hindlimb. After yielding into the earth and pushing off with the right hindlimb, the lizard has sequenced through its body by extending that limb, elongating the right side of the body, and reaching fully forward with its right forelimb through the fingertips. The left forelimb provided support, and the tail swung in an C-curve to the left. At the end of the movement, the left hindlimb has moved into full flexion. The lizard is now ready to repeat this pattern on the left side. The lizard has already begun the transition to the other side by swinging the top of its tail to the right.



- 2. The lizard has just moved forward by completing Homolateral Yield & Push from the left hindlimb. After yielding and pushing off with the left hindlimb, the lizard has sequenced through extending that limb, elongating the left side of the body, and reaching fully forward with its left forelimb through the fingertips. The right forelimb provided support, and the tail swung in a C-curve to the right. At the end of the movement, the right hindlimb has moved into full flexion. The lizard has already begun the transition to the other side by swinging the top of its tail to the left.
- 1. Homolateral Yield & Push begins with the left side of the lizard's body flexed. The lizard will initiate this pattern by yielding into the earth and pushing off with its left hindlimb. The movement will sequence through the body all the way through the left forelimb.

Belly Crawling

The second expression of Homolateral Yield & Push from the Lower Limb is by alternating sides to crawl on the belly across the supporting surface.

This sequence starts from the bottom.

- 3. The baby has just moved forward by continuing to push with her right foot, extending the right side of her body forward through the fingertips. At the end of her reach, her tail will rotate to the left and her left leg will release forward. She will then be able to yield & push from her left foot to repeat this movement on the left side.
- 2. The baby has begun a Homolateral Yield & Push from the Lower Limb on the right side by shifting her weight onto the left side, yielding and pushing into the floor with her right foot, elongating the right side of the spine, and reaching forward with her right hand.
 - 1. The baby has just completed Homolateral Yield & Push from the Upper Limb on the left side. Her left side is elongated with the left arm and leg extended and the tail rotated fully to the right. Her right side is shortened, with her arm and leg flexed so that the knee has moved forward. Her head is in midline because she is focused on a distant object in front of her.

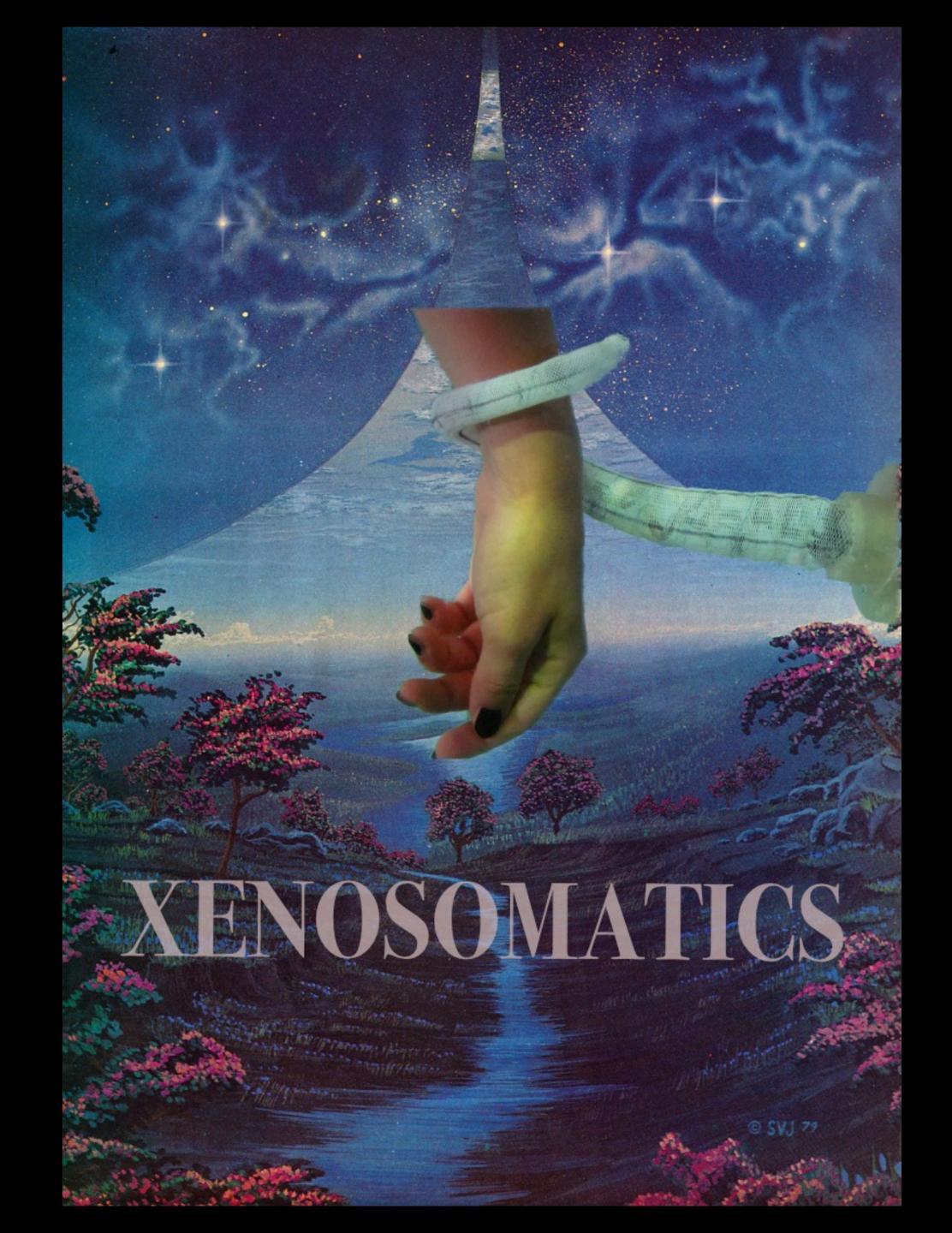
Integration of the Homolateral Yield & Push from the Upper Limb and Lower Limb (in belly crawling forward by alternating sides)

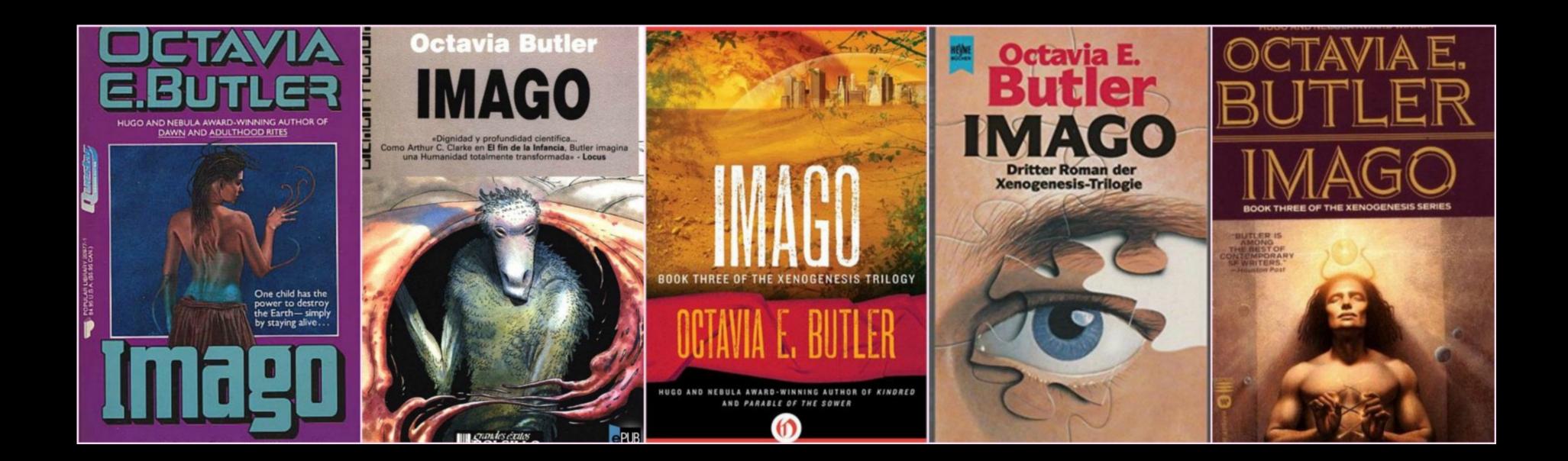
In Homolateral Yield & Push from the Lower Limb, when the baby is not focused on something, the head may also rotate toward the opposite side of the elongation. Whereas the range of the head rotation in Homolateral Yield & Push from the Upper Limb is about 45 degrees to each side, in Homolateral Yield & Push from the Lower Limb, head rotation is about 90 degrees to each side, giving the baby the ability to visually scan through a 180-degree range. This head rotation is not the isolated turning of the head from the neck, but is one element of a homolateral total body pattern initiated from a foot.



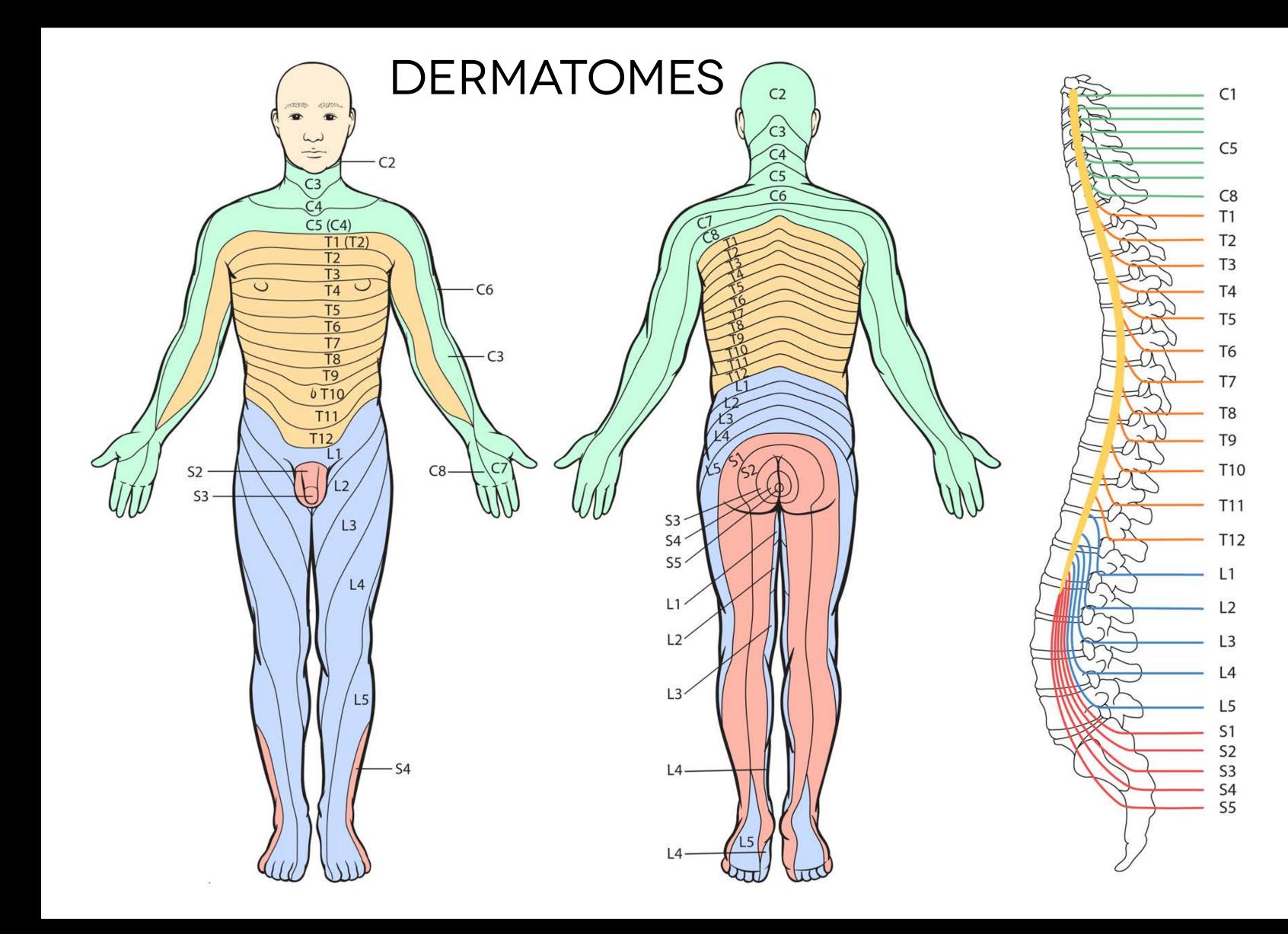
SOMATIC DESIGN IN LARP

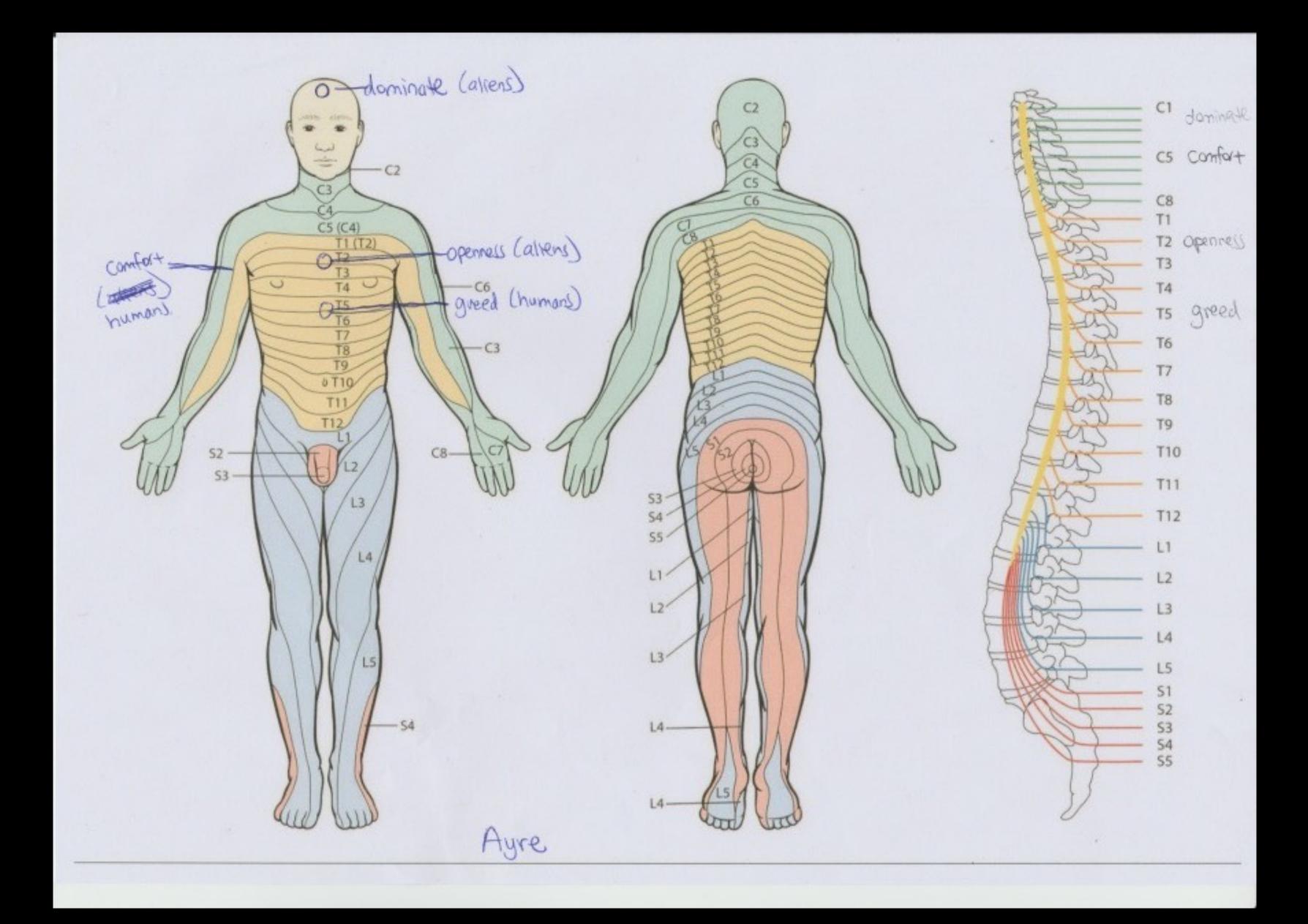


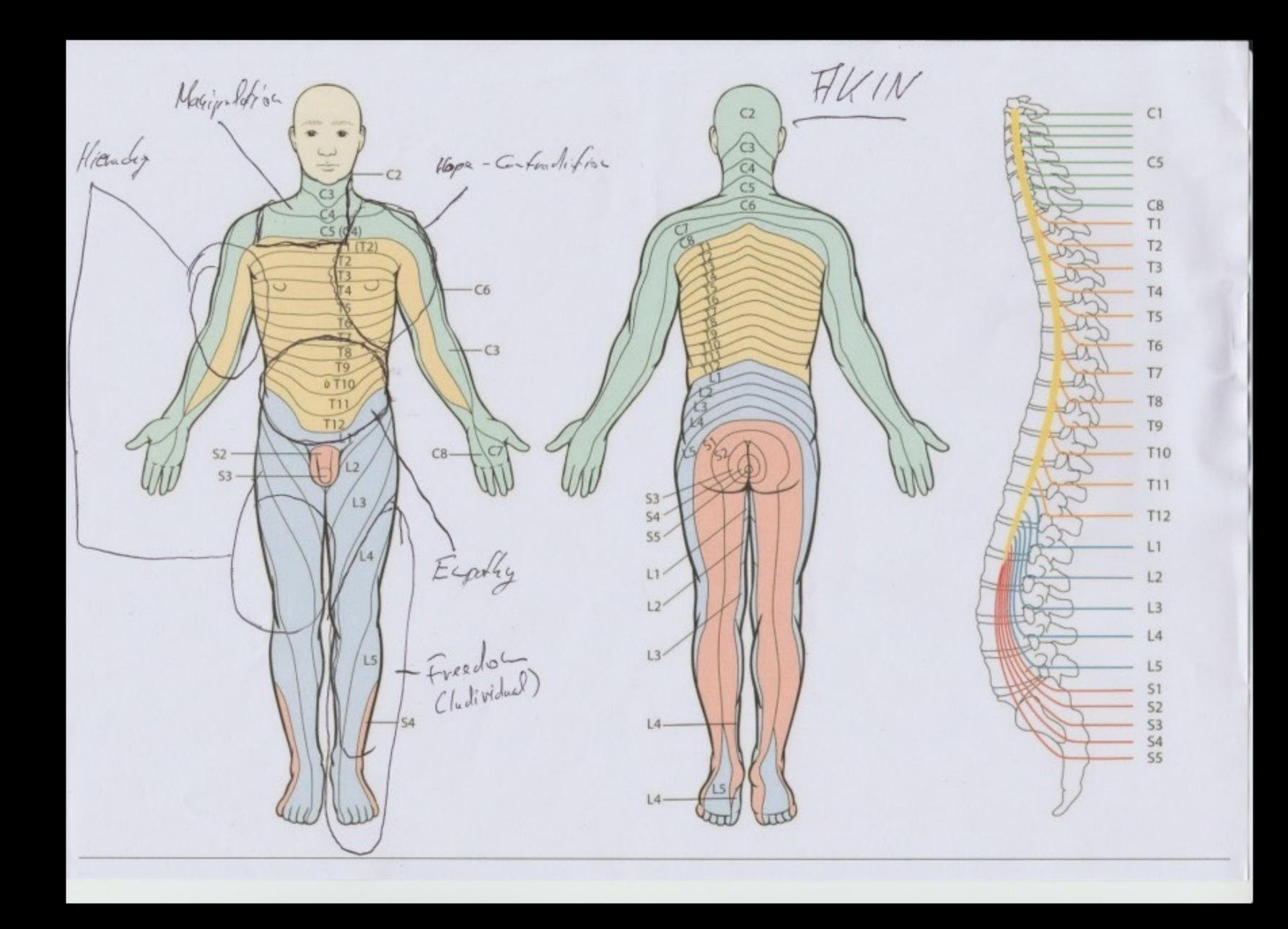














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