



Julia Fast

ORTHO-BIONOMY

Winter Newsletter

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PROPRIOCEPTION- “THE SIXTH SENSE”

MORE THAN FIVE SENSES?

Thanks to our primary school learning, most of us can easily identify the five senses - sight, smell, hearing, touch, and taste. The mention of a “sixth sense” leads some of us to ponder the supernatural, as famously portrayed by Bruce Willis and Haley Joel Osment in the Hollywood blockbuster of the same name. Nevertheless, many of us are unaware that more than five senses help our brains and bodies process sensory information and interpret the world around us.

WHAT IS THE “SIXTH SENSE”?

The sixth sense is known as “proprioception” [pro-pree-o-ception]. Doctor K. J. Suetterlin and Professor A. A. Sayer, report that proprioception helps us interact with our environment by providing a sense of where our body is positioned in space. Activities such as taking a sip of tea with your eyes closed, or turning a page without looking at the book, rely on proprioception.

In 1826 Scottish physiologist Sir Charles Bell first identified connections between the brain and the movement of our limbs and in 1906 neurophysiologist Sir Charles Sherrington first used the term “proprioception” to describe these connections. At first, it was believed these connections occurred in the muscles, tendons, and joints. However, evolving scientific knowledge has enhanced our understanding of how proprioception works. This includes response to stimulus from sensory input, followed by processing in the brain and resulting in a physical response.

Our sense of position and movement in space includes four key aspects;

- the sense of position of our joints,
- our sense of movement (kinesthesia),
- our sense of force (including tension, effort, or heaviness)
- our sense of changing velocity

PROPRIOCEPTION AND OUR HEALTH & WELLBEING

Suetterlin and Sayer report that our proprioception and specifically, our sense of joint position tends to be strongest in childhood and teenage years, then gradually declines after young adulthood (although some studies point to the contrary). They highlight that impaired proprioception can have a severe impact on motor coordination, posture, and an ability to regulate the force we use when executing movements. This can contribute to increased falls, particularly as we age.

HOW CAN WE ENHANCE OUR “SIXTH SENSE”?

There are many documented ways to improve our proprioception. Suetterlin and Sayer note posture training and Tai Chi can have positive benefits for proprioception. Andrea Salzman, who holds a master’s degree in physical therapy, maintains that a combination of active movement and balance training alongside passive movement training can be helpful. With active movement training you move your own limbs, whereas with passive movement training, limbs are moved by an outside force. Suetterlin and Sayer describe exciting new avenues of therapy which use movement training alongside cognitive training such as meditation, in an effort to train our brains to cope with new sensory information in new environments.

Sources:

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Salzman, A. (2017). Five evidence-based ways to hone proprioception. *Ausmed*. <https://www.ausmed.co.nz/cpd/articles/proprioception-training>

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I see Ortho-Bionomy as a bridge between conscious and subconscious tracing mechanisms, enabling us to maintain our current state of being, or after experiencing a surgery, injury, or trauma or having chronic conditions.

Our body, the anatomy and physiology are very complex which has evolved over time. We have always been curious by its complexity. Nowadays scientists are able to explain complex processes by discovering new facts such as proprioception. These facts are helping us to better understand how our body works, and which mechanisms in particular play a role in one or another physical event. The importance of understanding our body's complexity becomes even more important when we suddenly or gradually lose different physical abilities.

I would like to invite you on a little discovery with me. In talks that I give to clubs and groups I briefly mention the terminology "proprioception". In this newsletter I will go a little deeper and give you a better understanding of how proprioception occurs in our daily life and why Ortho-Bionomy works to improve it.

Alan Fogel, a professor of psychology, defines proprioception as the "psychology of self-awareness".

HOW DOES THIS RELATE TO THE PRACTICE OF ORTHO-BIONOMY?

Ortho-Bionomy works with proprioceptive reflexes. These reflexes are governed by how we feel in general – including being aware of things like having a full bladder – our 5 senses: sight, smell, touch, hearing, taste, as well as our sense of physical awareness.

Did you know we have over 600,000 sensory receptors in the skin alone?! Our body is constantly receiving information through sensory receptors. The amazing thing for me is that all this incoming information is being processed in the brain whether we are awake or asleep, whether we are conscious or unconscious in any particular moment. All this incoming data needs to be received, processed, interpreted and responded to.

Proprioception works to maintain our physical balance (equilibrium) and homeostasis (the self-regulating blood and lymphatic flow in the body).

In summary, Ortho-Bionomy works with proprioceptive reflexes by stimulating the brain to reconnect with the body; to re-calibrate, re-organise and re-balance; reminding the body how to regain its ability to function at its best.

For this to occur it is essential that as your OB practitioner I create an environment that is safe and comfortable for us both.

When a client is feeling relaxed, safe and comfortable they are more aware of what they are feeling during the session therefore more likely to gain the most benefit from it.

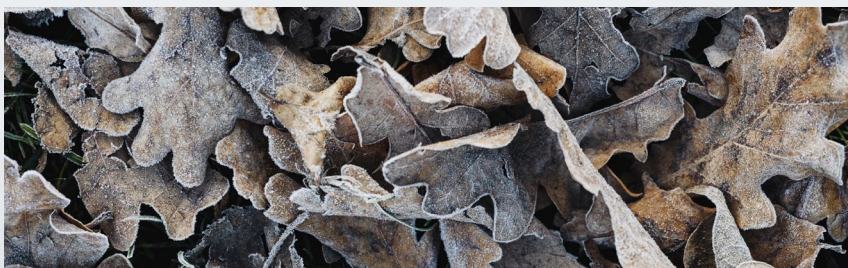
Creating this environment is crucial to the success of any session and is my number one priority before we begin.

Do you have memories of winters as a child?

Maybe in Central Otago when the snow settled for a few days?

Did you enjoy our most recent snowfall? The hills were covered with snow, such spectacular scenery throughout. It brought back my memories of growing up in the Soviet Union.

The winters there were always cold (-20C to -35C!) and everyone wore clothes made from very warm natural fibre cloth, layer after layer after layer - we called it the onion look. At any hour of the day or night we could see our breath in the air. Building a snowman was commonplace and I really miss that now.



This is a special time of the year, to slow down, to be present within yourself, reevaluate your first half year and make new plans to accomplish in the other half.

For everyone enjoying a winter holiday, I wish you and your family fun in the snow, your home filled with happiness, your heart with love and your life with joy.

For anyone not on holiday, take care, stay warm and safe, be healthy and well.

Julia

JF holistic health
mind+body+spirit