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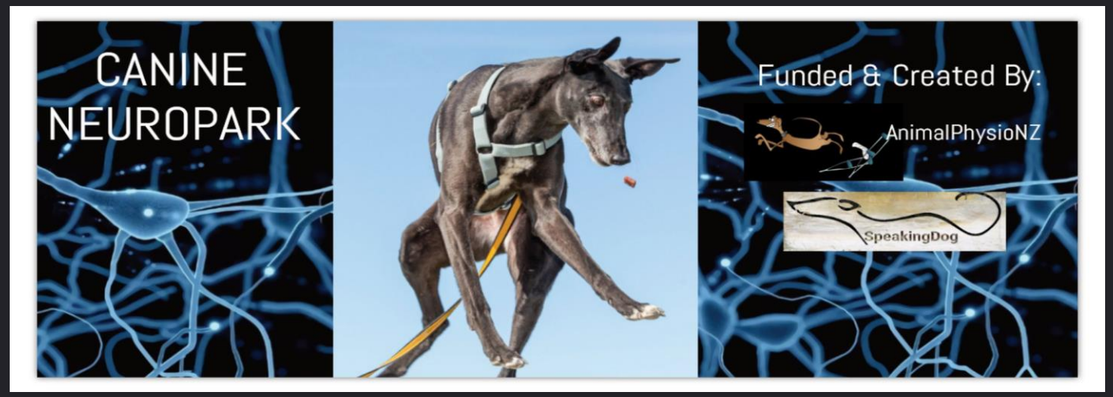

PAWZETTE

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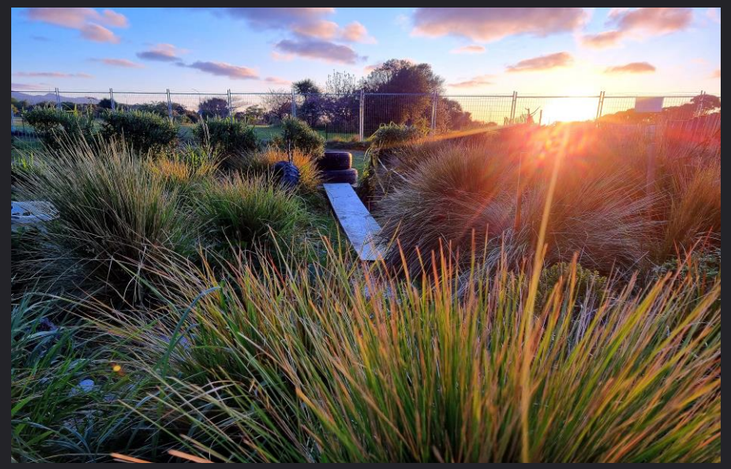


PAWZETTE

Summer 2023

IN THIS FEATURE:

Neuropark REMINDERS

Subscription Renewals
All memberships are now on subscription, meaning you will get a reminder when your subscription is close to expiring and another email when your subscription has ended.
Unfortunately, this part of our booking system is NOT automatic, and we are also not notified. So, we rely on you to message us through the chat box or wait until the end of the month for the renewal invoice to be sent out with the paypal payment link.
Such is life !! ☺

Please ensure the lock on the gate is secure when you leave.
If the lock falls apart, please get in contact ASAP through the chat box on our website www.canineneuropark.com; you will then be asked to use the emergency lock.
DO NOT FORCE-SHUT THE LOCK AFTER IT FALLS APART!

Breakages:
Lately, there have been a lot of breakages in our Maze's. Especially at Neuropark Social. Over the last few weeks, we have spent 100-200 dollars a week just fixing physio stations and dividers and parts of our Maze's. We can't afford that. We are very clear on our website and on our social media platforms that we are a Rehab Facility, NOT a dog park. Please use it as such. We have lots of "how to videos" on our Facebook page and our webpage. Over 95% of our Members have signed up, stating that the reason to join Neuropark is because their dog is "reactive". We rely on the responsibility of Members to read our website, what we opened Neuropark for and watch some educational videos to enhance the success for your dog and you using Neuropark. Canine Neuropark is a steppingstone for adaptation, not the endpoint.

Due to this development, we will organize "open-days" to educate members, how to use Neuropark as an observational tool for you, and as an interactive tool for your dog to build new experiences and memories to adapt behaviour, as well as showing you how to take advantage of the physio stations and how to check for musculoskeletal disfunction. These "open-days" will be free of charge for members. They will be advertised on our Facebook page as "Open-Day Events". Multi-dogs will still be allowed if they are from the same household, during a session with one of our vetted Behavior Consultants (currently: SpeakingDog & Sit Happens) and / or if used by a rehoming – rescue charity and their volunteers. We have had several open-days organized with the greyhound community and they have been very well received and proven successful for oner and dogs.

Please, Keep to your booked time!
We received a few emails from members who lost time from their booking because the field was not vacated by the previous booking. Please stick to your booked time. If something happens and you over-stay a few minutes engage with the other member, so they know you are not doing it on purpose. They may be able to help you. Overstaying on purpose is just not ok.

Locks
Our Neuropark lock code messages are very detailed on how to use our locks to secure the gate. It is important Members follow these steps. I'm getting too many message complaints from Members about finding gates not securely locked when they arrive for their booking.
Please ensure when you leave the gate is shut and secure.

Regards and best wishes to everyone
Bono & Elena

Be Safe Online -> check everything before you press submit!

Please ensure to never open a link from us, if it isn't from our Gmail address or you are being redirected to a site not displaying our domain www.canineneuropark.com/.... Or if you check out, PayPal's domain name, www.paypal.com/...
You can check a domain / website name easily in your web browser window.
Apart from the payment link in our Membership invoice, we NEVER send you payment links unless an invoice is requested by you.
You always be able to check out via credit card as a guest, no PayPal account is needed to pay for your membership, and to check out after you made a booking.
So be online savvy and always, read and double check before you; tick, click & submit your data

Off Lead Dogs

Red Zone areas have become busier over the years. Especially around Bexley Neuropark, some dog owners seem to treat that red zone area like an off-leash dog park. Unfortunately, at this stage we can't do anything about that, as it is a public area. Dogs however must be kept under control and along the Estuary, dogs must be on the lead.

It is vital that when you walk from the main CCC gate to Neuropark Bexley, that you have your dog on a well-fitting harness and a leash, to ensure your dog's safety. Use trees and bushes as dividers if you see oncoming dogs and people to make it easier for you and your dog. We feature a video on how to on our webpage.

Neuropark Updates

Locked Gates = Safety

Since mid January this year we have a second site at 395 New Beighton Road.

The reason we called it Neuropark Social is because it is located at a much more public setting, surrounded by a disk golf course, a sport field and a busy road.

It is however run under the same Terms and Conditions as Neuropark Bexley, or any other Neuropark Franchise.

Over the last few months, a concerning habit seems to occur, of non-members trying to enter at Neuropark Social and Bexley. We therefore advice you to lock the gate behind you once you have entered. Upon leaving Neuropark, please lock the gate even if another member has arrived.

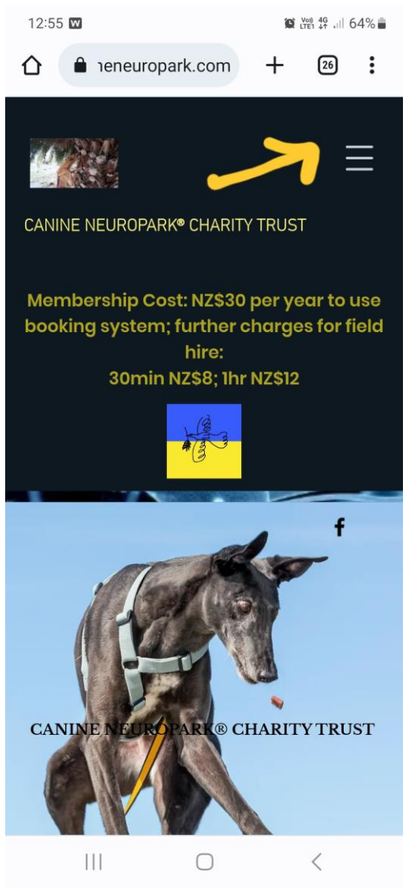
As you, that member has received the lock code. No lock code no entry.

Bookings

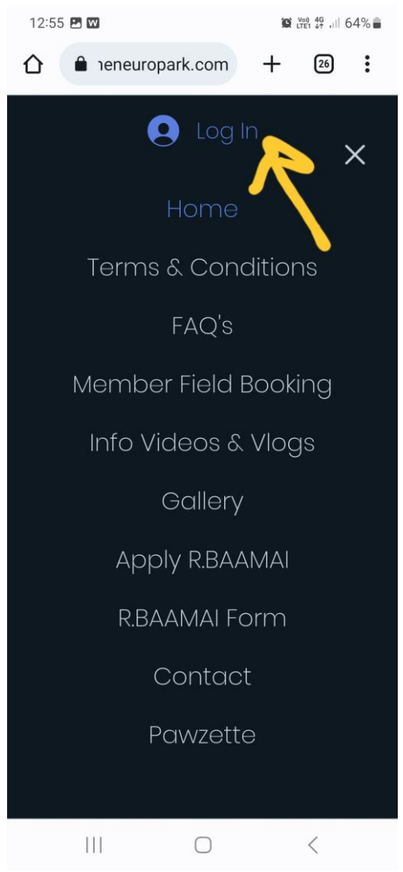
Booking must be made 5 hours in advance due to the number of members and bookings occurring on short notice.
Neuropark is a Charitable Trust and is not staffed- all notification, maintenance of the website, booking system and the fields are done by one person.

Even though, short-term bookings have automated replies, multi booking, rescheduling and bookings weeks ahead still need manual attention due to our manual lock type.
Membership applications are partially automated; but I still manually check replies and ensure, forms have come correctly thought the system to trigger the automations, while also maintaining the website, booking system, Franchisee Websites, Neuropark fields social media sites and my own business SpeakingDog and its educational projects.

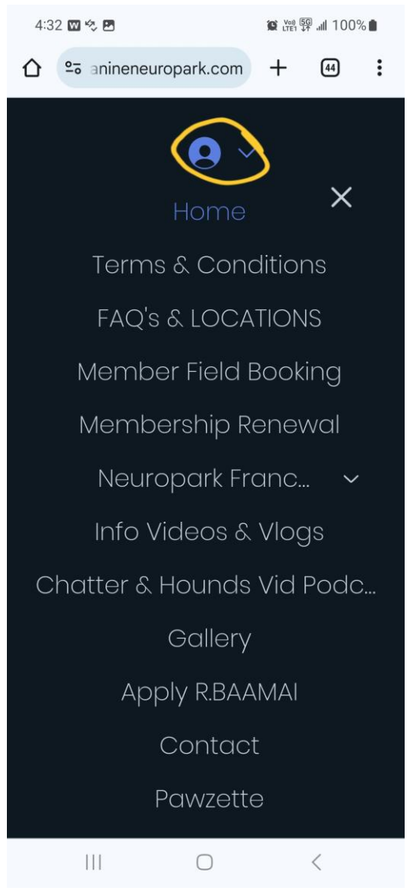
Code Messages in your Neuropark Account Inbox – How to retrieve them…..



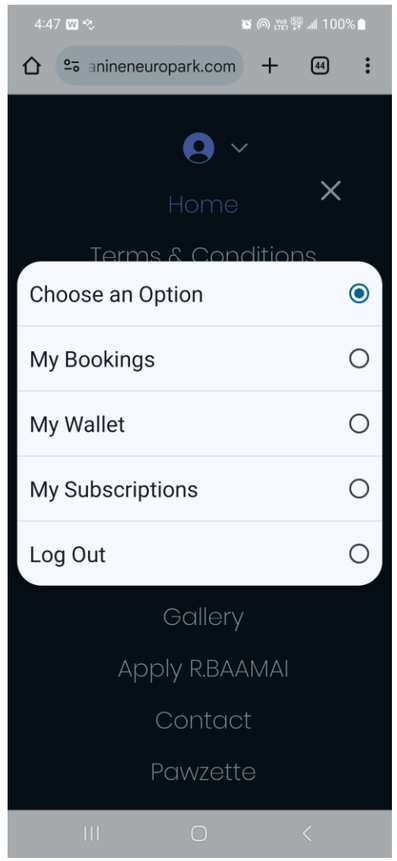
Step 1:
Click on menu on our website:
www.canineneuropark.com



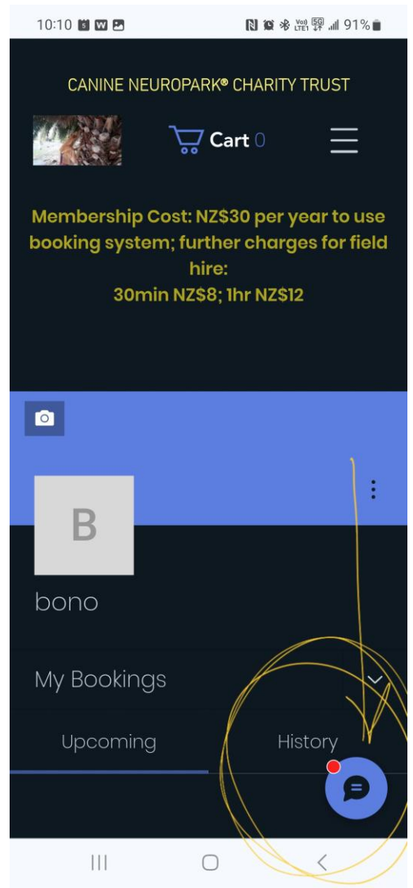
Step 2:
Click on "log In" and enter your details to sign into your account



Step 3:
Click on the human emoji arrow



Step 4:
Choose "booking", "Wallet" or "Subscription" to open your Neuropark account inbox



Step 5:
If there are new, unred messages or and notifications, the messenger sign will show a red dot

No Training at Neuroparks…. What??!!

Canine Neuropark's are rehabilitation facilities. They rely on the dog having agency to adapt to space through predicted movements -> interaction.

This does not mean we are saying "don't train your dog" a or training has no value. Of course it does! But it is not an underlying neurophysiological need to adapt and gain new experiences through interaction inside a Neuropark. Interaction happen because there is a need to explore expectations an animal has. If your dog is "reactive", it is actually predicting sensory outcomes and behaves according to those expectations to the confirm anticipated sensory input (barking, leaping, growling, etc). It can then either integrate the sensory messages and change behaviour (learn -> very expensive metabolically) or stay in its believe state. (metabolically a little cheaper than learning and changing movements – action plans)

Applied Adaptation Methods should only proceed with the guidance of either SpeakingDog K9 Services OR one of our vetted Behaviour Consultants / Practitioners.
These behaviour consultants understand the foundation of active inference, predictive processes / allostasis, and ensure, while you are using Neuropark, your dog benefits from exploring and exploiting the created niche in form of gaining valuable experiences, which will help adaptation processes outside Canine Neuropark.

Currently vetted behaviour professionals to use Canine Neuropark in Christchurch are:

Sit Happens NZ

More may follow depending on interest of other canine professionals in the fundamental mechanics of learning by a predictive system, such as any animal, through Active Inference.

"The way you interact with your dog, influences its nervous system as well as yours, on a spectrum of positive and negative – these interactions will change energy efficiency. If the influence is beneficial or negative, depends on your demands and the tools you use!

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Doi:10.1002/hipo.22488

The Senses as Sensors, Learning & Memory

Bono f Beeler BCCSDip.Can.Bhv.Prac

This first instalment of “The Senses as Sensors” is a basic summery introduction to understand the interactions between our external sensors, such as eyes, ears, nose, touch and taste and internal senses like nociception, proprioception, interoception, equilibrioception, head direction and navigation with the brain's spontaneous activity. (output)

Over the next few issues, I will lay out how intrinsic and sensory interactions make moving, learning and memory even possible.

Quite bluntly, if it would be just up to our sensors to activate the brain and “integrate” knowledge about the things in the world in the brain, no learning would occur as the brain would have no way to ground the sensory input to any actions.

It is important to define actions. Actions in this context refers to any quantum from a: neuron reading the polarization or depolarization of a downstream neuron, endocrine function, heart & respiration rate, attention shift – active sensing, thinking, memory consolidation & recall, motor actions like digestion, waste removal up to musculoskeletal movements and sequences of musculoskeletal movements {behaviour}. To support any action, a system needs energy – energy may be applied through external sources or through intrinsic resources[1]

The developed mechanics of a sensor alone are not enough ,the sensor most relate to output action (attention of sensor, dynamic movement and placement of sensors, and the sensors receptors must interact with physical changes (i.e.: light waves, chemical changes, air pressure changes) during early development to become functional. [2] [3]. If physical changes or movements are not available, sensors adapt to processing other sensory information (cross-modal processing)[4]

Understanding development as a constructive process, an interaction between nature (environmental influence) and nurture (genetic opportunities) broadens our view of how the brains intrinsic actions resonate with sensory input to create new experiences – we call learning; thus, not restricting us to the stimuli response paradigm.{picture a}

Senses as Sensors, Learning & Memory

On a very basic level, we can think of sensors as measuring devices. They are measuring whether the brains anticipated sensory input and action plans are energy efficient and viable, in relation to the environment's regularities and past experiences (genetic & learned action plans)

Often, it is claimed that the dog experiences his / her world mainly through its nose, because its olfactory sessors are so sensitive to a wide spectrum of chemicals; however, to efficiently explore and exploit all sensors – external and internal – are in the service of the brain, measuring the accuracies of the brains predicted action plans. In cases of mismatch, the sensory input solicits error loops for neuronal adaptation (plasticity). A process known as learning.

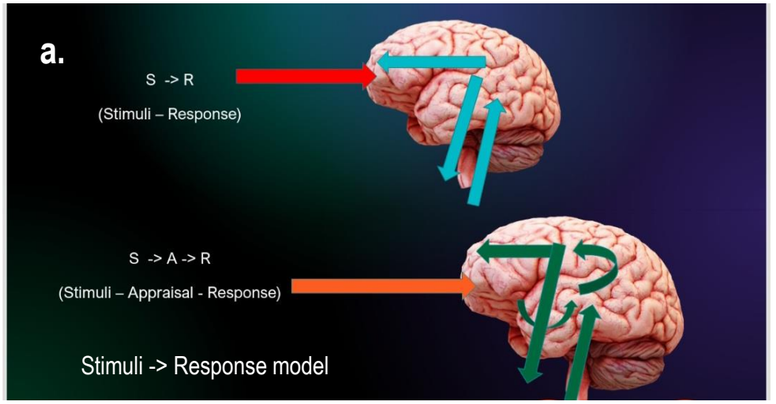
To “memorize” – strengthen adapted neuronal trajectories - internal patterns (sharp wave ripples) [5] select important changes during awake brain state shifts of:

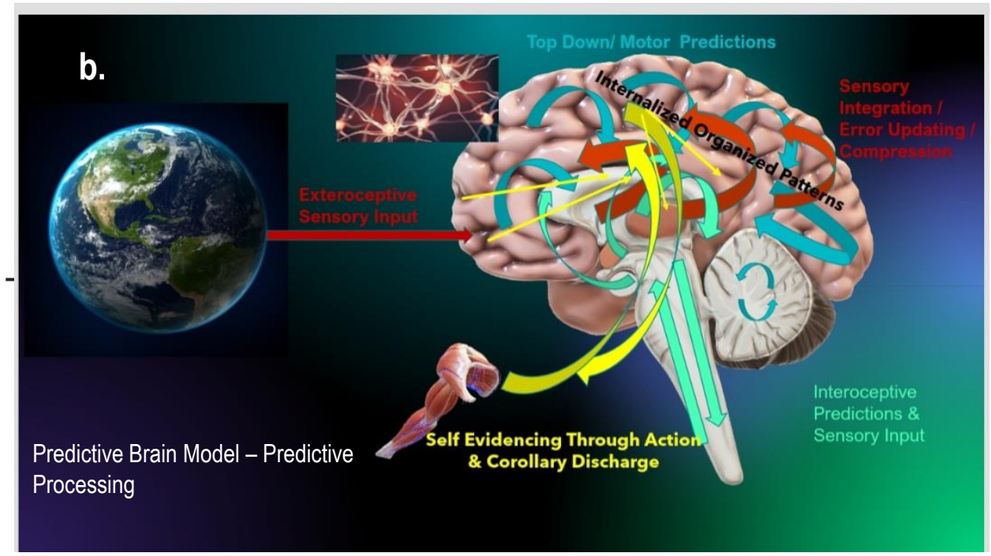
Preparatory / exploritary (attentive – online) to

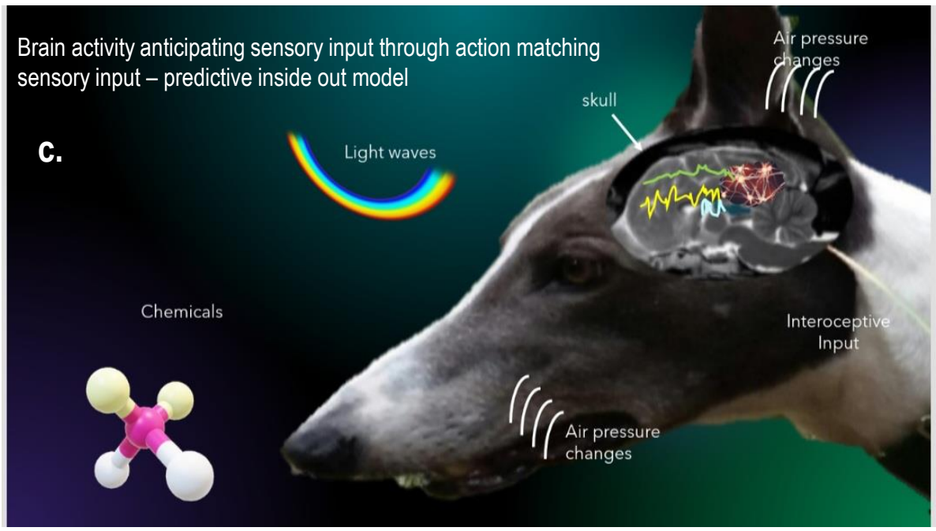
terminal / consummatory / exploitative states (non attentive – offline).Terminal / Consummatory / exploitative behaviours include actions such as: feeding, drinking, resting and in its extreme form sleep, etc. We allocated names such are reward or reinforcer for non attentive states

The shifts between those states are triggered by the high and low release fluctuation of neuromodulators.[6] During sleep stages (non rem sleep), sharp wave ripples replay selected sequences (experience in compressed form) thousands of times to consolidate memory of new experiences.[7]

This should outline the importance of non interruption or well targeted interruption of sequences of action -> rest state shifts, with the understanding that the reward / reinforcer gives the affordance (opportunities) for the shift from exploration into rest state and opportunities for sharp wave ripples to occur. But it is these “self-released” patterns themselves that select the experiences[6],[7], constructed by interactions of neuronal outputs and sensory inputs, which are then consolidated to long-term memory.







Senses as Sensors, Learning & Memory

To most, these functional details won't matter, because it is easier to understand the world though the feeling of "common-sense". What it feels to us; that there are things that trigger us to which we react to. We experience it to be so, because we have the common agreement of the sense to react to stimuli and thus apply common operant & classical training methods when working with dogs.

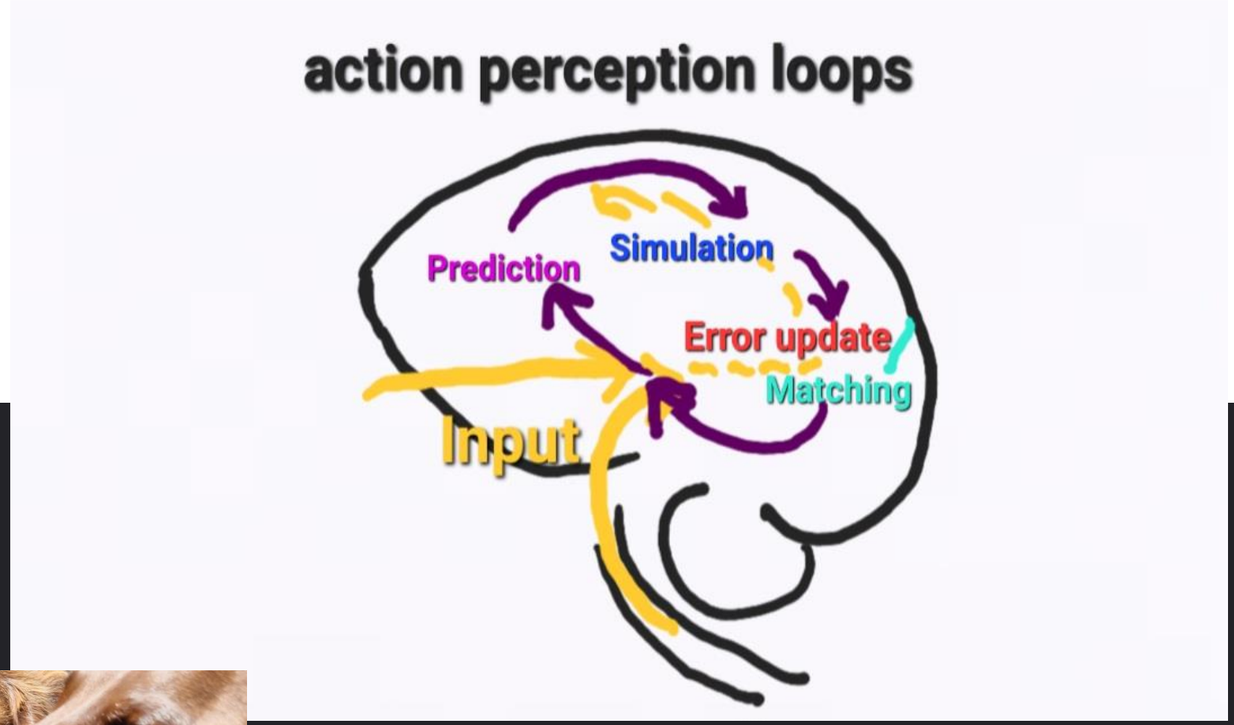
As professionals though, we have the responsibility to ensure our knowledge and the methods which evolved from the knowledge, benefits the animals' (here dog) natural needs, because they cannot speak for themselves. This doesn't just relate to behaviour, but how behaviour occurs in relation to the environment through efficient predictive processes of which the outcome, in an evolutionary sense, is survival and the passing on of genes.

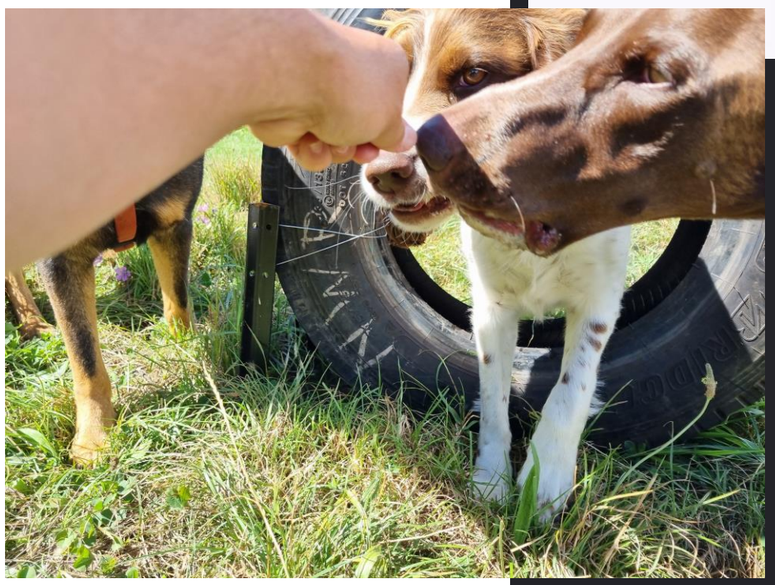
In relation to pet animals such as the dog, we are controlling their daily existence so profoundly, often treating them like little children, unable to function without our human input, that when behaviour issues arise, dogs and dog owners / dog guardians find it hard to cope and issues are reduced to behaviour disfunction.

It is no surprise that often, dog owners try to supress issues with aversive tools and methods to lessen the metabolic load on themselves, without understanding the influence this will have on the dogs' predictive processes and sensations and health in general.

Providing more natural interactions with the environment, engaging and attentively observing our dogs' actively inferred interplay with the known and novel environmental regularities and behaviour & brain state changes, is an important foundation of Canine Neuropark®© to support behaviour adaptations on a holistic and affectively* neutral or positive level

* See Emotion in the next section – page 10





The Science of Emotions

Bono f Beeler BCCSDip.Can.Beh.Prac.

While we should appreciate the outcome in advice and discussions on behaviour adaptations by talented and caring positive (R+) / trainers, behaviour consultants, behaviourist and vets, I am continually surprised on the persistence of focusing solely on Pankseppian hypothesis on emotions, which are scientifically categorized within the labels of the "basic Theories of Emotions" to explain behaviours as values of positive of negative values from an evolutionary perspective.

Why do how we think about emotions matter?

As explained in the previous article, on the sensors, learning and memory, the type of brain model applied matters in relation to the mechanics and function of a biological dynamic system – a living being. To be able to acknowledge that there is a movement, we would categorize as stimuli, sensors must be placed in attentive / online state and in many animals also in a physical position directed at the movement .

Therefore, an emotional state referred to by Panksepp such as SEEKING, is an active state which can range on a spectrum of positive or negative, aroused or calm and is context dependent on past experience and the immediate environment.

This can also apply to an emotional concept described as RAGE, as it serves the basic behavioural functions for defence but also to predate for food. The outcome of predation couldn't however be valued negatively as it supports energy regulation. An animal like a cat or dog may simply kill because it feels good not just for defensive purposes. For example, Panksepp identified nerve connecting from the amygdala to the hypothalamus to the periaqueductal Grey (PAG); he identified as the "Rage system".

It is of note to mention though, that these areas are involved in many other actions, mood, threat response & behaviour output. They are heavily connected and have no direct access to outside "stimuli". All these connections have is the ability to "read out" the polarisation or depolarization of the downstream neurons they have wired to, to then fire together or inhibit, depending on chemical influences[3]

We all anticipate we know what emotions are, but scientists still don't agree on a specific scientific definition of emotion.

Theories of emotion, of which there are many, labelled on a spectrum [1], [2], between:

Basic Emotion which concentrate on physical responses being responsible for emotions,

Appraisal theories which include physical actions and the brains appraisal of these functions as emotions,

and the Theory of Constructed Emotions which defines affect (feeling / mood) as a property of consciousness and Emotions as predictions of conceptual categories of the meaning of the physical actions and affective feelings, which are described as a summary of interoception and allostasis (predicted metabolic / energy regulation).

While calling complex affective and / or emotional experiences "systems" or circuits (I.e.: Pankespp)[4], to explain evolved innate behaviour expressions, data on "one circuit-to-one emotion, one facial expression-to-one emotion or one physiological change-to –one emotion has not been reliably reproduced.

For examples, the previous brain structures mentioned, amygdala and PAG are involved in many other physiological and physical events. In general, variety of physiological, behavioural and brain patterns may relate to emotional and affective instances and are context dependant.[5]

My argument is not about which theory we should focus on when we relate to animals, but be aware that no one physiological change such as heart rate or respiration, behaviour or chemical the likes of cortisol, dopamine or oxytocin can give us a "reading" on any specific emotional or affective state of an animal, and we must be careful that indoctrinated beliefs don't have a negative effect on the animal we work with because we have a bias, that a specific physiological type, behaviour expression or specific chemical, relate to one emotion or affective (feeling) type.

Sniffing for example may not always have relaxing tendencies; a dog showing threat related behaviour may not feel Fear, it may be frustrated or in an aggravated state.

A dog in a highly uncertain situation may not have elevated heart and or respiration rate, it may simply be at a "shut-down" point we may also categories as depression.

A state of "freezing" may have a higher or a lower measured heartrate

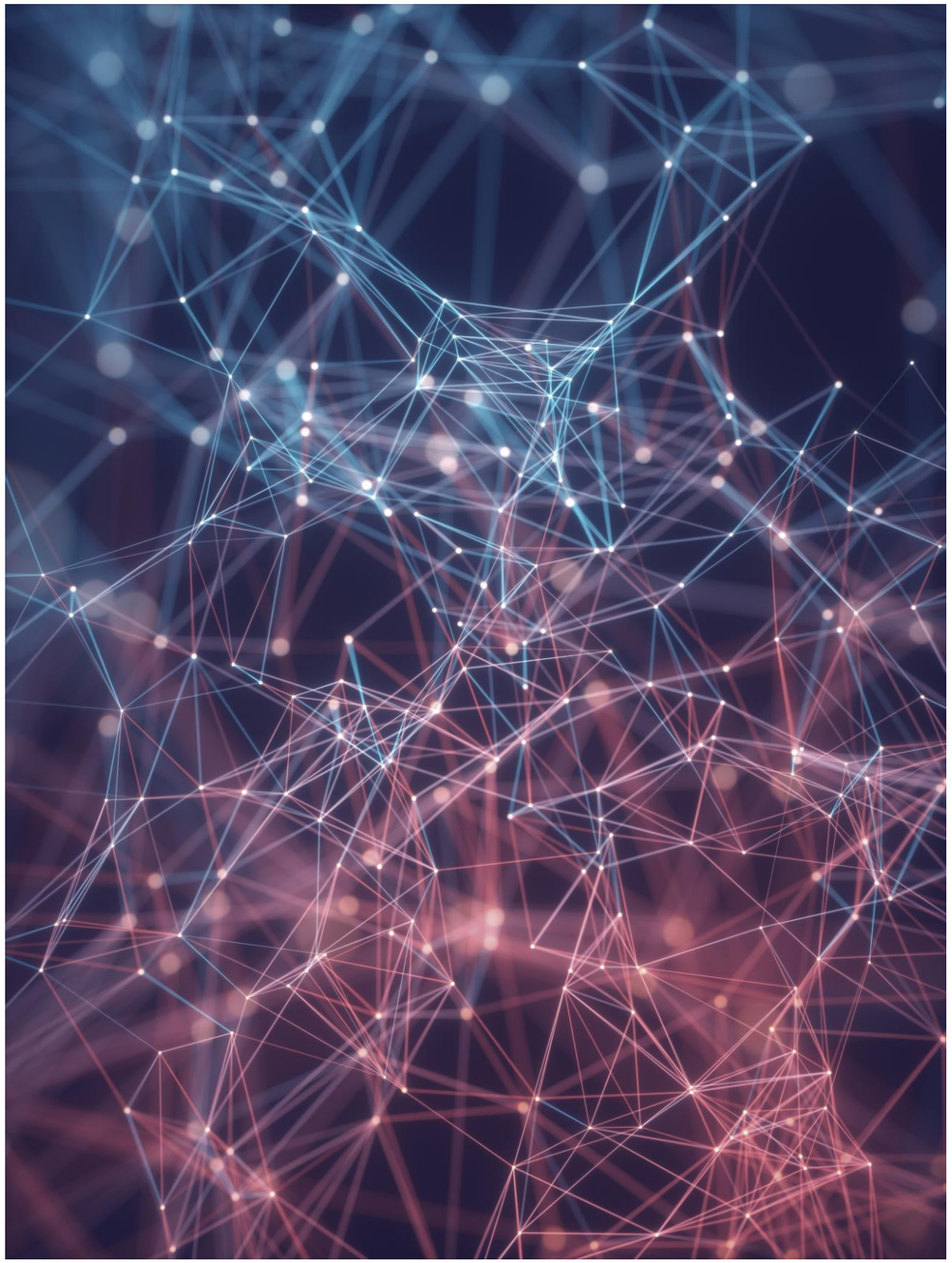
Feelings and emotions are highly individual experiences, not easily read in any physical form, and it should be expected from any professional in the animal field and of course psychology, to be well versed in the basics of the approaches of theories of emotion, to provide holistic support and methods to individuals on context dependant levels.

The way we interact with other beings influences each nervous system's regulation. The sound we use when we speak to our dogs, the body movements we make and how fast we move, touch, even how we smell, no doubt, influence our dog's nervous system, thus how they make meaning of a situation and the actions & movements the brain predicts to command efficient behaviour output in the environment they are in at the present time.

All these elements are so profoundly connected, they don't rely on one specific chemical, or one specific circuit or pathway – The emergence of such profound conscious events are many parts resonating together.

As a metaphor, think of it like music: many musical notes resonating together in synchrony can fill a room in symphony. A profound conscious and emotional experience.

Many parts connecting & resonating in synchrony can emerge in wonderfully complex and dynamic systems



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GALLERY

Neuropark Eisenstadt

Neuropark®© Dunedin

Our Neuropark Fanchisee's

Canine Neuropark®© has now 2 Franchise offshoots. One in Dunedin and one in Austria.

Neuropark ®© Dunedin is set up like the Rehab Facilities in Christchurch. The same booking and payment system. Franchisees sell their own memberships to their facilities; so, if you go to Dunedin and wish to use their field, you will be asked to buy a "Neuropark ®© Dunedin Membership", before you can hire their field.

Neuropark ®© Dunedin is owned and operated by Krystle Hall. Krystle is a senior veterinary nurse who gained certification in Canine Rehabilitation though the University of Tennessee.

Krystle also holds a certificate in Canine Strengthening and Conditioning, as well as Canine Hydrotherapy.

By day, Krystle is proud to work with the dogs at K9 Medical Detection as a Canine Welfare and Fitness Trainer.

www.neuroparkdunedin.com

Neuropark®© Eistenstadt, in Austria, is a Vet & Rehab led Neuropark ®©. Vet & Rehab Led Neuropark ®© Franchises are run like a practise by the specialists in the clinic.

Neuropark ®© Eisenstadt is led by Sibylle Karpf Mag.med.vet .

Sibylle Karpf Mag.med.vet. **gained her Veterinary degree at the University Wien in 1988 and has qualifications and incredible broad knowledge as a vet, rehab, dog training and in behaviour adaptation.**

www.sk-vet.at

Who We Are

Elena Saltis BSC, NZPT, CCRT, NZAVPA

Elena completes her BSc Physiotherapy degree at the Ohio State University in the USA. She has since worked as a human physiotherapist in the USA and in New Zealand. Previously, Elena owned PhysiotherapyNZ Ltd in Christchurch, encompassing numerous Physiotherapy Practices. She then went on to study at the Canine Rehabilitation Institute in the USA and then became an Instructor on the CRI course for USA and Australia. She has attended numerous post graduate courses in Canine Rehabilitation in the States and Australia in particular, advanced spinal manipulation, sports medicine, prosthetic / orthotics, advanced manual therapy and rehabilitation.

Elena also runs rehabilitation courses for Veterinarians worldwide. She is deeply passionate about sharing her skills and knowledge.

Elena is Co-Owner and managing Director at Animal Orthopedics Christchurch (AOC), an orthopedics surgery clinic.

Elena is a member of the New Zealand Animal & Veterinary Association and previously the Secretary for 10 years. She is passionate about philanthropy and has a clinic in Spain with a rescue sanctuary for Galgos. She has also set up “Street Tails” service to help care for homeless peoples' dogs in Christchurch and is the Co-Founder of Canine Neuropark®

Bono f Beeler BCCSDip.Can.Bhv.Prac.

After the completion of the Swiss Chefs Apprenticeship, Bono spent most of his 20’s and half of his 30’s in hospitality as a chef and later as a chef and Restaurateur. Familiar of dog obedience and agility from courses in childhood with other people's dogs, Bono completed a 2 years Diploma study with the British College for Canine Studies in 2013 including their practical assessment. Bono added certificates in Geology, the Fundamentals in Neuroscience with Harvard X and attended many seminars on dog behaviour as well as presenting “Roaming with Hounds”, “Emotions and Hounds” and “Pain in the brain” at separate symposiums. Bono is continuing his studies into the predictive aspects of the brain & body and the effect of behaviour output – “Active Inference” – and how this changes aspects of training and behaviour modification.

Bono is the owner & Operator of SpeakingDog K9 Services as well as the Co-Founder & Operator at Canine Neuropark®, also heading its longitude field study “RBAAMAI” (Behaviour Adaptation, Arousal & Mood Spectrum by Active Inference”)

Helen Robartes BSc (Physio), MSc (Vet. Physio with Merit), NZ Physio Board-Registered, MPNZ, MNZAVPA, MANZAVPA, MIAVRPT, Cat A (overseas) ACPAT, HCPC-UK, PEI Permitted Equine Therapist (Physio)

Helen is enthusiastic and passionate about helping animals and humans to be happy, pain-free, moving well and living their best lives. Qualifying as a human Physio at the University of Stellenbosch in 2007, and as a veterinary Physio at the Royal Vet College of London in 2012, Helen works with her patients to help them perform their best, prevent injury, optimize their recovery and have the best quality of life. Helen is based in the Hawke's Bay, and also travels through the lower North Island and upper South island. Helen enjoys collaborating with other veterinary professionals, teaching students, being a Physio (I LOVE and am FASCINATED by my work!) and aims to return to university in the future to do further research in this field.

Who We Are

Adele Curran BSc Psychology

Adele began her ongoing work with dogs in 2015 while completing a BSc in Psychology at the University of Canterbury, alongside additional papers in biochemistry, animal behaviour, Bioethics and Environmental Ethics. The mechanisms underpinning animal behaviour became a driving force for her future studies, and she now studies Canine Psychology & behaviour (Ad. Dip) with the ISCP to further her species-specific knowledge.

The venture into dog training wasn't intended. On her days off she went in search of lighter relief and while out and about she found Christchurch Bull Breed Rescue (CBBR) looking for volunteers. Seven years later and Adele is still at CBBR one day per week as a duty manager and training support for foster carers.

Adele has been working with Sit Happens since 2018. Her main focus is on behaviour modification in complex cases, and develop general core life skills and also holds puppy classes to educate dog owners

Christina Rock BVSc, CCRT

Christina is a qualified Canine Rehabilitation Veterinarian, trained through the Canine Rehabilitation Institute. As a canine rehabilitation veterinarian, she provides comprehensive rehabilitation care to canine companions, sport competitors, and working dogs. Her thorough functional assessments of the canine neuromuscular system give particular attention to form and function of soft tissues as well as skeletal health. Treatments provided include manual therapies (joint mobilization, soft tissue manipulation, trigger point release, modified stretching), physical modalities (cryotherapy, heat therapy, photo-biomodulation/laser, E-stim), therapeutic exercise (including home exercise programs with PhysioTec platform support), and neurofacilitation as well as comprehensive advice on home adaptations to support patient recovery and function. Mobile services allow in-home care or appointments at central locations in Southland, Queenstown, Dunedin, and Oamaru. She takes pride in clear communication and working cooperatively with you and your canine's veterinary care team to maximize their health and wellbeing!

Lisa Sturm BSc, MSc

Lisa arrived in New Zealand in 2014 from Germany. After graduating from University with a B.Sc in Information management and a M.Sc in International Management, Lisa went on to focus on her true passion: "Dogs"

Lisa is a dog trainer and behaviour consultant and has worked with thousands of dogs. She is a Supporting member of the International Association of Animal Behavioural Consultants (IAABC) and previous Treasurer & two-time Vice President and current full Member of the Association of Professional Dog Trainers New Zealand (APDTNZ).

After working as the IT Manager, Day Care Supervisor and Dog Trainer at a big dog center in Christchurch, Lisa founded the science-based dog training business Sit Happens in 2016.

In 2020, Lisa founded Kiwi Canine which is an online store for high quality, selected dog products of which many are made in Christchurch, New Zealand. She finds joy in showing her clients how smart their dogs are and enthusiastic to help them find the right products for their individual dogs

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