# A Short Cut

# to Happi ness

<u>I've asked a question. Spoiler alert: It's not</u> really a shortcut. It requires work and time. It requires nurturing and compassion. It requires the ability to forgive and the dedication not to judge. It requires that we learn how our mind and our body connect and how they exchange information. It requires us to listen and it requires us to love.

To talk about a shortcut to happiness implies a journey; one that most of us are already taking. We are all aware of what joy feels like, and we know the things that make us happy. We may even know that, to achieve peace and calmness, we must let go and accept what is out of our control. What we still don't quite understand is how.

To be a professional athlete requires high levels of physical and mental fitness. To maintain this requires training, and the more exercise an athlete does, the fitter they become. This is also true of mental fitness. Emotional balance is something that can be trained, and it becomes more stable the longer that you practice. Having a focus on nurturing emotional intelligence, from childhood especially, should become a necessity for modern life; therefore design must act as an agent of change to nurture human development.

# "We, half dust, half deity."

# OUR PHYSICAL SELF

Survival. This is the primary role of the brain. Every other function it performs is secondary to the requirements of hunger, rest, protection, sex and shelter. The brain generates signals concerning these requirements, it develops blueprints pointing us towards places where those needs can be satisfied, generates energy to get us there, warn us of jeopardy and opportunities en route and can inform our actions based on changes to our condition.

## The brain anatomy

Our brain is composed of three separate areas that we can call new, old and very old, based on their development in evolution. The development of the brain follows this evolutionary path. The reptilian brain (very old) develops in the wombs and organises basic life-sustaining functions for our infancy, such as threats. These regulatory abilities carry on throughout our entire lifespan.

The limbic system (old) is formulated mainly during the first six years of life but continues to evolve in a use-dependent manner. The prefrontal cortex (new) develops last, and is affected by emotional experiences in the same way as the limbic system.

### HOUSEKEEPING BRAIN

#### Reptilian/animal brain

The development of the reptilian brain can be traced back over 400 million years. So named because it was believed to be the part of the brain found in birds and reptiles. It is concerned with our body's vital functions, such as heart-rate, breathing and temperature. The functions of the reptilian brain tend to be inflexible and compulsive.

#### **EMOTIONAL BRAIN**

#### Limbic system/mammalian brain

At the heart of the central nervous system sits our emotional brain. The two areas that have a key role in monitoring our wellbeing reside here; the reptilian brain that controls the body's vital functions, and the limbic system that regulates our emotions.

When the brain identifies opportunities or dangers, it alerts you by releasing a wave of hormones. The subsequent visceral sensations can vary from uneasiness through to panic and will interfere with your focus, effectively shifting you, both physically and mentally, in a different direction.

The emotional brain is simpler in its cellular configuration and biochemistry than the rational/cognitive brain. The information received is less complicated and sorted into broader categories so that it jumps to conclusions based on rough similarities. The emotional brain is not designed to be nuanced, instead initiating pre-programmed escape plans, like our fight-or-flight responses.

The limbic system first appeared in early mammals around 250 million years ago. Unlike reptiles, mammals lived in social groups and nurtured their young and each other. This area of the brain is the seat of our emotions, it monitors danger, judges what is pleasurable and what is fearful. It is the arbiter of what is, or is not, important for our survival.

While the reptilian brain is rigid, the limbic system is malleable. This pliability is called neuroplasticity. The limbic system forms in, what Bruce Parry calls, a 'use-dependent manner', responding to experience where the neurons that 'fire together, wire together'.

The way that the limbic system wires together can alter how you perceive a situation. When a circuit fires often, this can become the benchmark setting. If a circuit has been firing repeatedly, it is likely to keep firing repeatedly. When you are loved and feel safe, the brain specialises in exploration, play and cooperation, whereas if you are frightened and unwanted the brain becomes practiced in managing feelings of fear and abandonment. The experiences we have in early childhood sculpt the limbic structures devoted to emotions and memory. These foundations will inform our emotional experiences throughout our lives, and while these structures can be modified and built on significantly by later experiences, the training we do in our early development can help create balanced pathways that do not need to be overwritten or re-trained.

#### **RATIONAL BRAIN**

#### Neocortex

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The youngest part of our brain is principally concerned with interpreting and understanding the world around us, how people work and figuring out how to attain our goals, manage our time and sequence our actions.

Language and our ability to think in abstracts makes us unique among animals. This ability and our capacity to absorb and integrate enormous amounts of information and then apply meaning to it is provided by the frontal lobes. These lobes are also the region from where our empathy radiates; our ability to 'feel' other people. In 1994, scientists identified specialised cells in the neocortex that came to be known as mirror neurons. When a person executes a certain act, certain neurons in their brain modulate their activity. When this act is observed by another, their corresponding neurons stimulate in the same way, mirroring the activity. In this sense, we not only pick up another person's movements but their emotional state and intentions as well, both positive and negative.

### **NEUROPLASTICITY**

When we learn something new, we forge new connections between our neurons, rewiring our brain to adapt to new circumstances. While this is an ongoing process, it is also something we can encourage and stimulate, where each new lesson has the potential to connect new neurons and mould our brain's default modes of operation. The amount that the brain can be moulded will be dependent on how invested we are in promoting neuroplasticity and how we approach life in general. At its root, all neurological functioning and re-training revolve around sensory integration.

Our frontal lobes can also (sometimes, but not always) stop us from doing things that will embarrass us or hurt others. We don't have to eat every time we're hungry, kiss anybody who rouses our desires, or blow up every time we're angry. But it is exactly on that edge between impulse and acceptable behaviour where most of our troubles begin. The more intense the visceral, sensory input from the emotional brain, the less capacity the rational brain has to put a damper on it.

neocortex

rational or thinking brain

actions, empathic understanding

planning and anticipation, sense of time and context, inhibition of inappropriate

# reptilian brain instinctual or dinosaur brain

arousal, sleep/wake, hunger/satiation, breathing, chemical balance

limbic brain

emotional or feeling brain

map of relation between, the organism and surrounding, emotional

relevance, categorization, perception

# Somatosensory feedback & body activation

The idea that we can feel emotion and place it within the body has long been known and can be found peppering our language. Whether we get 'cold feet' before a big event or we feel a shiver down our spine when we think about a lucky escape, the notion that we can communicate our emotions to others and that they will be universally understood lead Nummenmaa, Glerean, Hari, and Hietanen (2014) to create 'statistically clearly separable bodily sensation maps' (BSMs). The thirteen BSMs they created delineate whole body representations, in the style of a heat map, for the sensations associated with emotional response, with warmer colours (red, yellow and orange) mapping increased activity and cooler colours showing decreased activity (blue, green and indigo). The study, which included culturally diverse groups, found that somatosensory feedback was universal and that not only could people describe their own BSM for emotions, but that they were also able to recognise them in others.

Most of the basic emotions have elevated activity in the upper chest area. This would correspond, the researchers posit, with changes in breathing and heart-rate. All of the emotions produce sensations in the head, reflecting both facial expressions and mental reflection. The BSMs that correlate to emotions that may require movement see increased limb activity, as if the mind and body are preparing us for action. For doleful BSMs, such as sadness or depression we see a decrease in limb activity which ties into the lack of motivation that is expressed in relation to these sensations. Happiness, it appears, is felt throughout the body. This is one of the reasons why happiness is so exhilarating - it actually lights up our whole being.

Another interesting result from the study was the intensity of the BSM for shame, with it's tell-tale hot cheeks. Shame is an unpleasant, self-conscious emotion typically associated with a negative evaluation of the self, having withdrawn motivations and feelings of distress, exposure, powerlessness and worthlessness. It is strongly associated with our relationship with our community.

### Sensory feedback: Body activation

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**Bodily topography of basic (upper) and nonbasic (lower) emotions** associated with words. The body maps show regions whose activation increased (warm colors) or decreased (cool colors) when feeling each emotion. Based on Bodily maps of emotions by Lauri Nummenmaa, Enrico Glerean, Riitta Hari, and Jari K. Hietanen

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# The mind-body approaches to somatisation



**Visualization of specific patterns between an emotion and the human body** based on Understanding Mind-Body Interaction from the Perspective of East Asian Medicine by Ye-Seul Lee, Yeonhee Ryu, Won-Mo Jung, Jungjoo Kim, Taehyung Lee and Younbyoung Chae

Throughout the centuries we have hypothesised about, and grappled with, the mind-body connection without definite solution due to the physical and non-physical nature of the two component parts.

There are paradigmatic differences between competing theories. Behaviorists may hold a physicalist view, conceiving of the mind in terms of observable behavior expressed in or with the body. While cognitivism acknowledges the body's role, it tends to focus more on mental phenomena, reflecting a tendency towards dualism. Finally, embodied approaches in psychology place equal value on the role of each, acknowledging their mutual interaction and adopting a more holistic view (Leitan & Murray, 2014).

This integrated mind-body approach to health and healing operates in a dynamic loop where emotions impact the health of the body and vice-versa. Western medicine characterizes emotional disorders using 'neural' language while East Asian medicine uses 'somatic' language.

According to the Traditional Chinese Medicine (TCM) approach, emotions are narrowed down to seven basic feelings that are each associated with a corresponding element and organ in the body; anger with the liver, fear with the kidney, joy with the heart, sadness & grief with the lung and worry with the spleen, etc.

A KM Fundamental Research Division study from 2017 revealed specific patterns that existed between the visceral system and corresponding emotions, confirming the TCM understanding. It is also possible to draw correlations between these patterns and ones seen in bodily maps of emotions study explained previously.

On the emotional side, for example, the liver is connected to anger which, when out of balance, can be expressed in the extremes of excess wrath and irritation, or as a lack of feeling, as in depression or posttraumatic stress disorder. These mental health imbalances can be both symptoms and/ or contributing causes of liver dysfunction which is central for TCM understanding of our mental and overall health. This approach, combined with the understanding and practice of mind-body connection, can show us how emotions can be 'stored' in the body, perhaps as a result of a traumatic experience. The theory of cellular memories states that emotional memories are not only stored in the brain but may also be stored in organs. In 2009, Harvard Medical School defined cellular memories as "a sustained cellular response to a transient stimulus." Basically, when a cell is introduced to a specific stimulus it will react in a certain way and every time it is given this stimulus, even if it's only through our own thought process, it will have the same physical response. This is thought to contribute to numerous physical illnesses. The more negative, fearful or fault-finding our experience of the traumatic event is, the more emotional memories we seemingly tend to store in our cells.

While there may not be agreement on how the mind and body interact, the consensus that they do interact is overwhelming. When we look for answers to deal with mental imbalances, any treatment that focuses solely on the mind is likely missing critical information that the body is trying to tell us. Only when we approach our mental health holistically, through combined neural and somatic practices, can we truly address our wellbeing.

# Accessing the emotional brain

"The rational, analyzing part of the brain, centered on the dorsolateral prefrontal cortex, has no direct connections with the emotional brain, where most of our emotional imprints reside, but the medial prefrontal cortex, the center of self-awareness does."

— Bessel van der Kolk

Our analytical brain cannot directly communicate with amygdala, the brain center responsible for emotions. The connection can only be established through the medial prefrontal cortex. This is the area of the brain that governs our self-awareness and recognition (interoception) which in turn is how we 'feel' our emotions. It seems like the only way we can consciously manage our emotional states is through this link where we become aware of our inner experience and learn how to understand and process it effectively. This way, we can be more successful in keeping an emotional-balance by ourselves.



Triune brain visualization adapted from Joseph LeDeux (2003)

# "To recreate yourself: powder, fiber, wound."

# UNLOCKING THE EMOTIONAL BRAIN

Most of the fibers of the vagus nerve run from our body directly to the brain. This means that our arousal system is completely trainable by using breath and movement, our sensorial nature. This principle is historically used in places like India, China and Africa, but it is still considered an 'alternative' in our culture to established Western medicine.

## Using our innate skills

Contrasting to the Western reliance on verbal therapies and drugs, most other traditions around the world rely on mindfulness, movement, action and rhythm; fully connecting our mind and body.

At the core of any emotion management should be self-awareness; the ability to notice our own physical and mental processes. Ignoring any strong emotionally-induced sensations in our bodies always increases our vulnerability to being overwhelmed and affected by them, long-term. As van der Kolk explains in his book 'The Body Keeps the Score' (2014), noticing how transient our emotions are, responding to shifts in movement, breathing, as well as in our thinking is the first step towards regulation. The next step is to label these sensations and connect them to emotions and feelings that we already know. The very moment of acknowledgement calms down the sympathetic nervous system and leaves us less prone to slipping into 'fight-or-flight' reactive mode. A further step is to stay in that moment, observing the interplay between our thoughts and accompanied physical sensations.

"When we pay focused attention to our bodily sensations, we can recognise the ebb and flow of our emotions and, with that, increase our control over them."

- Bessel van der Kolk

## Mindfulness

Mindfulness can be defined as the conscious effort to maintain a moment-to-moment awareness of what's going on, both inside our head and around us. Mindfulness and self-regulation are a powerful combination for contributing to wellbeing.

The Buddhist-inspired technique of mindfulness is an important part of modern psychology and it has become fashionable, especially in business as a means of promoting mental health, with a subtext of increasing productivity. Mindfulness meditation practice aims toward stress reduction and more in-depth tranquility. In order for mindfulness practice to work, we have to first understand our body processes and include dynamic body activities, otherwise, meditative practice can eventually lead to the suppression of feelings we wanted to deal with in the first place. "One way to think of this process of transformation is to think of mindfulness as a lens, taking the scattered and reactive energies of your mind and focusing them into a coherent source of energy for living, for problem solving, for healing." — Jon Kabat-Zinn

Self-regulation requires self-awareness and monitoring of one's own emotional state and responses to stimuli. Being conscious of our own thoughts, feelings, and behaviours is the foundation of self-regulation: Without it, there is no ability to reflect or choose a different path. And without it, there is no feeling of agency or balance, what most of us refer to as happiness. More recently, therapists have built on this to develop MABT therapy. This practice seeks to join the interoception of accessing our bodily sensations and combining it with the mindful approach of how we understand our feelings and moods so that we can attain a deep sense of equilibrium in our lives.

# Emotion regulation

The term self-regulation can also be explained through self-control. It refers to the nervous system that works successfully by maintaining balance. As Stuart Shanker put it, "Self-control is about inhibiting strong impulses; self-regulation is about reducing the frequency and intensity of strong impulses by managing stress-load and recovery. In fact, self-regulation is what makes self-control possible, or, in many cases, unnecessary." Viewed in this light we can think about self-regulation as a more automatic, subconscious process, while self-control is a set of active and purposeful decisions and behaviors.

"Emotion regulation involves a coherent relationship with the self, specifically effective communication between body, thoughts, and feelings. It implies tolerance and understanding of signals from the body and the related cognitive attributions. It also implies having the capacity to positively manage challenging sensations and related behavioral responses, such as behaviors or decisions to moderate, suppress or change signals toward a desired end. From an embodiment perspective, the accurate detection and evaluation of cues related to physiological reactions is accompanied by appropriate regulation strategies that temper and influence the emotional response. Optimally, emotional regulation confers benefits in terms of health, wellbeing, social connection, and competence with life tasks."

- Cynthia J. Price, Carole Hooven



# Emotional intelligence

Emotion regulation process is boosted when we have high emotional intelligence, also known as emotional quotient (EQ). The interaction between intelligence and emotions have been studied at length over the past three decades, showing how EQ is the result of the strengthening interaction between intelligence and emotion, and our ability to understand and manage emotions. How well we are able to do this relates strongly to our wellbeing and happiness.

Emotions are "a natural instinctive state of mind that derives from our current and past experiences and situations" (Faltas, 2017) while our feelings are the conscious experience of those reactions. EQ, on the other hand, is an ability. It is having the awareness and skill to know, recognise and understand feelings, moods and emotions and use them in a flexible manner to guide our behaviour. EQ can also be taught. Salovey and Mayer (1990) stated that we can learn by "appraising and expressing emotions in the self and others, regulating emotion in the self and others, and the utilization of emotions in adaptive ways".

# The role of mainstream Western medicine

Mainstream Western approaches to mental health are slowly beginning to embrace avenues of treatment that include holistic (body and mind) self-management, however the patterns are erratic and inconsistent and there does not seem to be any major push to make cultural changes and

raise standards of care. Still, the broadly accepted way to deal with any kind of emotional imbalance is through medication that alters our 'emotional chemistry'. The relationship between the patient and the practitioner clearly gives control to the latter.

Our body has a host of inbuilt skills that can keep us on an even keel. When we interrupt and subdue the information that our bodies are trying to tell us, we cannot fully see the pathway, or short-cuts, to regaining our balance. Even if we are able to right the ship, we will be left with scars that will be harder to heal.



# "What is the reality of any feeling?"

# OUR MENTAL SELF

When we react to our cover emotions, we are teaching ourselves tricks. We are learning patterns of avoidance that may eventually become default responses that hide deep emotional imbalances. We lose sight of what our brain and body are telling us. If we don't have the tools that help us acknowledge and respond to what is really happening through our automatic reactions we will find ourselves stuck in a perpetual loop of monotone sensation, prohibiting our inner language, bar a few barked phrases, repeating day-in, day-out. Having emotional literacy skills is, therefore, the first step towards taking agency over our mental health.

## What are emotions?

Emotions are bodily responses occurring in the subcortical regions of our brain and the neocortex. Those responses create biochemical and electrical reactions in our body that alter our physical state. In essence, emotions are neurological reactions to an emotional stimulus.

The most fundamental emotions, known as the basic emotions, are those of anger, disgust, fear, happiness, sadness, and surprise. Some theories also add trust and anticipation. The basic emotions have a long history in human evolution, and they have developed, in large part, to help us make rapid judgments about stimuli and to quickly guide appropriate behaviour (LeDoux, 2000). The basic emotions are largely determined by the limbic system, including the amygdala, the hypothalamus, and the thalamus.

Not all of our emotions come from the older parts of our brain; we also interpret our experiences to create a more complex array of emotional experiences. The cognitive interpretations that accompany emotions — known as cognitive appraisal allow us to experience a much larger and more complex set of secondary emotions. Although they are in large part cognitive, our experiences of the secondary emotions, often referred to as feelings or moods, are determined in part by arousal and in part



**The Secondary Emotions** have a major cognitive component. They are determined by both their level of arousal (mild to intense) and their valence (pleasant to unpleasant). Adapted from Russell, 1980.

by their valence – that is, whether they are intrinsically pleasant or unpleasant feelings.

There are many ways to define emotion, but explanations generally fall into one of two camps: first, where emotions are seen as a state or feeling that cannot be conjured up at will, or second, where emotions are attitudes or responses to a situation or an object, like judgments (Zemach, 2001). Most modern research agrees with the second idea, viewing emotions as the outcome or result of something, provoked by action, or by being on the receiving end of an action.

The amygdala plays a key role in the perception of our emotions. It can regulate the release of neurotransmitters in the hippocampus, an area central to memory consolidation. One theory is that this is why emotional memories are usually perceived as stronger and are so long-lasting. Emotions are physical and instinctive, instantly prompting bodily reactions to threat, reward, and everything in between. The bodily reactions to emotions can be measured objectively by pupil dilation, skin conductance, brain activity, heart rate, and facial expressions. This is also how we experience emotions physically.

## What are moods and feelings?

While emotions are associated with bodily reactions that are activated through neurotransmitters and hormones released by the brain, feelings and moods are our conscious experience of emotional reactions.

Originating in the neocortical regions of the brain, feelings and moods are sparked by emotions and shaped by personal experiences, beliefs, memories, and thoughts linked to that particular emotion. Strictly speaking, a feeling is the side-product of your brain perceiving an emotion and assigning a certain meaning to it.

# Theories on emotions

Despite the fact that emotions impact every decision we make and the way we see the world, there is still a lot of mystery surrounding why we have emotions.

The major theories of emotion can be grouped into three main categories: physiological, neurological, and cognitive. Physiological theories suggest that responses within the body are responsible for emotions. Neurological theories propose that activity within the brain leads to emotional responses. Cognitive theories argue that thoughts and other mental activity play an essential role in forming emotions. Research on emotions continues to explore what causes feelings and how these feelings affect us.

There is research evidence to support each of these categories of theories, but there is still no consensus. Maybe we don't need to really understand the cause and effect relationship in order to know how to manage something. Maybe we can still use emotions as tools, even if we're not completely sure about their nature.

### EMBODIED COGNITION (EC)

Early cognitivists, such as Descartes, viewed the mind as a disembodied entity, and while cognitive theories have expanded and developed to acknowledge the relationship between the mind and the body they tend to emphasise the mental realm (Leitan & Murray, 2014). We can see this when we look at the lack of integration of the body within psychological interventions and psychotherapy (Hefferon, 2013).

EC posits that our bodies mediate our interaction with the world and that mental symbols must be grounded in forms, such as words (Glenberg, 2010). Considering previous theories on emotions, Prinz (2004) argues that although emotions are physical, they are essentially semantic too. In other words, emotions can be conscious or unconscious perceptions of the body's sensory input, but they are always grounded in language to an equal extent. This implies that, in order to understand and manage our emotions, emotional literacy is necessary.



## **Classification of emotions**

Positive emotions are ones that we typically find pleasurable to experience. This can be defined as "pleasant or desirable situational responses... distinct from pleasurable sensation and undifferentiated positive affect" (Cohn & Fredrickson, 2009). They are pleasant responses to our environment, or to our own internal dialogue, that are more complex and targeted than simple sensations. On the other hand, negative emotions are those that we typically do not find pleasurable to experience. Negative emotions can be defined as "an unpleasant or unhappy emotion which is evoked in individuals to express a negative effect towards an event or person." (Pam, 2013)

Examples of positive and negative emotions will vary based on who you ask; even the

definition of an emotion can vary based on who answers the question. However you define emotion, discerning between the two is an intuitive process—we seem to 'just know' which emotions are positive and which are negative.

Robert Plutchik put forth a 'wheel of emotions' that combined the primary emotions to form different feelings. Paul Eckman identified six basic emotions that he suggested were universally experienced in all human cultures. The emotions he identified were happiness, sadness, disgust, fear, surprise, and anger. He later expanded his list of basic emotions to include such things as pride, shame, embarrassment, and excitement. Plutchnik, on the other hand, believed that while humans have the capacity to experience over 34,000 unique emotions, there are eight primary, primordial emotions that serve as the foundation for other feelings, in all of their degrees and intensities. Plutchik used the same six basic emotions as Eckman, then added trust and anticipation. This classification is used as the basis for emotionregulation methodology explained through this project, that concentrates on emotional literacy.

According to this theory, the more basic emotions act something like building blocks. More complex, sometimes mixed emotions or feelings and moods, are blendings of these the basic ones. For example, basic emotions such as disgust and sadness can be combined to create remorse.

# Descriptions, causes, and reactions of the foundational, primary emotions

 Sadness: Includes feelings of sorrow, discontentment, depression, apathy, hopelessness, loneliness, and lethargy. It may bring distressing emotions like weeping. For survival, the origin is rooted in infant 'separation distress' and indicates the need for emotional support.

The contrasting emotion is joy.

• **Joy:** An emotion that deals with elation, euphoria, triumph, jubilation, and a deep sense of contentment. It's a life-sustaining behavior that affirms the continuation of repetitive successful behaviors.

The contrasting emotion is sadness.

• **Anger:** Refers to a subjectively unpleasant mental experience evoked by the real, or imagined, harm done to an individual or what an individual values. Feelings of hostility, rage, aggression, and dissatisfaction may be prevalent and bring aggressive behavior like fighting. It's a genetically programmed defense of territory.

The contrasting emotion is fear.

**Fear:** A primitive emotion that may manifest in frankness, apprehension, nervousness, worry, anxiety, uncertainty, terror. Biologically, it helps avoid dangers signaled by prior associative learning.

The contrasting emotion is anger.

 Disgust: Signs of disgust refer to feelings of aversion, revulsion, and a rejection of contact or seeking contact. Disgust's biological significance is to promote reproductive success and avoid lifethreatening objects and environments.

The contrasting emotion is trust.

 Trust: An abstract feeling of hopefulness, positivity, safety, belief in others. It's the first stage of psychosocial development and affects their view of the world.

The contrasting emotion is disgust.

• **Surprise:** Emotions of surprise are a mismatch between the experience expected and the experience that occurs; it may create feelings such as amusement, shock, disbelief, speechlessness.

It stimulates interest but may also induce caution to allow time for cognitive appraisal.

Its contrasting emotion is anticipation.

 Anticipation: Involving excitement, enthusiasm, irritation, pleasure, expectations, uncertainty, awaiting some event. Anticipatory feelings are associated with a state of awareness and an adaptation to future events.

Its contrasting emotion is surprise.

When we are feeling an emotion, it's not an instantaneous or isolated phenomenon that exists within a vacuum. It happens in a mental sequence before cascading down to a physiological reaction to engage the entire body. Research indicates there are dynamic components that are all simultaneously going into our emotional processing that ultimately influence what we do next. A primer of what these components look like, through the lens of our experience, goes through components of: feeling, action tendency, appraisal component, motor and physiological component.



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# Positive and negative affect; do we need all emotions?

"Tell me how all of this, and love too, will ruin us. These, our bodies, possessed by light. Tell me we'll never get used to it."

– Richard Siken

'Affect' refers to the emotions or feelings that we experience and display, especially in terms of how these emotions influence us to act and make decisions. Positive affectivity refers to positive emotions and expression, including cheerfulness, pride, enthusiasm, energy, and joy. Negative affectivity is negative emotions and expression, which includes sadness, disgust, lethargy, fear, and distress.

We often assume that positive and negative affects are on two opposite ends of a bipolar scale. You can only be at one point on this scale, meaning you can be experiencing one type of effect to a certain degree (from extremely mild to extremely strong), but not the other at the same time. In practice, we see this isn't really true. In the moment, people generally tend towards one or the other, but overall positive and negative effects tend to vary independently.

We know that we need positive emotions to function effectively, grow, and thrive. What about the negatives? They are definitely less pleasant, but all emotions are a source of information (Schwarz and Clore, 1996) that help us understand what is going on around us. Negative emotions, in particular, can help us recognize threats (Zein, Wyatt and Grezes, 2015) and feel prepared to positively handle potential dangers (Biswas-Diener and Kashdan, 2014). Both have impactful roles to play in our brain, and these roles are complementary rather than competitive.

# Cover emotions and emotional literacy

"I imagine one of the reasons people cling to their hates so stubbornly is because they sense, once hate is gone, they will be forced to deal with pain."

– James Baldwin

Sometimes our emotions are tricksters. When we don't have the knowledge to map our emotional language and without the insight into how emotions function in relation to sensations, as well as each other, we can slip into reacting to the feeling or emotion which we find more appropriate, or easier to handle. We do this to keep ourselves away from emotions that may bring about a heavier, lower feeling. Anger can act as a cover emotion for fear. Prolonged boredom will obscure sadness. Numbness can mask despair. Cover emotions are like a layer of ice over a lake that prevents us from falling into the deep water beneath, as Teal Swan explains. While this may seem beneficial to us, our lack of comprehension about what really lurks below the ice means that we are never able to deal with it appropriately.

When we react to our cover emotions, we are teaching ourselves tricks. We are learning patterns of avoidance that may eventually become default responses that hide deep emotional imbalances. We lose sight of what our brain and body are telling us. If we don't have the tools that help us acknowledge and respond to what is really happening through our automatic reactions we will find ourselves stuck in a perpetual loop of monotone sensation, prohibiting our inner language, bar a few barked phrases, repeating dayin, day-out. Knowing our emotional literacy is, therefore, the first step towards taking agency over our mental health.

# Should we compartmentalize our emotions?

### **EMOTION MICROCOSM**

"I must get inside of myself again and sublimate the energy I feel."

- Anaïs Nin

Klaus R. Scherer argues that, "Emotions are emergent processes: they require a dynamic computational architecture". This is to say, when we go through the various sensations of an emotion we do not experience them as instantaneous happenings within a vacuum. They bustle alongside other emotions and sensations where we observe their patterns and frequency to work out what they are telling us, mapping our entire body. To interpret this, we engage mental sequencing to ascertain what our body is trying to tell us. Is this a sensation we have experienced before? What does this sensation make us feel? Is this a positive or negative sensation? What changes are happening? In this sense, our emotions are emergent - they are not routine events but complex, dynamic sensations influenced by our instinctual behaviour, our environment and cognitive focus. Depending on the complexity of what we are feeling, our emotional state can change. We may experience fear and surprise, producing a sensation of alarm. The surprise may fade leaving us feeling fearful before we feel trust, which will combine with fear to bring about a feeling of submission.

The emotion microcosm system can help to name and identify what we are feeling in a healthy and effective manner, which in turn reduces emotional intensity that can be distressing and draining in both positive and negative affect. It can also help us to communicate effectively. Using the emotion mind map as both a day-to-day tool and as a design methodology, broadens its purpose even more.

"Listen, are you breathing just a little, and calling it a life?"

— Mary Oliver

# "I travel within myself besieged by contradiction

# THE HOLISTIC SELF

"Life is about rhythm. We vibrate, our hearts are pumping blood. We are a rhythm machine, that's what we are."

- Mickey Hart

# **Body and brain reciprocity**

Darwin's The Expression of the Emotions in Man and Animals (1872) is a wonderful exploration of the foundations of emotional life, and is still relevant today. For Darwin, mammalian emotions are rooted in biology. They are the indispensable source of motivation to initiate action. Emotions give shape and direction to whatever we do, and their primary expression is through the muscles of the face and body. Darwin goes on to observe that the fundamental purpose of emotions is to initiate movement that will restore the organism to safety and physical



equilibrium. In other words, if we are stuck in survival mode, our energies are focused on fighting off unseen enemies, which leaves no room for nurture, care and love. It means that as long as the mind is defending itself

against invisible assaults, our closest bonds are threatened, along with our ability to imagine, plan, play, learn and pay attention to other people's needs. Darwin also wrote about body-brain connections that we are still exploring today. The mind is not an island when intense emotions are involved, "heart, guts and brain communicate intimately via the pneumogastric nerve [...] in the expression and management of emotions". It's interesting to look at this through the lens of how we communicate our emotional states in day-today life. We experience our most devastating emotions as gut-wrenching feelings and heartbreak. We can retain a large amount of control while we keep emotions in our heads, however the feeling of being punched in the gut or our chest caving in can be unbearable. We'll do anything to make these awful sensations go away. Many mental health problems, from drug addiction to self-harming behaviour, start as an attempt to cope with the oppressive physical pain of our emotions. If Darwin was right, the solution requires finding ways to learn how to alter the inner sensory landscape of our bodies. In order to deal with our emotions, we have to deal with our bodies first.

### CRACKING THE NERVOUS SYSTEM

When we communicate with other people, all the little movements we make with our facial muscles, tone and strength of voice, breathing and heart rate are all linked by a single regulatory system. They are all born out of synchrony between the two branches of our autonomic nervous system (ANS): the sympathetic (SNS), which is our body's accelerator, and parasympathetic (PNS), which serves as its brake. This reciprocal nature is what Darwin spoke of when he looked at the body restoring equilibrium, with the sympathetic and parasympathetic working together, playing an important role in managing our body's 'energy flow'; the way we 'feel' about our body from the inside.

## The self-awareness mechanism

Interoception

"If what goes on deep inside our animal brains dictates how we feel, and if our body sensations are orchestrated by subconscious brain structures, how much control over them can we actually have?"

– Bessel van der Kolk

Interoception is the perception of sensations from inside the body and includes the perception of physical sensations related to internal organ function such as heartbeat, respiration, satiety, as well as the autonomic nervous system activity related to emotions (Vaitl, 1996).

Interoceptive awareness is key to identifying internal physiological processes related to affective feeling, and by so-doing is a means of integrating bodily sensations, cognitive processes, and emotional feeling (Craig, 2015). Hence, interoceptive awareness is a window to emotional experience, as well as potentially providing access to important mechanisms of emotion regulation (Khalsa and Lapidus, 2016).

How do we regain agency when our animal brains are stuck in a fight for survival or disconnected? In his book, The Feeling of What Happens (1999), Antonio Damasio maps out the things, he believes, are responsible for our experience of self. He points to the deep divide between our sense of self and the sensory-life of our bodies. He argues that the core of our self-awareness rests on the physical sensations that show us the inner state of our body, "Primordial feelings provide a direct experience of one's own living body, wordless, unadorned, and connected to nothing but sheer existence. These primordial feelings reflect the current state of the body along varied dimensions, along the scale that ranges from pleasure to pain, and they originate at the level of the

brain stem rather than the cerebral cortex. All feelings of emotion are complex musical variations on primordial feelings." Our conscious-self conducts the maintenance of our inner-equilibrium, we are registering and acting on our physical sensations to keep our body safe; this is the process of sensory integration. Related to the emotional states, Damasio points out how "it is not possible to manage life and maintain homeostatic balance without data on the current state of the organism's body". Parts of our brain that work on this are sometimes called the 'housekeeping areas', governing our breathing, appetite and sleep/wake cycles. This is the 'proto-self' part of our brain and it creates the kind of automatic knowledge that underlies our conscious sense of self. Without the proper connection to our own body, in terms of perceiving its processes and knowing how to help it move through the emotional waves successfully, we cannot talk about influencing our wellbeing or agency over our mental health.

"Knowing what we feel is the first step to knowing why we feel that way. If we are aware of the constant changes in our inner and outer environment, we can mobilize to manage them. But we can't do this unless our watchtower, the medial prefrontal cortex, learns to observe what is going inside us." – Bessel van der Kolk

Agency is when we feel we are being in charge of our life and our response to what happens outside of our control. It starts with interoception, with us being aware of our subtle sensory, body-based feelings. As we focus our awareness, we gain more insight into our potential to have agency and how to attain balance in our lives, even happiness.



# Own yourself; fucking sublimate

#### Our gut feelings are constantly signaling us what is safe, life sustaining or threatening, even if we aren't able to understand, or explain, why we feel a particular way. Our sensory network is like a human alarm system, sending us messages about our needs and about the things going on around us. They warn us, or gently direct us towards what is good for us. Without this connection, we mix things up. For example, we may think we are in love because we feel butterflies in our stomach, while what we are really sensing is anxiety. If we train ourselves to have a comfortable connection with our bodily sensations, we are able to trust them to give us accurate information. And when we know we have this data at our disposal, and it is accurate, we feel in charge of our body, and our feelings, even while dealing with heavy or negative emotions. We are able to perceive, acknowledge, respond appropriately and release the emotional state, while not identifying ourselves with it; this is the agency we should strive for. Luckily for us, it can be trained, the best possible scenario is that we have a healthy childhood basis and learn the art of balance by the way, but thanks to our brain's plasticity, we can train ourselves even in adulthood; we just need proper tools. Design plays an important role in assisting this process, and we as designers have a responsibility to create the standard that boosts the opportunities for children and adults to achieve agency.

#### Self-regulation

To sublimate is to change the form, but not the essence. Physically speaking, it means to transform solid to vapor; psychologically, it means changing the outlet, or means, of expression from something base and inappropriate to something more positive or acceptable. The word sublimate comes from the Latin verb sublimare, which means 'to lift up' or 'raise' and which is also the ancestor of our sublime. 'Sublimate' itself once meant 'to elevate to a place of dignity or honor' or 'to give a more elevated character to,' but these meanings are now obsolete.

When attempting to manage your emotions, your brain gives you two options. Knowing the difference between the two is central for understanding your body's responses, as emotion controlling structures in the brain decide what we perceive as safe or dangerous. There are two ways of interacting with this threat-detection system: from the top-down, via modulation messages, from the medial prefrontal cortex (MPC), or from the bottom-up via the instinctive areas of the brain, through breathing, movement and touch. Top-down regulation involves augmenting the capacity of the early warning device of your brain, the MPC, to monitor your body's sensations. Mindfulness and conscious breathing can help with this. Bottom-up regulation involves recalibrating the autonomic nervous system (ANS). We can access the ANS through breath, movement and touch. Breathing is one of the few bodily functions under both conscious and autonomic control.

### **EMOTIONS AS TOOLS**

Emotion regulation involves a coherent relationship with the self, specifically effective communication between body, mind, and feelings. Effective emotion regulation involves the ability to accurately detect and evaluate cues related to physiological reactions to stressful events, accompanied by appropriate regulation strategies that temper and influence the emotional response.

Emotional responses are largely relational or reactive. For example, you can think about someone and it will generate an emotional response, if you allow it. The response you might feel could be love or tenderness, or it might be anger or tinged with sadness, or even a combination of responses. Now imagine a situation where someone does something. The reactionary feelings that arise from this might be the same as above, they may differ, but they are both triggering a chain that we can act upon or choose not to act upon.

### **TOP-DOWN REGULATION**

When we talk about regulation, we are talking about stepping back from the emotional response, observing it, understanding the process and relationships between different emotional states and responding to this, rather than the original emotional trigger. This process is essentially what we call top-down regulation. It is a process whereby we learn not to act out on our emotions but to appreciate them and allow them. It is not a process where emotions gain labels as good or bad, or where we continue to suppress and push down emotions that do not fit with our situation. Instead we can use our emotional response to aim for our goals, be they balance, peace, joy or any other target that we set ourselves. For other emotional realms and waves that we experience, we should sit with them, watch them arrive and watch them depart. They do not need to be denied as they are a component of the human condition, like any other emotion.

When we observe our emotions, we realise that they are not us. Emotions will come and go, like the tides on a beach. When we allow and understand our emotions, we are allowing and understanding our humanity.

When you are able to mindfully approach the body-brain emotional process, you perceive your emotional responses when they are starting to bubble and froth inside you, before the bodily hormones, like adrenaline, kick in and you reach that point of overload or investment. So while the emotion is forming somewhere on our inner-horizon, we have time to act. We have time to use our knowledge and understanding to ensure that the emotional response does become too intense, and the knowledge that if it does, we can just wait for it to pass.

### **BOTTOM-UP REGULATION**

These emotional upsets may start out as a thought process, but they can quickly spread throughout the body as the brain fires off instructions to release chemical reactions. We can be overwhelmed with joy, or with fear, or one of many emotions. Rather than passively sitting, watching and waiting for the wave to pass, we can actively work with the body to regulate the brain. This is bottom-up regulation. By running, jumping, swinging our arms, practicing breathing techniques, using tools that calm us or stimulate the nervous system we can begin to release the energy building in our bodies.

#### **SUBLIMATION**

Having this deeper level of self-awareness allows us to separate ourselves (our essence) from the sensation that we, and our body, are going through. Seeing the emotion and not suppressing it but accepting it for what it is. When we see it, we see ourselves as we are. When we deny it, we are denying our humanity. This process of channelling emotional upset is sublimation; the ability to take the energy building with us and use it in a way that works towards our goals, and towards emotional balance.

This way, our emotions become tools. We can see them as flags, warning us of impending situations. They can help us approach life in all its relational complexity, dealing with ourselves and other people too. If we can learn to use the emotional tools that our body provides us with, then we are more in control of our lives.



## Neural pathways to connection

Co-regulation

"Community cannot take root in a divided life. Long before community assumes external shape and form, it must be present as a seed in the undivided self: only as we are in communion with ourselves can we find community with others."

— Parker Palmer

Our society and culture is geared towards promoting individuality. However, on a biological level we barely even exist as singular organisms. We are part of our environment, we exist within this space, within social groups, even when we are by ourselves. While it is important to focus on self-help in all its forms, to focus on it entirely at the cost of our shared experience means we lose the capacity to talk of love, of awareness and of regulation with any meaningful sense.

Most of our attention and energy is expended on connecting with other people; this cuts to the core of what it is to be human. It has to be integral to developing and maintaining our wellbeing and balance. When we look at broader definitions concerning 'negative' emotional states, we find symptomatic correlations for mental health issues that involve trouble in (or absence of) relationships, or difficulties regulating the physical sensation of our emotions. Often, it is a combination of both.

The problem with a 'lack of connection', in both senses, has been highlighted by our culture's loneliness epidemic, caused by the societal focus on individualism and self-sufficiency. John Cacioppo defines loneliness as "perceived social isolation." When we feel disconnected from others, we experience loneliness. He explains how we derive strength from our collective ability to plan, communicate and work together, and not from our rugged individualism, because we are social species. Our neural, hormonal, and genetic makeup support interdependence over independence. This is why connection is central to our balance and wellbeing, why the feeling of shame is so painfully debilitating.

"The funny thing is that thinking about others' thoughts doesn't feel particularly different from most kinds of analytical thinking we do. Yet, fMRI research shows that there are two distinct networks that support social and non-social thinking and that as one network increases its activity the other tends to quiet down – kind of like a neural seesaw. Here's the really fascinating thing. Whenever we finish doing some kind of non-social thinking, the network for social thinking comes back on like a reflex – almost instantly." – Matthew Lieberman

It seems that the first thing our brain does in any spare moment is focusing itself on social engagement. It becomes concrete that we are hardwired for connection.

Cacioppo goes further on explaining that loneliness can be really dangerous, too. Our brains have evolved to react intensely when we feel we're being outcast. When we feel ourselves being on the outside, our brain jumps into self-preservation mode.

"When we feel isolated, disconnected, and lonely, we try to protect ourselves. In that mode, we want to connect, but our brain is attempting to override connection with self-protection. That means less empathy, more defensiveness, more numbing, and less sleeping." – Brené Brown

Brown attributes the reason for our disconnection to fear, seeing it as a core-variable driving and magnifying our compulsion for sorting ourselves into factions and cutting ourselves off from other people. She believes that we fear vulnerability; trying to avoid getting hurt at all cost and avoiding connection because we're afraid of the pain of disconnection. Given the cultural approach to medicine in the West, it is hardly surprising that we compound our mental health issues by trying to answer the questions posed without the context of connection. The standard medical focus of the Western healing approach is to try to discover the right drug, or combination of drugs, to treat a particular disorder. As individuals we often attempt to regulate through alcohol or avoidance by other means, dancing around the distraction. In both cases, we are operating within a society that has conditioned us into relying on ourselves, and our emotional imbalance stems from this detachment from the group as well as denying our primary forms of regulation through social experiences.

To broaden our ability to manage our own emotional and physical experiences, we can, and should, incorporate the interpersonal aspect. To begin to understand this, we can return to Darwin's pneumogastric nerve, now known as the vagus nerve, which has parasympathetic control over the heart, lungs and gut. Through Polyvagal Theory (Stephen Porges, 1994), which is built upon Darwin's observations and expanding it to include the subtle interplay between visceral experiences, those relating to our nervous system, and the voices and faces of the people around us. Porges explained why a kind face or a soothing voice can sometimes lift us from a dark place, why being seen and heard by the important people in our lives can make us feel calm and safe, in contrast to the way we feel when we are ignored or dismissed by the same people.

Porges' theory puts social relationships front and centre in our understanding of mental health and personal wellbeing. Creating secure attachments that feel safe are fundamental to leading meaningful and satisfying lives. For our physiology to calm down or for it to thrive, we need that deep inner feeling of safety, the feeling that we are 'held'. Our relationship with other individuals and the group is based on a shared understanding that all relationships between individuals and the group are reciprocal. There is no prescription that can be written to induce friendship or love. These things exist in a magical ether of reciprocal understanding.

"No other words but words of love, no other thoughts but love."

#### – Walt Whitman

All this begs the question; which comes first? Love or self-love? Are we even capable of true self-regulation without the basis of functional interpersonal relationships? Or can we build and hold on to a relationship without first being able to regulate ourselves first, so we can reciprocate?

These questions are impossible to answer if we look at love as an emotion, instead of it being a more complex state. In her book All About Love (1999), and through her examination of her own search for emotional connection and society's failure in providing a model for learning to love, Bell Hooks states that "the word 'love' is most often defined as a noun, yet... we would all love better if we used it as a verb". Perhaps, love is not simply another positive emotion. Rather, it may be the momentary phenomenon through which we feel and become part of something extending outside of ourselves.

The act of love, and its meaning in our lives, emerges not from the unrealistic ideals of Disney-like romantic love, but from what

Nicolas Bourriaud calls the 'day-to-day micro-utopias' of shared positivity. Seeing love both as a positive resonance, and as an act, also blurs the boundaries that surround our cultural concept of emotion. Roger Scruton holds that love exists, "just so soon as reciprocity becomes community. That is, just so soon as all distinction between my interests and your interests is overcome" but, this 'union view' is fraught with difficulties. It implies that love cannot exist if unreciprocated, which we know isn't true. One could argue that love is either a union among lovers or desire for such a union. None of that helps. You can love someone without expecting anything in return. Some call this unconditional love and make it a unicorn, a myth you can only read about in books or watch on the silver screen, but really, it is just what a loving act is. A loving act towards a stranger you help on the street, or a loving act towards your own child. Both imply love, just a different type of love, and both imply choice. This is especially true if we're perceiving love through action, and away from the societal boundaries of romantic ideals.

In his book The Road Less Traveled (1978), M. Scott Peck defines love as "the will to extend one's self for the purpose of nurturing one's own or another's spiritual growth." Explaining further, he continues: "Love is as love does. Love is an act of will - namely, both an intention and an action. Will also implies choice. We do not have to love. We choose to love." So, since we have to actually decide before we act, this definition counters the culturally accepted assumption that we love instinctually. For Hooks, love is a recipe that we choose to follow, "to truly love, we must learn to mix various ingredients - care, affection, recognition, respect, commitment and trust, as well as honest and open communication."

Most of us are comfortable with love having less commanding and restrictive definitions because when we see love as a feeling we don't have control over, all the accountability and responsibility go away; it's only important how we feel and not how we act. We can still love and not act lovingly towards someone. We can still love and not offer or ask for support, for co-regulation we are wired for. So, which comes first? Love or selflove? Maybe we do know the answer. As Hooks states, "self-love cannot flourish in isolation. It is no easy task to be self-loving." Contemporary self-care axioms present apparently easy paths to self-love that, in reality, only make our ability to regulate worse and the idea of asking for help even scarier. The usual New Age approach to selflove is often blurred with spiritual rhetoric



that flows into narcissism; paying all the attention to individual self-improvement without any practice of love within the context of community. While it can make us feel better, it inhibits both love and self-love. In contrast, expanding our love outside of ourselves and giving to others, recognising when the other person needs our attention, is nurturing love both ways. When we are able to openly give of ourselves we are also more open to receive. This might be the only way to allow us to love ourselves; when we allow ourselves to belong. As Hooks says, "love is an action, a participatory emotion. Whether we are engaged in a process of self-love or loving others, we must move beyond the realm of feeling to actualize love. This is why it is useful to see love as a practice."

Daniel Goleman explains that biology and neuroscience confirm that we are hardwired for connection and that our relationships shape our biology as well as our experiences, "Even our most routine encounters act as regulators in the brain, priming our emotions, some desirable, others not. The more strongly connected we are with someone emotionally, the greater the mutual force." It is not surprising that the connectivity we experience in our relationships impacts the way our brain develops and performs. It makes sense in this context that this is how we grow using our own biological imprint, an instinct for social engagement as a way of our regulation, balance and, eventually, happiness. In A Path with Heart (1993), Jack Kornfield shares: "The longing for love and the movement of love is underneath all our activities."

### HOW TO FEEL SAFE AND HELD IN OUR BODIES

Polyvagal theory introduced the concept of our ANS monitoring three essential psychological responses; focus, collapse and frantic behaviours. Our level of safety, in relation to others and our physical environment, determines which of these three is active, or dominant, at any one time. When we feel threatened, we should instinctively turn to the first level, social engagement. We should call out for help and comfort from people around us. If they are able to meet this need, it is building the secure attachment we require. This influences our neurons that 'fire together and wire together', creating a default action where we will first seek people surrounding us whenever we are threatened. However, if no one comes to our aid, or we are in more immediate danger, our body reverts to primitive survival mode techniques, in this

case our 'fight or flight' mechanism, activated by our mammalian brain. If we already have a healthy default action, as described above, 'fight or flight' is a short term reaction to a specific danger. But, if we have been conditioned to not expect help from other people, it becomes our default response. When this also fails, and we can't fight or hide away, our body shuts down, expending as little energy as possible. We are then in a state of 'freeze and collapse' (activated by the reptilian brain).

All of these states can be recognised by how they make us feel. When we experience being acknowledged by people close to us, we smile when others smile at us, we are able to feel empathy. It sends signals to our heart and lungs, slowing the heart-rate and deepening our breathing, making us feel calmer, more relaxed. The vagus nerve also registers heartbreak and gut-wrenching feelings, where we feel our throat dry, voice strain, our heart speeds up and our breathing becomes swift and shallow. We signal to others for help, but if this does not come then the sympathetic nervous system takes over, flooding our system with epinephrine (adrenaline), mobilizing our muscles, heart and lungs for a 'fight or flight' situation. Finally, if there is no way out, our dorsal vagal complex, our ultimate emergency system, kicks in. It drastically reduces metabolism throughout the body, essentially shutting us down. We feel our heart drop, we can't breathe, our gut may stop working or empty, literally scaring the crap out of us. This is the moment when we disengage from ourselves and our surroundings. We collapse or freeze, appearing zombie-like. We dissociate. Our reptilian brain focuses purely on survival and preserving our life, awareness is shut down and we may not even register physical pain. Our primary mechanism for dealing with emotional distress, by co-regulating and depending on others, vanishes. We then become stuck in a perpetual loop of fight or flight/shut-down behaviours that we adapt to our lives, so how do we become 'human' again and bring ourselves back to a place where we can accept being 'held' and 'safe'?

As we have discussed, our individualistic culture tends to bypass emotional engagement, which is central to showing us how we can connect and attain happiness, through peace and balance, in our lives. Instead, we focus on recruiting the cognitive capacities of our mind despite the well-documented effects of anger, fear and anxiety on our ability to reason. This completely ignores the need to engage our in-built safety system of our brain, by involving the whole body and our surroundings before we try to influence our thinking and our emotions. Combining the 'top-down' approach, to activate social engagement, with the 'bottom-up' method, to calm the physical tensions in the body, seems to be the only way to really influence the core of our emotional state so we are able to feel safe.

— bell hooks

"Love is an action, a participatory emotion. Whether we are engaged in a process of self-love or loving others, we must move beyond the realm of feeling to actualize love. This is why it is useful to see love as a practice."

# "And now that you don't have to perfect, you can be good."

•• John Steinbeck

"We are biologically, cognitively, physically, and spiritually wired to love, be loved, and to belong. When those needs are not met, we don't function as were meant to be. We break. We fall apart. We numb. We ache. The absence of love and belonging will always lead to suffering. Connection is why we're here. We are hardwired to connect with others, it's what gives purpose and meaning to our lives, and without it there is suffering."

– Brené Brown

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In order to achieve the personal balance we strive for we must commit to the loving practice whilst living as a part of a community. We must unlearn the culturally imposed individualism and turn more to others. When we read our body accurately, through interoception, and by understanding our mental-processes, we are cultivating self-awareness and emotional detachment, thus training our mental balance. Using the emotionregulation methodology both as a design method, and as a tool for end users, allows us to keep developing the design system. This holistic approach to regulation, a combination of social engagement and calming the physical tensions of the body, is where we can see the possibilities for design to support and nourish a pathway to happiness.

If we are to aim for progress and improvements in the quality of our lives, our mental health should be central. The way we use design to improve ourselves must incorporate emotion regulation and itself be a holistic approach.

# EMOTION-REGULATION METHODOLOGY & EMOTION MICROCOSM

"So delicate it is almost barbaric, almost violent." – Caitlyn Siehl

### **DESIGN METHODOLOGY & END-USER TOOL**

The combination of good interoception and emotional intelligence.

#### 1. Interoception (body)

#### 2. Emotional intelligence (mind)

- Sensing & recognising
  (self-awareness, sensory system)
- <u>Understanding emotion cause</u> and effect; recognising (bodily sensations of particular emotions, behaviour induction)
- <u>Understanding emotion microcosm</u> (emotional system, organisation)
- Having emotional literacy
  (emotion spectrum, difference
  between moods, feelings and
  emotions and their interconnection)
- Understanding cover-emotions

#### 3. Self-regulation (body & mind)

- <u>Understanding</u> the body data
  accurately
- <u>Using tools</u> to understand the rational & emotional processes, articulating what we feel
- <u>Detaching</u> from emotions; instead of reacting, mindfully creating the response #ownyrsIf #sublimate



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#### References

Van del Kolk, B. (2015). The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma

hooks, b. (1999). All About Love: New Visions

LeDoux, J. (2015). Rethinking the emotional brain

Damasio, A. (2000). The feeling of what happens: Body and emotion in the making of consciousness

Brown, B. (2017). Braving the Wilderness

Damasio, A. R. (1994). Descartes' error: Emotion, reason, and the human brain

Ekman, P. (1984). Expression and nature of emotion

Ekman, P. (1999). Annotated update of Charles Darwin's "The Expression of the Emotions in Man and Animals"

Porges, S. W. (1997). Emotion: an evolutionary by-product of the neural regulation of the autonomic nervous system Goleman, D. (2005). Emotional Intelligence: Why It Can Matter More Than IQ

Porges, S. W. (2001). The polyvagal theory: phylogenetic substrates of a social nervous system

Nummenmaa, L., Glerean, E., Hari, R., Hietane, J.K. (2014). Bodily maps of emotions

LeDoux, J. E. (2000). Emotion circuits in the brain. Annual Review of Neuroscience

Oatley, K., Keltner, D., & Jenkins, J. M. (2006). Understanding emotions

Ochsner, K. N., Bunge, S. A., Gross, J. J., & Gabrieli, J. D. E. (2002). Rethinking feelings: An fMRI study of the cognitive regulation of emotion. Journal of Cognitive Neuroscience

Ye-Seul, L., Yeonhee R., Won-Mo J., Jungjoo K., Taehyung L., Younbyoung C. (2017). Understanding Mind-Body Interaction from the Perspective of East Asian Medicine

Fogel, A. (2013). Body Sense: The Science and Practice of Embodied Self-Awareness

Schachter, S., & Singer, J. (1962). Cognitive, social, and physiological determinants of emotional state. Psychological Review Wilson, T. D., & Schooler, J. W. (1991). Thinking too much: Introspection can reduce the quality of preferences and decisions. Journal of Personality and Social Psychology

Witvliet, C. V., & Vrana, S. R. (1995). Psychophysiological responses as indices of affective dimensions. Psychophysiology

Scherer, K. R. (2009). Emotions are emergent processes: they require a dynamic computational architecture

Tsakiris, M., De Preeste, H. (2018). The Interoceptive Mind: From Homeostasis to Awareness

Dana, D., Porges, S. W. (2018). The Polyvagal Theory in Therapy: Engaging the Rhythm of Regulation

#### Guilty

**Rumination** A Shortcut to Happiness?

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# Sub

"To sublimate is to change the form, but not the essence. Physically speaking, it means to transform solid to vapor; psychologically, it means changing the outlet, or means, of expression from something base and inappropriate to something more positive or acceptable."

- Merriam-Webster

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