

The International Journal of Ecopsychology (IJE)

Volume 1
Number 1 *Narratives on Coronavirus: The
Overwhelming Power of the Infinitesimally
Small*

Article 3

10-15-2020

“Healthy Country, Healthy People”: Aboriginal Embodied Knowledge Systems in Human/Nature Interrelationships

Liz Cameron
Deakin University, Australia

Follow this and additional works at: <https://digitalcommons.humboldt.edu/ije>



Part of the [Cognitive Psychology Commons](#), [Community Psychology Commons](#), [Counseling Psychology Commons](#), [Environmental Studies Commons](#), [Health Psychology Commons](#), [Human Ecology Commons](#), [Other Anthropology Commons](#), [Place and Environment Commons](#), and the [Social and Cultural Anthropology Commons](#)

Recommended Citation

Cameron, Liz (2020) "“Healthy Country, Healthy People”: Aboriginal Embodied Knowledge Systems in Human/Nature Interrelationships," *The International Journal of Ecopsychology (IJE)*: Vol. 1 : No. 1 , Article 3.

Available at: <https://digitalcommons.humboldt.edu/ije/vol1/iss1/3>

This Article is brought to you for free and open access by the Journals at Digital Commons @ Humboldt State University. It has been accepted for inclusion in The International Journal of Ecopsychology (IJE) by an authorized editor of Digital Commons @ Humboldt State University. For more information, please contact kyle.morgan@humboldt.edu.

“Healthy Country, Healthy People”: Aboriginal Embodied Knowledge Systems in Human/Nature Interrelationships

Cover Page Footnote

Cover: The Interrelated Self, Artist--Belanjee Fig. 1: The Interrelated Self, Artist--Belanjee Fig. 2: Oolгна, Artist--Belanjee



**“Healthy Country, Healthy People”:
Aboriginal Embodied Knowledge Systems in Human/Nature
Interrelationships**

Cameron Country

Liz Cameron, PhD*

*Deakin University, Geelong, AUS - Indigenous Knowledges - l.cameron@deakin.edu.au

Abstract

The relationships between humans and nature require interdisciplinary perspectives to develop expanded understandings at this crucial time for the planet and its inhabitants. A poignant step towards improving the global ecological situation--which includes human survival and flourishing--is to reconnect our human/nature relationships. *From an Australian Aboriginal standpoint*, human-nature connectedness is integrally embedded in the relationship to the natural world that is termed *Country*. This term not only illustrates geographical boundaries but encompasses the harmony and balance of all living things within a cultural and spiritual context. At the interface of this knowledge, ways of thinking, feeling and being include a relatedness to *localised knowledge* based on the guiding principles of respect, responsibility and reciprocity to place. These principles ensure a sustainable environment that incorporates a 'whole of life' approach to human and nature health and wellbeing. In articulating how a sense of place is critical to psychological health within the human psyche, this paper explores Australian Aboriginal eco-therapeutic approaches surrounding the proverb '*Healthy Country, Healthy People*' that strengthen our social and emotional connections with the natural world. The article advocates for a re-evaluation of self and our embedded perspectives that we draw from nature through being on Country.

Keywords: Eco-therapeutic, Indigenous, Self-awareness, Human-nature connection, Embodied knowing, Dharug Aboriginal Nation

Cameron Country

Introduction

A deep sense of ecological unity encompasses the Aboriginal proverb '*Healthy Country, Healthy People*'. Central to this concept is the interdependence of all species to thrive in harmony. Should the environment be unhealthy, people will become unhealthy, as humans are primarily the disturbers of nature. *Healthy Country, Healthy People* also expresses the reciprocal interactions between humans and the environment. It is a useful way of thinking about human interactions with nature towards improving health and building resilient ecosystems. Human interactions with nature can also be damaging.

The loss of biodiversity caused by humans is directly associated with the spread of diseases such as COVID-19. The human destruction and alteration of landscapes have led to an escalation of contact between animal and human populations through deforestation and loss of natural habitats, increasing the risk of transmitted diseases. Agricultural expansion and biochemical use have also played a role in emerging human infectious diseases (Dobson, 2001) that significantly impact global public health (Despommier, 2018). As human use and exploitation of natural resources continues to keep pace with rapid overpopulation growth, including prolonged aging, the likelihood of other diseases will increase. The occurrence of COVID19 has emphasized a need to improve the mutually affective connection between humans and nature. By applying natural 'protective barriers' such as biodiversity conservation (Jones, 2013), including the restoration of habitats, disease emergence will be reduced.

The epigram of *Healthy Country, Healthy People* is termed *Nura Budyari* in the language of the Dharug Aboriginal Nation, which translates to "land good health and wellness." The term infers healthy relationships and kinship systems within a spiritual and cultural place, with Country being an extension of self. Caring for Country quite literally implies the fundamental care for humans and the cultural landscape as one identity. Our laws and knowledge systems involve humans being only a part of the extensive ecological system, rather than having controlling ownership; we are guided by Country to determine all needs. This ideology extends to and is reinforced through having an emotional self-awareness (belonging) and self-immersion (identity) within the environment. It is this ecological consciousness where one feels, hears, listens, and speaks to Country that is regarded as authentically living. *Healthy Country, Healthy People* is further explained as the bushlands and waterscapes being living things and therefore constituting health and healing. Country is essential to life. In short, Country is self.

The interrelationship between self and Country, or humans and nature, has been colonised in Australia through erasure of Indigenous knowledge systems and destruction of the environment, resulting in severe alterations to the natural landscape, which, in turn, has ruptured the continent's natural ecosystems. The impact of early colonial migration was constructed through both material and conceptual transformations that rejected Australia's distinctive natural environment. The determination of early colonists to recreate and replicate their own homelands was significant in both farming and industrialisation techniques, as has now been well-documented (Pascoe, 2014). Colonists often considered the terrain hostile or unfavourable to western practices and reacted by importing their own plants, animals, and farming techniques to 'improve' the land. In contrast to Aboriginal perspectives, which understood their local environment's interconnected and cooperative ecologies, early colonists viewed the natural bushlands as chaotic, disorderly and ever-changing, without a pattern of predictability. This colonial desire for order remains entrenched today in landscaping and agricultural techniques that impose externally structured systems and literal straight lines upon the Country.

Indigenous ways of knowing and being in the world have much to offer in terms of nuance to questions that are now pressing, regarding human relationships with the non-human world. This article discusses how Aboriginal knowing encapsulates the multi-sensorial nature of lived and felt experiences that promote self-reflection, which includes a sense of self as part of and deeply in context of Country. The loss, through intergenerational effects of suppression of Aboriginal ways of knowing, of reliance on one's felt self-knowledge, not only interrupts our deep connection with our senses and Country but threatens our psychological well-being. The nature of preconscious knowing is not easily understood or articulated as it occurs in a space beyond (or prior to) language but has been known to Aboriginal people from time eternal. These Indigenous systems of knowing include and give precedence to embodied rituals, ceremonial spiritual practices, and an inherent and actively reconstituted connection to *Country*. *Country* speaks through these ritualized practices as the land transmits stories that make visible and facilitate knowledge-sharing. Spirituality, along with cognition, and transference through cultural arts and ritual, is infiltrated via bodily experience, and integrated as a state of health and wellbeing in alignment with Country.

The colonial replacement of natural systems of co-operative ecology demonstrates and correlates with a rejection of not only Australia's distinctive landscape, but a loss of connection with and sense of belonging to the natural world. Within Western epistemological frameworks there is limited attention paid to perspectives that value human/nature relationships in the context of personal and collective health and wellbeing. Attitudes and perceptions of the natural environment fall under categories of cognitive dependence rather than mutual reliance, interrelationships, and ecological unity. To elaborate, this concept refers to the cultural differences of "sight" versus "deep seeing." Sight refers to the surface while deep seeing includes felt sensory experiences. To use mapping as an example, cognitive processes involve a visual consciousness of how colonists viewed the Australian landscapes. Without knowing the cultural history, viewing the landscape was primarily dependent on cognitive actions to construct maps. These processes involved a standardised scientific model to gain the "correct" knowledge of the terrain. This way of thinking assumes that all objects and landmarks are real but does not consider the unseen, such as the cultural interrelationships and ecological importance of the landscapes.

Country and Ways of Knowing

Comprehending that the health of people is dependent on the health of the land in an Aboriginal sense involves a set of cultural appreciations and terminology. Firstly, *Country* refers to the area of land of a certain Aboriginal Nation (*my mother's Country*, *Dharug Country*, *Gunditjmara Country*, etc.); hence there are hundreds of 'Countries' within Australia. Country also encompasses the interdependent relationships sustained by cultural knowledge associated with spirituality, culture, language, family, law, and identity. Each person is entrusted with the cultural experience and responsibility to care for the Country, to build healthy and intimate connections. Country extends to the animals, people, vegetation and spirits, the earth beneath the surface and the air above it, and the complex interactivity of all of these. Country is a living, breathing entity. Late Warlpiri elder Darby Jampijimpa Ross stated simply: 'Country - it's the heart, the world' (Campbell, 2006, p. 212). Cultural theorist Stephen Muecke describes Aboriginal Australians' beliefs about Country in terms of a vitalistic philosophy that ascribes life to inanimate things, bodies, and places—all are in a sort of mutual flow, whereby Country is seen as a living body comprised of interconnected parts, linked by (kinship) relationships between people, country and ancestors: "the blood of this country" (Muecke, 2004, p. 171). Aboriginal sociologist Aileen Moreton-Robinson, in a recent interview, proposed a reconsideration of ecofeminism incorporating Indigenous

women's knowledge in the context of catastrophic climate change. She asked, "What is it to walk on something living (the earth)? You take care how you treat that living thing you are part of and are sustained by." Moreton-Robinson added succinctly, "All western theory is human-centered power. That has to be changed" (2020).

Aboriginal Ways of Knowing refers to understandings of oral and visual transgenerational knowledge that has relevance to past, present, and future ideals in making sense of the world. Such theories and practices include integrated holistic models that are grounded in lived experiences associated with place, culture, history and social connections, and which acknowledge the intellectual value of people. *Ways of Knowing* expresses concepts of knowledge systems relating to language, sense perception, emotion, reason, imagination, intuition and memory. Spirituality is the core of Aboriginal being and provides meaning to all aspects of life based on social, moral, ethical, kinship and community values and laws that maintain sustainable relationships with one another and the environment.

Knowing Country is strengthened by the custodial obligation to ensure the land is not dominated by one species. This is highlighted by traditional Aboriginal life where people intentionally lived in smaller populations, using plant-based contraception to ensure the land was not overburdened by its inhabitants. Beyond colonisation, the Australian environment continues to undergo enormous pressures, with recent global migration resulting in a population of displaced people with no cultural connection to place and an ill-informed consciousness of their surroundings (Gifford, 2011). Challenges also lie in the emotional detachment to nature from different cultural lenses that do not view Country as a living entity. Acknowledging the past people of the lands is a common practice in many Australian speeches but rarely considers the value and recognition of the natural environment as a spiritual and cultural entity. Yet, a sense of belonging could be shared by all inhabitants if they embraced the values of Aboriginal philosophies and began accepting the responsibility of *Caring for Country* through a holistic approach. Caring for Country not only builds a sense of responsibility and obligation but enhances one's place-based identity and belonging in understanding one's interrelationship with Country. This conceptual framework can also promote holistic responses to climate change in realising that positive action on environmental challenges is integral to one's own health and wellbeing. This carries through to the importance of the design of public spaces, institutional settings, and residential areas to encompass nature, to further educate the community and create healthy surroundings. Conversely, if we continue to be disconnected from Country, we lack a conscious need to protect it (Kollmuss & Agyeman 2002).

To grasp an understanding of the Aboriginal knowledge associated with the notion of *Healthy Country, Healthy People*, it is necessary to identify, understand, and re-evaluate our embedded perspectives. This requires not only a cognitive understanding but, more importantly, an immersion of oneself emotionally and spiritually. The kind of immersion I propose not only engages oneness with the environment but also allows for the absorption of personal feelings and reflection.

The Interrelated Self

Developing an awareness of self assists us in becoming more attuned to the signs and signals of Country through responses within the *interrelated self*. Such awareness is based on foundational knowledge concerning the emotional bonds and felt experiences. Emotions are not only expressions of thought but are inextricable expressions or conduits between our social, spiritual, and physical aspects of ecological understandings. Spending immersive time

on Country allows for a development of an *ecological being* as our sense of what is significant shifts from self-imposed individualised ideals and ambitions to respect, responsibility and reciprocity within the environment. Our perspective changes from individualistic to collective, *with* and as part of nature. The interrelated self requires an investment in social and environmental bonding, rather than individualistic ideals.



Figure 1. Title of artwork - The interrelated self: a holistic concept of knowing, feeling and being connected. Storyline - The central circle illustrates self with radiating concentric circles highlighting the interrelationships with all living things. This acrylic and ink painting depicts the connections of being, seeing and living within a connected world where Country is essential to life. Artist - Belanjee

The *interrelated self* focuses on collective internal and external influences to reach social harmony, as opposed to the *independent-focused self*, primarily centred on self and personal gratification. The interrelated self is aware of felt sensations that offer information from our surroundings that can guide thoughts and emotions. This body-to-mind experience involves felt multisensory indicators that synchronize with the natural vibrations of Country. This suggests why *being on Country* facilitates emotional rejuvenation and psychological health. Sensory regulation as a heightened form of health and wellbeing requires synchronizing self to the natural world to feel the natural rhythms that influence our emotional moods. Current

research reinforces this viewpoint as circadian (natural rhythms) disruptions are frequently reported in major depressive disorder relating to changes in seasons (Germain, 2008). Furthermore, seasonal changes in day length can affect mood (Rosenthal et al., 1983) by delaying the offset of melatonin secretion (Wehr, 1997).

Being on Country

While various studies articulate how engaging with nature reduces stress and creates a more meaningful experience in the world (Uzzell & Moser, 2006), there is minimal material addressing *how* to find connection with our natural world. For Aboriginal people, reclaiming our emotional connection to the environment requires multisensory stimulation through experiences of *being on Country*. The experience of being on Country permeates throughout the whole body, which unconsciously adjusts to or synchronises with the rhythms of nature. This process could be described as psychophysical: an embodied integration of sensory and emotional interrelation or communication with the surrounding environment. We experience these ‘rhythms’ as feeling the emotional, natural beats of life as every living thing has unique frequencies, including our functioning bodies.

The Human Sensory Interplay with the Environment

Our human senses equip us to gather information from our environment. The human senses are internal guides that respond to the emotional, social, physical, cultural, and spiritual environments, enabling us to respond by felt fluctuations and quickly adapt to changes. Generalized recognition of the human senses includes sight (vision), hearing (audition), taste (gustation), smell (olfaction), and touch (somatosensorial), but from a Dharug Aboriginal standpoint we also include intuition, *Oolгна*, and the imaginative *Ngara*. While there is a loss within English translation, terms associated with *Oolгна* include intuitive, felt, ‘gut’ sensations that are viewed as a bodily alert signal. The term *Ngara* refers to the imaginary, an ability to actively observe through a sense of curiosity, connected to dreams and visionary encounters. Western concepts of the five senses—sight, sound, smell, touch and taste are therefore elements that contribute to only a portion of the human sensory experience, whilst deeper perceptual insights (*oolгна* and *ngara*) enable us to feel, respond, connect and adapt to the environment.

Ways of Knowing that engage the seven senses provide some baseline understanding of how we can connect with the natural world. This framework embraces meaningful ways to develop perspectives to become more ‘in tune’: to connect, perceive, interpret, analyse and evaluate the environment. Ways of knowing involving emotional and perceptual felt responses prior to cognitive thought offer a thorough approach to feeling Country. By utilising our seven senses we can gain a more holistic approach in understanding the human-nature experience in how we react and behave. The seven senses also play important roles in fostering emotional and physical states of health and wellbeing.

In defining Aboriginal sensory knowledge systems, most ways of knowing use verbs rather than nouns. Interpretation through verbs is a more accurate portrayal than the use of nouns. For example, the noun ‘sight’ is interpreted very differently from the verb ‘seeing.’ Sight reflects one action, whereas seeing involves more profound observing. This is noted in various cultures across the globe, such as the Javanese acknowledging the felt senses through a structured language discourse using verbs such as seeing, hearing, talking, smelling, and feeling. Cultural language also influences how we define and make meaning of the human

senses and how we value our senses. This is demonstrated in how Eastern and Western cultures describe our human senses. Western customs categorise five senses within a hierarchical order, with sight as the 'noblest' of the senses and touch classified as the 'lowest' (Howes, 2006). Western culture also ranks and labels the 'proximal senses' (touch, taste, and smell) as inferior (Holmes and Spence, 2004), with the sense of sight considered the dominant mode for the progress of science and 'object-centered thinking' (Pacey, 1999, pp. 39–57). This sensory hierarchy is very telling in terms of western cultural relationships to the environment. From an Aboriginal standpoint, the notion of sight as the dominant sense would create an imbalance: relying merely on sight significantly limits our capacity to obtain an immersive bodily experience. Perceiving through our seven senses provides us with a multisensory breadth of knowledge with which we can connect deeply to Country. The following section will elucidate Indigenous understandings of the human senses—as the interstices between self and Country, or human and nature—with a focus on the senses' role in relation to health and wellbeing. Though described separately here for the purposes of elucidation, sensory experiences of course occur in complex interrelation with each other.

Ways of Smelling, Seeing, Hearing, Touching and Tasting

The sense of smell is often overlooked as a transformative way of connecting with self-experiences and interpreting the environment as all things are defined by varying odours. Smell assists in identifying the changes in seasons and weather patterns through, for example, the scent of flora coming into bloom, or alerting us to threats such as bushfires through the smell of smoke. The sense of smell is of great importance to human health, quality of life, and survival as odours have a direct impact on people's everyday experiences and their perceptions of the surrounding environment. The sense of smell is linked with memory (Hackett & Dusti, 1976) and is highly emotive, as odours evoke experiences and emotions associated with these sensations (Truong, Bonnefoy & Prévot, 2020). Other research found that smell sensitivity within natural spaces offers a gateway to psychological renewal and increases an individual's identification with the natural world (Olivos-Jara, Aragonés & Carrascal, 2013). Smell is also used as a diagnostic tool to identify diseases as odour is linked to various illnesses. To elaborate, liver problems are associated with the distinct smell of raw fish, gum infection smells like rotten eggs, and food poisoning has a floral aroma. Many Australian plants contain essential oils that have been used in healing. For instance, eucalypts and melaleucas have a characteristic odour that elicits a sense of their anti-bacterial qualities that fight against infection.

Sound vibrations and repetitious rhythmical melodies such as music, dance, chanting, and singing play a critical role in human-nature connections. Rhythmical sound waves offer a mesmerising dimension of knowing resulting in physiological calmness through becoming more attuned to the natural environment energies. The sounds of nature are aesthetically valued because they are thought to provide a quiet respite from typically loud urban noises (Mace, Bell & Loomis, 2004) as listeners exhibit a strong preference for nature sounds (Van Hedger et al., 2018). The sound of nature also improves mood (DeLoach, Carter & Braasch, 2015) and cognition (Mace, Bell & Loomis, 2004), which reduces physiological stress (Alvarsson, Wiens & Nilsson, 2010). Song and music created via rhythm-based instruments such as clapsticks are vital means of expression for many cultures, including Aboriginal cultures, and act as conduits of connection to Country in ritual and ceremonial contexts.

Ways of seeing relate to deep insight. Seeing can lead to self-reflection and further interactions within the natural world as from observation comes insight; from insight comes

curiosity and from curiosity comes knowledge. In other words, the sense of seeing exemplifies a deeper understanding of knowing where we can visualize, involve imagination, and express concepts that cannot be achieved through logical, realistic sight. Our environment consists of outward and visible expressions of our culture, in which the visual is mediated through a series of cultural lenses that shape what we see and don't see, how we perceive and interpret. It is the medium with which we continuously adapt within an embodied experience, and how we see the landscape.

Touching refers to felt vibrations that provide information about features of our surroundings. For example, the fingertips perceive surface textures, feel pressure changes through vibrations and detect temperature fluctuations. *Being on Country* ideally means walking barefoot so as to literally feel and connect to the earth's communications. The haptic information gleaned through the soles of our feet can be extremely nuanced, as they are exposed to a variety of cues that both facilitate connection and alert our bodies to hazards of the terrain. Social or human touch is a critical component of human interactions that can create emotional bonding (Essick et al., 2010), as it conveys sensory experiences of pleasure and detects irregular sensations associated with stress and pain through the intentional use of the hands to reduce muscle tension. Current research indicates that touching decreases respiratory rate, blood pressure, pain, mood disturbances, and fatigue (Post-White et al., 2003), increasing emotional stability, and mental health function (Cook, Guerrero, & Slater, 2004). Tactile engagement with our surrounding environment facilitates closer individual identification with the natural world.

Tasting is perceived via the taste buds on the tongue and palate, which contain receptor cells that are able to differentiate a vast and diverse array of informative experiences, with the sense of smell contributing to such analysis. Plants are often described by the way they taste, such as bitter flavours. For example, native ginger has a rancorous taste and is used to fight off infections and assist with encouraging salivation. In traditional medicines worldwide, both the taste of bitterness and pungency of plants are likely indicators of pharmacological value (Olivier & van Wyk, 2013). Other examples of ecological knowledge related to taste include kangaroos seeking out salt ash compost from large trees following fires for lactation purposes.

The Internal Senses of Knowing and Cultural Connectivity: Ways of Intuitiveness

Intuitive knowing (*Oolгна*) is considered an internal enduring emotional signal that involves sensory nerve processes located behind our umbilical cord. Our gut (“garrah-mah”) feelings are considered the core site of thinking, knowing, and being. Intuitive knowing, as an emotional energy centre, is a bodily alarm signal that alerts us to situational change. Early studies by Gershon describe this area as the ‘enteric or second brain’ (1998). Gershon argues that the enteric brain is independent of the mind-brain, having its own reflexes and senses that create reactive responses when exposed to physiological stress. He associates the enteric brain with a higher sense of consciousness that acts as an alert system through sensory warning signs of an impending threat.

Intuitive knowing is associated with bodily sensations that frequently emerge from emotional cues to raise conscious awareness. Intuitive knowing involves sources of information contained within oneself and one's environment. These experiences can impact our moods and reasoning. Intuitive experiences include a spiritual encounter of having had a previous experience such as *déjà vu*, immediate or direct knowing, seeing images or signs through

dreams, or non-human messages. Vaughan suggested that intuitive experiences give the individual a direct, transpersonal experience of the underlying oneness of life: 'Learning to recognize pure awareness or consciousness as the context of all experience, distinct from the contents of consciousness, is one way of understanding this level of intuition' (Vaughan, 1979, pp. 78-79). The human/nature connectedness inherent in Indigenous conceptualisations of Country comprises of listening to our intuitive responses to the nonhuman world and viewing nature as part of our community. Intuitive knowing is knowledge accessed through feelings that are subtly conveyed through the embodied senses. In most instances, this form of knowing supports a shift from thinking about nature to strengthening direct engagement.

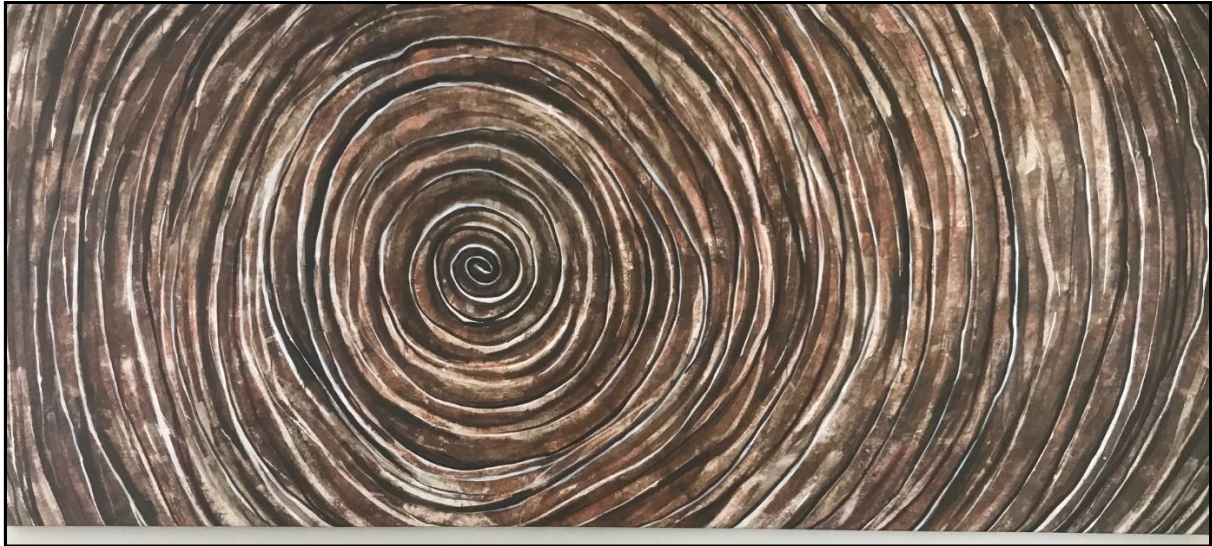


Figure 2. Title – Ooligna, the centre of knowledge and connection to being. Storyline – to be truly able to connect with our environment we need to connect deeply with our feelings to know what Country needs from us. This acrylic and ink painting illustrates the spiral, created in an anti-clockwise movement to consciously parallel with the Australian natural rhythms such as the southern coasts tides. Artist - Belanjee

Ways of Imagining

The imaginative explores visions of possibilities that go beyond just personal experiences that provoke a sense of curiosity for the unpredictable or unanticipated. The English word 'imagination' is ambiguous and is used to refer to fantasy and reverie and inventiveness in thought and action, particularly associated with children's play. The Dharug term 'nganga' refers to the imaginative that relates to psychological functions, such as emotions, perception, sensory interludes, memory, and spiritual transformations. It is not a distinct mental faculty of the human mind. The role of the imaginative in experiencing natural environments encompasses visualization and dreaming, which are referred to as *spiritual knowing*: a blurring of the boundaries between self-experience, space and place, and phenomena that lies beyond the immediate, present landscape. The imaginative cultivates cultural repertoires and desires which deeply impact our lives and the way we interpret our experiences through *ways of being, knowing and acting* in the world. The imaginative is associated with an emotional attachment to nature. It is this emotional response that stimulates perceptions and influences moods. Utilizing our imaginations enables us to bridge the conscious and unconscious worlds. The imaginative process emerges from stimuli from the human senses, enabling us to experience a quality of connection and encounter. This involves inner listening to cultivate

intuitive capacities to develop new and innovative insight. Emotional responses have a substantial influence on the cognitive processes including perception, attention, memory, reasoning, and problem solving. The connection between an emotional response and abstract thinking is strengthened through an individual's creativity and [imaginative](#) capabilities.

Imaginative processes reconstruct our relationships to place, people and the natural world by assisting in problem solving, encouraging us to understand and connect to the natural world, and nurturing the human spirit. When we use our imaginative senses, we are creating relationships and making connections with place, as *Nganga* represents the link between the self and the natural world. The imaginative is a form of knowing, a medium for communication and a paradoxical point between our conscious and unconscious. Engaging imaginatively with nature enables us to act ethically with mutual respect and to envision multiple ways of being in the world. Learning to think in terms of relationships and to see the world via *Nganga* as an interrelated whole can be a transformative, integrative and embodied learning experience. We depend on our ability to use our imaginative sense to form close relationships with nature. As culture influences our imaginations and our interpretations of reality, in aiming to shift the direction of society from anthropocentric to biocentric worldviews, the imaginative sense is essential to reconnection with nature, and ultimately to all our survival and flourishing.

Conclusion

Current crises in human and ecological health require interdisciplinary perspectives and approaches to the human-environmental interface beyond capitalist exploitative models. Indeed, the human-nature connection lies paramount to healing our world. When humans have a higher degree of nature connectedness they learn to live in harmony with nature, to live more sustainably, by understanding they are not at the centre of all life but must co-exist with other species. Aboriginal *Ways of Knowing* incorporate immersed embodied dimensions of human-nature relationships through eco-therapeutic approaches that strengthen our social and emotional connections with the natural world. The interplay of the human senses in engaging with natural environments offers ways of knowing Country that are beneficial in terms of generating harmony and balance on psycho-physical, cultural, spiritual and ecological levels. As humans are multisensory beings, an immersion of self will restore our broken connections to nature. Hence, the idiom *Healthy Country, Healthy People* offers a pathway to more harmonious cohabitation with the non-human world and impels humans to take responsibility for how we both fit and act in the world.



References and Bibliography

Aldridge, D., Fachner, J. (2006). *Music and Altered States: Consciousness, Transcendence Therapy and Addictions*. London: Jessica Kingsley.

Campbell, L. (2006). *One Hundred Years of Life in a Changing Culture*. Sydney: ABC Books for the Australian Broadcasting Corporation.

- Cook, C. A., Guerrerio, J. F., & Slater, V. E. (2004). Healing touch and quality of life in women receiving radiation treatment for cancer: a randomized controlled trial. *Alternative Therapies in Health and Medicine*, 10(3); 34–41.
- DeLoach, A. G., Carter, J. P., & Braasch, J. (2015). Tuning the cognitive environment: Sound masking with “natural” sounds in open-plan offices. *The Journal of the Acoustical Society of America*, 137, 2291–2291.
- Despommier D, Ellis BR, Wilcox BA. (2006) The role of ecotones in emerging infectious diseases. *EcoHealth.*, 3, 281–289.
- Dobson A, Foufopoulos J. (2001) Emerging infectious pathogens of wildlife. *Philos. Trans R. Soc. Lond. B.* 356, 1001–1012.
- Essick, G. K., James, A., & McGlone, F. P. (1999). Psychophysical assessment of the affective components of non-painful touch. *NeuroReport*, 10, 2083-7.
- Germain A, F. E. (2008). Chronobiology of the core symptoms of depression. *Medicographia*, 30(30), 30-34.
- Gifford, R. (2011). The dragons of inaction: Psychological barriers that limit climate change mitigation. *American Psychologist*, 66, 290-302.
- Holmes NP, Spence C. (2005). Multisensory integration: space, time and superadditivity. *Curr Biol*, 15(58), 762-764.
- Howes, D. (2011). Hearing scents, tasting sights: Toward a cross-cultural multimodal theory of Aesthetics. In Francesca Bacci and David Mellon, (eds.), *Art and the Senses*. Oxford: Oxford University Press, pp.161-82.
- Jesper J. Alvarsson, S. W. a. M. E. N. (2010). Stress recovery during exposure to nature sound and environmental noise. *Environmental Research and Public Health* 7(3), 1036–1046.
- Jones KE, et al. (2008) Global trends in emerging infectious diseases. *Nature*, 451, 990–993.
- Kollmuss, J. A., J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260.
- Mace, B. L., Bell, P.A. & Loomis, R.J. (2004). Visibility and natural quiet in national parks and wilderness recreation areas: Psychological considerations. *Environment and Behavior*, 36(1), 5-31.
- Manohar, V. I. C., Gray, J., Talpur, N., Echard, B., Bagchi, D., and Preuss, G. (2001). Antifungal activities of origanum oil against *Candida albicans*. *Mol Cell Biochem*, 228 (1-2), 111-117.
- Moreton-Robinson, A. (2020, 2/9/2020) *20th Anniversary of talkin' up to the white woman, for broadly speaking*. Wheeler Centre Melbourne.
- Muecke, S. (2004). *Ancient and modern: Time, culture and indigenous philosophy*: UNSW

Press.

Olivier DK, V. W. B.-E. (2013). Bitterness values for traditional tonic plants of southern Africa. *Journal of Ethnopharmacology*, 147, (3), 676-9.

Olivos-Jara, P., Aragonés, J. I. y Navarro-Carrascal, O. (2013). Educación ambiental: itinerario en la naturaleza y su relación con conectividad, preocupaciones ambientales y conducta. *Revista Latinoamericana de Psicología*, 45(3), 503-513.

Pacey, A. (1999). *Meaning in technology*. Cambridge, MA.: MIT Press.

Pappas, J. N., M. (2001). Composite effects on group drumming music therapy on modulation of neuroendocrine-immune parameters in normal subjects. *Alternative therapies in health and medicine*, 7(1), 38-47.

Pascoe, B. (2014). *Dark Emu*. Broome, Western Australia: Magabala Books.

Post-White, J., Kinney, M. E., Savik, K., Gau, J. B., Wilcox, C., & Lerner, I. (2003). Therapeutic massage and healing touch improve symptoms in cancer. *Integrative Cancer Therapies*, 2(4), 332–344.

Rhee, S. H., Pothoulakis, C., and Mayer, E.A. (2009). Principles and clinical implications of the brain–gut–enteric microbiota axis. *National Reviews. Gastroenterol. Hepatol.*, 6, 306-314.

Rosenthal NE, L. A., Wehr TA, Kern HE, Goodwin FK. (1983). Seasonal cycling in a bipolar patient. *Psychiatry Res*, 8(25), 31-26.

TA, W. (1996). *A "clock for all seasons" in the human brain* (Vol. 111). Amsterdam: Elsevier.

Truong, M. X., Bonnefoy, B. and Prévot, A. C. (2018). *There is more than meets the eye: Evidences of a multi-sensory and restorative experience of nature in a French urban park*. Paper presented at the 5th European Congress of Conservation Biology.

Uzzell, D. L. M., G. (2006). Environment and quality of life. *European Review of Applied Psychology*, 56, 23-24.

Van Hedger, S. C., Nusbaum, H. C., Huang, A., Heald, S. L. M., Kotabe, H. P., & Berman, M. G. (2018). The aesthetic preference for nature sounds depends on sound object recognition. *Cognitive Science*. 43(5), 12734.

Vaughan, F. (1879). *Awakening Intuition*. New York: Doubleday.