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INTRODUCTION: MATERIALITY, LIVELINESS AND PERSONHOOD IN THE ANTHROPOCENE

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*To grasp our unbreakable reliance and connectivity to everything else
is the beginning of reshaping how we imagine ourselves, our actions
and the vast material event of which we are a part.¹*

This anthology draws together a range of papers originally delivered at the 16th Sophia Centre conference in 2018. The conference, titled *Rivers, Mountains, Sky and Sea: The Materiality of Spirit and Place*, was designed to inspire discussion around the complex and culturally significant intersections and influences experienced between humans and other entities or bodies in and of the environment or landscape. The conference emerged from a research culture at the University of Wales Trinity Saint David which has resulted in the creation of a series of volumes that deal with what is now known as the ‘New Materialities’. This culture has resulted in the creation of a series of volumes at the University of Wales Press, driven by Luci Attala and Louise Steel.² From the Sophia Centre, Bernadette Brady and Darrelyn Gunzburg have produced a significant volume on space and place for the Bloomsbury Studies in Material Religion.³

The approach taken by the New Materialities focuses on attempts to suture – heal or resolve – the intellectual division between people and the living world that anthropocentric thinking has created. It does this by providing examples of how the landscape (and other ‘scapes, including skyscapes, seascapes, taskscapes and inscapes), substances, and all living entities not only inspire thought and action, but also play a key role in physically shaping how humanity is able to be and to exist, always emphasising the fundamental connections that constitute life. Following Karen Barad and Donna Haraway, it remembers that all ways of being emerge from the physics or methods of matter-in-relationship and therefore attends to a reconsideration of agency, what an agent (a thing or substance

which initiates change) is, and even how we understand individuality.⁴ Where, we ask, does an individual end and the wider environment begin? Consequently, the term ‘materiality’, as it is used here, does not simply describe objects or things nor is it concerned with the vicissitudes of production *per se*, but rather is used to

encourage thinking that realises being human is not a state divorced from a broader set of material conditions, but rather emerges-with and is (in)formed-by being-with the physics of wider interacting ecologies.⁵

The conference was organised by the Sophia Centre for the Study of Cosmology in Culture and the Harmony Initiative, now the Harmony Institute.⁶ The Sophia Centre’s remit is the study of the ways in which human beings make or identify meaning in, and engage with, the wider cosmos, while the Harmony Institute explores notions of the universe as a single integrated whole and their practical applications and consequences. Our guiding view of Harmony is taken from David Cadman, one of the university’s Honorary Professors of Practice:

Harmony is an expression of wholeness, a way of looking at ourselves and the world of which we are part. It’s about connections and relationships. The emotional, intellectual and physical are all connected. We are connected to our environments, both built and natural; and all the parts of our communities and their environments are connected, too. Harmony asks questions about relationship, justice, fairness and respect in economic, social and political relationships. As an integrative discipline it can be expressed in ideas and practice.⁷

This all takes us to the question of shallow ecology and deep ecology, the two versions of the ecological movement as defined by Arne Naess in his seminar lecture in 1972.⁸ In Naess’s distinction, shallow ecology is functional and pragmatic and focuses on the fight against pollution and resource depletion. It is completely anthropocentric. By contrast, deep ecology assumes that there is no distinction between humanity and nature. The first principle of Deep Ecology, with capital letters, as defined by Arne Naess, is: ‘Rejection of the man-in-environment image in favour of the relational, total-field image. Organisms as knots in the biospherical nest or field of intrinsic relations’.⁹

Consequently, the chapters in this volume pay keen attention – and offer a colourful ethnographic assortment of meanings and approaches – to how the materiality of being and of spaces and places as integrated wholes are variously

understood and impact on people's lives. Regardless of the vast differences in meanings, each chapter demonstrates the physical activities of what Eduardo Kohn called forms.¹⁰ Ilaria Cristofaro explores the sunlight on the sea, Bernadette Brady the twist in a river's flow, Alan Ereira and Kim Malville, the shape of a mountain, and Stanislaw Iwaniszewski the rise of the moon. These phenomena are not just beautiful but are influencers and instrumental partners or associates in life's endeavour that together co-create personal actions and the conclusions that individuals and cultures use to explain life. Importantly, the chapters also work to demonstrate the fundamental connections that run between, and hold, all things – including people – together in a vast, impacting web of influences, meanings and physical possibilities. Adopting this focus dethrones the human as the sole creator of meaning, and reveals the activity, agency and role of substances, materials and life forms in the collaborative processes of life.¹¹ Moreover, it uncovers some of the problems associated with making intellectual distinctions that depict certain entities as of little significance, others as lifeless and all as existentially separate from each other: as part of these 'confederations' of 'variously composed materiality', we are entangled with their material agency and emerge together.¹²

Therefore, the chapters in this book illustrate how worldly substances, locations, entities and lives-lived are not only fortuitously or even homeostatically contiguous but are fundamentally and materially bound to, or tangled with, each other in co-productive unity.¹³ Rather than a world full of individualities, every 'thing' is in perpetual existential relationship and therefore need each other and are *of* each other. Consequently, the perspective adopted by this volume demonstrates that neither actions nor ideas can sidestep the basic elemental physicality of existence, and that any such notion that they can do so does not bear out in accounts of lived experience: people sense, and have sensed, a fundamental connection to the landscape around the world and across all times. As a result, this volume offers a series of examples that illustrate not just the important truth that the substances that comprise life are co-creative partners variously living as humanity and then with humanity, but also show how a range of worldly substances' behavioural capabilities are substantially and significantly implicated in the ways that lives can be lived at all.¹⁴

The conference took as its starting point the notion that many contemporary conceptions of human lives almost circumvent, and certainly pay scant attention to, the existential, even earthy, connections that inform people's lives. For many, lives are lived with little reference to the complicated shifting material processes out of which bodies, structures, tools, objects, and creatures form and fold. The elemental forces that are responsible for much of existence are all but

forgotten in the high-rise, cramped, concreted urban lives so many people now live. Indeed, perhaps since the time of the first Enlightenment thinkers, when so called enchanted or magical thinking was heavily frowned upon as unhelpfully superstitious, knowledge in and of the world and its processes has, for many of us, lost its presence, its vitality and aliveness.¹⁵ Any ability of the entities in the landscape to speak out, to be heard, to hold knowledge and to impart it as sensations, dreams, prophecy, weather conditions and so on has been judged as fanciful and replaced with what might be called a more rational, logical and verifiable approach, where knowledge can only be considered robust and accurate if it can be replicated numerically or under experimental conditions.

This type of modern approach to water, the soil, the sky, the forests and the built environment has redrawn the building blocks of life as essentially inert, mute and dumb, forming into life by chance through some as yet undefined process. This approach not only sucks the life out of the materials around us, but also paints a picture of existence as a setting or arena where personality and personhood are restricted to only certain species and in particular ways, and where life is primarily a process motivated by genetic perpetuation – all of which is framed by and securely coupled to the notion of accumulation (accumulation of wealth, in the case of human beings) as the basic measure of success. Knowledge, in this world, must be found through reductionism, dissection and taking bits apart; imagination that conjures animated landscapes are no more than frivolous flights of fancy – fun for kids, maybe – but certainly not ‘the truth’. Using this as the governing perspective to explain life means that bio- and geo-diversity becomes little more than the backdrop and stage upon which human lives are enacted, with the water, the air, forests and other non-human entities retained, controlled, and engaged with solely as props for human use in their never-ending dramas.

However, the depiction of the earth as comprised of inert material substances and merely reactive entities is seriously countered by the immense body of cultural and phenomenologically focused literature that can be found in the world’s libraries.¹⁶ These accounts provide compelling alternative perspectives with which to appreciate and understand the multitude of other-than-human forces and beings that actively shape human existence. Together, they demonstrate that material, in its many forms, rather than being mute, *is* experienced as communicative, affective and, importantly, storied; each entity, every ‘thing’, every part, whether natural or artificial, and even the totality – ‘the whole’, as Haraway reminds us – has a story to tell.¹⁷ Moreover, materiality is also regularly presented as persons (not people) with dispositions and individual temperaments that cannot be successfully categorised using orthodox typologies.¹⁸

Expanding the notion of personhood out from people to include other entities accepts that the world is comprised of blending subjectivities that similarly need to be cared for and that have comparable abilities – to broadcast messages, learn and even teach – as the works of Frantisek Baluska, Stephano Mancuso, Monica Gagliano, Charles Abramson, Martial Depczynski, Susan W. Simard and Steve Beyer have amply demonstrated.¹⁹ Consequently, to live with these others they must not be used recklessly, nor should entities be moved, destroyed, or inconsiderately ignored without understanding that such changes by definition will alter the totality,²⁰ and with that, could bring detrimental consequences for how life can live. As Nurit Bird David and Naveh wrote,

To cut such ‘green’ branches is considered *tapu* (wrong conduct toward others; Bird-David 2004b: 332-4) because, they explained, this ‘hurts’ the tree, which ‘like us has a soul’. One Nayaka further explained that ‘every [forest] tree is a living being, a tree has a soul. Like people have blood, trees have water’.²¹

As a result, and despite the dominant and loud claims that continue to insist matter is lifeless, it is not always obvious that plants are unable to communicate with us.²² Nor is it obvious that we cannot be related to a red macaw.²³ People around the world persist in experiencing the world as alive, bursting with personalities, and from this draw various assorted conclusions about how to behave, who is kin and where and how one finds knowledge about existence, as the following quote from Chumpi, a Kawapi individual from the upper Amazonia, explains.

Woolly monkeys, toucans, howler monkey... are persons, just as we are. The jaguar is likewise a person. ... for they are, as it were, our relatives by marriage. They live together among their own relatives; nothing they do is by chance; they talk among themselves; they listen to what we say; they intermarry in a proper fashion. In vendettas, we too kill relatives by marriage, but they are still relatives. They too can wish to kill us.²⁴

In a similar vein, the Nayaka not only share the forest with the other-than-human dwellers, but they also communicate directly with them too, as the following short vignette demonstrates.

Out walking with Naveh, Chathen encountered an elephant. As they approached the elephant ‘Chathen repeatedly said to the elephant:

‘You are living in the forest, we are also living in the forest; you come to eat here, we are coming to take roots ... we are not coming to do you any harm’²⁵. In his words, Chathen emphasized co-dwelling in the forest and points of similarity in an attempt to pre-empt confrontation.

As this passage illustrates, ethnographies have gone a long way to inspiring conversation about how to approach the wealth of differing perspectives and ontologies that populate the world today. Scholars’ arrogant habit or tendency towards translating these vivid accounts away or concluding that ideas such as forests being persons or possums being cousins to humans must be merely symbolic devices, as Gilbert Herdt argued, are, thankfully, as Sam Hurn has shown, becoming a thing of the past.²⁶

In tandem with the ontological turn in anthropology, which asked the question, ‘what if these alternative understandings about the world were embraced as reality?’, scholarship is moving away from the limitations associated with the adjudicating, colonial and rational mindset of modernity and is moving towards contemplating not just a lively world but also a world where different perspectives can co-exist without contradiction. Numerous cultural ontologies (accounts that explain reality) offer an animated picture of another world utterly dissimilar to the one lacking in vitality and personality presented earlier. In contrast, these accounts demonstrate that the soils, plants and rocks are not only alive with purpose, but also provide insight, knowledge and wisdom, and in consequence forge significant relationships with people – relationships that enable people to be taught by and have informative friendships with the things around them.²⁷ As Monica Gagliano wrote,

Each plant has its own song and its own language to sing it... these songs are not metaphors but tangible gestures of a plant’s fondness to communicate and relate to the human through kinship. They are a blessing that grants the human person access to the enriching powers of the plant person, an invaluable gift.²⁸

The notion of other-than-human wisdom is often associated with animist ontologies, which tend to avoid the assumption that physical appearance is an indicator of internal identity. Rather, following Vivieros de Castro’s ‘perspectivism’, physical appearance is conceptualised as almost a covering that disguises the fundamental physical or material similarities within.²⁹ This means that categorisations which rely on exteriors fail to appreciate the inner individualities of worldly items. To fail to recognise inner states establishes a

landscape occupied by disparate random entities who are often represented as at odds with each other, fighting for survival, rather than working together cooperatively, or negotiating similar events and dealing with analogous concerns. When conceptions of nature depict it as reduced to haphazardly scattered or clustered ‘bits’, one is taught, even forced, to understand things in isolation. Using this reductive approach positions entities as disassociated from the wider whole.³⁰ This makes it easy to disregard specific bits as possibly insignificant and thereby maybe reject or eradicate them. On the other hand, animist systems perceive a continuity beyond, or running through, the outward appearance of difference. Any differences in form belie or disguise the inner resemblances in ‘motivation, feeling and behaviour’ that animate, as Descola puts it.³¹

Numerous communities around the world appreciate life in this way, be it in the form of animism or pantheism; aliveness runs through the forms that shape the landscape. Neo-, eco- and traditional pagans experience this similarly, as do adherents of probably all traditional religions around the world. According to Surrallés, in Peru a universal vein of potentiality runs through all materiality.³² Comparably, in Canada, it is only the skin that hides the underlying humanity in every being and, according to the Kasua in Papua New Guinea, ‘the bodies of humans, trees, and animals are all filled with the same substances: *bebeta* (blood), *ma* (a vaginal humour), and above all the omnipresent *ibi* (which means ‘stomach fat’ but also ‘tilth’ and ‘latex’), which is the source of the materiality of all organic and abiotic bodies’.³³

Phenomenological accounts also provide a wealth of experiences that demonstrate how engagement with the landscape provides an interactive, visceral field of co-creative significances, rather than a backdrop, stage, or location on which to enact human lives. These experiences not only generate sensorial conclusions but also reveal that the sensations produced are a result of being in relationship with, or becoming-with, the world, and as such provides knowledge *from* (rather than about) the mountains, lakes, or moonlight in the way of feelings, connections and associations. Feelings or sensations therefore are generated by, in and through relationship and hence, when careful personal attention is afforded to them, they encourage novel realisations, prompt significations, and create meanings that are valued as noteworthy moments and life lessons – stories to be told that continue and persist as ways to think about the world.³⁴ People, just like other animals, sense the world in multiple ways – from visual, haptic and tactile contacts and through the changes in physical sensations that these engagements engender within. This might simply include conclusions about the air temperature, the wind direction, or the effects of recent meteorological conditions on the garden, but can also include sensations such as

the mud squelching under foot or between one's toes, one's fluttering heartbeat and a sharp intake of breath on contact with the icy chill of stream water, a surge of gratitude as the juice of a freshly picked strawberry dribbles down your chin on biting into it, or the sharp pain from the stabbing received by grabbing a thorny plant stem. Either way, the world is constantly drawing our attention and causing sensations to viscerally rise and fall. This is the conversation from body to body: the world is talking if we are just prepared to pay attention and listen.³⁵

The abundance of literature that describes or outlines alternative methods, ways of knowing and ways of being with the world, provide interesting novelties that tend to captivate and fascinate. Perhaps more importantly, they also endure and may be attempting to take root again. While the deadening mechanistic thoughts of industry and geo-politics advance across the now globalised landscapes, a sense of dis-ease about its systems and devices is growing. And not as a reversion to spirituality,³⁶ where ghostly authorities' wishes are attended to, but as a way to recognise, respect, and celebrate how one exists as part of a vast, pulsing network of influences that stretch out, down and deep into the earth and through other animated worldly entities.³⁷ And to embrace alternative ontologies where those things that are not human are considered persons and kin, and where knowledge can be given by birds or valleys or fish to people.³⁸ One is not alone.

The land we walk on *is* the bones of our ancestors

In association with an openness, even resurgence of, these ideas, we may argue that a gentle wave of something Jane Bennett (following Max Weber's earlier warnings regarding modern life) or Patrick Curry might call re-enchantment is tentatively in progress.³⁹ The expansion of personhood to incorporate non-human entities – including the entire planet – demonstrates how barriers to accepting an animated or alive world are receding.⁴⁰

Personhood, like agency, is often assumed to be something only humanity possesses. Human focused definitions associate personhood with the ability to be rational, to choose and to communicate, and provide persons with civil liberties and rights. However, these definitions have not always included all humans, as the right to own slaves sadly illustrates. Nevertheless, one might suppose that it is only people who can legally have personhood, but this is not the case, as entities such as corporations are given the status of personhood and therefore have rights under the law. Consequently, the notion of personhood extends out from people and in so doing establishes other things as persons with rights for protection.

The concept of environmental personhood is fairly new, having emerged in 1972 from a book titled *Should Trees have Standing?*. The author, Christopher Stone, argued that elements of the environment should have the capacity to bring action to court if aggrieved. Concerned about the destruction that industrial developments were producing, Stone asserted that people who retain purposeful relationships with any aspect of the environment should be able to advocate for and legally defend that entity.⁴¹ Remarkably, his call for the environment to be recognised in this way generated considerable discussion and is now regularly used in the courts to protect aspects of the landscape around the world.⁴²

In 2014, after decades of disputes, the Whanganui River in New Zealand (*Te Awa Tupua*) was the first river in the world to be established in law as alive and as a legal person. The attribution of personhood has not only provided the river with rights, but it has also delivered human guardians to ensure all rights are upheld. Giving the water rights was deemed necessary to ensure its wellbeing, partly because of fears about pollutants in factory effluent waste being released into the river.

According to Maori ontology, the source of Whanganui River are the mists that surround the top of the nearby mountains and birth an alpine stream on Mount Tongariro and other tributaries, which then feed the river. Local indigenous thought does not restrict the river's presence to the water channel, but rather considers the entity to be almost boundary-less, contiguous with the surrounding mountains and the sea.⁴³ This conception extends its influence out from a particular location, as there are no boundaries to the whole world.

The Iwi people explain that the river's existence is the result of ancestors arguing. The ancestors, in this case, are not people; they are mountains. The path that the water runs through was created as one of the mountain ancestors, fighting and hot with rage, took flight – fleeing towards the sea, scattering parts, and altering the landscape. Consequently, the entire area is this ancestor, and the mists, valley, water, and plants of the area are how the ancestor manifests today. On hearing that the status of the river was successfully changed to that of 'person', Tūtochu Whakaturua said, 'Ko au te awa, Ko te awa ko au - I am the river, the river is me', thus highlighting not only how the 'bones' of all ancestors form the ground we walk on, but also the fundamental, ongoing material association and connectivity between human bodies and the landscape.⁴⁴ The changing status has also simultaneously rebalanced Maori sovereignty over the area.

Relatedly, animal sentience is now also being reconsidered in several countries. Current debates, echoing those above, focus attention on animals as property, particularly in association with moral positions on the pain and suffering inflicted

by industrial or intensive livestock production; these debates are also calling for animals to be recognised as subjects rather than objects.⁴⁵

The idea that things can become persons may seem alien to some, but Naveh and Bird-David reminded us of its deeper roots when they recently posed the question, ‘How did persons become things?’⁴⁶ Using ethnographic information from the animist hunter gatherer culture of the Nayaka in India, who are increasingly changing their life ways to include selling produce, they set out to ‘explore how domesticated animals, plants, and land [are beginning] to “come into being” as objects amidst a Nayaka “world of persons”’.⁴⁷ In European history, therianthropy (the belief that humans can metamorphose into animals) and the experience of the aliveness of the landscape, gradually disappeared. Tim Ingold considers that the kind of domination necessary to cultivate or engage in animal husbandry was responsible for the shift in perspective.⁴⁸ Comparably, Descola concluded that the development of hierarchies within social relations is to blame.⁴⁹ Danny Naveh and Bird David, on the other hand, noted that it is possible to employ what might be considered contradictory ontologies, simultaneously: that is, to see some aspects of the world as animated and alive and others as objects lacking any kind of life. Using the Nayaka experience as illustrative, they note that a change in perceived utility provides the impetus to accept some subjects as transformed into objects. Consequently, Nayaka individuals hold two categories of animals, plants and land concurrently these days: those in the forest are ‘sentient co-subjects who think, feel, make decisions, and, to an extent, understand what is said to them’,⁵⁰ while ‘[u]nlike their forest counterparts, domesticated animals and plants are treated, sometimes quite aggressively, as objects, framed according to their use value and often according to their exchange value as well’.⁵¹ One does not live with domesticated entities as equals and therefore their status shifts accordingly.

Establishing that things are *for* something appears to be connected to the kind of objectification that is now dominant across the world today. However, cautioning a tidy dichotomy between ‘forest “persons”’ and ‘domesticated “things”’, Naveh and Bird-David explain that persons slowly become things when put in different contexts, specifically in economic contexts where items are commodified and quantified.⁵² They also remind us that the world uses multiple perspectives contemporaneously without recognising any contradictions – ‘the professional logger who privately cares for his garden, or the industrial butcher who privately cares for his dog’ are cited as examples of how diverse identities are regularly employed without ambiguity.⁵³

The Anthropocene: do we have time?

*'It is later than you think' (W. H. Auden)*⁵⁴

There is a sense of urgency filtering through public narratives these days – a sense of urgency articulated in the many missives the public around the world are confronted with daily, as almost every news outlet provides yet another example of how one area after another is suffering as a result of the climate changing. These now regular events, having conclusively diffused across the public imagination and discourse, for many, unquestioningly demonstrate how the current global situation – that is, the shifting geo-meteorological and environmental events – are the result of human activity. Taken to a logical conclusion, these events suggest planetary life as we know it is seriously threatened, and in association, numerous global and national organisations have been slowly formed with a view to find solutions to address the problems.

In keeping with the name now given to the Anthropocene Age, any blame for substances like water altering their behavioural patterns falls squarely in the lap of human activity.⁵⁵ From the melting glaciers or pollution in the oceans, to the floods, droughts and damaging storms, to the highest recorded temperatures, to the soil's infertility and the air's toxicity and to the decline in biodiversity – it is the vast array of industrialised activities, emerging as they have from the mindset of accumulation, objectification and resource use, that have provided the conditions for these changes. This is not news to any of us. And as the world is being presented as teetering on the edge of becoming a nightmarish dystopia that generates monsters out of the mutating materials that life forms itself from, for increasing numbers, enough is enough.⁵⁶ Human exceptionalism must end its rule.

However, solutions are not straightforward. Innovations tend to be rooted in economics and politics in support of the overarching aims of modernity. Typically, powered by the fantasy of growth, the voice of the economist, the data technologist, the mathematician and the engineer now sit at the top table, guiding, informing, and choosing. Appeals to other 'gods' is often deemed eccentric – interesting, but insufficient – and any other knowledge, while charming, is filed under 'story' not 'fact'. But as every cosmologist knows, every account is just another story, every fact can only be considered truthful through the lens of the cultural ontology it emerges from. This then is not a matter of truth, but of truths, of multiple simultaneous worlds, where each knowledge system holds its own in context, which means that other voices must be drawn into discussion if whatever solutions are reached can be holistically and harmoniously applied. This volume provides alternative voices and perspectives and brings ancient but also simultaneously new ideas to the table.

The chapters

The individual chapters variously consider the role of the landscape and its features in shaping human lives, and explore how the conclusions reached provide a picture of the world worlding, with life as a cohered, if differentiated, organic vitality actively co-creating existence in unison, and where people are just one aspect of this wider motivating whole.⁵⁷ Each author has approached this from a novel perspective to provide an overarching picture of how all lives living impact each other materially, not incidentally or in ways one can ignore – and in doing so act as a reminder of the physical ties that, from one perspective, can be thought of as binding lives together and, from another, demonstrates that every item, thing and force happening in the world is an aspect of a vast, influencing oneness.

The book is loosely subdivided into three merging subject areas – land, water and sky. The section on land provides a variety of perspectives on how the soil, the landscape, and the environment shape and are shaped by human lives.

Kim Malville's chapter provides us with a vivid picture of the life of mountains. He reminds us of key links between the landscape and environmental features by showing how they are the co-created work of numerous forces including human activity. As such, he demonstrates that the landscape, rather than being simply inert and driven by geo-physical forces, is active with personalities and preferences. Most importantly, the chapter illustrates how the landscape – particularly mountains, in this case – is not an inert and altogether benign sphere, and therefore, must be approached with sensitivity and care in order to avoid dangerous consequences. Using a historical perspective, Malville illustrates the role that specialised practitioners have played in the creation and maintenance of the landscape in Tibet. Following the path of the great Buddhist teacher and magician Padmasambhava, Malville illustrates how the influences of the demons of earthquakes and avalanches were subdued by planting spiritual treasures, sacred texts and teachings around Mt Everest for future generations.

Glenda Tinney, an ecologist turned early years teacher, uses personal childhood memories of splashing about with tadpoles and mud in Wales to think about the value of changes in the conceptions of and interactions with the environment in the global North. Using Harmony Principles, Tinney explores the links between 'right thinking' and 'right action' and, by using experience of climbing a tree, explores how the environment can teach us about how we want to be human. Her chapter illustrates how the living and inert things around us play an active role in providing life-lessons that may be missed on most curricula in current times.

Suzanne Klein and Lilith Goldschmidt continue to explore the construction of landscapes by turning our attention to the history and development of photography as a method to record 'nature'. Their work outlines the role representations of

the other-than-human world using this medium have constructed nature into a series of comprehensible frames for viewers. Rather than providing true likenesses of reality, as the technology suggests, this chapter demonstrates how the ‘photographic act’ disguises – almost makes invisible – the choices and presence of a photographer in the process, and how memories and conceptions of nature have been carefully crafted through this lens.

Alan Ereira’s chapter challenges orthodox ecological conclusions by providing a rich ethnographic picture of the Kogi or Kaggaba in Colombia, a small-scale society existentially and intimately occupied with caretaking the Earth using complicated, dense and secret material and psychic practices. He outlines how conceiving of a landscape as comprised of distinct ‘things’ is alien to this indigenous group and reminds readers that, while it may appear axiomatically accurate to imagine that things must have edges to exist, from a New Materialities perspective, the notion of edges or boundaries is problematic; things materially blend and seep into each other, and so therefore should not be thought of as individualities. Using this as a springboard into a discussion on the Kogi’s perception of the landscape as a singular, living entity, the chapter advances a picture of a people who live in dialogue with the Earth. Chiming with the numerous examples of small-scale societies around the world who continue to live in an animated world, this chapter offers a strong counterpoint to the view of a world made up of separate, competing things.

The next section concerns itself with how water plays a role in human lives.

Ilaria Cristofaro adopts an anthro-archaeological perspective on the immateriality of materiality to continue the discussion. Cristofaro’s chapter explores conclusions and the social significances of the shimmering play of light cast from the moon or sun on the sea. Using a phenomenological approach, Cristofaro demonstrates how these glittering paths provide inspiration, even persist in urging people to think through complex and emotionally potent aspects of existence – specifically how death is negotiated and understood. By using these beautiful visual signs almost as clues in the landscape, Cristofaro reminds us how people have engaged with and represented the story of death.

Bernadette Brady’s chapter is inspired by the pre-Christian Celtic mythology provided by a rich compilation of manuscripts called the *Mabinogion*. The *Mabinogion*, written in the 12th-13th centuries in Welsh, is a collection of stories about ancient Wales. Brady focuses on the connections between the mythological accounts in the text and the geographical locations as they appear in the landscape, to make conclusions about the cosmology as presented by the stories. She does this by focusing specifically on the Afon Cynfael river in Gwynedd in the north of Wales, as the river is named in the fourth branch of the mythological collection,

and by paying careful attention to the construction of the story, illustrates how it provides clues to understand the calendar and seasons.

Alexander Scott is concerned with elucidating the complex network of materials and meanings that collect, seep, and spread out to, and from, places. Attending to water in Liverpool, he shows how any sense of place is not restricted to that location but rather almost breathes, and certainly flows, in and out in concert with multiple localities, forces and ideas that gather, muster, and amass. Scott notes that identities are relational and referential, and demonstrates how places – in extending out from any geographical location in multiple tangled, even spiralling ways – co-produce their identities in association with numerous other spaces, impacting in material and immaterial ways.

Moragh Feeney-Beaton also plunges into water to think about how swimming might be helpfully conceived of as a liminal act. Explaining her experiences of ‘wild swimming’, she explores how engaging with water in these settings provide a space where the notions of the ‘ordinary’ and the ‘extraordinary’ entwine to produce significant numinous experiences in the everyday. Feeney-Beaton maintains humanity is occupied in a constant ‘search for uplifting’, and this chapter reveals water’s part in realizing that.

Melanie Long offers an ethnography of living on house boats and details the kinds of practical negotiations one must make with the water, and the other animals that live with the water, to ensure a workable relationship in what she positions as a liminal space. The liminal, as established by Arnold van Gennep and developed by Victor Turner, is a concept that describes a creative, unpredictable, unsettled zone between two more normative ones.⁵⁸ For Long, boats as homes provide a portion of ‘dry land’ floating on the fluid changeability of the river and as such can be understood as troubling the boundaries of the more common practice of living on the soil. Choices to live this way are numerous, but Long importantly demonstrates how this choice emerges through a sense of kinship with, or connection to, both the river and also the boats.

The final section draws on cosmological features to illustrate that the connectivity of existence moves out from the ‘edges’ of the atmosphere past the night sky and further into the universe. It draws spirituality ‘down to earth’ and provides a series of examples that demonstrate how earthly spaces offer and create places of worship.

Stan Iwaniszewski’s work provides a detailed account of the significance of celestial bodies for human lives. Outlining the many correspondences between activities in the heavens with those below, the reader is shown how the cosmological meanings enable culturally significant knowledge to be generated and lived by. Using ethnographic information from the Aztecs, Iwaniszewski

problematises and extends any orthodox notion of personhood out from humanity to both encompass features in the landscape and above, and also to allow aspects of 'the person' to seep and be distributed through the environment.

For Selma Faria, current times demand a shift in paradigm away from the dated focus on survival towards one that proposes an ecologically integrative model – one that attends to equilibrium and interconnectivity over accumulation. And that draws together the bodies of people with the rest of the environment so that all existential connections, from cosmological features to the chemical composition of our own bodies, are taken into account.

Fenella Dean approaches the slippery concept of the sacred to untangle some of its complications and considers how spaces qualify for the title 'sacred' by using the example of the O2 building, a fairly new construction built on a disused site over 20 years ago in London. By attending to the materiality, function, use and construction of the O2 arena in London, Dean demonstrates how spaces develop their sacred status in association with human experiences, rather than in isolation or intrinsically, and that this process of almost, what one might call, sacredisation relies on conscious attention to how objects, spaces and things enact their place within the profane or mundane of daily life. Again, tying in cosmological activities, Dean's chapter provides another example of how spaces materialise spirituality through the construction of ideas into earthly forms and how any human connection or links to the cosmos can be made tangible in built-up areas.

For too long the standard Euro-American view of the world as an inert resource to be exploited for human benefit has held most of the world in an economic, profit-driven stranglehold. Current conditions suggest that the increasingly ruthless sophistication of industrialised methods is responsible for the slowly unfolding alterations in environmental conditions, as we hear regular reports on how the processes of worldly materiality are altering the way they function. The weather patterns are changing in almost every region, often causing previously unimaginable, even mythic destruction: towns are washed or burnt away overnight, oceans are part plastic, and the air we all breathe is heavy with particulate matter.

With few effective adaptation strategies in place, it appears that the route to global disaster is being set. The Euro-American mindset and the mythical creation – 'the market', interested only in competition, consumerism and accumulation – is blamed. Small waves of activism in the social, economic and political spheres around the planet seek to change this perspective, with some moments of success. This book represents our contribution to add to the voices that are calling out for change. In this case, we want a change of mind and

heart, a change that realizes – makes real – the connections between us and our material partners. However, it is also important to challenge the view of the world as meaningless by reasserting its role as meaning-full, and to recognise the human role as not above and beyond nature, but fully within and a part of nature. We therefore need to understand, respect and explore our relationship with world around us and this book, in its own way, is a part of this much larger mission.

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