



THE UNIVERSITY OF
SYDNEY

February 2021

Longform Series

Sydney Environment Institute

Shallow and Deep Collaboration: Art, Ecology and Alexander von Humboldt

—

Dr Dalia Nassar

Shallow and Deep Collaboration: Art, Ecology and Alexander von Humboldt

Presented at the Iain McCalman Lecture

February 3, 2021

by Dr Dalia Nassar

The research, events and operations of the Sydney Environment Institute take place at the University of Sydney, on the Gadigal lands of the Eora Nation. We pay our deepest respects to Indigenous elders, caretakers and custodians past, present and emerging, here in Eora and beyond.

The Iain McCalman Lecture celebrates SEI co-founder and former co-director Iain McCalman's dedication to fostering and pioneering multidisciplinary environmental research. The lectures aim to highlight the work of early to mid-career researchers working across disciplinary boundaries to impact both scholarship and public discourse.

sei.sydney.edu.au



Left to right — SEI Director and co-founder David Schlosberg, Deputy Director Daniell Colermaier, Dalia Nassar, co-founder Ian McCalman and Deputy Director Michelle St. Anne, February 2021.

I want to begin by acknowledging the Gadigal people of the Eoria nation, on whose lands we are gathering today and pay my respects to their Elders past and present.

I am deeply honoured to be giving the 2021 Iain McCalman lecture, a lecture named after one of my favourite people at this university. I am grateful to the Sydney Environment Institute for all the thought and effort that has gone into preparing this, and I want to thank all of you for being here today. vv

The environmental crisis is *the* crisis of our time, and perhaps the greatest crisis that humanity has ever faced. A crisis that we have known about for over three decades and yet, despite widespread knowledge of the mammoth changes, dangers, and innumerable deaths, we do next to nothing. Why? This is the million-dollar question.

Answers abound. It has to do with our psychology. We simply cannot act in the face of a crisis this large. It has to do with the deadly marriage of politics and economics. So long as short-term profit is high, long-term thinking is impossible.

And, perhaps more fundamentally, it has to do with the fact that we have failed to fully comprehend the meaning of the crisis. For the ecological crisis is not only a bio-physical crisis, but also, and as the question implies, a crisis of knowledge. We *know*, and yet we do not act. It is as if we know, but don't *really* know. Our knowledge does not move us.

This tells us something. It tells us that the environmental crisis challenges not only our most trusted concepts, ideals and norms, but also the *very way we know*. It tells us that knowledge, as it is currently practiced, is inadequate, problematic, even dangerous

in a time of crisis. It also tells us that we must join the efforts of the natural sciences with those of the human sciences. We must find a way to bring together, even integrate, the disciplines that investigate the world "out there," with those that investigate the images, metaphors, and concepts that structure knowledge, and determine the relation between knowledge, behaviour and action.

But what should this joining of the arts and sciences look like? And how can this collaboration bring about a new mode of knowing—one that translates knowledge into action? My aim today is to venture an answer.

In 1973 the environmental philosopher Arne Naess drew an important distinction between shallow and deep ecology. While shallow ecology aims for sustainable development with a view to preserving the status quo of capitalist society into the future, deep ecology calls for a fundamental transformation in our whole attitude towards the more than human world: a transformation of our norms, practices, institutions, and ways of life.

With a nod to Arne Naess I wish to distinguish two forms of collaboration between the arts and sciences: shallow and deep collaboration.

Shallow collaboration maintains the status quo of distinct disciplines. The disciplines continue to work within their boundaries and only collaborate at the end of their separate efforts. While the natural sciences address the bio-physical aspects of the crisis, the arts address its psychological, sociological and normative aspects. The sciences deliver knowledge about extinction or climate change, while the arts make this knowledge tangible and engaging to a public that is uninterested,

lethargic, or overwhelmed. On this model, the arts serve to communicate and publicise the sciences.

In contrast, deep collaboration transforms the disciplines from the ground up. Disciplinary boundaries are porous and collaboration occurs from the beginning. This facilitates new ways of seeing and new ways of thinking. Deep collaboration asks us to do what we do differently in light of what the other brings to the table. It asks us to see the world through another framework, and allow it to encroach upon our discipline, and stimulate us to ask new questions. This form of collaboration involves deep transformation—transformation in the ways in which we approach the world and understand ourselves within it.

Perhaps in the present circumstances, where there is little support for breaking disciplinary boundaries, this is a very difficult task. But is it impossible? And, more importantly, is it desirable?

To answer these questions, I will draw on a historical example, and I'll do this for two reasons.

First, I want to convince you of the possibility of this form of collaboration by showing you *that* it happened and *how* it happened. As modern science emerged and achieved increasing significance in Europe, the distinction between the arts and sciences was not always or even generally relevant. Often the same person who undertook experimental and observational work was also engaged in philosophy, poetry or the visual arts. The two tasks were not regarded as opposed, but as part of one project. From the Renaissance to the mid-nineteenth century, so-called scientists employed methods that we now associate with the arts. They sought to “interpret” nature in the same way that one interprets a historical or literary text. They used illustrations and travel writings to extend their understanding of geography and plant and animal distribution. And they drew on various artistic media to describe and categorise living beings. By considering how the methodologies of the arts played a crucial role in the emergence of scientific insights, we will see that deep collaboration is not only possible, but also generative of new forms of knowledge.

This leads to the second reason. Today, we assign the natural sciences the task of determining the world “out there,” while

to the humanities we assign the task of investigating the world “in here,” the emotive, subjective and distinctly human. But if historical examples show that this division of labour is relatively recent, then we have to ask ourselves: do we want to maintain it? And if not, why not? Is it desirable for the natural sciences to be interested in feelings, lived experiences, and ethical norms, and is it desirable for the arts to generate new insights into the natural world? The answer, I believe, is, yes—and it is precisely when this happens that deep collaboration is realised.

So what is the historical example I have in mind? As you might have guessed from the title of the essay, it is that of the German scientist-explorer, Alexander von Humboldt.

Humboldt, who lived from 1769 to 1859, was perhaps the most famous scientist of the nineteenth century. On the 14th of September 1869, the centenary of his birth, Humboldt was celebrated across the world: from Alexandria to Adelaide and Melbourne, from Moscow and Paris, to Buenos Aires, Mexico City and Chicago. In Berlin, his hometown, 80,000 people gathered despite torrential rains, while in NYC entire houses disappeared behind large posters of Humboldt's face and City Hall was adorned in banners. Cities, universities, and various natural phenomena—including the Humboldt current—have been named after him. (Not, though, Humboldt University in Berlin, which was named after his brother, Wilhelm, the comparative linguist.)

In 1799, after failed attempts to travel to the French colonies, Humboldt was given permission by the Spanish Crown to undertake scientific exploration in South America. On June 5th of that year, along with his scientific companion, Aimé Bonpland, Humboldt set sail from Coruña, Spain, arriving some six weeks later in present-day Venezuela. It was during the five years he spent in the Americas that Humboldt undertook his most influential research. Charles Darwin, following in Humboldt's footsteps, noted in his diary that it was Humboldt's book *Personal Narrative* that he read over and over again while voyaging on the *Beagle*.

Often described as the “father of American environmentalism” and the founder of modern ecology, Humboldt is perhaps the first European thinker to develop a comprehensive vision of nature as a dynamic, organised and developing unity.



Some twenty years before Ernst Haeckel coined the term “ecology,” Humboldt had articulated the idea of nature as a dynamic “household” (oikos) in which living beings and their surroundings develop in relation to one another. As he puts it in one of the first statements of his five-volume *Cosmos*, nature is a “unity in multiplicity, the connection of the many in form and mixture, of natural objects and natural forces, as one living whole.”

It is this idea of nature as a dynamic household that underpins Humboldt’s first concrete ecological observations, which he made in South America.

In March 1800, Humboldt arrived at the once lush area of Lake Valencia or Lake Tacarigua. In contrast to his expectations, he encountered a region suffering from drought. Through conversations with indigenous locals, creole farmers and his own investigations, Humboldt came to a surprising conclusion: the felling of trees, and the replacement of forests by farms, had fundamentally transformed the climate and the soil. What was once a verdant area, with regular rain, had become a desert. This is how he puts it:

When forests are destroyed . . . as they are everywhere in America by the European colonists, the springs . . . dry up, or become less abundant. The beds of the rivers, remaining dry during a part of the year, become torrents whenever heavy rain falls on the heights. With the disappearance of sward and moss from the sides of the mountains, the waters falling in rain are no longer impeded in their course: and, during heavy showers, instead of slowly augmenting the level of the rivers by progressive filtrations, they furrow the sides of the hills, bear down the loosened soil, and form those sudden inundations that devastate the country. And so it results that the destruction of the forests, the want of permanent springs, and the existence of torrents are three phenomena closely connected to one another.

In this statement, which had a profound impact on environmental policy in the United States, Humboldt pointed to two crucial, but hardly recognised, facts: the influence of trees (forests) on the environment and the influence of human beings on the environment. While Humboldt’s predecessors had recognised that living beings are affected by their environments, they had not considered

how living beings themselves affect their environments: that is, how living beings, including humans, fundamentally transform the climate, soil, plants and animals of a region.

Humboldt’s insight was radical for his time. What is surprising is that his insight remains radical today. Although it might appear to us as entirely straightforward, we continue to find it difficult to conceptualise the dynamic relationship between living beings and their environments.

As biologist Sonia Sultan puts it in her 2015 book, *Organism and Environment*, while “conceptualising the relationship between organisms and their environments is pivotal for both ecological and evolutionary investigations,” it remains the case that “[i]n both disciplines, this relationship is generally seen as an interaction between separate entities, in the sense that an individual whose traits are internally (i.e., genetically) determined confronts an externally defined and measurable environment”.

In other words, some two-hundred years after Humboldt, we remain bound to a notion of the “environment” that fails to take account of his ecological insight. For what he saw is that the “environment” is not a stable backdrop for animal (and plant) activity, but an ongoing dynamic collaboration between living beings and their surroundings. This means that the two – organism and environment – are absolutely interdependent. The one cannot exist without the other: the climate and soil of Lake Valencia cannot exist without the trees—and vice versa: the trees cannot exist without regular rain and nutrient-rich soil. To conceive of them as originally separate entities that then somehow come together is to misunderstand them and their relation.

The difficulty that Sultan articulates was widely discussed by Humboldt’s predecessors and contemporaries. The eighteenth-century French naturalist, George Louis Leclerc Buffon, put the matter in the following way: our intellect proceeds linearly or sequentially. We move from one object, to the next, to the next. This, however, is not how nature proceeds. Rather, Buffon writes, nature “does not take a single step except to go in all directions; in marching forward, she extends to the sides and above.” The problem, then, is epistemological, having to do with an incommensurability between the way we know the world, and the way the world

"Humboldt's insight was radical for his time. What is surprising is that his insight remains radical today. He saw that the "environment" is not a stable backdrop for animal (and plant) activity, but an ongoing dynamic collaboration between living beings and their surroundings."

— Dalia Nassar

Alexander von Humboldt and Aimé Bonpland at Mount Chimborazo, Ecuador (1806) by Friedrich Georg Weitsch.



is. We see objects as separate and grasp relations along a linear causal nexus: one thing moves and causes another to move. In nature, however, objects are interrelated, and relations are manifold and multi-directional.

Some twenty years after Buffon, Immanuel Kant explicated this difficulty from a slightly different angle. In the *Critique of the Power of Judgment*, he argues that the reason we fail to understand living beings has to do with the character of our cognitive faculties. The fact that we proceed from one object to the next means that we can only grasp a certain kind of whole, a whole that is made up of separate, pre-existing parts. A clock is one such whole. The bits and pieces that make up the clock are produced separately. When they are put together, we have a clock.

Living beings are not wholes of this sort. Their various parts—the hearts, lungs, veins, and so on—do not emerge separately from one another. Rather, they emerge in relation to one another and as parts of a living body. Think of the formation of an embryo.

This means that the structure of a living being is decisively different from that of a clock. The living being is not the outcome of separate parts that are brought together to make a whole. Rather, the parts can only exist in relation to one another, within the context of the organism as a whole. This reveals a certain circularity in the structure of living beings: the parts exist only through the whole and the whole exists only through the parts. And this circularity, Kant concludes, makes it impossible for us to properly grasp them.

In short, our cognitive tendencies lead us to apprehend the world as composed of separate objects, whose relations are exclusively linear. And so—whether we are speaking of the relations between the parts of an organism, or the relations between organisms and their environments—we separate that which is existentially and biologically inseparable.

The question then is: How did Humboldt come to see organisms and their environments as a dynamic collaboration? How did he come to recognise that a particular environment does not pre-exist its inhabitants, and that the inhabitants do not pre-exist the environment?

In January 1806, Humboldt delivered his first lecture after returning from South America at the Prussian Academy of the

Sciences in Berlin. There he offers insight into his methodology and the knowledge he gained during his travels. Titled “Ideas for a Physiognomy of Plants,” the lecture introduces Humboldt’s audience to a new way of looking at the natural world: a way that he calls “physiognomy.”

Just as we discern a person’s character through their gestures, body language and expressions, so the physiognomist of nature (the new scientist that Humboldt wants to establish) discerns the character of a landscape through the expressions and gestures of plant and animal life. Accordingly, the physiognomist of *plants* is interested in those aspects of a plant that make the greatest impression on the viewer: whether it attains to great heights (like palms) or twists and turns (like lianas), whether its leaves are broad like those of the banana tree or narrow like conifer needles.

To elucidate the task of this new scientist, Humboldt looks to the landscape painter. Like the landscape painter, the physiognomist is interested in the overall impression that a landscape makes—in those expressive aspects, which give the landscape its unique character. In contrast to a botanist, who aims to categorise, distinguish and separate plants, the physiognomist, like the landscape painter, binds them together. This means that the physiognomist must see not separate trees, or distinct species; rather, they must see trees in relation to one another, see them as members of a forest, and see the forest in *them*.

To give his audience a concrete sense of what he means, Humboldt considers the diverging ways that a painter and a botanist treat leafy hardwoods. While the botanist distinguishes different hardwoods (oak, beech, walnut), the landscape painter allows them, as Humboldt puts it, “to run one into the other,” portraying them as members of a forest. This is because the painter is interested in capturing the overall impression that hardwoods make on the viewer—an impression that is connected to the fact that the different hardwoods grow in relation to one another and together form a distinctive forest.

Trees, as you may know, take on different forms depending on where they grow. Consider the oak, one of the most beloved leafy hardwoods. A solitary oak growing on a hill looks decisively different from an oak growing in a forest. The crown of a solitary

oak spreads out in all directions, eventually achieving a dome shape. By contrast, the forest oak develops a small crown, and its growth is patterned on the growth of the other trees in the forest. An oak in a hardwood forest is an expression not only of the individual tree or the genus oak, but also of the forest itself. The forest is not “outside” the individual oak tree, but literally inscribed in it its very form.

Just as the trees express the forest, so also the forest expresses the trees. The *kind* of forest it is—whether it is cool and humid, or temperate and dry, whether its soil is nutrient rich or poor, how much carbon it stores, and how much rain it receives—depends on its particular trees. The forest environment, in other words, is realised in and maintained through the activities of its trees. The forest is an expression of its trees as much as the trees are an expression of the forest.

By working with form, expression, and gesture, the landscape painter captures this relationship, and thereby presents trees and forest, organism and environment as interdependent realities—as beings that emerge with and through one another.

In this way, landscape painting overcomes our cognitive tendency to separate entities that are internally connected, and to conceive of relations in purely linear or sequential terms. For the painting presents at once, or in one glance, the manifold relations which our usual cognitive procedures can only grasp in sequence. The aesthetic integrity of the painting is not merely an abstract formal quality, but also communicates a sense of the integrity of the environment that is depicted.

From the landscape painter, then, the natural scientist learns *how* to look at nature: not as a composite of separate entities, which are only externally related to one another, but as an ongoing and dynamic collaboration between beings that are internally dependent on one another.

Depending on the lens through which we look, phenomena and ways of being emerge or hide, and our understanding is enriched or impoverished. Art, as Humboldt illustrates, may be the most powerful of these lenses. By drawing on modes of seeing that he learned from landscape painting, Humboldt sought to realise a deeper understanding of the world, and to found a new, encompassing discipline. The discipline we now call ecology.

At this point, you might be wondering about Humboldt’s use of landscape painting as an orientation for the scientist. After all, landscape painting is situated: what is depicted depends on where the painter happens to be and when. Further, much of what is conveyed in a landscape painting is difficult to pin down and articulate in objective terms. The *feeling* of a place, its character, and gestures involve the viewer as much as they involve the view. What is captured in the painting appears to lie somewhere between objectivity and subjectivity. For it refers to both the particular place that is depicted and the impressions and feelings that this place evokes—impressions and feelings that are of this place, that reveal something about this place, but which nonetheless belong to a human subject.

When it came to his own writings, Humboldt explicitly rejected the ideal of objectivity in science, which was becoming standard in the mid-nineteenth century. This is because, he argued, science should offer “living depictions” of nature—not dead ones. That is, depictions that draw on affect and imagination in order to deepen understanding.

This does not mean turning away from truth. Rather, like landscape painting, Humboldt’s writings facilitate an encounter with the world which, on the one hand, allows natural phenomena to express themselves to an attentive observer, and, on the other, engage the observer, thereby revealing to her her own involvement.

The lecture Humboldt gave in Berlin in 1806 was published two years later in a collection of essays titled *Views of Nature*. In the Preface, he explains that his aim is to join a “literary with a purely scientific goal,” such that each essay has *both* aesthetic and scientific ends.

Like landscape paintings, the essays portray an aspect of nature: steppes and deserts, waterfalls and rivers, jungles, and so on. But unlike landscape paintings, which capture a region through visual devices, the essays draw on all of our senses. By describing not only the light, shape and color of the landscape, but also its smells and sounds, its transformations from day to night, seasonal changes as well as changes wrought by human, animal and plant activity, the essays allow the reader to encounter nature as a dynamic process, and to imagine herself walking, climbing or riding through it.



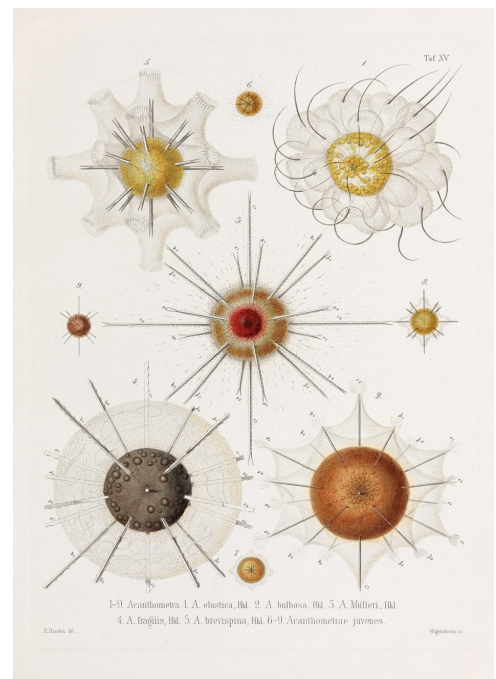
A section of Alexander von Humboldt's Naturgemälde, a "microcosm on one page" depicting Mount Chimborazo, a volcano in Ecuador which he climbed during his five year expedition across South America. Naturgemälde is a German term that can mean 'painting of nature' but which also implies a sense of unity or wholeness.

"What we find in Humboldt's essays are scientific works of art – however contradictory this term might at first appear – works in which feeling and thinking are in the service of one another, where each is willing to be challenged, expanded and transformed by the other."

— Dalia Nassar



Above - Moss and Muscinae (1904) top right, Trochilidae (humming birds) (1899), bottom right, Plate 15, Monograph on the Radiolaria (1862) by Ernst Haeckel. Haeckel's scientific and artistic practice were both significantly inspired and influenced by Humboldt.



"The problem, then, is epistemological. We see objects as separate and grasp relations along a linear causal nexus: one thing moves and causes another to move. In nature, however, objects are interrelated, and relations are manifold and multi-directional."

— Dalia Nassar

The first essay in the collection, "Concerning Steppes and Deserts," begins by situating the reader, imaginatively placing her in a particular spot: the foot of a high granite mountain—or as Humboldt describes it, a granite spine. Immediately, the reader is invited not only to picture the mountain, but also to stand at its foot. From there her gaze turns southward, and rests on "a broad, immeasurable plain," the steppes or llanos. What the reader sees is not a God's eye-view of the landscape, but the steppes as they appear from a particular angle. This angle colors her impression. The steppes seem to "climb and dwindle into the horizon." Having walked to the steppes from the lush valleys of Caracas, the reader is also struck by the sudden change in landscape from the "luxuriant fullness of organic life" to "the barren edge of a sparse and treeless desert..." and feels astonished.

By invoking all of the reader's senses, her feelings and imagination, as well as her body, Humboldt's essays invite the reader to become the wanderer: to imagine what it is like to watch the clouds thickening over the steppes, portending months of rain, and sense the constriction in the atmosphere. To imagine what it is like to hear the sudden and deafening cries of hundreds of animals in the jungle in the dead of night, or what it is like to stand on the banks of the Orinoco river for hours in torrential rain. In reading these descriptions, we do not only think about the particular aspect of nature, nor do we simply see it from a specific standpoint. We also imagine ourselves in the landscape, experiencing it in an embodied and emotive way.

Interwoven with these vivid descriptions are careful observations and detailed measurements of various natural phenomena, as well as comparative,

historical and geographical analyses. The technical details and scientific explanations are not separated from the embodied experiences, but emerge from them.

For instance, the feeling of a constricted atmosphere motivates careful observations of cloud formation before an electric storm, while the sense of shock at the sudden deluge in the steppes leads to insights about animal adaptation, how the cows and horses that had for months survived in arid conditions had suddenly become amphibian-like, struggling with new predators, in a new habitat. And, when the wanderer journeys from South America to Africa, she is surprised by the vastly different impressions that their respective landscapes inspire. This leads her to reflect on their deep histories and geographies and to offer reasons for why the African desert, the Sahara, is so arid in comparison to the South American one.

But these feelings are not mere stimulants, which are put aside once scientific explanation begins. They remain and serve to anchor scientific insights in the reality of lived experience. As responses to the world, openings onto phenomena, the feelings and impressions are not subjective, having only to do with the wanderer's inner life. Rather, in the same way that a landscape painting conveys the character of a region by capturing its expressive forms, so these feelings and impressions reveal something about the phenomenon. The astonishment that we feel in suddenly gazing on the vast, barren steppes has to do with their stark difference in character from the lush valleys, while the sense of constriction before an electric storm reflects the heaviness of the air, the sudden closeness of the horizon, and the intensifying clouds. In and through these feelings, the landscape expresses



Mount Chimborazo, Ecuador by Giovanni Poveda-Chiljis.

itself to the attentive wanderer, and thereby ceases to be a mute, indifferent object.

But just as feeling anchors scientific reflection, so reflection informs and shifts feeling. In reflecting upon the adaptability of animals in the flooded steppes, for instance, shock becomes wonder. Throughout, feeling and reflection enable, expand and transform one another.

This is perhaps most vivid in Humboldt's description of the practice of so-called horse-fishing, where wild horses are corralled into a pond filled with electric eels. The idea is that in electrocuting the large animals, the eels will exhaust themselves, and can then be easily caught. In the instance Humboldt describes, horse-fishing was undertaken on his bidding, as he was fascinated by the phenomenon of animal electricity.

To begin with, we sense a certain excitement and curiosity in connection with the strangeness of the phenomenon of electric fish. However, as we observe the horses' repeated attempts to flee the scene, witness their strained bodies, and the panic in their eyes, excitement wanes, and in its

place emerge shock and concern. What we feel disrupts the narrative, and as we read the essay's final paragraphs, the panic in the horses' eyes and the emotion it evokes haunt our reflections. In this instance, feeling challenges and expands thinking, it challenges us to think again, and think more deeply, about human actions and their value, about animal suffering and its need.

What we find in Humboldt's essays, then, are *scientific works of art*—however contradictory this term might at first appear—works in which feeling and thinking are in the service of one another, where each is willing to be challenged, expanded and transformed by the other. Feeling is not a mere means by which to communicate the data that Humboldt collected. Rather, it inspires, shapes and transforms intellectual and moral consideration—as it is also shaped and transformed by them.

Humboldt's essays thus reveal to the reader a different way of being in and understanding the world. A way that is not neutral and detached, but passionately involved in and affected by a dynamic world.

“The environmental crisis is a crisis of knowledge, but also of sense and imagination—or, more specifically, of the separation of knowing from sensing, feeling and acting, and the separation of the natural sciences from the arts. It is a crisis that has to do with a chasm within us: where we know but do not really know. Where the kind of knowledge we cultivate is disconnected from the reality in which we live, or—better—where our very practices of knowing actively disconnect us from this reality.”

— Dalia Nassar

And they do this not purely theoretically. By addressing the reader as a sensing, feeling and thinking being—as a *whole* self—the essays generate and enact this richer way of being in and knowing the world.

Through reading the essays, we encounter ourselves and the world differently. It becomes evident that our experience of the world is mediated by feeling, and that these feelings are both *of* the world and *of us*.

We realise that *who* we are is inextricably connected to the world in which we live, the world that touches us and is touched by us.

And so, slowly, our experience shifts. The world no longer appears to be simply or primarily an object to be studied, but a world of which we are part, a world that speaks to us, and affects us, that is *in us* as much as we are *in it*.

We begin to understand that we are not outside nature, but inside it. And the mistake emerges when we imagine otherwise.

Just over a year ago, as fires raged across Australia, Danielle Celermajer wrote a series of essays for the ABC in which she describes her experience of the fires that threatened her home in the Southern Highlands and took the life of Katy, one of the two pigs she cares for. On NYE, with her home in peril, Dany made her way to Sydney, only to be shocked by the celebratory mood in the city. In contrast to her neighbours who had been dealing with an existential threat, city-dwellers, while aware of the fires, had only experienced them abstractly—as one news item among many. On NYE, they were only waiting for a party.

What Dany witnessed on that day was, as she put it, two Australias: an Australia for whom the fire was a real, existential threat, and an Australia for whom the catastrophes remained abstract—information, news items, but not realities.

The environmental crisis is a crisis of knowledge, but also of sense and imagination—or, more specifically, of the separation of knowing from sensing, feeling and acting, and the separation of the natural sciences from the arts. It is a crisis that has to do with a chasm within us: where we *know* but do not *really* know. Where the kind of knowledge we cultivate is disconnected from the reality in which we live, or—better—where our very practices of knowing actively disconnect us from this reality.

In a time of crisis, what we need is to re-tether our knowledge to the world—to sense, affect, and lived experience. Only in this way will we overcome the split that undermines knowledge, making it passive and impotent. What we need is a form of knowing that emerges from and speaks to our *whole* selves: to our senses, imagination and understanding. A knowledge that moves us and motivates us, because it reveals, in a visceral way, that what happens out there does have to do with what happens in here; that nature's fate is also *our* fate.

This form of knowledge is what deep collaboration can and should achieve. And this is why it is imperative.

—



Dalia Nassar

Department of Philosophy

Dalia Nassar is a senior lecturer in the Department of Philosophy. She works on German romanticism and idealism, the philosophy of nature, aesthetics and environmental philosophy. Her current project focuses on a distinctive methodological approach to nature, which emerged in the late Enlightenment and Early Romanticism, and on the ways that this methodology can be brought to bear on current environmental questions and concerns.

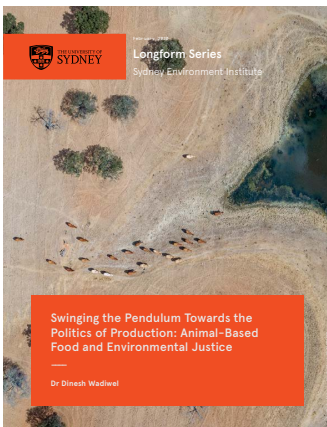
She is the author of *The Romantic Absolute: Being and Knowing in German Romantic Philosophy, 1795-1804*, which considers the meaning of the crucial notion of the 'Absolute' in German philosophy between Kant and Hegel, and editor of the collection, *The Relevance of Romanticism: Essays on German Romantic Philosophy*. She has also co-edited a special section of the *Goethe Yearbook* vol. 22 (2015) on 'Goethe and Environmentalism' and a focus section of *Studies in History and Philosophy of Science* on 'Kant and the Empirical Sciences' (2016).



March 2020

Climate Change and the New Work Order

Dr Frances Flanagan



April 2020

Swinging the Pendulum Towards the Politics of Production: Animal-Based Food and Environmental Justice.

Dr Dinesh Wadiwel



December 2020

Fouling / Concreting / Artmaking: Three Habits of an Encrusting Ocean

Dr Killian Quigley

The Sydney Environment Institute

sei.sydney.edu.au

