Transformations issue 30 (2017) www.transformationsjournal.org

ISSN 1444-3775

AUTHOR BIO

Rob Garbutt is Senior Lecturer at Southern Cross University, Lismore whose place-based research considers ways of belonging through a cultural studies and environmental humanities lens. He works with words, sound and images. Rob's first book, *The Locals*, was published in 2011 and he was coauthor of *Inside Australian Culture*, published in 2014.

Shauna McIntyre is an early childhood educator for whom place and the relationships within places are the beginning of provocations for learning.

The provocation of Gaïa: Learning to pay attention in Rotary Park

Rob Garbutt and Shauna McIntyre

ABSTRACT

How do we learn with the environments we inhabit to promote mutual flourishing? This paper argues that environmental arts practice is a key component in the pedagogical process of getting to know where we live and, through a more-than-human intersubjective exchange, enriching our response-ability to the environment. To think through and work towards this pedagogy we explore a small patch of Gaïa – the Rotary Park Rainforest Reserve in Lismore, New South Wales – via a photography and video project that contemplates didactic and interpretive signs along a short walking circuit. Crucial to our contemplation of this environmental arts project are concepts for action that we develop by putting into conversation ideas from the environmental humanities and early childhood education: *progettazione*, time to learn, provocation and attention. Through aesthetic immersion in, and in dialogue with the forest, these concepts help us conceptualise a regenerative curriculum and relational pedagogy that energise, amongst other things, environmental arts in-the-making.

KEYWORDS

Regenerative curriculum, early childhood education (Reggio Emilia), environmental humanities, provocation, attention

Introduction

Like entering into and re-emerging from the belly of the town, the figure of Gaïa, rather than the Earth, comes to mind: her liveliness, her many-folded garment, a figure that precedes colonial Modernity. We follow a walking circuit along a creek, into a valley of dry rainforest, and then turn to head downstream and emerge into sunlight again. Slowly. One hour to walk 2.4 kilometres. According to our MapMyWalk app we have burned no calories. As a physical workout the walk is pointless. This workout, instead, is an exercise in "attentive immersion" (van Dooren, Kirksey and Münster 12). This particular fold of Gaïa is a provocation to retune to a form of flourishing that is close at hand but tragically unfamiliar. Like the rest of the land around Lismore in northern New South Wales, Australia, it has been largely cleared, both physically and from local knowledge, despite it resolutely remaining Bundjalung Country (Garbutt "The Clearing"; Garbutt The Locals). Here in the centre of the town of Lismore is a preserved fragment of the bountiful but largely lost rainforest known as The Big Scrub. We return here each weekend to Rotary Park Rainforest Reserve to "get to know" this foreign land near where we live and to involve ourselves with it. We "get to know" from different disciplinary frames: Shauna thinks with children and early childhood education in mind; Rob brings with him a cultural studies backpack that includes a few cameras and a sound recorder. Both of us grew up in Lismore, have settler heritage, and after leaving town for the city have returned in mid-life.

In this paper we wish to explore "getting to know" Rotary Park through environmental arts practice, where the rainforest becomes our teacher and not just a static backdrop as a place of learning. It is a pedagogical provision as well as a provocation that engages our attention – in relational terms it makes our attention – as we learn to pay attention. So as we stand here in deep rainforest shade contemplating concepts for action in the environmental arts, four in particular loom large: *progettazione* (Malaguzzi), time to learn, provocation and attention. We work with these concepts in theory and through practice, drawing on work in early childhood education and the environmental humanities.

The example of practice that will ground the paper is a creative project that engages with a set of didactic plaques and interpretive signs using photography (see Figure 1), video and these words. The project is a conduit and means of expression for "attentive immersion" in Rotary Park, immersion provoking attention, provoking questions regarding what draws and makes our attention, and the stories that inhabit and that are expressed in this making. As such, Rotary Park provides the provocations for what we term a regenerative curriculum [1]. A curriculum that is not *generative* as a place cleared for production, but *regen*erative in that it emerges through relation with its entangled being, that re-stories our cleared sense of place; place, relationships and knowledge not made, but in the making (Ellsworth 1).

^[1] After reading an early draft of this paper, the term regenerative curriculum emerged in discussion between Nigel Hayes, Soenke Biermann and the authors.

Fig. 1 Pothos (Image: Rob Garbutt).



Our creative practice, our work in environmental arts, is central to our attentive immersion, and following theorists such as Nicolas Bourriaud and Grant Kester our orientation is not towards object-production but to "processes of intersubjective exchange" (Kester 30). Thus we would emphasise our interest in the environmental arts rather than environmental art, where in English the plural arts has the sense of skill or practice. This sense is thought to derive from the Proto-Indo-European root ar, to "fit together, join" (Harper). Environmental arts, then, could be conceived of as the practices with which humans join creatively with, and are co-productive with, environments. Our interest is in the "immersive interaction" within a specific site and its ability "to transform our perceptions of difference and to open space for forms of knowledge that challenge cognitive, social, or political conventions" (Kester 37 and 11). Joining ways of knowing and aesthetics "brings aesthetic experience back to an experience of life and relations ... and returns it to the everyday processes which help us sense how things dance together with one another" (Vecchi 15). This is necessarily multidisciplinary work where, as Grant Kester argues, artistic practice is in "a relation of reciprocal elucidation" (37). For us aesthetic practices through the arts are necessarily in conversation with science, pedagogical theory and the environmental humanities. In joining creatively in an "intersubjective exchange" with Rotary Park we immerse ourselves in an environment that takes on a role as etho-ecological provocation; a provocation that has the potential to detune our colonial "mode of belonging" (Muecke) and retune us – in this "us" we speak of our own position – towards the environments that as postcolonial inheritors we find ourselves within.

This retuning requires a creative and relational critique of the tendency we Moderns have of viewing "the environment" as a backdrop to human activity. For this reason we find great value in thinking with the work of scholars such as Isabelle Stengers and Bruno Latour who invoke *Gaïa* in place of the environment or the Earth. This is a deliberate provocation to disrupt a masculinist, distanced, scientistic view by putting in place of an object a personalised figure – "the bastard child of scientists and paganism" – who demands to be addressed because of her uninvited and unwanted intrusion into our lives (in Stengers, Davis and Turpin 177). To recognise a relationship with Gaïa is always to meet her in her local instantiation in our places of experience. Following the ideas of James Lovelock, however, she is

also relationally global. Bruno Latour urges us to resist the tendency to make Gaïa a "spirit-of-the-Earth," a unified controlling force of life, and instead understand Gaïa in terms of "connectivity without holism" ("Why Gaia Is Not a God of Totality" 15). The agency of Gaïa, then, is in relationships here, and relationships that connect us to cascades of other heres of relations: from space she appears as a thin blue film (Latour "Why Gaia Is Not the Globe") while within her we encounter a differentiated "many folded" Gaïa (Stengers in Latour "Why Gaia Is Not the Globe.' Panel Debate").

In keeping with this relational approach, our methodology, then, is multifaceted, a bricolage that "exists out of respect for the complexity of the lived world" (Kincheloe, McLaren and Steinberg 168), considered essential for researching complex social situations as part of an embodied, critical and emancipatory research practice. We extend this argument to the multispecies and more-than-human web of relations in which we are a part through our engagement and involvement with Rotary Park. Bricolage as method has particular resonance for us because, like Kincheloe, McLaren and Steinberg who focus on research by educators in educational settings, for us Rotary Park is such a setting. And we draw on ideas from early childhood education not only because one of us is an early childhood educator, but also because in relation to our knowledge of where we live we feel like we are beginning as young children, though without the nimbleness of mind. Most importantly, however, it is in early childhood education that pedagogical theory, particularly that which has developed in Reggio Emilia, enables an openended, emergent and relational learning engagement with the places in which we live.

Progettazione and time to learn

Embedded in this emergent learning process, this bricolage of research practices, are two of our four concepts for action in the environmental arts: progettazione and time to learn. When we use the word "project" in this paper we infuse it with the sense that the pedagogistas of Reggio Emilia preschools conceptualised progettazione in their work. Progettazione might generally be translated as "design" or "planning" but this would give the word an instrumental flavour whereas in Reggio preschools the word connotes a flexible, unprogrammed, yet reflexively intentional process of organising learning that allows educators and children to follow interests, connections and paths in ways that are always subject to negotiation and modification as the work progresses (Project Zero and Reggio Children 17 [Translator's note]; Giamminuti 24-25). Moreover, for Loris Malaguzzi, the place in which one is located is vital, as progettazione connotes "an approach that could give us an idea of ourselves as connected to and tied with the environment, with nature, and with the cosmos" (Malaguzzi 328). This open-ended process of connection, of progettazione and bricolage, could be seen akin to the practicebased approach of some creative researchers (see, for example, Candy), however, we favour these words with their roots in education that connect us to research as learning.

Our progettazione began and continues in making time to learn, primarily by immersing ourselves in Rotary Park by walking. This time to learn is not the linear time of modernity with its arrow-like trajectory over the horizon of now (Garbutt "Rear-View Mirror"). Time to learn allows an ecology of attention to develop that moves from encounters to relationships, from relationships to naming (Pelo 109). These encounters began in 2014 during weekly Sunday walks that follow a constructed walking circuit. The time of day varies according to the rhythms of our weekends, and while we have walked at most times of day, as well as at night, afternoons are our usual time. Each walk of 2.4 kilometers takes about an hour, and each weekend we alternate clockwise and anticlockwise routes. There is routine to our practice as well as recognition of a duration that extends beyond each hour to connecting week to week.

The path we follow is in decay but easily followed. While our path is regulated, we couldn't say that each step is "part of a fluid dance" (Edensor 71) as it requires negotiation of such things as uneven terrain, water, mud, a fallen tree, encroaching vines, the hold of the barbed tendrils of the wait-awhile vine or leaf-litter mixed with flying-fox shit sticking to the soles of our shoes. Our movement is slow, often halting, because of all these factors, and so often as not what draws our attention is what we stumble upon. This stumbling is not only physical but of the mind, something that interrupts routine paths to provoke a "process of ... renewal" in ways of knowing and attentiveness (Reggio Emilia Working Group 288). Stopped in our tracks we prioritise time to retune our attention: observing, noticing; taking notes, photographs, videos, sound recordings, souvenirs. Such things as the path, our interests, our recording devices, our attentiveness, stumbles, the weather, mosquitoes, each other's moods, the desire to be slow and quiet so as not to scare flying-foxes, what we are otherwise doing each Sunday, yields a developing sense of familiarity, belonging, and the recognition that place is dynamic (Edensor 71).

Often, too, our walking is woven through with personal projects within our overall Rotary Park *progettazione*. The audio/visual/textual exploration of didactic and interpretive signs that dot the walking circuit, prosaically titled "The plaque project," is one such project that we will now take time to unpack. We will think through this multimodal narrative to develop our two remaining concepts for action in the environmental arts: provocation and attention.

The plaque project

As we mentioned above, dotted along the Rotary Park walking circuit are sets of signs which narrate one's passage. One set tells the story of a rainforest restoration project undertaken in the 1980s. Less conspicuous now is a set of brown plaques on wooden posts that point out plant species. Many are lost. Lost, too, are the majority of markers of a number sequence on aluminium squares: we have found eight of the twenty-five. Death and decay of the trees to which most were nailed have rendered the associated two-page walking guide mostly useless. More persistent, however, are stainless steel plaques

that now supplement the earlier signs. Rob's focus has been continually drawn back to these stainless steel plaques. It began, he thinks, because they are shiny. Against the greens and browns and forest shadows they arrest one's eyes with their metallic surface reflecting fragments of the sky above. And because they can be read. They could be photographed, too: he could collect the complete series. That was satisfying.

Through our conversations came the question of whether this way of entering into a relationship with Rotary Park is what Rob is most comfortable with: not letting attention to the forest enter into what to be interested in, what to notice, how to notice, but rather to be organised into knowing, here on the prepared path. The path, the plaques, the names: they're organising Rob's relationship with this country, here in this fold of Gaïa.

Shauna asked, "Do you have Gaïa in your sight?"

"That's a very good question. No," Rob answered, "I am on a track. I have plaques in my sight and words in my mind."

Pothos / Pothos longipes / Araceae (Figure 1)
White booyong / Argyrodendon trifoliolatum / Sterculiaceae (Figure 2)
Blunt-leaved condoo / Pouteria myrsinifolia / Sapotaceae
Whalebone tree / Streblus brunonianus / Moraceae
Rough-leaved elm / Aphananthe philippinensis / Ulmaceae
Climbing fern / Arthropteris tenella / Davalliaceae
Yellow tulip / Drypetes deplanchei / Euphorbiaceae
Guilfoylia / Guilfoylia monostylis / Surianaceae
Creek sandpaper fig / Ficus coronata / Moraceae
Incense cedar / Anthocarpa nitidula / Meliaceae
Settlers flax / Gymnostachys anceps / Araceae
Giant stinging tree / Dendrocnide excelsa / Urticaceae
Barbwire vine / Smilax australis / Smilacaceae

Fig. 2 Montage from "The plaque project" (Images: Rob Garbutt).



The plaques float above the earth and the path through the forest becomes a circuit of knowledge, but that objective is to no effect: without a framework scaffolding this information, and despite the northern-hemisphere familiarity in many of the names, not much is added to our stock of knowledge. Something is settled but only in that way that naming is sufficient to bring us to a stop, prompt us to look – sometimes at what we're not sure – and move on. The assurance of knowing can be enough to foreclose an encounter developing towards a relationship.

But in stopping and sensing, could we reframe these plaques as contemplative multispecies Stations of the Cross on this walking circuit? Could we reform this path and its plaques as a circuit of relations?

Let us pause here with and without the blessed assurance of the words on the plaque to watch and listen (Figure 3).

Fig. 3 Barbwire vine - the movie (Video and image: Rob Garbutt).



>> https://youtu.be/m44OoVL1c5U <<

Provocative relations

The mode of our encounter with this forest, this particular fold of Gaïa, takes the form of a provocation, the third of our four concepts for action in the environmental arts. A relationship with the forest through the plaques is at first glance not a relationship with the place, but instead a relationship with a globalised yet provincial way of knowing that mediates the place. The place, the forest, forms a background for an ethos that is separated from the oikos, and there is little room for the imported ethos to risk itself (Stengers "Cosmopolitical Proposal" 997-98). In this sense, the plaques along the walk perform a form of "provocative containment" (Lezaun, Muniesa and Vikkelsø), that experimental technique most beloved after World War Two for simulating a social "reality" in a laboratory in order to provoke responses in participants: provocation as a challenge, generating a response contained within the controlled and reproducible environment of the laboratory (279). In this instance the plaques contain path, plant and pupil in knowing predicated upon directing ones attention to an isolated, named single species. If provocation is both "generation and challenge" then what is generated in the challenge of the plaque is an ethos of knowing that uses separation and containment as its method.

Initially the Plaques Project took this way of knowing the forest as its field of inquiry and critique. By isolating the plaques in a photographic image, by exposing the images for the brightness of the stainless steel surface, the plaques are isolated against shaded darkness. The plant referred to is barely or not visible and the series of images take one on a "walk" through Rotary Park that is deracinated, disembodied, guided by words — common name, Latin species name, botanical family — that remain largely meaningless. In this reading, the plaques which are intended to provoke engagement with the plants of the forest fail in their mission. The pre-programmed curriculum founders on a prior lack of connection and experience of the plants, an effect that is amplified in instances where the plant referred to is unclear. Thus as provocations for learning the plaques do little for the walker who is unfamiliar with Latin or botanical families. In this sense they serve to alienate

one from developing a relationship with the forest, and reinforce the message that the relationship of knowing is best formed through scientific expertise and knowledge: expertise triumphs over experience, knowledge made is valued over knowledge in the making. The words on the plaques stop us in our tracks, stop us in our thoughts, and foreclose the encounter.

Yet this is not necessarily the plight of the plaques. When the camera, through operator error, recorded a video rather than took a photograph, the potential of the plaques to challenge and generate a response was multiplied. The imaged scene around the Barbwire vine plaque is no longer contained in blackness and silence and is instead animated with sound and movement: a small insect crawls across the plaque surface, the squabbles of roosting flying-foxes are audible, as are honks of nesting Australian ibis. The Barbwire vine plaque, though designed to identify for us a specific species of climber, instead becomes a provocation to stop walking and attend beyond the one plant. This was, of course, always the plaque's potential, however by engaging through video rather than a still and silent image, the potential becomes clearer. Videography engages a mode of attention more amenable in this situation to multiply relationships rather than the close focus of photography.

No longer contained, multispecies relations between vines, flying-foxes, ibises and people come into view inspiring a regenerative and open curriculum rather than the programmed learning design of the plaques. Aesthetic engagement through an arts practice is key to opening up this line of thinking critically and engaging relationally with place. We don't offer this as a universal prescription, but here arts-based enquiry plays the role of focusing the senses and the mind on how we know our places. Beyond the containment of the plaque the Smilax australis vine climbs through trees that form roosts for a maternal colony of the endangered Grey-headed flying-fox. Their presence and their endangered status connect people and flying-foxes in complex relations: they are endangered because of habitat loss and their endangered status protects their presence in the centre of a town that would prefer that they were gone, along with their smell, their shit and the noise from their encampment. Further, the colony, estimated to be up to seventythousand strong during peak times, damages the rainforest canopy of this place set aside in 1901 as a flora reserve (Northern Star). The flying foxes' eating habits, moreover, bring in exotic weeds, yet seed dispersal of native fruits and pollination of blossoms also benefits the biodiversity of the "islands" of what was once the vast and contiguous Big Scrub rainforest (Joseph; Whiteman). Love, tolerance and contempt flourishes between flying foxes, trees, residents, bat-people and tree-people with no neatly defined set of alliances.

The Barbwire vine also helps form a mat of material that supports nests, organised like townhouses, of a section of a nesting Australian ibis colony. This colony is one of a number along the east coast of Australia where ibis cohabit with flying-foxes. The non-endangered ibis, so one story goes, have learnt that flying-foxes with their endangered status offer sanctuaries that may be disturbed only after application to, and rigorous vetting by, a government department. In other sites free of flying foxes, especially those beside airports where the ibis is a significant bird-strike risk for passenger

jets, the birds have been subjected to various forms of population management (McKiernan and Instone 482). The benefits of cohabitation may have made their way from ibis colony to ibis colony along the coast (McKiernan and Instone 488).

The presence of the ibis also speaks of human relationships with and in other more distant places (Smith, Munro and Figueira). The presence on the coast of nesting colonies of a bird which usually breeds in the inland marshes of south-eastern Australia speaks of the degradation of many wetlands due to drought and water use for agriculture. While they typically build nests on rafts of reeds, the ibis are now adapting to building their rafts in trees, and their long curved beaks are just the right shape and length for rummaging in rubbish tips and garbage bins. The plentiful supply of food on the outskirts of towns and cities sees their populations flourish and does nothing for their image as part of "nature." Ibis, therefore, are becoming widely characterised as pests. And in Rotary Park, because of their ungainliness in their tree-top roosts, a number fall to the ground injured and eventually die. Corpses litter the Rotary Park walking path at the height of the breeding season in spring and summer. Flying-fox excrement, decaying ibis and the warning honks and cries of both have transformed the anticipated idyll of a rainforest walk into a contested, squabbling and problematic space.

The Barbwire vine, twisting skywards, does not fence us in. Instead it connects us - trees, human preservation of remnant rainforest, endangered flying-foxes and their carers, walkers and migrations of ibis refugees as a result of agricultural water usage in inland Australia. Between still image and the livelier video is a contrast in ways of knowing, and between a contained curriculum and one we characterise as regenerative. The plaque as a provocation for an exploration into how knowledge is made and experienced in place opens new possibilities. Akin to Stations of the Cross each provokes and invites contemplation: at what, we might not be immediately aware, but the regenerative potential for any provocation is, as Bruno Latour puts it, to transform a simple matter of fact into a matter of concern ("Why Has Critique Run out of Steam?"). And while we have made a crude distinction between the photographic image and video as provocateurs that respectively distinguish between contained and regenerative modes of knowledge production, both have this potential. The still image, after all, also makes connections: in the text to a plant and to laboratories, dissections, illustrations and taxonomic argument; and on the plaque surface the reflections of sky and forest, as well as resting insects and accumulations of excreta from the beings above, or through signs of corrosion through weathering. The video meanwhile is always contained in its vision and sound. Thus both still and moving image also point to the limits of our senses and of what we attend to.

Environmental arts practice – in the making, as well as the reflecting, reading and writing that attends the practice – enables an immersive and regenerative engagement within our particular folds of Gaïa. Arts practice adds aesthetic and material dimensions to our thinking to produce an enquiry that necessarily exceeds the space of facts, ideas and critical theory. This aesthetic dimension helps joins together disparate and compartmentalised practices in

our existing arts of living with our environments. Something is being provoked, but not as a demand, not as a product, but through poeisis as restoried relationships between maker, knowing and place (Heidegger 12–15). In this involutive situation it is *attention* as well as *provocation* that has captured our thinking as key concepts in our inquiry, for it becomes apparent that the stainless steel plaques provide a window on how attention is made, and how making attention is entangled with systems of constructing knowledge. Arts practice slows us down and leads us to consider how we learn the art of paying attention (Stengers, Davis and Turpin 179-80). This leads us to our fourth and final concept for action in the environmental arts.

Paying attention

The *Smilax australis* plaque connects in one's imagination to a botanical key: "Paired tendrils (modified stipules) present at the base of many leaves.... Prickles present on stems. Leaves with 5 longitudinal veins, green on both surfaces. AUSTRAL SARSAPARILLA Smilax australis' (Williams and Harden 9). The field guide is a product of a scientific way of seeing developed in Europe during the early eighteenth century that Daston and Galison name "truth-to-nature." Truth-to-nature avoids "drowning in details" of variants within a species (377). In a botanical key the drawings are a synthesis of the universal identifying characters of a species arrived at by reasoned judgement after paying close attention to many selected specimens (Daston and Galison 371). Botanical drawings and descriptions require this form of attention to averages, as does the botanist in the field: identification requires one to "obtain a leafy shoot of average form, avoiding leaves which are clearly aberrant" (Williams and Harden 1–2). The objective at each step is to bring one to the unambiguous identification of the specimen at hand. In the name a plant is known. Akin to the Bible story of Adam naming the animals (Genesis 2:19), to name is to distinguish as well as the privilege which accompanies dominance. In this sense, through the unambiguity and power of science, Smilax australis will always dominate the common name with its unreliable variants such as Barbwire vine or Austral sarsaparilla.

Truth-to-nature, as a mode of attention, not only forms a reliable object of science but also coproduces a scientific self who is able to selectively discern relevant detail from a jumble of observations. For the scientist this may involve training the body and mind in practices unusual to the ordinary person, such as over a period of weeks closely examining thousands of specimens with a hand lens to discern the character of one species in distinction from another, all the while keeping careful and detailed notes charting the process of reason informing one's judgement (for a detailed discussion see Daston and Galison 234-41). Over time this production of the self was advocated as the healthy norm. By the late 1800s psychologists came to believe that a person's ability to focus their attention produced their ability to think with reason. This, in turn, was the source of capital-C-Culture and granted humanity command over nature: in short the "capacity ... of maintaining an orderly and productive world" (Crary 17). Conversely, a lack of attention came to be seen as a pathological condition. For the casual observer walking through Rotary Park, then, each stainless steel plaque

naming a plant is the tip of a cultural iceberg buoyed by a mode of attention that singles-out, identifies, names and creates a sense of mastery over this environment.

In this section we are keen to identify this scientific mode of attention because of its dominance in the park and, if we are guided solely by the plaques, over our attention and sense of our selves. Our aim here is not to critique and bust up, but to identify and multiply because in Rotary Park this scientific knowledge is put into practice through techniques of rainforest regeneration that for over 35 years have maintained this forest in a state that makes it valuable to (more-than-)humans for purposes too many for us to apprehend. But we agree with Bruno Latour that at a time when the impact of dominant modes of attending to the world have made us a force of nature, while all the time those same modes imagined us as separated from nature in a place of culture, then our modes of attending to the world need to move from worrying over matters of fact, to gathering around matters of concern (Latour "Why Has Critique Run out of Steam?"). That is, we need to remember that values always attend facts. And as Daston and Galison (369) argue, "[w]ays of scientific seeing are where body and mind, pedagogy and research, knower and known intersect." Thus how we attend to Rotary Park requires a scientific self involved in a scientific way of seeing, as well as modes of attention and belonging that form relationships of connection.

If the forms of attention that Crary identifies in discourses of the West at the start of the twentieth century were directed towards productivity, we would assert that at the beginning of the twenty-first century our divided attention is dominated by consumption. This is a mode of consumption that, Isabelle Stengers (In Catastrophic Times) argues, is accompanied by buying the right to not pay attention to the effects on Gaïa of quenching our desires. For Amitav Ghosh, this ability to not pay attention to our potentially catastrophic actions while apparently being sophisticated in our self-awareness could well define a period named by our descendants as "the time of the Great Derangement" (11). Our need, then, is to remake our mode of attention, to learn to attend in relationship with Gaïa.

This sets us thinking of a series of signs in Rotary Park that tell the story of a rainforest restoration Bicentennial Project from 1985-1988. Here is one of them:

The area around you was being destroyed progressively from the centre outwards, due to exotic vines & privet having taken advantage of a break in the canopy. Exotic & native vines were expanding the gap by smothering the perimeter trees. Although native regeneration had taken place this was rapidly being dominated by invading species.

It was cleared of weed growth, & even some native vine growth in February, 1987. It was originally intended to plant pioneer species in this area, however, the recovery of the native regeneration was so dramatic that only minimal planting was carried out – to the extent of four or five plants.

The growth of regeneration can be monitored by the yardstick.

Fig. 4 The area around you... (Video and image: Rob Garbutt and Shauna McIntyre).



>> https://youtu.be/gRQz2ALDe4g <<

Rob asked, "What are you looking at?"

"Isn't this amazing?" Shauna replied, clearly affected. "Despite what was planned by the project team the 'native regeneration was so dramatic ... only minimal planting was carried out.' The forest was active in its own regeneration. I think this could be the start of a curriculum – a regenerative curriculum with the forest."

Learning to pay attention requires a pedagogy that does not gather our full attention towards separating and defining species and things in taxonomic feats of concentration. For us, attending to and with Gaïa is woven through with a pedagogy that is relational: on getting to know, rather than knowing, that which interests us. And it requires a curriculum that is regenerative, that is not predefined in discrete units of work but develops between us and that in which we are interested (Despret). This interest guides us on a path we have described earlier as an unfolding *progettazione*. There is an essential ethic of response-ability, akin to rainforest regeneration rather than replanting, infusing this learning process. It is characterised by

how one might better respond to another, might work to cultivate worlds of mutual flourishing [.... These relations] remind us that knowing and living are deeply entangled and that paying attention can and should be the basis for crafting better possibilities for shared life. (van Dooren, Kirksey and Münster 16-17)

This entanglement necessarily leads us to consider not only that which attracts our attention through being noticeable, but things we might otherwise ignore: learning to pay attention in relation with things, living and non-living, which deserve due attention.

Attending to the plaques in Rotary Park is a turn towards objects that attract attention. Engaging with their shine in an ongoing, reflexive photographic and videographic exploration, however, enables new ways of thinking and researching the impact of what we pay attention to, of how we have learnt to attend and the connections between attention, knowledge and our relationships with Gaïa. If naming leads us to the species named and of knowledge made, the potential of an artistic engagement with an ethic of response-ability to Gaïa points us towards how this knowledge is in the making. Of getting to know the plaques, rather than viewing them as knowledge. "Getting to know" relationally takes us to considering how knowledge and ourselves can potentially be remade and, therefore, restoried. We are taken a step beyond knowing the identified species as fact to getting to know the relations in which we, the plaque and the plant are located (Blaise, Hamm and Iorio 39).

Aesthetic engagement has the potential (though not with an exclusive hold): to extend our environmental arts, that is, the arts of living with our environments; to bring the human sensorium to bear on learning with the forest in a spirit of regeneration; of being provoked into learning; of learning with to flourish with; of paying attention with possibilities for growth.

Conclusion

In this paper we are concerned "to think what we are doing" (Arendt 5) in the context of the Anthropocene. Our premise is that this thinking must begin with relationships between humans and the more-than-human worlds we inhabit and make, and to recognise that these relationships are not lived in the mind alone; that our thinking about what we are doing must join with an embodied understanding developed through aesthetic encounters.

We have also situated this process as a process of learning. We have become painfully aware of our ignorance of the environment in which we live, and that if we are to think about what we are doing to it, then this needs to begin here where we find ourselves. For us, Rotary Park Rainforest Reserve is a stimulating site to start this learning process as it represents a continuing link with Bundjalung country, not as an unchanging patch of Gaïa but as a site that bears traces of environmental history into the present. It is an ark that has gathered and generated many and varied passengers and cultures in its passage.

"The plaque project" has brought to the fore dominant ways of knowing and perceiving and learning, and necessary for retuning these modes have been a range of concepts for action. Early childhood education pedagogy developed by the practitioner-researchers from Reggio Emilia provides us with a theoretical and practical frame for considering open-ended but purposeful processes for learning, conceptualised as *progettazione*. Also valued by the *pedagogistas* of Reggio Emilia is time for learning: the recognition that learning takes time, that time needs to be made for learning, and for reflexively researching the learning process. It is this attitude of learning as research that directs our enquiry, open-ended as it may be.

The multidisciplinary environmental humanities provide a theoretical palette for mutual flourishing of humans and more-than-humans that complements a pedagogically informed approach to getting to know. At the intersection of the two, the third of our concepts emerges: provocation. While the humanities have conceptualised provocations as a challenge that generates a response, pedagogical theory envisages provocations as challenges and stimulus for learning. The intrusion of Gaïa into our Anthropocenic lives is the ultimate provocation of our times, yet this provocation while interconnected in Earth systems is also always local and specific. Provocations turn our attention, the fourth and final concept for action we propose in this paper. The Moderns have been able to claim a right not to pay attention for too long. That luxury has taken its toll and we argue here that we need to retune our attention to Gaïa and that aesthetic engagement through the environmental arts in the making is one vehicle that can guide this retuning.

For us then, this brings us to the final two points that we wish to emphasise. Accompanying the Moderns' need to learn about where we live requires of us to think relationally, and so our learning is necessarily infused with a relational pedagogy that avoids compartmentalising learning and joins mind and body and our Gaïa-connections together in enriching our environmental arts. Secondly, this is also the case for curriculum. A compartmentalised curriculum is effective for some purposes, but its dominance has disconnected our thinking. We propose a form of curriculum that comes from a regenerating rainforest: a regenerative curriculum that connects humans and the more-than-humans in learning-networks of care and response-ability.

Walking, listening, looking, waiting, photographing, thinking, reading, talking, feeling and smelling the world about us, doing it all one more time: an aesthetic engagement is productive for learning new ways to attend to the places in which we live. And developing an ecology of attention is necessary for enlarging our arts of living in those places, for multiplying our relations with them for the mutual flourishing of all: that is the provocation, the insistent provocation, of Gaia.

Works Cited

Arendt, Hannah. *The Human Condition*. Chicago: University of Chicago Press, 1958.

Blaise, Mindy, Catherine Hamm, and Jeanne Marie Iorio. "Modest Witness(Ing) and Lively Stories: Paying Attention to Matters of Concern in Early Childhood." *Pedagogy, Culture & Society* 25.1 (2017): 31-42.

Candy, Linda. *Practice Based Research: A Guide*. 2006. Accessed 7 April 2017. https://www.creativityandcognition.com/wp-content/uploads/2011/04/PBR-Guide-1.1-2006.pdf.

Crary, Jonathan. Suspensions of Perception: Attention, Spectacle, and Modern Culture. Cambridge: MIT Press, 1999.

Daston, Lorraine, and Peter Galison. Objectivity. New York: Zone Books, 2007.

Despret, Vinciane. "The Becomings of Subjectivity in Animal Worlds." *Subjectivity* 23.1 (2008): 123-39.

Edensor, T. I. M. "Walking in Rhythms: Place, Regulation, Style and the Flow of Experience." *Visual Studies* 25.1 (2010): 69-79.

Ellsworth, Elizabeth. *Places of Learning: Media, Architecture, Pedagogy*. New York: Routledge, 2005.

Garbutt, Rob. "The Clearing: Heidegger's Lichtung and the Big Scrub." *Cultural Studies Review* 16.1 (2010): 28-42.

---. The Locals: Identity, Place and Belonging in Australia and Beyond. Cultural Identity Studies. Ed. Chambers, Helen. Bern: Peter Lang, 2011.

---. "Rear-View Mirror: Vision, Time, Modernity and the Anthropocene." *Continuum* 31.2 (2017): 277-84.

Ghosh, Amitav. *The Great Derangement: Climate Change and the Unthinkable.* Chicago: Chicago University Press, 2016.

Giamminuti, Stefania. Dancing with Reggio Emilia: Metaphors for Quality. Mt Victoria: Pademelon Press, 2013.

Harper, Douglas. "Art (N.)." *Online etymological dictionary* (2017). Accessed 16 February 2017. http://www.etymonline.com.

Heidegger, Martin. *The Question Concerning Technology and Other Essays*. Trans. Lovitt, William. New York: Garland, 1977.

Joseph, Rosemary. "Rotary Park Regeneration Project, Lismore Nsw." EMR Project Summaries 2012. 27 September 2016.

Kester, Grant. The One and the Many: Contemporary Collaborative Art in a Global Context. Durham: Duke University Press, 2011.

Kincheloe, Joe L., Peter McLaren, and Shirley R. Steinberg. "Critical Pedagogy and Qualitative Research: Moving to the Bricolage." *The Sage Handbook of Qualitative Research*. Eds. Denzin, Norman K. and Yvonna S. Lincoln. 4th ed. Los Angeles: Sage, 2011. 163–77.

Latour, Bruno. "Why Gaia Is Not a God of Totality." *Theory, Culture & Society* 34.2-3 (2016): 61-81.

---. "Why Gaia Is Not the Globe." Aarhus Universitet. 2016. Accessed 22 September 2016. https://youtu.be/7AGg-oHzPsM.

---. "Why Gaia Is Not the Globe.' Panel Debate with Bruno Latour." Aarhus Universitet. 2016. Accessed 22 September 2016. https://youtu.be/Q60UOS8TyA8.

---. "Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern." *Critical Inquiry* 30.2 (2004): 225–48.

Lezaun, Javier, Fabian Muniesa, and Signe Vikkelsø. "Provocative Containment and the Drift of Social-Scientific Realism." *Journal of Cultural Economy* 6.3 (2013): 278-93.

Malaguzzi, Loris. "Talk at a Workshop on Progettazione in the Scuola Dell'infanzia." Eds. Cagliari, Paola, et al. Loris Malaguzzi and the Schools of Reggio Emilia: A Selection of His Writings and Speeches, 1945-1993. Oxford: Routledge, 2016. 328-38.

McKiernan, Shaun, and Lesley Instone. "From Pest to Partner: Rethinking the Australian White Ibis in the More-Than-Human City." *Cultural Geographies* 23.3 (2016): 475-94.

Muecke, Stephen. "Indigenous-Green Knowledge Collaborations and the James Price Point Dispute." *Unstable Relations: Indigenous People and Environmentalism in Contemporary Australia*. Eds. Vincent, Eve and Timothy Neale. Perth: UWA Publishing, 2016. 252–72.

Northern Star. "Lismore Municipal Council." *Northern Star.* 12 October 1901: 6.

Pelo, Ann. The goodness of rain: Developing an ecological identity in young children. Redmond: Exchange Press, 2013.

Project Zero, and Reggio Children. Making Learning Visible: Children as Individual and Group Learners Reggio Emilia: Reggio Children, 2001.

Reggio Emilia Working Group. "Opening to the World: 1980-89: The Selection of Documents." *Loris Malaguzzi and the Schools of Reggio Emilia: A Selection of His Writings and Speeches, 1945-1993*. Eds. Cagliari, Paola, et al. Oxford: Routledge, 2016. 280-90.

Smith, A. C. M., U. Munro, and W. F. Figueira. "Modelling Urban Populations of the Australian White Ibis (Threskiornis Molucca) to Inform Management." *Population Ecology* 55.4 (2013): 567-74.

Stengers, Isabelle. "The Cosmopolitical Proposal." Trans. Carey-Libbrecht, Liz. *Making Things Public: Atmospheres of Democracy*. Eds. Latour, Bruno and Peter Weibel. Cambridge: MIT Press, 2005. 994–1003.

---. In Catastrophic Times: Resisting the Coming Barbarism. Ann Arbor: Open Humanities Press, 2015.

Stengers, Isabelle, Heather Davis, and Etienne Turpin. "Matters of Cosmopolitics: On the Provocations of Gaïa." *Architecture in the Anthropocene: Encounters among Design, Deep Time, Science and Philosophy.* Ed. Turpin, Etienne. Ann Arbor: Open Humanities Press, 2013. 171-82.

van Dooren, Thom, Eben Kirksey, and Ursula Münster. "Multispecies Studies: Cultivating Arts of Attentiveness." *Environmental Humanities* 8.1 (2016): 1-23.

Vecchi, Vea. Art and creativity in Reggio Emilia: Exploring the role and potential of ateliers in early childhood education. London: Routledge, 2010.

Whiteman, Holly. The Impacts of Flying Fox Camps on Rainforest Remnants at Rotary Park, Lismore, and Lumley Park, Alstonville. Lismore: Unpublished undergraduate report, Southern Cross University, 2012.

Williams, John, and Gwen Harden. Rainforest Climbing Plants: A Field Guide to the Rainforest Climbing Plants of New South Wales Using Vegetative Characters. Armidale: University of New England, 2000.