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Chapter 7: **Site/sight/insight: Becoming a socioecological learner through collaborative artmaking practices**

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Abstract

This chapter explores collaborative arts practices as critical and creative vehicles for assembling a figure of the socioecological learner. We focus on developing the sensorial and affective dimensions of learning through aesthetic engagements with place, drawing on Deleuzian concepts of the “larval subject”, “carte”, and “rhizome”. In doing so, we also forge connections with contemporary life sciences that reveal the permeability and plasticity of learning processes through dynamic interactions within developmental eco-systems. These conceptual and empirical resources inform our posthumanist methodological approach to collaborative arts practices, which we describe in terms of a c/a/r/tography. Through the collaborative production of “site/sight-specific” images and poetic texts, we seek to produce a generative and visually critical exposé, which locates the emergence of the socioecological learner within a “biosocial ecology of sensation”. This opens up a field of potentials for sensing, thinking, feeling, and learning through collective aesthetic engagements with more than human worlds.

Orientation

In this chapter, we seek to explore and share site/sight-specific collaborative artmaking as a collective medium for socioecological learning. There are many ways to see and to know, and thus the term site/sight alludes to an assemblage of place, milieu and ‘seeing’, in ways that transcend the privileging of the visual. Whilst the visual nature of this chapter is acknowledged, sight and seeing may also be philosophically positioned, as we have also accomplished herein. In doing so, we engage a methodology of c/a/r/tography, which enables us to draw together approaches from a/r/tography, Deleuzoguattarian mapping, and affective and sensational pedagogies (Ellsworth & Kruse, 2010; Massumi, 2002).

This chapter also draws on recent findings from the fields of biology and ecology, which highlight the role of affect and sensation in modulating learning processes through dynamic interactions within developmental eco-systems (Frost, 2016; Protevi, 2013). Inspired by postgenomic conceptions of ecological milieus in which epigenetic material is inherited and exchanged across species (Meloni, 2015), we draw on recent developments in biosocial research to trouble persistent notions of the learner as a bounded individual subject (de Freitas, 2018). By thinking and working through posthumanist concepts, images and poetics, we aim to render a figure of the socioecological learner as a “larval subject” that emerges through affective and sensorial engagements with the more

than human world (Deleuze, 1994). The notion of a larval subject that is always *coming into being* has significant implications for our understandings of art, design, education, and other creative practices of life-living. Rather than these practices simply yielding effects within a superficial and transient conception of 'culture', we argue that art and aesthetic practices alter the biomaterial compositions and functionings of the affective body.

In the second part of this chapter, we bring visual form to these concepts in order to convey layers of meaning by engaging with ecologies of sensation and affect. We do so by creating a series of visual and poetic compositions which perform as visually critical exposé, and which seek to operate cathartically and synergistically with the intentions central to this chapter – that of assembling a figure of the socioecological learner through affect and sensation (Lasczik Cutcher, 2018). The visual passages that we compose in this chapter significantly replace traditional academic text. By this we mean that the visual portrayal of the inquiry is not merely descriptive or illustrative, but rather *expressive* of conceptual thought and creative action. The visual elements therefore operate *as* theory, *as* artwork, *as* exhibition, *as* action (Lasczik Cutcher, 2018). The portrayal is and is not itself (Cutcher, Rousell & Cutter-Mackenzie, 2015), both immanent to, and embedded within, the images and the poetics. This is to approach the emergence of the socioecological learner as a fundamentally creative and aesthetic process, and thus one that is tied to a posthumanist vision of Art as a way of thinking, knowing and becoming-with the world (Haraway, 2016). Rather than seeking to represent the world in various ways, we take up Art as a collaborative “experimentation with the real” that produces new ecologies of sensation and affective bodily capacities (Deleuze & Guattari, 1987, p. 12). Specifically, and for the purposes of this foray, it is important to acknowledge that,

To make Art is to immerse oneself in research, in knowing and in theoretical framing. Using the evidence of one's research, the artist makes an image or object that exemplifies their theoretical dispositions regarding the object/subject under study. This is not a visual representation or representation, but a critical text in its own right. It is a material and conceptual creation of an experience and artifact that is an aesthetic portrayal of theory. (Lasczik Cutcher, 2018, p. 95)

As framed by this notion of art as a mode of critical and creative inquiry, we engage in site/sight-specific encounters with collaborative artmaking, engaging sensation and affect in order to walk and to map, record, and experience place through artistic expression. The expressive coupling of Art and Place produces unique opportunities for socioecological learning which are not beholden to discursive regimes of cognition and rationality. It is specifically through such aesthetic modes of sensory attunement and expressive response that we locate the emergence of the socioecological learner. Ellsworth & Kruse (2010) similarly describe their collaborative approach to researching an atomic test site in Nevada:

We invited our bodies' sensations to alter, materially, the highways of perception that others' words and experiences continued to generate within us...we created for ourselves a place of learning at the point where

paths of sensation and perception/cognition cross. From this crossroads, our aesthetic responses make something concretely of our spectatorship: traces and signals of the forces we sensed in our bodies as they played out across—and reconfigured—our preconceptions (Ellsworth & Kruse, 2010, p.279).

It is within this “crossroads” between sensation and perception that we locate the socioecological learner as a figure that emerges through sensory and affective engagements with place.

A Biosocial Ecology of Sensation

In taking a posthumanist perspective, this chapter does not claim that the human learner is situated centrally within a nested system, as popularly characterised in Bronfenbrenner’s socioecological and bioecological models (2005). Instead, we consider the human learner as one of many emergent elements within ecologies of sensation that form a shared environment or site/sight, with no assumed preference or hierarchical privilege. However, we do explicitly acknowledge that the socioecological learner takes shape as an individual, albeit one that is always in the process of becoming-with others. Drawing on Deleuze (1994), we describe this socioecological individual as a “larval subject” that emerges through dynamic interactions with the various systems specific to a locale, and constructs embodied understandings through synthetic processes of sensory attunement and affective response. The dynamic network of sensory interactions that occurs between individuals is what we characterise as an ecology of sensation, which forms the basis for pluralistic and ongoing syntheses between human, non-human, and inhuman (e.g. inorganic) agencies.

Considering this position, we begin this chapter without a preference, but a focus on the learner situated in an environment interacting with, and influencing the developmental systems that make up but one of the many ecologies that exist in a specific place, context, and milieu. While we acknowledge that a tension exists between a posthuman framing of this inquiry and the focus on the individual learner, per se, we also find it useful to dwell in such tensions as a generative space. To this end, we associate our approach with the recent (re)turn to the “problem” of the human individual in posthumanist scholarship, including recent reframings of humans as “biocultural creatures” (Frost, 2016), “biosocial subjects” (de Freitas, 2017), “creatures of becoming” (Rousell & Cutter-Mackenzie, 2018) and “biosocial becomings” (Ingold & Palsson, 2013). In doing so, we draw connections between the notion of the socioecological learner and the emerging field of “biosocial research” in education and the social sciences more broadly (Ingold, 2013; Youdell, 2017).

This biosocial approach extends Brown, Jeanes and Cutter-Mackenzie’s (2014) conception of social ecology with respect to lived experience, place, experiential pedagogies/learnings, and agency and participation. All of these elements are engaged herein, but in a way that also acknowledges the biological and material dimensions of bodies within ecological systems, and how these dynamically intersect with aesthetic practices and social experiences. We thus see the socioecological learner taking shape within a *biosocial ecology of sensation* that

operates through an economy of affect, as the capacity to affect and be affected through dynamic interactions. In order to develop this conceptualisation further, we draw on a series of findings from contemporary biology and ecology that connect our conception of the socioecological learner with nonhuman organisms and developmental eco-systems.

New Life Sciences and the Larval Subject

The ability to learn through sensory and affective engagement is not restricted to the human, as contemporary research in the life sciences increasingly points to the pivotal roles of affect and sensation in modulating the learning capacities of nonhuman organisms (Shaviro, 2015). Citing recent scientific research in “enactivist” biology, Protevi (2013, p. 172) describes how *E. coli* bacteria “continually reassess their situation” and learn to respond to dynamic changes in their environments by reconfiguring a “bacterial memory”. Drawing on Deleuze’s theory of difference and repetition, Protevi describes how this process involves a series of “syntheses”, including a “passive synthesis” of organic, biological, and chemical processes as well as an “active synthesis” of perceptual, affective, and sensory-motor responses. It is through these various syntheses of biological and sensory milieus that the living organism finds expression as a “larval subject” (Deleuze, 1994), a subject which is always in the process of sensing, learning, growing, and developing in connection with its environment and the interpenetrating syntheses of other organisms. As Protevi (2013, p. 165) writes, “larval subjects are the patterns of these multiple and serial syntheses, which fold in on themselves ... producing a site of lived and living experience, spatiotemporal dynamism and sentience... a ‘primary vital sensibility’”. The Deleuzian notion of the “larval subject” thus gestures towards an “organic subjectivity” and “vital sensibility” that is common (and yet uniquely individuated) across the entire spectrum of the living world, including single-celled microorganisms, aquatic and terrestrial plant life, and of course the lives of animals including the human.

The larval subject also makes a productive conceptual figure for understanding the biosocial configuration of the learner in relation to dynamically changing ecologies as developmental eco-systems. Contemporary research in the ecological sciences is helpful here, as Susan Oyama’s (2009) “developmental systems theory”, Lynn Margulis’ (1998) theory of “symbiogenesis”, and Mary West-Eberhard’s (2003) notion of “developmental plasticity” provide robust models for understanding the ways that social ecologies collectively sense, learn, develop, and transform through distributed networks of dynamic interaction. While we lack the space here to describe these various ecological theories in any depth, they share an emphasis on the dynamic plasticity and permeability of organismic, cellular, and even genetic functioning with respect to socioecological processes and environmental conditions (Frost, 2016). With the rise of “postgenomic” biology following the complete mapping of the human genome, the field of epigenetics has had a profound influence on contemporary understandings of social and ecological systems (Ingold, 2013). Rather than genes being fixed and immutable biological components of a given socioecological system, there is now evidence that gene expression is dynamically regulated and even “exchanged” between organisms in response to changing sensory, social, and environmental conditions. For instance, West-Eberhard’s (2003) studies of developmental

plasticity suggest that “different developmental processes change the pattern of expression of the genes” in a particular socioecological system (Protevi, 2013, p. 203). Creative processes of learning and development can thus actualise an “untapped potential” for gene expression in response to changes in the social and physical environment (p. 204).

One of the radical implications of these findings is the idea that these epigenetic effects are *epidemiological* and *transgenerational*, to the extent that sensory, cultural, aesthetic, and developmental processes can be passed on and inherited by future organisms and eco-systems (Frost, 2016). In other words, our individual and collective experiences affect our genes in ways that can be inherited by our children, and their children, and so on. This means that affective and sensorial connections with places (such as the artful practices of Indigenous peoples) are passed on not only through language and cultural transmission but also through epigenetic variations at the interpenetrating levels of gene, cell, organism, and society (Meloni, 2015). Because our inquiry is situated in the affects and sensations of bodies, we are interested in learning as it is organically lived through movement, feeling, and creative expression, as a relational process of becoming-with. It is indeed our focus on learning through affect and sensation that makes collaborative artmaking such an appropriate method for this inquiry.

Collaborative Arts Practices

In an age of climate change and ecological catastrophe, artists are uniquely positioned to activate socioecological learning through the collective *experience* of place as an ecology of sensation. What is perhaps most engaging about collaborative arts making is that collaboration itself is a creative and generative way of thinking, feeling, and making through and within a social ecology. In the arts, specifically the performing arts, collaboration is an essential ontological and epistemological structure that is situated within the social and ecological frameworks that generate it (Baguley, 2007).

Collaborative arts practice also has a distinct route of inheritance within the feminist genealogy of community-based and socially engaged public art (Lacy, 1994). Recent movements in arts education have also responded to turns toward transdisciplinary collaboration, dynamic social processes, and environmental engagement in the contemporary art world (Conomos, 2009, p. 114). The myth of the lone male artist labouring unaided in his garret has become as irrelevant as it is misogynist in contemporary educational and artistic practice. Collaborative practice also allows for a flattening of siloed discipline boundaries, and encourages transdisciplinary modes of thinking and doing across the arts, sciences, and humanities. As Gershon (2009) reminds us, collaboration generates previously unknown possibilities, through conflict, risk, disagreement, accidental happenings and unimagined possibilities for sensation. The outcomes are unavoidably transformative, and such complexities are rich spaces for socioecological learning. Further, Santamaria and Thousand (2004) argue that collaborative practices encourage inclusivity and an acceptance of diverse thinkings, knowings and doings (Cutcher, 2015). Art has become less a category or a thing, but rather a performance, a process, both generative and destructive at the same time (Wright, 2004). Generative in its yields, destructive due to the

artist's need for sole authorship. Yet it is important to acknowledge that there is no such thing as the lone practitioner, as the self is multiple in itself, an ecology of flesh, sensation and thought, memory and experience. Artmaking itself is a relational practice.

This relational framing of collaborative art is useful for arts practitioners and arts educators who are seeking to foster aesthetic engagements with the more than human world. From a relational perspective, simply *being together in place* offers a space for becoming-with the site/sight as an ecology of sensation, which embraces an ecological aesthetics of the larval subject as an emergent form of life (Deleuze, 1994). We can also engage such understandings to merge together place, the human and nonhuman as a site/sight through which the blending, melding and weaving of creative research can emerge. Through this lens we as arts makers can compose the mixed milieus of site/sight within new territories (Deleuze & Guattari, 1987; Naughton, 2018), in “a state of constant change where there is no beginning, or end, only a coming from the middle” (Naughton & Cole, 2018, p. 3).

C/a/r/tographies of site/sight/insight

As our own collaborative arts-based inquiry unfolded “from the middle”, we found ourselves returning to the notion of site/sight again and again: walking together and apart, documenting together and apart, writing together and apart, and creating together and apart. In this way, our collaboration allowed for an immersion in socioecological practices in the making, as we engaged with and through the human, the nonhuman and the inhuman, side-by-side, individually and together. The artworks and the artmaking themselves became a breathing ecology, a living inquiry (Irwin, 2004), which is inextricably entwined with place – the site/sight as ecology of sensation. It is this living engagement with site/sight as sensational milieu that forms the heart of our c/a/r/tography.

The site/sight that is the focus of this inquiry is a coastal stretch of beach just south of the town of Kingscliff, on the east coast of Australia in the state of New South Wales. By its very nature, the beach is an ecosystem of wind, sand, water, nonhuman life forms, salt and air that merge, clash, fight, engage, align and intersect. South Kingscliff, or Salt, as it is known, is part of a coastal zone management plan, largely due to the ongoing erosion of coastline and dunes. The previously large area of casuarina trees has been removed for major housing and infrastructure development, including a sprawling resort and an artificially constructed “village” providing basic services and dining options for residents. All that is left of the coastal vegetation is a narrow barrier of casuarina plants that hold the dunes. These are backed by landscaping and pathways for human traffic to and from the resorts to the beach, well known by the locals as a dangerous and largely unguarded swimming area – a rough constant swell, rich with constant rips, undertows, and shark activity. In front of the casuarina trees is an uninterrupted strip of golden sand so fine that it squeaks with each step, stretching from Cudgen Creek to the north down to Bogangar in the south.

We are aware of these geosocial tensions as we venture out to walk the site/sight and map it with our cameras, our senses and our bodies. In doing so we engage

the methodology of c/a/r/tography, an approach with its genesis in the arts-based educational research of a/r/tography and the Deleuzoguattarian (1987) notion of the *carte* or map (Rousell & Cutcher, 2014). Such cartographic methodologies are rhizomatic, speculative, productive, unpredictable and experimental rather than representational or reflective (Rousell, 2015). Deleuze and Guattari (1987) make a crucial distinction between the map that is “entirely orientated toward an experimentation with the real...”, and the “tracing” that is a self-enclosed representation of the world (p. 12). Cartography is thus aligned with the biocultural figure of the rhizome, which is comprised of an ever-expanding entanglement of lines of growth and becoming, the components of which can be detached, rerouted and plugged into new assemblages of living matter, meaning, and sociality. Like grasses, bamboos or the microbiology of the brain, cartographies spread horizontally across the collective surface of experience by contagion, rather than by arborescent systems dependent on underlying structures of communication and signification. Hence, cartography can be described as a “distributive and transformative process without beginning or end, in distinction from that which is organised vertically, rooted to a single spot” (Young, 2013, p. 265).¹ Cartography involves mapping lines of becoming that always begin in the middle of the cartography, in the milieu “from which it grows and overflows” (Deleuze & Guattari, 1987, p. 21).

A/r/tographic living practices also begin in “middling” spaces of relation. “Such practices acknowledge that “no one is ever an individual detached entity but rather continually affected by entanglement in the materiality of all things, human and nonhuman” (Triggs, Irwin, & O'Donoghue, 2014, p. 253). Always in movement, mapping a/r/tography embraces the *carte* as both an event and an artefact and rethinks the concept of methodology in favour of a “living practice” (Irwin, 2004, p. 34). Living practices are never fully intentional and in this instance, find their theoretical framework within artistic practices and expression within artistic practices. Such living practices might be better described as “volitional” and “directional”, as they are initiated through movement and are open to the fluxes of affective experience within an ecology of sensation (Manning, 2016). It is here that we also focus on potential. “Potential situates everything as secondary to the movement of practice. Practice is no longer derived knowledge, but rather, the feel of new forms of vitality” (Triggs et al, 2014, p. 256). Thus, c/a/r/tography embraces the potential of artistic practices to pursue an embodied exploration of what is not yet known.

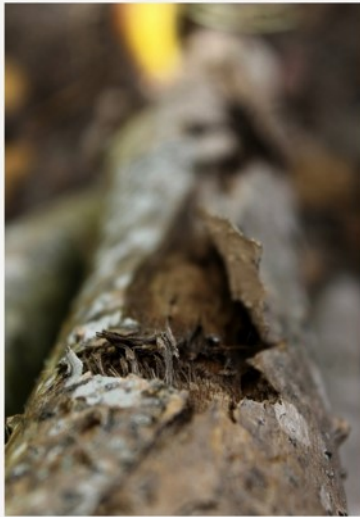
As we embark on wayfinding in this historically, culturally, environmentally and aesthetically rich site/sight we appreciate the affective and generative space for experimentation and collaboration that unfolds through our collective engagement with c/a/r/tography. Indeed, we experience layered mappings of our

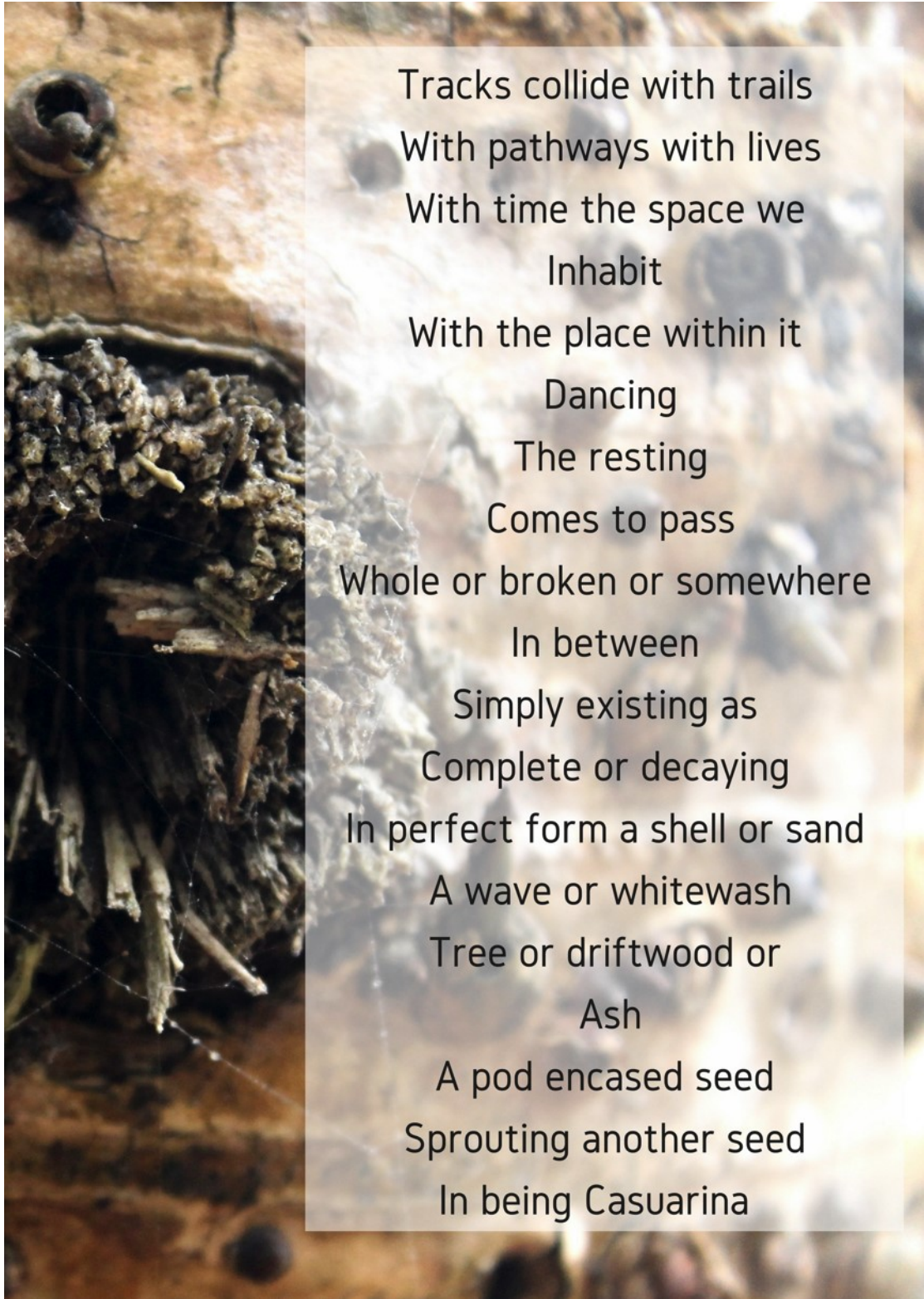
¹ This is to explicitly distinguish cartography from arborescent methodologies that are predicated on the image of thought, language and life in terms of a tree that germinates deterministically from a seed, and grows roots that descend into an obscure and yet entirely rational depth. In phenomenological and structuralist terms, this means that the seed always contains the underlying ‘essence’ or ‘presence’ of the individual tree it will eventually grow to become. Rather, for the rhizome-map there is no pre-existing individual essence for each thought, language or life, only the machinic production of difference (as individuation of a larval subject) through networks of dynamic interaction across scales and temporalities.

site/sight/insights (Irwin, 2003). Lingering in the folds of c/a/r/tography (with its forward slashes) opens up active spaces for engaging with the vitality of potential itself, where the in-between spaces of knowing and unknowing, seeing and unseeing, encourage ruptures. Knowledge creation is abundant and yet it is the vitality of the penetrating discernments of insights that invite us to delve into the spatial connections in the site itself as an ecology of sensation. As a collaborative, these site/sightings are our own as well as others' creatively shared and critically considered, as we constantly experience mapping movements that are at once aligning, disorienting, yet redirecting us to see anew and to see again what we perceived. Embracing the site/sight/insight métissage may be a challenge yet it invites a layering of mapping encounters, processes and events. Indeed, in doing so we are attuned to the possibility of invention and poetic wisdom. We surrender to a dynamic coming to think, feel, and know.

What follows is the portrayal and critical engagement of the c/a/r/tography of the site/sight as an ecology of sensation. As mentioned, the visual operates as artwork, but also as a critical and theoretical engagement that produces socioecological insights. The viewer will note the poetic aesthetics of the visual essay. The poetry that breathes alongside the imagery can be considered both integral to the essay, and also as an exegetic. The reader is given the chance to read slowly, to linger with the images, to pause, revisit and find your way (Lasczik Cutcher & Irwin, 2018). In this way, the reader/viewer/audience joins us in a socioecological learning encounter, making and remaking their map of engagement as they go. In this way, you join us in the c/a/r/tography, in the wayfinding (ibid).

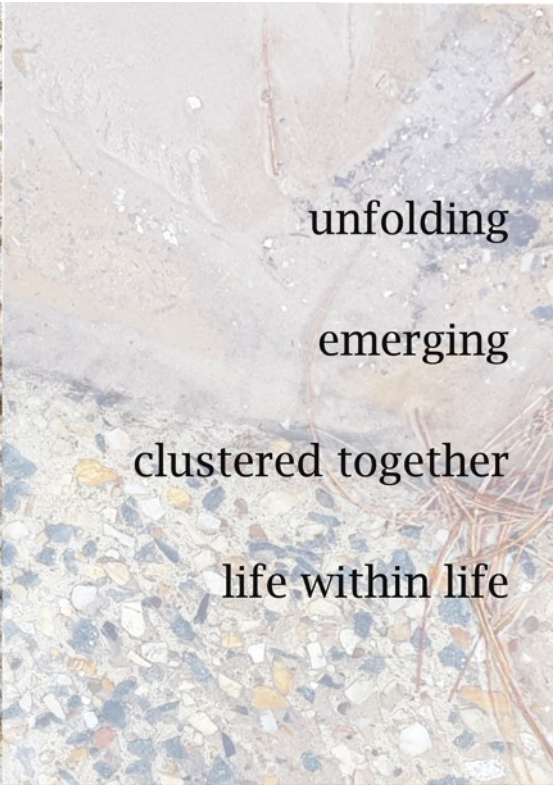






Tracks collide with trails
With pathways with lives
With time the space we
Inhabit
With the place within it
Dancing
The resting
Comes to pass
Whole or broken or somewhere
In between
Simply existing as
Complete or decaying
In perfect form a shell or sand
A wave or whitewash
Tree or driftwood or
Ash
A pod encased seed
Sprouting another seed
In being Casuarina







The beach is very generous to those who experience her
She offers me her breath, her salty kiss.

I often choose to be cradled by her wet embrace, or to run my feet along her
back, relishing her texture and curves.

She always offers me gifts to challenge me

They are objects used and discarded, however
challenging me to shape, craft and reuse.

Today she offered me the lid from a takeaway
plastic container.

This one is easy, I say to myself in confidence.



I know this material and can take advantage of
its properties of flexibility and stiffness
I know it can be cut, drilled, bent and joined easily
I can value add to this, using a battery, LEDs and tape
I will use the flexibility of the material to bend over
itself and the stiffness to keep the circuit open,
acting as a switch
I will make a torch. What do you see in this gift?







shifting
standing, lingering, wayfinding
 grinding my passage, through the years
 on the sand, of the sand, through the wind,
 the rain, the tears, the joy
 with another living thing (with many living things)
 but this one will linger-with
 the beach
always.



Conclusions – Learning to be affected

Each living practice requires bodily participation in order to immerse and disperse oneself within an ecology of sensation. By participating in an ecology of sensation we unleash the vitality of potential to affect and to be affected by powerful and transformative experiences. We learn how to be affected by what we experience in ways that are not reducible to cognition and rational categorisations. We become larval subjects, emerging anew with and through each experience and relation. As such, it is important to remember we are not able to sense these potentials for learning if we are too controlled and desire a world of order (Triggs, et. al., 2014). Our capacities to sense our environments are not simply static or given, nor are they accountable to socio-cultural norms and political regimes. They are dynamic processes which are constantly being modulated, attuned, and sensitised in relation to the experiences of other bodies, both human and nonhuman, with whom we share our worlds. This is how we learn to be affected: to feel and think the world differently through the senses and through the affective capacities of the body. Learning is also how we come to proliferate creative difference through our participation in ecologies of sensation. “Learning to be affected means exactly that: the more you learn, the more differences there exist” (Latour, 2004, p. 8). Learning to listen, learning to speak, learning to write, learning to think, and so on, are all living practices that capacitate developmental processes through increased sensation and affectivity. The more you learn the more feelings you can feel, the more sensations you can sense, the more perceptions you can perceive, the more thoughts you can think, the more behaviours you can behave, the more you are capable of *producing difference within a biosocial ecology of sensation*. Socioecological learners therefore need to think beyond traditional categories of knowledge production and historical identities, and instead, open themselves to living practices, where emergence of new knowledge is joined with a co-emergence of newly knowing entities interacting and connecting human and nonhuman. Indeed, the visual essays shared here are layered and entangled potentials mapping our encounters with site, sight and insight. Additional experiences will yield new potentials and new insights. A living practice of c/a/r/tography frames unimagined and untold potentials for sensing, feeling, and learning more than we can perceive.

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