Two places: working and walking with waterways

Kim Williams and Lucas Ihlein

HERE is a map of Australia showing two places: Wollongong and Mackay. Both are coastal regional cities; both have economies built on mining and agriculture. Wollongong is temperate, known for its coal and steel industries, surf beaches and (nowadays less so) for dairy farming. Tropical Mackay is known for sugarcane production and its proximity to coal mines. Both are port cities.

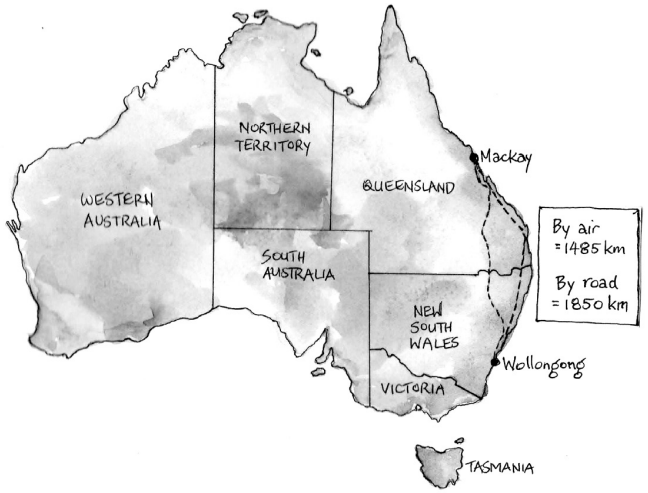

Figure 19: Kim Williams, Map of Australia, showing geographic relationships between Mackay and Wollongong, 2017

We (Kim Williams and Lucas Ihlein) are artists living in Wollongong. This chapter offers a meditation on our experiences working in these two places, near and far. What connects both the places and the artworks is *water*. The cultural and ecological communities in Wollongong and Mackay are deeply shaped

by water's inexorable downhill flow. Our text flows back and forth between these two loci, reflecting on our working methods as examples of socially engaged art, and considers how these might enable an ongoing process of embodied learning. Through structured aesthetic experience around waterways in Mackay and Wollongong, our goal is to become more deeply embedded in these places, and to facilitate transformed relationships with land, water and ecology.

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We begin with two maps showing the relationship between land and sea mediated by waterways in Mackay and Wollongong. The first shows the Pioneer River. This is the major waterway running through the sugarcane fields in the Pioneer Valley of Mackay, Queensland. You can see the railway lines on both sides of the river: small sugar trains transport the freshly cut cane to the mills along these tracks. This map represents an area of roughly fifty kilometres from west to east. It shows the geographic focus of our project entitled *Sugar vs the Reef?*[396]

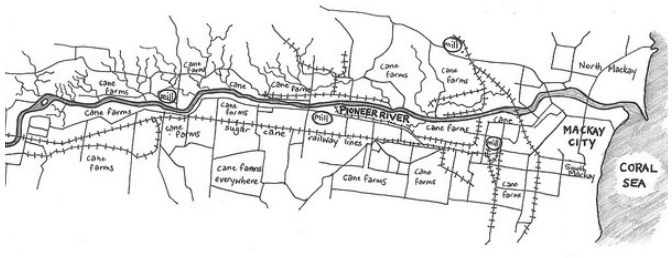

Figure 20: Kim Williams, Map of Pioneer River, Mackay, 201

The second is a map of Towradgi Creek. This map shows the basic infrastructure surrounding a creek just north of Wollongong: roads, railway line, schools etc. It represents a relatively small geographical area, perhaps three kilometres from west to east. Towradgi Creek is one of the fifty or more creeks in our local region which are the focus of the socially-engaged art project *Walking Upstream: Waterways of the Illawarra*.[397]

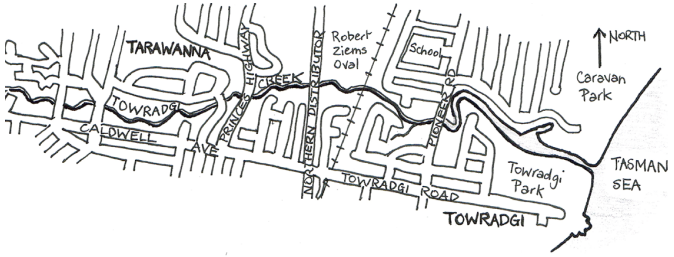

Figure 21: Kim Williams, Map of Towradgi Creek, Wollongong, 2017

While *Sugar vs the Reef?* tackles the cultural, political and environmental tensions of coastal agricultural practices in Mackay, *Walking Upstream* explores the social, cultural and geographic textures of the region in which we live. Before delving into some of the themes emerging from our two projects (themes such as contested land and water use, environmental responsibility, and care), we want to flesh out the cultural and climatic atmospheres of Mackay and Wollongong a little more.

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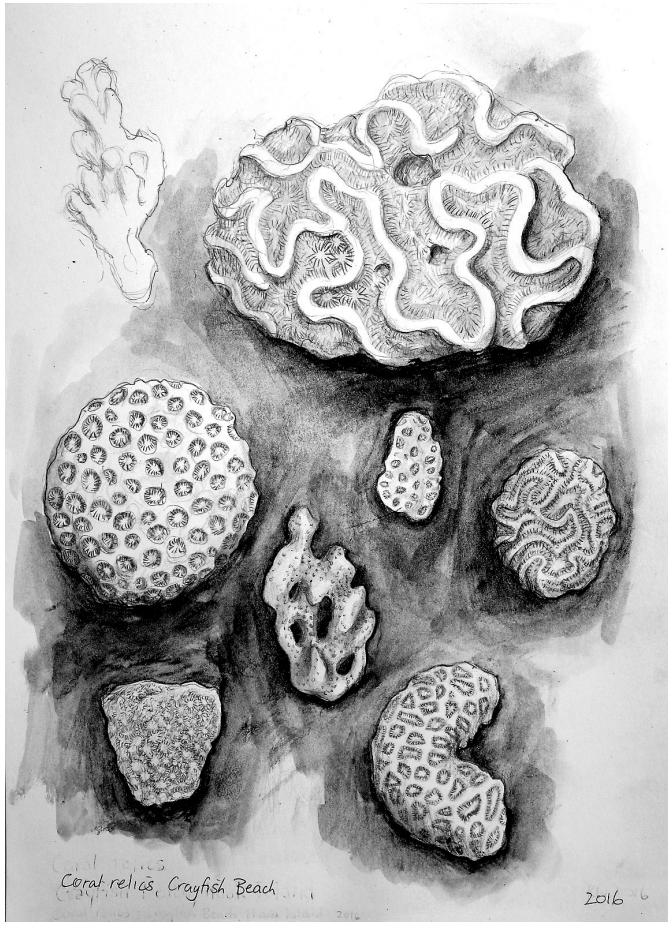
In Mackay, solid walls of sugarcane dominate the landscape. Fields of cane flank the airport. The smell of sugar processing during the seasonal "crush" at the local mills hangs sickly sweet over the town. It's hot all year round, very wet in the summer, and sugarcane – a kind of giant perennial grass – flourishes here. Farms spread from the coast right up into the Pioneer Valley. During big rain events, loose soil sediment erodes, and chemical runoff from fertilisers and pesticides that are used on nearly all sugarcane farms leach into dozens of local creeks, flowing down the Pioneer River into the Coral Sea. This run-off from farming exacerbates the conditions for coral bleaching in the Great Barrier Reef. It's this tension between industrial agriculture and an adjacent world heritage site for biodiversity that we're exploring in our work in Queensland.



[[Figure 22: Kim Williams, *Coral Relics, Crayfish Beach, Great Barrier Reef,* drawing, 2016.]]

Since we began working in Mackay in 2014, a central question has emerged. How can the environmental effects of sugarcane farming be improved? We've begun collaborating with a cohort of sugar cane farmers in Mackay's Pioneer Valley. They are developing and demonstrating methods to build healthy soil and reduce the need for chemical inputs to their crops. These farmers are attempting to generate grassroots cultural change in their own communities. As artists interested in terrestrial and marine environments, we are acting as catalysts to connect these change-maker farmers with the wider public. Our artist-farmer collaboration draws attention to the potential benefits of regenerative agriculture for soil health and water quality in the Coral Sea.

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Our work in Wollongong is quieter and slower. We are less focused on trying to create discernible transformation "out there". Rather, we walk along creeks in an attempt to develop closer relationships with our local environment – *to know it* more intimately. There are more than fifty creeks in Wollongong. Small and large, they flow down subtropical rainforest gullies from the Illawarra escarpment, which is like a giant green wall squeezing the suburbs towards the coast. At the top of their flow, the waterways of the Illawarra bubble over giant boulders and seep from hidden earthen springs. Further downstream, the creeks bisect housing tracts, industry, farmland and commercial districts, eventually flowing out to the Tasman Sea directly or via Lake Illawarra.

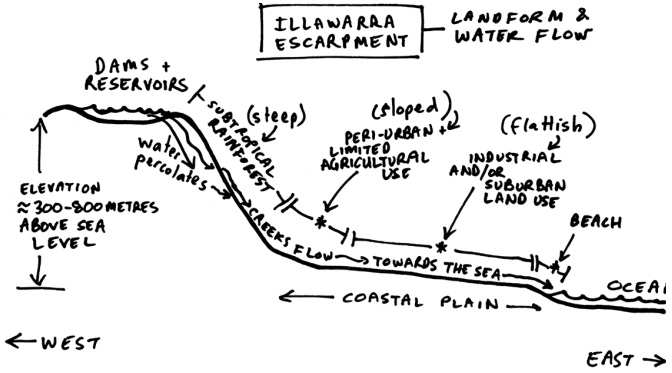

Figure 23: Lucas Ihlein, *Indicative cross-section of Illawarra Escarpment (not to scale),* drawing, 2018.

Wilfully following a creek line upstream, we cannot help being aware that these waterways were flowing long before Europeans began reshaping the local landscape. The active practice of

walking reveals how degraded the waterways of the Illawarra have become since European invasion. Many have been reduced to weed infested and rubbish-strewn drains. Yet despite the neglect of the waterways (*you wouldn't dare drink the water!*), the riparian areas provide habitat for a diverse range of plant species and creatures: leeches and ticks; bandicoots and feral deer; tree ferns and lantana; noisy miners, frogs, lyrebirds and feral goats.

Land use and its effects

Both projects share our fascination with the ways in which humans have shaped these places through land use. They are both busy places. Many of the Illawarra's waterways are covered over by roads, parklands, railway lines, and concrete; disappearing from view as the utilitarian focus of human activity buries these ancient markers in the landscape. The Pioneer River in Mackay is also surrounded by busy activity: cane farmers pump water out of the river to irrigate their crops, sugar mills draw water for industrial processing, while water skiers buzz up and down the river in their leisure time.

Fundamentally, our projects are about people and landscapes and plants and animals and places of habitation. They are political engagements with environmental policy, agribusiness, farmers and politicians, land ownership and trespass. They are physical engagements with forest, electric fences, rain and heat, blistering sun, cold winds, tropical stingers and subtropical leeches. They are cultural engagements with soil and water, co-option and displacement, indigenous custodianship, and farming practices.

It is impossible to divorce the physical characteristics of these two places from the stories that emerge from working in those landscapes. The things that happen in these places arise not only from the cultural practices of people living (t)here; those cultural practices themselves arise from the landforms, the soils, the weather, and the waters.

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We began working in Mackay in 2014, when a retired farmer, John Sweet, contacted Lucas to propose an unusual farmer-artist collaboration. John is a devotee of Keyline Design, a farming system invented by PA Yeomans in the 1940s that builds soil and increases the capacity of the land to hold water. He had seen Lucas' previous work with Ian Milliss on *The Yeomans Project*, and saw potential in a new artist-farmer collaboration for North Queensland.[398]

John's ambition is as big as Queensland itself: he argues that in order to save the Great Barrier Reef from agricultural run-off, massive-scale Keyline re-design is needed across the entire catchment, which empties into the Coral Sea. This represents a 2000 kilometre stretch of coastal farmland. A noble proposition! But how can a small group of artists influence change on that vast scale? In reality, the only practical way we know is to start small and local. And so in late 2014 we began visiting Mackay and making friends with sugarcane farmers in the catchment of the Pioneer River. Fairly quickly, we were deeply inhaling the sugar industry's atmosphere, becoming familiar with the local jargon: billets, ratoons, the "crush", bagasse and best management practice. But it's what lies hidden beneath the surface of the soil – friendly nematodes, mycorrhizal fungi, worms – that quickens hearts in the world of regenerative agriculture. According to our farmer friends, healthy soil biology – the tiny things – could make a world of difference for global agriculture and carbon sequestration.[399]

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Our creek work in Wollongong was more self-initiated. Beginning in 2014, we three friends (Kim Williams, Lucas Ihlein and Brogan Bunt) decided to bring a set of mutual interests (bushwalking, walking-as-art, and dialogical art) together around a clearly identifiable geographical feature in our neighbourhoods. As artists of European descent, our hunch was that focusing on our local creeks might help us to form deeper connections to the places where we live. We often bring along with us a few curious walkers: colleagues, friends or family members. When we

can, we try to connect with the traditional Aboriginal custodians of the land through which the creeks flow. Our walks unfold as unspectacular stories of discovery, delight and disappointment. Sometimes we write them up prosaically on our blog as field notes; at other times, playful poems emerge, such as this account of a walk from 2017:

Macquarie Rivulet Creek Walk Poem

It was a fine day, an AA Milne day,
Smallish clouds puff along in a clear blue sky,
Four adults and child meet at Shearwater Drive:
Let's find the mouth! – and off stump the five.
But the Big Metal Fence and the Very Big Dogs
Put a stop to the start of our journey:
No go. NO TRESPASS!
... so perhaps
take a roundabout way to the mouth?
Instead
a new house up for sale (Come in! Come on in!)
Three beds, two baths and a double garage,
Our decoys talk mortgage and offers and rates
while the rest fill our pockets with free chocolates
Slyly checking: Will the backyard let out on the mouth?
No luck. No access. No way to squeeze through.
And so back to our creek, its path to pursue.
Alongside the banks, eating a sanga, in Darcy
Dunster Park,
Under the freeway and aircraft hangar
– not (how can I put it?) "Textbook Romantic"
We spy a discarded franger.
Press on! Time to go! Follow that creek!
But a sign says
No go. NO TRESPASS!
Do we comply? Or turn a blind eye?
We turn it, crawl under the wire.
To help out a friend (who cannot quite bend)
Kim lifts up the fencewire (a live one)
Watch her dance! (or convulse) - señorita possessed,
And the wire on the rebound hits Joshua's back,
With two thousand volts going clickety clack
He lies face down and shocked in the mud.
Through lush green paddock alongside the creek
with a herd in the distance mooing
We're stopped by an impasse in very long grass –
a creek branch too deep to be crossed.
So we head for the Herd with barely a word
the fine milk machines of our region,
We commit minor offence: "Crawling Under a Fence
And Consorting with Holstein and Friesians."
As we make muddy way through the muck and the hay
past the milking shed's earthy aroma
to the road leading back to our creek-walking track:
Time to be heading off home, huh?

Whose land? Whose water?

From our account of these two projects so far, it's clear that physically inhabiting and moving our bodies about in these places is essential to our work. We are constantly traversing land, whether on foot, or by car, and sometimes crossing water by kayak or boat. These experiences create a shift in our awareness of the territory we inhabit at any given moment, and our behaviour shifts with the territory.

Walking along creeks in our home region, we are aware we are breaching the legal boundaries of territory. What is public space and what is private space? What is recreational or functional or abandoned or untouched land? It's not always clear. When we travel to Mackay, the movement between territories is similar, though the edges of the urban and rural rub more closely against each other.

Land divisions define both the Illawarra and Mackay regions strongly. Roads and fences range across the underlying topographies of places. Landscapes that have long been cared for by the Dharawal (Illawarra) and the Yuwibara (Mackay) peoples become fragmented by infrastructure.

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Land ownership comes into sharp focus in the world of industrial sugarcane farming in Queensland. Indigenous people were dispossessed of their lands prior to the establishment of sugarcane farms up and down the Queensland coast in the mid-1800s. Locking up these lands as farms was a way of establishing British dominance and warding off perceived threats from Asian colonisation. To provide cheap labour for the farms, 'blackbirding' was commonly practised. Men (and some women and children) from Pacific Islands such as the Solomon Islands, Vanuatu and New Caledonia were forcibly removed and taken by ship to the canefields of Queensland, where they worked in slave-like conditions.[400]

When the White Australia Policy came into effect in 1901, many of the Islander workers, even those born in Australia, were deported to their countries of origin. Most of the Australian South Sea Island population in Mackay today are descendants of the 'blackbirded' workers who were allowed to remain in Australia – or who were permitted to return during the labour shortages of the First World War.

Despite this complex multicultural history, we are struck by the disconnection between the contemporary cane-farming community of Mackay, and the Aboriginal and South Sea Islander communities.

These days, cane-farmers don't often discuss the pre-history of their paddocks. It is as if the walls of sugarcane are walls of silence.[401] While our work in Mackay began with an environmental focus (regenerative agriculture and its positive impacts on soil and water quality), inevitably cane farming's cultural background would emerge and demand attention. Since 2016, we have made an effort to meet and develop connections with the local Aboriginal and Australian South Sea Islander people: the Mackay and District Australian South Sea Islander Association (MADASSIA) and the families that form the Yuwibara Aboriginal Corporation. We attempt to create situations where the Aboriginal, South Sea Islander and farming communities may begin to talk and work together. We take advice on social protocols from members of these communities, and our intention is to honour the place of Aboriginal and South Sea Islander people in an industry that historically exploited their labour and lands.

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In Wollongong, our walks happen on the lands and waters of Dharawal Country. Dividing, fencing and 'owning' land and water – these are legal constructs, which are very new in Australia. The dominant property ownership system imported from Europe 230 years ago does not align with the human-land systems developed over many thousands of years by Aboriginal peoples prior to invasion. In NSW, even creeks are subject to colonial property law. If a creek runs through a suburban backyard, the creek bed and banks (*but not the water flowing through it!*) are legally the property of the homeowner.

In 2017, we published a book called *12 Creek Walks*, which attempts to codify some of our experiences into a sort of user's manual. Some of the creeks are harder to walk than others – and this is generally due to human-made impediments. If we wish to proceed, we are forced to trespass. In the introduction to the book, we write:

> While we cannot simply do away with the current legal system, that does not mean we have to agree with the idea that it is "right" for a creek to be privately owned. We believe that fences, except where sensitive ecosystem repair is being conducted, should not obstruct access to creeks. We believe that private property owners should leave a riparian corridor alongside creeks, and should definitely not run fence-lines right down to the water's edge. We believe that creeks belong to everyone, but most of all, creeks belong to themselves.[402]

[[Figure 24: Vincent Bicego, *Walking (and climbing) in the upper reaches of Byarong Creek*, photography, 2017.]]

Dialogical aesthetics: the art of reframing problems

We now turn to a closer reflection on the methods we use for our engagement with Mackay and Wollongong. One important process – ever-present in our work – is conversation. In his book *Conversation Pieces: Community and Communication in Modern Art*, art historian Grant Kester identifies a tendency in contemporary art he calls "dialogical aesthetics", in which talking is not just a means of establishing the conditions for the production of an artwork, or a way of critiquing it after the fact. Rather, Kester argues, the act of talking (or more broadly, "the creative facilitation of dialogue and exchange") can itself be the work of art.[403] Conversation without the pressure of outcomes, listening without judgement, and in-situ dialogue occurring outside of our normal social circles, are all part of our artmaking repertoire in Wollongong and Mackay.

While the most obvious 'method' used in *Walking Upstream* is walking, an important aspect of this project is *talking* – making connections, forming a loose community of people who share an interest in walking creeks. When walking, we are invariably talking – getting to know each other better, talking about our immediate experience and our observations, sharing knowledge about plants and animals, voicing opinions about current events both local and global, forging new friendships, learning from each other, making jokes and laughing.

Talking is also a central method in *Sugar vs the Reef?* The project has evolved through engagement with the farming community, attending farm field days, talking to sugar industry representatives and reef scientists, building connections with natural resource management and community organisations, getting to know the Indigenous and the Australian South Sea Islander communities, making overtures to politicians, pitching ideas to funding bodies - in short, learning the territory of industrial sugarcane farming and Great Barrier Reef advocacy and inserting ourselves into this territory. Our talks in Queensland generally don't happen while walking, but while sitting down. We 'sit down' with local experts, we put ourselves in front of them for a time, usually with a cup of tea, talk and listen and slowly build trust.

In making ourselves available for public conversations along creeks and in canefields, we become witness to myriad problems – environmental degradation, erosion, questions about farming profitability, land use regulations – faced by local people. We

have a dual role, both insiders (in Wollongong) and outsiders (in Mackay) and this sometimes allows us the opportunity and insight to see a problem situation from an unusual angle. In this, we are guided by the tradition of eco-social art established by the Harrison Studio in California – a tradition that attempts to mobilise seemingly "stuck" circumstances by reframing them as opportunities to bring forth "a new state of mind."[404]

For example, as we walk the creeks in Wollongong, here and there we notice tracts of bush regeneration, nurtured by bushcare groups who are working to improve and care for their neighbourhood riparian corridors. It is always admirable seeing these efforts to restore native habitat and clear creeks of weed and rubbish. A woman from a local bushcare group attended a talk we gave at the Wollongong Art Gallery during our 2017 exhibition.

Figure 25: Lucas Ihlein, Kim Williams and Brogan Bunt - artists' talk at Wollongong Art Gallery for *Walking Upstream: Waterways of the Illawarra* exhibition, December 2017. Photo: WayWard Films

She, who knew far more about plants than we ever will, was passionate but also despondent about her bushcare group's efforts. She felt as though they were fighting a losing battle. She asked us, *"What can we do? How can we carry on?"* It was an existential question. How to best care for creeks while caring for one's own mental health?

In response, we tried to reframe the problem. Rather than thinking of this as a battle, why not look upon the situation as an opportunity to craft relationships? The creek is a natural corridor uncared for by the state: it is a grey zone. Creek land backs onto private housing. It is *not-quite-public-enough*. Apart from a few sections that are zoned "recreational", most creek corridors are left to fend for themselves. Similarly, the duty of care shown by private homeowners usually extends only to the limits of their own back fence. So creek-care is an opportunity for self-organised community building. And as long as the challenge of garbage and weeds continues, there is an incentive for neighbours to emerge from behind the picket fence and care for something they don't 'own': forging relationships with non-human entities (place, water, soil, plants, animals, etc.) as well as with other people.

Sometimes in our work, problems emerge without warning. In late 2016, together with sugarcane farmer Simon Mattsson, we made a proposal for the *Watershed Land Art Project* to the Mackay Regional Botanic Gardens. Stage One of the project involves planting a dual crop of sugarcane and sunflowers in the Gardens. Our goal was that the crop would be a demonstration of regenerative agriculture over an 18-month period, grown in a horticultural setting popular with locals and visitors to the region. The idea was to create a public platform for discussions, workshops and events that could amplify the potential of regenerative agricultural methods.

The Botanic Gardens agreed in principle to the proposal and there was some local media coverage. A period of silence followed, after which a scathing letter arrived from the chair of a community group which cultivates native plants, runs guided tours and generally supports the Gardens. They opposed our plan, holding the view that sugarcane is an entirely inappropriate species to grow in a Botanic Garden.

Figure 26: Kim Williams and Lucas Ihlein, *Plan of proposed planting zones*, *Watershed Land Art Project*, *Mackay Regional Botanic Gardens*, 2017–19

The irony of the situation wasn't lost on us. We are attempting to reframe the problem of industrial sugarcane production and its impact on the Great Barrier Reef. Promoting regenerative agriculture is an acknowledgment that conventional sugarcane cultivation methods are problematic for soil health, with negative impacts on terrestrial and marine habitats. Growing a multi-species crop of sugarcane and sunflowers in the Botanic Gardens is an opportunity to open up dialogue about co-habitation of species: native, horticultural and agricultural. It is potentially a means of bringing these non-human 'communities' together to explore ways to disrupt monoculture cropping conventions, using techniques to improve both soil and habitat on farms.

While we're trying to draw together incongruous communities of plants, we are attempting something similar with humans. These encounters are not easy (and this one in particular remains unresolved). Before the *Watershed Land Art Project* had even begun, simply circulating the proposal brought to the surface seemingly opposing worldviews about the purpose and function of botanic gardens, and the role of native versus agricultural species. The discomfort involved in pursuing these conversations is precisely the material of our work as artists engaging with the social characteristics of complex environmental management situations.

Overlapping Methods in Socially Engaged Art

Our working methods sit within the field of socially engaged art (SEA), a set of practices that evolved through the late twentieth century from a diverse lineage: avant-garde art, feminism, community arts and political activism. SEA has been energised in the early 21st century through the growth of grass-roots political activism using cultural forms such as performative gatherings, visual and tactile arts, public events, design and media production. These forms are further mediated through digital technologies and social media. New York curator Nato Thompson speaks of "the inevitable tide of cultural producers who are frustrated with art's impotence and who are eager to make a tangible change in the world."[405] Thompson distinguishes SEA from its avant-garde predecessors, which could be defined as *movements*: Dada, Situationism, Fluxus and Happenings for example. Instead, he describes SEA as an indicator of a new social order which models "ways of life that emphasize participation, challenge power, and span disciplines ranging from urban planning and community work to theater and visual arts."[406]

Socially engaged art employs a diverse set of practices ranging between "art and non-art."[407] For Grant Kester, SEA expands beyond the studio-gallery relationship, "in which the artist deposits an expressive content into a physical object, to be withdrawn later by the viewer."[408] It is, rather, a relationship of reciprocity, where the artwork emerges through the interaction of diverse participants or collaborators. In the context of socially engaged art, the ethical process of relational engagement is

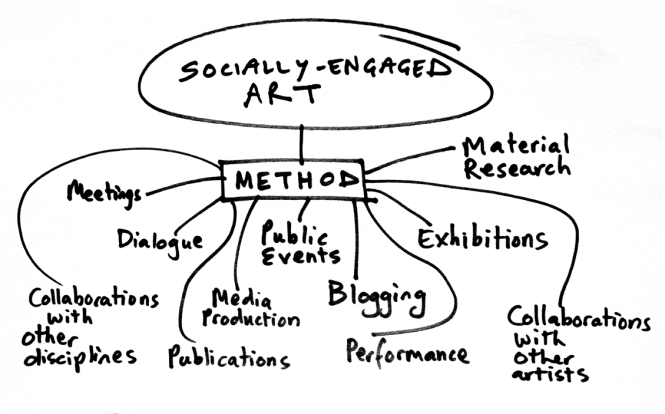

Figure 27: Lucas Ihlein, *Diagram of methods and materials in Socially Engaged Art with a particular focus on* Sugar vs the Reef? *and* Walking Upstream: Waterways of the Illawarra. 2017.

front and centre, through which creative responses to complex situations may emerge. To work in this field means questioning the standard focus on outcome over method. We negotiate the ambiguous territory between means and ends.

In our own projects, we frequently find ourselves wearing three hats as we shuttle between diverse communities. Our role is ambiguous and mobile. When we articulate our methodology and insights using the language of research, we behave as academics within the university system; when we work on encouraging regenerative agriculture practices, or team up with creek regeneration groups, we operate in an activist mode; and when our activities generate discernible objects, artefacts and actions to be presented within an artworld context, we are identifiable as artists.

Different social milieux call for shifts in our identity, but it may not always be clear to our collaborators exactly who we are. For example, since 2016 we have been meeting with politicians in Mackay, lobbying alongside farmers and community activists for government support to establish a farmer-led demonstration farm for the sugarcane industry. We introduce ourselves wearing *all three* of our hats at the same time: as artists, university

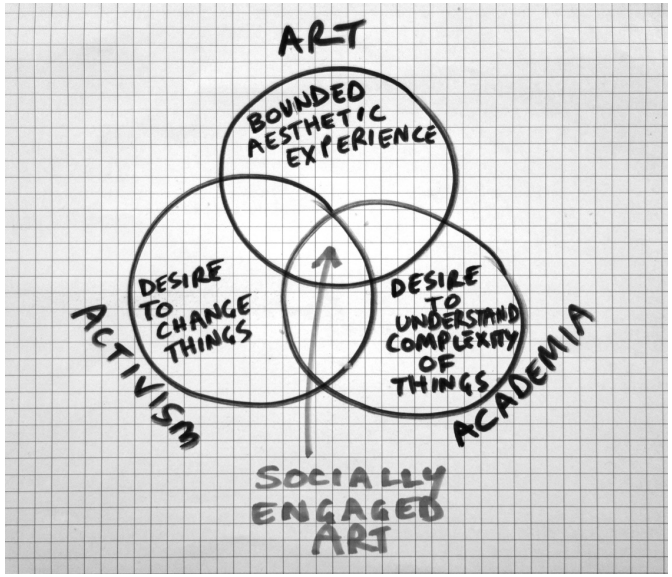

Figure 28: Lucas Ihlein, *Socially Engaged Art in a Venn diagram*, 2014.

researchers (the "Dr" before Lucas' name on his business card is frequently useful); and members of the farmer group Central Queensland Soil Health Systems. The ambiguous role played by socially engaged artists at these meetings can help to shift the conversational atmosphere beyond the standard "script" – as it is not immediately clear to the politicians what we stand for. Artist and educator Pablo Helguera has also noticed the value of ambiguity in such situations. In fact, in his analysis, this virtuous lack of clarity may be the defining contribution of SEA. Helguera writes:

> Socially engaged art functions by attaching itself to subjects and problems that normally belong to other disciplines, moving them temporarily into a space of ambiguity. It is this temporary snatching away of subjects into the realm of art making that brings new insights to a particular problem or condition, and in turn makes it visible to other disciplines.[409]

By shuttling back and forth between academic, artistic and activist contexts, we risk being not quite "legitimate" in any of them. Being prepared to embrace the ambiguity of our role is a social experiment in its own right – and if it works, one of the rewards is the opportunity to cross-pollinate ideas from one realm to another, and potentially allow new solutions to scale up from the local to the regional or the global.

Figure 29: Artists-activists-academics-farmers meeting with conservative federal MP George Christensen to propose a large-scale demonstration farm for the sugarcane industry, March 2017.]]

Worldscapes: working at multiple scales

While the spatial scales that we operate within (creek, catchment, paddock, watershed, reef) operate at the level of landscape, the veteran practitioners from the Harrison Studio urge a wider view. They use the term "Worldscape" to describe the intricate interconnectedness of ecological and social processes. The Harrisons' definition is dense:

Worldscapes are problems with global reach that have three properties: They refer to complex systems for which single cause and effect solutions are ineffectual. The problem itself reveals the disciplines required for resolution as well as determining how deeply the people involved must engage these disciplines. Multiple feedback loops are inherently part of the process. Any resolution both ennobles the place in question and the people at work.[410]

What this notion of worldscapes offers is a way to consider the intricate connections between social processes (everyday life practices, scientific research, policy making and implementation) and environmental processes (watersheds, atmospheric cycles, biological functioning). Our human methods for managing environments (and even the paternalistic notion of "management") can be limiting, in that they chop up problems into disciplinary boxes – and yet the functioning of worldscapes pays no attention to the boundaries of human systems. An important challenge at the conclusion of the Harrison's definition is that any resolution to a problem should "ennoble the place in question and the people at work." Would this rule out sweeping large-scale top-down governance (such as the wholesale displacement of populations to build mega-dams, or mass-retreat from rising sea levels)? How can small-scale communities contribute to decision-making about worldscape-scale problems?

~

In Wollongong, we skip across rocks from one side of Byarong Creek to the other, ducking overhanging branches, passing backyards with dogs. Some of us take photos, some draw pictures, some make maps. Others just talk. A botanist plucks a delicate stalk of grass from the creekside and inspects its seeds through thick glasses.

In a clearing we come across a lounge-setting, its stuffing hanging out. Bongs are stashed nearby. A cosy place for a Saturday night.

A helicopter flies overhead and we wave from below. The video camera on board sees the creek system. It sees the Pacific Ocean and Tom Thumb Lagoon. It sees the steelworks guarding the mouth of Allans Creek, poisoned by industry. It sees the confluences of the waterways that flow into Allans Creek: Charcoal Creek, American Creek, Byarong Creek. It follows Byarong Creek up Mount Keira until the creek disappears, then it floats over the top of the mountain and spies Cordeaux Dam nestling in the forest up above the escarpment.[411]

Government bodies publish flood mitigation plans, flood studies, hydrological graphs and catchment management plans for the Illawarra. In flood, creeks that are usually benign trickles become raging torrents, funnelling down the gullies of the steep escarpment. In flood, creeks become capable of carrying away backyards, capable of moving cars and shipping containers out to sea.

At the start of this project in late 2014 a question immediately arose for us: could these creeks ever be drinkable again? It seemed far-fetched and overly ambitious at the time, but now, having built a small community of interest in local creeks, perhaps it is possible. By focusing our energy on a single creek, a local waterway could become a site of care, where people could go to "take the waters" and appreciate what is special about the Illawarra.

~

In Mackay, as we sit around farmhouse kitchen tables or ramble through rows of sugarcane keeping an eye out for snakes, we keep thinking about scales, small and large.

The paddock you can walk across with your own feet; the broadacre scale you need a tractor to manage; the river-valley you can see from the window of an aeroplane as it comes in to land at Mackay airport; and the scale of the entire reef catchment system, visible only by satellite.

These *geographical* scales map loosely onto *social* scales. The discussions that take place within the boundaries of a single farming family; two farmers having a yarn over a shared fence; what goes on at a farmer-led soil health meeting; the sugarcane mills and their rules and regulations; and the fickle nature of state and federal environment policy. The Great Barrier Reef "belongs" to Queensland, but at the same time, it is a registered World Heritage Site, and in this way, it belongs to everyone on the planet. But does "everyone" have a right to tell farmers what to practice on their land? Increasingly, farmers need to earn their "social license to farm."[412] The vast social scales of the Great Barrier Reef's catchment always come back to the local.

Temporal scales, too. Thousands of years for forests to establish, for the reef to grow; decades for the Aboriginal custodians to be displaced or dispersed; years, for the trees to be cleared by South Sea Islanders working under slavery conditions; the annual cycle of planting and harvesting shaped by seasonal variations; the time it takes for soil to be depleted of nutrients and organic matter; the catastrophic moment when a cyclone devastates a year's hard farm work; the dawning awareness of warming oceans killing coral at the end of a hot summer.

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Where freshwater flows into saltwater, life proliferates. Human settlements grow abundantly in these transitional zones – so it is not surprising that some of the world's largest population centres locate themselves around the mouths of rivers. At our peril, we disregard our responsibility to maintain healthy waterways.

Our work as socially engaged artists in these two places – near and far – is a mode of learning about the functioning of these geographical features. The cultural, economic and environmental meanings of creeks, rivers and catchments are inextricably enmeshed and complex. Through collaboration, our goal is to create the conditions for deepened awareness and preparedness to change. Walking, talking, planting and proposing, telling stories, and demonstrating possibility: our work aspires to an ethical engagement with lands, waters and peoples.