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Rachael Jacobs

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The arts as a vehicle for small shifts in thinking on climate change, heat and environmental destruction in South West Sydney

Rachael Jacobs 🄳

Western Sydney University, Sydney, Australia

ABSTRACT

This paper reports on a collaboration between advocacy organisation, *Sweltering Cities*, artists and researchers who developed a multi-site research project that provided South West Sydney residents an opportunity to engage in drama and poetry workshops that gave voice to their lived experience of rising surface temperatures, as well as their desire for environmental protection and climate action. The research featured in this paper contributes to previous research that finds aesthetic modes of engagement to be powerful with regard to ecological awareness, capable of being a positive motivator of small shifts in thinking which are a precursor to climate action.

Introduction

At the time of writing, the latest IPCC (Intergovernmental Panel on Climate Change) report has highlighted that climate risks are increasing as emissions continue to rise (IPCC 2023). The effects of this acceleration have been felt around the world, and this paper focuses on the region of South West Sydney in Australia. The climate crisis poses immediate threats in the region, most commonly through rising surface temperatures and heatwaves, which affect more people than any other environmental disaster in Australia (Australian Climate Science 2023).

South Western Sydney is a region of metropolitan Sydney that includes some large, suburban centres and small cities such as Cabramatta, Bankstown, Fairfield and Liverpool. The region is racially, religiously and linguistically diverse and has one of the greatest concentrations of language diversity in Australia. The population is predominantly working class, and among other populations, is also home to migrant and refugee communities. The region has a higher-than-average percentage of long-term unemployed residents, as well as people in public housing and people living below the poverty line. There are a lot of young people, with 21% of residents under 15 years of age, and a further 14% in the 15–24 year age range (South Western Sydney

CONTACT   Rachael Jacobs   ✉ r.jacobs@westernsydney.edu.au

Primary Health Network 2019). South West Sydney is part of an Urban Heat Island which experiences exacerbated effects of climate change through hot homes, sweltering workplaces and classrooms. Most of western Sydney and South Western Sydney is a large urban heat island that can be 10° or more hotter than suburbs closer to the eastern seaboard (Sweltering Cities 2022).

This paper reports on a collaboration between heat mitigation and climate advocacy organisation, Sweltering Cities, arts researchers and community artists who developed a multi-site research project for South West Sydney residents on the issues of environmental awareness, climate change and heat. This project, called *Chill the Heat,* adopted a climate justice orientation that takes into account the unequal impacts of climate change on disadvantaged and marginalised communities. Climate justice references the structural, socioeconomic, and intergenerational inequalities that create the unequal burden of climate change, and the attempts to mitigate them (United Nations 2023). Climate justice research (Trott, Even, and Frame 2020b) also reports that, despite being on the front lines of climate catastrophe, the perspectives of critically affected communities are often overlooked and their perspectives and experiences are underrepresented in policy and decision-making processes.

In early scoping discussions with South West Sydney residents, participants named climate change as one of the primary concerns of their communities, and chose to explore the broader issue of the destruction of the environment in arts projects. *Chill the Heat* involved drama workshops and poetry and the study was framed by the theory of intersectionality (Bond 2021; Crenshaw 1989). Intersectionality acknowledges that aspects of an individual's identity – such as gender, race, sexuality, and others – overlap and intersect, affecting their experiences of the world, especially in times of hardship or crisis. Intersectionality helps us to understand lived experiences of climate change and heat as experienced by diverse communities, including migrant and refugee communities, socio-economically disadvantaged peoples, geographically isolated families and more, all of which will be discussed in the paper. This study also reflects the correlation between adverse effects, climate change and intersectional marginalisation.

This research contributes to previous findings that attest to artistic and aesthetic modes of engagement being powerful in the context of the climate crisis (Curtis 2017; Gablik 2004; Jacobs and Milne 2020; Trott, Even, and Frame 2020a). The findings suggest that arts engagement is capable of being a positive motivator that is able to facilitate reflective and deep thinking about the state of things, as well as creative thinking around what is possible in relation to climate action. Other findings from this study found that a connection with nature was an important pre-cursor to understanding the significance of climate action. Simultaneously, the research also documented the negative impacts of heat upon home life, learning and wellbeing that arose during the workshops.

Through the intertextuality of multiple artforms, participants demonstrated that South West Sydney is a site of resistance and resilience, as participants expressed their concerns about irreversible damage to the environment, as well as small shifts in thinking that may be a precursor to mitigating environmental destruction. This paper concludes with further assertions that attest to arts engagement being effective at bringing together lived expertise with artistry to enable shifts in thinking in individuals and the community that are orientated towards climate action.

Art, imagination and responses to the climate crisis

The environmental movement is filled with examples of the ways that art has become a touchstone for social action on environmental matters. Some Australian examples are discussed by Jacobs and Milne (2020) who reflect on campaigns in threatened spaces such as rainforests, lakes, rivers, and quartzite beaches – some of which have been destroyed while others are now World Heritage listed. In particular, they outline the convergence of advocacy to save the Franklin River in Tasmania that used visual art, photography, music and literature. The success of this campaign suggests that advocacy with rich intertextuality may be able to capture the imaginations of a wide range of people, even if they have never been to the place concerned. *Chill the Heat* also engages intertextuality, using a range of mediums and a convergence of artworks, reflecting some aspects of artists' approach during the campaign to save the Franklin River. There is an undeniable shift of perspective that occurs when one's aesthetic senses are engaged, and a multitude of possibilities when multiple senses are engaged through intertextuality. This can encourage the respondent to question and critique the state of things, and even spur one to action. The scientific case for environmental action can be strengthened through the activation of people's everyday humanity, empathy, and ability to imagine new, wild possibilities for a world that is cleaner, more sustainable and ecologically just. Curtis (2017) describes 'three pathways through which the arts promote pro-environmental behavior' (4). The arts can be used to communicate ideas to audiences; the arts connect audiences to nature; and the arts can embed ecologically sustainable development through artworks. The project featured in this paper draws upon two of these pathways, those being communicating ideas to audiences and connecting audiences to nature.

While Curtis' pathways describe the vehicles by which pro-environmental behaviour can be promoted, a discussion is still necessary of the aims of art interventions and their relationship to a theory of change. *Chill the Heat* was guided by utopian thinking that facilitates activities that reflect on *what is* as well as 'what might be' (Busby 2015, 414) in order to create the possibility of change. The activities are orientated around creating space that may shift thinking, allowing for individuals and communities to see the potential for change. This vision for change is elusive and not always as big-bang as some parties in the climate action movement may desire (Jacobs et al. 2022), but it represents moments of resistance in a slower, more incremental ways (Freebody et al. 2018) that may be more sustainable for communities in the frontline of the effects of climate change.

Small shifts in thinking through the arts

Engaging in the arts, either as a participant or audience member, can serve to facilitate critical thinking and meaning making, generate images and metaphors, and invigorate imaginative solutions and create community-led actions (Trott, Even, and Frame 2020a; Benz, 2020). Gablik (2004) also argues that art has a role in changing humans' worldview, as it challenges people to consider their role in the world outside of their immediate interests, wants and desires. Greene (2007) adds that art can trigger a 'transformative moment of moral and political awakening' (2). This paper is primarily concerned with artistic engagements that bring about awakenings or shifts in thinking and perhaps can be a

precursor to the environmental protection of climate action. If arts interventions are able to successfully engage the senses, they may allow participants and audiences to (re)contextualise challenges, as well as (re)imagine their contexts and futures. This resonates with Busby's (2015) pedagogy of utopia, drawing from Ricoeur's (1986) thinking on utopias in which people can develop the ability to recognise current predicaments, and subsequently develop the capacity and desire to change reality. Busby explores the potential of participatory drama to stimulate questioning of experiences that enables a pedagogy of utopia to emerge. This pedagogy does not make change happen, rather it creates a space that enables participants see that there is the potential to create change.

Climate justice and intersectionality

Beyond nation-level disparities, viewing the climate crisis and the need for climate action with a climate justice orientation highlights the disproportionality of risks faced by certain groups within countries (Trott et al. 2020b). Climate justice acknowledges that challenges experienced as a result of climate change, as well as the ability of populations to mitigate and adapt, is heavily influenced by factors such as income, gender, race, class, and political representation (Christian-Smith et al. 2012). Studies from around the world have applied a climate justice orientation on the issue of heat, subsequently finding a correlation between economic vulnerability and urban heat exposure (OECD 2018). Zander et al. (2018) found that exposure to extreme heat reduced labour productivity from people feeling heat stress and impaired their well-being, and thus caused substantial economic losses. The frequency, magnitude and duration of extreme heat events, will continue, and possibly worsen, in urban heat islands in the future (Pyrgou, Hadjinicolaou, and Santamouris 2020), impacting the most vulnerable or marginalised populations disproportionately. As United Nations Secretary-General, Antonio Guterres said in relation to climate change 'as is always the case, the poor and vulnerable are the first to suffer and the worst hit' (United Nations 2021).

Despite being on the front lines of climate catastrophe, the perspectives of critically affected communities are often overlooked and their perspectives and experiences are underrepresented in climate change research (Trott et al. 2020b). A climate justice agenda demands an examination of the intersectional impacts of climate change on affected communities and those who are least responsible for the problem. Climate justice links human rights with climate action (Office of the High Commissioner for Human Rights 2021). It strives to address inequities through short and long-term mitigation and adaptation strategies, as well as meaningful climate action that is led by the communities concerned. Climate justice acknowledges that climate impacts can exacerbate inequitable social conditions and brings into consideration race, gender, disability and class and other intersectional considerations into the centre of climate action discussions (Amorim-Maia et al. 2022).

This paper reports on a study of *Chill the Heat*, a multi-site arts project, that was designed with the theory of intersectionality (Bond 2021; Crenshaw 1989) as a reference point. Intersectionality highlights the ways in which different aspects of a person's identity can expose them to overlapping forms of discrimination, challenge and marginalisation. It allows and analysis of the interaction between systems of oppression and marginalisation. Intersectionality as a concept grew from Crenshaw's (1989) work in the

legal field when she identified the limitations of a single-issue analysis of cases of disadvantage and discrimination. Crenshaw found that one person could be subject to multiple forms of discrimination and marginalisation concurrently, often compounding the effects of oppression. As Crenshaw (2018; 1989) states, 'Intersectionality is a metaphor for understanding the ways that multiple forms of inequality or disadvantage sometimes compound themselves and create obstacles that often are not understood among conventional ways of thinking.' (149). Numerous others have since explored intersectionality, and more recently it has been explored in relation to climate justice (Amorim-Maia et al. 2022; Collins and Bilge 2020; Mikulewicz et al. 2023), as will be discussed later in this section of the paper. Intersectionality was chosen as a guiding theory for this study because it is able to reflect the complexities of populations in South West Sydney, as mentioned previously. Like the region, the participants were culturally, religiously and linguistically diverse, including people from forced migration situations and First Nations people. The participants included people living in vulnerable circumstances, people in insecure housing, those in precarious employment or underemployment and other areas of marginalisation. Participants were often geographically isolated, and in this paper are descriptions of some participants' challenges living far from accessible transport or far from services they required. Living in an Urban Heat Island, as described earlier, is a form of disadvantage as it has negative impacts upon daily life, health and wellbeing.

Intersectionality is useful in the context of examining the lived experience of climate change, as it allows examination of the ways that differing populations experience its effects. Using a single-focus lens to examine sites of criticality for climate change leaves little space to address complex problems (Collins and Bilge 2020) and limits the long-term effectiveness of solutions. Climate justice intersects with intersectionality effectively in that it calls for more socially transformative approaches that redress the drivers of diverse, underlying, and systemic inequalities (Amorim-Maia et al. 2022). However, Mikulewicz et al. (2023) have recently argued that climate justice scholarship has not realised the full potential of its relationship with intersectionality, 'something we see as a critical blind spot in the literature.' (3). This paper seeks to address this gap, providing examples from South West Sydney as case studies to support this coalescence, while additionally demonstrating the effectiveness of the arts in providing pathways towards intersectional climate justice.

Chill the Heat: An arts-based climate justice project in South West Sydney

In 2021 the International Teaching Artists Collaborative (ITAC) commissioned five teaching artists from around the world to design and deliver projects in their local communities that change beliefs and behaviours in relation to climate change. The projects took place in Australia, South Africa, Serbia, the Philippines and Brazil. Together these five projects formed ITAC's Climate Collective. I (Rachael Jacobs) led the Australian arm of ITAC's Climate Collective in which I developed a research and participatory arts project that engaged five artists in South West Sydney to create mini-projects around the lived experience of heat or the lived experience of climate change. The project partnered with Sweltering Cities, an organisation that empowers communities experiencing extreme heat by telling stories of lived experiences and building community organising campaigns around local impacts and public health. They also increase political pressure for climate justice,

adaptation and mitigation in order to make communities safer, decarbonise cities and grow and diversify the movement for climate action (Sweltering Cities 2023). Each artist chose a community and site to work with and designed an arts-based project that became case studies for the research, and these five projects became known as *Chill the Heat*. Case study 1 was a visual arts-based engagement in an early learning centre, with children aged 0-5. Case study 2 was a dance piece, created by a collaboration of two South Asian Dancers, one First Nations dancer and one First Nations storyteller. Case study 3 was a cartooning programme for young adults (aged 16–26) in South West Sydney, with workshops available online and face-to-face at a local art gallery.

The arts projects examined in this paper are Case Study 4: Poetry, and Case Study 5: Drama. These two case studies were conducted with Initial Teacher Education (ITE) students from Western Sydney University. There was a strong overlap of participants, practice and themes between these case studies, which is why they were chosen to be profiled in this paper. The other case studies will be profiled in other publications and presentations. In this paper, I refer to myself in multiple roles, firstly as a researcher evaluating the whole project under the broad research question: How can arts engagement assist communities experiencing the effects of climate change? I was concurrently the facilitator of Case Study 5, the Drama project. I was also a participant in Case Study 4, the poetry workshops.

The projects were conducted throughout 2021 and continued into early 2022 due to significant delays from the COVID-19 lockdowns active in Sydney in 2021. Each artist was orientated to the project with a briefing about heat-related issues in South West Sydney. The briefing was extensive, beginning with an acknowledgement of the First Nations countries we would be working on, and a discussion of the ways that colonisation, dispossession and ongoing genocidal acts contribute to environmental degradation, climate change, ecocide and omnicide. The briefing then outlined the positionality of climate justice and intersectionality, exploring ways that climate change affects vulnerable and marginalised communities and individuals in a disproportionate way. As part of this discussion, artists were presented examples of projects demonstrating ways that other artists were addressing climate change in their work in West and South West Sydney. Among those profiled was Kayleigh Rusgrove who created visual stories about the changing environment and possible futures (Ridley 2022); *Oceania Rising: Climate Change in Our Region*, which involved Pasifika artists creating exhibitions, installations, workshops and film that are rallying cries for climate change action (Fairley 2018); and *SOLASTALGIA*, Mawa Ngurra's project bringing Aboriginal artists from western Sydney and the Blue Mountains together to the impact of climate change from the perspective of Australia's First Nations people (Fairfield City Council 2020). Through these examples, artists were invited see South West Sydney as a site of resilience and creativity, not a problem to be solved. This framing is important as it emphasises that a climate justice orientation avoids blaming individuals for the climate crisis and does not place the sole responsibility for fixing it on South West Sydney residents. Rather, each artist was invited to think creatively around awareness, collective action, policy change and raising the voices of the lived experience of South West Sydney residents.

Case Study 4 (poetry) was facilitated by two First Nations poets (Lloyd and Chris) who engaged the ITE student participants in a poetry writing workshop. Originally planned as a face-to-face project, this 2-part workshop took place online due to ongoing restrictions of

Covid-19. Two workshops of 1.5 hours long included meditations on the natural environment and the feelings of being in Country (Country is the term often used by First Nations people to describe the lands, waterways and seas to which they are connected) which were journalled then transformed into poetry which could be read or performed. These engagements were based around Curtis (2017) second pathway through which the arts promote pro-environmental behaviour, that being a connection to nature. The workshops were attended by 24 adult participants who were all enrolled in a Primary Education degree at Western Sydney University.

Case Study 5 (drama) was conducted two weeks after the poetry workshop. 38 adult participants attended the drama workshops, 21 of whom had completed the poetry workshops. All were enrolled in the same Primary Education degree at Western Sydney University. The ITE students attended 3×1.5 hour drama workshops which were conducted face-to-face in South West Sydney. The first session began with a discussion of heat-related issues and drama activities that explored life in urban heat islands. During this initial session, participants used the terms 'climate change' and 'climate crisis' extensively, to describe the root cause of the heat. There appeared a consensus amongst the group that while poor urban design was contributing to the rising heat, climate change was exacerbating the problem at an alarming rate. Participants appeared less interested in conversations around the mitigation of heat, and more interested in exploring the environmental destruction (such as land clearing) that had led to the creation of the Urban Heat Island. In response to this interest and passion, I chose to engage the participants in a process drama (Heathcote and Bolton 1995; Neelands and Goode 1990; O'Neill 1995; O'Toole, 2003) based around The Lorax by Dr Seuss (1971). While not directly related to the issue of heat, The Lorax was chosen as it addresses systemic issues and power hierarchies that challenge climate action while providing the distance and lens of an imaginative world through which participants could engage in meaning making. It specifically addresses issues that arise with the lack of tree coverage, which is one of the major factors contributing to the heat island. Included in these sessions was a problematisation of Dr Seuss' literature, particularly around contemporary discussions of racist imagery and stereotyped approach to characters. This led to the complexity of the wider debate about the place of problematic classic literature discussed amongst participants. Participants were asked their thoughts on the use of The Lorax. All are aspiring teachers with great familiarity with his body of work. There was agreement that while some Dr Suess texts are unusable, there are others with messages that are of value. The participants particularly noted that Dr Seuss' family and the company that preserves his work initiated the discontinuation of problematic texts and were seen to have 'done the right thing' in a world where we are all more aware of power disparities and prejudice.

Process drama was chosen for its ability to interrogate a topic from multiple perspectives (Hallgren and Österlind 2019) allowing participants to take on a range of roles. This allowed participants to understand the perspectives of many affected by environmental destruction, including animals. Campbell and Hogan (2019) attest to story being an effective motivator for adult participants, particularly those from culturally and linguistically diverse backgrounds, to engage with complex themes. Process drama was also chosen to bolster participants knowledge of drama pedagogies as they were all future teachers. During the process drama, participants worked episodically (Saunders 2015)

through the story moving in and out of role to explore the institutional and systemic challenges that create roadblocks to environmental protection and climate action.

The participants

In total, 41 ITE students were volunteer participants in the research. Table 1 shows the number of students engaged in each case study:

The participants were aged 18–34, with 31 of the 41 students living in South West Sydney. Eight more lived nearby in Western Sydney (still within the Urban Heat Island), and the remaining two students lived in other metropolitan areas of Sydney. The participants reflected the cultural diversity of South West Sydney, with 73% being bilingual or multilingual. A total of 68% were born outside of Australia. Thirty-nine participants had at least one parent born overseas. A total of 91% of students were the first in their family to go to university. Six participants identified as First Nations.

In the following sections, focus group participants will be referred to using the acronym FGP, and survey responses referred to using the acronym SR. All participants have been given a number to anonymise their contributions.

Methodology

The poetry workshops were observed by the researcher and ethnographic notes were taken in a journal. Participants were invited to complete an evaluation survey at the conclusion of the workshops, which contained qualitative questions reflecting on the workshop as well as specific strategies. All 24 participants also gave permission for their poetry artefacts to be anonymously collected as data for the research. After the poetry workshops, the facilitators were engaged in a semi-structured interview lasting 52 mins. Lloyd and Chris (pseudonyms) were asked questions about their intent when designing their workshops, the experience of conducting the workshops and their impressions of the poetry created by participants.

The drama workshops were conducted over two days on the Bankstown campus of Western Sydney University, which is in South West Sydney. Each participant attended 3×90 min workshops. I was the project designer and facilitator of these workshops. To gather data, I video-recorded all of the drama workshops and at the conclusion of each workshop, made notes in an ethnographic journal. The ITE student participants were also asked to complete an evaluation survey containing questions about the workshop strategies as well as their attitudes towards the lived experience of heat and climate action. 18 ITE student participants also agreed to participate in face-to-face focus groups. In groups of 6, they were asked questions about their experience of the poetry and drama workshops, as well as their attitudes towards the lived experience of heat and their thoughts on climate action after participating in the workshops. The focus groups lasted 25–45 mins, were audio recorded then transcribed for analysis.

Table 1. Participants in each case study.

Case study	Description of project	Number of participants
4 (Poetry)	2×1.5 hour workshops held online	24
5 (Drama)	3×1.5 hour workshops held face-to-face	38 (21 of whom attended the poetry workshop)

The research was conducted with a rigorous ethics procedure governed by Western Sydney University. The ethics body both encouraged and mandated particular requirements for working with vulnerable groups, such as First Nations people and migrant and refugee participants. All data was de-identified, with any identifying information removed. The data was transcribed and then coded using QSR NVivo10 (NVivo 10) qualitative analysis software. A thematic content analysis (Saldaña 2016) using an iterative approach was developed, with initial analysis centred on identifying and coding participants' experiences of the arts engagement, followed by coding of the artists' and participants' reflections on the lived experience of heat and the need for environmental protection. A number of interconnecting themes were generated through the analysis: three of which will be discussed in this paper. Additionally, some limitations of the project emerged in the analysis. These, along with the findings, are discussed in the following sections.

Limitations

This paper reports on a small-scale study with participants who volunteered to attend the workshops. All participants knew about the climate and environmental orientation of the project before beginning their participation. Therefore, the sample of participants may be skewed to those who were interested or at least open to conversations about climate action. The workshops had limited time, which may have limited the extent to which the artists and participants were empowered to see themselves as change agents. The larger project, *Chill the Heat*, became somewhat disjointed and marred by uncertainty during Sydney's 4 ½ month lockdown in 2021 due to the ongoing effects of COVID-19. The poetry workshops were originally intended to take place face-to-face in Dharawal (also called Tharawal) Country in South West Sydney. The pivot online resulted in a drop in the numbers of participants as many cancelled due to 'zoom fatigue' and other factors. Uncertain conditions in the community also led to a loss of participants for the drama workshops. Many who did attend arrived with some anxiety about the future of their studies which had been interrupted or delayed, as well as not having been in a face-to-face learning environment for some time. Despite the limitations, there is evidence that data quality is high. There is a correlation of findings across data sets, as well as strong relationships to findings from previous studies and new findings to contribute to the community of research and practice.

Intersectional experiences of heat

I know it's supposed to be sun and surf and fun, but I literally dread summer. (FGP1)

Australia exudes the image of a sun-loving nation, with summers consisting of water-based leisure time. The reality is quite different for people living in Urban Heat Islands, and several of the participants reflected on their day-to-day experiences of summer during both the drama and poetry workshops.

The poetry workshops began with a brainstorming of physical feelings induced by the environment of South West Sydney or Western Sydney where most participants lived. Participants then transitioned to imagining, then discussing what summer feels like, using

analogies or metaphors. During this process, several participants used words that denoted discomfort, such as 'stickiness', 'wilting' or 'parched'. The facilitators modelled a strategy in which brainstormed words or phrases could be arranged aesthetically to create freeform poems. After workshopping this strategy and some dedicated writing time, some of which were shared in the Zoom chat box, others were read out loud.

Poetry sample 1:

Our soles burn as we walk across our cracked Country.

Sitting on the banks with our hands drawing in the dust.

Singing up our rivers.

Poetry sample 2:

Some days I am 30 plus degrees and 100% humidity,

A ubiquitous sense of blood pressure rising,

Synthetic fabric sticks to bodies,

Rising heatwaves hover above the bitumen as I crest the hill until -

Heavy grey clouds gather, pregnant with the promise of catharsis.

Later, in the first drama workshop participants were scaffolded into representing a typical summer day using freeze frames and still images. Working in groups, some participants created images of holidays, barbeques and parties, but the majority showed humans, animals and plants wilting in heat, bathed in lethargy or struggling to complete daily tasks. In both the drama and poetry workshops, the sharing of responses sparked an impromptu discussion in which many participants shared their lived experiences of heat. The following is an extract from a conversation that flowed from the freeze frame activity in the drama workshop:

P3: My place is not air conditioned so getting sleep is near impossible.

P4: Oh, it's ridiculous. It's not like you can cool down either. My pool is 40 minutes away. In a bus that comes every hour.

P5: Even if you could, that pool is nine dollars!

Poor infrastructure and planning in South West Sydney as exemplified by the infrequency of public transport, as well as socioeconomic disadvantage, financial strain and the cost of living, exacerbate the lived experience of heat. In other subsequent discussions flowing from the early stages of the poetry and drama workshops, participants discussed heat's negative impacts on home life, learning at school, children's ability to play, and adults' ability to safely travel to and from work. They discussed their living arrangements and the majority of participants said they were renting, with little or no agency over heat mitigation inside their homes. Others discussed living in crowded conditions, with large families or big share houses. Participants discussed the difficulties of engaging in shift work and casual employment. They mentioned that taking time off due to extreme heat caused financial instability, a challenge that has been well-documented in research (Chakraborty et al. 2019). Outside of economic factors, some participants discussed

gendered roles in the home which were exacerbated by the lived experience of heat. One participant wrote about the expectation on her to undertake domestic duties, which included cooking several meals for a large family. Intergenerational issues were raised, as participants told stories of babies unable to sleep or grandparents unable to move in the heat. Other participants discussed the challenges of heat for disabled people, for either themselves or family members. A participant told a story about a mobility aid over-heating if left away from air conditioning. Another talked about the impossibility of taking an assistance animal outside during a heatwave. The threats of climate change to disabled people have also been well documented by a wide range of research. A United Nations study found that disabled people and people with mental health conditions will be more adversely affected by climate change than the wider population, stating that 'Persons with disabilities – an estimated 1 billion individuals worldwide may experience those impacts differently and more severely than others' (United Nations 2020, 3).

In the public domain, there has been a change in the ways that the effects of climate change are understood, with regard to psychological distance. Climate change was once viewed as something that will happen in the future, to other people in far-away places. For example, Newell (2023) mentions popular images of climate change once containing polar bears or shrinking ice caps which appear 'a long way off (for most of us), to animals we've probably never encountered' (online). Newell (2023) and Van Valkengoed, Steg, and Perlaviciute (2023) go on to report that most people today view climate change as psychologically close, although they add that this does not necessarily result in more climate action. Even so, the Australian Psychological Society (2019) recommends that psychological distance be reduced by sharing the local impacts of climate change. The partner organisation of this project, Sweltering Cities, has prioritised storytelling as they believe personal stories can be a key driver of awareness and change.

The poetry and drama strategies in this study were able to prompt deeper conversations about the intersectional realities of the lived experience of heat. Greater visibility of these stories may help others to understand that the most marginalised people will bear the brunt of climate change impacts. These stories also provide illustrative examples that climate change is deeply intertwined with inequality. This project is one of many examples that demonstrate that climate change is more than an environmental crisis – it is a social crisis and compels us to address issues of inequality in all its forms with a climate justice orientation. Similarly, the climate crisis will not be solved through environmental action alone. Climate solutions that address to principles of procedural and distributive justice will have more effective and sustainable outcomes (World Bank n.d.).

Connecting with nature and country

While the stories of the intersectional challenges of heat create a worrying picture, both the poetry and drama workshops turned towards more hopeful expressions of thinking around climate justice. The facilitators of the poetry workshop guided participants through an engagement of the senses, asking them to listen, feel and smell the senses of nature around them, and then express ideas about the kinds of environments they wish to live in. In shared pieces of writing, the cleansing and healing powers of water, in particular, rain featured strongly.

Poetry Sample 3:

Most of the days I feel like rain-

It falls from the skies as if to mask your pain

When you walk through the watery curtain totally drenched

Your body feels invigorated, your thirst quenched

At times it feels maternal, she tries to nourish

Every single living being - who under her care will flourish

Poetry Sample 4:

Rain on black, cracked tar steams and rises,

Fat drops pelt the roof, dance erratically on leaves,

Reverberate off windows.

Other writing featured animals, both domestic and wild. Many painted pictures of abundant wildlife evoking spaces of happiness, particularly with a soundtrack of a cacophony of birds.

Poetry Sample 5:

The morning greets with

Kookaburra speech

Three or four,

On the electric lines

Proudly cackling

Beautifully disruptive songs

Other writing reflected on family memories or community history. The writing that invoked days gone before reflected on the past as positive places to be or places to be returned to. One of the First Nations students explained that she could never find comfort or peace without the presence and blessing of her ancestors in her ancestral home.

Poetry Sample 6:

Our Old People telling the Dreaming Stories of the golden perch splashing up the Murrumbidgee who seem to disappear like the borders of our ancestral grounds into the horizon.

As both the researcher and a participant in the workshop, I was moved by the depth of writing that the participants were willing to share in the online environment with people whom they had barely met. The prompts provided by the workshop facilitators provided a refreshing panacea to the frustrations of the previous conversation about the challenges of living in urban heat islands. Later in the focus group, a participant explained that they were grateful for the space to reflect and attune with nature, at a slower pace than they had previously experienced.

FGP3: The simplicity of the structure of the poetry workshop and the discussion with other people was really nourishing. It was so simple, but uplifting you know. I felt like I could

work with these prompts and also consider other relationships with Country. I never felt like I had nothing to say. I just came away thinking 'I need nature in my life' and I want to advocate for it too.

Another participant reflected on the ways that the meditations from the poetry session made the content from the drama workshop deeper and more profound.

> FGP4: When we started the Lorax I was like, oh shit, this is not just a kids' story. Like I felt those animals and beautiful trees in my bones because I'd written about them just before. It so real to me after we'd done some writing.

Some participants reflected that the drama workshops were enhanced by the earlier engagement with nature provided in the poetry workshop. Their senses were primed to engage in explorations of the importance of the environment. In a way, Curtis (2017) first pathway through which the arts promoted pro-environmental behaviour (using the arts to communicate ideas to audiences) was enhanced by the second pathway (using the arts to connect audiences to nature). Participants observed the strength of their own responses when they imagined its demise.

> FGP9: After the poetry workshop I felt like I could more easily taste and smell that beautiful world that Dr Seuss drew and described. And I felt totally outraged when they started destroying it.

Participants who attended the poetry workshop reflected in the survey that they found much synergy between the themes of both workshops and were able to connect the learnings from both. They found themselves more open and receptive to drama strategies after they had experienced the poetry workshop which specifically acknowledged and respected the criticality of nature to our human experience. Curtis (2017) pathways through which the arts promote pro-environmental behaviour have been activated here, in particular, the arts' ability to connect audiences to nature. In this instance, Curtis' second pathway appears to have strengthened the first pathway, that being the communication of ideas to audiences. This, in turn, made space for the participant to experience a form of Busby's (2015) pedagogy of utopia in which they were open to recognising current predicaments but expressed a desire to change reality and form new realities.

Finding voice through the arts

The poetry and drama projects had their own discreet aims and foci. The poetry workshops focussed on the individual engaging in deep listening, communing with nature or being in Country, for the purpose of instilling respect for the environment which would hopefully translate to Greene's (2007) moments of moral and political awakening, in this case, a disposition of conservation and protection. The drama project raised issues adjacent to Urban Heat Islands but had a focus on understanding the ways that environmental degradation can occur, as well as things that communities can do to create change.

The drama workshop began with an introduction to the Seussian world of the Lorax, which is set amidst lush trees and fields and pristine waterways. Into this world, the 'Once-ler' sets up a 'Thneed' factory (a Thneed is a thing that you need) by cutting down the soft Truffula trees, poisoning waterways and polluting the air. In Seussian style, the story is filled with fantastical creatures, all adorably drawn and poetically described. Halfway through the process drama, participants were asked to depict the

animals perishing or leaving the land, waterways, and skies due to excessive pollution. The strategy used role reversal in which only the animals could talk and the humans had to remain silent. In the post-workshop surveys, the participants cited this role play as the most effective and memorable strategy of the process drama. The following extract from the focus groups shows some of the emotions elicited in this strategy.

> FGP5: I have to admit I started crying in the part where only the animals could talk. The humans just looked so heartless when they were silent while the birds choked and the fish died. I honestly think the world would be better if we could hear from all the animals.

The focus group participants cited the teacher-in-role section that followed the role reversal as one of the most memorable strategies that they experienced. Participants saw this as a key turning point in the drama or a moment in which they were able to enact current predicaments and rehearse possible actions. I was both the facilitator and in role as the factory owner, the Once-ler, who announced that new factories were to be opened, despite the destruction depicted at previous points in the process drama. Participants were invited to meet with the Once-ler to express their views. In my role, as the Once-ler, I would not yield to their demands. Participants then gathered at the back of the room and came back as a collective, arguing, demanding that the factory be shut down, then chanting 'Change starts now!'. In the post-workshop survey, most participants stated that they found this section of the workshop to be surprisingly poignant, with some commenting that it was a moment that this moment allowed them to pause to consider possible ways to take climate action. Participants' reflections suggested that the culminative effect of the process drama activities, particularly combined with the poetry workshop activities, had successfully triggered the senses to allow for space to situate their world's current challenges.

Some participants were additionally able to experience small shifts in thinking, allowing them to develop empathy with those taking action in the world and they were able to see the possibilities for climate action in their own world – FGP11: I have more understanding of activists and school strikers … You protest when you don't feel you're being heard, or when there's no other option.

Some of the participants also spoke of the intersectional reality of expressing desires for change.

> FGP17: … my voice was, like shaking, when I went to speak to the boss of the factory. I've never … fought with anyone in a powerful position. As a Muslim girl and we weren't allowed to talk like that at home, so I don't really know how. Today was kind of like practice for real life.

There is a plethora of research, particularly with young people, that attests to the value of drama in helping to find voice and experience empowerment (Antonelli et al. 2014; Boon and Plastow 2004; Cahill 2002; Raphael 2004). Tomlinson (1982) also declares that performance gives the performer power. While writing in the context of disability, Tomlinson's assertion can be applied to other intersectional identities, as suggested by the participant who referenced her Muslim upbringing in the context of her journey to find a voice. It is important to note that this experience is not universal to all Muslim women and girls. Such arguments have, in the past, contributed to misconceptions of extremism or conservatism and many other participants of varying cultural backgrounds

may have also had similar experiences. In the context of this paper, her narrative is being noted as it describes a moment when the participant found space to reimagine their context and possible futures while navigating the intersectional complexities of injustice that accompany her speaking out in the face of injustice.

While finding voice and courage can be applied to a wide range of circumstances in life, the survey responses suggest that learnings were particularly potent with regard to environmental protection. For example, two participants responded by stating:

> SR13: I used to care, but always thought that humans were more important than animals and the environment. Now I see it's all connected.

> SR27: When the factory workers had to leave it was really important part of the story because I have some experience of this in my family. I've heard so often that caring for the planet is bad for jobs, but this drama lesson showed the opposite.

These comments have synergy with a climate justice orientation that considers environmental issues in connection to human rights. The issue of employment also allowed participants to reflect on the concept of a 'just transition' which is an approach to climate action, specifically decarbonisation, that protects human rights. Just transitions are informed by climate justice as well as uniting industries and movements (Heffron 2021).

In focus groups, participants were asked what change, if any, they could make to their personal responses to climate change. The following excerpt from a focus group suggests a change in thinking may be a powerful precursor to climate action:

> FGP1: … I will feel less guilty. I had always thought it was my fault that they planet was dying and that's a lot.

> FGP3: Oh my god, that's just too much. There's bigger forces than us who have caused this.

> FGP6: Totally. Greed is the biggest enemy of the planet.

> *All say yes in agreement.*

> FGP6: But that doesn't mean we do nothing.

> FGP2: Yeah of course. But what do we do against such big enemies?

> FGP5: I don't know, but maybe just whatever you can. It might even be having a conversation with your family or correcting misinformation if we see it.

> FGP1: Well, we're teachers. That's a lot of influence we can have too.

> *All murmur in agreement.*

This study contributes to previous research that finds aesthetic modes of engagement to be powerful and transformative with regard to environmental awareness, capable of being a positive motivator that transforms despair into hope, and perhaps hope into action. Providing opportunities for participants to raise their voices in a space that was safe but also brave (Arao and Clemens 2013) was also a valuable experience brought about by the challenge of the material presented to them and the opportunities to play in and out of the role.

Small shifts as a precursor for climate action

The rich intertextuality of the five workshops combined to engage participants' aesthetic senses with a view to sparking thoughts about environmental destruction, climate change and the way it is experienced in their own world, particularly with regard to heat. Grounding the drama and poetry workshops on the issue of heat gave them a familiar starting point through which to examine the effects of climate change. Although the drama project shifted focus away from heat, the participants experienced, through process drama, an awareness of ways that voices can be collectively raised to advocate for change. Their responses demonstrated the resilience of the region, as well as a deep desire to resist destruction and create more liveable and equitable communities. Their vision for change is nuanced and at times, concrete action appeared elusive. As discussed earlier in this paper, change is not always as big-bang as the climate change movement desires, but represents moments of resistance in a slower, and more incremental way (Freebody and Finneran 2013; Jacobs et al. 2022). Small shifts in thinking are evident in these artistic engagements, be they an awareness of climate-related issues, empathy with those who take climate action or finding ways to raise voice in oneself. Small shifts in thinking can result in climate action, and although this research did not enquire into the subsequent actions that participants took, it should be noted that climate action takes many forms. The participants themselves articulated the ways that shifts in thinking can transform into action. Those actions may be as small as having conversations in their own community, but they are indeed significant. As is the realisation that their role as teachers is a role of influence in the community.

There are numerous tensions and limitations in this research. One of which was previously discussed; Urban Heat Islands were not caused by the residents of South West Sydney, nor should they be responsible for fixing them. However, climate action requires the attention of all, and yet another tenant of climate justice is that solutions are most effective when they are led from within the community concerned. This project was not focussed on finding solutions but rather engaging participants in an arts-led discussion. The workshops were an invitation to inspire thinking around our relationship with nature, as well as collective action and policy change in the hope of raising the voices of the lived experience of South West Sydney residents. Subsequent papers will be written about the other arts engagements that formed part of this project (dance and visual arts projects), their aims, outcomes and the interaction between them. For now, it is noted that while South West Sydney residents should not be unduly burdened with fixing the climate crisis or its effects, their perspectives are pertinent in looking for solutions that are informed by their intersectional expertise. Mentioned in this paper were the intersectional ways in which heat causes disadvantage for South West Sydney residents, exacerbating the disadvantage experienced as a result of gender, culture, religion, access to services, disability, housing conditions, age, employment insecurity, financial insecurity, geographic isolation, socioeconomic status and more.

The small shifts in thinking inspired by the arts engagement in *Chill the Heat* are one of many experiences that can work towards a change in participants' self-efficacy with regard to political engagement or advocacy. Additionally, it is noted that the participants are future teachers, and even small shifts in thinking can affect conversations in

classrooms with future generations. This research contributes to new conversations about intersectionality's convergence with climate justice but also seeks to move beyond to explore the ways that aesthetic engagement, art and creativity can bring about new understandings of climate change that are rooted in community. By reconnecting the body, spirit, mind and emotion with nature, we enable the full potency of human capacity to work towards addressing the climate crisis. South West Sydney is a fertile site for action, and through art, we can help to support resilient and hopeful changemakers who are ready to raise their voice.

Notes on contributor

Rachael Jacobs lectures in Creative Arts Education at Western Sydney University. She is a researcher in anti-racism education, a community activist, aerial artist, South Asian choreographer and she runs an intercultural dance company. As a community artist, Rachael facilitates projects in community settings, mostly working with migrant and refugee communities.

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ORCID

Rachael Jacobs http://orcid.org/0000-0002-4742-368X

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