


## ARTICLE

# Reworlding Together: Learning with Place through Cli-Fi Urban Role-Play

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### Abstract

Reworlding (Haraway, 2016, *Staying with the trouble: Making kin in the Chthulucene*. Durham, Duke University Press) underscores the significance of Indigenous cosmologies that perceive time and place through circular, recursive and reciprocal relationships. This recognition acknowledges the perpetual regeneration and transformation of the world, which flourishes through novel ways of worlding. Moving away from dystopian-utopian binaries in climate fiction (Cli-Fi), genres of hopepunk and solarpunk align with the collective and affirmative ethos of reworlding and its near-future grounded relationality. Climate Change Education (CCE) is situated in relation to the impacts of climate emergency on cities through urban play, opening up an opportunity for collective and collaborative live-action futuring for better worlds by reworlding together. These methods were developed through the design of a climate action game experienced through live-action role-play in a Carlton street closed for two days in Naarm Melbourne. The game design responds to cascading impacts of the climate emergency on the city in 2050 as it becomes a megacity of 8 million residents. Thematically, this fiction explores how we might live well together while players are invited to experience this scenario by learning how to reworld a neighbourhood together. Through this case study, the capacity of Cli-Fi and CCE to dream alternate social imaginaries are explored via urban role-play.

**Keywords:** arts-based; creativity; design; place

### Introduction

Since the advent of the Anthropocene, a diverse range of positions presenting alternate futures have rapidly emerged in response to the existential crisis that it presents. It is often recognised as signifying to the Western world the end of history (Chakrabarty, 2009) in stark contrast to modern cultural narratives of endless growth and progress. These narratives still exist in transhumanist philosophies centred on accelerating change through technology toward a singularity, with this event understood to be a world-changing event that suddenly and dramatically shifts life as we know it. Rewilding efforts that focus on restoring biodiversity and returning ecosystems to an uncultivated state have important regenerative impacts but can be tainted by eco-nostalgia that romanticises natural environments without acknowledging the nature-culture continuum (Haraway, 2003) that complicates these efforts (De Vroey, 2023). For many people the end of the world as they know it has shifted from the realm of fiction to an experience that may be part of their life in the near future.

These positions frame familiar, outdated dichotomies that represent dominant social imaginaries present in 2020 that were disrupted by impacts of the pandemic. A social imaginary is a set of values, laws, institutions, habits and symbols that form a collective society, and it is the patterns of how people live together in a place that define shared existence (Castoriadis, 1997). Social imaginaries are created through processes of worlding (Gaonkar, 2002) that can propose other possible worlds built on different sets of symbols and values. If we are to explore alternate social imaginaries that include us and all the other beings and forms of life that sustain us, then we need to adopt a post-anthropocentric position that also acknowledges our own position as world builders and social beings who share “the awareness of all that was wrong with the old world and which has now become manifest” (Braidotti, 2020).

Hopepunk (Innocent, 2025; Mancuso, 2021), a term coined by Alexandra Rowland in 2017 via a tumblr post stating, “The opposite of grimdark is hopepunk. Pass it on” presents an alternative to the dystopian-utopian binary in speculative fiction by offering a more complex and entangled situation. It is positioned against “grimdark” fictions based on dystopian futures where everyone must fend for themselves against overwhelming pressures, and also in opposition to “noblebright” worlds where heroes or organisations with extraordinary powers are singled out to save the day. Being hopepunk means knowing that the odds are against us, so the most radical action is to fight for positive change and to do it with collective optimism. It resonates with Braidotti’s description of our shared predicament during the Covid-19 pandemic in which “We” Are In This Together, But We Are Not One and the Same” and aligned with her articulation of an affirmative ethics (Braidotti, 2019) through acceptance, hope and critical action.

As hopepunk declined in use to describe a subgenre of speculative fiction, the more widely recognised term solarpunk (Flynn, 2014; Reina-Rozo, 2021) has become the closest alternative that shares some of its values. As it tends towards a utopian position, it is easily co-opted into other agendas and used to greenwash products and technologies to make them appear eco-friendly. However, it shares the optimism of hopepunk and often builds social imaginaries that are based on regenerative systems and values. Rebellion, decolonialism, social justice and optimism feature in solarpunk narratives built on near-future scenarios that are possible and relatable. Grimdark, hopepunk, noblebright and solarpunk all represent different social imaginaries with narratives that typically respond to impacts of industrial revolution, mass extinction, social upheaval and environmental collapse where they intersect with climate fiction.

Castoriadis maps the construction of social imaginaries through their relations to identity, language and to nature by understanding them as being created collectively and locally. There exists not a single world but rather a multitude of worlds, each inhabited by individuals who instinctively accept and adhere to the societal norms and customs of a unique social imaginary. Events such as the Australian bushfires of 2019–2020 (Norman et al., 2021) and Covid-19 pandemic mean that apocalyptic climate fiction scenarios increasingly appear in everyday life. However, while these events led to reflection on the endemic issues in the worlds we live in (Grusin & Ryan, 2023) there is a deficit in imagination and social inertia on how we may respond.

Place-based education (Ardoin et al., 2012) has increased post-pandemic (Yemini et al., 2023) indicating a trend towards the need for increased understanding and connection to place. These efforts are motivated by three main objectives. Firstly, shifting the role of passive citizen to active custodian of place. Secondly, being with complexity across the cultural, ecological, social, political and economic factors that shape place. Thirdly, as a strategy of decolonialism and post-anthropocentrism that challenges dominant systems of knowledge.

Place-based education (PBE) emerged in the 1990s to counter pedagogical practices that were increasingly detached from context, culture, place and environment. It prioritises community-based, experiential and ecological learning that is grounded in place (Gruenewald, 2003; Orr, 2013; Smith, 2002; Sobel, 2004) and learning by doing in relation to the world and to others often via democratic processes (Dewey, 1923a). Some pedagogies extend this to include environmental

citizenship and custodianship in relation to cultural commons (Bowers, 2008; Schild, 2016; Smith & Sobel, 2010) consisting of intergenerational and interspecies knowledges, skills and systems of mutual support and care. PBE frameworks map aspects of the biophysical, psychological, socio-cultural and political-economic (Ardoin, 2006) that demonstrate a deeper engagement with place. As learning environments were disrupted by the pandemic, there was an increase in PBE activity that coincided with an increased awareness of the climate emergency.

During the same period, pervasive game design (PGD) explored shifting relationships to place through mobile technologies (de Souza et al., 2009), experimental play, interactive art and locative media (Galloway & Ward, 2006). PGD blends experimental games, events and performances in mixed realities that expand the spatial, temporal and social impacts of play (Montola et al., 2009). Often working with the framing of the city as playground, these games situate play in relation to the world simultaneously revealing the game of everyday life and inviting players to hack the rules (Wark, 2007). This approach and philosophies of play design that extend into daily life (De Koven, 2013) have extended the impacts of these experimental design patterns across other disciplines. Post-pandemic, this approach to game design became increasingly connected with climate action through urban play.

Place-based knowledges are central to Australia's First Peoples in land and resource management (Gammage, 2012), connecting people and knowledge to place (Neale & Kelly, 2020), and they are already posthuman (Bignall & Rigney, 2019) in the sense that they represent post-anthropocentric materialist philosophies. These approaches offer practical solutions to our current crisis but exist within social imaginaries that are so different to Western systems of thought that their value has been unrecognised in much of practice, policy and curricula since colonisation. Their absence from such vital facets of modern society is posited to have hampered adequate climate action (Thornton et al., 2019). Inherent in this absence is the continued sustenance of a Western epistemology that frames human consciousness as separate from and elevated above nature (Piersol et al., 2018).

However, processes for recognising and regenerating these knowledges exist through their capacity for alternate systems of governance (Rigney et al., 2021), as pre-digital technologies for ubiquitous computing (Dourish & Bell, 2014) and as cartographic methods for remapping urban space (Guntarik et al., 2023). Being present and connected with these knowledges means being 'on Country' and immersed in a way of being that is interconnected with cultural, environmental and spiritual connections of a place (Corn et al., 2024; Graham, 2009; Porter et al., 2020). Melbourne was founded in 1835 (Presland, 2009) but has been known as Naarm by Kulin peoples for millennia. Despite almost two centuries of urban development and imprinting of colonial social imaginaries on Naarm Melbourne, it is still Country, holding multiple worlds in one place. Although all are not equal, patterns of Naarm remain in Melbourne (Briggs et al., 2024).

Innocent identifies as a migrant settler of English descent with matrilinear connections to the Victorian gold rush era and later patrilinear connections to elective migration from the United Kingdom. He grew up on the unceded lands of the Wurundjeri Woiwurrung people and currently lives and works across both the Boonwurrung Bunurong and Wurundjeri Woiwurrung lands of the Eastern Kulin Nation in Naarm Melbourne. This context informs this research that always starts with site-responsive approaches to urban play.

### "Making it real"

In what ways can the alternate social imaginaries of Cli-Fi be made possible in relation to the world we live in today? In this article, design research practices that investigate and respond to Cli-Fi are explored through a recent public project situated in Naarm Melbourne. These practices aim to realise alternate social imaginaries as lived experiences with the goal to move them from fiction to reality. Methods of speculative design (Dunne & Raby, 2013) are extended through a

convergence connecting the social imaginary, hope/solar punk and urban play. These methods work with the city as a material that may be reimagined through play via processes of “reworlding.”

Reworlding (Innocent, 2024a) engages with existing systems and processes, employing a cartographic approach to remap them into alternate social imaginaries. Through the lens of reworlding, Cli-Fi can be viewed as speculative fiction, but it can also be considered social science fiction set in a polycrisis and climate emergency. This is a method of acquiring knowledge and skills in living harmoniously within society through collaborative efforts. Posthuman knowledge operates through convergences that encourage transdisciplinary engagement, fostering connections across the environmental, socio-economic and technological domains. This approach avoids dichotomies and simplifications. These ways of being with complexity also come with hopeful and practical means of survival in the climate emergency through affirmative ethics — ways of “staying with the trouble” (Haraway, 2016).

The term reworlding is introduced by Haraway in 2016 referencing regenerative patterns that are common in Amerindian cosmologies (Danowski et al., 2016). In these social imaginaries worlds end to allow others to emerge and thrive, in contrast to the ‘end of history’ aligned with dominant Western definitions of the apocalypse as a singular and final event. In the context of pre-colonial times, world-altering events can be both detrimental and transformative, creating the conditions for change and potential. In the post-colonial era, the consequences have become increasingly violent. Apocalyptic acts of worlding are deliberately imposed on cultures to assimilate or destroy them. Consequently, survival becomes the sole viable strategy for these cultures. However, the regenerative capacity for reworlding remains.

The current climate emergency brings into sharp focus a critical challenge in epistemologies underpinning environmental education, namely the separation of nature and culture, although this distinction is rapidly evolving and shifting away from the “differentiating boundaries we are accustomed to” (Brown et al., 2020, p. 225), in favour of an embodied and entangled understanding of the world — one that emphasises relationality and the mutual shaping of human and other-than-human life, which is widely understood to benefit and enrich environmental education (Brown et al., 2020). The Eastern Kulin Nation consists of five interconnected language groups that traverse the place currently known as Melbourne and many regions surrounding this city that share culture and language going back tens of thousands of years. In their language, there is no singular or separate word for “nature” but instead a relational set of values and practices that connect culture and daily life with the cycles of the world itself. Being on Country is a way of being that was ever-present prior to colonisation and is being actively regenerated — and sought after by new generations (Briggs, 2008).

To bring these values to the social imaginary of Melbourne means finding a way into posthuman knowledges (Braidotti, 2018) that are at odds with Western models of understanding the world that seemed to “work” only decades ago. Ecological thinking may be traced back much longer than this, in both science (Meadows et al., 1972; Margulis & Fester, 1991) and early Cli-Fi (Callenbach, 1977) but has been obscured by economically-driven narratives of technological progress. To swiftly transition from perceiving nature as an external entity and the naïve belief that we can simply allow it to revert to its natural state, we must undergo a collective existential shift of global proportions. This shift entails acknowledging our involvement and entanglement with every living being, transcending the anthropocentric perspective.

Reworlding questions existing structures and narratives that shape our relationships making other worlds tangible through lived experience of their material topologies and ecosystems. Cli-Fi plays a pivotal role in environmental education by defining mythologies and narratives that adopt this perspective to envision alternative realities. Methods of reworlding empower individuals to become active participants in a dynamic world, fostering an understanding of both the realm of our subjective experience and the world as a symbiotic system and living entity. Recognising our place within these systems facilitates the development of resilience, adaptability and self-

organisation — given that emotional connections to place can act as powerful catalysts for climate engagement (Khadka et al., 2020), tangible benefits for climate action may be realised and supported through place-based approaches.

Engaging with complexity presents challenges not only because it challenges our dominant social paradigm but also because it demands sustained attention and concentration to manage multiple perspectives simultaneously. Creative and immersive play, particularly when contextualised within the real world, provides a means of confronting complexity that expands possibilities and facilitates entry into Cli-Fi settings and scenarios, transforming them into narratives that can be experienced through collective participation and action. This article delves into this method of reimagining through an analysis of the impacts of iterations of Cli-Fi game design over a five-year period, guided by principles of place-based environmental education.

Connected via a climate fiction scenario set in Narrm Melbourne 2050, this article explores the intersection of PBE and CCE through methods of urban play. This is explored through a case study reflecting on the design and impacts of a climate fiction game set in Cardigan Street, Carlton.

## Methods of reworlding

Urban play is situated in relation to the complexity of urban life, acknowledging that urban life should influence and drive urban design. However, relationality within design and cities typically operates in the opposite direction, as urban design attempts to shape urban life. Post-pandemic, a growing awareness of the potential of tactical urbanism, community action and creative placemaking is offering ways to engage with and within our cities through socially engaged practice. Urban play is framed in relation to these critical and participatory practices through methods of reworlding that invite residents into complex relationality with place, often within their own neighbourhood.

In the context of education, play is generally understood through children's play, as it is an integral component of their learning process (Dewey, 1923), significant in the social origins of mind (Vygotsky, 1978) and sense of play drive (Schiller, 1993). Under optimal conditions, children engage in spontaneous and intuitive play. While it brings joy, it is also crucial for their physical, social, cognitive and intellectual development. Adults retain this capacity for play, albeit with a deficit and often unrecognised benefits. The primary deficit is the societal stigma associated with play for adults. It is perceived as an unproductive use of time, regressive, juvenile, trivial, or childish. Adults rarely receive permission to engage in play unless it serves a specific purpose, such as organised sports, where play is associated with fitness or financial gain (Henricks, 2015). In recent times, the advantages of play have gained recognition primarily due to the distinct nature of play experiences for adults. Adults can become fully engrossed in play and subsequently transition out of this immersive state to reflect upon and share the novel knowledge acquired during play. Literature concerning young learners has investigated "wild pedagogies" (WP), one reading of which emphasises *inner wildness* defined by "self-will, wonder and intrinsic motivation . . . allowing for curiosity and spontaneity inspired by the landscape and students' interests" (van Tol & Wals, 2025, p. 182). Among its benefits is the capacity to support a relational atmosphere between humans and non-humans. In the context of urban play, igniting this *inner wildness* in adults can yield similar advantages, as later illustrated in this article.

Early play studies conceptualise this space as a "magic circle" (Huizinga, 1949), delineated by a distinct boundary between life and play. Within this realm, the player participates in a game where an alternate reality becomes feasible, and the conventional rules of life are either suspended or disregarded.

More recently, through a multitude of definitions of play and the increasing intertwining of play design with the world, various instances emerge where this simplification fails to hold true.

Urban play (Innocent, 2015) serves as a prominent example, engaging with diverse world rules, encompassing socio-economic, environmental and technological aspects.

Nevertheless, the concept of a magic circle retains its utility as a threshold or an invitation into worlds within worlds. It represents a means of coexisting with complexities proposed by Cli-Fi, reimagining the everyday through unconventional and unfamiliar ways of being, such as existing within a nature-culture continuum.

Urban play invites individuals into ways of relating to all living beings that surpass their “personal” Overton window (Lehman, 2010), enabling them to suspend disbelief and transcend the boundaries of their imagination. This temporary, voluntary and generally inconsequential experience grants individuals’ permission to explore a space of possibility beyond the dominant social imaginary. They can engage in conversations with magpies, establish a connection with a river as a living entity, operate an economy without monetary transactions and so forth. Essentially, it serves as a game. However, by positioning this space of possibility in relation to the actual urban environment through urban play, and by drawing upon the cognitive abilities of adults to analyse and reflect on their play experiences, there arise opportunities for subtly altering the social imaginary through the vitality of their embodied and lived experiences of play (Innocent & Stevens, 2021). Through its relational and embodied engagement with people and space, urban play may meaningfully support aspirations that curiosity and knowledge of the natural world can inspire genuine environmental care. Urban play is responsive to the duty to “offer the potential for this deeper level of care for the earth” (Piersol et al., 2018, p.98) and is valuable in its ability to reach across generational contexts and outside of curricula.

Another definition of these methods is serious play (Beavis et al., 2017), which more broadly explores the capacity of various play activities for complex problem-solving through creativity and innovation. This approach emphasises freedom and possibility, process and flow, liberating players from shame or responsibility and enabling them to take more risks. This creates a safe environment for engaging with challenging topics and their associated effects, countering these with joy and affirmation.

Furthermore, when considering the context of urban play and methods for reworlding, the posthuman subjectivity of affirmative ethics establishes a connection with the nature-culture continuum. Immersion in both urban play and radical immanence (Braidotti, 2013) leads to a state of heightened intensity (Innocent & Leorke, 2019), making it possible to perceive a post-anthropocentric self as a relational entity in the world.

Finally, the capacity of play for world-building through make-believe and role-play extends this into a collective experience of “doing it together” (DIT), a counterpoint to DIY that is both improvised, radical, resilient and collaborative. Additional modes of learning through observation, body doubling and nonverbal communication emerge through intensive and immersive play framed, but not defined by, collective goals. As with all of these methods and with posthuman knowledges more generally, these are not new ideas or practices as they are reflected in patterns in Indigenous cosmologies (Briggs, 2008). However, they are new to the social imaginaries of our cities (Innocent & Briggs, 2025), where urban play is typically situated. Reworlding in this context is radical and critical play with a dominant social imaginary.

## Urban play and education

Creative play has emerged as a fundamental method in learning design thinking, fostering a mindset of innovation and problem-solving. These methods are frequently applied across various disciplines where disruption of conventional learning patterns is required. Typically, the perceived advantages include stimulating the imagination to generate novel concepts, promoting collaborative teamwork and inducing a state of immersion and mental engagement. Emotional



development is also a significant motivator, driven by the willingness to take risks within a secure environment, explore unconventional roles and adopt alternative or unfamiliar methodologies.

Play is notoriously challenging to define, with sociologists, anthropologists, psychologists, artists, designers and educators providing diverse definitions based on context. A useful and inclusive definition is Koven's "playing well together" (De Koven, 2013). A more practical definition of play in adults is offered by Brown and Vaughan (2010), and a critical cultural approach of play as a "portable way of being" by Sicart (2017). In-depth analysis of the impacts of play or as a method necessitates a shift to the specific mechanics and narrative of play design itself, along with their connection to pedagogical methods. This article focuses on Live Action Role-Play (LARP), which invites participants to embody their roles in a shared fictional world and physically portray their characters through behaviour, appearance, interaction and play.

In the late 1970s, early forms of live-action role-playing (LARP) emerged in Australia, Europe and North America. Today, LARP has gained global popularity, encompassing a diverse range of scales and genres. While the majority ofLARPs are designed for entertainment purposes, a smaller subset of experimental LARPs incorporates serious play and ecogames (Beke et al., 2024), addressing social issues such as the emerging genre of climate LARPs (Beke, 2023) or LARPs that embed social commentary within traditional tropes.

Generally, the design and structure of LARPs include one or more Game Masters (GMs), Non-Player Characters (NPCs), Player Characters (PCs), core rules and plot points that establish a framework for play within the fictional world. Some LARPs prioritise storytelling and character development, while others focus more on missions and mechanics, altering the play experience. However, players typically transition fluidly between character development, storytelling and achievement or strategy, depending on their individual preferences and the role they perceive for their character in the world.

These dynamics make LARPs rich platforms for learning through immersion and experience, and for introducing challenging scenarios such as climate catastrophe, democratic decline, urban conflict and mass extinction. In a LARP, these scenarios serve as opportunities for environmental education, enabling participants to comprehend the conditions and decisions that led to their emergence and the complexity — and often reliance on others — to unravel these causes and mitigate their consequences.

Situating reworlding within LARP is a way of simulating the future, exploring potential outcomes, both positive and negative and learning by being with the posthuman condition. This approach does not invariably result in a tangible solution, but multiple ways of being within a nature-culture continuum, a sense of the possibilities of other worlds, or renewed perspectives that require significant unlearning of past patterns to align with it.

## Urban play design

Situated in Cardigan Street from Saturday October 5 to Sunday October 6, 2024 *Reworlding: Cardigan Commons* was a climate action LARP connecting methods of reworlding with neighbourhood building in a near-future Naarm Melbourne (Figures 1, 2, 3). It attracted 37 registered players who played with 9 NPCs, 2 GMs, 7 urban play facilitators, 1 DJ and approximately 150 curious passersby. With the exception of the latter, the participants engaged in character from 10 am–6 pm each day with a break for lunch. A section of Cardigan Street, Carlton was closed to traffic with support from the City of Melbourne during play, allowing a large urban play area to be filled with a large semi-permanent installation made of recycled and found materials. The street is wide, with parking spaces in the centre that were occupied by this installation allowing it to stay in situ for the weekend providing a home for the emergent neighbourhood.



Figure 1. Reworlding: Cardigan commons: installation in Cardigan St.

Figure 2. A group of NPCs in the LARP.







**Figure 3.** Player holding resource cards.

I designed the game for public engagement with regenerative futures through urban play and to develop reworlding as method to experience alternate social imaginaries. It works with critical play (Flanagan, 2009) to apply pervasive game design patterns to political and social critique. Future thinking becomes tangible and relatable to the conditions, structures and material forms that influence our daily lives drawing upon PBE approaches. Situating this in relation to Cli-Fi intends to bring ecological literacy to people and place and address the challenges of climate change and “post-COVID” cities. This case study reflects on the emerging practice of urban role-play in relation to CCE.

Design of the game began in 2020 as Melbourne experienced the first lockdown in response to the Covid-19 pandemic. Innocent recorded an invited presentation for the 2020 Braidotti Summer School at Utrecht University, exploring hopepunk in relation to posthuman convergence. The presentation was accompanied by a “reworlding action” designed to address the challenges faced by cities that have been disconnected by the pandemic. In 2022, this evolved to a “rules-light” OSR (Old School Renaissance) (Baker & Baker, 2010; Nilsson & Nohr, 2020) design for urban role-play first situated in Collingwood during Melbourne Design Week 2023. The OSR design philosophy draws upon early tabletop role-playing games that emphasise player agency, participation and storytelling over complex rules and systems. Later games at MPavillion in 2024 combined player character and casual participation, and at Museum of Brisbane 2024, introduced the new setting of Meanjin Brisbane blending in elements of tabletop play. All of these games were staged publicly and addressed impacts of the climate emergency on Australian cities in 2050.

RMIT University CBD campus is a spacious and permeable campus situated adjacent to the most densely populated urban area in Australia, situated between the university and Queen Victoria Market. This campus houses a transient population of students and staff that is comparable to a small city, such as Bendigo or Ballarat. The northern portion of the campus is located in Carlton, a well-established inner suburb that connects with North Melbourne. In 2024, new engagement policies were implemented, positioning this area as the City North Social Innovation Precinct

(CNSIP). Within this framework, projects across the university were commissioned to investigate how the university could contribute to urban life and this climate action LARP received support for development and delivery. Collaborating with the future play lab's existing partnership with Regen Melbourne and data collected by RMIT PlaceLab on the precinct, themes of urban governance and adaptive futures guided the design of Cardigan Commons, which focused on the challenges and opportunities presented by the anticipated transformation of Naarm Melbourne into a megacity with a population of 8 million citizens by 2050.

In preparation for the weekend street closure, three workshops have developed the background of the non-playable characters (NPCs) representing three factions in the game's fictional narrative. *Bearbrass*, drawing inspiration from one of the early names for Melbourne, focuses on human characters rather than the environment. However, it acknowledges the necessity for change to usher in a new era of prosperity for the city. In contrast, *Symbios* perceive the climate of change as an opportunity to adopt a regenerative mindset. They embrace new scientific insights into the role of symbiosis, as outlined by Margulis and Olendzenski (1992), and recognise the importance of living in harmony with these systems.

These two factions are open to player characters (PCs) joining their ranks. The 37 players registered for the game have chosen their respective factions and roles. A third faction, designated as *CityAI*, is not open to PCs. It is represented by NPCs who assume the roles of AI agents tasked with governing the neighbourhood. Each faction embodies a distinct perspective on the world in 2050. While they occupy distinct positions, the LARP does not commence with overt conflict with everyone living together on the same street.

Background materials establish the core mechanics of the game, represented by physical play materials with minimal digital elements. Each player carries a small amount of "hope," represented by glass marbles, which signifies their mental resilience more than physical health, as is typical of LARPs. During play, three events usually result in the loss of hope: extreme heat events, during which players must quickly find shade; flash floods, when players must quickly reach higher ground; and doom scrolling, which occurs when players look at their phones during play. If any player reaches zero hope, they can no longer move and become isolated. Players quickly realise that sharing hope is not prohibited and typically begin sharing it to rescue others. Facilitators stage the weather events using analogue instruments, such as a bell for extreme heat and drums for flash floods, at both pre-scripted and random moments during play. They also collect marbles from those who have not reached safety in time. By lunchtime on the first day, players began exploring ways to modify the street infrastructure to adapt to these conditions. These modifications were proposed to the Game Masters and costed in terms of the hope required to implement them.

Additional hope and resource cards are concealed within lockboxes strategically positioned in the surrounding streets, necessitating the decipherment of access codes. Members of the public are cordially invited to engage in casual play by being provided with marbles and action cards as initial incentives for interaction with the players. Within the game, resource cards embody nine distinct types of place-based capital, each personified by non-playable characters (NPCs): human, social, intellectual, cultural, experiential, environmental, financial, economic and construction. These resource cards are meticulously collected and exchanged, subsequently utilised to effect modifications to the environment. Notably, one of the initial proposed structures was a research centre, which encompassed human, intellectual and construction elements. Similarly, a data centre was envisioned, integrating intellectual, financial and economic components. These structures collectively generated opportunities for role-playing and exploration. The LARP commenced with the birth of the eighth millionth citizen, triggering a crash in the *CityAI* and confining its local operation. This pivotal event introduced the premise to the players: the global *CityAI* would resume its online operations at the conclusion of the weekend. Consequently, the players were given a finite time frame to establish harmonious coexistence and impart knowledge to the newly activated *CityAI* (Figures 4, 5, 6).



Figure 4. Reworlding: Cardigan Commons: installation in Cardigan St.



Figure 5. Marking out the street.



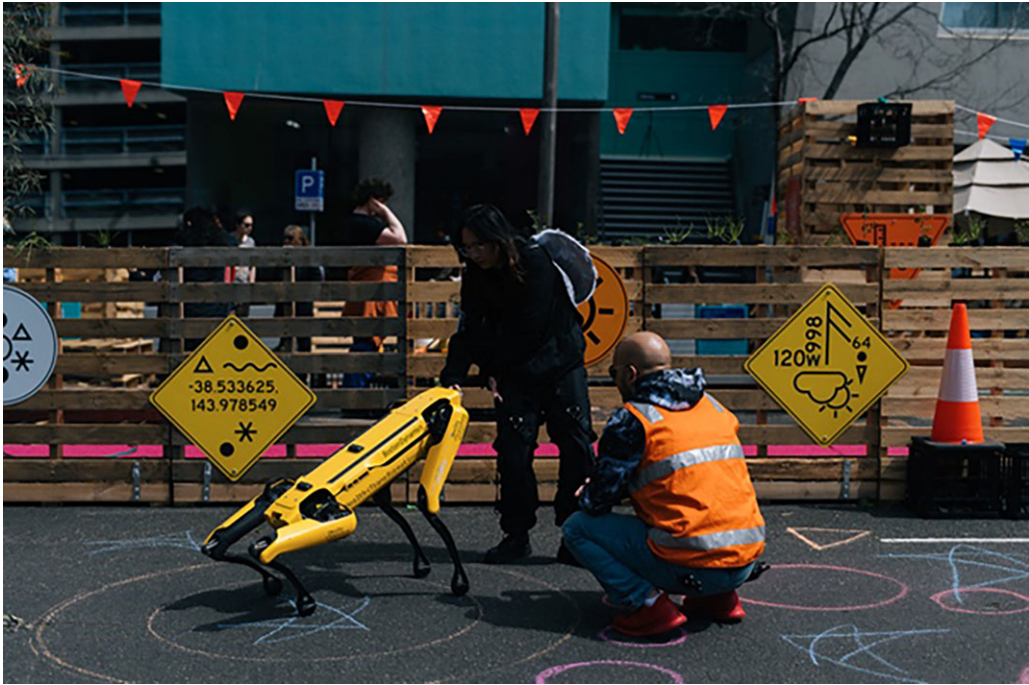


Figure 6. Players share resources with robot.

### Defining urban role-play

Within the confines of the constructed environment and game mechanics, players collaborated on their roles and scenarios, resulting in a two-day collaborative effort to build a new neighbourhood. Interviews conducted throughout the weekend provided insights into the narrative themes explored. During quiet moments in play, walking interviews were conducted in character to maintain the immersion of Naarm Melbourne 2050. Players responded in character, sometimes as themselves and often transitioned between both roles as they addressed various topics or concerns. The mobile format of these interviews engenders a closer connection between the human and non-human — the method has been observed to evoke conversation informed by the surrounding landscape and environment (Evans & Jones, 2011). Three major themes were identified in the project evaluation, each of which is outlined below.

### City as material

Cardigan Street was reworlded into a civic square, with the road closure allowing a large set representing a future neighbourhood to be built between two major buildings. Working with the city as a material for loose parts play, the LARP provided an environment for CCE in relation to a social imaginary — how we might live well together in a post-colonial megacity during a climate emergency. Learnings range from understanding the failures of existing urban design patterns, the critical role of social infrastructure and the ways in which posthuman methods engage with these challenges and opportunities. The street was transformed into a village constructed from recycled shipping pallets, urban signage, play materials, marquees and urban greening. The resulting space contained players immersed in the world but was also permeable and porous, inviting observation and participation from footpaths and nearby buildings. Resources for players were concealed in nearby laneways, inviting exploration, which were swiftly discovered.



Inviting individuals to engage in play with urban materials invited reimagination of the built environment, a space that is frequently perceived as inaccessible, static, or solely functional rather than accommodating human interaction. CCE goals were developed in partnership with Regen Melbourne, an environmental organisation for the regeneration of Greater Melbourne and written into the game setting. By defamiliarising the street, players quickly responded to these goals by engaging with world-building responding to the impacts of climate change. One player foresaw this possibility and brought a portable tool chest for their character. The GMs also brought road marking paint, which was utilised to delineate new infrastructure constructed by players, serving both as a means of annotating the space and identifying additions to the neighbourhood ranging from cultural centres to water management.

Typically LARPs are not staged in public spaces, and an alternative location would have significantly reduced the workload and associated costs associated with traffic management and other consequences of street closure. However, the occupation of a street was a central element of the invitation to participate in the LARP and have permission to reworld the neighbourhood together utilising both the unfamiliarity of the street and its potential as a place of gathering. The limits of streets like this one are experienced every day resulting in a deficit of imagination and lack of action toward regenerative streets (Regen Melbourne, 2024). This game created a space for civic participation in urban governance through the transformative experience of the LARP itself. During the initial three hours preceding the lunch break, parallel play was predominantly engaged in, as players synchronised their attention with one another and their surroundings, perceiving their potential as agents of change.

Grounding imaginative play in materiality emerged as a recurring theme, providing players with a practical outlet to respond to the recurring climate events that drained hope. The balance between motivation and despair on the first day was closely monitored by GMs to work with the tension between urgency and agency — players needed sufficient time to be immersed in imaginative play but also to be grounded in the real threat of a climate emergency. Very few players isolated themselves; instead, they sought connection and purpose. In providing opportunities for CCE, the nine non-playable characters (NPCs) performed plot points related to their characters and were sought out by players. *angelcapital*, the CityAI NPC representing finance, initially drew significant attention as she held “real money” and was mysterious. In Bearbrass, the *academagician* representing intellectual capital was kidnapped, creating further tension and a knowledge gap when players realised they possessed critical resources. These fictional characters held resource cards that they would provide to players based on conversations and engagement, inviting players to learn and comprehend the politics, resources and systems that were at play on the street.

### **Place-based education**

Methods of reworlding were introduced to remap the neighbourhood as a site for PBE. The game’s design revolves around conflict and limited resources, while also implicitly fostering collaboration. Players are initially invited to construct a neighbourhood by learning with and responding to place. Some players arrived with a preconceived narrative, while others were captivated by the unfolding of an emergent story. One character arrived with a small tree that could move on a remotely operated robotic platform. This tree became the “leader” of Symbios, with the human player acting as their translator and delegate. Building on another recurring Cli-Fi theme, the Symbios faction is deeply entangled in an emerging symbiocene that enables tangible new relations with the more-than-human drawing upon posthuman themes and Indigenous cosmologies. Rather than imposing this through set mechanics and abilities, the OSR rules-light nature of the game design frames this as an invitation to imaginative play. Players were drawn into conversations with the tree as much as they were with the NPCs representing culture, experience and environment, revealing more-than-human layers of place obscured by the built environment.

Inviting immersion in place was critical in the game design. States of crisis and stress, whether arising from life and work demands, climate anxiety, doom scrolling, or a combination of these factors, disrupt and hinder regenerative and imaginative ways of engaging with the world. In contrast to immersion in a speculative world while reading science fiction, the collaborative experience of LARP can bring into play a narrative grounded in PBE that is shared with others. Players have multiple avenues for reimagining: through the fiction of their character, the setting, a specific mission, or, as mentioned earlier, through emergent and collective storytelling. Taken literally, this is akin to being “lost in a book,” but the book is being written around you through a decentralised and emergent ongoing situation — and your presence is essential, as this story is unique and only occurs once. ManyLARPs result in multiple retellings and the sharing of diverse perspectives on pivotal moments, leading to an ongoing form of storytelling even after the event.

To provide a goal for players to share their visions for the neighbourhood they were asked to “imprint” these upon the CityAI upon its reactivation at the conclusion of the game. This concept aligns with the recurring theme of AI in urban settings, portraying it as the potential solution to the complexities of urban governance. However, in this setting they were asked to present different social imaginaries to serve as roadmaps for the megacity of Naarm Melbourne in 2050. The collective game, whether played by Bearbrass or Symbios, involved proposing ways of coexisting and simultaneously discovering methods of relating to the three CityAI NPCs whose presence is predominantly nonverbal until the revelation of their “wake words” — words or phrases used to activate digital assistants such as “Hey Siri” or “OK Google.” This channelled conversations on possible futures as the game oscillated between active urban play and collective role-play as players performed the role their character had developed in relation to place.

Throughout the weekend, the LARP was accompanied by a live musical arrangement, signifying the emotional state of the CityAI. On the second day, the DJ commenced a countdown to the highly anticipated CityAI reboot, which had been on everyone’s minds. After lunch, during which a scripted natural disaster dispersed the neighbourhood across the street, an unscripted town hall meeting was convened by leaders of the two player factions. This meeting, which lasted over an hour and involved all attendees, witnessed players presenting distinct visions for the neighbourhood, inviting collective “vote” from those present via marbles to determine the course of action. The collective strategy that emerged was to establish a lounge space for the three CityAI NPCs to be contained and influenced. This was accomplished in the afternoon. Consequently, the aforementioned conclusion was reached, where both player factions collaborated to execute this plan, despite still holding divergent sets of values. Free play continued until players reconvened as the CityAI NPCs, now occupying a makeshift lounge, became online and began to explore the neighbourhood in a manner reminiscent of newborn children, while Charli cxc’s hyperpop glitch-ballad Track 10 permeated the space. From a game design perspective, the ending was ambiguous rather than providing a definitive closure, leaving room for a potential sequel. Nevertheless, it conveyed a sense of positivity as players gradually transitioned out of character and engaged in conversation about the game.

### **Cli-Fi themes**

Over two days of urban play the GMs, NPCs, players and place generated and experience a Cli-Fi narrative together through the framework of the game design. The design of the world in which the LARP took place draws upon multiple sources, including *The Fifth Season* by Jemisin (2015), *The Ministry for the Future* by Robinson (2020), *Annihilation* by Vandermeer (2014), *Snow Crash* by Stephenson (1992) and *Imago* by Butler (1989). These works are connected to the future play lab research on urban design, regenerative futures, Indigenous knowledge and posthumanism, which is situated in Naarm Melbourne.

Within this blend of influences, non-playable characters (NPCs) held prompts and provocations to initiate stories with players or influence their direction, combining active

listening with strategically staged moments of performance. This method is characteristic of LARP design, although working with the speculative and open-ended nature of Cli-Fi presented both challenges and opportunities for players to contribute their own knowledge to the narrative. Some players arrived with firmly established positions, while others tested concepts they were still developing and tested them within the play community from the secure position of their fictional character.

Some players developed a transhumanist narrative exploring technology's potential to subjugate "nature." However, it presents alternative readings. A digital realm could serve as an escape or refuge for human society, creating space for other living organisms to flourish. The embodied nature of CityAI through human characters, manifested through its interactions with human NPCs, generated a creative tension. This tension arose from the inherent difficulty in abstractly discussing AI, as they were tangible entities. Some players adopted character positions that contradicted their own values, testing these positions and attempting to comprehend or escape their own perspectives, as previously mentioned. Through gameplay, they discovered a safe environment to observe the repercussions of their actions within the environment and the community, occasionally encountering unexpected outcomes. Generally, the world design aimed to represent three positions: Bearbrass as the status quo; Symbios as a progressive and post-anthropocentric path forward; and CityAI as either a villain, an obstacle, or simply unknown, contingent upon the player's approach. While players developed more nuanced positions, there was an observed overall tendency for them to be drawn to the status quo, particularly on the second day as the LARP progressed toward a resolution.

Economies were a prominent theme of the LARP, although they were not explicitly identified in missions or objectives. Some players concentrated on resource gathering, with the marbles symbolising hope. However, they also served as a currency for shared infrastructure and a means of tallying votes and resource cards associated with nine distinct forms of capital. This system was not introduced in this manner; players who were intrigued by its functioning discovered various resource cards and assembled this information, developing their own theories on the necessary components for constructing a successful neighbourhood. Challenging fundamental structures such as money compelled players to contemplate their current scripts as individuals in Naarm Melbourne (2024), both during the event and when the game was set in 2050. Frequently, they found a way to return to the familiar, while those who opted for alternative paths encountered difficulty in articulating their character's goals and actions. Observation of play across the two days revealed that the community reached a state of stability and equilibrium on the first day as they adapted to extreme heat and flash floods. Subsequently, they transitioned to a more speculative engagement with the CityAI on the second day.

Through the convergence of players with the installation, game and world design, a multitude of Cli-Fi themes were interwoven within the immersive experience of the LARP. While some players sought to immerse themselves fully, others engaged in more contemplative interactions with the environment. A significant portion of participants occupied a middle ground, collaborating on the challenge of constructing a neighbourhood collectively. This involved articulating a vision for the neighbourhood that could be persuasive to the CityAI. The primary objective was not to create a narrative, but rather to evoke an experience of a potential world. This experience would foster a strong memory of the location where the LARP transpired, enabling its continuation. Methods of reworlding concentrated on creating shifts in social imaginaries that align with prevalent Cli-Fi narratives to activate imagination. These narratives describe near-future plausible worlds that extend and reshape our existing knowledge. They incorporate emerging or rediscovered knowledge that speculates on how these knowledge bases may converge in novel ways. Immersive, urban play creates profound memories of these experiences, which are further enhanced by the observations and participation of passersby, given that the LARP takes place in public spaces. Additionally, the narratives shared afterward contribute to the lasting impact of these experiences through core memories of being immersed in play.

## Concluding remarks

Repurposing speculative fiction to envision the neighbourhood's potential in 2050, juxtaposing the non-fiction reality with the urban role-play of the LARP, creates markers and reminders of Naarm Melbourne's current state. This creative tension, coupled with player immersion, leads to an interdisciplinary convergence. Politics, sociology, urban planning, placemaking, creative coding, community arts, speculative design, urban governance and Indigenous knowledge are interconnected through the LARP's world design. As evident in player narratives, this rhizomatic structure offers multiple commencement points for players to initiate their own narratives and establishes connections or conflicts with other players. The GMs and NPCs introduced new challenges, disrupt, encourage, or observe the outcomes of player actions.

Building on past events, through this LARP, methods of reworlding (Innocent, 2024b) were tested at scale through an increased number of participants, an extended duration of immersion and a larger disruption to urban life due to the two-day street closure. *Playful pedagogies* underpin the design, which focuses on reworlding as a method to transform institutional structures and social norms by working within the structure of the existing street and the openness of the invitation to play with that same street in a speculative and imaginative context. Engaging with urban play and being immersive in collective action led to *regenerative play*, which improves individual and social well-being and embraces forms of storytelling futures that are grounded in past ways of being and knowing. Reworlding in the LARP occurred through play about place, working with the city as a material to find ways to connect people, place, knowledge and experience.

These methodologies position environmental education within relational processes of reworlding. Participants, through their engagement, are prompted to contemplate their own subjectivity, ethics and agency in relation to both a tangible entity, such as a local neighbourhood and an intangible phenomenon, namely the global climate emergency. This process is not undertaken in isolation but rather within an urban community that rapidly develops through immersion and shared experiences. This community invites an embodied philosophy of collaborative action (DIT), which aligns with the values of hopepunk and other Cli-Fi collective ways of being. Knowledge and action are intrinsically intertwined within collective experiences. In this LARP community, resilience and urban governance were explored through an invitation to construct a neighbourhood.

As a climate action game, this Cli-Fi LARP serves as a portable instrument for reimagining the world through urban role-play. It presents avenues for coexisting with potential futures that are simultaneously conceived and experienced in relation to the world and to others. Through this process, it expands the reach and impact of Cli-Fi in environmental education by employing an experimental and interdisciplinary approach to urban play. By grounding this experience in a convergence of posthuman thinking and Indigenous knowledge, the LARP is positioned within an affirmative ethics that posits the possibility of radical transformation and establishes connections to circular ontologies of time and space that render this transformation tangible to players seeking to disrupt the prevailing status quo.

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## References

- Ardoin, N.M. (2006). Toward an interdisciplinary understanding of place: Lessons for environmental education. *Canadian Journal of Environmental Education (CJEE)*, 11(1), 112–126.
- Ardoin, N.M., Schuh, J.S., & Gould, R.K. (2012). Exploring the dimensions of place: A confirmatory factor analysis of data from three ecoregional sites. *Environmental Education Research*, 18(5), 583–607. DOI: [10.1080/13504622.2011.640930](https://doi.org/10.1080/13504622.2011.640930).
- Baker, D.V., & Baker, M. (2010). *Apocalypse world*. Lumpley Games.
- Beavis, C., Michael Dezuanni, M., O'Mara, J., & J (2017). *Serious play: Literacy, learning and digital games*. Routledge.
- Beke, L. (2023). Climate larps, *Environmental design in nordic larp*. Analog Game Studies. <https://analoggamestudies.org/2023/09/climate-larps-environmental-design-in-nordic-larp/>.
- Beke, L., Raessens, J., Werning, S., & Farca, G. (2024). *Ecogames: Playful perspectives on the climate crisis*. Amsterdam University Press.
- Bignall, S., & Rigney, D. (2019). Transforming colonial systems: Indigeneity, nomad thought and posthumanism. In R. Braidotti & S. Bignall (Eds.), *Posthuman ecologies: Complexity and process after deleuze*. Rowman & Littlefield.
- Bowers, C. (2008). Why a critical pedagogy of place is an oxymoron. *Environmental Education Research*, 14(3), 325–335. DOI: [10.1080/13504620802156470](https://doi.org/10.1080/13504620802156470).
- Braidotti, R. (2013). *The posthuman*. Polity Press.
- Braidotti, R. (2018). *A theoretical framework for the critical posthumanities*. *Theory Culture & Society*, 1–13. DOI: [10.1177/0263276418771486](https://doi.org/10.1177/0263276418771486).
- Braidotti, R. (2019). *Posthuman knowledge*. Polity Press.
- Braidotti, R. (2020). “We” are in this together, but we are not one and the same. *Bioethical Inquiry*, 17, 465–469. DOI: [10.1007/s11673-020-10017-8](https://doi.org/10.1007/s11673-020-10017-8).
- Briggs, C. (2008). *The journey cycles of the Boonwurrung: Stories with Boonwurrung language*. Victorian Aboriginal Corporation for Languages.
- Briggs, C., Anderson, K., & Slater, A. (2024). Learning, unlearning, and relearning history in early childhood education. *Decolonising Australian History Education*, 1, 87–106.
- Brown, S., & Vaughan, C. (2010). *Play : How it shapes the brain, opens the imagination, and invigorates the soul*. Avery.
- Brown, S.L., Siegel, L., & Blom, S.M. (2020). Entanglements of matter and meaning: The importance of the philosophy of Karen Barad for environmental education. *Australian Journal of Environmental Education*, 36, 219–233. DOI: [10.1017/aee.2019.29](https://doi.org/10.1017/aee.2019.29).
- Butler, O.E. (1989). *Imago*. Grand Central Publishing.
- Callenbach, E. (1977). *Ecotopia*. Bantam Books.
- Castoriadis, C. (1997). *The imaginary institution of society*. Polity Press.
- Chakrabarty, D. (2009). The climate of history: Four theses. *Critical Inquiry*, 35(2), 197–222. DOI: [10.1086/596640](https://doi.org/10.1086/596640).
- Corn, A., Curkpatrick, S., & Langton, M. (2024). *Indigenous knowledge: Australian perspectives*. Melbourne University Press.
- Danowski, D., de Castro, E.V., & Nunes, R.G.(Trans) (2016). *The ends of the world*. Polity Press.
- de, S., Silva, A., & Sutko, D.M. (2009). *Digital cityscapes: Merging digital and urban playspaces*. Peter Lang Publishing, Inc.
- De Koven, B. (2013). *The well-played game: A player's philosophy*. The MIT Press.
- De Vroey, L. (2023). Back to the future : Retrospectivity, recovery, and nostalgia in rewilding. *Environmental Ethics*, 45(4), 359–380. DOI: [10.5840/ENVIROETHICS202383167](https://doi.org/10.5840/ENVIROETHICS202383167).
- Dewey, J. (1923). *Democracy and education: An introduction to the philosophy of education*. Macmillan.
- Dourish, P., & Bell, G. (2014). *Divining a digital future: Mess and mythology in ubiquitous computing*. The MIT Press.
- Dunne, A., & Raby, F. (2013). *Speculative everything: Design, fiction, and social dreaming*. The MIT Press.
- Evans, J., & Jones, P. (2011). The walking interview: Methodology, mobility and place. *Applied Geography*, 31(2), 849–858. DOI: [10.1016/j.apgeog.2010.09.005](https://doi.org/10.1016/j.apgeog.2010.09.005).
- Flanagan, M. (2009). *Critical play: Radical game design*. The MIT Press.
- Flynn, A. (2014). *Solarpunk: Notes toward a manifesto*. Retrieved July 4, 2025, from <https://hieroglyph.asu.edu/2014/09/solarpunk-notes-toward-a-manifesto/>.
- Galloway, A., & Ward, M. (2006). Locative media as socialising and spatializing practice: Learning from archaeology, *Leonardo electronic Almanac* (Vol. 14). MIT Press. ISSN 1071-4391.
- Gammage, B. (2012). *The biggest estate on earth: How aborigines made Australia*. Allen & Unwin.
- Gaonkar, D.P. (2002). Toward new imaginaries: An introduction. *Public Culture*, 14(1), 1–19. 2002.
- Graham, M. (2009). Understanding human agency in terms of place : A proposed aboriginal research methodology. *Philosophy Activism Nature*, 6, 71–78.
- Grunewald, D.A. (2003). Foundations of place: A multidisciplinary framework for place-conscious education. *American Educational Research Journal*, 40(3), 619–654. DOI: [10.3102/00028312040003619](https://doi.org/10.3102/00028312040003619).
- Grusin, R., & Ryan, M. (2023). *The long 2020*. University of Minnesota Press.
- Guntarik, O., Davies, H., & Innocent, T. (2023). Indigenous cartographies: Pervasive games and place-based storytelling. *Space and Culture*, 28(2), 221–236. DOI: [10.1177/12063312231155348](https://doi.org/10.1177/12063312231155348).
- Haraway, D.J. (2003). *The companion species manifesto: Dogs, people, and significant otherness*. Prickly Paradigm Press.

- Haraway, D.J. (2016). *Staying with the trouble : Making kin in the Chthulucene*. Duke University Press.
- Henricks, T.S. (2015). *Play and the human condition*. University of Illinois Press.
- Huizinga, J. (1949). *Homo ludens; a study of the play-element in culture*. Routledge & K. Paul.
- Innocent, T. (2015). Humans at play in the Anthropocene. *The Fibreculture Journal*, FCJ-175. <https://fibreculturejournal.org/fcj-175-humans-at-play-in-the-anthropocene/>.
- Innocent, T. (2024). Reworlding: Urban play as method for exploring alternate social imaginaries. *Space and Culture*, 27(2), 227–241. DOI: [10.1177/12063312231223134](https://doi.org/10.1177/12063312231223134).
- Innocent, T. (2024). Reworlding as method; approaches to urban play in the future play lab. *Analysis and Policy Observatory*. <https://apo.org.au/node/329602>.
- Innocent, T. (2025). reworlding methods for entangling urban play with regenerative futures. In *Proceedings of 30th international symposium on electronic/emerging art (ISEA2025)*, Art Center Nabi, Institute for Culture and Arts Seoul National University. DOI: [10.23362/KOEN2025.07.25.1.073](https://doi.org/10.23362/KOEN2025.07.25.1.073).
- Innocent, T., & Briggs, C. (2025). Reworlding: Posthuman thinking/Urban play/Technology/Place-based knowledges/Indigenous cosmologies. In G. Klumbyte, E. Jones & R. Braidotti (Eds.), *Posthuman convergences: Transdisciplinary methods and practices*. Edinburgh University Press.
- Innocent, T., & Leorke, D. (2019). Heightened intensity: Reflecting on player experiences in Wayfinder Live. *Convergence*, 25(1), 18–39. DOI: [10.1177/1354856518822427](https://doi.org/10.1177/1354856518822427).
- Innocent, T., & Stevens, Q. (2021). Urban play as catalyst for social wellbeing post-pandemic. *Frontiers in Computer Science*, 3. DOI: [10.3389/fcomp.2021.634145](https://doi.org/10.3389/fcomp.2021.634145).
- Jemisin, N.K. (2015). *The fifth season*. Orbit Books.
- Khadka, A., Jie Li, C., Wilhem Stanis, S., & Morgan, M. (2020). Unpacking the power of place-based education in climate change communication. *Applied Environmental Education & Communication*, 20(1), 77–91. DOI: [10.1080/1533015X.2020.1719238](https://doi.org/10.1080/1533015X.2020.1719238).
- Lehman, J. G. (2010). *An introduction to the Overton window of political possibility*. Mackinac Center for Public Policy. <https://www.mackinac.org/OvertonWindow>
- Mancuso, C. (2021). Multiplicative speculations: What we can learn from the rise and fall of Hopepunk. *ASAP/Journal*, 6(2), 459–483. DOI: [10.1353/asa.2021.0031](https://doi.org/10.1353/asa.2021.0031).
- Margulis, L., & Fester, R. (1991). *Symbiosis as a source of evolutionary innovation : Speciation and morphogenesis*. MIT Press.
- Margulis, L., & Olendzenski, L. (1992). *Environmental evolution : Effects of the origin and evolution of life on planet earth*. MIT Press.
- Meadows, D.H., Meadows, D.L., Randers, J., & Behrens III, W.W. (1972). *The limits to growth*. Potomac Associates.
- Montola, M., Stenros, J., & Waern, A. (2009). Pervasive games, *Theory and design. Experiences on the boundary between life and play*. Morgan Kaufmann Publishers.
- Neale, M., & Kelly, L. (2020). *Songlines: The power and promise*. Thames & Hudson.
- Nilsson, P., & Nohr, J. (2020). *Mörk borg*. Free League Publishing.
- Norman, B., Newman, P., & Steffen, W. (2021). Apocalypse now: Australian bushfires and the future of urban settlements. *NPJ Urban Sustainability*, 1, 2. DOI: [10.1038/s42949-020-00013-7](https://doi.org/10.1038/s42949-020-00013-7).
- Orr, D. (2013). Place and pedagogy. *NAMTA Journal*, 38(1), 183–188.
- Piersol, L., Russell, L., & Groves, J. (2018). Nature education for sustainable today and tomorrow (NEST): Hatching a new culture in schooling. *Australian Journal of Environmental Education*, 34(2), 97–114. DOI: [10.1017/aee.2018.31](https://doi.org/10.1017/aee.2018.31).
- Porter, L., Hurst, J., & Grandinetti, T. (2020). The politics of greening unceded lands in the settler city. *Australian Geographer*, 51(2), 221–238.
- Presland, G. (2009). *The place for a village: How nature has shaped the city of Melbourne*. Museums Victoria.
- Regen Melbourne. (2024). Catalysing a wave of regenerative streets in Greater Melbourne. <https://www.regen.melbourne/news/regen-streets-report-2024>.
- Reina-Rozo, J.D. (2021). Art, energy and technology: The solarpunk movement. *International Journal of Engineering, Social Justice, and Peace*, 8(1), 47–60. DOI: [10.24908/ijesjp.v8i1.14292](https://doi.org/10.24908/ijesjp.v8i1.14292).
- Rigney, D., Vivian, A., Hemming, S., Berg, S., Bignall, S., & Bell, D. (2021). Treating treaty as a technology for indigenous nation-building. In D. Smith, A. Wighton, S. Cornell & A.V. Delaney (Eds.), *Developing governance and governing development international case studies of indigenous futures*. Bloomsbury Publishing.
- Robinson, K.S. (2020). *The ministry for the future*. Orbit Books.
- Schild, R. (2016). Environmental citizenship: What can political theory contribute to environmental education practice? *The Journal of Environmental Education*, 47(1), 19–34. DOI: [10.1080/00958964.2015.1092417](https://doi.org/10.1080/00958964.2015.1092417).
- Schiller, F. (1993). *Essays*. Bloomsbury.
- Sicart, M. (2017). *Play matters*. The MIT Press.
- Smith, G.A. (2002). Place-based education: Learning to be where we are. *Phi Delta Kappan*, 83(8), 584–594. DOI: [10.1177/003172170208300806](https://doi.org/10.1177/003172170208300806).
- Smith, G.A., & Sobel, D. (2010). *Place- and community-based education in schools: Place and community-based education in schools*. Taylor & Francis Group.

- Sobel, D.** (2004). Place-based education: Connecting classroom and community. *Nature & Listening*, 4(1), 1–7.
- Stephenson, N.** (1992). *Snow crash*. Bantam Books.
- Thornton, S., Graham, M., & Burgh, G.** (2019). Reflecting on place: Environmental education as decolonisation. *Australian Journal of Environmental Education*, 35, 239–249. DOI: [10.1017/ae.2019.31](https://doi.org/10.1017/ae.2019.31).
- van Tol, S., & Wals, A.** (2025). Wild pedagogies in practice: Inspiration for higher education. *Australian Journal of Environmental Education*, 41, 177–199. DOI: [10.1017/ae.2025.16](https://doi.org/10.1017/ae.2025.16).
- Vandermeer, J.** (2014). *Annihilation*. Farrar, Straus & Giroux.
- Vygotsky, L.** (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wark, M.** (2007). *Gamer theory*. The MIT Press.
- Yemini, M., Engel, L., & Ben Simon, A.** (2023). Place-based education – a systematic review of literature. *Educational Review*, 77(2), 640–660. DOI: [10.1080/00131911.2023.2177260](https://doi.org/10.1080/00131911.2023.2177260).

## Author Biography

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