

Reworlding: entangling Indigenous knowledge and posthuman thinking through urban play

Abstract

When play scholars attempt to define play a multiplicity of definitions emerge dependent on context, situation, and relations with a world. It is a particular way of being that is posthuman, post-cognitive, post-anthropocentric. First Peoples are the foremost experts in connecting knowledge with place, processes of experiential learning, languages of relational world building. Many of these methods are expected outcomes of 'innovation' arising from Extended Realities (XR) including location-based games, augmented reality, and electronic art. By entangling experimental game design, cultural knowledge/s, and posthuman philosophies this paper brings together reflections on creative practice in shaping a blending the expert knowledge of First Peoples with experimental art exploring play, place, language, and other ways of being. By decentering and entangling the subject, everywhere is already posthuman, in that it is post-anthropocentric, although it has also always been here. Instead, new methodologies and cartographic tools are needed to explore posthuman ways of being and knowing. Play is integral to First Peoples epistemologies in that knowledge emerges through action and interaction with people and place rather than learning being a strictly cognitive activity. These methods appear in experimental game design and electronic art, in the posthuman subject, but also in First Peoples epistemologies.

Keywords

ecologies of place, urban play, First Peoples, placemaking, augmented reality, posthumanism, pervasive games, Indigenous futures, creative practice research

Introduction

Play is another way of being. It is speculative and imaginative, disruptive and regenerative, collective and immersive. When play scholars attempt to define play a multiplicity of definitions emerge, dependent on its context, situation, its set of relations with a world. It is intangible, something that happens between humans, non-humans, and (although not always) technologies. When it happens, it can change a person, it can change a place, find a new use for (electronic) things. It is a particular way of being that by being posthuman, post-cognitive, post-anthropocentric plays a role in creating another social reality.

However, this idea is not new. Framing it within narratives of innovation in creative technologies, electronic art, progress of modern civilization etc is problematic and inaccurate. These ways of being have been practiced for thousands of years but unrecognised. First Peoples

epistemologies and ontologies, ways of knowing and being in connection to place, precede what has been described as the 'ludic century', although the playful mood of the early 00s had quickly changed in face of the climate catastrophe.

First Peoples are the foremost experts in connecting knowledge with place, in processes of experiential learning, in languages of relational world building [1]. Although much of this knowledge and culture has been repressed or lost, much of it also continues through living cultures that persist today. Many of these methods are desired and/or expected as outcomes of 'innovation' arising from creative technologies, or from Extended Realities (XR) including location-based games, augmented reality, electronic art etc.

This creative practice started in the digital realm, then shifted into mixed realities in the early 00s, moving into public art and urban play in 2010 that evolved out of a micronation founded in 2005. In 2014, collaboration began with Australia's First Peoples on experimental game design exploring place-based storytelling, location-based media, augmented reality during *Memefest: Radical Intimacies: Dialogue in our times*. Collectively, we developed an Alternate Reality Game that led players through an experience of creation and loss, a process of playing and coping with trauma. In 2018, the *64 Ways of Being* [2] project was initiated, a five-year experimental game design project developing play about place.

By entangling experimental game design, cultural knowledge/s, and posthuman philosophies this paper brings together reflections on creative practice in shaping a blending the expert knowledge of First Peoples with experimental art exploring play, place, language, and other ways of being. By unravelling this entanglement, connections and correlations with 'everywhen' [3] will emerge.

2020-2024: this moment in time

everywhen is a way of being in the world, and a way of worlding, bringing the world into being. It is about the material, phenomenological experience of this moment right now, and how the ongoing processes of worlding over networks of place and time also exist in the moment, create that moment. By decentering and entangling the subject,

everywhen is already posthuman, in that it is post-anthropocentric, although it has also always been here. Braidotti's definition of posthumanism challenges rationalism and human exceptionalism characteristic of Western traditions of humanism. Instead, new methodologies and cartographic tools are needed to explore posthuman ways of being and knowing, and these already exist in knowledges of First Peoples, post-colonial discourse, feminist and queer theory. Everywhere, 'the human subject is no longer a singular entity but a more complex ensemble: of zoe/geo/techno-related factors, which include humans... This implies that thinking and knowing are not exclusively the prerogatives of humans, but take place in the world, which is defined by the co-existence of multiple organic species and technological artefacts alongside each other' [4].

Posthuman knowledge moves the human subject out of the centre of the world, and acknowledges the Anthropocene as signalling the end of human history (as we know it) through mass extinction, climate change, and other catastrophic events. However, rather than adopt a negative position, by recognising the regenerative capacity of the planet and its diverse population of non-human agents, another world becomes possible through the lens of affirmative ethics. "'We" Are In This Together, But We Are Not One and the Same' [5] was Braidotti's response to the COVID-19 pandemic, that echoes writing on First Peoples philosophy in response to the Anthropocene that recognises that it is not the end of *the* world, but *a* world [6]. To adopt this position means embracing a different relationship with time, a non-linear, circular relationship, an understanding that the future may not be harder, better, faster, stronger, or apocalyptic ruin, but something else altogether [7].

This century (another arbitrary construction of time) began with some claiming that it would be a 'ludic century', a century defined by games just as previous centuries has been defined by novels and cinema. Economically, technologically this is largely true, but how does play relate to culture? Trammell proposes a repair of play [8], highlighting gaps in Huizinga and Callois Eurocentric approach, play is formative of culture - but what culture, for who? Again, play is integral to First Peoples epistemologies in that knowledge emerges through action and interaction with people and place rather than learning being a strictly cognitive activity. Body, mind, language, place are entangled in the formation of meaning. Often when we think of play, we think of digital games or screen-based media, but play about place - despite being messy and

difficult, slippery and hard to define - situates play directly in relation to the world, and entangles it with social realities.

Finally, in performing these shifts, all five senses need to be included in knowledge production. Phenomenological, experiential, post-cognitive ways of being are ways into posthuman knowledge, ways of reworlding place and shifting our relationships with the world, perhaps sensing that another world is possible. Post-cognitive processes such as autopoiesis [9] when entangled with the sensory experience of urban play create other ways of being, particularly in second-order cybernetics in which we are entangled in a world while also participating in the processes that bring that world into being. These methods appear in experimental game design and electronic art, in the posthuman subject, but also in First Peoples epistemologies. Again, these ideas while novel within the context of art and technology are not new in themselves. Longstanding precedents exist and inform these 'new' cartographies and systems [10].

In early 2020, as this confluence of thinking around the relationship of urban play and place during the first Melbourne lockdown, I framed this creative practice as 'reworlding'. This is a way to understand urban play in relation to people and place, as a socially engaged practice realised through methods of creative placemaking. Urban play is speculative, imaginative, creative—a method for exploring alternative social imaginaries directly in relation to place. It can be play in the city [11], play with the city [12], or play for the city [13]. As a creative practice, we are interested in the capacity of analog-digital hybrid modes of urban play that reimagine and reconnect people and place.

reworlding: 64 Ways of Being

Urban play describes all of the forms of ludic engagement people have with cities. It is an inclusive and interdisciplinary definition, including the playable city, pervasive game design, urban play communities, spanning digital and analog forms and hybrid forms in-between. While the future play lab engages with urban play in all of its forms, this paper is focussed on reframing the mobile phone as a platform for electronic art using augmented reality and geolocated immersive audio. Working with this platform, reworlding is developed as a creative practice combining the speculative nature of urban play, experiential and process-driven aesthetics of live art, and world building / worlding capacity of game design.

64 Ways of Being is an urban public art experience that brings Melbourne’s laneways, streets, parks and rivers to life via mixed reality—to create a conversation with the city about its past, present and future. Drawing on Indigenous knowledge and Melbourne’s multicultural communities, the project embeds location-specific participatory artworks—ways of being—throughout the city.

Players traverse the streets of Melbourne, guided through a labyrinth of art-filled laneways and covered arcades and onto the banks of the Birrarung (Yarra River). Along the way, players are prompted to reimagine the world through urban play. The app experience speaks to the many layers of knowledge and identity encoded within the environment. Evoking the social, cultural and linguistic diversity of the city, *64 Ways of Being* connects people with place through an inventive blend of performance, game design, and mobile technology.

64 Ways of Being was created by Troy Innocent, in collaboration with live performance collective—one step at a time like this—and AKQA’s specialist creative mobile development studio Millipede. The project is supported by the Victorian Government through Creative Victoria.

There are journeys located in other parts of Narm/Melbourne, in Footscray, St Kilda, Collingwood/Fitzroy. This analysis is focused on the first journey situated in the Melbourne CBD in which the platform was developed and many of these ideas were explored, tested and refined. It is also a site of interest as it was once the largest wetlands in Australia. The flow of waterways, and their disruption, emerged as a major theme in this journey that moves through Melbourne’s infamous laneways but ends with a contemplative walk along the Birrarung or Yarra River.

Holding Multiple Worlds

This journey begins at the top of the steps of Parliament House, that offers a unique view into the Melbourne CBD from the edge of the city looking down into the Hoddle Grid, where the 57 tram flows down into the city. The audio track begins with the voice of Aunty Joy Murphy AO singing in Woi Wurrung before the narration begins to decode the visible signs of this place, which consist mainly of colonial architecture: The Princess, The Imperial, The Windsor. Finally, the player is invited to walk down the steps as the music shifts from a slow atmospheric composition by Allara Briggs-Pattison (Yorta Yorta) to a beat-driven track by Kuren (Wiradjuri). From this moment the

player continues to flow downstream for the entire journey, following the topography that is obscured by the Hoddle Grid—the 9x5 matrix of main streets that map the centre of the CBD that is disrupted by smaller streets and laneways creating small labyrinth like spaces between the main streets.

As the player moves from one of these main streets into the laneways, they are led by shifts in the music and occasional audio instructions rather than a digital mapping service to create a sense of disorientation and defamiliarisation—getting lost and immersed in place, slowing down, bringing the player into a flow state with the world, contemplative and active simultaneously. This establishes the main game loop: immersive audio situating the player in relation to place leading to an augmented reality encounter in a laneway, square or other public space. The design of this loop defines a ‘way of being’ made of place, language, music, and play. Multiple ways of being are connected to one another to create a journey, revealed on an abstract map upon completion.

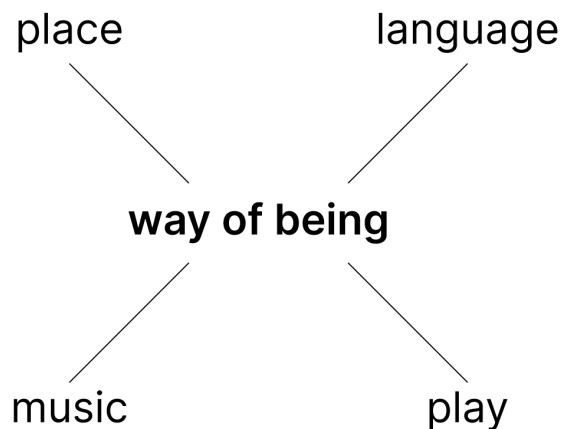


Figure 1. Diagram of a ‘way of being’ in *64 Ways of Being*. ©Troy Innocent.

Working with the city as a material, this goal of this approach to the game design is to situate the player within multiple worlds, not only the coexistence of Narm and Melbourne but also to reimagine Melbourne’s identity by drawing attention to its creative, linguistic, cultural, social and urban diversity. Each of the four elements are entangled to create each way of being in the journey, coming in and out of focus depending on where the player is situated in relation to the world.

Halfway through the journey, as they are exiting a labyrinth of laneways and arcades into a side street towards Elizabeth Street to flow down toward the Birrarung, the player hears this:

‘There’s a relationship between birds, moon, stars, the trees, everything is a pattern, everything is made of patterns. And it’s how you navigate through those patterns, of your world. And here it blocks me because it’s another pattern.’

N’arweet Carolyn Briggs AM, *excerpt from 64 Ways of Being: Holding Multiple Worlds.*



Figure 2. Flash flooding on Elizabeth Street in February 1972. ©Neville Bowler.

Every **place** has an existing atmosphere, mood and semiotic landscape that speak to the player. Our approach disrupts the hierarchy of the information and experience of place by bringing layers that are obscured, deliberately or through neglect, into sharper focus. In Elizabeth St, for examples, two hidden layers are brought to the surface. This street is on the Hoddle Grid carrying trams, people, cars between the central station on the southern end at Flinders Street to the Queen Victoria Market on the northern end and beyond. On the surface, it is made bitumen, steel, concrete, underneath the creek still runs down to the river, now a storm water drain connected to a massive underground network of pipes that manage the water table [14] of the pre-colonial wetlands. Within this hidden waterway, short-finned eels [15] are said to migrate out to the Coral Sea to complete their life cycle.

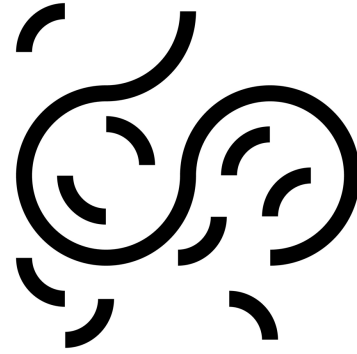


Figure 3. Geogram designed for ‘biik’ in *64 Ways of Being: Holding Multiple Worlds.* ©Troy Innocent.

Our perception, connection, understanding and experience of place is shaped by **language**—maps that define the dominant patterns, stories connected to a place, the words that are used to talk about our relationships to the world. *Biik* is a Kulin word that has multiple meanings, dependent on context, in describing place names, land, earth, or Country. This last definition is difficult to translate into English as it represents a completely different ontological relationship. In English, place is a separate entity, land may be contained, bounded and owned by an individual. In Kulin language, there is no word for land that has this meaning as prior to colonisation this concept did not exist. Country is part of you, and you are part of Country, there is no separation. This is true for First Peoples across Australia, as defined by Pascoe [16], Gammage [17], Yunkaporta [18] and many others. One definition offered by Woi Wurring elder Aunty Gail Smith to capture this concept in *64 Ways of Being* is: ‘Biik: A word for land – and how being on Country connects every living being, including you.’ This is a posthuman way of being, a way of embedding you into patterns of the world.



Figure 4. Players flowing through the underpass through Flinders Street Station onto the Birrarung. ©Daniel De Souza.

Working with the city as a material, these two found elements of place and language are augmented via digital interpretation. The first of these digital elements is **music**, performing many different roles in immersing players in ways of being. In the design, music tracks are geofenced allowing the track to change as players turn a particular corner, enter a specific space, or approach a waterway. Much of the music is mixed with spoken word performance written by one step at a time like this, excerpts of interviews with people connected to each place, and a collage of found materials linked to each journey. The music also choreographs the player in their flow through the city, shifts their perception of time, breaking or reinforcing patterns in the urban environment. As players reach the end of Elizabeth Street they arrive at an intersection leading into an entrance to Flinders Street Station, where pedestrians outnumber cars and flow across the intersection in both direct and diagonal paths, interspersed with the occasional tram. At this place, the word *Biik* is situated and part of N'arweet's eel story is heard with a track from the Orb Weavers entitled 'Reeds / Rush'. Following this moment, players are moved through an underpass leading to the Birrarung, following the flow of the creek that once was here, still here in the urban flows of people through this place. Spoken word suggests the 'Join the flow, follow the eels to the river'.

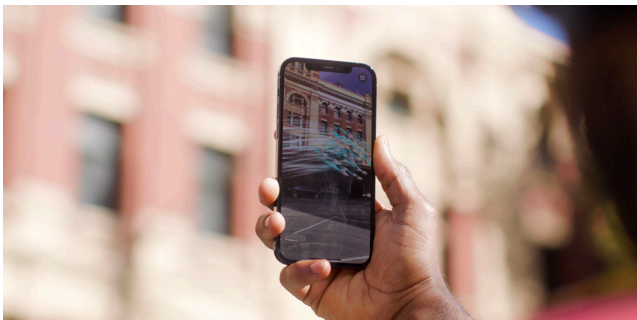


Figure 5. Player viewing cloud of eels outside Flinders Street Station in *64 Ways of Being*. ©Daniel De Souza.

Flowing along the journey, each way of being is drawn into a point of focus at a particular place through **play** with augmented reality. In the design, there are eight different types of encounters that choreograph this play about place differently, sometimes moving the player through a public square, playing music together via street art created for that purpose, following a digital character, playing a neon sign, and so on. The encounter at the end of Elizabeth Street uses flocking algorithm to animate a cloud of abstract eels that flow up from the street into the air to dance about in front of the station. This design situates the player in three different ways to this particular time and

place: firstly, the augmented reality is interspersed with the flows of pedestrians, trams and cars to entangle the eels with this place as it is now, at this particular point in time; secondly, it embodies the players into a cycle of being, to connect them in a small way with place, to make them feel part of it rather than separate to it; and, thirdly, it stages them in relation to the world around them, as they follow the dance of the eels with their phone they slowly dance in place, inadvertently performing to the public, disrupting the usual busy pattern of the intersection. Perhaps, for this short moment, the player is entangled in an everywhen, a moment outside of their familiar ways of being, a moment of play that entangles another possible world with their everyday lived experience.



Figure 6. Players immersed in *64 Ways of Being* in the busy intersection outside Flinders Street Station at the end of Elizabeth Street. ©Daniel De Souza

Player experience and other impacts

Impacts of the project are part of a larger study on three different levels: firstly, on the creatives involved in making these experiences; secondly, on local government partners, creative placemaking agencies and arts organisations who support these practices; and, thirdly, on the players who experience them. Multiple perspectives come into play, including socially engaged practice, digital storytelling, creative placemaking, digital interpretation, and site-specific practice.

This impact study will utilise a mixed methods approach to integrate, analyse and present data, focussed on designing and testing the project in a variety of settings. These projects, and the ways in which they are investigated, are 'research creations' that involve assemblages of people with concepts, ideas, materials, place and space. Investigating how participants perceive, experience, and comprehend the sociable, materially assembled world in which they live and play, can provide insight into how

experience and perception are constituted through social and practical engagements – including in relation to sociality and place.

Players report moments of heightened intensity and connection when immersed in the place-based experiences of *64 Ways of Being* as they become attuned to place, across multiple senses. Being grounded in place, slowly down, sensing an emotional rather than transactional cartography creates a pervasive sense of presence and embodiment. The audio layers attune players to place, opening up multiple layers and drawing their attention to its linguistic and semiotic landscapes. Play introduces another level of embodiment and presence, and a sense of possibility as the urban environment momentarily becomes theirs to recreate and reimagine. Visually, it is augmented via digital animation and iconography that make tangible invisible or imperceptible ways of being, annotating and remapping the city—seeing it through new eyes. Finally, these different modalities are combined to invite a mode of active introspection, while walking and playing in the city the players are also engaged in imaginative play with its past, present and future.

The impact study will invite players to describe meaning and context of their play experiences by retelling and sharing their own stories. Elements of play will be explored - entry, experimentation and discovery, pleasure, embodiment and affect, frustration and failure, transformation and transgression, exploring the unknowable, and leaving. These narrative accounts will provide rich data for formal investigation and presentation of the role of play in interpretation of place and its meaning.

Already posthuman

By entangling First Peoples ontologies and epistemologies with electronic art, public space, digital media, and urban play it becomes clear that Braidotti's posthuman project to decentre human relationships with the world align with thousands of years of living on Country as a relational entity entangled with the world. Put simply, to be posthuman we can look to the present, past, future, and shift from a linear relationship of time always moving forward, always accelerating but instead as circular, nonlinear, multiplicitous. In *64 Ways of Being*, players are situated as relational entities entangled with urban environments, framing their experience of the world through diverse ways of being. Taking this reimagination of social imaginaries even further, framing it in relation to circular relationships to time, these ways of being show that there is not one world

but many. Extended even further, within the context of the Anthropocene, this perspective challenges the linear conception of the end of *the* world to become the end of *a* world, making another world possible. If the Anthropocene brings to light the possibility of the end of history, it may equally bring into focus that the end of Western history does not necessarily mean the end of the history of the world as a whole, the other histories exist and may present alternate realities in the near future.

Again, this also means challenging the futurist narrative of electronic art, acknowledging that many ideas—such as place-based knowledge, post-cognitive communication, and networked, living systems—are not new ideas but central to First Peoples ways of being for thousands of years, although digital technologies offer ways to entangle these with the world in different ways than that were previously possible [19]. This offers an opportunity to shape their use and design, particularly in relation to the fraught argument that technology is morally and politically neutral. While this is a complex topic, in relation to *64 Ways of Being*, the design works to reframe the mobile phone as a way to slow down, connect with place, be a relational entity in the world. That is, to entangle posthuman, and therefore also First Peoples, ways of knowing and being in the world with digital technology. By offering an alternative, this also defamiliarises the mobile phone, the digital mapping services whose design is driven by efficiency and productivity, cycles of likes and digital distraction, to also offer another way of being.

These other ways of being come from urban play, particularly the invitation for adults to play with the world. Unlike children engaged in play, adults are able to be critical and reflective on their play experiences, and this significant shift changes the relationship of play with the world. Processes of reworlding, while not immediately shifting the actual structure of built environments, influence the social imaginary, shifting meaning and connection with place. Play has its most profound impact on the internal world of the player, resonating beyond the external action of play, which is often the point of focus as it is what we see. However, the focus is not on ways of seeing but ways of being in the world. In *64 Ways of Being*, this is fundamental to the design, starting with a speculative world in which players are holding multiple worlds in their mind simultaneously, and the embodied and entangled acts of reworlding placing them in relation to public space in playful ways that offer ways to remap and reimagine those spaces. Upon revisiting those spaces at a later date, the memory of

their play about place rises again to the surface, resonating across time.

This reframing of speculative design in relation to site-specific practice is fundamental to reworlding in *64 Ways of Being*. Augmented reality (AR) is typically applied in a non-critical way without context. Extended Realities (XR) often, but not always, expand on this by creating stronger relationships between physical and digital layers, and this approach is embedded in our design working within the constraints of the range of mobile phones readily available to players. However, the design also works with relational context through the speculative world building of the game design, the immersive audio that situates players in relation to place, the multilayered choreography of the player through use of spatial play. The familiar world of Melbourne as a city is opened up as a site of possibility through the experience, the invitation to play at the beginning of the journey says ‘the most crucial piece of technology is you, your eyes, your ears, smell, touch, taste - your imagination ... the way is a map, a map of Country, a map of the city, and a map of you.’

In this way, it is a kind of everywhen. It reframes the dense spaces of the Melbourne CBD in relation to their relatively recent environmental history as a wetlands, and to the long history of First Peoples of the Kulin Nation. It also asks the player to reimagine their own relationship to place, and their role in cities as living, relational entities that hold multiple possibilities - despite the catastrophic impacts of the current dominant social imaginary. It draws upon the disruptive and critical aspects of play, its generative and imaginative capacities to immerse people in another world, another way of being, for a moment. It was not so long ago that this city was another place altogether, and it may not be long before it becomes something else again.

‘You’re looking at different stages in time, and I think that’s what we have to understand.’

N’arweet Carolyn Briggs AM, *excerpt from 64 Ways of Being: Holding Multiple Worlds*.

Acknowledgements

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