

# 'Fluid Geographies' Programme



19 November 2024



TAURANGA



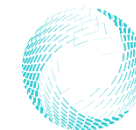
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## Overview of Programme

	Tuesday 19 November	Wednesday 20 November	Thursday 21 November	Friday 22 November	
8.00am			NZGS Breakfast		
8.20am		Mihi Whakatau Opening	AGM		
8.40am			Café 101 ground floor		
9.00am			All welcome		Keynote Panel
9.20am		Keynote	Keynote		100 years NZ
9.40am		Karen Fisher and Meg Parsons	Tahu Kukutai and Rob Kitchin		Geographic Board
10.00am					
10.20am		Morning tea	Morning tea		Morning tea
10.40am					
11.00am		Parallel sessions	Parallel sessions		Parallel sessions
11.20am			Teacher Workshops		Teacher Workshops
11.40am					
12.00pm	Registrations open				
12.20pm	Early Career				
12.40pm	Research	Lunch (Meet the NZGS)	Lunch	Lunch	
1.00pm	Network		(HoD Meeting)		
1.20pm	Workshop		Parallel sessions	Parallel sessions	
1.40pm		Parallel Sessions	Teacher Workshops	Teacher Workshops	
2.00pm					
2.20pm	Start social event or move to GAGA				
2.40pm					
3.00pm	GAGA		Fieldtrips	Poroporoaki Closing	
3.20pm	workshop	Tea and Coffee			
3.40pm	on leadership				
4.00pm		Keynote			
4.20pm		Kimberley Peters & Paula Satizábal			
4.40pm					
5.00pm	ECRN & GAGA	NZGS			
5.20pm	Social events	Awards			
5.40pm		Mix and Mingle			
6.00pm			Dinner at Nectar		
6.30pm			97 The Strand		

## Detailed Programme

Tuesday 19 November		
12.00	Level Two Foyer	Registration desk opens
12.20-3.00	Te Manawaroa TCBD.1.07	Early Career Research Network Workshop
3.00-5.00	TCBD.3.06	GAGA Workshop. After the GAGA workshop attendees are welcome to join the ECRN group
3.00-	<a href="#">The Hop House</a>	ECRN Social Event

Wednesday 20 November		
7.45	Level Two Foyer	Registration desk opens
8.20-9.20	2.03 Tiered lecture theatre	Mihi whakatau opening
9.20-10.20	2.03 Tiered lecture theatre	Joint Keynote: Meg Parsons and Karen Fisher
10.20-11.00	Level One Foyer	Morning tea

Wednesday 11.00 – 12.40 Parallel Session 1								
	2.03 Tiered lecture theatre	1.07 Te Manawaroa	2.08	2.09	2.10	2.12	3.02 Water Lab	3.03
Session & Chairs	<a href="#">Diverse economies and community economies research of Asia-Pacific I</a>	<a href="#">Indigenous geographies: Relational research</a> <b>Sandi Ringham, Karen Fisher, Meg Parsons</b>	<a href="#">Geographies of biosecurity</a> <b>Sarah Edwards, Susanna Finlay-Smits, Brendon Blue, Dee McDonald</b>	<a href="#">Fluid geographies: Women's work and citymaking in the Global South</a> <b>Anindita Datta and Swagata Basu</b>	<a href="#">Geographies of Health</a> <b>David Conradson</b>		<a href="#">Understanding watery places through recreation and leisure practices: Bodies in the water and on the sand.</a>	<a href="#">Digital Geographies</a> <b>Lars Brabyn</b>
11.00	Jack Barrett	Kiely McFarlane	Brendon Blue	Aishwarya GVN	Mario Puent-Sierra		Belinda Wheaton, Marg Cosgriff, Doortje Hoerst, Robin Kearns	Lars Brabyn
11.20	Ben Lilly	Lisa Steed	Brent Lovelock	Unnimaya U G	Bingyu (Susie) Deng			Jessica McLean
11.40	Swarnima Kriti	Georgia McLellan	Sylvia Nissen	Jose Antonio Lara-Hernandez for Irene Boles	David Conradson			Nicola MacAulay
12.00	Mark Harvey	Sandi Ringham	Sarah Edwards	Yi Li				Freddie Ray
12.20	Etienne Nel	Liz Murphy-May	Cathy Breed					Lars Brabyn

12.40-1.40	Level One Foyer	Lunch
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Wednesday 1.40-3.20 Parallel Session 2								
	2.03 Tiered lecture theatre	1.07 Te Manawaroa	2.08	2.09	2.10	2.12	3.02 Water Lab	3.03
Session & Chairs	<a href="#">Diverse economies and community economies research of Asia-Pacific II: Gradon Diprose</a>	<a href="#">Indigenous geographies: Relational research</a> <b>Sandi Ringham, Karen Fisher, Meg Parsons</b>	<a href="#">Geographies of biosecurity</a> <b>Sarah Edwards, Susanna Finlay-Smiths, Brendon Blue, Dee McDonald</b>		<a href="#">Radical geographies here: Spaces of possibility and responsibility</a>		<a href="#">Coastal leisure and recreation: From liminal spaces to coastal liquidity</a> <b>Belinda Wheaton</b>	
1.40	Nikolai Siimes	Charlotte Milne	Matt Henry		Amanda Thomas, Marcela Palomino-Schalscha, Ritodhi Chakraborty, Mayumi Sato		Doortje Hoerst	
2.00		Meg Parsons	Dee McDonald				Belinda Wheaton, Nik Dean, Marg Cosgriff	
2.20	Juliana Mansvelt	Yvonne Underhill-Sem, Roi Burnett	Robyn Kannemeyer				Marg Cosgriff	
2.40	Salene Schloffel-Armstrong	Anya Benavides	Claire Dowsett					
3.00								

3.20-4.00	Level One Foyer	Tea and Coffee
4.00-5.00	2.03 Tiered lecture theatre	Joint Keynote: Kimberley Peters and Paula Satizábal
5.00-	Te Manawaroa TCBD.1.07	NZGS Awards Mix and Mingle

Thursday 21 November								
7.45	Level Two Foyer	Registration desk opens						
8.00-9.20	Café 101 ground floor	NZGS Breakfast AGM						
9.20-10.20	2.03 Tiered lecture theatre	Joint Keynote: Tahu Kukutai and Rob Kitchin						
10.20-11.00	Level One Foyer	Morning tea						
Thursday 11.00 – 12.40 Parallel Session 1								
Teacher Workshop Room 3.06 Overview Mary Robinson Session 1 and 2								
	2.03 Tiered lecture theatre	1.07 Te Manawaroa	2.08	2.09	2.10	2.12	3.02 Water Lab	3.03
Session & Chairs		<a href="#">What lies beneath: Re-surfacing and re-claiming taonga stories from below</a> <b>Maja Zonjić and Jacs Forde</b>	<a href="#">Critical physical geographies</a> 1:Understanding environments <b>Brendon Blue</b>	<a href="#">Bodies, gender, sexuality, space and place: Fluid Geographies?</a> <b>Lynda Johnston</b>	<a href="#">Enacting post-structural political economies: A critical dialogue</a> <b>Nick Lewis, Richard Le Heron</b>	<a href="#">Climate Change</a> <b>James Renwick</b>	<a href="#">Mobilities</a> <b>Helen Fitt</b>	<a href="#">Urban Placemaking</a> <b>Laurence Murphy</b>
11.00		Kelly Klink	Hilary Reinhart	Suzanne Vallance	Nick Lewis and Richard Le Heron	Kim Kullman	Angela Curl	Alejandra Guerrero Rondón
11.20		Emma Passey	Justin Connolly	Ellie Buttle	Tim Smith	Nicholas Kirk	Jillian Frater	Golkou Giyahchi
11.40		Jacinta Forde	Marc Tadaki	Emma L Sharp	Angus Dowell	Ariane Bray	Helen Fitt	Nathan Balmer
12.00		Jocelyn Zeke	Mayumi Sato	Elizabeth Murphy-May, Jean-Louise Olivier, Jessica Lemire	Reflections on learnings and lessons.	Gurleen Kour		Angelina Coelho
12.20		Maja Zonjić				James Renwick		Laurence Murphy



12.40-1.20	Level One Foyer	Lunch
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Thursday 1.20-3.00 Parallel Session 2 and Teacher Workshops Room 3.06								
Teacher Workshop Room 3.06 Overview Mary Robinson Session 3								
	2.03 Tiered lecture theatre	1.07 Te Manawaroa	2.08	2.09	2.10	2.12	3.02 Water Lab	3.03
Session & Chairs			<a href="#">Critical physical geographies</a> 2: Rethinking environmental power <b>Marc Tadaki</b>	<a href="#">Bodies, gender, sexuality, space and place: Fluid Geographies?</a> <b>Emma Sharp</b>		<a href="#">Historical Places and People</a> <b>Mike Roche</b>	<a href="#">At the edge of the sea: A social geography of mobilities that intersect with shore and sea</a> <b>Maria Borovnik</b>	<a href="#">Living with Living Rivers</a> <b>Ian Fuller</b>
1.20			Ruth Lewellen	Anindita Datta		Swagata Basu	James Braund	Ian Fuller
1.40			Glenn Banks	Jean-Louise Olivier		Kirsten Locke	Kevin Judkins	Jade Hyslop
2.00			Claire Grant	Ritu Yumnam		Lex Chalmers	Kevin Judkins	Madeeha Merchant
2.20			Åsa Nilsson Dahlström	Eva Neely		Michael Roche	Maria Borovnik	Discussion
2.40				Yi Li			Yunie Nurhayati Rahmat	

3.00-4.45	<a href="#">Various</a>	Field trips and Workshops
6.00-	97 The Strand	Conference Dinner Nectar

Friday 22 November								
8.20	Level Two Foyer	Registration desk opens						
9.00-10.20	2.03 Tiered lecture theatre	Public Keynote Panel Place naming in Aotearoa: A century of the Geographic Board Ngā Pou Taunaha o Aotearoa Robin Kearns, Michael Roche, Gerry O'Reilly, Wendy Shaw and Alanna Kamp						
10.20-11.00	Level One Foyer	Morning tea						
Friday 11.00 – 12.40 Parallel Session 1 and Teacher Workshops Room 3.06								
Teacher Workshop Room 3.06 GIS Session 1 and 2								
	2.03 Tiered lecture theatre	1.07 Te Manawaroa	2.08	2.09	2.10	2.12	3.02 Water Lab	3.03
Session & Chairs		<a href="#">Creative Engagement with Fluid Geographies</a> <b>Robin Kearns</b>	<a href="#">Remembering our geographical tactics and enactive contributions</a> Holding a space to think through our enactive contributions <b>Erena Le Heron</b>	<a href="#">Bodies, gender, sexuality, space and place: Fluid Geographies?</a> <b>Ritu Yumnam</b>	<a href="#">Circular flows, care and community: Responding to the problem of waste</a> <b>Polly Stupples, Gradon Diprose</b>		<a href="#">Land to water: Watery (re)thinking in the Anthropocene</a> <b>Karen Barbour, Michelle Duffy</b>	
11.00		Tony Nyberg	Susanna Finlay-Smits	Jose Antonio Lara-Hernandez	Lila Laird		Jessica Lemire	
11.20		Gregory O'Brien	Erena Le Heron	Bahamin Badihi	Gradon Diprose		Johanna Claus	
11.40		Kennedy Warne	Suzanne Vallance, Flo van Noppen	Javaria Farooqui	Polly Stupples		Rodrigo Hill	
12.00		Discussants	Flo van Noppen	Rata Gordon			Michelle Duffy	
12.20				Lynda Johnston				

12.40-1.20	Level One Foyer	Lunch							
Friday 1.20-3.00 Parallel Session 2 and Teacher Workshops Room 3.06									
Teacher Workshop Room 3.06 GIS Practical Session 3									
	2.03 Tiered lecture theatre	1.07 Te Manawaroa	2.08	2.09	2.10	2.12	3.02 Water Lab	3.03	
Session & Chairs		<a href="#">Transforming geographies through introducing geographies: reflecting on our experiences writing and editing the 4th edition of <u>Introducing Human Geographies</u></a>	<a href="#">Remembering our geographical tactics and enactive contributions</a> <b>Gradon Diprose</b>				<a href="#">Policy Mobilities</a> <b>Russell Prince</b>		
1.20		Mark Goodwin, Karen Fisher, Lynda Johnston, Meg Parsons, David Conradson, Juliana Mansvelt	Marc Tadaki				Youjeong Jang		
1.40			Richard Le Heron				Colin McLeay		
2.00				Simon Kingham				Russell Prince	
2.20				Discussion: Enactive contributions, where to next?					
2.40									
3.00	Poroporoaki Closing								

## Creative Engagement with Fluid Geographies

**Panel Convenor:** Robin Kearns, University of Auckland with speakers, Tony Nyberg, Gregory O'Brien and Kennedy Warne. Discussants David Conradson and Karen Fisher

### **An invitation to be moved: Framing the fluid landscape      Tony Nyberg**

Photographer Tony Nyberg presents a series of images from a recent exhibition that resulted from an extensive road -trip throughout parts of Aotearoa during which he sought to engage with the fluidity of landscape: its movement from both recent (land instability, flooding) and historic (land-use conversion from settler colonialism). Key undercurrents were our collective complicity in climate change and complicated feelings, contradictions and misunderstandings with our loved ones when we approach documenting landscape change. His narrative of the origins, method and intent of this collection is complemented by the reading of excerpts from a short commentary that Tony invited Robin Kearns to prepare as an accompaniment to the exhibition. We reflect on the process of collaboration between professional geographer and geographically-inclined photographer, in light of this exhibition and an earlier and more fluid collaborative conversation about Te Aunanga/Oakley Creek.

**Keywords:** Photography, Climate Change, Landscape, Collaborations

### **Always Song in the Water                      Gregory O'Brien**

What accommodation can be made within the realms of science and natural history for imaginative/artistic intervention? Is the fluidity of geography/oceanography such that it can be added to, and possibly even enlarged, by individual and collective artistic endeavours? Two projects involving Gregory O'Brien over the past 15 years have raised numerous questions around this theme: the monograph Don Binney--Flight Path (AUP, 2023) explored the relationship between ornithology, in its conventional sense, and a very unlikely nesting partner, Modernist art. Similarly genre-bending, the book and exhibition 'Always song in the water' (New Zealand Maritime Museum 2023-24) had, at its heart, a personal, imaginatively charged-up notion of place and geography, extending from Tai Tokerau to the northernmost expanses of New Zealand's oceanic territory while, at the same time, charting an interior space--the inner life of a writer-artist. Referring to these and other encounters, traversing numerous cultural as well as disciplinary boundaries, O'Brien will explore notions of 'oceanic' creativity--a manner of working and being which is essentially fluid but never shapeless; an approach which is multi-channelled, ever-changing and driven by the distinctive life-force of the Pacific region.

**Keywords:** Place, art, oceans, creativity, Pacific

**Personhood for the Moana?            Kennedy Warne**

I have been engaged in articulating fluid geographies for the past 25 years as a *National Geographic* writer, exploring and documenting the underwater world, both salt and fresh. My recently published memoir, *Soundings: Diving for Stories in the Beckoning Sea*, records those journeys. Through storytelling I aim to foster ideas of marine stewardship, resist the political territorialisation of the oceans and encourage ideas of the personhood of the seas. Here in Aotearoa we have become familiar with the application of personhood to terrestrial entities, be they forest (Te Urewera), river (Whanganui) or mountain (Taranaki). Might it be possible to conceive of Tangaroa’s realm, or at least totemic portions of it, in a similar way, moving from a perception of the oceans as generalised spaces to specified, treasured and revered places? Ultimately, what I seek to uphold in my writing is te mana o te wai in all the forms that water takes: fresh, salt, frozen, atmospheric. Abandoned by the current government, this concept can gather all human interactions with water under its capacious korowai and lead us into a relationship-centred, as opposed to resource-driven, engagement with earth’s most abundant molecule.

**Keywords:** Personhood, Storytelling, Marine stewardship, Oceans, Writing

[What lies beneath: Re-surfacing and re-claiming taonga stories from below](#)

**Session Convenors:** Maja Zonjić and Jacs Forde, Te Herenga Waka / Victoria University of Wellington

**The Unshackling of Te Moana Nui o Toi            Kelly Klink**

This talk explores the history, tikanga, and identity of Ngāti Rehua from their origins to the present day. It documents key events, beliefs, and ancestors, which form the threads of the sail that powers the waka of Ngāti Rehua. The complexities of Ngāti Rehua identity are explored, focusing on the essence of our life as an iwi; an innate and intentional connection with whenua and moana tupuna, as embodied through tikanga. The talk also examines the holes and patches in this sail, delving into the destruction wrought by colonisation and the ongoing injustice faced by Ngāti Rehua. The talk thus highlights the unbreakable wairua of Ngāti Rehua and their resilience in living as the tangata whenua within the islands of Te Moananui o Toi.

**Keywords:** Tikanga, waka, colonialism, mātauranga

**Lake Whatumā and Her Relational Entanglements            Emma Passey**

Waterways matter – they hold geological and social histories, ecologies, and indigenous knowledges and they are part of our national and cultural identity. However, despite their ecological, social and cultural significance, we are losing them faster than our native bush. They

have been drained, disturbed and degraded and as we find ourselves amid the Anthropocene, we have become critically disconnected. My emerging PhD research explores the shifting and entangled narratives between Lake Whatumā, the surrounding farmscape and humans, with the view to reconnecting with and restoring the waterbody. The lake is a taonga for several hapū who whakapapa to this whenua. In 1851 the surrounding landscape was described by Donald McLean who negotiated the Waipukurau Purchase as “the finest pasturage in the world”. It is now a modified farmscape. Drawing on a contemporary eco-ethnographic framework and multiple methods including autoethnography and visual representation my research embraces the notion of thinking with Nature. Exploring embodied experiences, I attempt to untangle overlooked meanings and stories that are held in this ancient but modified landscape, and the narratives shared by interview participants. However, my open inquiry and reflexive approaches have highlighted challenges to authentically include Lake Whatumā as a more-than-human being and elevate her voice. I share part of my emerging journey to unravel these riddles. These difficult encounters highlight the need for contemporary creative processes and practices to reimagine environmental research. Thinking with Lake Whatumā supports a reshaping of environmental debate reversing Nature-human degradation and disconnection.

**Keywords:** More-than-human, lake, relational entanglements, Anthropocene

**‘Ko tātou te moana, ko te moana tātou: We are the ocean, the ocean is us’**

**Jacinta (Jacs) Forde**

The ocean plays an important role in Indigenous Pacific cultures. For Māori, it is an important element of their identity and social belonging. The relationships they have had and continue to have with their maritime environments is symbiotic and symbolically determining. Māori are intimately connected through their atua (deities) and tūpuna (ancestors), and the coast and sea provide sustenance and protection for their whānau (family). This relationship is often in contention with western views and legislative processes toward the marine space and Māori are often marginalised in decision-making processes. Epele Hau’ofa’s “re-imagining of the ocean as a highway that links rather than separates” gave prominence to Pacific and seascape epistemology. Thus, this paper will be particularly concerned with highlighting Indigenous knowledge, namely mātauranga (Māori knowledge), focusing on a community on New Zealand’s northwest coast and their interaction with the seascape.

**Keywords:** Indigenous epistemologies, mātauranga, taonga

**The Tokelauan Pa: examining the significance of cultural taonga for Tokelauan diaspora in Aotearoa**

**Jocelyn Zeke**

The Pa/Kahoa (pearl shell lure pendant) is a unique and distinctive cultural taonga that embodies Tokelau's culturally rich Oceanic past. Traditionally crafted and used as a fishing lure by the skillful tautai (master fishermen), over time it has evolved to become a valuable item

that is gifted and worn by Tautiti Tokelau (Tokelauan girls and women). Today, the Pa represents a unique Indigenous adornment which reflects the distinctive customs and beliefs of faka-Tokelau (the Tokelauan way of life). The largest Tokelauan diaspora resides in Aotearoa New Zealand, with over 8,600 people—significantly exceeding Tokelau's own population of just over 1,600 locals. While it is increasingly common to see non-Tokelauan people being gifted and wearing the Pa, its significance still remains rooted in symbolizing Tokelauan ola mātua (belonging), alofa (love and compassion), and fāfia (pride and happiness). For my master's research, I am working alongside the Tokelauan community in Rotorua to further understandings of faka-tokelau. I approach the Pa as both a metaphor for navigating my research processes and 'insider/outsider' positionality as a young Pasifika researcher, and as a more-than-human taonga with its own stories and traditions. My research aims are to examine how my own community maintain and negotiate a sense of belonging to our cultural identity while in Aotearoa New Zealand, and what role cultural adornment, such as the Pa, have in our connections to faka-Tokelau.

**Keywords:** Tokelau, Pacific cultural identity, Pasifika taonga, Tokelauan Pa/Kahoa, Rotorua

**Hrvatski crveni koralji: Croatian red coral taonga stories and their connection to Aotearoa**

**Maja Zonjić**

*Corallium rubrum* is a slow-growing branch-forming red coral species, found deep in the Mediterranean sea. Red coral use traces back to 20,000 B.C. with many cultures using red corals for their magical properties. Red corals (crveni koralji) have been harvested in Croatia since the fifteenth century as both local taonga worn as part of traditional dress (narodna nošnja), as well as an export good. However, due to unsustainable extraction methods and climate change impacts, red coral is now endangered. Alongside red coral disappearance, traditional knowledges and taonga origin stories are vanishing, too. This loss is exacerbated by ongoing historical waves of emigration from Croatia, including in the 19th century, when thousands of Dalmatian men settled in Northland as gumfield labourers. Despite the rich cultural entanglements between Croatians and Māori at the time, there is still limited scholarship about how Croatian-descended communities including Tarara maintain elements of Croatian culture within Aotearoa, including sharing traditional knowledges and preserving taonga such as red corals. Additionally, although there is a resurgence of transnational feminist scholarship in Croatia, foreign-originating scholarship about the Balkans tends to characterise the region and its people through financial instability, backwardness, and post-war discourses: despite the Homeland Independence War ending nearly 30 years ago. Meanwhile, global 'Development' agendas raise concerns for Croatian coastal area sustainability, but focus on reduced tourism versus local people's well-being; while framing taonga including red corals as a commodifiable "natural resource". In response, this project challenges these marginalising discourses which erase complex histories and cultural entanglements. Instead, this kaupapa advances more nuanced narratives by focusing on the importance of reclaiming taonga stories and centering the revitalisation of Croatian traditional knowledges.

**Keywords:** Tourism; Traditional knowledge; Culture; Croatia; Corals

## Land to water: Watery (re)thinking in the Anthropocene.

**Session Convenors:** Michelle Duffy, The University of Newcastle and Karen Barbour, University of Waikato. For those participants able to attend the earlier workshop, there will be a flow of ideas from the workshop to this session

### **Dancing with the more-than-human            Jessica Lemire**

Bodies are not defined by the fleshy parts that are located under the skin, nor are they bound by it. Bodies are not limited to humans – waters have bodies, knowledges have bodies. And with a body, one can dance. More-than-human dance is a framework that magnifies connections between bodies and place. It attends to fluidity and fluctuations in movements; shape-shifting rhythms and convergences. More-than-human dance is relationality in motion. Rising, falling, lapping tides; whispering wind on prickling bare skin. Our bodies of water have memory that we perform and unravel through movement. Through this presentation, I invite you to sink deeper as you listen to the water of your body. There are three key points which underpin more-than-human dance that I wish to share. Firstly, dance is not limited to humans – all beings, all bodies; physical, ethereal can dance. Secondly, dance is relational – it brings focus to the intimacies of connection. Thirdly, dance is born from rhythm - undulating, oscillating and ephemeral. Through the lens of eco-somatics, I guide you into movement, inviting you to be curious about the ways that your body is choreographed by place by waters and the bodies of knowledge that they carry. We will move together in a practice that invites us to be sensuous, porous, and fluid.

**Keywords:** Eco-somatics, sensuality, dance, more-than-human, relationality

### **Fluid Rituals and Response-Able Hospitality: Fostering Reciprocal Relationships With The More-Than-Human World            Johanna Claus**

This paper explores how Creative Practice Research methods can foster shared understandings and meaningful responses to the Anthropocene challenges by integrating posthumanist ontologies and eco-somatic practices. Based on an example of a seasonal site-specific performance ritual by a river, I will discuss how rituals may facilitate unique forms of embodied expression, thereby enhancing reciprocal relationships with self, community, and the more-than-human world. Drawing on insights from contemporary theorists, the relational encounter of ritual is viewed from the perspective of a nature-culture continuum, where human interactions with the environment are understood as intricately intertwined with cultural, social, and intersubjective experiences. This perspective is employed to illustrate how individuals from diverse cultural backgrounds engage with and navigate complex socio-ecological dynamics within ritual contexts. Considering that the natural world is not a 'neutral' backdrop but an active participant with its own agency, I propose ritual practices as a fluid process where guest and host roles are co-created between the human and more-than-human world in shared spaces. Such an approach demands an ethics of response-able hospitality, rooted in affirmative relationships and a commitment to navigating complexities and responsibilities. In the context of Aotearoa, ritual approaches also involve negotiating place-specific ethics and politics to support



decolonization efforts and cultivate caring relationships among diverse communities. This work arises from my recently completed doctoral research on site-specific performance rituals in the Anthropocene.

**Keywords:** Posthumanist Ontologies, Eco-Somatic Practices, Interspecies-Kinships, Nature-Culture Continuum, Ethics of Response-Able Hospitality

**Waikato River as living water-river-place: Lens-based practice and water as methodology**

**Rodrigo Hill**

Contemporary lens-based practice has evolved into a broad field of possibilities, a flux of modes that represent experiences, feelings and emotions. In parallel the depth and layering of places offer stimulating challenges to researchers and artists who are willing to creatively explore the spatial and multi-sensorial ways of thinking and understanding living water-river-places. This research paper highlights methodological developments connected to my PhD research completed in 2019 and focused on the Waikato River located in the central North Island of Aotearoa New Zealand. The research explored the intersection of lens-based methods and place-making connected to the Waikato River. Taking water as primary photographic motif and methodology of connection, I developed an approach based on analogue photography and experimental processes as part of an iterative methodology of water studies and place-making. Prolonged water observations of the Waikato River informed my own embodiment and emplacement and subsequently the creation of visual perceptions that led to a collection of sensorial based photographic constructions of my experiences and processes of water-place-making. As part of my lens-based practice I have used the waters from the Waikato River to both shoot and process films, extending the concept of place beyond the visual photographic motif, becoming a tangible place-trace. This paper argues for sensory approaches applied to lens-based practice as extremely nuanced and expressive models of place-making in the Anthropocene able to generate alternative routes to critical thinking and research connected to water-river-places.

**Keywords:** Lens-based, Place, Water, Methodology

**Ecotone stories: Listening for the Anthropocene in watery encounters**

**Michelle Duffy**

Interest in thinking with and through marine environments invites us to reconceptualise place as more than terrestrial. In addition, water worlds remind us of 'the chaotic but rhythmic turbulence of the material world' (Steinberg & Peters 2105: 248; emphasis in original). This dynamism has significant implications in the Anthropocene: how to make sense of the depth and range of change occurring around us? This paper focuses on practices of listening to ecotone places, those places of interaction between adjacent ecological systems (Gosz 1993). These locations are highly mobile and fluctuating in form, making them difficult to capture through standard research techniques (Denning

2022). Nonetheless, these are spaces of fecundity, creativity and transformation (Neimanis 2012). Drawing on the compositional practices of two Australian artists – Ros Bandt and Leah Barclay – this paper considers how the visceral experience of listening can help us consider the intricate, deeply entangled relations between human and nonhuman worlds through multi-sensory attentions. Gosz, J. R. (1993). Ecotone hierarchies. *Ecological applications*, 3(3), 369-376. Neimanis, A. (2012, May). Thinking with water: an aqueous imaginary and an epistemology of unknowability. In *Entanglements of new materialisms conference*, Linkoping (pp. 25-26). Steinberg, P., & Peters, K. (2015). Wet ontologies, fluid spaces: Giving depth to volume through oceanic thinking. *Environment and planning D: society and space*, 33(2), 247-264.

**Keywords:** Ecotone, water, listening, viscosity

## Living with Living Rivers

**Workshop Convenors:** Ian Fuller, Massey University

### Living with Living Rivers    Ian Fuller

Rivers are inherently dynamic but have long been engineered and managed as though they were static. The true dynamism of our rivers, and the limitations of our management paradigm, has been revealed during recent catastrophic floods in Aotearoa New Zealand. These events have exposed the vulnerability of our society to social and economic disruption along our river corridors, significant repair costs, and wider impacts on adjacent transport corridors. While there is always a role for flood protection (static-river paradigm), moving towards allowing room for rivers (dynamic-river approach) is equal parts a scientific and knowledge challenge as it is an institutional and collective public action challenge. This workshop will provide a cross-disciplinary opportunity to discuss how we should operationalise rehabilitation efforts that seek to give Room to the River. How should we make this happen in Aotearoa? To successfully address this question, we need to understand our awa as living entities in our physical, social and cultural landscapes.

**Keywords:** Economic and Social Analysis, Environmental policy and planning, Environmental stewardship - Kaitiakitanga, Fluvial Geomorphology, River corridor planning

**He Awa Ora, He Tangata Ora: Healthy Rivers, Healthy Communities****Jade Hyslop**

It is environmentally, legislatively and morally evident that effective natural resource management requires meaningful partnership with Indigenous communities. Our research extends recent studies that suggest an alignment between geomorphic approaches to river restoration that promote space for rivers to adjust and function, and Te Ao Māori ways of thinking about and managing river systems as tīpuna (ancestors), or living beings. We draw upon a literature review and interviews with kaitiaki and pūkenga (knowledge holders) engaged in the Hōteio Sediment Reduction Project in Kaipara, Auckland, to examine whether kaitiaki could benefit from increased uptake of geomorphological concepts and tools in restoration, and how this might be done. We suggest that highlighting upfront commonalities between geomorphic and Te Ao Māori approaches (e.g. catchment scale understandings, working with nature, making space for rivers, use of observational data, and holistic restoration) can create a shared platform for considering how geomorphology and mātauranga might be used together in novel ways that fulfil iwi aspirations. We note the inability of fluvial geomorphology alone to capture the deep, intricate and relational interconnections that Māori have with their environment. We contend that western science must step back from dominating the restoration narrative, and instead be re-framed and applied with a Te Ao Māori worldview context. We offer a conceptual nested hierarchy approach for doing so. Whilst this approach will be undoubtedly complex, getting this right will pave the way for resilient river restoration, in ways that simultaneously empower iwi and their rights to rangatiratanga, mana motuhake and kaitiakitanga.

**Keywords:** Fluvial geomorphology, kaupapa Māori, kaitiakitanga

**Transboundary Water Futures: Rivers, Rights and Reparations****Madeeha Merchant**

Climatically defined by mountains and monsoons, the Indian subcontinent is on the front lines of the anthropogenic climate crisis. Current research, data and on-ground realities paint a stark future for the region. The cascading catastrophes of acute climate vulnerability, extreme weather events and an unprecedented magnitude of climate induced migration is unfolding a humanitarian crisis in a region home to over 1.8 billion people. The Indian ocean warming and the third pole melting, faster than global averages are indicative of looming climate crisis. Colonial / post-colonial accountability is imperative to climate reparations and climate justice narratives. Our geographies of disasters, displacements and destruction were jointly created by colonialism. Our histories of famines, partitions and mass migration were jointly written by imperialism. Acknowledging this systematized amnesia in climate policy, finance and action is necessary to shift away from the global north's framework of climate securitization, capitalists systems of exploitation and extractivism and debt bondage. We need to look inward, towards regional, local and indigenous practices that engender decolonial, anti-colonial, feminist and anti-racist possibilities. A just and equitable climate future for the Indian subcontinent. One that places vulnerable populations and ecosystems at the center of all collective political action, that challenges existing power structures, questions hegemonic knowledge production and decolonizes development. Bound by water, the riparian countries of the Indian subcontinent survive and thrive through their shared water geographies.

Transboundary water futures: rivers, rights and reparations, explores collective socio-climatic imaginaries that value geomorphology over borders, flow over control and ecosystems over nation states.

**Keywords:** Climate Justice, Environment personhood, Riparian Rights, Third Pole, Indian Subcontinent

### Geographies of biosecurity

**Session Convenors:** Sarah Edwards, Manaaki Whenua – Landcare Research; Brendon Blue, Victoria University of Wellington; Susanna Finlay-Smits, Manaaki Whenua – Landcare Research and Deidre McDonald, Massey University

#### **Deadly environmentalities: making Predator Free citizens**                      **Brendon Blue**

Conservation in Aotearoa New Zealand has come to mean killing. The apogee of this might be Predator Free 2050, the ambitious plan to eradicate rats, possums and stoats from the nation by 2050. Promising to free indigenous flora and fauna from detrimental relations with these introduced animals once and for all, it offers an apparently elegant solution to a set of creatures whose destruction has become a matter of national identity. But this is more than government policy: described by advocates as a ‘social movement’, PF2050 involves reshaping notions of citizenship to encourage active participation in eradication. Based on interviews conducted with advocates both for and against this national-scale project, this paper examines its attempt to create ‘Predator Free citizens’. Through considering how PF2050 is constructed, negotiated and resisted, it asks what utility environmentalism offers as a lens for understanding conservation and biosecurity practices in Aotearoa.

**Keywords:** Predator Free 2050, governmentality, conservation, pests

#### **Engaging the other in conservation conversations; what new New Zealanders think about invasive species**                      **Brent Lovelock**

Just as populations of invasive species are fluid in their growth and decline, so too are the populations of the ‘receiving communities’ in a state of constant flux. In Aotearoa New Zealand, immigration is implicated in profound demographic change and what could be referred to as a ‘fading’ of the majority culture. The implications of this change in ethnic composition of our society, with a rise in the proportion of New Zealanders of north and south Asian and Pasifika descent, among others, are underexplored in terms of what this means for future conservation management and particularly for the ‘social contract’ for ongoing management of non-native invasive species. It has been demonstrated that human-nature relations are culturally determined, but the extent to which migrant/citizen status and ethnicity flavour

perceptions of invasive species and attitudes towards their ongoing (and expensive) management are unclear. This paper reports on Te Apārangi Royal Society Marsden funded research that explores ethnic migrant community members' views about invasive species and their management. Informed by semi-structured interviews and focus groups undertaken in these communities, the findings of the study reveal diverse perspectives on invasive species, some of which lay outside the mainstream norm of 'control at all costs' that has informed Predator Free 2025 and our current modes of engagement with invasive species. Such perspectives are associated with culturally determined evaluations of individual species that may downplay their invasive status.

**Keywords:** Invasive species, perceptions, immigrants, demographic change, human-nature relationships

### **Engagement in genetic technologies for biological conservation: for whom, how, and for what ends?**

**Sylvia Nissen**

'Engagement' is increasingly seen as critical to genetic technology governance. It is the most wide-spread principle in gene drive governance documents internationally and is widely included in relevant codes of ethical conduct and risk assessment processes. However, there are clear shortcomings in emerging practices of engagement for genetic technologies. It is therefore important and necessary to foreground critical perspectives on 'engagement': that is, to ask questions of whom is engaged and by whom, how and on what terms, and for whom or what those processes serve. This paper unpacks the concept's normative expectations and empirical conditions in the context of gene drive developments for biological conservation. It demonstrates that despite the rise of rhetoric of engagement for genetic technologies, these efforts strongly lean towards superficial practices that reinforce knowledge hierarchies and existing power dynamics. This work is as part of a five-year interdisciplinary project that looks at gene-drive development in the context of wasp management.

**Keywords:** Genetic modification; engagement; conservation; biosecurity

### **Cat management in Aotearoa: Biopolitics, care and multi-species justice**

**Sarah Edwards**

Animal geographers and more-than-human scholars are increasingly attuned to the death of non-human animals, including in biosecurity and conservation contexts. Viewed through the lens of biopolitics and a more-than-human ethic of care, such research exposes the values and assumptions that make some animals killable, and problematises mundane and everyday acts of violence towards non-human Others. Nevertheless, geographers also caution that care, too, can be violent, and point to the tension between care and justice. In this paper we consider how these insights can be used to interpret the current debate over cat management in Aotearoa. Cats are much-loved companion animals, and Aotearoa has one of the highest rates of cat ownership in the world. However, roaming cats – be they 'owned', 'stray' or 'feral' – have been identified as key threats to native species, and there are calls to control their numbers and manage their behaviours. Cat

management can thus be interpreted as a biopolitical concern of how to 'make live and let die', whether this is between species (e.g. cats vs. birds) or within species (e.g. 'owned' vs 'feral' cats). We argue that, while the death of non-human animals cannot be avoided completely, there are nevertheless opportunities to engage in 'care-full' and 'just' cat management practices that lead to more equitable outcomes for the more-than-human inhabitants of Aotearoa.

**Keywords:** Biopolitics, cats, care-full justice, conservation, more-than-human

**Parrot power: kākā agency in the multispecies city**      **Cathy Breed**

In the city of Pōneke Wellington, local ecosanctuary Zealandia has flooded the capital with a now thriving population of native birds, many of whom were locally extinct just 20 years ago. The charismatic kākā parrot with its shrieking call and playful demeanour is becoming an increasingly dominant actor in this new urban multispecies assemblage, winning the hearts of many human residents, and injecting itself into public discourse. Inspired by multispecies studies and more-than-human scholarship and their approaches to moving beyond static boundaries of nature vs culture, this talk explores the more-than-human actors and agencies that are co-constructing the city of Wellington. Thinking with the kākā, I investigate the ways in which a highly visible and charismatic native parrot is (re)configuring the urban environment, asking how are the kākā changing Aotearoa's capital city? In focusing on and telling stories with the kākā, this work contributes to the growing scholarship committed to revealing the nonhuman agencies at play in the world. By putting multispecies studies in conversation with discourse analysis and political ecology, it explores how we can approach nonhumans as agentic beings in our political ecologies of place and demonstrates how people share and co-create urban spaces with nonhuman neighbours.

**Keywords:** More-than-human, multispecies studies, nonhuman agency, kākā, urban conservation

**Securing the Wind? Governing Atmospheric Life**      **Matt Henry**

Birds, dust, and smoke from bushfires are all periodic windborne visitors to Aotearoa New Zealand. Blowing in on the wind these visitors are, however, only the most visible tip of a churning atmosphere teeming with life and materials. Drawing on Stuart Elden's (2013) call for a more thorough consideration of the assemblage and power of volumetric territoriality this paper asks how is the atmosphere framed in discussions about biosecurity in Aotearoa New Zealand? The paper suggests that biosecurity, as imagined and practiced, in Aotearoa New Zealand is enacted through reference to areas bounded by borders that are territorialised in two dimensions. Biosecurity reduced to a plane struggles to grasp both the insecurities generated by the swirl of aeolian processes unconcerned by bounded areas, and how they might be

rendered governable. Using Ozguc's (2020) idea of borders as 'fluid meshworks' as inspiration the paper concludes by thinking about how volumetric biosecurity might be imagined, what counts as security, and how meshwork borders might enable the wind to be secured.

**Keywords:** Atmosphere, Biosecurity, New Zealand, Meshwork, Volumes

### **Scientific world-making with microbes: An actor-network theory framing of Aotearoa NZ's *Mycoplasma bovis* incursion** Dee McDonald

Drawing on my PhD findings, this paper offers a classic actor-network theory (ANT) framing of the *Mycoplasma bovis* (M. bovis) eradication programme. Much of the existing biosecurity literature that is concerned with securing agriculture from diseases focusses attention on farmer realities of biosecurity. While this research makes an important contribution to making visible multiple biosecurity ontologies, the central role of scientists in making biosecurity worlds has been neglected. Moreover, and equally as influentially, there appears to be an absence of biosecurity research that is methodologically driven by ANT. Therefore, this paper aims to extend the existing body of geographical work by using ANT to frame a particular set of biosecurity realities – those of a group of Aotearoa NZ veterinarians, epidemiologists and researchers who were central to the nationwide eradication programme. There is value in offering this glimpse into these scientist's M. bovis worlds because biosecurity is primarily concerned with human management of non-human life, and scientists are essential mediators who tell different types of stories from farmers and government officials. Yet, their voices have not been heard in this uniquely social science way before.

**Keywords:** Biosecurity, More-than-human, Actor-network theory, *Mycoplasma bovis*

### **Shared responsibility for biosecurity: Myrtle Rust in New Zealand and mainstream media framings of taking responsibility for action** Robyn Kannemeyer

When an unwanted pest or disease crosses a border into a new environment it triggers a set of risk management responses. Depending on the level of response, this can bring scientific uncertainty, political controversy and the need for new knowledge and perspectives from a range of stakeholders. Understanding how to manage a new biosecurity incursion on arrival is complex, dynamic, and often contested as actors across science and policy try to gain new knowledge about the incursion to inform management decisions. In Aotearoa New Zealand (A-NZ) the biosecurity system has moved towards a shared responsibility between government agencies, industries, Indigenous people, and communities. However, sharing responsibility can introduce new complexities into the biosecurity system. Media can also play a role in shaping the biosecurity response to an incursion as they choose how they frame a story. Myrtle rust is an invasive, fungal disease originally from South America that threatens culturally and economically important myrtle species globally. Myrtle rust arrived in A-NZ in 2017 and

continues to threaten our iconic native trees like pōhutukawa, mānuka, rātā, and ramarama. We use myrtle rust as a case study and media discourse analysis to explore how the biosecurity response to the myrtle rust incursion was framed in mainstream, online, media initially and once eradication was no longer possible. Our analysis focuses on what conceptions of the border existed for myrtle rust, the different actors involved in the biosecurity response and how responsibility for action was enacted through the media framings.

**Keywords:** Biosecurity, shared responsibility, myrtle rust, media discourse analysis, media framings

### **Hunting for Well-being: Pig hunters and wild pigs (poaka) in Aotearoa New Zealand**      **Claire Dowsett**

Pig-hunting in Aotearoa New Zealand is linked to the well-being of hunters, their communities, and non-human actors within the environment. The legacies of pig-hunting run deep for both Māori and Pākehā. Wild pigs (poaka) were fundamental to survival during colonisation and remain an essential source of subsistence today. However, while serving as a valuable food (kai ) resource, wild-pigs are an invasive species, causing ecological and economic harm. While there is a call from conservationists to intensify control programmes, the contribution of pig-hunting to wellbeing needs to be considered. This study took place in the pig-hunting community of the Whanganui region, where those with an interest in the management of poaka were invited to participate in semi-structured interviews. The research was guided by kaupapa Māori and community participatory research principles. Twenty-four participants were interviewed, and thematic analysis utilised to express the voices and insights from the pig-hunting community. Pig-hunting contributes towards livelihoods and wellbeing through food security whilst also providing for the spiritual, environmental, and recreational experiences that hunters seek to deepen through their connections with the environment. This is especially the case for rural communities, where poaka play a substantial role not only for subsistence, but also in the cultural value they have, particularly for Māori. Poaka are a substitute for the indigenous species that were traditionally harvested by Māori but are now threatened with extinction. Pig-hunting is more than a simple outdoor activity, demonstrating wellbeing outcomes that reach beyond the individual hunter, extending wide into their communities and environments.

**Keywords:** Hunting, wild food, subsistence, wild pigs, invasive species



## At the edge of the sea: A social geography of mobilities that intersect with shore and sea

**Session Convenor:** Maria Borovnik, Massey University

### **Dusky Bay reconsidered: Applying a mobilities lens to New Zealand's fiords**      **James Braund**

Fiords are arguably New Zealand's most watery environment. Carved out of mountains by glacial action, they admit vast volumes of seawater from below and receive huge amounts of water from above in the form of rain. Constrained by fiords' precipitous sides and largely beachless shorelines, humans have historically tended to visit these long arms of the sea far more than permanently inhabit them, and in doing so have used them as a temporary space for recreation, tourism, fishing, and scientific fieldwork – to name just a few activities. While a number of different theoretical perspectives could be employed to examine human usage of New Zealand's fiords, the highly transient nature of humans' experience of these waterways suggests that a mobilities-based approach might lend itself particularly well to such an examination. To test this possibility, this paper reconsiders Europeans' first encounter with a New Zealand fiord, which occurred when James Cook and his crew on HMS Resolution spent five weeks in the autumn of 1773 in the inlet in the southwest of the South Island which he named Dusky Bay, now known as Tamatea/Dusky Sound. Drawing primarily on the accounts left by Reinhold and Georg Forster, Cook's German naturalists on this voyage, a preliminary analysis suggests that in a setting where sea and ship were everything, this first visit prefigured subsequent human usage of New Zealand fiords in several notable ways.

**Keywords:** Fiords, seascapes, mobilities, geographies of ships, Georg Forster

### **The cause of the grounding of the Rena off Tauranga's shores in 2011 and short and long term environmental impacts**      **Kevin Judkins**

Prior to the Rena grounding, New Zealand had never experienced the stark reality of a large containership hard aground in its pristine maritime environment. Honed from experience, other nations with ample salvage resources, have dealt with significant maritime disasters on a similar scale. New Zealand meanwhile languished, remaining isolated and insulated from the consequences of a significant heavy fuel oil pollution event coupled with a catastrophic shipwreck. When the Rena struck Astrolabe reef at 17 knots, forty thousand tonnes of ship and containerized cargo came to a complete stop within half a ship's length. The scale of the resultant pollution from the grounding and subsequent breaking up of the vessel, was unprecedented in New Zealand. Being ubiquitously visible, heavy fuel oil became the flag bearer of this pollution. Yet did not have the long-term affect that many had predicted. This presentation will narrate the wider circumstances of the environmental pollution issues to do with the Rena grounding.

**Keywords:** Maritime disaster, environmental pollution, Astrolabe Reef

**Emergency preparedness / Opportunities missed / What went well?**

**Kevin Judkins**

Building on the earlier narrative, this second presentation will highlight the complex governance issues that surrounded the recovery of the Rena. – On the morning of 5th October 2011, New Zealand woke to the news that a containership had gone aground off the port of Tauranga. Maritime New Zealand, the government agency responsible for dealing with the Rena grounding, was woefully unprepared for an incident of this scale. Natural attrition had depleted their ranks of any significant marine experience, relegating the premier maritime department to nothing more than a regulatory bureaucracy, alternately vacillating between indecision and hubris. In contrast, experienced salvage personnel acted quickly. Travelling from Sydney to board the stricken vessel, they subsequently assumed responsibility for the salvage attempt. Bringing with them decades of marine salvage experience, they initially overlooked the wealth of knowledge, ability and determination of the local community, available to them. At very short notice, local engineering contractors rose to the task of fabricating and supplying equipment for the unprecedented task ahead.

**Keywords:** Rena recovery, maritime disaster, governance

**Seafarers, borders and enclosures**

**Maria Borovnik**

Applying a mobilities justice lens, this presentation will engage with some of the realities seafarers face within uneven global structures. Although seafarers are essential drivers of global trade, their agency is flavoured by a number of injustices and uneven conditions. They operate in these global systems in what has been labelled as ‘forgotten space’ within what Mimi Sheller has pointed out as ‘dominant mobile regimes’ that (re)produce im-mobilities and unequal relations and networks. The focus of this presentation will then be specifically on the consequences that the COVID-19 pandemic has had for many seafarers, and how border controls had a significant impact on their immobility.

**Keywords:** Mobilities justice, shipping, COVID-19, seafarers

**Fluid Institutions of Access: Sea Space as a Livelihood Resource in Coastal Indonesia**

**Yunie Nurhayati Rahmat**

Indonesia is the world’s largest producer of carrageenan seaweed, the cultivation of which is dominated by household operators and is transforming livelihoods in many coastal communities. Growing demand from the global food processing sector has rapidly transformed Indonesian coastal sea space into a commoditized livelihood resource, where access is governed by emergent, and highly fluid, institutions. Through an extensive ethnographic study in two coastal villages in South Sulawesi, we show how a new property rights regime is being created through evolving institutions of access (both formal and informal) in continual feedback with the livelihood strategies pursued by

individual households. The ability to benefit from access to sea space, during a price boom, emerges from within multiple strands of intersecting power relations, producing a range of livelihood outcomes. This study contributes to debates on how rural livelihood opportunities are infused by the politics of access to natural resources, thus reshaping processes of agrarian change in coastal regions.

**Keywords:** Access, Livelihoods, Institutions, Sea Space, Seaweed

## Diverse economies and community economies research of Asia-Pacific

**I: Session Convenor:** Emma Sharp Massey University

### **Diverse Economies and Economic Possibilities for Māori-led housing in Kāinga**      **Jack Barrett**

This paper draws and reflects upon my doctoral research, examining the diverse economies and economic possibilities for housing provision in kāinga (Māori-kin) communities. The basis of this research is a diverse and community economies approach to understanding the work of a Māori-led community enterprise (Hikurangi Enterprises based in Te Tairāwhiti of Aotearoa) and their efforts to lead a self-determined version of housing in their ancestral regions. By exploring the enactment of these aspirations through Hikurangi Enterprises and their wider network, I argue that they have developed community economies across a range of sites that constitute housing provision, such as finance and construction. This paper aims to illustrate these community economies, revealing them as sites of economic diversity, expressions of self-determination, and economic openings for Māori to self-determine housing within the kāinga. As well as discussing the significance of these community economies, this paper reflects on my engagement with diverse economies ideas and methods during this research. I highlight how in this research, conceptualising community economies as assemblages, and the centring of Indigenous aspirations were instrumental to uncovering community economies that can enact Indigenous futurities through self-determined housing.

**Keywords:** Diverse Economies, Community Economies, Indigenous self-determination, Housing, Assemblage

### **Left Behind', or Storied?: Towards Fluid Understandings of Development in Small Town NZ**      **Ben Lilly**

Declining and stagnating communities, particularly rural communities, are prevalent in New Zealand and elsewhere in the world – as structural and circumstantial processes such as urbanisation, globalisation and innovation prioritise growth of cities to the relative loss of satellite, single industry, and farming localities. This paper will draw on diverse economies thinking to address these processes in the context of Pātea. Pātea is represented in terms of decline after losing a major employer, so you might expect it to take any investment opportunity

that comes along. But it is clear that decision-making in these kinds of small 'left behind' places is underpinned by a different sense of economy. Decision-making in Pātea is influenced both by the past and the future, as nuanced understandings of wellbeing - in the form of social, cultural, and environmental values throughout the community – enable Pātea's community to reshape their identity beyond a desire for 'reindustrialisation', and beyond linear models of development.

**Keywords:** Left Behind Places, Development, Pātea, Community, Diverse Economies

### **Cultivating Diverse Economies with Affect: Chinhari's Experience in India**

**Swarnima Kriti**

This paper explores lac cultivation undertaken by the Chinhari, a young women's group in Dokal village, Chhattisgarh, Central India. Lac, a resinous secretion produced by *Kerria lacca* insects, is a valuable commercial product found predominantly in Asia. Historically, overexploitation led to the extinction of lac insects in the forests surrounding Dokal, despite Chhattisgarh and Jharkhand being global leaders in lac production. The research focuses on young women of Chinhari coming together to reintroduce lac insects into local forests, driven not by profit motives but by a desire to return/gift back to the local forest and nurture the ecosystem. For these young women, lac insects were an asset (dharohar) of the forest, crucial for biodiversity and ecosystem health. Their efforts mark a departure from viewing lac solely as an economic resource to recognizing its cultural, spiritual and ecological significance. This shift challenges capitalocentric perspectives and fosters new relational dynamics among the young women, the forest ecosystem, and the wider community. The diverse economy scholarship looks at affect as a means to bring a change in economic subjectivity. Through such an affective lens, this paper examines how Chinhari's coming together transformed subjectivities, widening them from narrow economic frameworks to embrace broader spiritual, cultural, ecological and communal responsibilities. By reintroducing lac insects, Chinhari redefined their roles within a network of diverse relationships. This work illustrates the potential for place-based initiatives to disrupt dominant economic paradigms and cultivate alternative subject positions.

**Keywords:** Lac cultivation, Chinhari, Diverse Economies, Affect, Young Women

### **Te Huruwhenua: A Māori model of economics and social wellbeing**

**Mark Harvey**

This presentation aims to unpack Te Huruwhenua, which is a proposition for Māori model of economics and social wellbeing (Harvey, 2024). He Huruwhenua (defined as a fern/the fern), is an attempt to incorporate the various material, economic, social, health, ecological and spiritual aspects of many of the frameworks surveyed while proposing a sense of adaptation to include new concepts and perspectives that we Māori can adapt to in future. Some of the economic, social and generative contemporary Māori models reflected on here include: Teina

Boasa-Dean and Juhi Sjareef's Māori Doughnut Economics model (2020), and Matthew Scobie and Anna Sturman's proposals around economic decolonisation (2024). Examples of Te Huruwhenua may be how we can navigate developments in AI (Artificial Intelligence), data sovereignty, the possibilities of economic de-growth and how we might navigate micro hāpori (Community) based economies. The visual metaphor of a maro or pītau (fern frond) is offered due to how it spirals and grows, allowing for new and unfolding view-points to be considered. The spiral is a common motif throughout te ao Māori, that amongst other things can be seen to reflect on our interconnectedness with the world around us and each other and how we share origins and grow. He Huruwhenua is intended to support Māori whakamana (empowerment), applying Linda Tuhiwai Smith's call for decolonising (2024). It is proposed that this model could be used as a transdisciplinary research and conceptualising framework for Māori across a wide range of contexts, touching on many disciplines (in a Western knowledge sense), that others may reflect on and in turn develop.

**Keywords:** Māori, economics, social, futures, model

#### **Rural cosmopolitanism in New Zealand: migrant mobilities, settlement and support**      Etienne Nel

The concept of cosmopolitanism has sparked increasing interest in migration research internationally, specifically the attitudes and openness of communities and institutions towards international migrants in rural and regional areas. Parallel to this, there has been little research on how cosmopolitanism manifests itself in rural and small-town New Zealand, which have limited history of ethnic migration till recently. Since the 1990s, however, when visa policies were diversified, the rural primary and secondary sectors have accepted migrants from countries other than traditional western source nations. This paper exposes various migrant realities, drawing on empirical research from New Zealand's Otago-Southland regions: The first theme examined in the presentation is the degree to which migrants from various countries have assisted in addressing population loss and labour shortages in many areas. Second, the reality is that migrant experiences range from positive experiences and the ability to settle in tranquil settings to discrimination and the inability to use previously acquired skills. A third critical issue is the extent to which settlement support systems, which are common in cities, are generally lacking in smaller centres, implying that alternative meso-level infrastructures have gradually flourished to fill the support gap. Exploring these three themes and the broader migrant experience, we demonstrate the emergence of more diverse small town cosmopolitan relations, which, we argue, go beyond the narrow definition of cosmopolitanism, which is often characterised by precarity, further marginalising migrant agencies, small town geographies, and migrants' place in them.

**Keywords:** Rural and small town; migration; cosmopolitanism; migrant settlement

**II: Session Convenor:** Gradon Diprose, Manaaki Whenua - Landcare Research

**Diverse valuing of winegrowing in practice                      Nikolai Siimes**

Agriculture is normatively framed as a necessarily capitalist endeavour, whereby farmers seek to maximise the economic value they produce above all else. Despite this perception, my fieldwork shows a number of winegrowers who are choosing to pursue other values and value through their farming practices alongside or instead of valuing in monetary terms. This paper uses interviews and participant-observation with biodynamic winegrowers to show that a wide range of values are appreciated and cultivated for in a much-more-than-capitalist system of agriculture. I read winegrowing for difference (Gibson-Graham & Dombroski, 2020b) revealing a fluid, diverse economy of wine, and take as heuristic Heut's & Mol (2013) "registers of valuing" to think through the diverse valuing of biodynamics. I highlight how the financialisation of wine has led to a set of priorities which could be antithetical to agriculture after the Anthropocene.

**Keywords:** Valuing; biodynamics, winegrowing; diverse economies, agriculture

**Making sense of Christmas enthusiasm: Emotion, magic and the mystery of money in the shaping of the Christmas experience**

**Juliana Mansvelt**

Charles Dickens (1843) notes of Christmas: "It is a time, of all others, when Want is keenly felt and Abundance rejoices". Commercial culture at Christmas encourages the acquisition of commodities, the fulfilment of desire, and the pursuit of pleasure. Previous research by the author (Mansvelt, 2024) suggests that though differentially enabled by finance, the celebration of Christmas in Aotearoa/New Zealand is centred on narratives of reciprocity, familial gathering and sharing. Twenty semi-structured interviews with New Zealanders who self-describe as Christmas enthusiasts were conducted in 2023 and 2024 to examine the manifestation of Christmas in their lives and spaces. While there was variation in spending on Christmas celebrations by participants, most participants spent considerable sums on decorating homes and properties. Such spending was reimagined as acts of cultural production, generosity, creativity and caring – shaping 'the Christmas spirit'. Following a call to grapple with how households actualise money (Evans & Gregson, 2023), this paper examines the intersections and contradictions between money and its social meanings at Christmas time. Christmas is an 'investment' for enthusiasts, a means of valuing time, crafting spaces of meaning and emotion, and shaping home and family. Money matters, but its relative absence from participants' talk suggests that more investigation of the role of finance in shaping want and abundance, inclusions and exclusions at Christmas, is necessary.

**Keywords:** Christmas, enthusiasts, celebration, emotion, money

**Geographies of imprisonment, caring economies and the library****Salene Schloffel-Armstrong**

This paper brings together contemporary research on the public library and burgeoning geography scholarship on the industrial prison system (Wilson Gilmore, 2023). Recent scholarship on the public library has imagined it as a potentially radical space, that can offer an ‘already existing’ alternative to neoliberal urban norms (Aptekar, 2019) and can operate as a form of commons. In this paper, these strands of geographical work are brought into the context of the prison library. Prison libraries sit outside the public library sector in Aotearoa and have a starkly different relationship to normative narratives of the library as a form of social infrastructure. As libraries, they are highly managed spaces and inaccessible to the public. Their collections are partial, tightly controlled, and appear to be built on a donation basis. They also have a distinct relation to the prison system within which they are embedded and therefore enact a particular logic of imprisonment and punishment. I argue that despite this, they also potentially hold within them possibilities of operating as economies of care. In bringing this literature together, this paper begins to trace useful linkages from research on the public library to explore geographies of imprisonment in Aotearoa. Prison libraries are proposed as contradictory spaces, within which the possibility — and limits — of caring within the current prison system can be seen.

**Keywords:** Libraries, prisons, imprisonment, care economies, care

**Circular flows, care and community: Responding to the problem of waste**

**Session and Panel Convenors:** Polly Stupples, Te Herenga Waka Victoria University; Gradon Diprose, Manaaki Whenua

**Revolt against throw away culture! Exploring the transformative role of repair cafes****Lila Laird**

In recent decades we are prepared for our things not to last. This has become a natural part of life in New Zealand and in many other places in the world, and is reflected in global waste streams that are as hefty as 2.2 billion tonnes per year. Therefore our capacity to repair our stuff is significant in shifting towards more circular and regenerative economies. Repair cafes are a community approach to caring for our things through leaning on the skills, tools and materials of those in the community. The Ōtautahi Repair Revolution is the current repair movement in Ōtautahi-Christchurch and includes a number of local repair cafes nestled in different suburbs across the city. Although efficient repair is important for circular economies, these repair cafes foster an experimental and fluid approach to repairing that I believe has transformative potential. This paper draws from current PhD research with Ōtautahi Repair Revolution to highlight the role of this experimental approach in learning to attune ourselves to repair.

**Keywords:** Repair, waste, circular economies, communing

## **Reusable Packaging in the Grocery Sector: Understanding Impacts and Outcomes**

**Gradon Diprose**

Single-use packaging uses significant resources and creates large volumes of waste and plastic pollution. Grocery items, including food, beverages, cleaning and personal care products, are key users of single-use packaging, which brings disposability practices, and exposure to plastics, into the daily lives of most people on the planet. Reusable packaging systems are a small, but growing area of study due to their perceived potential value in tackling the plastic, waste and climate crises by reducing demand for single-use packaging. However, comprehensive studies into the impact of reusable packaging systems across supply chains are still lacking. There is a need to understand not only the real-world environmental benefits of reusable packaging systems, but also their interaction with social justice issues, including accessibility, affordability, cultural appropriateness and public health. We address this gap by describing a trial methodology to measure the impacts and outcomes of reusable packaging systems in New Zealand's groceries sector. Our case study findings show that reusable packaging systems have positive benefits, but also face significant economic and infrastructural challenges to scale out and become both socially accepted and convenient. Our findings illustrate both the challenges, and implications, of moving investment and practices towards the top of the waste hierarchy.

**Keywords:** Waste, single-use packaging, reusable packaging, wellbeing

## **Seeding transition: communities, collaborations, and the circular economy Polly Stupples**

A wide range of governance institutions and policies, across multiple scales, articulate aspirations for transition to a circular economy (CE), to move away from the linear trajectory of take, make and dispose. In these aspirations, different conceptualisations of the CE exist, from a technocentric focus on efficiencies in material flows, to degrowth agendas for radical social, cultural and economic transformation. Degrowth and transitions writers describe a necessary shift in the scale of social action, from 'seeds, small-scale experiments and lived experiences' towards the 'emergence of collaborations, coalitions and mutual reinforcement between seeds' (Pereira, 2018). This process shifts social action from the micro scale to the meso scale, which in turn supports the articulation and consolidation of emerging large-scale narratives and values. In Aotearoa, high-level CE articulations are common (e.g. in government and Council websites and some policy documents), and many innovative grassroots initiatives exist, however a gap between these has been identified. Responding to this gap between grassroots innovation and large-scale aspirations, in this presentation we describe our efforts to identify sites and practices of the CE where 'collaborations, coalitions, and mutual reinforcement between seeds' is taking place, and where CE social action is scaling up, or out. This preliminary mapping work aims to identify particular sites or places, diverse actors, and mechanisms that seem to enable the coalescing and mutual reinforcement of CE initiatives.



**Keywords:** Circular economy, care, community development, waste, transitions

### Bodies, gender, sexuality, space and place: Fluid Geographies?

**Session Convenors:** Lynda Johnston and Ritu Yumnam University of Waikato; Emma Sharp University of Auckland; Marcela Palomino-Schalscha and Maria Teresa Braga Bizarria Te Herenga Waka Victoria University of Wellington

#### **Man-made disasters? Exploring women's roles in disaster risk reduction and recovery Suzanne Vallance**

While gender has become a contested term, storms, floods and tsunamis don't lie: So called 'natural' disasters tend to kill more women than men and kill them at a younger age (Neumayer and Plumper (2007)). Consequently, we must acknowledge that disasters are not 'natural' though to call them 'man-made' may be a provocation too far. Nonetheless, disasters amplify pre-existing trends and norms, some of which discriminate against women and increase their vulnerability. The choices that kill women are embedded in our residential, transportation and employment infrastructures. In this paper, we present two roles for women in disaster management. The first explores the potential of gender mainstreaming and the second presents a counter-narrative to 'women as vulnerable victims'. We conclude that while gender is performative, so too is its dissolution. If disasters discriminate on the basis of gender, disaster management cannot be gender-blind. Even (especially) in the absence of an essential woman, women must stand as an essential foundation for political action and effective disaster risk reduction and recovery.

**Keywords:** Gender, disaster, vulnerability, risk reduction

#### **Slippery chemicals in (and out of) place: What non-stick chemicals tell us about geographies of ubiquity Ellie Buttle**

Although a chemical contaminant might be considered 'ubiquitous' due to its presence everywhere, how the concept of place factors into this ubiquity is complex. By examining how place is entangled with intersecting and diverse materialities, distinct geographies of ubiquity emerge. This paper works with the object of analysis of PFAS (per- and polyfluoroalkyl substances), to explore how chemicals in general are entangled with notions of ubiquity. One of the chemical qualities of PFAS is their ability to make things 'non-stick'. From Teflon frying pans to the insides of food packaging, these chemicals are highly useful and good at what they do. Yet, their slipperiness is problematic as it enables

them to move easily through ecosystems, and then antithetically, 'stick' and build up in all kinds of bodies. Processes involved in managing PFAS draw boundaries around these chemicals such that they are 'in place' yet they materially – fluidly – slide across environment-types (e.g. soil, air, water), territorial lines, and even regulatory ontologies in terms of 'what' and therefore 'where' are PFAS? By interrogating the ways that these chemicals' slipperiness is tackled by the boundaries placed around PFAS in Aotearoa New Zealand, this paper explores what it means to see ubiquity through a lens of 'place' to understand what decisions are being made in how these chemicals are managed.

**Keywords:** Ubiquity, materiality, chemical geographies, contamination

**Planetary dermatographies: Understanding Soil Through Sara Ahmed and Jackie Stacey's "Thinking Through the Skin"      Emma L Sharp**

Sara Ahmed and Jackie Stacey's concept of "Thinking Through the Skin" explores how our embodied experiences shape our understanding of the world. It emphasizes the importance of sensory perceptions and bodily engagements in shaping our knowledge and interactions, and in this paper I discuss this in relation to our environment. Where Ahmed invites us to consider how our skin, as the boundary between ourselves and 'the world', mediates our relationship with the spaces, objects, and beings around us, I extend this thinking into how the 'skin of the earth', soil, mediates our relationships with our living planet, as a planetary dermatography: providing nourishment through the fluidity of its porous boundaries, its life holding capacities, its provision of a barrier from harms, and the scars it bears in the witnessing and taking of the brunt of humanity's violence. Through this framework, where Ahmed and Stacey highlight the significance of sensory encounters in constructing meaning, identity, and social relations, when thinking soil as skin I underscore the embodied nature of knowledge and call for a deeper engagement with our sensory experiences to navigate the complexities of our relationships with the world.

Keywords: Soil, thinking through the skin, dermatographies, fluid boundaries, bodies

**Queer Ocean Relationships: Affirmation in/through Ocean      Elizabeth Murphy-May, Jean-Louise Olivier, Jessica Lemire**

Queers have always known that Ocean is Queer. Bodies of water nurture beings that are often described as murky, sticky, unnatural, dirty, odd ... Queer. This paper is a conversation between three Queer PhD students from the University of Newcastle, Australia. Each of us have been on a continued journey to come into deeper relationship with Ocean. These relationships, like Ocean are dynamic and expansive. For Liz and Jean-Louise relationships with Ocean start on the shore and flow into the water beyond the break zone bringing them into deeper connection with Queer community in and out of the water. For Jess, her relationship with Ocean brings her into connection with Ancestors who swim at their depths. Ocean has given us all opportunity to submerge, soften, and unravel into a deeper sense of knowing ourselves. In time/s where queerness is contested, invisibilised and silenced, Ocean and their creatures offer us a reimagining of a world beyond

heteronormative agendas, and towards a reaffirming of identity, communities and belonging. Drawing from diverse positions of knowing Ocean (Gumbs, 2020; Underhill-Sem, 2020; Riley, 2023; Imbler, 2022; Neptune's Necklace, bisexual dolphins, trans groupers, rose-veiled fairy wrasse fish, and of course the bottom-feeders) we learn with Ocean, reaffirming our queerness within these communities of beings. In this paper, we wish to reflect on these learnings as a continued unfolding and reimagining onshore - flowing into the ocean.

**Keywords:** Queer Geographies, Ocean, Affirmation, Community

### **Fluid Geographies of Care, Co Production and Feminist Counterspaces: Tactics in a Patriarchal Academy?**

**Anindita Datta**

Elsewhere I have argued that “Doing feminist research is a political project” (Datta 2020). In line with this contention, the present paper examines in detail the micro politics and fluid geographies of care, co – production and feminist counter spaces from specific feminist collaborations. Within these collaborations, a fluid and care centered approach not only instrumentalized the creation of feminist counterspaces, but could also be read as acts of resistance within a patriarchal and male dominated institutional context . A feminist counterspace is “non-hegemonic, operating against the grain of hegemonic spaces, and multilayered, existing both in physical and experiential terms.... they are counterspaces, or differential spaces, as they operate outside the control of the established order” (Datta 2021, p 151) Within this fluid feminist counterspace, nestle smaller the spaces of solidarity, co – production, emotion and dissidence, cradling each other seamlessly to successfully push boundaries of location, distance and time, and in the process stitching together unique feminist collaborations . Such collaborations work to extend the space of feminist geographies within Southern contexts where policy driven research takes centre stage within mainstream human geography.

**Keywords:** Care, feminist counterspaces, feminist geographies, India

### **Caring back and forth between home(s): Emerging reflections about gendered care practices with women from migrant and refugee backgrounds through creative methods**

**Jean-Louise Olivier**

Narratives around women from migrant and refugee backgrounds have been constructed as homogenous and binary between home country vs. new country – gendered oppression vs. gendered empowerment (Muhanna-Matar, 2021). However, as Muhanna-Matar (2021) and others (Kesting, 2014, Reyna Rivarola and López, 2021) have argued experiences of moving between places is far more diverse, fluid and complex. In this paper, I reflect on this fluidity through creative workshops that explored practices of care with women at Zara's House - a

centre for women and children from migrant and refugee backgrounds in Muluubinba/Newcastle, Australia. This project was conducted in collaboration with community co-facilitators, migrant women, staff and volunteers at Zara's House, a PhD student and supervisors. Care in this project draws on feminist care ethics (Tronto, 1990) and emerging scholarship on infrastructures of care (Olivier, Mee, and Power 2022; Power and Mee, 2020) and shadow infrastructures of care (Power et al. 2022). Emerging reflections on these creative workshops reveal how practices of care are tied to gendered experiences from home as new memories are made in new places and – home(s). Thinking through the creative practices in these workshops, I draw on examples of embroidery, Daf drumming and poetry with women at Zara's House to better understand how and why gendered care practices may be connected to fluid, shifting and emerging home(s). In doing so, I argue that more fluid understandings of gendered care practices are important to nourish better spaces of care with women from migrant and refugee backgrounds.

**Keywords:** Care, Gender, Creative Methods, Migration

**“The pahar (highlands) has gone into the maidan (lowlands), and the maidan has come into the pahar”: Belonging and being a young pahari in the lowlands of the Delhi region**                      **Ritu Yumnam**

Based on empirical data collected over a period of eight months in the Himalayan state of Uttarakhand and in the lowlands of the Delhi region in India, my presentation examines the fluid material-social geographies of migrant pahari youth's gendered experiences of belonging in the urban lowlands. My analysis draws on qualitative data from interviews, group discussions, social media, popular pahari music, alongside observations from cultural events and immersion into young people's everyday lives. I argue that the socio-spatialities of the pahar and the maidan stretch into one another in ways that allow pahari-ness and the subjective possibility of being a pahari to transcend the physical geography of the Uttarakhand highlands. Pahari-ness and pahari belonging are (re)produced and (re)shaped in mutually constitutive relations with multiple spaces/places: physical and digital; highlands and lowlands; and the rural and urban. Inspired by the theoretical approaches of feminist geography, music geography, and the (new) mobilities paradigm, I think beyond the highland-lowland binary, and present the ways in which belonging to the pahar is maintained through the mobilities of objects, bodies, ideas and practices. Cultural artifacts associated with the Uttarakhand highlands stretch the notion of pahari-ness into the distant lowlands. These include digital content, pahari music, food, clothing, language, cultural associations and festivals, and inscriptions of pahari symbols over the neighbourhood. The analysis reveals how belonging and non-belonging are gendered and tenuously layered, creating frictions in young pahari subjectivities and gender relations.

**Keywords:** Belonging, youth, Uttarakhand, highlands, mountains, gender, mobility, music

**Liminal spaces and subjectivities - New parents' local journeying in Wellington, Aotearoa New Zealand**      **Eva Neely**

Becoming a parent changes where, how and when time is spent; and marks a significant rupture to previous, known ways of living. Parenthood involves the intensified negotiation of life spheres with sometimes incompatible demands and schedules. New parenthood (ideally) starts with parental leave, reorienting a new parent's geography towards their local community, with a wide range of scenarios in how families juggle one, or both, parent/s returning to paid work. We draw conceptually on liminality to examine the multitude of intersections of 'being in-between' as a new parent. Through multisensory walking and photo-elicitation interviews with parents of young children in Wellington, Aotearoa New Zealand, we linger in their liminal subjectivities and spaces exploring how liminality might act as a productive concept to explore their becoming as parents, learning who they are becoming in the world as a child-parent dyad, alongside their dwelling in and journeying through spaces and places of in-between-ness. We seek to explore multiple and diverse spatialities of nested, staggered, scattered and mobile liminality to move beyond more common binary, anthropocentric and singular conceptions of parenting subjectivities and spaces. Besides theoretical contributions, this work will include practical implications on the role of place for parental wellbeing.

**Keywords:** Liminal spaces, wellbeing, parenting, subjectivities, place

### **Liquid Home: Navigating Identity, Geographic Happiness and Belonging through Eco-creative Migrants' Homemaking in Aotearoa New Zealand** Yi Li

Migrants' homemaking constitutes and is constituted by the taskscapes they create in their inhabited environments. This paper uses sensory ethnography, sensuous geography, and creative methods to examine a group of eco-creative migrants' nesting through their eco-creative practices in Aotearoa New Zealand, which I call 'liquid homemaking'. Data analysis in this presentation is based on 12 semi-structured interviews and fieldwork conducted from 2021 to 2023 with 6 migrant cross-cultural couples and 6 individuals in Auckland, Dunedin, and Christchurch. It explores the multifaceted experiences of migrants' homemaking in the oceanic context during times of climate change and uncertainty, illuminating the profound connections between their migration journey, creative resettlement, self-sustained life, and the Aotearoa landscapes. By investigating how migrants use their bodies as tools to engage with the land, embracing fluidity to negotiate a sense of emplacement, social connectedness, and well-being through their intentional practices, this study reveals how they create relational landscapes for self-healing and planetary health, working towards a regenerative future. I triangulated meaningful place, mindful body, and sensuous experiences according to affordance theory, drawing on a phenomenological understanding of human-nature interactions. Findings indicate that eco-creative practitioners approached their bodily experiences within New Zealand landscapes to foster security and trust with their 'habitats,' thereby reinforcing their 'grounded' identity. I argue that parenting the land and caring for nature emerged as essential components of their wellbeing. The geographic happiness among the studied migrants' taskscapes reflects their adaptation to migratory mobility and isolation.

**Keywords:** Migrants' homemaking, Geographic Happiness, Aotearoa, Landscape, phenomenology

### **Fluid Appropriations: Women's Temporary Use of Public Spaces in Merida During the COVID-19 Lockdown**

**Jose Antonio Lara-Hernandez**

This paper explores the concept of 'fluid geographies' through the lens of temporary appropriation (TA) of public spaces by women during the COVID-19 lockdown in Merida City Centre, Mexico. During the pandemic, stringent lockdown measures and a restructured urban mobility system led to significant changes in how public spaces were used. This study focuses on the emergent assemblage of women who adapted to these changes by temporarily appropriating public spaces for various activities that diverged from their intended design purposes. Using an assemblage and resilience thinking approach, we conducted participant observation and activity mapping from May 10th to May 23rd, 2021. The findings reveal that these women engaged in TA for work, leisure, and sacralization, thereby creating a dynamic socio-ecological landscape that responded to external pressures of lockdown and urban regeneration. This phenomenon underscores the fluid nature of public spaces and the necessity for adaptive, inclusive urban policies that recognize the informal, yet vital, contributions of marginalized groups. By examining the fluid subjectivities and embodied geographies of these women, this paper contributes to the broader discourse on geographical knowledge as voluminous, material, and in continual reformation. It highlights the resilience and adaptability of informal practices in the face of socio-economic and environmental challenges, advocating for a reevaluation of public space management in the context of increasing climate change-induced disruptions.

**Keywords:** Temporary appropriation, fluid geographies, resilience thinking, urban informality, COVID-19, public space, Merida.

### **Fluid Strategies: Iranian Women's Methods for Negotiating with Urban Gender Inequality**

**Bahamin Badihi**

The Gender Gap Index in 2023 ranked Iran 143rd out of 146 countries, highlighting severe gender inequality. Gender inequality, stems from social norms, laws, and regulations, affects all aspects of women's lives in Iran, including their presence and activities in public urban spaces. Not only are women restricted in their use of the city in terms of times, locations, and activities, but women are often subject to violence in Iran's cities. This research aims to shed light on how women negotiate gender inequality in the public spaces of Iranian cities, using art as a means to visually represent these experiences. Data was collected via mini online interviews, which were then qualitatively analysed. Discussions between researcher and artist followed, to generate artistic presentations of the key themes identified. The art generated by the artist/researcher collaboration will be showcased through the presentation. The findings reveal a fluid and dynamic mixture of strategies used by women to navigate public spaces. We identified three main themes in women's coping strategies. The first theme represents passive methods, such as avoiding issues that could pose specific challenges. The second theme shows adaptation to the environment and its gender-based challenges. The final theme encompasses active resistance, where women confront inequalities head-on, accepting

consequences and directly challenging unequal situations. To conclude, despite significant challenges posed to women in urban public spaces of Iran, women employ various tactics to navigate gender inequality in Iran, demonstrating their resilience and agency.

**Keywords:** Gender Inequality, Urban Public Spaces, Iranian Women, Negotiation Strategies, Qualitative Research

**Romance Geographies: Analyzing Gendered Spaces of Leisure Reading in Pakistan**

**Javaria Farooqui**

The retail ecosystem of popular romance genre fiction in Pakistan shows clear demarcations between socio-economic classes, stigmatization of leisure activities of women, and the precarious visibility of the female bodies in a patriarchal and religious society. This in-depth examination of the retail spaces of Anglophone and Urdu romance genre fiction, consisting of field reports and readers responses, shows how an ambiguous national scale of morality and impossibly rigid gender binaries are constructed in the urban centres of the country. Bookstores selling Anglophone popular romance genre fiction are situated in upscale neighborhoods and are patronized by elite and upper-middle-class women, who enjoy more social mobility and less stigmatization because of their socio-economic privilege and higher social status of English language than their peers who read popular romances in Urdu. Both types of bookstores—those selling Urdu popular romance genre fiction and those selling Anglophone romance genre fiction—are in market areas that cater to women, offering goods such as clothing, accessories, salons, and tailoring services. However, bookstores selling Urdu romances are located in lower-income neighborhoods where women’s leisurely pursuits, and their bodies, are objectified and restricted in a variety of ways. My study uses data collected from four major cities—Lahore, Islamabad, Karachi, and Peshawar—to argue that leisure spaces significantly influence the social and sexual identities of women. The aim of this research is to highlight the ambiguous tensions surrounding female bodies in the national geographies of leisure, in the hope of finding sustainable and progressive alternate social practices.

**Keywords:** Leisure geographies, romance, women, reading, Pakistan

**Fluid Bonding: Poetic Inquiry, Expressive Arts Therapy and Eco-eroticism**

**Rata Gordon**

This paper documents my arts-based autoethnographic inquiry into the intersections of expressive arts therapy and eco-eroticism, by exploring my experiences of erotic engagement with local bodies of water. My therapeutic and research methods mirror and flow in and out of each other, both employing poesis, decentering and phenomenology through poetic inquiry. Through my research, I reveal the ways that ‘stream of consciousness’ writing in relationship with bodies of water animates sensual connection, and dissolves paradigms of fixed gender role, identity and relationship.

**Keywords:** Water, poetic inquiry, eco-eroticism, expressive arts therapy, arts-based research and auto-ethnography (ABR+A)

**LGBTQIA+ bodies, aging and homes: Spaces of belonging in Tauranga Moana? Lynda Johnston**

This presentation reports on a research project that brings together geographies of sexualities and genders with geographies of gerontology to explore older LGBTQIA+ people's experiences of home and ageing in Tauranga Moana. To date, there is no research in Aotearoa that has taken a 'spaces of belonging' approach to older LGBTQIA+ people and home. A focus on the spatial concept of 'embodied belonging' highlights people's desires for attachment to place, objects and home. The concept of belonging is lived, felt, queered and experienced in relation to bodies, things and home. I draw on interviews with LGBTQIA+ people 60+ years old and living in the Tauranga Moana region to extend critiques of ageism, homophobia, transphobia and cissexism. This new knowledge enhances understandings of older LGBTQIA+ people's emotional, dynamic and constitutive relationship to home.

**Keywords:** Gender, Sexuality, Age, Homes, Belonging

**Fluid geographies: Women's work and citymaking in the Global South**

**Session Convenors:** Anindita Datta, Professor & Head, Dept of Geography, Delhi School of Economics, University of Delhi and Swagata Basu, Professor & Head, Dept of Geography, SSV college, Hapur, Uttar Pradesh

**'Good' work in oppressive conditions: A qualitative study of women's work in the public canteens of Chennai Aishwarya GVN**

What does paid work mean for women? What are the implications of care work when performed at a site of 'socialised care'? Acknowledging the dialectic between social lives and the spaces in which they are lived provides opportunities to bring out the complex experiences of women's work beyond the binaries of empowerment or emancipation. This paper follows the work lives of women engaged as informal workers in the formal setting of a state-run welfare scheme that is aimed at countering urban food insecurity. The Amma Unavagams are a chain of public canteens located across Chennai capital of the South Indian state of Tamil Nadu, serving cooked meals to the urban populace at highly subsidised rates. While the Amma Unavagam scheme enabled the creation of job opportunities for low-skilled, low-educated urban women, the informal nature of their employment has a bearing on multiple aspects of their work. The workers labour in precarious conditions, distanced from the state as contract employees, yet carry the burden of welfare delivery as front-line workers of the state. Through participant observation and in-depth interviews conducted in the canteens, I present the problems and possibilities of care work by exploring the subjectivity and agency of workers. The paper dwells on their motivation to work despite the perceived unfairness of



their terms of employment, the instruments of discipline used by the state apparatus that enable continuous functioning of the canteens with minimal supervision, and women's labour that mediates welfare delivery cushioning bureaucratic inefficiencies to ensure uninterrupted provisioning of cooked meals three times a day all-round the year. Women gain and lose, simultaneously, in the process of making these canteens as 'spaces of care' in the city.

**Keywords:** Care work, women's labour, informality

### **Women on the Wheels: Autonomy, Flexibility and Precarity of Work as Experienced by Female Workers of Food Delivery Platforms in Kochi, India** **Unnimaya U G**

Platform-mediated gig works have emerged as a recent addition to the increasing number of non-standard employment relations globally. While the criticisms of rising precarious labour conditions and erosion of social security in non-standard work apply to platform-mediated gig work, this employment model is often lauded for greater flexibility, autonomy and ease of accessibility. The potential of this employment model in democratising job opportunities and formalising informal economies is significant in the global south. In a country like India, where the participation rate of women in the labour force is alarmingly low, the flexible nature of work and the autonomy of work management that gig work offers can act as incentives for women to enter the labour market. This paper looks at the work experience of female food delivery workers in the city of Kochi, in the state of Kerala India, using participant observation and in-depth interviews. The study uses a gendered political economy framework to understand the nuances of autonomy and flexibility gig work offers to women workers. The study finds that women workers enjoy the flexibility and autonomy gig work offers, irrespective of its precarious nature. Gendered individualization of risk varied across age groups. While older women workers were concerned about managing the unequal burden of social reproduction along with the volatile nature of gig work, younger women complained of harassment and stalking while on the road as the major challenges to their participation in delivery gig work.

**Keywords:** Delivery gig work, gender, autonomy, flexibility, precarity

### **Feminist Solidarity as a key to Urban Resilience: Women-Led Citymaking in Post-Earthquake Otautahi Christchurch** **Jose Antonio Lara-Hernandez for Irene Boles**

The contribution of women to city-making, when analysed through the theoretical framework of feminist solidarity, reveals a profound and interconnected network of support, resilience, and transformation. This paper analyses the significant contributions of women in the most prolific city-making groups that have arisen following the Canterbury Earthquake Series (CES) in Otautahi Christchurch, Aotearoa New Zealand, focusing on

the positive, transformative power and long term positive effects of women-led grassroots action in the aftermath of disaster. To do so it utilises a mix-methodology combining a relational media content analysis with semi-structured interviews to key women leaders. This research spotlights women's contributions as a pivotal mechanism by which Christchurch's socio-spatial dynamics were recovered, highlighting the city's capability to cope with and adapt to natural disasters. This paper concludes that in the context of urban environments, women's contributions are not merely supplementary but central to the functionality and vitality of cities as they are instrumental to initiating a variety of informal placemaking activities that are essential for urban life, such as organizing community spaces, managing local markets, and establishing mutual aid networks that provide resources and support to those in need. By fostering connections among diverse groups, women create inclusive urban spaces that reflect the needs and aspirations of their communities.

**Keywords:** Citymaking, grassroots action, post-disaster, women-led, Otautahi

### **Fluid Identity: An Exploration on Migrant Women's Ocean and Bush Play in New Zealand**      Yi Li

"I Belong to Nature." This presentation is based on my project on migrant eco-creators' placemaking in Aotearoa New Zealand, focusing on the ethnographic data relating to migrant women's sensuous engagements within their meaningful places – the Ocean and the Bush – as their strategies for coping with migration adaptation and identity transformation. Surfing, sailing, open water swimming, urban foraging, botanical monoprinting, and forest bathing are some examples that nurture creativity and well-being. The group of migrant women under study consists of individuals involved in artistic or pragmatic practices related to their ecological surroundings. To varying degrees, they have established self-sustaining lives towards regenerative living and are recognized as 'eco-creative practitioners' or 'migrant eco-creators.' I employed sensory ethnography and sensuous geography in immersive fieldwork conducted in Dunedin, Christchurch, and Auckland, spanning the pandemic period. I observed how these women utilized their feminine bodies to engage with natural forces and climate uncertainty, experiencing bodily changes and cultivating environmental sensitivity. The embodiments in eco-creative migrants' sensuous engagements and land-body intimacies serve as consonants in the healing of the Aotearoa landscape in response to their challenges in migration resettlement. Findings indicate that the migrant women approached creative play within natural landscapes to negotiate pain and joy, suffering and pleasure, by generating imaginary landscapes. By examining the participants' intentional choices to connect with specific types of landscape, I argue that the ocean and bush play embodied their intentional pursuit of geographic happiness, establishing fluid identity, fostering relational well-being, and promoting community resilience in the Global South.

**Keywords:** Eco-creators, Placemaking, Sensuous engagements, Geographic happiness, Migration adaptation

## Indigenous geographies: Relational research

**Session Convenors:** Sandi Ringham, University of Waikato, Meg Parsons, University of Auckland and Karen Fisher, University of Auckland

### **Ignored, despised, commodified: A discourse analysis of native freshwater fish management in Aotearoa** **Kiely McFarlane**

Freshwater fish management in Aotearoa is characterised by the active management of introduced 'sports' fish and invasive 'pest' species, while taonga fishes are largely overlooked by government agencies and the wider public. Waterways are consequently characterised by novel ecosystems dominated by and created for introduced species such as trout, while 76% of indigenous fish species are classified as threatened with or at risk of extinction. For Māori communities, to whom these species are tūpuna, tohu and a treasured food source, this neglect is contributing to the erosion of ways of life and associated knowledge as well as their human and non-human relations. This presentation uses historical discourse analysis to examine how our freshwater taonga species, which were central to the economies and lifeworlds of many hapū, came to be ignored, despised and commodified in the 20th Century. Building on work on settler colonialism and Indigenous environmental justice, it seeks to understand processes of world making and erasure by tracing the evolution of discourses and their ongoing effects in contemporary freshwater management. By examining the taken-for-granted ideas and practices that produced our freshwater ecosystems and management approaches, we can understand how we arrived at our current neglect of freshwater taonga, as well as opportunities to assemble new, more just discourses of freshwater management.

**Keywords:** Freshwater fish, environmental justice, settler colonialism, taonga species

### **Ethnicity and Hybridity in whānau spaces in Aotearoa New Zealand** **Lisa Steed**

This presentation reports on the early stages of a research project that brings together relational geographies of ethnic identities and Māori geographies to explore the lived and spatial experience of Pākehā (white Aotearoa New Zealanders) growing up in familial / whānau te ao Māori spaces. To date, there is no research in Aotearoa New Zealand that has taken a 'cultural spaces of belonging' approach to understand how Pākehā navigate hybridity within a socio-historical context of being colonisers, while acknowledging cultural and whānau (family) connections to te ao Māori. Notions of hybridity and liminal spaces between Māori and Pākehā are explored in academic literature usually by Māori who whakapapa (have ancestral links) to both Māori and Pākehā. There is a dearth of literature on Pākehā experiences of growing up in mixed heritage whānau and/or immersion/deep cultural engagement with te ao Māori spaces. Autoethnography is used to highlight the lived experience of straddling both Māori and Pākehā cultural spaces, while being Pākehā. Discussion focuses on three spaces: the body, home and the nation in order to highlight the shifting nature and spatial construction of ethnicity in Aotearoa New Zealand.

**Keywords:** Hybridity, liminal, Māori, Pākehā, relational geographies

**Re-indigenising kuku economies through whakapapa****Georgia McLellan**

Dominant conceptualisations of modern-day Indigenous economies commonly misrepresent the underlying form of these economies as some variant of capitalism. While Indigenous economies are connected into dominant trajectories and undermined by capitalist social relations, they are not entirely subsumed by capitalism. In Aotearoa, for example, there is a significant debate about what is meant by “The Māori economy” at a time when the nation is waking up to the importance of Māori assets, investment, and aspirations. The asset base of “The Māori economy” is currently estimated to be worth approximately \$70 billion (Business and Economic Research 2018). The number is significant because it points to the importance of Māori ownership and economic activity. However, measuring Māori economies in dollar terms works to deny the rights and possibilities of Māori economic tino rangatiratanga. A more productive and politically fertile starting point is to recognise that Māori economy has distinctive foundations and the material economies that it produces take multiple forms. The widely touted idea of “The Māori economy” requires reframing and a re-enactment of this framing to better reflect Māori economic thought and practice and to inform and actualise thriving Māori futures. This paper explores the various social relations and social practices involved in gathering and harvesting kuku (green-lipped mussels) to enhance the livelihoods of the descendants of Whakatōhea, an iwi situated on the east coast of Aotearoa. Ultimately, I paint a picture of a diverse economy that involves capitalist social relations but is fundamentally anchored in whakapapa relations.

**Keywords:** Indigenous economies, Māori economies, tino rangatiratanga, whakapapa

**The fire whispers to my blood and my bones: Sensing home****Sandi Ringham**

This presentation explores the ways in which the environment is an active participant in the creation and maintenance of Indigenous women’s sense of place. The research visits Ngāti Kuri, Aotearoa New Zealand’s most northern tribe. Located in their tribal lands are unique ecosystems, flora and fauna. The relationships between the tribe and ecosystems are essential for maintaining ancestral connections to homelands. These connections are embodied through the senses. Sensory exchanges that occurred during tipi haere (mobile focus groups) are discussed to showcase the ways in which participants engaged with the environment through singing and storying the landscape. Tipi haere is a mobile method for gathering participants’ experiences, thoughts and creativity. Stories, poetry and songs were unearthed as we traveled with and in our tribal landscapes. Pūrākau (storywork) is utilised in this research to identify who Ngāti Kuri women were pre-colonisation, who we are now and who we plan to be in the future. Contemporary and traditional pūrākau provided material evidence of Indigenous women’s environmental roles and responsibilities. The presentation peels back the layers of colonisation from the storied landscapes of Ngāti Kuri to reveal Māori women as resilient and strategic in their responses to environmental and tribal well-being. Bringing forward the voices and identities of Indigenous women re-positions them as drivers of change and weavers of people.

**Keywords:** Mana Wahine, environmental relationships, Indigenous storywork, sensory exchanges, Indigenous ontologies

**Confirmation with Country: A Relational Approach to Research Outputs****Liz Murphy-May**

Geography is witnessing an emergence of critical research in the form of relational and decolonising practice. It comes as a response from Māori and First Nations scholars to decolonise the discipline and its extractive legacies of research through producing research via fluid relationships across land and water, space and time. Whilst this has led to an increase of decolonising methodologies and epistemologies (Tynan, 2021; Ngalakgan Country et al., 2021), to what extent are research outputs also considered a fundamental part of this decolonising? I present this paper to reframe research outputs as a fluid, ongoing, and complex practice and ethic of attending to land relationships. Whilst extractive legacies of research suggest that knowledge is only legitimated through its material outputs, this paper suggests how it is the relationships built and nurtured within research that legitimates ways of knowing, being, and doing. I engage with Māori and First Nations scholars and activists call for decolonising research methodologies (Smith, 2012) and literature reviews (Tynan, 2021) to consider the possibilities of reframing research outputs as a practice and ethic to my research practice as a PhD student. To demonstrate this, I traverse nonlinear temporalities to invoke the more-than-human relationships who guide this thinking of rethinking outputs through my experience of presenting my PhD Confirmation on Country in 2022 as a practice and ethic to my research relationships. The perspectives shared in this paper continues to communicate how the relationships built and nurtured through my Confirmation are not forgotten nor lost post ‘data collection’ of ‘dissemination’, but rather, continue as a Country-led practice and ethic of setting things right on stolen land.

**Keywords:** Indigenous-led; more-than-human; Country; relationality; kin-making

**Inclusion of Semá:th values in flood risk assessment design: adaptation of the Mauri Model to ‘Canadian’ disaster contexts****Charlotte Milne**

In November 2021 ‘British Columbia’, ‘Canada’, saw some of the worst flooding in the province’s history. In the ‘Abbotsford’ area thousands of people were forced to evacuate when the once settler-drained 134km<sup>2</sup> Sumas Lake (Semá:th Xo:tsa) returned, a water body that was once integral to the livelihood of Sumas First Nation. More than a century of settler-colonial flood management in the territory of the Semá:th peoples have left them and their assets at risk of both unexpected flood damage, and damage from a lack of natural flood behaviour. For this reason, the Nation is undertaking a unique flood risk assessment to understand their flood risk, while also communicating the potential for floods to bring benefits to certain areas. This paper presents a co-designed methodology that allows for the inclusion of Indigenous Semá:th values within a flood risk assessment format. The method uses a form of the Mauri Model (created in Aotearoa), which has been adapted to fit local community contexts and into a participatory mapping framework. The process is easy for participating knowledge holders to follow, while it also creates data that is modifiable to the formats required for flood mapping. The creation of this methodology stems from the argument that flood risk assessments are typically centred on Western science alone, in turn leading to management decisions that only reflect settler-colonial understandings of flood risk. Here we argue it is possible to weave other worldviews into flood risk assessments to advocate for the needs and rights of flood-exposed Indigenous peoples.

**Keywords:** Flood risk, First Nations, Disaster, Mauri Model, Methodology

**Decolonising climate justice: the need for a relational and decolonial turn**      **Meg Parsons**

Increasingly, scholarly, public, and political discussions of climate change are recognising that climate change is an unprecedented situation, a climate emergency, and a global crisis, which necessitates immediate action be taken to ensure that we avoid the worst effects and prevent a global ecocide. While the growing recognition of the global climate crisis is important and necessary, current responses to climate change are (sometimes unintentionally and other times deliberately) exacerbating the drivers of climate change and worsening climate injustices. In this paper, I document how climate change is a crisis that is intricately embedded within the wider ongoing catastrophe of colonialism around the globe, it is a prime example of the Colonialcene epoch we live in (not the Anthropocene). Yet, climate change mitigation, adaptation, and climate justice scholarships, as well as international and domestic climate policies and projects, seldom mention colonialism, and decolonising climate responses remain few and far between. In this paper, I take inspiration from Indigenous, feminist, and Black studies of climate ethics to explore what relationality means in the context of climate (in)justices in Aotearoa and the wider Te Moana-nui-a-Kiwa (Pacific Ocean). I trace the connections between Tangata Whenua and Tangata Moana-nui-a-Kiwa, with an emphasis on whakapapa, relationality, reciprocity, and ontological pluralism, to explore histories and current lived experiences of radical social-ecological changes, resilience, and loss and damage. Through this exploration, I seek to offer insights into what just climate actions are or could be for Tangata Whenua and Tangata Moana-nui-a-Kiwa.

**Keywords:** Relationality, Indigenous, climate justice, mobility justice, Pacific

**Realising relationalities: researching climate (im)mobility in the Pacific**      **Yvonne Underhill-Sem, Roi Burnett**

Relationality is not a new concept for indigenous Pacific scholars. The importance of relations, connections and interconnections between all living and non-living things is central to indigenous Pacific worlds. It can be evidenced through concepts found across the region such as va (Samoa), vā (Tokelau, Tonga), vahaloto (Niue), veiyaloni (Fiji), and wā (Hawai'i, Aotearoa). Guided by this ancestral wisdom, this paper reports on the methodologies and approaches undertaken on a Pacific-led project exploring climate-related (im)mobilities in the Pacific. Working in 17 Pacific communities across seven Pacific countries, the project centered existing relationships to co-design a project and partner with communities and local researchers, both senior and emerging. This project highlights the ways in which relationality is a central aspect of Pacific research and informs the ways Pacific researchers engage in knowledge-making, through the nurturing and deepening of relationships.

**Keywords:** Pacific research, mobility, climate change, relationality, indigenous research

**A journey towards symbiotic science: from mountain summits to where stream water meets the ocean** **Anya Benavides**

Inspired by nurturing reciprocal connections to my ancestors and the places that raised me, this research looks at how modern conservation connects, disconnects, and separates ecosystems that are culturally and biologically interlinked. In this paper, I consider how modern conservation and Kānaka ʻŌiwi discourses merge, framing the origin of Ka Pae ʻĀina o Hawaiʻi (the Hawaiian Archipelago). Geologically birthed, Hawaiʻi formed and cradled adaptation of bird, plant and marine kin who traveled from lands all over the world fostering native and endemic ecosystems. Over millions of years, the concept of ʻāina – land or that which feeds – was embraced and reflected in Indigenous conceptions of fluidity and connection across environments. Through colonialism, capitalist agricultural practices, and global environmental impacts, the experiences of those living in Ka Pae ʻĀina o Hawaiʻi continue to change. Ka Pae ʻĀina o Hawaiʻi faces extreme levels of native species extinction. This paper draws on interviews with land managers, geographers, educators, and cultural practitioners that reflect fluid relationships to ʻāina/landscapes in Hawaiʻi. From these interviews, I learned about the interconnections with the ecosystems they live, work, and exist in. I analyze the structures of contemporary land management narratives in interviewees' multidimensional perspectives on land stewardship. My research combines biology, geography, education, and cultural perspectives by listening to narratives that reflect relationality to place and participants' lived experiences working within the fluid spaces of the land and that which feeds.

**Keywords:** ʻĀina, fluidity, conservation, Hawaiʻi

## Critical physical geographies

**1: Understanding environments Session Convenor:** Brendon Blue, Te Herenga Waka Victoria University of Wellington

**Geologizing Nature and Development: A Political Geology Perspective on Construction of Karst of Gunung Sewu, Indonesia** Hilary Reinhart

This study aims to explore the construction of Karst of Gunung Sewu by modern geological science and its relationship with development from political geology perspective. This perspective sees geological knowledge is always situated in socio-political contexts of a historical conjuncture. The data were drawn from internet archives including photos, news articles, reports, and academic literatures and analysed using content analysis. It shows that Karst of Gunung Sewu encountered karst geological knowledge in 19th century when the Western geomorphologists typified its landform as another signature of tropical karst. Hydrogeologists, archaeologists, and foresters then followed to enrich scientific understandings of this area. Compelled by those knowledges, the Dutch colonial government began to exploit its timbers and land for plantation. The Indonesian Government during 20th century used the same knowledges to combat water scarcity and poverty in this region. As tourism promotion started to dominate development in the recent decade, geographers and geologists must reorient their knowledges to geo-tourism. While Western geology and physical geography dominantly justify development in this area, they are imbricated with the local knowledge system and environmental ethics as the foundation of people's livelihood and relation with nature. Altogether, those knowledge systems braid complexities and frictions of

global/local and modern/traditional dynamics discursively. As preliminary findings from my Ph.D. thesis, this study reveals that through history, development interests perpetually reshape Karst of Gunung Sewu, determining whose and how knowledges prevail. It also prompts further inquiries around knowledges, tourism development, and the new political meaning of karst.

**Keywords:** political geology, development, karst, Gunung Sewu, construction of nature

**Wider than freshwater: how non-freshwater related activity can indirectly influence and have impact on freshwater outcomes Justin Connolly**

Freshwater policy has been a focus of policy efforts for several decades. Changes in political direction in that time may have encouraged a narrow and focused view on a specific policy area, rather than one interconnected with other policy areas. This work seeks to widen the lens on policy related to, or adjacent to freshwater policy discussions. Using a systems thinking approach, we developed a causal loop diagram that illustrates broad activities that influence freshwater outcomes – we sought to highlight how issues beyond the obvious influence freshwater. We interviewed a range of specialists in energy generation, biodiversity, green infrastructure, climate change as well as those with knowledge of freshwater policy, management, and chemistry. This highlights a range of influences on freshwater, only some of which are usually linked with freshwater policy development. We also reflect on the areas discussed through a ‘leverage points’ lens, driven by the question – where can we intervene and what impact will that have on freshwater outcomes? Leverage points have different strengths and potential impact on freshwater outcomes and some sit outside current areas associated with policy development. Interventions often included in policy discussion – such as water storage and use efficiency improvements – are likely weaker areas of leverage. While no single recipe exists to achieve desired freshwater outcomes, we argue the insights can help freshwater policymakers understand influences beyond those they are currently aware of, which can help better coordinate policies across a range of areas.

**Keywords:** Systems thinking, freshwater outcomes, policy

**Knowing and (re)making environmental space through data**

**Marc Tadaki**

Critical studies of environmental data and their generation, infrastructures, and political economies have proliferated in recent years. Insightful contributions have emerged from critical data science, feminist studies, political ecology, Science and Technology Studies, and environmental studies – but what are we learning from this literature, and is it producing some ‘stylised facts’ or robust foundations upon which to build and refine claims? Here I suggest some modest conceptual foundations for undertaking critical analysis of environmental data. First, scholars must account for how environmental data are referential, laboured, and performative. Data gain their prestige by their purported ability to refer to ‘the world’ out there, which underpins their ‘truth value’ and drives investment in their obtainment and mastery. But to be recognisable, data must be labouriously transformed from analogue signals into ‘data’, which is shaped by human values. Through this process, the resulting data reflect the world only partially, and yet worlds are built upon these understandings; they are performative. Second, the drivers of environmental data



development can be external as well as internal. Internal drivers are where the importance of the data referent (material reality e.g. water quality or biodiversity) drives change, and external drivers are where the perceived usefulness of the data framework (more than the importance of the specific referent) drives the infrastructure development. Grasping the world-making process of environmental data can help us understand where choices happen, where values come in, which can help us identify where we are making choices and what values are underpinning those choices.

**Keywords:** Critical physical geography, STS, environmental politics, environmental governance, epistemic infrastructure

**Geographies of Hope: Environmental Resistance against Occupation**

**Mayumi Sato**

The relationship between the occupation of Palestine and the environment is an increasingly studied topic, yet discussions around resistance to occupation-induced environmental injustices are rarely discussed. Environmental violence in Palestine is inextricably linked to Israeli colonization and dehumanization of their lands and people, such as the occupation planting industrial waste sites near Palestinian farms, destroying biodiversity from the annexation wall, and burning olive plantations. Despite this, there is scant conversation around how Palestinians are fighting environmental injustices as a pathway to decolonizing their land. My research aims to shed light on the different modes of Palestinian environmental resistance, whether in retaliation to air, chemical, waste, and land pollution, or through the physical act of staying on their land and their connection to it. Focusing on the ways in where Palestinians resist, ranging from refugee camps to farms, and how they resist, ranging from seed sharing and collective farming, I offer insights on how fighting global patterns of environmental crisis can be better understood by looking at the everyday environmental resistances of Palestinians.

**Keywords:** Spatialities of resistance; environmental justice

**2: Rethinking environmental power Session Convenor:** Marc Tadaki, Cawthron Institute

**Power, politics, and climate change adaptation in Westport Ruth Lewellen**

Adaptation to climate-induced flooding is a global challenge, and how flood risk is understood is inextricably linked to decisions about how to respond. Although there is a substantial body of literature critiquing management options and governance structures, the power embedded in adaptation decision-making is rarely studied. My research will consider adaptation decision-making through the lens of post-political theory. Post-political theory contends that in many Western societies, conflicts are shaped to maintain the status quo and avoid disrupting established power structures. Currently, there is scarce empirical research that links climate adaptation with post-political theory, and the way wider ideological and

structural discussions are foreclosed through post-politicising processes. Using post-political theory, my research will critically analyse the discursive and material processes shaping mal(adaptive) solutions to flood risk in Aotearoa New Zealand. I will investigate how decision-making is impacted by the intersection of flood risk and governance within a neoliberalising and colonising context using Westport, a small town with big floods, as my case study. I aim to incorporate diverse voices and materiality into my analysis, capturing the array of discourses present in both Westport and broader Aotearoa New Zealand society. I seek to understand how the physical and economic landscapes have shaped Westport's exposure to floods; what discourses are circulating about flood risk; and how democratic processes make space for multiple ways of perceiving flood risk. Through this case study, I aim to help Aotearoa New Zealand navigate the complexities of adaptation decision-making by uncovering how power shapes these decisions.

**Keywords:** Adaptation, climate-induced flooding, post-political

### **Criticality, materiality and blind frogs: A Minister and myths of the mining industry in Aotearoa**

**Glenn Banks**

Shane Jones, the Minister for Resource and Regional Development has been busy promoting the prospects for a significant growth in the mining sector in Aotearoa New Zealand. Changes to the Crown Minerals Act, a new Draft Minerals Strategy and a call for a doubling of mineral exports by 2035 have sat alongside an almost gleeful dismissal of environmental concerns with the sector. In support of the discursive and regulatory 'boosting' of mining is the claim that Aotearoa New Zealand needs to 'do our bit' for the global green energy transition and also work to improve our 'resource security' by identifying and extracting so-called 'critical minerals'. This paper is an initial interrogation of this position, examining the recent moves to legitimate the extension of mining through this criticality lens, and assessing – based on recent International experience – the Minister's aspirations and claims for the sector in terms of jobs, royalties, exports and economic development.

**Keywords:** Mining, Aotearoa, Political Ecology, Economic Development

### **Imagining Alternative River Futures for The Tukituki Awa, Central Hawke's Bay**

**Claire Grant**

In 2011, a large-scale water storage dam was proposed on the Tukituki awa to provide water security in Central Hawke's Bay in the face of increasing periods of drought due to climate change. The Ruataniwha Dam has been highly contested by local communities and environmental organisations who argue that the dam prioritises economic progress over social and environmental outcomes. Despite this contestation, alternative management options have not been sufficiently explored. The Ruataniwha Dam is an example of a Eurocentric command-and-control approach that dominates the landscape of river management in Aotearoa New Zealand. Such approaches are manifestations of a dominant imaginary, or desirable vision for the future, which privileges capitalistic and colonial ways of knowing and doing. Such dominant visions work to marginalise alternative imaginaries informed by epistemologically diverse relationalities. Alternative imaginaries may inform alternative river management

approaches which work to produce more just socio-ecological futures. My research asks, 'How might the future of the Tukituki awa be (re)imagined?' I apply a queer feminist ecology lens to the case of river management of the Tukituki awa, with the Ruataniwha Dam as a focal point. I employ a participatory research approach to work with local people, including myself, to develop a more just socio-ecological future of river management in Hawke's Bay, and Aotearoa New Zealand more broadly. This research responds to the contestation around freshwater management in Hawke's Bay, as well as calls in the academic literature for the application of queer feminist theory and a focus on imaginaries in environmental research.

**Keywords:** River Management, Imaginaries, Queer Feminist Ecology, Participatory Research

### **Rights of Nature for Lake Vättern in Sweden? Åsa Nilsson Dahlström**

Rights of Nature is increasingly popular approach as an alternative (to) development, and particularly for water management. The most recent case in the EU is the formal recognition in 2022 of Mar Menor, a saltwater lagoon in southern Spain suffering from eutrophication, as a legal person with rights to flourish and to be protected and restored. In Sweden, Lake Vättern is used as shooting range by the Swedish Armed Forces and is threatened by climate change, invasive species, high levels of PFAS-toxins, and most recently plans for mining for crucial raw materials to support the green transition. The potential for introducing Rights of Nature for the Lake is currently investigated by both researchers and activists as an alternative to the current unsustainable management regime and weakening legal protection. Meanwhile, Lake Vättern, the second largest lake in Sweden, remains a crucial national source of drinking water, a popular recreation area and an important ecosystem in its own right. By placing Lake Vättern and its wellbeing at the center, Rights of Nature proposes an innovative ecosystem management model which asks the question: If Lake Vättern had rights, what would it do? This presentation presents the findings of an ongoing interdisciplinary project about Rights of Nature by researchers from Chalmers, Gothenburg and Jönköping Universities in Sweden.

**Keywords:** Political ecology, Rights of Nature, freshwater management, Sweden, Lake Vättern

### [Remembering our geographical tactics and enactive contributions \(in a science system that needs reminding!\)](#)

**Session Convenors:** Erena Le Heron, Le Heron Leigh Consulting and Gradon Diprose, Manaaki Whenua

**Exploring the myths that shape narratives and practices of land management and farming in Aotearoa New Zealand** Susanna Finlay-Smits

Wide green paddocks, grazed by fluffy white sheep or, increasingly, black and white cows, set against a backdrop of snow-covered mountains, this is the bucolic image of farming in Aotearoa New Zealand that has long been presented to us and to the world. The perceived 'rightness' of such an image, and its presentation as being quintessentially kiwi is underpinned and legitimised by a number of core myths about farming, about land management, and about Aotearoa. These pervasive myths include anthropocentric myths of human exceptionalism, and our separation from, and dominance over, nature. Myths of progress and productivity that have driven land grabs and environmental degradation. And nostalgic myths of Aotearoa as a new Eden, God's own country modelled in the idealised image of English countryside. Such myths shape our ideas, our practices, and our relationships with other people, other species, and with the land. They structure our reality, and our sense of self, and yet the work that these myths do is seldom explored. Drawing on narrative analysis, Q sort interviews, and conversations over a serious game undertaken as part of the Moving the Middle programme, this paper will explore the myths that form the bedrock underpinning the dominant narratives and practices around farming and land management in Aotearoa such that we may begin to see them for what they are, and what they do.

**Keywords:** Myths, narratives, practices, farming, land management

**A serious game? How boundary objectives may support participatory processes for the re-framing of farming narratives for pro-environmental futures in Aotearoa NZ**      **Erena Le Heron**

Individuals and groups from diverse sectors (industry, agriculture, government, Indigenous, community) work at different scales to consider how to improve governance of changing social ecological systems. At the farm-gate, many land managers wish to improve their environmental performance but feel unable to act due to diverse constraints (e.g. increasing farming and living costs, changing regulations). In this paper, we discuss how narratives and discourses practiced by these farmers may be a key factor to both their inability to act and their ability to imagine alternative farming futures. We draw on research conducted in Aotearoa NZ, to consider how the participatory method of 'serious games' might provide an avenue for such managers to reframe their farming narratives for alternative farming futures. We provide an overview into how our serious game was developed and used; and share insights into discussions about real and alternate decision-making at the farm-gate. We end by articulating how a serious game, and other items developed via participatory research, may be used as 'boundary objects' between farmers, researchers and others, to support participatory reframing of farming narratives in Aotearoa NZ, and elsewhere.

**Keywords:** Serious games, boundary objects, enactive research, narratives, farming futures

**An experiment in empathy (as nature)**      **Suzanne Vallance, Flo van Noppen**

In the context of species extinction, climate change, pollution and enormous global waste streams, it can be difficult to identify any positive counter-narratives for researchers wanting to make a difference. Even the well-recognised sustainable development uber-project has failed to mitigate environmental decline. This, we suggest, is because the sustainable development construct retains and reinforced society-nature binaries and configures that relationship primarily for our human benefit. A good partner in a reciprocal, respectful and empathetic relationship would act very differently. The aim of this research was to explore whether it was possible to promote different relationships with nature within a constrained budget and limited time. This paper presents the results of our “experiment in empathy (as nature)”. The experiment was conducted to test the hypothesis that ‘if the natural world had a greater say over our research endeavours, we would do different research and/or do research differently’. We focus on the first part of our experiment which involved inviting selected participants to a ‘re-minding’ retreat to re-write a research strategy ‘as’ elements of nature. A comparison of the before and after strategies shows how the revised version developed by air, water, soil, landscape, plants and birds shows some rather interesting and unexpected differences. We conclude that it is possible to promote more empathetic relationships with nature and that giving Nature a say over our research may result in some intriguing changes to research practice.

**Keywords:** Nature, empathy, socionatures, relationality

### **Schools and students as ‘agents of change’ for pro-environmental land-use**

**Flo van Noppen**

This presentation will share initial insights of one of the case studies in the Agents of Change research area in ‘Moving the Middle’, an MBIE funded research project looking to better understand how people shift towards more sustainable land-use practices. Agents of change asks: who or what inspires pro-environmental changes on land? How effective are they? And, how can they be better supported? Traditionally researchers have studied how the advisory system including farm advisor, peers, and regulation, those directly engaging with landowners and managers, shape practices on land. In this research we look at the role of other ‘agents of change’ shaping the system and how they might be better supported. This presentation focuses on a case study, investigating the role schools and students in pro-environmental change. To find out how schools and youth shape practices on land, we are working with three schools/educational organisations operating in distinct environmental contexts and relationships: one school in an agricultural context with clearly observable environmental issues, a charter school with a pro-environmental focus, and one school that operates from a te ao Māori worldview. Distinct pathways of influence to change on land were identified in each of these schools. The amount and nature of agency taken by students to make changes differed. The presentation concludes with implications of these insights to those that seek to inspire environmental agency in students.

**Keywords:** Sustainability, agency, youth, pathways

**From representing to changing the world... and back again. Reflections on 'the future', research impact, and how these things can relate to freshwater fish**                      **Marc Tadaki**

Proposal-building is a ubiquitous research activity in which the defining categories of social and environmental life are assembled and enacted. This assembly internalises incentives in government funding priorities, as well as the wider milieu of environmental politics. How researchers navigate these tensions and find 'room to move' is an important topic that deserves attention, yet is seldom discussed. Here, I reflect on composing a large interdisciplinary research proposal, Fish Futures, that hinged significantly on the promise of environmental prediction, while at the same time tried to ring-fence space for improvisation, contingency, and emergence. As we built our proposal to know fish futures, we navigated a value-laden course through choices about 'whose entities' should be assumed to exist in the future and why. Furthermore, in our attempt to foreground critical social science in knowing the future differently, we ran into an irreducible democratic problem of 'impact' and what it is about society that we proposed to change. We grappled with this by sidestepping behaviour as the typical target for change and instead vested authority for determining within relationships and roles that are still-becoming. While geographers might be forced to rehearse impact discourses, and while these are often structured by dominant norms, we do have choices about how to perform 'impact'. Clarifying and understanding these choices is an important step toward reconstituting impact from the inside out.

**Keywords:** research impact, transdisciplinary research, politics of knowledge, freshwater management

**Geography's secrets: nurturing our IP while strategically using it**                      **Richard Le Heron**

The paper reflects on moments of rupture and emergence in Aotearoa's knowledge/funding complexities in the 21 Century where Geography has had visibility. The paper argues that Geography is a fragile, often fractured, fluid and yet formative nexus of individual and collective capacities and capabilities that has retained its presence through methodological inspiration, interventions and initiatives. How might Geographers re-position themselves in new and challenging times?

**Keywords:** Formative- methodologies, individual-collective capacities-capabilities, enactive-proactive tools

**Geography, science and policy: reflections on working at the interface of government and academia**                      **Simon Kingham**

Is part of the purpose of our roles as academics to change society by feeding our knowledge into policy decision making? Increasingly the spotlight might fall on how we are making a measurable difference in society. So how can geographers engage with stakeholders, and use our knowledge, gleaned from both our teaching and research, to inform, shape and/or change policy? Reflecting on his role as Ministry of

Transport's Chief Science Advisor, this presentation will consider how we can engage in decision making and the risks of doing it. It will consider the pros and cons of being 'inside government' vs the greater freedom, but less direct access to policy makers, of being outside. It was also consider the professional and personal risks of trying to get your voice heard in policy debates. Finally, it will reflect on the value of being a geographer.

**Keywords:** Science, policy, government, academic, geography

## Digital Geographies

**Session Convenor:** Lars Brabyn, University of Waikato

### **Using satellite derived wetness and topographical data to spatial predict the biological response to climate change in the McMurdo Dry Valleys in Antarctica      Lars Brabyn**

This research focuses on the spatial distribution of visible terrestrial biology (moss, cyanobacteria / blue green algae, lichens, springtail and mites) in the McMurdo Dry Valleys. GIS derived topographical and wetness indices, machine learning (random forest) and explanatory tools (SHAP graphs) are used to produce separate predictive maps of the likely distribution of these different forms of biology. The availability of liquid water is an important factor that drives biology in terrestrial Antarctica, which is considered a desert. The expectation is that biological activity will increase with climate change based on increased temperatures and increased glacier melt. The model utilises an explicit wetness explanatory variable that can be fine-tuned to changes in glacier surface temperatures ("positive" degrees days) measured from thermal infrared satellite images and subsequent melt water runoff models. Biology survey data captured over four field season (n = 886) was used to train and validate the model. Although the overall model accuracies were poor, the resulting maps and the influence of the different explanatory variables align with field knowledge and theoretical expectations. The models show that wetness is an important driver for moss and cyanobacteria. Northerly aspect (which links to temperature) is important to mites, and topographic position (ridgelines) is important for lichens. The resulting maps provide an initial assessment of the distribution of biology in the MDV. More survey data is required to improve model accuracy; however, the initial maps provide important information for guiding future survey sampling strategies.

**Keywords:** McMurdo Dry Valleys, Antarctica, Biology, Climate Change, Predictive Maps

### **Digital Shadow Waters      Jessica McLean**

I walk along the Cooks River, Gadigal Country, at dusk and dawn, most days, rain or sunshine, light and dark. One morning walk, in the ink dark of early winter, is the day after a woman has given birth in the dark on its banks. There are police cars and tape aplenty. I have been doing auto-ethnography of this water place for over a decade, in parallel and in conversation with other rivers that grew me up, that were the focus of early career studies, that welcomed me to any new place I would visit. Many rivers wind through this paper. In turn, I am not writing this alone. This is no lone wolf endeavour (Kanngieser et al 2024). Val Plumwood's (2008) shadow waters shapes this paper. Doreen Massey's (2005) spaces of loose ends and missing links grounds it. Judy Wajcman's (2004) technofeminism helps me track and extend it. Indeed, sometimes I feel that even the rivers write with me. They haven't found out what happened to the woman and child, we do not know if they are okay, as if their story has gone out with one of the adjacent king tides at full moon. They are putting up signs to encourage people to share information, come forward. Still I walk and take note. And share glimpses of these digital shadow waters, looking for what was and might be.

**Keywords:** Shadow waters, digital geographies, rivers, water places

### **The fluidity of CCTV data journeys in urban spaces**

**Nicola MacAulay**

Today's ubiquitous Closed-Circuit Television (CCTV) camera networks throughout contemporary urban environments can be likened to brigades of taken-for-granted sentinels in the way that they silently and continuously surveil and record passers-by. Academic attention to CCTV tends to focus primarily on those sentinels. In reality however, they are simply the visible vanguard that acts as a gateway to hidden and complex surveillance assemblages through which invisible CCTV data journey. Limited research pays attention to the journeys made by contemporary digital data. Moreover, no empirical research to date maps the urban journeys of CCTV data as a way of exploring what human and non-human actors shape the journeying of data, and how those data go on to influence the surrounding social and political urban ecosystem. Drawing on a journeying approach to digital data and using Wellington city local government CCTV as a case study between 1960 and 1990, this paper highlights the heterogeneity of hidden data pathways that co-exist within concentrated urban microcosms such as Wellington and reflects on the implications of these pathways for our understanding of security.

**Keywords:** Fluid, Urban, CCTV Data, Wellington, Security.

### **Digital Social Spaces as Thirdspaces for Young People in Aotearoa, New Zealand**

**Freddie Ray**

The prevalence of digital social spaces (such as social media, online forums, and online gaming) indicates young people in Aotearoa increasingly interact in a distinct context than considered historically by geographers. This growing engagement with online spaces has been



the focus of critique and concern in public discourse, and has the potential for influencing youth policy decisions, such as the school cell phone ban. The broadening appeal of digital communication technology partially brought about by COVID-19 presents an exciting opportunity to acknowledge the opportunities and challenges that digital social spaces represent in young peoples' lives. Geographers have used thirdspace theory in discussion of material spaces to explore malleable spaces of socialisation under a poststructuralist lens. In geographic literature, thirdspaces are also tied to community and the sense of belonging young people find in public spaces. Digital social spaces may present a distinct modality of thirdspace where young people shape their sense of social belonging. Based on this possibility, my presentation asks: To what extent may digital social spaces act as flexible, informal, and neutral third spaces for young people in Aotearoa New Zealand? Based on a qualitative approach, that involves focus groups and participant reflections with young people who use digital spaces, in this presentation I will explore their experiences, motivations, and perspectives on engagement with such spaces. Using thirdspace theory, I will also unpack the impacts of digital spaces on their feelings on and challenges to social belonging.

**Keywords:** Thirdspace, Online Spaces, Social Belonging, Youth, Social Media

### **The application of Geographical Information Systems (GIS) and mapping for helping to understand prison violence Lars Brabyn**

Prison violence is a serious and complex “ecological” problem involving many dimensions, including the characteristics of the prisoner population, the experience of staff and the prison management techniques being used, as well as the physical layout of the prison. As part of a research project called Nga Tūmanakotanga – Turning the Tide on Prison Violence, the novel use of GIS for mapping prisons was explored, producing a surprisingly high impact on the research. An established international method for helping reduce prison violence is called “Promoting Risk Intervention by Situational Management” (PRISM). An important emphasis of this method is having conversations with prison staff (including senior management) and prisoners to comprehend the full situation of the context of prison violence. As part of the implementation of PRISM for our research, we introduced heat maps showing the layout of prison units and the frequency of prison violence for different years. These maps have been an important catalyst for these conversations. Temporal and spatial information has triggered memories of violent incidences and stimulated interpretation of the situation, which is an important component PRISM. In addition to heat maps of violence, the GIS has also quantified dimensions of the prison units, which has been used to calculate the spatial density of prisoners, as well as the proportion of indoor and outdoor space. These additional spatial statistics have also assisted the use of PRISM.

**Keywords:** Prison violence, PRISM, Geographical Information Systems, Map

## Enacting post-structural political economies: A critical dialogue

**Panel Convenors:** Nick Lewis and Richard Le Heron, School of Environment University of Auckland

### **Enacting post-structural political economies: A critical dialogue     Nick Lewis and Richard Le Heron**

Based on our recent Sustainable Seas experiences around framing policy guidance over enacting a societal and policy-centric proposal for transitioning to a blue economy we are very conscious that others may have informative experiences and valuable insights to relate. We have adopted a panel format to encourage wide ranging debate. The panel session will open with a summary of the Blue Economy project and what it might mean for a new generation of economic geographers in Aotearoa and beyond. This will be followed by panel presentations. The session will conclude with a round-the-table reflection on learnings and lessons from the presentations.

**Keywords:** Enactive geographies, economic geography futures, post structural political economy, transitioning practices

### **Systemic understanding of blue economy futures     Tim Smith**

The Blue Economy has been touted as an under capitalised frontier for economic growth. While many studies have shown the impacts of land-based neo-liberalism trajectories such as biodiversity loss and social inequalities, less have been focused on critiquing the expansion of the Blue Economy. An example of coastal tourism is used to highlight these pervasive impacts globally.

**Keywords:** Blue economy, coast, tourism

### **Infrastructuring experimentation     Angus Dowell**

Geographers have increasingly pointed to experimentation as a basis for enacting societal transitions differently. They highlight the significance of non-hierarchical forms of agency, multiplicity, and the messiness of encounters in making transitions possibly, and increasingly ask questions of a politics of 'co-experimentation' that could be mobilised in enacting transitions in more coordinated but non-prescriptive ways. Drawing on two bodies of literature, Social Studies of Economisation and Marketisation and Infrastructure Studies, this paper builds on this work to explore how experimentation might be conceptualised and enacted in more enduring forms as infrastructure.

**Keywords:** Co-experimentation, infrastructure, economization, enactive research

## Understanding watery places through recreation and leisure practices: Bodies in the water and on the sand

**Panel Members:** Belinda Wheaton and Marg Cosgriff, University of Waikato; Doortje Hoerst University of Queensland, Robin Kearns University of Auckland

In this panel we will explore how recreation and leisure help us to understand oceans, coastal places, coastal practices and relations, and cultures in Aotearoa and beyond. Speakers in the panel are all using creative place-based methodologies to explore embodied recreational practices (e.g. 'beaching', open-water swimming, surfing) with and across different coastal places, communities, and demographics (gender, age, ethnicity). Our research explores key questions related to the importance of coastal spaces in Aotearoa for diverse human and more-than-human wellbeing and the methodological and ethical issues and responsibilities associated with undertaking this research. The roundtable discussion will focus on inter-disciplinary understanding drawing on research from cultural geography, feminist cultural studies, health, sociology, and outdoor education, and how these interconnections might help to (re)shape geographical debates.

**Keywords:** Coast; recreation, leisure, blue space; creative methodologies; mobile methods, more-than-human

## Coastal leisure and recreation: From liminal spaces to coastal liquidity

**Session Convenor:** Belinda Wheaton

### **Sailing as a messy practice: Dealing with rubbish, debris and bacteria in places of escape** Doortje Hoerst

As extreme weather increases due to climate change, heavy rainfall and floods become more frequent in Australia. Especially in urban areas, floods and fast river currents carry debris and bacteria along, accumulating until they eventually end up in the ocean's bays and coastal areas. Bays are popular locations for social yacht racing - a form of sailing in which people come together at a yacht club to sail a course of about three hours, to then return to the yacht club for some drinks – because they give some protection from the elements. Especially for sailing clubs that are situated at relatively urban locations, heavy rainfall in these areas has a direct impact on practices of sailing. The floating around of big objects like logs and pontoons may damage boats, and an accumulation of plastics, bacteria and chemicals are harmful

to people and other critters living in that place. Sailing, as a form of leisure often practiced to escape from everyday life, is intrinsically connected to everyday life in the city through the waterways that connect it. Furthermore, it seems impossible to escape consequences of climate change as they become part of sailing. In this paper, I will show how women in sailing negotiate their position to the places they sail in as coastal environments confront them with environmental change. Through layers of privilege, care, and non-innocence, the notion of escape itself becomes polluted, as places of escape can be places of harm too.

**Keywords:** Sailing; climate change; escape; coast; more-than-human

### **The Waters that Bind Us: Exploring Salt Water Citizenship, Knowledge and Understandings in Wales and Aotearoa New Zealand**

**Belinda Wheaton, Nik Dean, Marg Cosgriff**

This paper discusses an exploratory collaborative project between researchers in Wales and Aotearoa, exploring coastal waters as spaces where communities come together for leisure, work, and well-being, demarcating boundaries of belonging and identity. The ways we think about and with water in these two countries, Wales and Aotearoa, has similarities and differences, which will help us uncover the ways in which a ‘water citizenship’ (Whyte, 2019) flows through our collective imaginary of ourselves and the things we do. The research builds on interdisciplinary research focused on bodies, ‘blue spaces’ and wellbeing. This research recognises the importance of human-more-than human interrelationships, and that blue spaces are both therapeutic landscapes, and places of exclusion (e.g. Wheaton & Liu, 2024; Wheaton, et al. 2021). Our methodology involved; 1) in-situ mobile methods (e.g. walk-and talk and swim along), and experiential encounters such as collecting and sharing kai; 2). Conversations with diverse community recreational water users (e.g. swimmers, surfers), members of environmental science groups, and tangata whenua. We also utilised participant co-produced ‘mood-boards’, a creative technique advocated as a method to help express emotions that can be difficult to share with traditional talking methods (Spawforth-Jones, 2021). We discuss the benefits and challenges of these methods for understanding the complexity of local saltwater citizenship, and the diverse ways it is understood and enacted. More widely, the paper speaks to the multiple, complex relations of bodies with their ‘local’ coastal environments, and diverse impacts for human, more-than human wellbeing.

**Keywords:** Arts-based methods, blue space, therapeutic landscape, water citizenship

### **Bringing the more-than-human into the frame: Young people, local beaches and wellbeing**

**Marg Cosgriff**

Tracing the flows of sand and salty waters in coastal dwellers’ lives brings attention to human’s entangled relations with more-than-human entities. In this paper I draw from a study exploring young people’s everyday relations and practices with the beaches bordering coastal neighbourhoods here in Tauranga Moana. Using the question of what might happen if humans were not seen to be the only participants in research (Rotas, 2014) as a springboard, the reciprocal creep and (back)flows of the ocean and sandy shores into and through young people’s daily lives and experienced wellbeing are initially foregrounded. Burdsey’s (2016) challenge to write against “static portrayals” of

seaside social relations is then further pursued through examination of the intersections and interplays in sensory, social, environmental, and symbolic marginalisations and exclusions that surfaced in young people's stories. The value of relational, visual methodologies including participant-generated photographs for supporting exploration of the embodied, temporal, and fluidly-grounded nature of human and more-than-human relations and responsibilities is proposed.

**Keywords:** Wellbeing, more-than-human, coastal liquidity, relational, photo-talk

### Radical geographies here: Spaces of possibility and responsibility panel

**Panel members:** Amanda Thomas, Marcela Palomino-Schalscha, Te Herenga Waka Victoria University of Wellington, Ritodhi Chakraborty, Te Whare Wānaka O Aoraki Lincoln University, Mayumi Sato, University of Cambridge

Radical geographies that developed in the 1960s and 70s were a response to the social conditions of the time, and the need for geography to say something more meaningful than offering technocratic and managerialist disciplinary insights. Rich streams of radical geography also emerged in Aotearoa New Zealand (see Watters 1998; Tim-adical Writing Collective 2017; Palomino-Schalscha et al 2023). However, perhaps reflecting the need for geographers in Aotearoa New Zealand to be generalists, there is little contemporary work that explicitly claims to progress radical geographies here. Yet geographies that are sharp in critique, wild in imagination and dogged in pursuit of justice, are needed more than ever. At the current moment – characterised by genocide, insidious toxic patriarchy, technofetishism, re-embedded colonialism, neoliberal fascism and accelerated climate injustice – what are the spaces for cultivating justice? What are the responsibilities of our geography community? What kinds of radical geographies emerge from this whenua and moana? In this panel session, we will foster a discussion on ways to cultivate radical geographies and geographies across spaces (spaces of learning, research, engagement). This panel session invites conversation, critical interrogation and practical ways forward for radical, inclusive and responsible geographies in Aotearoa New Zealand.

**Key Words:** Radical geographies, Aotearoa, Responsibility, Possibilities

### Historical Places and People

**Session Convenor:** Michael Roche

#### **Feminist Geographies of Toponymic Inscriptions: Unravelling the Politics of Commemoration** Swagata Basu

The politics of naming places, an essential aspect of critical toponymic studies, is gradually being integrated into feminist historical geography. This interdisciplinary approach aims to comprehensively understand how spaces, knowledge, and practices can be critically viewed through the intersecting perspectives of feminism, history, and geography. The argument that no historical activity is devoid of a preceding idea is central to this study. The act of naming 'spaces' to give them meaning and transforming them into 'places' is a profound

assertion of identity. Drawing from the insightful analysis conducted by ‘ToponomasticaFemminile’ in various urban spaces in Italy, this paper attempts to critically examine colonial and post-colonial naming of urban geographical micro spaces (landmarks, institutions, monuments/ memorials, parks and street names) in Meerut city, India, a cantonment town established by the British where the germination of a mutiny against colonial rule had begun. During the post-independence period, the city has assumed primacy in the national capital region for its economic importance and cultural heritage. The paper documents the process of the masculinist/ misogynist project of appropriation of spaces by othering, erasing and obscuring women’s history over spaces that are rich palimpsests of both men’s and women’s collective efforts to offer the space its character.

**Keywords:** Critical toponymic studies, colonial India, post-colonial spaces, feminist geography

### **Education Policy as “nothing but force”: A spatial mapping of an education experiment      Kirsten Locke**

When the military took over schools in Palmerston North and Fielding in 1942, it provoked an educational experiment that had lasting effects on Aotearoa’s education system (Collinge, 1978; Macdonald, 2016). According to Clarence Beeby (1942), the “emergency gave us the chance to do more than just carry on with the bare school subjects”. As the short film *Children without schools* (NFU, 1942) shows, children took to the streets of Palmerston North and Fielding in an Emergency Education Scheme (EES), making the town their classroom, replacing a teacher-lead educational experience with self-governance, and undertaking activities that foregrounded engagements with the community and with local sites. Inspired by Franco Moretti’s (2003) literary mapping, this presentation provides an account of the forces at play in the EES that fostered constellations of educators, in and across schools and through organisations, and which lead us as researchers to the streets of Feilding and Palmerston North. Taking an post-anthropocentric approach (Priem, 2022), we discuss the social and ecological relations that shaped this experiment, including the material forces which necessitated the use of alternative spatialities; activities that fostered creative engagements between bodies and environments; and understandings of childhood, creativity, the body and social democracy (Macdonald, 2011) which contributed to an inclusive, participatory ideal of public education linked to democratic citizenship and a wider social agenda. This spatial analysis allows us to map the way the combination of ‘forces within and forces without’ that shaped the EES created new forces that reformed post-war education, and that may still have something to teach us about the forces at play in educational policy and reform today.

**Keywords:** Education, history, mapping, policy, emergency

### **Writing the Rural; the Lived Experience of Jack Hillary      Lex Chalmers**

Lives in the rural spaces of Aotearoa New Zealand in the 100 years that followed the signing of Te Tiriti o Waitangi were never easy. Physical labour in the native forests and timber mills was common and until the dawn of the 20th Century agriculture was generally small-scale and barely sustainable. Women's lives were no easier, wood stoves and lamplight, home butchery, limited access to food supply, high levels of childcare, and home-schooling are commonly reported. The first activity in 'writing the rural' is to document the experience of individuals and families, but the much larger task is to understand how the physical environment, economic conditions, social and cultural activities allowed/excluded options for individual and families. Jack Hillary (1888-1937) was the second son of an English father who arrived in Auckland in 1883 and an Irish mother who landed in 1865 in Dunedin. After working initially in kauri mills around Dargaville Jack moved to the totara forest of the Mamaku, to work in a country store in Te Kuiti, a dairy farm in Matamata and ultimately to the Tatua Co-operative Dairy Company in Tatanui. Jack often worked at a distance from his partner and two children. Understanding his life through published details, family accounts and photographs, along with account books is reasonably straightforward, but the requirement of writing rural lives is to see the biographical detail against events like the establishment of the Native Land Court in 1865, Vogel's Abolition of Provinces in 1876, Women's suffrage in 1893, the end of the Kauri economic boom in 1906, the local and national significance of railway development the national experience of events at Gallipoli and the Somme, the 1931 Depression and emergence of the Waikato dairy industry in the interwar years. 'Writing the rural' anchors biography in time and space.

**Keywords:** History, rural, biography, context

#### **Geographer on Board – Evelyn Stokes on the New Zealand Geographic Board 1989-2005 Michael Roche**

Professor Dame Evelyn Stokes (1936-2005) enjoyed a richly varied career as university teacher and researcher, as a contract researcher for the Huntly Social and Economic Impact Monitoring Project, in supporting geographic education at the secondary school level, and notably as a member of the Waitangi Tribunal. One of her less well-known roles was as the New Zealand Geographical Society nominee on the New Zealand Geographic Board, the national place naming authority from 1989 to 2005. After briefly sketching in the Board's responsibilities and her appointment attention will be given to her activities on the Board including (1) more routine tasks affirming, correcting and declining of new place name proposals, (2) her attitudes to additional Board responsibilities with respect to Antarctica and the naming Undersea features, and (3) how she responded to Māori place names as part of the cultural redress aspect of Treaty settlements and finally her external role in publicising the Board's activities to the geographical community.

**Keywords:** Evelyn Stokes, NZ Geographic Board, place naming

## Transforming geographies through introducing geographies: reflecting on our experiences writing and editing the 4th edition of *Introducing Human Geographies*

**Mark Goodwin Exeter University, Karen Fisher, Lynda Johnston, Meg Parsons, David Conradson, Juliana Mansvelt**

Editing a textbook to introduce a field as large as human geography is not a small task. In response to extensive reviews, editors of the previous editions of the best-selling *Introducing Human Geographies* brought together a new editorial team and revamped the entire book with mostly new contributors. In this session, the editors speak with a range of contributors to the new edition on the opportunity to reframe and transform the direction of human geography, while also honouring and reflecting on where it has come from. Some of the chapter authors will present their key arguments and insights from their contributions to the fourth edition of *Introducing Human Geographies*. The editors will screen a video of a range of participants from around the globe who have contributed but are unable to attend the conference due to distance or cost. They will also discuss how their chapters relate to the broader themes and issues of the book, such as geographies of the Anthropocene, geographies of difference, and geographies of hope, and the desire to increase the diversity of both the peoples and places represented. The session will provide an opportunity for the audience to engage with the authors and ask questions about their research and writing.

**Key Words:** Teaching geography; discipline; human geography; decolonisation; pedagogy

## Climate Change

**Session Convenor:** James Renwick

### **A pedagogical experiment in attunement to melting places**

**Kim Kullman**

Attending to a pedagogical experiment within a fragile mountain ecology exposed by receding ice patches in Norway, this paper describes how a group of landscape designers, wildlife guides, geologists and visitors are cultivating affective and sensory attunement to the vulnerabilities of melting places. Committed to undoing damage on the local terrain, the experiment has involved the collaborative creation of a walkway that choreographs moving bodies to render perceptible the distinctive features of the sensitive site and encourage reflection on the vanishing permafrost. Acting as an interface for human and nonhuman processes, the walkway inserts a spatial and temporal interval between bodies and the ground to prevent erosion and provide latitude for the shifting polygon morphology and its microclimates. The



paper draws out the implications of this collective experiment for rethinking the terms of ecological entanglement within the cryosphere and addresses the ethical potential of environmental pedagogies engaging with the dynamics of melting.

**Keywords:** Attunement, landscape design, environmental pedagogy, climate ethics, cryosphere.

How does climate change disrupt human-tree entanglements? Case studies of small tree clusters in Aotearoa New Zealand **Nicholas Kirk**

Trees exercise agency that shape and transform place. Tree agency is entangled with the agencies of the more-than-human world, including typical human interventions such as planting, pruning, and caring. Scholarship in vegetal geography and critical plant studies has begun to explore the relationship between vegetal agency, human agency, and more-than-human agency, but the role of climate change in disrupting, reshaping, and reforming these entanglements has so far not received much scholarly attention. This presentation reports on research examining the motivations to plant small clusters of trees in Aotearoa New Zealand and asks how climate change disrupts and reshapes entanglements between humans and small clusters of trees, motivations to plant trees, and ultimately how these will combine to reshape place. Various examples of small tree clusters will be presented to help answer this question.

**Keywords:** Trees, climate change, vegetal geography, more-than-human geography

**Reframing climate adaptation policy through justice, fairness, and equity** **Ariane Bray**

Justice has become critical in climate change adaptation scholarship and practice, with just adaptation now a recognised area of scholarship. Concurrently, governments are engaging with language around climate justice, just transitions, and equity. However, the contingency of this language and its relationship to addressing injustices remains unclear. Furthermore, justice is always situated and must account for the specificities of time and place. This raises questions about what just adaptation means in the Aotearoa New Zealand context. Lastly, concepts of justice are often deemed as abstract, difficult to mobilise and even sometimes ideological, making their incorporation into adaptation policy challenging. This paper bridges theory and practice in climate adaptation justice by developing and applying a framework to analyse justice in adaptation policy. Drawing on diverse conceptions of justice within the Aotearoa New Zealand context, including theories of justice, just adaptation, and te Tiriti o Waitangi, the framework is used to evaluate the central government's adaptation strategy. Applying the framework revealed that current government strategies successfully recognise the relationship between preexisting inequities and the distribution of climate change impacts, in addition to the need for situated solutions. However, it also revealed that the transformative potential of just adaptations risk being diluted by watered-down language and unclear actions. This paper highlights the constraining effect of expectations of political neutrality in policy, embedded in Western assumptions about legitimate discourse and

knowledge. The continual undoing and redoing of work due to shifting political tides underscores the fragility of achieving lasting change within business-as-usual political systems.

**Keywords:** Adaptation, justice, climate change, policy

**Geographical Assessment of Meteorological Drought and Flash floods in North-Western Himalayas: A Case Study of Jammu Division (J&K)  
Gurleen Kour**

Recent years have seen a significant increase in public knowledge of extreme weather occurrences, partly due to immediate media attention that highlights the devastating nature of storms, heat waves, droughts, floods and cold spells. Some of the events like heat waves, cold waves, meteorological drought, flash floods and cloudburst are increasing day by day. In this present work, Meteorological Drought and Flash floods have been assessed spatially over the Jammu province. To analyse meteorological drought, Standard Precipitation Index (SPI) has been adopted because it represents “the probability of rainfall occurrence in the region in a certain period of time. To analyse Flash flood, Fuzzy Analytical hierarchy Method (Fuzzy AHP) has been utilized in the monitoring of hazard. The extreme drought has been found to be of high frequency in Billawar weather station lying towards south-east of the study area whereas all other stations have low to moderate frequency of extreme drought conditions. It is also explored that in case of flash flood susceptibility, Zone I is more susceptible followed by Zone II, Zone III whereas Zone VI is less susceptible to floods.

**Keywords:** Flash flood, Drought, SPI, AHP, Jammu

**Water: a blind spot in climate change policies? James Renwick**

The availability of water, and extremes of water quantity, both floods and droughts, are key aspects of climate change in terms of impacts on human societies. Yet, water has not yet received the full attention it deserves from both scientists and policymakers, for several reasons. There has been a natural focus on temperature in relation to climate change, and we are all used to thinking about “warming levels” as a shorthand for the magnitude of change. Observing and understanding gradual changes such as aridification and increasing seasonal-interannual variability of the water cycle can be missed in all the noise of short-term extreme events. Moreover, the role of water has not been adequately recognized in the assessment of mitigation strategies, even though compliance with the Paris Agreement require a massive deployment of land-based strategies whose feasibility and efficiency heavily depend on water resources. It is thus essential to develop a

more integrated approach to water and climate change, that would allow scientists and policymakers to “close the loop” between mitigation options, water cycle changes, hydrological impacts and adaptation.

**Keywords:** Climate change, water availability, adaptation, mitigation

## Urban Placemaking

**Session Convenor:** Laurence Murphy

### **How Public Urban Green Spaces can foster a sense of belonging for Latin American migrants in Wellington, Aotearoa New Zealand** **Alejandra Guerrero Rondón**

Due to climate change and other social, economic, and political dynamics, the number of Latin American (LA) migrants are almost certain to increase in Aotearoa New Zealand (NZ). However, navigating the NZ system and dynamics can create limitations for some LA migrants regarding integration, such as, sense of belonging and place-identity. A component that may hold significant potential in fostering a sense belonging and contribute in reshaping place-identity is the attachment to nature and the influence of plants within Public Urban Green Spaces (PUGS). From a embodied and poststructural-feminist perspective, this presentation will explore how PUGS can serve as a medium for expressing practices of visual inscription that embed particular social imaginaries, place-identities, social connections and interactions with the environment into the landscape. Using walking interviews and a creative activity with LA migrants, as well as interviews with members of relevant organisations, this research seeks to shed light on the significance of PUGS in shaping the narratives and experiences of LA migrants in Wellington. In doing so, this work will contribute to provide insights and research evidence that can inform Nature-Based Integration (NBI) proposals to guarantee equal access to nature and create an attachment to the host society. Ultimately, this research wants to contribute to the well-being, health and cultural identity of LA migrants in Wellington and similar contexts.

**Keywords:** Sense of belonging, place-identity, Public Urban Green Spaces (PUGS), Latin American migrants.

### **High-quality Green Spaces for Realising Inclusive Cities**

**Golkou Giyahchi**

Public green spaces (PGS) provide critical ecosystem services, such as enhancing human well-being and health, quality of life, and social integration. However, benefits from PGS are distributed unequally among all urban residents. While the existing literature indicates a lack of inclusivity, the reasons behind the exclusion of vulnerable groups like migrants, lower socio-economic groups, and women from fully benefiting from PGS remain underexplored. Additionally, while the predominant focus is on the quantity of PGS, the 'quality' of them remains a contentious issue due to their multifaceted nature, encompassing objective, subjective, and relational dimensions. People's nature-orientation, prior experiences with PGS, and awareness and education about PGS benefits emerge as key characteristics, among others, to consider for inclusivity. Thus, I will present a theoretical framework of quality PGS for inclusive cities, grounded in relational geographical thinking and the

interactions of people, place and time (IPPT). This framework reflects the dynamism of PGS and the evolving relationship between people and PGS over time. The research focuses on migrants as they are important but understudied concerning their use of PGS and provide an understanding of “becoming” in IPPT which is aligned with relational geography. This framework was developed through reviewing the literature on inclusive city dimensions, the relevant qualities of PGS, people’s perceptions (particularly migrants), and interconnections among them. This framework will be applied in Wellington and refined based on the migrants’ experience captured through interviews and observational techniques. Thus, this research contributes to creating inclusive cities where migrants can equally benefit from PGS.

**Keywords:** Public Green Spaces, Quality, Inclusive City, Migrants, Relational Geography

### **Tactical Urbanism's role in achieving successful urban form interventions in Aotearoa | New Zealand Nathan Balmer**

Tactical Urbanism is an approach to regenerating urban areas that focuses on adaptability, community engagement, and testing new ideas. It promises numerous benefits, including reduced costs and context-appropriate interventions, and has demonstrated success globally. While its potential to enhance urban spaces is widely recognised, the best methods and applications for implementing tactical approaches remain unclear. This research examines Tactical Urbanism’s role in achieving successful urban form interventions in Aotearoa | New Zealand, using case studies and expert interviews. By analysing international and national examples, we identify the attributes of successful interventions and explore how best to implement this approach. Interviews with professionals from district and city councils, placemaking consultants, transport authorities, and university academics provide valuable insights. Our findings highlight how Tactical Urbanism can be utilised to create more accessible, attractive, safe, and economically successful places in Aotearoa | New Zealand. Encouraging dynamic and iterative planning approaches can foster environments that everyone can enjoy now and into the future.

**Keywords:** Placemaking, community, urbanism, engagement, adaptability

### **Public Understanding and Support for Water-Sensitive Urban Design: Insights from Aotearoa New Zealand Angelina Coelho**

The Water Sensitive Cities (WSC) paradigm offers a framework for urban development that places water at the forefront of urban planning, advocating for water-sensitive urban design (WSUD) and green infrastructure to manage stormwater while protecting and promoting ecosystem services. A fundamental element of WSC is fostering well-informed and engaged communities. To date, however, little research has shed light on public understanding of WSUD terms and related concepts, especially the impacts of stormwater on water quality and potential mitigation strategies. This paper addresses this gap using nationwide public survey data from Aotearoa New Zealand on three interrelated topics: water-related knowledge, urban water stewardship, and stormwater management technologies. Greater water knowledge was associated with older age and higher education levels. Other key findings indicate that 87% of respondents understand the relationship between the health of aquatic ecosystems and human well-being. Overall, respondents demonstrated limited understanding of WSUD terms and technologies such as constructed wetlands, raingardens, and bioretention cells. Despite this limited knowledge, 81% of respondents supported legislation requiring developers to incorporate nature-based solutions (e.g., parks, ponds, green roofs) into new developments, and nearly 80% would like to have a well-designed and maintained constructed wetland in their neighborhoods. Open and green spaces,

regardless of their stormwater function, were perceived as beneficial by 75% of respondents. The findings suggest that while knowledge is important, communities may support WSUD implementation in the form of nature-based solutions, regardless of technical understanding. This emphasizes the importance of emotional and behavioral elements, in addition to cognitive aspects, in fostering water-sensitive citizenship.

**Keywords:** water-sensitive-urban design (WSUD), public understanding, stormwater management, green infrastructure, community engagement

### **Capital Flows and Urban Placemaking: Examining the role of a property investor/developer in the creation of large-scale commercial spaces in Auckland**      **Laurence Murphy**

Geographers have long been interested in the 'urbanisation of capital' but more recently attention has been directed toward the activities of specific property actors. Employing a firm-level analysis, this paper offers a case study of Kiwi Property, a leading New Zealand property company with an investment portfolio exceeding NZ\$3 billion. The study charts its corporate and financial dynamics and examines its history of speculative real estate development. The paper examines Kiwi Property's role in developing three distinct commercial places in Auckland: Sylvia Park (a mixed use development valued in excess of NZ\$1billion), Resido Apartments (a large build-to-rent (BTR) apartment development) and Drury's emerging metropolitan centre (a commercial hub in a new urban development expected to be home to 60,000 people). The paper argues that it is at the level of the firm that real estate investment practices are enacted and that an individual firm can wield considerable power in urban placemaking.

**Keywords:** Urban placemaking, capital, investor/developer

## Geographies of Health

**Session Convenor:** David Conradson

### **Drinking water infrastructure deficits and inequities in New Zealand**      **Mario Puente-Sierra**

Drinking water contamination poses a significant public health risk, with the condition of drinking water reticulation central to the provision of safe drinking water. Previous observational studies have been constrained by inconsistent data collection and reporting by different asset owners. This study aimed to conduct a national audit of pipe conditions in council-owned water supplies in New Zealand and create a comprehensive national dataset of drinking water reticulation. Pipes were classified as either past or within their life expectancy and assigned a condition grading based on their age and the material used, according to available literature. Out of 57,174 km of pipes with complete information, 18.5% (8.7%–28.1%) were past their life expectancy and 30.7% (24.5%–42.5%) were in substandard condition. Preliminary

analysis shows differences in pipe condition by sociodemographic characteristics and wide variations in condition between asset owners. The findings hint at a larger water infrastructure deficit than previously estimated, indicating a need for increased budget allocation for renewals. Spatial disparities in pipe condition between asset owners suggest that upcoming legislation enabling councils to form council-controlled organisations may result in some councils not realising the benefits of regional cooperation. Future research would benefit from standardised data collection among suppliers and consideration of additional factors like operational and environmental conditions. Such a dataset would be valuable for exploring the relationship between reticulation quality, water quality, and public health outcomes.

**Keywords:** Public water, reticulation, spatial, policy, dataset

### **Life in green: Associations between greenspace availability and mental health over the lifecourse - a prospective birth cohort study** **Bingyu (Susie) Deng**

Background: The beneficial impacts of greenspace availability on mental health are well-documented. However, longitudinal evidence using a spatial lifecourse perspective is rare, leaving the relationship between greenspace availability and mental health at different life stages over the lifecourse unclear. This study first uses prospective birth cohort data to examine the associations between greenspace availability in childhood (0–16 years) and mental health in adolescence (16 years) and associations between greenspace availability and mental health in adulthood (18–40 years). Method: Data from 1265 Christchurch Health and Development Study (CHDS) cohort members born in 1977 were used. Mental health outcomes including depressive symptoms, anxiety disorders and suicidal ideation were assessed in adolescence (16 years), and in adulthood (18–40 years). Greenspace availability (birth to age 40) was measured by the proportion of vegetated areas within circular buffers (100m to 3000m) around homes using time-series impervious surfaces data. Bayesian Relevant Lifecourse exposure models and Generalised Estimating Equation logistic regression models were employed, adjusted by important individual, family and area-level covariates. Results: No associations were found between childhood greenspace availability and any adolescent mental health conditions. However, in adulthood, a one standard deviation increase in greenspace availability within 1500m and 2000m buffers was associated with a 12% and 13% reduced risk of depressive symptoms, respectively, after adjusting for various covariates. Discussion: This study supports the protective effects of greenspace on adult depressive symptoms. The study underscores the importance of using a spatial lifecourse epidemiology framework to understand long-term environmental impacts on health.

**Keywords:** Greenspace, Mental health, Lifecourse, GIS, Birth cohort

### **Extending geographical conceptualisations of health-enhancing environments: examining therapeutic and transformative place encounters** **David Conradson**

Over the past four decades, geographers have developed a number of frameworks to conceptualise the health-enhancing effects of particular places and environments. Notions of therapeutic landscapes and enabling places have been important in this work. Beyond their immediate and apparently health-enhancing effects, however, to what extent do such settings address the broader processes and structures that create ill-health in the first place? How might their therapeutic benefits be realised and sustained within contexts that systematically generate distress

and ill-being? We explore these questions with reference to health-enhancing settings in New Zealand and the UK. Building on the work of Kayley et al (2019), we argue that a distinction can be made between place encounters that are (i) ameliorative (reducing distress, albeit in a temporary fashion), (ii) health-enhancing (enhancing health, with some temporal durability), and (iii) transformative (enabling health while also altering some of the relational structures that generate ill-being). To make such distinctions, it is necessary to consider how a putatively health-enhancing setting is entwined with and influences its broader social and economic context. Although such consideration has not routinely been part of therapeutic landscapes research, we suggest it offers significant analytical benefits. It can also strengthen the connections between therapeutic landscapes research and related scholarship in health and medical geography, public health and critical human geography.

Keywords: Therapeutic landscapes, Transformation, Health Geographies, Wellbeing

## Mobilities

**Session Convenor:** Helen Fitt

### **Sharing mobility: potentials and pitfalls of sharing vehicles in residential settings**      **Angela Curl**

Heavy reliance on private car as a form of mobility is inequitable, unhealthy and unsustainable. Climate change, urbanisation and demographic shifts demand that we think differently about mobility, ensuring people's access needs are met while minimising harms to human and planetary wellbeing. We spoke with professionals involved in the governance, management and operation of shared e-bike and e-car schemes in residential settings in Aotearoa New Zealand. We wanted to understand how housing providers are supporting resident wellbeing through novel initiatives such as shared transport and to explore the mechanisms that support or hinder those initiatives being established and operating successfully. Schemes that make e-cars and e-bikes available for residents to use on a shared basis are relatively novel, but operating in various settings in Aotearoa NZ including retirement villages and social housing. Shared mobility schemes such as these offer the potential to broaden mobility options, alleviate financial pressures associated with car ownership and to reduce reliance on cars as part of a broader shift towards more inclusive, sustainable and healthier mobility. While informal sharing of transport has always happened, the realities of shifting from individualistic approaches to providing transport to more formal approaches to mobility commoning is less than straightforward. This presentation will reflect on the potentials and pitfalls of shared mobility as a way towards communing mobility as part of a just transition.

**Keywords:** Mobility; sharing economy; accessibility; e-bike;

### **Can you call it Gerotopia if you can't drive?**      **Jillian Frater**

There are over 460 registered retirement villages in New Zealand, with the number of villages expected to keep increasing. In recent decades, a mix of high- and low-density accommodation for older people has been constructed in Aotearoa New Zealand. Low density villages are often

created on large parcels of land on the edge of the city. As a result, residents are often reliant on private motor vehicles to provide for their needs as other forms of transport are not available to them. In addition, most residents have had access to private vehicles for most of their lives and use them by choice. This, however, leads to transport challenges for residents if they are no longer able to drive. We compare two retirement villages in Christchurch, a low-density village on the outskirts of the city and a medium density village nearer to the centre of the city and consider what future land use or transport options are possible. We find the transport experience of the two groups is quite different and that, while some is explained by self-selection of type of village, transport accessibility is a real issue for some residents.

**Keywords:** Retirement villages, transport options, driving cessation, car dependence

**Centuries old, but still evolving: Using a practice architectures frame to provide a long-term view on how transport interventions work (or don't) Helen Fitt**

Transport interventions both shape, and are shaped by, wider socio-material and cultural contexts. Interventions have potential to bump sedimented practices in new directions, or to be derailed or corrupted by pre-existing elements in social life. This presentation uses a social practices frame to explore how threads of social life entwine to influence how an intervention plays out, and how those threads may in turn be re-configured in its wake. It uses, as examples, two case studies in which shared mobility was introduced into very different contexts, a social housing complex, and a retirement village. It then explores how the different cultural-discursive, physical-material, and socio-political contexts influenced how the shared mobility schemes played out, and how the contexts, in turn, were reshaped. It concludes by arguing that understanding transport practices within a wider architecture, can help us to identify where they are amenable to change, and potentially even where they can act as a lever for wider beneficial social change.

**Keywords:** Transport, mobilities, practice architectures, shared mobility, social practices

## Policy Mobilities

**Session Convenor:** Russell Prince

**How did the Council of Europe's Intercultural Cities Programme gain international outreach? Youjeong Jang**

The travel of policy ideas is a widely recognised phenomenon, particularly in the age of globalisation. This has been a central topic of research in the field of geography, particularly through the lens of 'policy mobilities'. Moving away from the conventional idea that policy movement is a linear and depoliticised process, this approach acknowledges the complex and fluid nature of its movement. Policy movement is often accompanied by the production of discourses that position a particular policy as legitimate. It is also driven by the interests of dominant actors at the centre of policy diffusion. From the perspective of policy mobilities, this paper investigates how the Council of Europe's Intercultural City Programme (ICC) gained international outreach. Initiated in 2008 in 11 European cities, the programme



has significantly expanded in size and geographical coverage. It now includes more than 160 member cities across the Middle East, Africa, Asia-Pacific, and North America. Focusing on its rapid and widespread expansion of membership, this paper aims to explore how the ICC's discourses, particularly those centred on its underlying concept of cultural diversity, facilitated the uptake of the policy. Moreover, it identifies the channels through which the ICC became mobile to effectively reach cities worldwide. Lastly, it opens room for critical deliberation on whether the ICC's diffusion was leveraged to reinforce the power of its provider. By doing so, this study offers an extended explanation of how making and circulating a policy is contingent on broader sociopolitical contexts.

**Keywords:** Policy mobilities, Policy discourse, Cultural diversity, Intercultural Cities Programme

### **Whither housing crisis? Colin McLeay**

Recent Aotearoa New Zealand governments have sought to 'solve' issues of housing affordability through the introduction of targeted legislation. Thus, in 2013 a National-led Government gained assent for the Housing Accords and Special Housing Areas Act, the purpose of which was to "enhance housing affordability." More recently, in 2020, a Labour-led Government introduced the Urban Development Act, legislation designed to 'facilitate sustainable and inclusive urban development.' In the current year, despite prior legislative initiatives, politicians continue to decry the 'crisis' that defines housing affordability in Aotearoa New Zealand. Given recent statements from the current Minister of Housing about the Coalition Government's plan to "fix our housing crisis" (Honorable Chris Bishop, 4 July 2024), it is perhaps timely to reflect on efforts to 'fix housing' in Aotearoa New Zealand. Framed by post-political conceptualisations, this paper offers reflections on the current 'position' of the housing crisis and considers current national housing strategies.

**Keywords:** Housing crisis, affordable housing

### **Mobile Keynesianism: linking policy mobility and state transformation in New Zealand, 1930-70 Russell Prince**

The study of policy mobility has revealed the rich geographical life of policy, demonstrating the very real ways in which policy enacted in one place often references policy enacted elsewhere, and how in doing so, it changes and evolves as it is constantly adopted and adapted. One of its contributions has been the elaboration of neoliberalism as an interconnected process of neoliberalisation producing its variegated geography. But the policy settlement that neoliberalism replaced in the capitalist world, Keynesianism, is still approached in comparative or institutional terms rather than as a process. Applying a policy mobility lens to the study of Keynesianism is an opportunity to correct this. But this historical case is also an opportunity to consider policy mobility anew. Drawing on the relational urbanism that also contributed to policy mobility studies, this paper builds on topological approaches to argue for analysing mobile policy as a consequence and cause of the

reworking of relations between and within policy territories. Using the Keynesian policy shift that occurred in New Zealand between 1930 and 1970 as a case study, it shows how relations were transformed but ongoing, and these transformations are both driven by and a consequence of mobile policies; that Keynesianism as an international phenomenon was a reworking of relations necessarily both between and within territories; and that Keynesianism produced a space of technical expertise and authority that continues to shape policy today.

**Keywords:** Policy mobility; historical methods; New Zealand; topology; territory; Keynesianism