

Methods Futures Report

Sea, Sky, and Land: Engaging in Solidarity in Endangered Ecologies

4S Conference Nov 2023



By Robert Meckin (Feb 2024)

The 4S (Society for the Social Studies of Science) conference 2023 was a large, disciplinarily diverse gathering with over 400 sessions spread over 4 days. Navigating a particular route through the conference, this document makes use of different forms of reporting (personal, anecdotal, analytical, summative) and makes links between elements of the conference and the National Centre for Research Methods' (NCRM) current methodological engagement foci in the areas of artificial intelligence (AI) and socio-environmental sciences. Those different reporting strategies aim to give an impression of attending the 4S conference in Honolulu, Hawai'i.

Sea, Sky, and Land

Hawai'i. Over Oahu. Descending into Daniel K. Inouye airport on the coastal outskirts of Honolulu I was momentarily surprised to see what looked like a US frigate sailing between Moloka'i and Oahu. I scanned around below, trying to identify Pearl Harbour as we flew over hangars, corrugated barracks, camouflaged Humvees, and fighter jets. Kai, iani, 'āina. War machine.

We landed. I collected my bag and took a taxi to a hotel in Waikiki. Pacific holiday legend. Lei. Surf. Hula. In the hotel room the TV and air conditioning were already on.

Jetlagged and weary, I dozed on the bed as a political programme called *Spotlight* broadcast. Governor Josh Green was discussing the ways the state was responding following the wildfires that ravaged Maui in August 2023. The community of Lahaina had been destroyed. Governor Green discussed concerns including housing, tourism, infrastructure, insurance, compensation, and legal action. Towards the end of the interview the conversation turned to Red Hill where, it turned out, the US Navy's jet fuel storage facility had been leaking fuel into the water table resulting in fuel coming out of home faucets, including the Navy's own.

This strange, hazy interview gave me a wealth-and-power perspective on the problems in Hawaii. Over the next four days of the conference, through the plenary sessions in particular, the combined effects of tourism, militarism and science on Hawai'i were demonstrated. Speakers discussed the entwinement of knowledge and power, the importance of finding ways to recognise

different ways knowing, and crucially, the ways that knowledge production is intimately tied to institutional logics and values in local ways, but that can also speak to wider concerns of colonialism and environmentalism.

Aloha 'Āina

The three *keynote plenary sessions* were focused on Hawaiian knowledge with indigenous scholars offering talks on the circular economy (Dr Kamanamaikalani Beamer), sense-making, biography and ancestry (Dr Manulani Aluli Meyer, Dr Mehana Blaich Vaughan, Dr Malia Akutagawa), and water politics and knowledge (Dr Bruce Ka'imi Watson, Dr Kyle Kajihiro, Dr Aurora Kagawa-Viviani). The central theme throughout was aloha 'āina.

The complexities of translation emerge as one attempts to suitably convey meanings in English. Aloha, at its most prosaic can translate to hello, welcome, or goodbye. Yet it carries more fundamental meanings of compassion, care, kindness, love. 'Āina, usually translated as land, can be better understood as 'that which feeds'. Aloha 'āina can therefore be interpreted as caring for that which feeds and nourishes. This was consistently argued as a founding principle of indigenous knowledge production and, in today's sustainability lexicon, showed that Hawai'i was once a cared-for ecosystem, supporting a human population and could comfortably do so again, instead of importing some 85% of food consumed in Hawai'i.

The absence or loss of aloha 'āina, speakers argued, results in streams that once watered the main islands

being diverted to holiday communities leaving areas in drought, prone to fire, and lacking any natural or sustainable capacity to fight fires. A remarkable and bleak detail of the Lahaina fires was that the heat melted the pipes leaving no way to transport water for firefighting. The complete destruction of the infrastructure, both the historic streams by humans and human-laid pipework by fire, has left Lahaina uninhabitable.

Comparable loss of knowledge and western ignorance was also discussed by Candace Fujikane in *Session 340. More-than-human landscapes*, where she described the 300 or so indigenous names for different winds that blow from Maui to Kanapou bay on Kaho'olawe. Where the US Navy planning had accounted for just one dominant wind and so, Fujikane argued, failed in their tree-planting efforts, she then beautifully demonstrated how the detailed, particular knowledge of wind and rain can help love and care for specific environments.

Throughout many of these arguments I expected a nod to, for example, Brian Wynne's (1992) ecological work on the knowledge of Cumbrian sheep farmers, given it was such a crucial line of work in STS, but there was none. I think this may also highlight that the field of science and technology studies (STS) is perhaps at a point of transition, with many other scholars who wrote key texts – Trevor Pinch, Harry Collins, Sheila Jasanoff – who I used to see at 4S conferences no longer as visible.

That smaller, uninhabited island of Kaho'olawe was mentioned numerous times in the context of building military knowledge. For decades, the US Navy routinely bombed the island in drills and exercises. After years of testing and training, unexploded ordnance litters the island with some 95% still dangerous due to bombs and shells. One operation included three simulations of nuclear attacks and was designed to assess effects on decommissioned ships moored at sea. The detonations left an enormous crater scarring the island's coast. That Kaho'olawe has, from the air, the appearance of a curled up baby emphasises these attacks in the name of military understanding ravaged the defenceless and innocent.

Western ideas of knowledge production might include detachment and a modest witnessing of the natural world through to domination through colonialism. Anthropology continues to wrestle with its complicit past, here. Aloha 'āina is therefore an alternative mode of knowledge production beginning with a more caring,

familial and ecological relation with the world. In this view, fire and loss are also regenerative and provide the nutrients for a new round of growth and abundance.

Acknowledgements

Speakers and conveners were encouraged to give a land acknowledgement to the native peoples of Hawai'i and the words below give a brief sense of such a statement.

We acknowledge Hawai'i as an indigenous space where the descendants of the original people are kānaka 'ōiwi or Native Hawaiian. We recognize that her majesty Queen Lili'uokalani yielded the Hawaiian Kingdom and these territories under duress and protest to the United States to avoid the bloodshed of her people, who are recognized in the Kingdom's law and today as kānaka Maoli. We recognize that Hawai'i remains an illegally occupied state of America. We further recognize that generations of indigenous Hawaiians and their knowledge systems shaped Hawai'i in a sustainable way that allow us to enjoy her gifts today. For this, we are truly grateful.

The history of colonialism and the current political situation, which by local Hawaiian accounts is relatively recent, also brought home the continued impacts of exploitation and political duplicity.

During the audience discussion in the second plenary, an author stood, her left hand by her side trembling with emotion, and contributed her own recent experiences. Australia's recent 2023 Australian Indigenous Voice referendum had rejected the right to political representation by constitutionally recognising indigenous Australians. Her people had been on their land for 65 000 years. Again dispossessed. Disenfranchised. Māori and other Islanders agreed. Shared their experiences.

I sought her out later in the conference and thanked her for her moving words. She asked if I was English and likened the Indigenous Voice referendum to the UK's Brexit referendum in 2016. The moment of solidarity and sympathy caught me off guard and I mumbled my gratitude. Endangered ecologies might not be just environmental, they might also be political.

Later, I attended a session on indigenous health where two scholars were castigated for their lack of awareness for not properly acknowledging an aboriginal collaborator who was in the room. The ensuing

conversation highlighted the scholars had embarked on the collaboration without sufficient background work or knowledge of the recent [Code of Ethics for Aboriginal and Torres Strait Islander Research](#) (AIATSIS, 2020). Acknowledgement is therefore multidimensional, where geographic, political, and physical presence bleed into one another, setting up hierarchies of knowledge systems. It was extraordinary to see it play out in a learned society setting on the very topic of inequality.

Making and doing

Presentations at 4S tend not talk about methods. At least, not in a conventional sense. The methods expo track called 'making and doing' (an all-day drop-in session all day with many satellite workshops) tended towards enactments of doing STS work as creative engagements, disseminations, and experiences. In the back corner of an exhibition room I saw a concertina screen. The kind that might be in a health clinic or hospital ward. I drifted over. A group had indeed set up a 'pain theatre' with 4 stations, where one could be, in turn, patient, public, researcher and computer modeller in a quasi-roleplay. I was struck by the inventiveness and enactment of multiplicity in respect to the body (mentioning Annemarie Mol's (2002) work, but without recognition) and felt the experiential as an important mode of argumentation. The blurred line between doing and understanding.

Elsewhere were more familiar engagements using charts and post-it notes. But all different ways of eliciting, assembling, and representing knowledge. There was a rather plain looking stall, with the title *M40. Using Augmented Reality to Connect to Energy Stories: An Interactive Installation* scrawled in felt tip. It turned out to be showcasing a downloadable app where users can explore a reconstructed 1940s Albertan oil family shack, showing how knowledge can be distributed and transport historical findings using new technological media. It grounded some recent work NCRM has done on potential of VR and AR to impact research methods (See Futures Brief).

Another fascinating stall was *M16. Mobilizing Absences: RefineryAirWatch.org* where scholars had compiled and consolidated knowledge of chemical contaminants in air around refineries. Assembling knowledge in such a way shows where there are (massive) knowledge gaps, hinting at the political and economic influences in producing particular kinds of knowledge e.g. about specific contaminants or between point and continuous data production. Again, ignorance, deliberate or

incidental, shows how we can't know types of air pollution because the data is selectively not generated. Even if it is consolidated, access and meaning making also lag without context. The politics of ignorance.

A track of three sessions *Studying with: building infrastructures for collaborative work* to some degree talked of methods of and for collaboration. Methods could be thought of as transportable techniques for making knowledge, but that would always need some kind of local adaptations. Different modes of interventions were discussed, including metaphor, hesitancy, material props, living rooms, and emotions. Methods were therefore ways that interlocutors might experience or discuss knowledge without consensus. They might work together productively, but to different ends.

AI as concern and kin

Artificial intelligence proved a technology of concern throughout the conference. This was partly due to my own choice of interests in health research, but also it also featured in the second plenary where Dr Meyer spoke of an indigenous approach to AI that would see AI, not as a technology to be fearful of, but as a tool like any other that could be used well, for instance if it was cared for and seen as kin in the quest for aloha 'āina, rather than seen as an independent monolith. Other speakers studying security, agri-tech (where data is 'perfect'), insurance (predictive or near-miss encounters) and web archives (common crawl), among others, spoke of a range of political and epistemic implications arising from AI.

In session 112. *What Is Sociological About AI?* Noortje Marres argued that the use of facial recognition technologies could be denied by UK security services because the processing was done in cameras, but was streamed for processing elsewhere, suggesting a rhetorical deployment of where knowledge is made to obfuscate who is making knowledge. She went on to argue that people behaved differently if they thought FR was in use, leading her to argue it was an antisocial technology, doubt playing on the language of the UK's historical antisocial behaviour orders (ASBOs) and the Anti-Social Behaviour, Crime and Policing Act (2014) regarding behaviour in public. A consistent theme was on the specificities of knowledge – that AI is built by particular institutions for particular purposes and that has parallel enactments in these instantiations (see above arguments regarding militarism and tourism for potential implications of employing AI in these contexts).

Indigenous science and western methods

In writing this report I have revisited and emphasised the emotional and experiential as modes of knowing. I also relived the affective impacts of testimonies of land appropriation, destruction, and oppression. The theme of acknowledgement emerged in the writing. What also occurred to me was the theme of sea, sky, land echoed Christopher Nolan's historical war film *Dunkirk*, which tells stories at different speeds. A week on land, a day at sea, and an hour in the air. Knowledge making is temporal, too, and the intensity of the conference situated in Hawai'i highlighted all kinds of conflicts in contemporary knowledge systems. It took me two full days to travel to and from the conference. Air travel. Academic tourist.

I'd travelled out on the words of family and friends.

Oooo, lucky you, that is exotic.

Hawai'i? You must have made a strong case for your intellectual development.

While I had abstract reservations, the realities were complex and multifaceted. At the same time, some indigenous and western analyses have much to agree on. Drawing on the native Hawai'ian argument for continuity, as opposed to conservatism, I would also

encourage STS to maintain its own historical and intellectual connections as it moves forwards in these uncertain times.

I want to end with one final paraphrase from the second plenary. An audience member asked a question suggesting that western feminism could be a way to interpret and complement native Hawai'ian knowledge. The response, which was about realising how some cultures might be way ahead of others, was something like:

Ah well, feminism didn't do too well in Hawai'i because of the historical importance of the Wahini (female) in our culture.

References

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