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# Surfacing Hidden Histories and Relations using Design Fictions in VR.

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## **Abstract**

This paper looks at how the authors use Design Fiction and Speculative Design as part of a framework to surface hidden histories and relations. This framework also creates the possibility of creating alternate histories and new contexts with which we can provide a platform for the re-examining of hegemonic and anthropic histories.

## **Author Keywords**

design fiction; speculative design; research through design; information visualization; speculative histories; queer utopias; linguistics

## **Introduction**

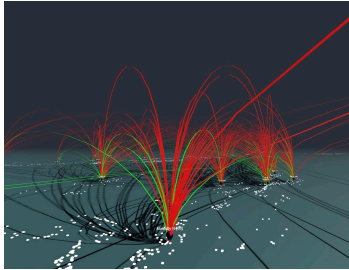
Our research studio at the University of Technology Sydney, the Speculative Narratives and Networks Studio [<http://specstudio.com.au>] brings together a number of Research through Design practitioners to investigate the intersection of narratives, networks and

speculative practice. It is in this context that our investigations into virtual environments as material space are carried out. As part of this research we use Design Fiction and Speculative Design as part of a framework, and while we have an ongoing interest in these materials of design when used to co-create, explore and speculate the future, we have a particular interest in how we can use these to surface hidden histories and relations. This also creates the possibility of creating alternate histories and new contexts with which we can provide a platform for the re-examining of hegemonic and anthropocentric histories.

## **Layered Horizons and Sappho's Ghost**

We will use different projects to discuss our use of Design Fiction in the process of designing to surface histories, relationships and contexts, and this will highlight an approach to a way of working that is central to our Research through Design process.

*Layered Horizons* is a Research through Design and Digital Humanities project that brings together disparate data sets from linguistics, anthropology, geography and archaeology—within Virtual Reality (VR)—to create interactive information visualisations that explore and investigate the extent and nature of ancient contact between First Peoples of the continent now known as Australia and the Asia-Pacific region. There are many outcomes to this multi-faceted project;



Layered Horizons—canoe time and remapping the pacific: Canoe time can be seen as the time it might take to move from one place to another via canoe. Many factors can influence canoe time, including ocean currents, winds, and in our speculative reimagining of the Pacific sea-birds. In the visualisation islands are moved closer to each other, or further apart, enabling us to explore the entanglement of the human and the non-human as well as the living and the non-living.

Our use of the word “entanglement” comes directly from Tsing[15] and Haraway[3], and indicates an inseparability of human and non-human agents within a network that we are attempting to make more visible.

<http://layeredhorizons.net>

the one we will look at here is a visualisation of “canoe time,” and of particular relevance here, a Design Fiction creating an alternate Pacific, in virtual space, where the *entanglement* between canoe and sea-birds is centered (see side panel).

*Sappho's Ghost* is a short interactive VR experience using a HTC Vive headset and Leap Motion hand tracker. It provides a threshold into a speculative pocket of queer utopia, where queer desire is a positive force for bodily manifestation. There are two key spaces the audience finds themselves in: the box, and the slime riot. Throughout the experience the user is guided by a vocal narration that explains elements of the space, such as how the box environment represents the process of algorithmically generated poetry, and then how the exploded space of colour and reflection, shine and slime represents a different, embodied form of textual interaction. By putting queer text within reach in a visceral way, *Sappho's Ghost* aims to rethink discourses surrounding queer cultural production and strategies of meaning making in digital environments.

### Surfacing Hidden Histories and Relations

Design Fiction need not only be the end “product” for an examination of future technologies, but can also be a tool as part of a process for surfacing possible past histories and potential future histories. By enabling us to distance ourselves from claiming to be working with “actual histories”, we can model alternate histories to offer as possibilities that can then be used to re-examine hypothesised or accepted “truths.”

The act of re-remembering via speculative scenarios enables a re-examination to take place. Design Fiction offers useful narrativising tools that can be used to

rethink and investigate the past as well as the future. While useful for “suspending disbelief about change” [12], especially regarding future technological possibility, it can also be used to question common assumptions regarding the construction of history, and how this is used to shape what we think the future can be.

In his critique of the now ubiquitous “Speculative Everything”, Cameron Tonkinwise points out that “provocation [by way of Speculative Design] is necessary, as the very first moment of, but not sufficient for, researching - at some point you need to try to answer.” [14]. This rings true of our approach to using Design Fiction as a catalyst to creating frames or lenses through which to conduct our research. This research is multi-purpose in that it answers both questions of design and how we might design, as well as how design might play a central role in answering the wider questions of our projects (linguistics, humanities, anthropological, achiological, gender and queer studies etc.)

In her essay *Beyond the here and now: speculative design, feminist queer futurity, and critical utopianism* Nicci Yin offers us a critical approach to Speculative Critical Design and Design Fictions, pointing out the tendencies of SCD and DF to ally itself with the uncritical agenda of Silicon Valley (which we might sum up with Zuckerberg’s infamous mantra of “move fast and break things”) with a tendency to “reproduce neoliberal visions of the future.” [16]

In her investigation of humanitarian design as a subset of speculative design she highlights the way that neoliberal precarity, individualism and technological



Sappho's Ghost is experienced as "real" by the audience, in as much as the speculative interface is actually interacted with and exists a virtual space they can move amongst. While there is the guiding narrative telling the story of the coder-poet for the user, the experience emphasises partiality and ambiguity, in which new readings and performances are enabled. Sappho's Ghost is first and foremost centred on relationality and desire, animating historical fragmented material to suggest wider future possibilities. Rather than a flattened appeal to empathy, it works with queer philosophies of critical utopianism [2] and embodiment [1] through its exploration of the affordances of VR.

<https://www.alicb.com.au/sapphos-ghost>

solutionism are embedded in speculative design practices. While we acknowledge that many practitioners take a critical approach to their use of these practices—even in our own work we must continually remind ourselves that provocatively reifying these values for didactic purposes can only offer so much. In her own work towards formulating an alternate approach, she draws on feminist HCI and queer theory to reconsider how speculative design practices can instead work to create visions that sincerely challenge the normative values surrounding a technology or future conceit. This focus on hope and utopianism has been a core alignment in our own work, especially in how we think through designing with and for VR.

It is however important to note that in thinking through possibilities (whether they be historical re-remembering or future-imaginings) our focus remains on presenting alternatives rather than exaggerating norms as dystopian futures. It is also of note that when we speak of hope and utopianism, this should not be read as naive posturing on imagined, yet impossible realities, nor as ignoring the current, increasingly dystopian "state of the world."

Part of our focus on crafting alternative visions or experiences, rather than dystopian manifestations, comes from believing that there is more that can be achieved than what often accounts for "empathy". For example, we are all aware of Chris Milk's showmanship in extolling the virtues of VR as an empathy machine[13], but we, as have many others[4, 7, 11] see this as an extremely flawed perspective taken from a position of privilege[8]. In her astute and thorough review of the framework of empathy in video games,

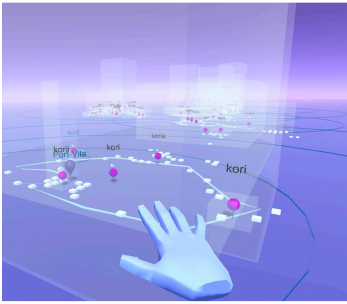
particularly queer video games, Bonnie Ruberg[9] expands on growing critiques to specify the issues with the concept of "stepping into someone else's shoes" for immersive media such as video games and VR, in which the complex lives of others are seen as destinations that can be visited for ten or so minutes and understood wholly. This conceptualisation treats the experiences of marginalised identities as fables or educational tools for a presumed cisgendered, heterosexual white male (considered to be the "core" demographic in video games), often against the will of the creators themselves. In her article Ruberg begins to develop a more specific, considered understanding of affect and relationality in video games, and this nuanced consideration of the politics of emotion in video games is especially useful when working with Design Fictions and VR<sup>1</sup>.

### **An Approach to Practice**

Throughout the design and development of *Layered Horizons* we are able, through a Design Fiction, to propose a model for Pacific navigation based on "real world" data. While plausibility and evidence is important, the moveable island model encourages a consideration of what "could" be, and more importantly a reconsideration of the framework of investigation.

Rising out of our interest in entanglement as a concept, we have been working with the Speculative Design conceit of retangling. Within a project that centres around data visualisation, we have been looking at

<sup>1</sup> An example of this tendency in action in VR was Facebook's much maligned virtual tour of hurricane damaged Puerto Rico [10].



Layered Horizons - If the strength of VR is to create an immersive virtual environment then the surfaces of it can and should feature and exaggerate the liveliness of the real environment and utilise the friction between all of these layers as a productive force. In doing this we hope to also bring to life the instabilities and contingencies of the visualised space. We also hope that bringing in layers of animated real-time data, will help highlight flux as an important destabiliser in how it interacts with, and bring to life a previously apparently "static" environment.

"fuzzier" or speculative data we can bring into the project. One such source of information we have been investigating has been around sea-birds, and the knowledge that sea-birds have long been used to aid in navigation[5].

Our aim here is to flesh out a virtual landscape and to re-entangle language (the central concern of the research as a whole) and other data sets with other auditory and visual information from the place that these data sets come from. As an example, and above and beyond their significance as a navigational tool, local bird sounds become a way to place cultural data in context and trouble the boundaries of silo'd off "objective" human data.

The nature of "clean" data painstakingly tidied and delivered in CSV files, spreadsheets etc. means that much of it is separated from its context—this makes it difficult for us to grasp the actual messy and indeterminate entanglements of the world from which the data emerged, and to consider possible narratives or potential futures or alternate histories that worldly entanglements may engender. We use Design Fiction to create speculative historical retanglings. Another way of thinking about this may be to think instead of a "design conceit," where the "conceit" is a restructuring of reality around (for example) canoe time - reconfiguring through a different spatial relation and understanding of experience. Our focus is on the storyworld and how VR can be used to manifest this alternate reality.

During its initial development, *Sappho's Ghost* used Design Fiction as it is more usually understood: as a VR experience it would guide the user through a fictionalised archive with an extensive invented history,

using an interface that was not fully functional but would operate in tandem with the invented history to construct a sense of plausibility. This fictionalised archive was intended to document the work of an invented poet who used currently existing fragments of Sappho's lesbian poetry to craft new queer poetry using algorithmic processes, thereby critically engaging with the fragility and partiality of queer histories.

Over time, however, the fiction of *Sappho's Ghost* became more and more real, as this intended archive narrowed down to simply presenting the process of algorithmic generation that was actually undertaken, as well as displaying the generated poems themselves in a novel embodied mode of interaction. While the final experience is not a Design Fiction in the strict sense, the narrativisation of the generative process of the poems allowed for slippage and exploration in the design of the interface; and through the vocal narration provided in the experience to guide the user, within the experience itself. The Design Fiction conceit of creating a fictional archive in VR provided provocation that resulted in a queer VR experience that engages critically with ideas of embodiment, textuality and history, as well as presenting a speculative prototype for possible modes of affective interaction in VR.

## Conclusion

Our projects have applied fictionalising approaches to design research projects in VR. Rather than focusing centrally on the technology at hand and speculating on its future impacts, they use playful imaginings to explore possible pasts and animate potential futures, with the core concern being relationality and using alternative modes of being and knowing as structuring elements.

## Acknowledgements

*Layered Horizons* is a project by Andrew Burrell, Rachel Hendery and Alexandra Chalmers Braithwaite. It is part of the Waves of Words project. Waves of Words is funded by the Australian Research Council (DP180100893) and we are grateful for the input of the other project team members: Patrick McConvell, Laurent Dousset, Antoinette Schapper, Michael Falk, Billy McConvell, Matthew Spriggs and Tim Denham. <http://layeredhorizons.net>

*Sappho's Ghost* is the design outcome of Alexandra Chalmers Braithwaite's Honours in Visual Communication project, conducted in 2018 and supervised by Dr Andrew Burrell. <https://www.alicb.com.au/sapphos-ghost>

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