

ISEA2024 Recreating Memory in Miniature

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Abstract

We have discovered a unique way to connect with communities, people and place through the creation of transmedia experiences of memory, objects and space. Our current work centres around reinterpreting memories through miniature domestic spaces, created using simple materials. We translate these miniatures into virtual reality via photogrammetry, forming resonant and uncanny memory spaces. These spaces are further brought to life through voice-over stories and the movement of the viewer's body through these life-sized virtual replicas of the original miniatures. In this artists' talk we will explore the development of this creative process through our current work-in-progress on flooding, memory and the climate crisis.

Keywords

Virtual Reality, Movement as Knowledge, Ephemeral Memory, Immersive Technology, Connection, Collaborative Approaches, Participatory Art, Miniatures, Interdisciplinary Exploration, Flooding, Climate Crisis

Introduction

We have a long history of working with miniatures, stop-motion animation and immersive technologies. Over the past four years we have been working with the creation of miniature objects as a way to explore memory.

In 2021 we were commissioned by the Museum of Australian Photography to create a photographic response to the pandemic. We created miniature sculptures of the rooms we spent many months in during lockdown, based only on our memories, avoiding visual references.

In 2023 we began the development of a new immersive documentary installation work, *The World Came Flooding In*. We developed this artwork in response to the alarming increase in flooding throughout Australia and internationally, informed by our deep concern about the climate crisis. As we developed the work we built on our previous ideas exploring memory through miniatures to discover both a new creative process and a new workshop model.

In this presentation we will detail the work that has led up to this point, our creative process and the associated workshop model we have developed. We will demonstrate that this process explores ecologies of place resonant with the Everywhen, connecting the past and the present through embodied spatial memories and stories.

Background

In our practice we have always sought to immerse audiences into worlds that we create. We have worked with interactive and immersive technologies since we began collaborating more than twenty years ago. We have created interactive film-based installations using choose-your-own adventure style movies (Figure 1), used webcam feeds to put audiences into animated worlds (Figure 2) and created interfaces using repurposed computer mice and soft toys with electronics built in (Figure 3). We've constructed a three-dimensional stop-motion 360 virtual reality animation from cardboard (Figure 4), and made a stop-motion augmented reality documentary about cinema (Figure 5).



Figure 1. *Play With Me* (2002). Screen capture showing live video feed of viewers face transposed into a stop-motion animated interactive film. ©Isobel Knowles and Van Sowerwine.



Figure 2. *You Were In My Dream* (2010). Screen capture showing live video feed of viewers face transposed into a stop-motion animated interactive film. ©Isobel Knowles and Van Sowerwine.



Figure 3. *Expecting* (2003). Documentation image showing modified mouse interaction with interactive stop-motion animation. ©Isobel Knowles and Van Sowerwine.

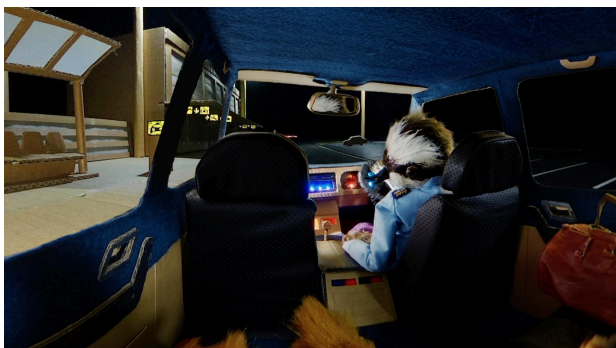


Figure 4. *Passenger* (2019). Film still of 360 virtual reality stop motion animation. ©Film Camp.



Figure 5. *Night Creatures* (2022). Documentation image showing augmented reality stop-motion animated character placed into viewer's screen via augmented reality. © Film Camp.

These works all used miniature sculpture and/or cut-outs to create invented worlds in which we immersed the audience, informed by research and personal experience.

Can't Do Without You

In 2020 we were commissioned by the Museum of Australian Photography (MAPh, formerly known as the Monash Gallery of Art) to create a new work based on our experience of the pandemic. The work we developed for the show, *Can't Do Without You*, was based on two miniature sculptures recreating the rooms each of us spent most of our 2020 Melbourne lockdowns in (Figure 6).



Figure 6. *All the details are etched into memory* from *Can't Do Without You*, cardboard, polymer clay, coloured paper, acrylic paint, wire, fabric 40.0 x 44.0 x 33.0 cm, 40.5 x 42.5 x 23.5 cm, 2021. ©Isobel Knowles and Van Sowerwine.

By the time we made the work, those rooms no longer existed—Van's house was renovated and Isobel's house was totally rearranged. We made a creative decision to recreate the rooms from memory, without referencing photographs, and to create them only with materials we already had in our studio—limiting ourselves to our

existing internal and studio worlds only. We also decided not to employ precise scaling as we normally would, but instead relied on visual instinct and memory to build the furniture (Figure 7).



Figure 7. *Floating in parallel*, Coburg 2021 from the series *Can't do without you* pigment ink-jet print 75.0 x 90.0 cm. ©Isobel Knowles and Van Sowerwine.

The process of building these rooms was revelatory. As we rebuilt these familiar rooms, memories began flooding back both of physical objects but also of events that had occurred. We discovered things about ourselves we had forgotten, and about each other as we constructed our environments. As the work developed, the fact that it was made from memory and was therefore a physical manifestation of our internal psychological worlds became a core component of the process and a new way for us to contextualise our miniature sculptural practice. We discovered a way to bring the past and present together.

The World Came Flooding In

At the start of 2023 we were one of four Victorian teams selected for the inaugural Frame Documentary lab. Over six months and three intensive weekends we worked with a mentor, the Frame Doc team and our cohort of collaborators to develop a prototype for an immersive documentary experience.

As we began to design our creative framework we thought again of the power of creating objects from memory. We were (and are) deeply concerned with the climate emergency, and had some adjunct personal experiences with flooding. Together we had also experienced the sudden and terrifying destructive power of water when we were caught in a rip in 2022 in Northern NSW and nearly drowned.

We were inspired to make a work about the personal impact of climate disaster through recreating rooms destroyed by floods. We created test miniatures, again of

our own personal spaces (lost to time, not to floods) and filmed these rooms being flooded in 360 virtual reality (VR) video. The results of this test were powerful, but raw and in need of a framework to give the experience context (Figure 8).



Figure 8. Test flood scene from *The World Came Flooding In*, 360 video as part of proposed interactive VR experience 2023. ©Isobel Knowles and Van Sowerwine.

We had recently become aware of the possibilities of photogrammetry, using apps on our phones to create 3D scans of objects. We decided to try scanning our test miniature rooms and putting them into a Unity environment, enabling us to experience these miniatures scaled up to real room size in a true '6 DoF' (6 degrees of freedom) 3D space, in which viewers can physically walk around (Figures 9 and 10).

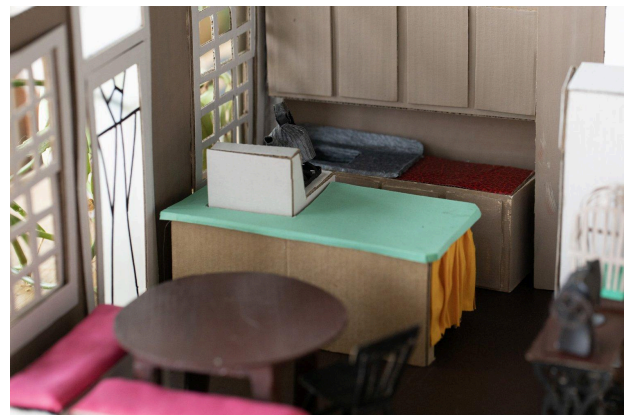


Figure 9. *The World Came Flooding In*. Cardboard miniature, proposed interactive VR experience 2023. ©Isobel Knowles and Van Sowerwine.



Figure 10. *The World Came Flooding In*. Digital scan, proposed interactive VR experience 2023. ©Isobel Knowles and Van Sowerwine.

We put this scan into a virtual reality headset, and were blown away. The world that we had created looked like nothing we'd seen before, and was recognisably built of cardboard and natural materials, yet obviously digital and three-dimensional, very organic looking. The scans are quite imperfect with corners softened and holes and gaps in the meshes. The melted-looking imperfect rooms in the black void of the default Unity universe are beautiful analogies for the way visual landscapes exist in our memories. We realised we had found the perfect medium to explore the feelings of loss and instability people experience when their lives are impacted by floods, and how our memories and stories can help us move forward after disaster.

The final planned work is a transmedia installation that includes miniature domestic spaces, a virtual reality exploration of those same spaces and a gallery of community photographic works created through public workshops. The architecture of the installation is transferable to other themes and situations. The shift between memory, physical miniature object and life sized 3D digital work combines time, place and space.

Workshops

As part of our research for *The World Came Flooding In* we designed workshops as a way to connect with flood affected people and communities. We consulted with a trauma-informed practice specialist on how to design a workshop that facilitated conversation but didn't force people into difficult emotional situations. We learned that creating something with your hands can put people in a more open state. Our workshop built upon the work we did in *Can't Do Without You* where we found that the simple invitation to remember something that was lost, and attempting to recreate it from paper, was a powerful and meaningful tool for deep engagement with stories associated with place and time.

By chance we had a connection with the public programs coordinator at the Lismore Regional Gallery so we were

able to run an initial workshop at one of the most flood-affected places in Australia. We invited people from the community to create a piece of furniture from paper, sparked from their own memory of an object they had lost (Figure 11). We scanned each object and placed them in virtual reality (Figure 12).



Figure 11. *Memory Postcard* workshop, Lismore, Australia, 2023. ©Isobel Knowles and Van Sowerwine.



Figure 12. *The World Came Flooding In*. Scans of miniature furniture built by flood-affected community members, 2023. ©Isobel Knowles and Van Sowerwine.

The response to the workshops was incredible. People were deeply moved by the experience of walking around in our prototype, and many people talked about the importance of conveying what they had been through to others who had not been able to comprehend it. Through our workshops we have now found two generous and supportive story contributors whom we will work with to rebuild a room from their flooded houses and record their audio stories of their experiences.

After running these workshops we decided to include (with consent) a selection of these items with audio at the end of our VR experience, and as printed photographs in the installation, creating a multi-faceted connection to those with lived experience of flooding. When the final work is exhibited these workshops can be run as a unique and

engaging public program, allowing participants to explore objects from their memory using papercraft and VR.

Future Prospects

We were able to run a similar test workshop at the start of 2024 in Rotterdam, Netherlands as part of International Film Festival Rotterdam. The participants were not flood affected—instead we focused on participants' memories of objects and furniture from their past. Again we had an incredible reaction from participants who found themselves accessing memories and having an experience that was uncanny, beautiful and compressed past and present - aligned with the ideas of the Everywhen.

We plan to go into production later in 2024 to create *The World Came Flooding In*. We feel we have discovered a new and exciting creative process that we will first explore through the lens of flooding and climate crisis, with associated public programs available when the work is exhibited. We are also working on a documentary about an old building in Melbourne that will use similar techniques to blend past and present to tell stories.

Authors' Biography

Isobel Knowles & Van Sowerwine's work blends three-dimensional miniatures, photography, animation and immersive technologies in unique and emotionally charged, surreal environments. They create technologically adventurous, elaborately detailed animated storytelling through immersive installations, expanded cinema and VR. They are fascinated by tension that lies beneath an apparently calm surface and how stories and the way they are told can change our perception of the world.

Knowles & Sowerwine's practice includes deep research and community connection. *Night Creatures* (2022) had a diverse range of film enthusiasts creatively telling their moving stories of how film and festivals changed their lives. For their 2019 VR work *Passenger* they interviewed taxi drivers and recent migrants to shape the story of arrival in a new land. Their 2016 work *Out In The Open* portrayed a fictional story of a trader at Queen Victoria Market in Melbourne, devised after spending extensive time with stallholders and workers.

They have exhibited work at major institutions including the ICA, London, the Seoul New Media Biennale, the Art Gallery of NSW and at QAGOMA. They have premiered work at major international film festivals, including at Cannes (where they were awarded a Special Mention), Chicago, Sundance, Rotterdam and Venice.

Their installation *You Were In My Dream* won the 2010 Premier of Queensland's National New Media Art Award. Their 2011 interactive installation *It's a jungle in here* won

an Award of Distinction (Interactive Arts) at the 2012 Prix Ars Electronica.

In 2021 they were commissioned by the Museum of Australian Photography to create *Can't Do Without You*, blending three-dimensional miniatures, photography and animation to explore the psychological impact of lockdown in Melbourne. Their 2022 Melbourne Film Festival XR commission *Night Creatures* won awards at the Australian International Documentary Conference in 2023 and Tricky Women Austria in 2024.