

# The Visit

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*“The concept is strong and attempts to raise awareness of and empathy towards minority/marginalised groups suffering from dementia. The treatment of a sensitive subject concerning a medical condition is dealt with respectfully and responsibly.”*

ICIDS 2021 Jury

# Cultivating empathy through VR engagements with lived experience

## **Abstract**

*The Visit* is an interactive non-linear 6-degree-of-freedom real-time video installation and Virtual Reality experience, developed from an interdisciplinary research project conducted by artists and psychologists working with women living with dementia. Visitors are invited to sit with Viv, a life-sized, semi-realistic, and responsive character whose dialogue is scripted largely from verbatim interviews. The work draws us into a world of perceptual uncertainty, while at the same time confounding stereotypes and confronting fears about dementia. The characterisation has both scientific validity and the qualities of a rich, emotion-driven film narrative. The point of the work is to draw the viewer into the emotional and perceptual world of Viv.

## **Keywords**

*Lived experience, dementia, interactive narrative, immersive media, computer animation, virtual production*

## Entering Viv's world

Using an untethered Oculus Quest Virtual Reality (VR) headset the viewer arrives in Viv's kitchen and is invited to sit down and "stay a while". She adds "I don't see you that often". Viv (Figure 1) is the protagonist in *The Visit*, a VR experience that aims to cultivate empathy and understanding of people living with dementia. Her potentially confabulating narratives and disclosures of aural and visual hallucinations are taken near-verbatim from interviews with people living with dementia as they talk about their experiences of the everyday. *The Visit* challenges the viewer's expectations both in their role as VR user and as visitor/companion spending time with a person living with dementia by subverting expectations that the agency and autonomy of the VR user, who becomes the visitor in this scenario, are prioritised. Instead, the viewer is charged with investing time to sit

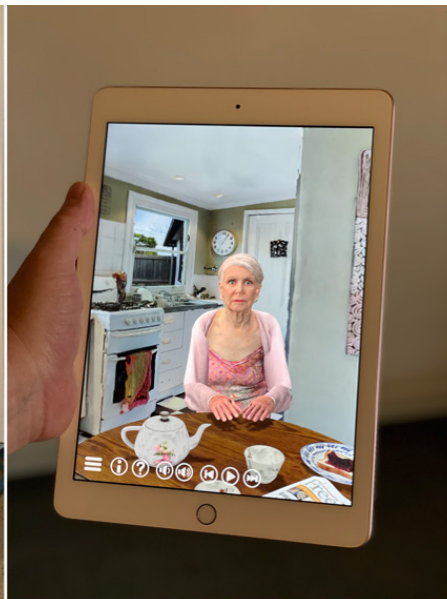
with Viv, and attune to her narratives (Rogers, 1959). In what may initially appear to be a passive observer role, the viewer is challenged with coming to understand how they respond to being in the company of a person living with dementia, and attending to any thoughts, feelings or emotions that arise from their engagement. In inviting viewers to engage with the non-linear narratives that reveal the lived experience of dementia, *The Visit* aims to influence behaviours to overcome the societal stigma associated with this condition.

In addition to the VR version, *The Visit* has been exhibited as an interactive screen-based installation and is also available on smart phones and tablets (Figure 2).

## Virtual Production

*The Visit* was designed and constructed using Virtual Production (VP methods)—comput-







er-aided production and visualisation. VP leverages real-time visualisation of characters and digital sets in combination with live-action capture. It is where filmmaking and computer game technology, or the physical and the digital world meet. Traditional film making practices are merged with current and ongoing advances in real-time technologies to enable creative choices to be made early in the production process. *The Visit* aims at providing the viewer with an authentic experience of engaging with a person

living with dementia by bringing together the verbatim stories of people with dementia in a composite character voiced by Australian actor, Heather Mitchell. The digital character was animated using Motion Capture, and to retain authenticity Viv's kitchen was created from a 3D photogrammetry scan of the kitchen of one of the interviewees (Figure 3). The character, animations and set for the kitchen were assembled with the computer game engine Unity 3D.



## Character

Viv is a composite digital character bringing together the narratives of five women living with dementia. The 3D scanned and rigged character was purchased from renderpeople.com and animated using Motion Capture (MoCap) processes. A MoCap actor performed movements, which were digitally recorded for the purpose of animating the digital 3D character, which became Viv. The system recorded spatial data relating to

the performer's joints. The data is then mapped onto the digital human's skeleton and its skin deforms according to the movements (Figure 4).

For further authenticity, facial expressions and visemes (a set of mouth shapes) were manually modelled onto the digital character's face. This basic repertoire of facial expressions allows the character to dynamically express emotions, such as smiles or frowns, and 'speak' the words of the script, voiced by the actor (Figure 5).

## Recognising agency and autonomy

People living with dementia often recognise they get treated differently when friends, family and people they engage with in the everyday become aware of their dementia as a result of a formal diagnosis or from observing changes in behaviours (Swaffer, 2016; Kenning et al. 2022). People often do not know how to behave. While many people may have a pathological understanding of dementia, relatively few understand the everyday lived experience of the condition. This lack of understanding manifests as a societal stigma and leads many to assume that a person living with dementia is unable to make decisions for themselves, are in a constant state of confusion, or have constant memory issues. But, while dementia is terminal—there is no cure—and the symptoms can become debilitat-

ing, for people living with dementia the time between diagnosis and the advanced stages of the diseases that require higher levels of care, can be productive, meaningful and joyful. People living with dementia can have autonomy and agency and a good quality of life as they focus on “living with, rather than dying from dementia” [Personal Communication, D. Frost – August 2021]. How then can a VR experience address this problem and cultivate empathy and understanding of what it is like to live with dementia?

## VR affordances for cultivating empathy

VR has been positioned as “the empathy machine” because of its ability to facilitate a first person viewpoint that seemingly allows viewers to see “through the eyes of” another (Milk, 2015). While such imaginative transpositions provide illusions of “being in the shoes of”, it





does not necessarily engage with the intersubjective relationships and relational dynamics necessary for the cultivation of empathy. So, in arriving in Viv's kitchen, the viewer does not visually embody a character—used often as the primary tactic for reinforcing presence in VR (Slater, 2022)—but arrives in a virtually disembodied state. *The Visit* invokes a strong sense of presence by drawing on other affordances of VR. It uses 'place illusion', which occurs by virtue of the sensory motor contingencies aligning across the real and virtual worlds making the viewer feel as if they are in the virtual world. It also uses 'plausibility'; the extent to which what is happening meets expectations or 'makes sense' in the context of the experience on offer (Slater, 2022). In doing this, *The Visit* creates a sense of presence that holds the viewer in the space, where they are potentially available to build understanding by exploring the relational dynamics made available to them.

In taking a deliberate departure from the virtual 'body ownership' paradigm, *The Visit* resists the viewer having agency over another body in the virtual world. This serves two purposes. It encourages the viewer to retain an awareness of their own physical body and any emotions, sensations and feelings arising in response to the character whose virtual and perceptual world they are engaging with. At the same time, in attending to Viv's narrative and building an understanding of her relationship with hallucinatory characters, the viewer may entertain the possibility that their disembodied state emerges from their being, in Viv's perceptual world, a hallucinated character.

## Viewer engagement

In visiting someone's home, social conventions usually dictate that we are not free to openly ex-

plore the environment unless invited to do so. *The Visit* retains these conventions. The viewer is not given autonomy to explore Viv's home, rather in this real-time interactive immersive experience, Viv retains agency as she holds the viewer in place, allowing time for the relationship to build. The slow unfolding of the narrative, we propose, has the potential to increase the level of engagement with the character and her perceptual world and this, as demonstrated in an evaluation of audience experience, subsequently heightens empathetic response (Papadopoulos et al., 2021).

As the viewer arrives in Viv's kitchen, she becomes aware of them. She turns face-to-face and makes eye-contact and smiles. She begins to talk and addresses the viewer directly. Her acknowledgement reinforces the viewer's sense of presence, plausibility, and of belonging to this world (Papadopoulos et al., 2021). The viewer sits (in a disembodied state) at the table opposite

Viv, as she offers tea and toast. She seemingly does not wait for an answer and goes on to talk to an empty chair at the table, as if to a child. Viv looks out of the window and comments on her garden shed, or phones her daughter. In attuning to the narrative the viewer may shift from casual observer of the character, to developing an understanding that they are implicated in this relationship. Perhaps as a visitor who she doesn't often see, or a character in her hallucinations that make her, "quite comfortable really". Not unlike computer games and real-world decisions, the viewers' actions have consequences in this virtual world. The viewer staying with Viv impacts on her response and the narrative flow. When the viewer leaves, she returns to her silence, alone in her kitchen looking out of her window, waiting for her next visitor.

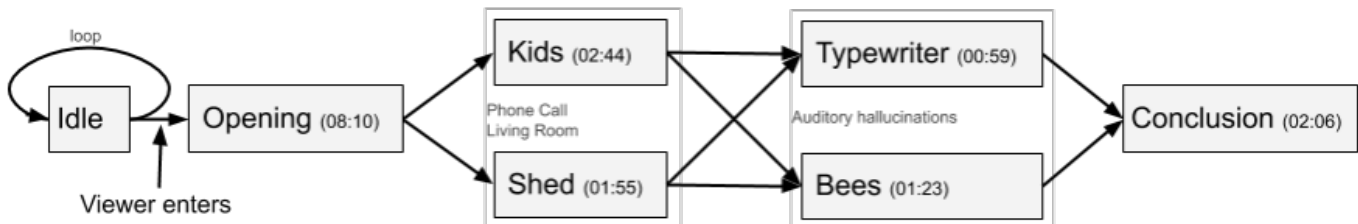
## Non-Linear Narrative

Each time the viewer returns to Viv in her kitchen, the experience is different as the narratives are randomly selected from a range of options. The script is comprised of an opening scene, with two sets of two parallel storylines and a closing scene (Figure 6). The viewer's visit with Viv varies between 13:10 and 14:24 minutes. The opening scene is consistent to ensure that the viewer's presence is acknowledged, and they are welcomed into Viv's kitchen, as she engages in eye contact and exclaims "You're back, come and sit down". The opening narrative sets the scene and provides context for the viewer (8

mins) as Viv talks about the carers who come to her home to care for her "I like Goran the best... he's very funny and I find [laughter] that I get so much support from people who are very funny".

She tells the viewer that she walks two kilometres a day and that she plans to go swimming. While the plausibility of being in the kitchen with Viv remains, the viewer may feel challenged if doubts arise about the verisimilitude or plausibility in the content of her narrative.

The parallel narrative storylines are concise (approximately 1-3 mins) and presented randomly. The central narratives focus on two visual hallucinations (Kids and Shed) and two auditory hallucinations (Typewriter and Bees).



They provide greater insights in to her perceptual world and into Viv's strategies for coping with, and her feelings about her hallucinations; "I was very close to my Dad. I still see him. Sometimes he's standing right there in the hallway. It doesn't bother me. It's quite comforting." The narrative concludes with Viv engaging in wistful, reflection, "I travel all the time, I am always travelling" as she turns to look out of the window as the viewer leaves.

## Script

The narrative script was created near-verbatim from interviews with five women living with vascular dementia who provided insights into their everyday worlds. The interdisciplinary team at fEEL (felt Experience and Empathy Lab) engaged with the audio and transcripts of the interviews, drawing together conversational vignettes which were organised within a loose

formal structure provided by the sections of a musical soundtrack featuring Peter Sculthorpe's String quartet no. 16 with Didgeridoo (Kenning et al., 2022). Many of the stories chosen for the script show emotional fluctuations and tactics for dealing with confusion and resist being informative about dementia as a disease, diagnosis or the pathology of dementia. For example, Viv hears the buzzing of bees. The viewer also hears them. While the viewer may feel confused, Viv's narrative can provide comfort as she acknowledges the sound, makes note of her associations with the sounds of bees, and recognises that this is one of hallucinations.

The script was developed with the aim, not of telling the viewer what it was like to live with dementia, but allowing the words and experiences, challenges and strategies of the women living with dementia to be revealed to the viewer, according to their inclination to attune to what is being said.



*(Merge the auditory hallucination of bees with Sculthorpe soundtrack. Design the sound so that the viewer may hear bees coming from behind their head, so as to induce the desire to turn as Viv does)*

**Viv:** Oh, not the bees again (starts looking around//turning and swatting)...  
*(towards the viewer)* You better watch out...

**Viv:** Dad kept bees... (realising noise not real)... they wouldn't be inside would they?

## Cultivating Empathy

To cultivate empathy, *The Visit* aims to bring the viewer into a virtual space drawing on the principles of plausibility and place illusion, while also limiting the physical interactivity, agency and autonomy of the now disembodied viewer. In this space the viewer is charged with attending to the narrative of the digital character, Viv, and their own responses to what has been said, how and why. This approach offers alternatives to the information-rich, cognitive-led communication approaches so often used for overcoming stigma. These approaches, which focus on pathological dimensions of dementia foreground loss and deficit. In doing this they encourage cognitive responses that all too often culminate in judge-

ment and a tendency to try to compensate the person living with dementia for perceived losses. Whereas engaging with dementia through an artwork which promotes sense-based affective processes that precede cognition can lead to the cultivation of empathy and reveal different ways of knowing and understanding dementia. *The Visit*, then, is designed to engage the viewer in attending to and attuning to what is said, how and why. The viewer is not required to solve any problem or 'correct' any behaviour perceived as resulting from dementia. He is left recognising the agency and autonomy of Viv, the five women with dementia whose words she speaks, and potentially the wider community of people living with dementia.

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- The Visit VR. Free to download for Oculus Quest platform at <https://sidequestvr.com/app/5564/the-visit>

## Images

1. Viv is a digital character based verbatim on the interviews of people living with dementia.
2. The Visit is available as VR, a screen-based interactive installation, and on smartphone/tablet.
3. A real world kitchen as set to provide the context for the character to perform. Created as a detailed 3D model based on a photogrammetry scan.
4. Motion capture and character rigging.
5. Character facial expressions, applied dynamically in line with the narrative.
6. Narrative structure.
7. Excerpt from script developed near verbatim from the interviews with women living with dementia.

**The felt Experience & Empathy Lab (fEEL) at the University of New South Wales Sydney** brings together specialists in immersive media, participatory design, trauma studies and psychology to advance new methods in the study of embodied subjective experience – focusing in particular on the two areas of trauma and ageing. EEL has developed the field of psychosocial design, harnessing immersive technology to examine the nature of embodied experience and its dynamic relationship to social settings. This approach supports the articulation of lived experience in relation to trauma, mental and emotional health, and dementia and ageing – in turn providing a robust knowledge base for the design of creative tools to support psychosocial wellbeing. The felt Experience & Empathy Lab has been established with funding from the ARC Australian Laureate Fellowship awarded to Scientia Professor Jill Bennett, Director of the Big Anxiety Research Centre at UNSW.

**Medium:** Interactive Interface

**Year of Release:** 2019

**Link to the artwork:** <https://youtu.be/iqMhWP8SKT4>

**Artist website:** <https://kerenberg.com/>