DECOLONISING THE DIGITAL

EDITED BY JOSH HARLE, ANGIE ABDILA, AND ANDREW NEWMAN

TECHNOLOGY AS CULTURAL PRACTICE

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TORRES STRAIT VIRTUAL REALITY RHETT LOBAN (VIRTUAL REALITY)

Torres Strait Virtual Reality (TSVR) is a new and innovative way of learning and depicting a Torres Strait Islander experience. It provides access and insight into aspects of the Torres Strait culture, stories, customs, practices and viewpoints in a highly visual way through virtual reality. My game has sought to capitalise on the passions and enjoyment of video games held by our younger generation of adults and children to make learning a much more interesting journey. I hope TSVR has helped promote my community and the Torres Strait Islander culture to a wider audience and highlights our unique culture, traditions and history which few tend to know about. I provided the game as teaching material for several different and varying courses at the University of New South Wales engaging both Indigenous and non-Indigenous students to share our knowledge and foster understanding of cultural diversity.

TSVR illustrates Indigenous environmental knowledge of seasonal, plant and animal life cycles and how this aligns with the island surroundings like the stars, constellations and the wind. The game also depicts several cultural aspects and phenomena in the Torres Strait such as Tombstone openings, trade between Papua New Guineans and the Torres Straits Islanders, traditional hunting practices as well as characters from Torres Strait stories and legends.



RHETT LOBAN

Creator / Researcher / Educator

Rhett Loban is an Associate Lecturer at the Department of Educational Studies at Macquarie University. He is also currently completing his PhD at the School of Arts and Media in the University of New South Wales. He is interested in the use of new and unconventional technology such as video games and virtual reality for learning and teaching. He is a Mainland Torres Strait Islander born in Brisbane whose father is from Thursday Island in the Torres Straits and mother is from Dundee in Scotland.

INTERVIEW

Josh Harle: Do you want to talk us through your project; the world and what the player would be doing in that space?

Rhett Loban: The game has different elements, but at its core, it's a cultural journey. In the Torres Straits, we have something called a Tombstone Opening. About a year or more after somebody has died, it depends on whether the family can afford it, after someone has passed away you have an end of a mourning period, but it's a little bit like a celebration with feasting and dancing and singing.

In the story, one of your family members has died and you're going to a Tombstone Opening on Thursday Island and you're going on a journey to get all these different items that you would need: drums, mats and spears for the ceremony and for the celebration. You're just going through and interacting with or encountering all these different things. When you go to one island you're looking for maybe drums or mats and they may not have them there, so you have to go to the next island. Then you have to get dugong and then turtle for the meat. In the game you get one at the reef and the other you can get near the beach. Typically you'd get it in the water but for the sake of gameplay we had some of the turtles on the beach. That's the journey, the cultural part.

There are other things in the game as well There's the Indigenous astronomy aspect, where you'll see the constellations in the sky and we've tried to make that quite authentic

in the position of where it's located. Those relate back to navigation, and the constellations would shift in the sky to indicate a different part of the season, which is also another indicator of events happening, like fish are getting fat or turtles are laying eggs.

Within the game different elements are interlinked, for example, the constellations themselves aren't just a bunch of stars; they represent different stories. Like in most cultures the constellations represent characters. One of the constellation characters you can find on one of the islands and you can encounter a mix of supernatural beings on islands as well. So there's a whole bunch of different elements that are there.

JH: One part of the game we find really interesting is that the tasks you have to perform are narrated to the player by your father's voice. So the cultural knowledge of the game is being taught possibly similar to how you learned it.

RL: Yeah, that's right. So he's basically guiding you through the journey, how you get from island to island. He's there and he is explaining the stories or his environmental knowledge, explaining everything.

Angie Abdilla: With the various stories within the astronomy, how is that experienced in the first person?

RL: You can either look up at the stars and you can see them there. Not all the stories that are in the stars are



told on the ground, but we talk about the characters in the sky. So, we'll talk about Baidam the shark who's in the north or we'll talk about Tagai who's in the south. There are obviously stories behind that. Tagai was in his boat and there is a story about how he got there and he was travelling with maybe 12 or 13 other people and they did something bad and betrayed him. He ended up killing them and then, if you look at the opposite side sky of the sky, they are represented there, like 12 or 13 stars. So, there are stories like that, but perhaps they are not illustrated as completely as I would've liked to in the game journey.

You are told parts of the stories, but there are other stories that are there. So you're not told the entire story, but you encounter characters within the stories, or you encounter elements of those stories' journey. There's another story, it's a giant called Wawa and if you go to one of the more northwestern islands you'll encounter Wawa. But that in itself is a story on its own 'cause there's a whole thing

where he stole a turtle from people who had caught a turtle and then they ended up running off with the turtle and then he chases after them. But in the game you don't actually encounter that whole story, you only encounter elements of those stories.

JH: And from playing the game we've heard certain parts of the story told through the voice of your father guiding you in where to go and how to negotiate the spaces.

RL: Yeah, he is guiding you through and telling you how to navigate. Obviously, there is a mini-map there as well if you're lost, but my initial intention was that the stars would guide you and when you get to each check-point you would be told where you have to go next. The original intention is that you use the stars to navigate and find out where you need to go and there will be signing there to understanding the traditional navigation and constellations.

AA: What inspired you to create the experience, and who's the game for?

RL: I created the experience for a few different reasons. First off there wasn't really that much Torres Strait Island digital entertainment or digital media out there and even generally there's not even that much Indigenous media out there. So, I felt there was a gap and opportunity to contribute something to that space.

Another reason is VR was a new and trending thing that came out and I felt it was a very experiential platform



to do justice to the way Torres Strait Islander or Indigenous people might have passed down knowledge. Astronomy is a very visual thing, you look up at the stars and you can see the stars. You're putting on these goggles and you're looking around and you're being immersed in that space. I felt the way that knowledge has been passed on and the way that it's been done in the past at least, it's very true to that sort of medium.

Other reasons would be practical in that I had the ability to make it myself. I had learnt maybe a year before how to work with *Unreal Engine 4*, so I thought "Oh what do I need to do" and the transition from just taking it from a game to VR game. Technically it's not a big thing, but in terms of design, there are obviously bigger complications. I found that out while I was doing it. I had the ability and it was much cheaper and accessible to get the technology and to create the game.

AA: What were the complications specific to working in VR? Design or conceptual?

RL: It's got to do with VR in general. There are other people that have come out with games, and you know vou can have vour user interface and there are general things that you can have. But VR is this new weird thing around the world - it's an open world to teleport. Like SkyRim VR, they basically just teleport around the map. I don't necessarily really like that, so I thought a controller would be good, but this brings in issues because there is a disconnect between what the people are doing in the world and what they are actually seeing. There were issues around that and working in VR. A lot of people had trouble with the journey as opposed to if you created a generic, normal non-VR first-person game.

JH: Maybe you can give more of an overview of the journey, to help explain why it's so much about travelling between these different islands. Why would you say the teaching is so much about different places and that journey, especially in the context of the ceremony where you have to go to the different places and pick up different things? Why just sitting in a room with your Dad telling you a story is not the same learning experience.

RL: Generally moving between the islands, I guess it's something that's unique to the Torres Straits. I'm born in Brisbane, from the mainland, and my father is actually from Thursday Island, but if you trace my ancestry back it comes from two different islands. We have ancestry from Mabuiag Island which is in the west and then we have ancestry from Boigu Island which is north. If you look at some of the Torres Strait Islands, there's relationships and there's things that go between those islands. It's important because even though we're from Thursday Island and Thursday Island's the commercial hub or the administrative hub, a lot of our ancestry goes back to these different islands.

Traditionally within the Torres Straits were certain language groups and people know you're from certain islands, but we all identify as a unified people. So, going to the islands it kinda tells you that there's the whole islands. It's just not by itself, there is a whole area and it's all interconnected and linked in different ways. So, even when you go to the first island, you're trading with them, so it's not just you're on your island and that's

it. I think even in the game itself it's interesting to go from one place to another. Like ideally something I really would've have liked, but I didn't have the time or the resources was to really make each island unique, 'cause if you go to some of the islands some of them won't have that much vegetation, they might be made of coral clay or it is a very rocky island. On Duan Island that's where people go to learn how to use dynamite to practice for quarrying and mining. So each island has their own characteristic and there is something unique or different on each island.

JH: In mainstream games, the experience of travelling between different places and especially that environment with islands you normally get from games like Far Cry is where your engagement with those different spaces is being a basically insidious invading force. The reason why you're going between those different points is that you're attacking this thing on this one and attacking this thing on this one. Or the idea of a home, you know you might start out in a valley, which is where you're from and then be forced through whatever dramatic reason to travel to these different locations. I think it's fairly unique to have something where you're traveling through different places not as an invader or not as someone whose exploring this place that's new as an outsider, but for there to be a sense of your background intricately woven between all of those different locations. So its distributed amongst all of these different places.

AA: Would you describe it as almost like a cultural mapping process? The way in which you're navigating through the experience, being directed through the various different islands, it's not, as Josh's said, in pursuit of the all mighty conquer, or the pursuit of mass killing. It's something radically different.

RL: So, typically when we think of native title we think of things like land rights, but it's also your right to exercise like cultural practices on the land as well, and the angle that they took on that was that, 'cause you're going on a Tombstone Opening to get all these different things you'll get Papua New Guinea drums and spears from Papua New Guineans that come over. You know Australia is separate from Papua New Guinea, so there typically would be a border and you'd have to go through that, because those cultural practices were in place before colonization, there was a treaty to facilitate that.

That might be something that could be seen as a native title journey to continue those cultural practices or if it's something like hunting dugong or turtle, which is within the context of doing it for, 'cause that's how we sustain ourselves and we don't necessarily have access to fresh meat. That's within the context of this Tombstone Opening, like the celebratory sort of thing. It's something that we've done and that we've always done so that's another stance that you can look at it from the journey.

The way that they looked at it in the education class, was from the process of creating the game. So, here I can go through the protocols that you have to adhere to when you're making any sort of product or if you're in a community, there are certain things you have to do. It's no different if you're making a product either. Going to an Elder on board or consulting different Torres Strait Islanders, I went to general Indigenous organizations as well to see what they thought and then I'd go ask parts of my family and tried to get consent there too. They were looking at it like, if you're doing anything with any Indigenous content it's just being respectful about it and understanding there are certain protocols for different people.

So I think that's the way that they were looking at it 'cause it's a game, it's something different from just going into a community.

JH: Would you say it's more than documentation because there is a potential for works to be more than a transliteration of culture into a form of documentation? Let's say you can make the case that your experience reflects the way of teaching knowledge, and the way in which maybe you would have learnt about it through your Dad telling, through travelling between those different islands, the fact that that way of teaching is built into spaces, means that it's actually practised culture so that its generating new cultural knowledge in itself?



RL: Yeah, absolutely. One of the things, at least in the Torres Straits, for some Torres Strait islanders culture is perceived as a tree. So you have these roots at the bottom and these are like traditional or age-old knowledge and it feeds up into the tree and out of this comes new branches and these new branches for me it's kinda like new forms of art and new forms of expression. But the branches themselves don't represent the exact thing underneath.

So it's a weird mix of something new, but it still in its essence has something old or something back to tradition there. So yeah, that's the way that I would see my game, is that it's this new branch that's coming out and there are familiar elements there, but it's not gonna be completely a representation or a complete look back, there are new things in there as well.

Even with the characters, I had to make do with what I could, like the Dogai. The Dogai is a witch and she's on the islands. So, in one of the stories she must jump into the ocean as she turns into an octopus so I was thinking how could I represent with maybe these generic models? How could I represent something like that? So I knew that sticking in an octopus and covering her in shells and all sorts of other things. No, but that's not what a Dogai looks like or at least not what artists in the books say what a Dogai looks like. But nobody really knows because it's their own interpretation journey so it's just what people think.

JH: Super interesting to talk about that process of telling the stories in a different medium and how you negotiated that. It may be interesting to think, was that part of the consultation as well, where you were talking through with other people about what would be an appropriate way to represent these characters?

RL: Yeah, well I think that was me also discussing with my dad because the way that the Dogai is represented in the story is that they have really big ears. They use these to cover themselves, to disguise themselves as a rock or to do different things. So this was one thing that was there, but we built a model for the ear, but it didn't really work. It was just like a solid object and it stuck out. It didn't really act like a big ear would act, because when you think of the big ear, you might think it might flop down and then it might wave around and do stuff. We didn't have the capacity to build in animation and do all these different intricate sorts of things. So we just took creative license and said, okay well what are the other, what's the story about. Then we were thinking, how do we build elements and what would it look like if it was in that?

I was talking with my dad because he's the one who... he tells me the stories. So I have knowledge of the stories, but he's the person that has them all. The ones that we read about, that's another thing itself. Obviously, we also get it from other places, but we thought, if it's like that, then maybe we can have an octopus because he goes into the ocean and then shells. Or, if it's the Dogai from the guinea bird's nest, or guinea fowl, it's a bird, but they live in this big mound. Then, normally in the mound, they have things sticking out of it, like leaves or palm leaves or something like that. So then we thought, for the Dogai, we can put it covered in leaves. So there was a discussion with my dad about that and then interweaving those elements into it as well. I think.

AA: You've mentioned before that there's a different story when you're reading texts to research cultural information as opposed to the process of your Dad sharing these stories. Can you describe your research process?

RL: Yeah, so we get a lot of myths from looking up things on the internet. What they used to do is they used to have a lot of books. So we looked at lots of books, and everyone has their own depiction of what a Dogai would look like, so that gives you an idea, but when they're telling you the stories, it's obviously your own imagination and it's something working, and it's something different. So I guess, if I'm told the stories, I have my own vision of what it might be like, but a lot of the stories overlap or they're not consistent. There's variations between them, but the stories are out there. So the ones that he does tell me, you also find in the book as well.

I guess the difference would be, if I'm told the stories, I have my own idea of what it might be like, but if you read it, then you obviously think about the picture and how it all comes out.

JH: There's an interesting element of your VR where it's your dad talking you through the things you have to do as part of the ceremony. So how do you think it's important for teaching this cultural practice. Your character in the game is Indigenous, regardless of whether the actual person playing or experiencing the game is from

an Indigenous background or not. The character that you're playing is someone who's part of this culture, related to the family member who's died, with an Elder talking through these things. It's not too dissimilar from games like *Grand Theft Auto* [GTA] where you're put into a position of a particular character with a background very different from the majority of people who'd normally be playing that game. Do you want to talk about that experience and how it would work for teaching as a way of communicating that culture maybe?

RL: By being placed there. Yeah, I guess, like you said, because you're placed there. You're immersed in the culture and you're having to go through the cultural, if there is such a thing like this cultural process of the Tombstone Opening and going through those different elements, into the different islands to collect and do different things.

AA: Was it a consideration when you were designing the experience, that the personal experience was adopting your persona, your experience?

RL: I never thought of it that way, but now that you say it, I guess it is something maybe akin to that. We originally actually did have a story set out. So you would take, I think the guy, we might have named him, his name was Gith I think. The original story, he's from Mabuiag Island, which is the island that you start on, and he's going to the tombstone on the Thursday Island. So you actually do have the character, but there's no real

exploration of the character's story or anything there. So, in essence, you are put in this place and you're not told much about the character's background and there isn't that much there I guess. You could see it as my experience to some extent, but I never really intended it that way. It was just that you were in this person and you just had to go through this cultural journey and you encountered all these different things on the way.

AA: How are the interactive elements of the experience important in telling the story or the work?

RL: I think it probably worked more into the natural world. The understanding, the natural science or the environmental science. Those are probably the more interactive things that change in the environment, and tell you about the place or the islands, I think. So, as I said, when you get to one checkpoint, I try to integrate a tidal system where the tides will rise up and down depending on the day and night cycles. It must be every day, so 24 hours, the tide rises four times, every time. It doesn't do it at the same level. It goes up and down, but it might go higher, like really high, and then very low, and then a little bit higher, and then a little bit lower, and it goes back up to high again. So that's one of the interactive elements that I've put into the game to try and maybe illustrate the different issues or environmental things that affect people on the islands.

For example, when you go up onto the beach, you may have to wait for the tide to go down, or for the second tide to come up before the boat can actually take off. Or it might be something like, you have to move the boat out far enough, because if you don't move it out far enough, then vou're going to be stuck on that island or stuck on a sandbar for like 24 hours until it comes back up again enough. That's one of the interactive elements. Then, the other thing would be, when you get to a certain checkpoint, there's a change in the seas, so you'll see a shift in the stars or in a constellation that tells you what's happening. So I think the interactive elements there, that change based on the player's behaviour, is more of the environmental sort of stuff. You encounter the supernatural beings and all of that, and you're told the stories, but it's not like they chase you around or do stuff like that. Most of the interaction. I feel, comes out of the environmental knowledge.

AA: On arriving in the game, are there instructions guiding your purpose for your mission?

RL: So you're basically guided by my dad's voice. So that's where you're getting a lot of the instructions from, being guided by the voice. Like I said, you have a mini-map there, but it's basically going through and the voice is telling you these pieces of knowledge or where you have to go to next and maybe the significance of why you need to get there and what will happen when you get there and what you need to watch out for.

JH: From memory, it starts with a place in the context of an explanation

of the overarching goal you're trying to do, getting these items for the ceremony.

RL: Yeah, it explains what a Tombstone Opening is. It explains like you said, why you're going to all these different places and what you'll need to get. I think I've even placed a tombstone at the beginning to illustrate the purpose of the journey as well.

JH: When you're talking about building this game, you talk about things like representation and how you want to represent different figures, but what does it mean to have this world and these actions represented in VR? Did you need to take extra care to communicate something? Did you actually show any real person represented in the VR experience? How did you explain what the implications of having it in VR as a game would be to the way that it was communicated?

RL: The way that I actually see it, because it's an educational material, I actually don't see it any different to, say, a *PowerPoint* presentation or some sort of educational or learning material like that, that any other lecturers or educators have made. I would say it obviously has a lot more steps than any other lecture material would. I got my Dad on board. I talked to a lot of my family. I showed different Torres Strait Islanders and other Aboriginal people the game and I consulted with two other Indigenous organizations as well.

So I've gone through a lot to do it, but

the way that I basically see it is, it's still an educational medium. If I was to go commercial, or I took it into a different sphere. People asked me whether I wanted to exhibit it at the library. I thought maybe that's okay at the beginning, but then it's taking it somewhere else, because people charge money to get into the library. So then it's charging money for something, so it becomes an entirely different beast when you start doing that. So the way that I've always seen it is it's educational material, it's really no different, only the way that it's presented. If the content is the same and you reference people or if you cite people or something like that, it's no different. But I obviously still went and took a lot of precautions because that's the protocol as well, but I still did all those sorts of things because that's just the respectful thing to do and it's covering myself. So there were extra precautions I took, but in the end, it's teaching material.

JH: So, if you're talking about it in the context of this, you have already some control over how it's framed and how people have to have some sort of framed experience of it and you have some control over the knowledge and who is getting access to that knowledge and the context in which it's happening. Can you talk more to that?

RL: Some people from Nura Gili at UNSW were really good and they were on board with the game. Then, I'm a part of another organization called Indigitek. It's basically getting Indigenous students involved in STEM

[Science Technology Engineering Mathematic] related career paths or interests. So I actually did a presentation of the game at one of their events. So they were on board and they were giving a little bit of feedback about that as well. So people from there. So those were the two organizations, but then again, I'm talking with different people.

I'm talking to different people in my family. Including in the Torres Straits, so there's people even back there. Then, another Torres Strait Islander down here in Sydney played it down here. So we're still talking with different people and getting feedback and going through the protocol and the process.



JH: I'm curious about how you handle the potential misuse of the technology, what the consequences of making this would be, and how you communicate these possibilities to members of the community when you are seeking permission. Say you put it out for free, for example, so it wasn't

so much an issue of the commercial benefit or the financial benefit that you might get from this, but just the fact that there was no control over what was being put out there, the potential for misuse, you don't have any control over how people read or use the work.

So, for example, all you have to do is look at things like GTA videos where the power to move around the space and use it in your own way is something that allows people to do things like create their own meaning from the way in which they interact with that game. As funny as it is to see people tea-bagging in an FPS game, where you kill someone and then make your avatar rub itself suggestively on them.

All of these ways where people can be completely irreverent to the original point of the game. That's just funny to see it in a commercial game where the significance of it is just there for entertainment, but the possibility of that in something that is more of a serious game, more communicating something that's important, is definitely there, I would say. People are amazingly good at inventing new ways of being irreverent, it's difficult to speculate.

On the basis of what people do to games at the moment, the field is completely open to that. Just things like killing off important story characters in a game and celebrating the violence if you can figure out how to perpetrate in a game is something that you don't have any control over.

It's hard to speculate, as I say. It's like the set up of, well, how much can people be assholes. The idea is people are amazingly innovative in the way that they would be assholes, especially with a medium that allows such a level of creation of meaning through a practice of the space. How much do you try to communicate these possibilities to participants and Elders? Yeah, it's an open question.

RL: You can't control people in what they do. It's just like you said. They'll come up with new ways or the most creative ways to mess up something. I can create the game and people can abuse it. There's always that vulnerability. The vulnerability could be a video being read different, they can overlay stuff on a video and put different silly things in there, or they can put voice-overs or stuff like that. So I guess there is that opportunity for people to abuse a game or put it in a negative light or something like that. I can't control the people. It's just me putting my thing out there and that just carries the risk of that. If people are disrespectful, then that's their own issue, or they need to sort themselves out.

I think if I was to go commercial, and I did release this, I'd actually be targeting schools. I'd be targeting educational institutions because that's where this would go. I've just got the *Oculus Store* [to share VR games] so I might even do something on that in the future. So I might put it on the *Oculus Store* or something, but the real people I'd be targeting would be primary school and then

high schools, and then maybe some University stuff. Those are the places I would be going.

AA: Are there any plans in place to do that?

RL: I haven't done anything yet. I'm talking with a couple of people but I'd ideally like to release something maybe in more of a mobile app as opposed to the current one, mostly because it's more accessible and it will get it out there. I haven't done anything yet, but I plan to do that. So maybe in the near future, I'll have something and I can do that. I was thinking I might do, instead of doing a big game, I might do modules. So I'll focus on one particular element, so one thing might be astronomy. In the game, if you go into the ocean, you can actually see crayfish migration happening as well. So I thought that might be another cool thing. Then, there's a couple of things there that I want to do. So that will be in the future.

JH: You said that you got introduced to *Unreal*. How did you originally get introduced to the medium?

RL: I think I must have played something. I went somewhere and I must have played something and I thought it was really good. Then I thought, I might have a VR, so I got it and I started making a game and then I was able to make something. So I got into game making through the class that I had to teach, but I can't remember what I played. I must have played it somewhere. I thought

it was really cool and then I thought, oh okay, maybe I can make something like this.

JH: For most people, from the creative background, it will be a question of how did you get into the technology. If you're coming from more of the technology side, with the competency of doing that, maybe the question should be how did you start thinking about using it as a culture of storytelling process?

RL: I think it will probably go back to the thing that I was talking about in the beginning. Nobody's really done anything about Torres Strait Island or Indigenous games in general. There's not really that much out there. There are some things like depicted as one-offs in the game or maybe yeah, there's maybe little bits of things in there, but nothing really substantial. So I thought, oh it's a story not really told. I think there's some interesting things about the environment to be said. So that's how I started seeing it in that way, is that there is nothing really there, so why not talk about it.

JH: Do you have anything in mind for inspiring examples of digital media work that helped you think about what you're working on now? Even if it's not specifically Indigenous, is there something in any particular way that you're like, this is working really well?

RL: You mean something I saw that's from a non-western perspective that I liked or something like that? Yeah, I know there are obviously some things



out there. There's a lot of Native American ones out there. So I think like Assassin's Creed, in one of them you play a Native American. There was another one, I think it's like an Inuit girl and she has a fox [Never Alone (Kisima Ingitchuna)]. That one was quite well received, but there's not really that many that I've played. Most of the games that I actually play are more grand strategy games.

They're probably, talking about western perspectives, they're probably the worst type because they're built around the idea of empire and conquest and expanding and colonizing.

JH: But as you've said you can at least do alternate histories with those?

RL: You can. In fact, I even made a mod, and I inserted Indigenous people into there as well. Even then, it's still hard to play. It's a good game

because it opens you up to the idea of understanding different people around the world and people you wouldn't have otherwise known about if you didn't have access to this big map. At heart, it's still a very Eurocentric game where it's all focused on Europe and expansion through conquering as opposed to maybe through building tall. You can do it, but it's easier to just expand now.

JH: I think we talked before about how I play *Civilization*, where I just stay in a little spot and develop all the technology and culture that I can, and then die basically because the militaristic other nations come and take over. That's my ideal, just sitting there developing science and culture. So working on this project is a very distinct difference between that colonial strategy game perspective and what you've been doing?

RL: Yeah, it's very different. In some ways, I've obviously inserted Torres Strait Islanders into the game, but I guess, if you're looking at it at a super realistic level or way, in some ways it may be hard to represent those people in those things, because the way that those games work is that there are like states and then you can control the state. Some Indigenous people have that, so we did have that in the Torres Straits. There were islands that people controlled and land was passed down, but in some ways, it's still hard to reflect that view or the way that the people are represented through the journey. So maybe a VR view to me is more a representation of Indigenous culture, than a grand strategy game.

JH: That's a really excellent point of comparison and reason for using VR.

RL: That's the contrast that I would see is that, even though I love those games and I try to put it in, it's still hard to reflect them in some sense. Do you know what I mean?

JH: Yeah, that's a really good answer. Also, you mentioned, and I'd completely forgot to follow up, that one difficulty in developing your environment is the fact that there's prefab models of all of these sort of western characters and objects that, for you, when you had to create it all from scratch. So it was actually a massive effort to create representations of people and things, because they're just not part of this library that everyone has access to.

RL: Yeah, that's right. So when you play the game, you will not find any people models in there because tropical islands are like everywhere in the world. Or there's vegetation or there's sea creatures or deer or boars or whatever. They're all generic models and they're everywhere, but even just creating a simple generic sphere or drum took a while, but from what is in my budget. I could have gotten my students to help me. You're almost better off buying the models as opposed to creating them yourselves, because there's so much effort involved in that. So yeah, I deliberately steered clear of any people models, because there wasn't anyone there that looked appropriate, because the Torres Strait Islanders are a mix of different people, you'll typically find they look quite Melanesian. There's nothing there that really represents Torres Strait Islanders in the islands if you went there now, what they would typically look like.

So, in some ways, I feel I didn't have anyone there. There were African Americans there, but they're not the same people because they're all dressed up. They dress differently. They're like in business suits and I'd have to have someone walking around in a business suit!

AA: You say it's more beyond the cultural artefacts that you didn't have access to, to tell the story most accurately. Would you say it's more of an issue to get the intention and purpose of the game, and the direction all the users experience, because, essentially, the cultural

artefacts all have a huge amount of assumptions built into them and only represent a tiny part of the world's culture. So how much did that hold you back as opposed to getting the user experience down pat?

What were the obstacles you overcame creating a culturally rich experience that's different to this first person, very Eurocentric, conquest type experience that games are renown for? How did the lack of access to culturally appropriate artifacts impact on the development process?



RL: Obviously because I couldn't access the authentic weaponry or even just drums it definitely impeded what I could and couldn't put in. To some extent, it did determine the way that it went, in the way that I designed the game, but to some extent, it didn't. If I had people there, it might have affected it and it made it more realistic. Some of the comments that we got from the people in the feedback is that they wanted people in the world and they wanted people

to inhabit the world. I couldn't do that, so I didn't put them in, but I think, if I were to put them in, it would change the experience, but I wouldn't have to shift all of my stuff around to change it for those people. So it didn't impede what I was doing, but it would have made a better experience.

AA: The purpose is your relational experience to the environment that you're in. That's more important than the focus on the quest and the cultural artefacts that you're collecting.

RL: Oh, this experience in general. Yeah, the travelling and going to each place, and then seeing the different things. I think, yeah, that's probably more important than something small or maybe.

AA: It comes back to your relationship with, and understanding of how you're connected with everything, like the tides and the stars. It feels like it was the priority, as opposed to getting hung up on the fact that you don't have access to the-

RL: The models or stuff like that?

AA: Yeah, yeah.

RL: Yeah, that's right. So the game experience in itself, that's core and I think that's the thing with most games, isn't it. It's designing that experience and all the aesthetics that you add later. That adds to it. There is something like having the authenticity there to make it really nice and feel really realistic and unique and authentic to its own thing

but, in itself, it's the experience and going through it. Yeah, I think you're right. It's probably more the process in going through it that's more of a cultural experience as opposed to necessarily all the aesthetics that would be there. It adds to it and it would have been way better if I did have it, but I still happened to make a game without it.

JH: The reason why I'm particularly interested in this is because it speaks to Ramsey Nasser's writing about programming in a non-English language basically. The idea is that, though it is possible to do it, there's a huge hidden cost to try and do things counter to what the dominant culture of producing these things is. So, yes, you can program in Arabic, but basically, you don't have to have access to any of these libraries that you would normally use, which doesn't make it technically impossible but it makes it very, very difficult and you need to fight against that.

It's very interesting to think that there's this hidden extra effort you need to go into to tell you're own stories because what you're working against is basically a landscape of all of this stuff that's reproduced over and over again. Over representations of western history, over millennia of ancient pottery up to what have you, suits and things like that, that you just don't have access to the equivalent of. I find that deeply interesting as something to make people aware of. Related to that, do you have any advice to people starting out using this medium for telling their stories?

RL: You really have to think about the story or the game that you're going to have, because I think some games just flat out won't work or some ways of storytelling or some ways of doing things in the game may not work. So I think my game, to some extent, didn't really work, to some extent because of the way that you use the control. About 30% of the people got sick. So, that's a huge part of my audience that I lost just by using the controls.

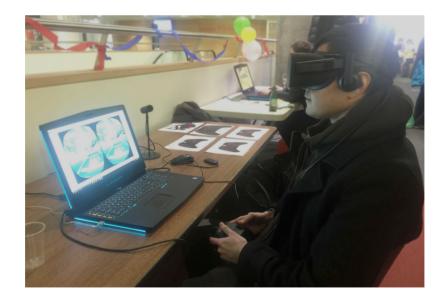
They get sick at different times. Some would be two minutes, some would be fifteen minutes, others could play for an hour, but there were a group of people that would be consistently getting sick. I think the later class groups, there wasn't really that issue. We started getting people, maybe only a few people that started getting sick. When you play VR, depending on, typically for the high-end VR, there's some sort of disconnect between what the person's body is doing and what they're seeing. So even though they're moving in the game, they're not moving their bodies, so I think there's something there, like they get dizzy. It varies. People react differently. Some people get sick and they get dizzy. Other people start sweating a lot, and I mean a lot, and you can see sweat coming down off them or you put it on and you can feel it. So people react differently to it, depending on what it is.

I feel like it's hard to say. Even, I think the way that you react in the game is different to how you would move around in the world. So, say in a game, you can run right up to a wall or you can run up to a tree or something like that, but if you were running around, you wouldn't run up to a tree and then put it straight up to your face. You wouldn't run into a tree or run through it or something like that. And people got sick when they did that, when they either ran into the tree or through the tree or into a rock or something, because you wouldn't do that in real life. Something like that.

Then, there might be issues like, in the beginning, it could be a testament to VR, but in the beginning, we had the water and you put the boat on the water, but there was a setting to make the waves choppy. So, when you got in, it was so choppy that it started moving around like you really were on a boat, and then you get sick straight away and you'd have to take it off. So there'd be stuff like that that you'd have to be ultra aware of as well. It

could be a testament to how good VR is! So we had to put those down, but there's just certain stuff in VR that doesn't work or your body is different from what you're experiencing and what you do in the game would be different from how you would do it in real life. So then, in some sense, it might be good to have a teleportation thing, where you teleport around. Then, of course, it breaks the emersion of being inside that game.

JH: Some of it, I'd say, is around design of that relationship to space. It's totally necessary for yours to be able to move through big open spaces. When you see things like *Fallout 4 VR*, where they've retrofitted this huge commercial game for VR, it's disappointing to see that they haven't thought about what that requires. They do things that are basically blacklisted from design of VR. In



room-scale VR the position of the players head is matched one to one with the position in space, and when you walk around and move your head everything feels attached as if you're in that space. Fallout do things like, if you walk up to something and look over it, there's a collision boundary over it, and it will just sickeningly push you away from the object without your control. They spent millions of dollars developing this thing. I guess we can take heart that, even with a millions of dollars budget, people can mess up their design of the VR interaction.

RL: If you just consider those sorts of things about what would work and what doesn't work it definitely helps. It may also have to do with people just being new to the technology. I can remember maybe twenty years ago, or ten, fifteen years ago, people would get plane sick a lot. I don't think I've ever seen anyone get plane sick now. I don't think I've ever seen anyone use the paper bag to vomit into. I'm sure there are exceptions, but I don't think I've ever seen anyone get plane sick now. So maybe the technology different or we've become accustomed to the technology. That's a possibility.