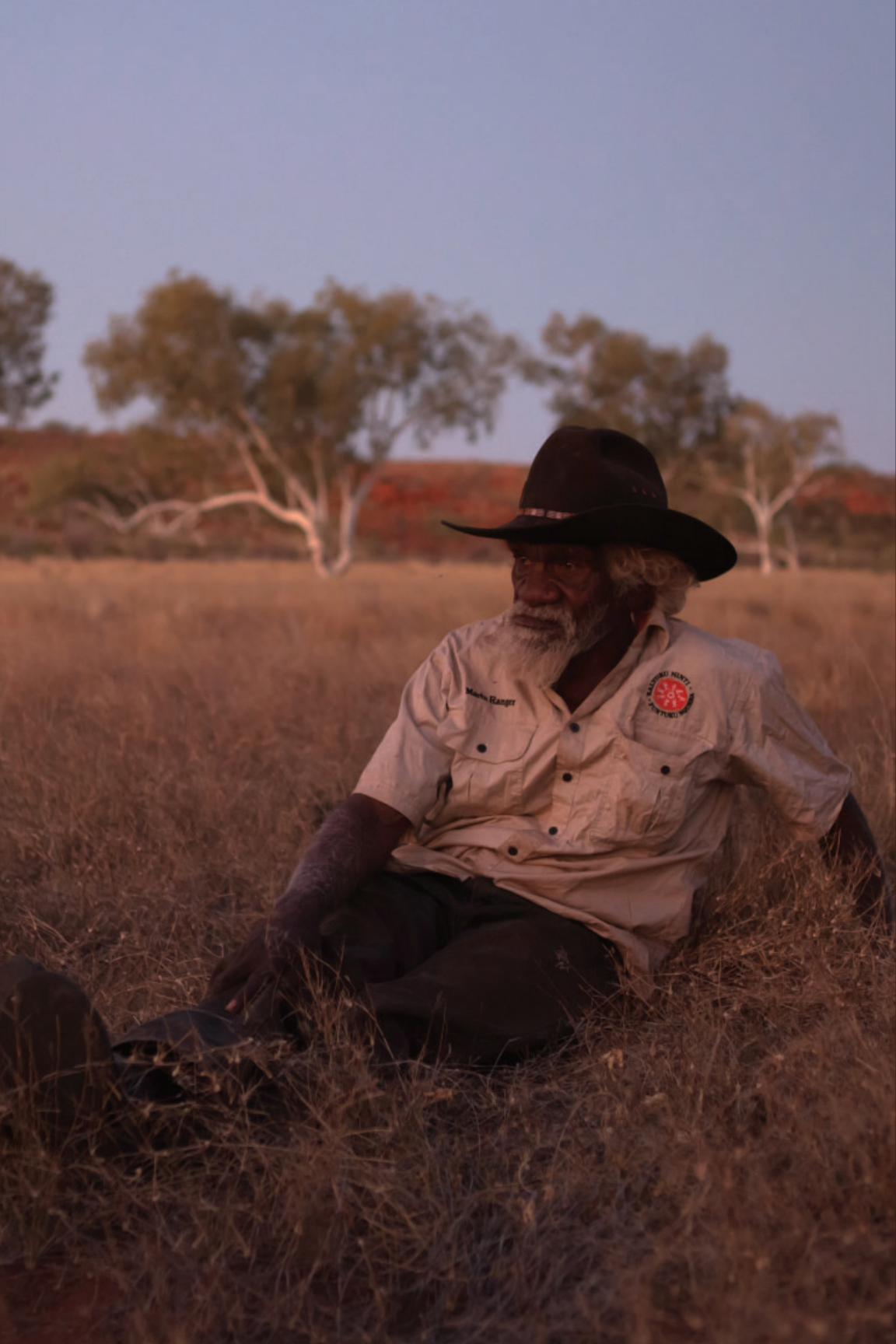


COLLISIONS
LYNETTE WALLWORTH & CURTIS TAYLOR
(360 VIDEO)

Collisions is a virtual reality journey to the land of indigenous elder Nyarri Morgan and the Martu tribe in the remote Western Australian desert. Nyarri's first contact with Western culture came in the 1950's via a dramatic collision between his traditional world view and the cutting edge of Western science and technology. 65 years later Wallworth carried cutting edge video technology into the desert so Mr. Morgan could share his story. Reflecting on the event, in this most magical of immersive experiences, Nyarri offers to viewers his experience of the impact of destructive technology and the Martu perspective on caring for the planet for future generations. Through the use of the world's most immersive technology in combination with artist Lynette Wallworth's world-class storytelling, the audience of *Collisions* is invited to experience an understanding of long term decision making via one of the world's oldest cultures.

Collisions premiered at the Sundance Film Festival and the 2016 World Economic Forum, Davos, and was awarded an Emmy Award for 'Outstanding New Approaches: Documentary'.

LYNETTE WALLWORTH
Artist / Filmmaker

CURTIS TAYLOR
Artist / Storyteller

Lynette Wallworth is an Emmy award winning filmmaker/artist who has consistently worked with emerging media technologies. Wallworth's works include the interactive video Evolution of Fearlessness; the award winning fulldome feature Coral, with its accompanying augmented reality work; the AACTA award winning documentary Tender, and her most recent work 'Awavena' which premiered at Sundance Film Festival and was presented in competition at the Venice Film Festival. Wallworth has been awarded a UNESCO City of Film Award, the Byron Kennedy Award for Innovation and Excellence, and in 2016 she was named by Foreign Policy magazine as one of the year's 100 Leading Global Thinkers.

Curtis Taylor is a filmmaker, screen artist and a young Martu leader. Growing up in the remote Martu desert communities and in the city, Curtis has gained both tradional Martu knowledge and a Western education. Curtis was the recipient of the 2011 Western Australian Youth Art Award and Wesfarmers Youth Scholarship and his screen work has been shown in international film festivals, including the 2012 Nepal International Indigenous Film Archive Festival. Curtis is currently undertaking film and media studies at Murdoch University in Perth.

INTERVIEW

Angie Abdilla: Can you tell us about yourselves?

Curtis Taylor: Yeah. My name's Curtis Taylor. My mob is Martu, Western Desert, East Pilbara, Northwest, Western Australia. I grew up in between the desert and the salt-water. I've been lucky to learn 'both ways'. Most old people, my old people, that exile the desert towards places like Anna Plains and Liveringa, Looma, Wangkajunka Fitzroy Crossing. They're living on other people's country and had to learn their ways and their language. I've been fortunate enough to have that passed down from our people and local people from which country we reside on.

Lynette Wallworth: My family's from country New South Wales. My dad grew up in a tiny little town called Weabonga and my mum grew up in Tamworth. So most of my relatives and family are from there. My dad was a bank manager, so we moved around country New South Wales. But I was born in Sydney and I lived on and off in Sydney and my family's all around Sydney, but my relatives came from Tamworth and my Dad worked in Tamworth, Orange and he worked in Moree. We're very New South Wales based.

AA: This interview is slightly different from the rest because it's focused on your cross-cultural collaboration. Lynette, you're the lucky non-Indigenous person in the case studies primarily because, a) it's a fantastic piece of work, and b) we're really interested in how you both managed that process. Can you describe *Collisions*?

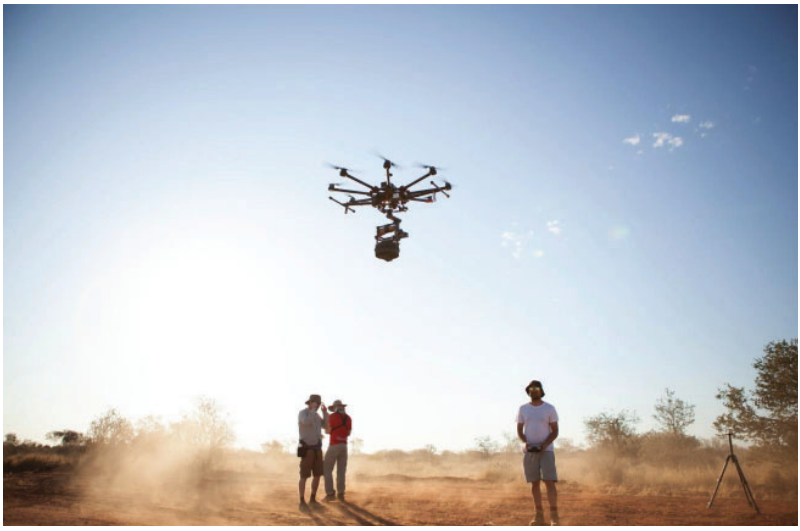
LW: Now it would be called an 'early virtual reality work'. It's a 360 [video] virtual reality experience. Fundamentally it's Nyarri's story of seeing an atomic test in the South Australian desert in the 1950s. But the work can't be separated from relationships I would say, because it emerged because of relationships.

I met Curtis at in an exhibition in Fremantle [*We Don't Need a Map: A Martu experience of the Western Desert,* 2014] we were both in. This was the first work that I did with the Martu women. But it was on that first hunting trip with the Martu women that I heard that Nyarri had this story, which was the story of *Collisions*.

Collisions was set in motion by the Martu women, who invited me to be there. *Collisions* came to exist not by my own drive, but being pulled into that work, pulled into that exhibition, meeting Curtis, hearing this story and that whole unfolding…

This whole history is all connected. Just even the fact that I was there. Because my backstory is I'd been to Maralinga in 2001 and 2002 and I had done work with the Anangu people who'd been moved off those lands. I'd gone back to the community, I'd been to Oak Valley.

Initially I had worked as a research assistant for Robert Hughes, who was in Australia working on his then-next [film] series and had a car accident in



WA. I was brought on because Robert was in the hospital. The Maralinga story was not going to be in the Beyond the Fatal Shore series, but I'd heard a radio program driving into the ABC for my first day at work, I heard a background briefing story about Maralinga, and I brought that story into the series.

I found a veteran who'd been a part of those nuclear tests, we filmed that veteran, and his story led me to then bring the Maralinga history into the Adelaide Festival in 2002. I worked with the Oak Valley community and they did a series of paintings about the testing that were in the 2002 Adelaide Arts Festival.

So I have these two previous relationships to this history, and not knowing any of this, I then get this out of the blue invitation to come to WA to work with the Martu women, who I'd never met before. Sitting in the desert that first night I mentioned the flowers I'd seen in the Maralinga desert. I don't know why I'd decided to talk about them, but I did. Nola, Nyarri's wife, turned to me at the fire and said "Okay, so you're going to have to talk to Nyarri." That was the beginning. It's in the very beginning of the narrations of *Collisions* which Curtis and I narrate together. The first words are: " This is not my story, this is Nyarri's story. Nyarri was waiting for me before I even met him." And that's what that refers to. Something set in motion in terms of the release of this story into the world, which Curtis can talk about more than me, to do with timing, to do with cycles of time, to do with the readiness of a story to be released, which I'm a part of. I'm just a part of that something that has been set in motion.

AA: So Curtis, how did you see this story coming into fruition? Obviously, there was a different calling for you? Can you describe what *Collisions* is for you?

CT: It's an immersive experience that takes you into Nyarri's perspective, how he saw Country and how he wanted to share his story. So you get a sense of that through the audio, his voice, and him being present on screen as himself. I think that was really powerful and well-delivered. It wasn't somebody else playing him, it was him playing himself.

I heard other Martu stories about Maralinga and Emu Fields [Nuclear testing] and knew a little bit about that story, that side. But you know, once Nyarri started to open up about his own experience... He came from the Warburton Dales area in the Gibson Desert, East of Kalgoorlie area. That's all his family's Country, so he traversed a lot of Country to end up where he is today. He held the story for a long time and was ready to share it with other community members in the Western Desert and family and other people from the region.

He opened up more as we were doing the project, as we were in production. From being out on Country and shooting it, I kept hearing more, new information about his experience. And as we went on we could see this one individual story was a part of a larger history of South Australia and I guess the world.

AA: And Lynette, what was it about Nyarri's story that captured your imagination to make a VR work?

LW: The form is really important. Nola had told me I need to speak to Nyarri and when I heard Nyarri's story, it was really like an instruction, like, that's your next job.

We were then in Parnngurr working on a second work together for the Adelaide Biennial, *Dark Heart* and the women were doing a very large collaborative painting which I was filming and that's when Nyarri came in and he and I had our very first conversation when he told me the elements of the story that he most wanted to share.

For me, that meeting was so profound, given that I had thought about this particular part of Australia's history for a long time. I asked him what it was that he thought he saw when he saw that Nuclear test. And fundamentally, his answer is the reason *Collisions* exists, because it was in that art shed that he said the words that become basically the complete heart of this work when he says "We thought it was the spirit of our gods rising up to speak with us and then we saw the spirits had made all the kangaroos fall down on the ground, as a gift to us of easy hunting…." That was such a powerful sentence, and when I heard it I realized he couldn't have thought anything else, but until I heard him say it, I never could have imagined he would have thought that.

So that of course, with this very important moment, I showed him my pictures of Maralinga, he talked to me about what he'd seen, and we also had a deeper, powerful conversation about war and violence, and the way that has been expressed through weaponry in the West, and the way that is resolved in a different way in Martu culture, or in traditional culture.

It was immediately a deep and profound and painful story there, and I asked him if he wanted to share. At the time my original thought was maybe what I should do would be another installation, because I was working on a second installation with the Martu women. I immediately had this image in my mind of Nyarri facing Oppenheimer and I felt like these two old men should meet. I felt there was a conversation there, that should have happened.

I hadn't yet seen a VR work. So at the time I heard this story I hadn't seen the form which was actually the best possible form for the work, and it wasn't until the following January that I was at Davos at the World Economic Forum showing another work, that I experienced a Virtual Reality work in a mobile headset and realized that the sense of place that it gave you, the ability for you to feel like you were not in a parallel world, but present in that world, meant that this was the form, even though it was very new and emerging, that this work should take.

I didn't know how to make that work because I had no access to that kind of technology but just realized at that moment this was the form the work should take. I was fortunate enough to be offered a residency with a company called Jaunt, based in Palo Alto, through New Frontiers at the Sundance Institute, that put me in a position where then I could access all that I needed in order to make the work.

AA: There's something really, quite disturbing, fascinating and disturbing about the origins of Western technology, as a cultural practice because it's so often driven by the mechanics of war. Thinking about the way in which Nyarri related and interacted with this spirit god is, it's quite unnerving, and probably one of the most powerful parts of the piece for me.

LW: It really is relevant in the sense that it's a story of the unintended consequences, of just following a technology, of allowing a technology without it being placed inside of community and culture. The scientists working on the first Nuclear tests

they were actually removed from Country, they were removed from their families, they were removed from any kind of community, and they were in isolation in Los Alamos. But the proof is in that process, right? A process of deliberate disconnection, so that you're not thinking about the multiple layers or of the threads that should connect you. Curtis and I, we were working on another project with the Nyiyaparli doing some filming. We were doing research, and so we went, and remember that, Curtis, we interviewed Nyarri and he was sitting on the ground.

CT: Yeah.

LW: And we also interviewed him in a meeting that Curtis and Mia were having around the way the Martu were also trying to respond to the potential of a Uranium mine which they wanted to oppose. It's all layered. Remember that interview we had with him and then these details were emerging? Some of these details, to be honest, are not in *Collisions* because they are so disturbing that they would have distracted you from... they would have stayed in your mind in a way that would have overridden the most powerful parts of the story that Nyarri wanted to share. But we were exposed to these layers of impact - of this one event - in not just Nyarri's life - because there were also Nuclear tests in the ocean off the Western Australia coast. So the moment we open this up to discussion, you started to hear these stories which are what Curtis was alluding to before. They were coming from more than one person.

But none of these stories, I would say, have emerged. We don't know them. They're not part of our national character. We're not holding them and we should be, because they have shaped us. So that's the importance of these stories as Curtis was saying before. It's an important, national story. It was a hidden history. And the fact that Nyarri had held it for so long and now was releasing it, at this particular moment in time, I think is why the work became as important as it did, Internationally.

CT: Yeah, and I guess most of the stuff that we found similar, when travelling with this work was especially in Switzerland, some of the people from some of the African countries or France or central Asia, and also in the U.S. that agreed to exploit something. And these events collided with people that were living off the land, still living traditionally or still in their area, their traditional home. When they do their exploration of these minerals, a lot of people get lost and they create these things that, at the end of the day will affect you. People are living on the land and that's the main resources that they have. So yeah, there are a lot of people that we find similarities with and we talk a lot with those people that were affected by these events.

But also, coming back, when we were speaking more for Martu history, a lot of people wouldn't have been still living in the mission. Like Lynette was talking about before, they knew stories about Maralinga but I think the Montibello [Nuclear] tests were more close to home because they see

the aftermath, of the fallout in the sky, coming down to in the region, and they heard, so there was more close to them but also the other story about Woomera about how a group of Martu women with their children were still living in their Country and were cleared out by the Commonwealth to make way for the Woomera [Nuclear] testing and so, yeah, in the desert these *Collisions* happen between these people.

AA: There's almost something intoxicating and maddening about the practice of taking finite resources from the Earth. You know, when you see the quest for extraction through and and for such destructive technologies due to unsustainable governance or regulation. I wonder what the protocols are for traditional Aboriginal technologies?

CT: Yeah, there are a lot of creation stories around the making of objects, the exploring of materials and ideas and stuff like that. I guess for us it was more, we didn't go past exploiting it fully to complete destruction, maybe in some cases they have but yeah there's definitely stories like that but I think a lot of people, a lot of different groups anyway have whatever ideas they exploited to create and reshape that they didn't go past to complete destruction. As long as it feeds us and it's working, we can share this with other people. The greatest value that we have, I think is the sharing of those ideas and those ideas were shared between stories and songs and between other people and still carry on today and still a reshape, rework and lot of different people are experimenting in their own different ways to exploit it to different means.

AA: Would you say that it is the intent that is the difference?

LW: Along those lines, *Collisions* has these two narrations. Myself and Curtis all the way through and there is a transitional moment in the middle of the piece in the narration, where I say "We", this is me representing Western culture "We respond to the urgent needs of a single point in time. Martu contemplate the expanse of a hundred generations." For me this is a bridging work, trying to explain ways of being and ways of thinking that are maybe not familiar to everyone who is experiencing this work for the first time. One of the most fundamental differences was about expanses of time and contemplations of multi-generational thinking and these ideas of exploitation and consuming are completely different depending on how many generations you think about.

When we were talking to Nyarri in that moment and in Newman, interviewing him one of those first times he was sitting on the ground, and he was doing this action, Curtis, maybe you can do it, I can never do it. He was sitting on the ground and was pulling one hand behind him and he was pulling another hand forward and he was doing this circular motion. He was basically saying as these ones are leaving these ones are already arriving and the way of thinking which is held inside of this work is about that. And

of course if your thinking is about not just this current moment and that's what I was thinking about in terms of where this work was going, where it was going to land and who was going to first see it in terms of world leaders and heads of industry was about how can you help those people think beyond this current moment in time and this multi-multi-generational thinking which is at the heart of any First Nation's thinking.

I've been into the libraries in Canberra. I've seen the letter that the King George wrote to James Cook. I've looked at that letter and you know what that letter says? The first commision was to observe the Transit of Venus in Tahiti and then the second letter, the secret commission, was to go and search for the Great South Land to see if there are any mines, minerals or resources. That's in the very first letter written to James Cook for the British exploration of this country. The idea of consuming was there, of consuming and taking and capitalizing was there from the beginning. So there's two mindsets inside this work which is why it is the way it is. It's trying to hold those threads and place them side by side.

Josh Harle: Thinking about your intended audience, it sounds like an important goal of *Collisions* was giving a non-Indigenous audience, the politicians at Davos for example, contact with an Indigenous worldview.

LW: Yes. Nyarri in terms of his own vision, was very focused on parliament here in Canberra. He was interested always, in getting in front of politicians. He used to list cities, you know Sydney, Canberra. He also was passionately interested

in leadership, political leadership. He is political in nature. So that time when we were in Newman and having these meetings, I put a PowerPoint together about what it looked like to go to Davos. I had pictures from the World Economic Forum, and we showed PowerPoint, which was like these pictures of Kofi Annan and Bill Clinton. It was like foregrounding, "Are these the people you want to take the story to"? And yes, he did and later, at Davos, Curtis had his photo taken with Kofi Annan, so we could update the powerpoint, with this changed reality of the story having now travelled into that Intended world.

I think the power of an artwork is a different thought in motion. And these are mostly forms of power. We had the opportunity of a new form with a powerful story that could be placed in front of people who, should they decide to make a different decision, can create far reaching impact..

But interestingly, when I started to try and get the funds for it, a lot of people said to me "While the Nuclear issue is interesting from a historical point of view, it's not relevant, it's not contemporary". So that was, if you can imagine early 2015. And it's true, at the time, in 2015, people were not thinking that there was going to be a ramping of the Nuclear threat. So again, there's something kind of prescient in the timing of the release of this work, of this story, that has to do with Nyarri's instinct.

AA: I think *Collisions* is definitely one of the first, most successful creative adaption of the VR format. How did you work with international developers in post-production, and how did Terri Janke's Indigenous Cultural Intellectual Property (ICIP) protocols inform your process?

LW: Because it was new and those protocols are not in place. One, around what should be contained in the work in this form, given that the form makes you feel present in that Country. So, the work itself holds the kind of protocols of a meeting, that apply to me to go there. In the work itself, you're told where you are travelling and why you are travelling. You are told you are going to Nyarri's home, where he lives, and it's a story he wants to share. And then you hear him singing, then you meet him, he comes and greets you. So, you're first invited and you are welcomed. There's a form of protocols of the meeting, and travelling to that community, that are built into the experience of the work.

And secondly, there was a question of, given that I was working with a US-based residency, how would the cultural protocols be applied to all layers of the work. That needed to be contractually enforced. So, I went to Terri and asked her to draft a contract to protect Nyarri's intellectual and cultural property rights. And so she drafted a contract, which then I had to sign. When we took it to the community, Curtis read it to him, but the contract was basically to protect his rights, and I was adhering to them. His rights in relation to the work. And what that contract then enabled me

to do, was enforce those rights with anyone else that I had to enter into contract with to make the work.

Everything had to be very carefully navigated so that we could always come back to the organic protection of this being Nyarri's story and that that could never be lost. His cultural rights within the work could never be lost. So, that ended up, that's not an easy thing I have to say to you, to navigate. With lawyers, the lawyer we were working with who worked for Jaunt, he used to be the lawyer for George Lucas. We are talking heavy hitter, that level. My producer Nicole Newnham was dealing with this stuff, and I would be on Skype a lot of the time with her as she was battling it out. But actually, the benefit of working a new form is you can also say, "I know this isn't traditionally done, but this is a new form, so let's do it. Let's do this differently. Let's create a new pathway."

Because we are working with this new technology, there certainly was no pathway of how to make the work. There was also no pathway in terms of those structures that you might want to put in place around the way the rights were held in the work, or any potential revenue share for such a work.

So, Nicole and I would continually push back in that way, guided by Terri and those pathways to protocol that she had developed for Screen Australia. So it was down to these things, and a lot of the time people would fight us on them. And I could always say, "Yeah but, however, if you don't agree to this you'll put me in breach of my contract". So we could enforce things, and it's like procedural I guess, it's contractual, but somehow there was something very satisfying about trying to shift this new form to to acknowledge these agreements which we had entered in to. In order to be able to make the work.

So, even in the copyright, if you look at the copyright, right at the end of "*Collisions*", it'll say, "Copyright to me from a story by Nyarri Morgan".

Our lawyer said at the time, "Well you don't need to acknowledge Nyarri's story again here in the copyright at the end because you're contractually acknowledging that, and you've adhered to all of that".

And I said, "But, is there anything to stop me acknowledging it?"

And she said, "No".

And I said, "So let's put it in".

So we learned a tremendous amount about pushing back beyond the "legalese", the kind of existing parameters of the way things are done. And saying "Well, I don't care how they were done before. Can we do this?" That was often where the greatest exhaustion came for Nicole and I. But now I feel like a lot of the satisfaction came because we were able to shape the process, that worked for us all and in the end it was satisfying for us all.

JH: I really like the thinking that for VR, as an immersive medium, it requires people in the community to agree to the visit, to welcome people into the community as part of that process. I think it's really important to take seriously what comes along with a medium. Not just take it on face value, but to say absolutely this is the significance.

LW: Also to take ethical responsibility for the fact that you, if you're pioneering in a form, you're creating a track. So why not deeply, deeply consider. What might be the ways that I can mirror a relationship. One, I only go to this community because I'm invited. So that is at the beginning of *Collisions* as well, you're told you're being carried there, you're invited to go. And secondly, I don't leave you there. Maybe that seems like a small thing, but at the end, there's a drone that goes up, and you're lifted up. And then it's just Nyarri walking on the ground below, and you're actually lifted into the sky. Into the blue. And then there's a final kind of moment, like an epilogue I guess, where Nyarri is just sitting, painting. But in terms of the narration of the work, you are lifted up and out. It's appropriate because VR is a powerful form, it does make you feel present, therefore you needed to be lifted back out at the end… This is a not a place where you can stay.

And you have people like Mark Zuckerberg saying that VR means you can go anywhere and do anything. I wanted to place protocols of meeting inside this work, given that it is, by its very nature, a bridging work. It's a work with two narrators, one indigenous and one non-indigenous. Around two histories, one known and one unknown. And it needed all of the time to respond to the protocols in the community so that it didn't exploit the visitor's presence.

So for using the VR and the drone, we held a community meeting as soon as we got there, everyone came to the meeting, put the headset on, and saw what the form could reveal. And then, we were guided continually about, for example, even how high a drone could go. Because of people's ability to actually know what it would see behind or in front, and what couldn't be be seen. And there was not a shot we took that we had to remove because it revealed something it shouldn't, because they were in control all the time, of what was visible.

AA: What a great process. I think it's the reason why the work is so rich and has such reverence. When creative works embody such a respectful process, it becomes evident, and the story is better for it. The protocols are really beneficial in guiding how you care for and tell a story properly.

LW: I think it's kind of beholden on us to think about that when the technology's new. You actually get to consider what this should process be, and how might this process be, and as I said we have enough of a relationship between us to actually carve that out together, to map that out together. And that, for me, is one of the layers of

the beauty of *Collisions* is that it held all of that thinking inside of it.

AA: I really liked the way the narration works with Nyarri speaking in language. Was this a creative or technical decision to embed the interpretation within your narration?

LW: Well, Nyarri wanted to speak English, didn't he, Curtis?

CT: Yeah. He wanted to speak english, but the things weren't translating across, so we said, "Don't worry about speaking English, just speak Martu Wangka and we'll fix it up, translate it. How you're saying it right now, or what you're trying to get across.

LW: He's addressing the camera a lot, and for 360 VR, wherever the camera is, the viewer, the visitor feels themself to be. And so, Nyarri would say, "Where's the Europe person?" And I'd say, "The Europe person is going to be where that camera is." And then he would talk. But he speaks how many different languages, Curtis? Seven languages?

CT: Seven, yeah.

LW: And often he had really specific things he wanted to say. We had an audio recordist with us, Liam Egan, who's worked with us before on another project. So we did some recordings which were just audio, so that we could really get the elements of this story that Nyarri wanted to convey, and then when I was in Berkeley, Curtis translated the audio, and then we could work on piecing parts of it together. It was a long process to get Nyarri's words as he wanted them said, and then to add the narration on top of that, but it was essential, because right from the start there was certain really particular things that he wanted to express. And as Curtis said, he so wanted to express them to the 'Europe people' where he imagined the work was going to be seen, that he tried to say them in English. And so it was important to actually have his words there and have the translation sitting under them, which Curtis did, so that nothing was missed.

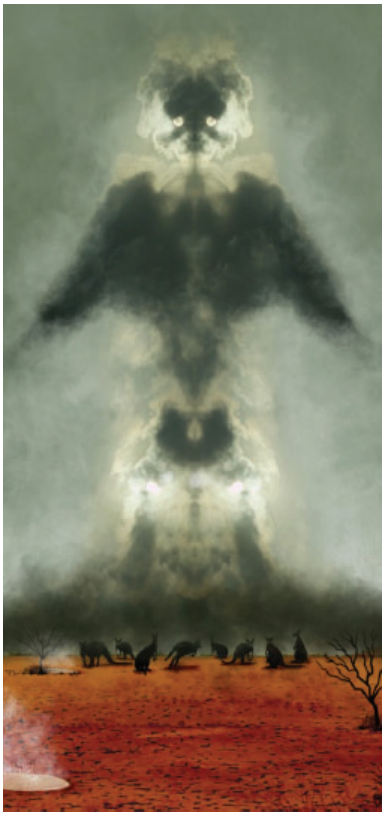
AA: Was there any directorial consideration in the post production on how you wove those three different elements together? Because it's three different types of storytelling, there's Nyarri's voice in language, there's the transcription, and then there's narration. There's pivotal points in the story that Nyarri was really clear about wanting to address those Europe people, did you use that as the basis for your direction?

LW: There was a very important scene, the scene where Nyarri is at the fire, he was looking directly at the camera and talking directly to the camera saying the things he most wanted to say. Putting the work together, those words worked more powerfully at the end of the film, because they were so significant. They're actually what we're left with. In terms of where they were shot, they were scenes where he was talking, and he was saying, "Look after your Country, Look after your young ones, think about the land

and the ones to follow." That ends up being what we're left with. We see him far below us tending the land through fire, walking about. When I mention that moment where we're lifting off, we're above, and he's on the ground, and he's giving these instructions, that ends up being the very last thing that he says to us. But really, it wasn't in direction in terms of in-the-field, it was in putting the work together through the very long edit that things, as they do, became clearer. This short 17 minute work had almost three months of post production to shape it into the piece it became and through that process the most powerful expression of the work became clear. So in terms of message it was simply 'This is going to be more impactful in terms of Nyarri's message, if it's placed here rather than there."

JH: Can you speak more about how working in VR affected your activities as a director?

LW: Well, those considerations around the protocols, the showing the traveling, and having the greeting, and the leaving, were all built into the work because of the intimacy of the form. As were the presentation decisions for *Collisions*. Nicole and I strove to have sychronised screenings of *Collisions* right from the very first presentation in order that experiences of the work were communal. Again that was a push on the technology as was currently available - we worked with *Two Bit Circus* so that we could deliver sychronised screenings so the work could be experienced as a collective dream, so the first screening, from Davos onward, were collective. In terms of direction in post, you use sound a lot more to call people's attention to where you want to go in VR. It's an incredibly valuable directorial tool in a 360 space. We record it spatially.



I had created a storyboard of twenty shots that I went through with Nyarri before we began, but we were being informed by where Nyarri felt things should happen in terms of all those shots. So if you think about that scene where he's singing, we were all

climbing up one area, and Nyarri just went off and scrambled up to another point. And he was like, "No, this is the best spot here. Often it was about what could and could not be seen in relation to the country from the point of view of the 360 camera."

CT: Yeah, it was good. We had the end of some nights that we could see some of the rushes [the raw footage], just for some of the Elders in the community to see if there wasn't anything shown that wasn't allowed to be seen by the public. They were wherever we went, the placement of the camera. Nyarri knew where to place it. He had this spatial awareness, already, what would be blocked out or "what I want people to see and what I don't want people to see", whether it be ridges and rocks and things blocking out the stuff that we were really close by to that couldn't be captured on film.

AA: Curtis, were there different protocols and considerations, from film to this new experimental format of VR? Were you advising the community around the process in the same way that you would within the film?

CT: I think that most of them were advising us at the end, when they saw the rushes, "Oh, can I have a look?" When we shot at the rock, they swiveled around and made sure everything was clear, and then they said, "Oh, okay, that's good." And even the first shot where you're coming into the community and we're flying up above them. You don't realize, after when they saw the camera, that they said, "Maybe when you cut it or next time you put the camera in the air, just fly to a higher ... Make sure you come up to this level."

LW: Even in the scene when Nyarri walks up to the Oppenheimer camera, you see the community sitting there, and there's a lot of people sitting around. Even where people place their chairs in relation to one another was according to where they needed to be. There was a continual rearrangement or organization according to protocols. Even when Nyarri was sitting in relation to Muuki, he had worked out.

CT: Yeah, even where people were placed, I think that was pretty normal where they placed themselves, sitting down in a social setting. People knew where to sit down and stuff like that. And there were times where they'd say, "Maybe this would work better if you sit down over here." It just looked different, made it work for the camera.
AA: Did you relate to VR differently due to the history of Indigenous

storytelling being circular and spatially grounded in Country? There's quite a difference to film, it's frame and the Western three-act story structure, hey. Did you find that challenging, or was that a creative opportunity?

LW: Well I come from installation art, so it's non-linear. It's not a three-act structure. It's creating a space where something can unfold. You create such a space so that the viewer might enter at any point and still be able to find the meaning within the work. It's not structured in that filmic way where you're pushing people through a linear narrative. *Collisions* does have a linear narrative, but certainly the habit or the experience of working in installation is a natural fit for virtual reality, and for this kind of oral history storytelling. Installation informs a habit of helping to guide people to act in a way that feels instinctively right, and if I hit that correctly then the work will flow.

AA: Do you think it's the conventions within filmmaking that drove the lineal aspects of *Collisions*? I noted you do use filmic conventions to guide the audience's attention and the story's direction, for example, how the camera is placed, editing and sound design in post production. It certainly feels like you're being guided through the story as opposed to a lot of other VR experiences which enable the participant as an active agent.

LW: That's something to do partly with the invitation from Sundance New Frontiers to take up the residency. Part of the invitation was, in those early days, to see whether it was actually possible to follow a complete narrative in VR. Because a lot of the works that existed in 2015 were 'experiences' as opposed to narratives. Sundance particularly chose artists for the residencies who they felt might be able to experiment with narrative form within that new technology.

And even the filmic considerations that you're talking about were really part of the residency parameters as well - in terms of a challenge to push this new form forward. Because at that point, people weren't even, doing filmic transitions within VR. People were fading down to black and fading up from black in order to move you from one scene to another. There was a lot of pressure to keep doing that. There were conditions told to me, at the beginning, which were a series of rules that I was told, if I broke them, people wouldn't take in the work, that the experience would be too jarring. And that was, "it can't be longer than 10 minutes", "you have to fade in and out of scenes", "you can't move the camera". It was a whole series of things which, well actually, we broke every single one of them.

But at the time that was the belief. I showed some of the raw footage to Joe Bini, who's Werner Herzog's editor, who was an advisor on the narration. I wanted to have someone who had a tradition of helping to do narration, because I've never done narration before, and I showed him this early footage, and I was saying, "These are

the things people are saying." And he said, "That's what people said at the beginning of film." You can't move the camera, you can't get a close up, you can't do this, you can't do that. And he said, "Do it all." So actually it was about trying to work out, could we do these things? Because we hadn't seen them done. They hadn't been done.

JH: It sounds like you said earlier about a bridge between two ways of thinking. Part of that was between film and spatial narrative, and also working with people who are experts in a spatial storytelling. And obviously there's a bit of frisson at the point that, if you're breaking rules, then you're doing good things, for sure. It seems like ideas of spatial storytelling have been brought closer to film.

LW: Curtis can say more about this, but I feel like part of these stories can't really be told unless it can be attached to place, and that's what this form makes possible.

CT: We couldn't film where it happened, on site, but we cheated in the landscape, we could have access to Nyarri and the landscape around, we didn't have to travel far. It wasn't shot in South Australia, in northwest Pilbara in Western Australia. It was easy to get access to. For us having access to these places, whether they be in the riverbed or in between these flood plains with these hills surrounding and the top of the rock wall which had an escarpment on top of that, all of these different places that were showing the diversity of the landscape and different parts of the story, how they work well with parts of the narration and what Nyarri was conveying at the time when he was singing throughout the experience. That was really important, so at the start, having that ... It became, and it is a character within itself, Country.

AA: When Nyarri is singing, is he singing up Country?

CT: Well, yeah, that song was composed at the mission, but it was a song about clouds forming and the rain coming. There were these other stories that were brought in from other people, other places that matched this and fitted it.

I guess one of the most fun moment for me was at ACMI, and we were singing, doing a Welcome, and had the mob from Melbourne come along, to do the welcome for us, kind of prompting Nyarri, "you should do a different song for this one." He chose a song about this lady's journey where she lived on the mission in Geelong, went along with church fellows from Fremantle, and then was on a boat to England, crossing the sea. A lot of people back home on the mission were worried about her and they composed this song about her, a contemporary song, a story, and yeah it was really fitting for Nyarri to pick that song at that time for the opening at ACMI.

LW: I think it was beautiful, because he sang this song about this woman who traveled by boat to the UK, and they made this song about that journey and Nyarri had really wanted

the work to go to London, which it did. (It's going to the Barbican next year, so will be in the UK again actually, so it's keeping on moving.) But I think he said when he was at ACMI he sang that particular song because *Collisions* had become the next part of that traveling. It's his story, and that story's traveled to England in this form.

AA: That's powerful.

LW: It was an amazing moment. It was like the song continuing.

CT: Yeah, and coming back to that directorial role, *Collisions* has a kind of narrative in this, with the sound and with certain triggers surrounding the experience, wanting people to engage with this space within the experience. But also, every time people watch it, they're directing themselves, every time they watch it, there's a difference, that they in a sense are directing themselves, directing their own experiences.

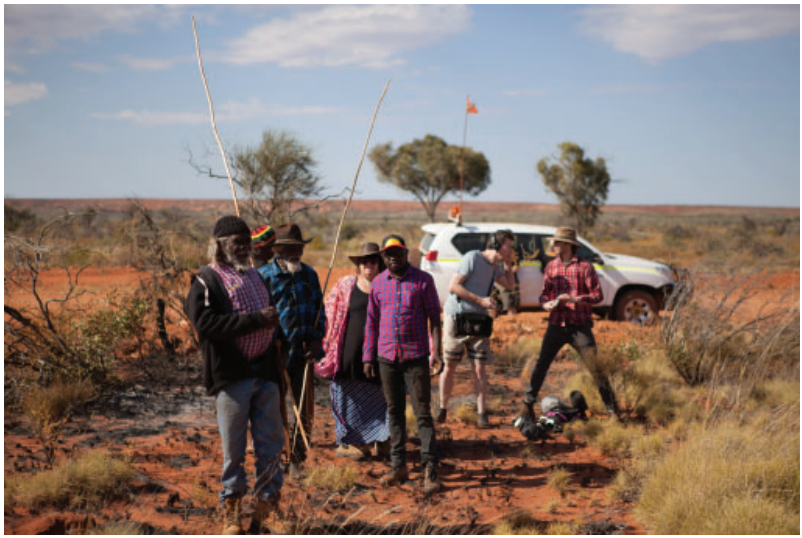
JH: Can you talk more about the soundscape and sound design in VR?

LW: Well we had Dolby Atmos sound, so we recorded spatially, and we also had lapel mics. We didn't have a sophisticated camera, we had a very early model that Jaunt had which was 16 GoPros, so it was before their bespoke models like the Neo. So we had a couple of different spatial mics in addition and then lapel mics, and then one of the really helpful things, was that we had an earpiece Nyarri could wear. One of the big challenges with 360 VR, with the sound, is that we can't be visible in the scene, you've got to be hidden. He's walking about and we're behind a tree or behind the truck. So he can't see us. It's awkward for him. But we had an earpiece which meant he could hear Curtis talking to him, or we could be talking to him as he's walking. So he was not alone.

So there were just little things that we used that were very helpful filming in that sort of space, but afterwards, Dolby wrote code to bring the sound in. So we could get this version of Dolby that's in VR. Curtis was with us at the time because we were recording the narration at Skywalker Sound, and that was a really great. Because they're Skywalker Sound, they had all these sounds,but one of the important things was that we needed the sound of a dying kangaroo. And they said, "Yeah, well we'll have something like that." But of course they didn't have that particular sound. So Curtis contributed sound to Skywalker Sound, which is that sound.

Also then we would go from there to the animation place, where the people were working on the animation, and same sort of things. I had worked over weeks to get the animations as I wanted them in terms of movement and action but they had the color of the kangaroos wrong.

So Curtis was giving very particular instruction about what the kangaroos would sound like, the Kangaroos' colour, which was awesome. Because there were teams of people by this stage that we were working with in order to pull everything together.



The wonderful thing about the sound, the Dolby Atmos is that it responded to where you looked. So, if you looked up, you heard it more clearly. If you looked down, you heard it so distinctly. So it is immersive in that way. And so it really kind of adds a whole other layer. It enriches the sense of your immersion in that space.

So Liam bought his first VR mic. He was obsessed with going out, making Curtis shoot off guns so that he could get particular sounds. It was a very rich, spatial palate he provided.

Then that's where Curtis and I recorded our narration. Do you want to tell the story about the Martu effect of the technology, both you and Nyarri, Curtis?

CT: Yeah, some of the cameras didn't work. Some nights that we shot, some of the cameras didn't work so that we'd shoot it again. They stretched some of the images out so that they could fill in the space. In the recording studio, I think our first recording we did was lost, I don't know, something happened and then we had to go back, do it again.

LW: It was very specific. *Collisions* was shot with 360 3D, which with 3D means you can't put the camera closer than like a metre to, say if it was the person that you were filming, because otherwise you're not going to be able to stitch those two cameras together that are providing the stereo.

The closest we could ever get the camera to Nyarri, in terms of close up shots, would be a metre, but you have a trigger that would trigger off all of the 16 cameras at once. Otherwise it's a nightmare in terms of stitching

all of that content together at that point, with the facilities available for stitching, it just became very difficult.

I think it was two or three nights in where the DP from Palo Alto came to me and said, "Is there something powerful about him?" Because whenever they put the camera within a metre of him, the cameras facing him would not trigger. So this came to be called the Nyarri effect.

They would have to go in and manually trigger off those cameras that were nearest to him, which was irritating, but also, by the end, we were all used to it. That was just what was happening.

Then we traveled all of the way to Skywalker Sound, and Curtis did his narration. And the narration did not take, so we had to do the narration all over again. A combination of technologies and resonances.

JH: As a side note, the Dolby Atmos 3D tools you helped create are now available for VR for free.

LW: It was an interesting time because you had people like Dolby, like Skywalker Sound wanting the experience of the post-production process in order to build the tools that we're now probably all using.

It's the benefit of pioneering in that way, being there first is, I feel like you have a greater freedom to push and see what's possible. But you're also dealing with things when they're not quite ready. So actually, it was a lot of time of that Dolby guy writing the code while we were on the sound stage. It was quite stressful but ultimately so wonderful to experience the result.

I think a good way to think about doing this sort of work is that you're making a path for other people to come after you, which is why it matters how you think about everything you're doing.

JH: It's very exciting to think that a creative project is driving the development of technology, that the code is being written in response to the creative project rather than the creative project having to deal with whatever's built into what you're given.

AA: Has *Collisions* informed this work you're doing now? What sort of medium are you working in?

CT: It's all like painting, sculpture in mainly wood. So, yeah, that's the kind of medium I've been working on since I moved away from video and just work with my hands more. I've been working with more wood materials and metal and other stuff, and painting. I haven't painted for a long time.

I started out painting. Telling stories and making films was taking a lot of my time. So, it's good to come back to this medium and see where I'm at and still experiment with ideas and stories, different techniques. So, yeah, that's really exciting for me.

Most of the time I'm not collaborating with anybody else, I'm just on my

own, and I find it really peaceful doing that. But also in a weird way, I'm still telling stories. Not my stories, but my grandfather's stories, my dad's dad, he passed away. But I'm telling his stories, stories that he composed, songs that he composed when he was alive. He was a really good composer of stories and songs and dance, and that's the stories. In a weird way, I'm collaborating with this work, with his stories. But, yeah, I was always interested in other ideas and the world outside the Western Desert and that kind of modern Western Desert thinking.

My first collaboration was with Lily Hibberd. She's based in Paris now, but we had been telling stories about phone booths and how they arrived into the communities and what the people in the communities were thinking about it and how they were utilizing them and how they still utilize them. But now, even though most of the Country has mobile reception, there are a few communities that don't have that network connection. So, yeah, it's still being used in that way. That was my first collaboration with somebody else and it was really exciting. I learned a lot from that and I learned a lot from *Collisions*, working with Lynette and with all the team.

AA: And, Lynette, how is your work now changed from *Collisions* to the project you're working on now?

LW: It happened as a really direct link. I really think it's important to say, if we're talking about collaborations, that Curtis' role is really particular. So much of this work, there's no rule book for it. My feeling is it has to be based on real relationship and trust and that you can't shortcut that. For me, the relationship with Curtis is extremely important. In a way, I can't even properly explain it. There's no comparable relationship to this one in the sense that I simply couldn't have done this work without him. It wouldn't be able to exist. I wouldn't be able to make it. I wouldn't be able to show it.

That's why I call it a bridging work. I don't even think we have the language for what this kind of melding is that has to happen. I'm not able to go to the place of making this work except that Curtis is standing beside me and in such a way that I am free to do what I can do. I was free to fulfill the part of it that was mine to do. It's respect and trust from a position of humility. I'm entering into something which, even though it's an invitation to me, there are levels of responsibility that Curtis is bearing on my behalf because I do not understand them. There's a part of me that's conscious and aware of that, as much as I can be conscious and aware, and trying not to mess up or overstep or make a mistake. But there's a part of me that knows all of the time that at any minute I might and that, if I do, that doesn't fall to me, that would fall more heavily on him. It's why the relationship is so incredibly important. I can't overstate what it means to me and that it's a real thing.

So, *Collisions*, and that process, this is like the third work I did with the

Martu, but I struggle for the words to say what that means. I can explain it to you as a feeling and a sensation. I can tell it to you as the knowledge, which I don't have in any other part of my professional life of this person taking the role of standing beside me in order that I am enabled to fulfill what I'm undertaking. So, that's incredibly meaningful.

I think, in part, that's why the work was able to fly in the way it did once it entered the world because everything was done in the right way. So, one of the moments of showing *Collisions*, was when it seen by an Amazonian chief Tashka Yawanawá - [Chief of the Yawanawá people in Acre, Brazil] who saw in it not just the potential for the technology to work well but that the process would work well for his own community. So he then invited me to come to the Amazon to create the next work which is called *Awavena*. And the two works are very, very much related.

The dream we had with it was that Curtis and Nola might be able to travel to the Amazon or *Awavena* might be able to travel here. Now I think we might virtually make that happen. They should meet one another. But, in a sense, if you can imagine, there's a culmination that's happening in these works where they're speaking to one another. Even though they're from a different part of the world and the stories are different, the works are talking directly to one another. That one work has led to the next so those relationships should be fostered as well.

AA: He's an inspiring man, Tashka.

LW: And he loves new technology and saw the potential in it, experiencing *Collisions*, but also felt our process working with the community, and so could extend the invitation. And *Awavena* will lead to other works. Tashka talks about himself as a bridge. He has a different sort of history that has led to him trying to navigate the two worlds [Western and Indigenous] also, through technology.

AA: Would you say that that's the capacity of technology or is it because of its emergent state and your combined ability to create a solid respectful process to navigate and utilise the technologies? Is it the tool or is it actually the process?

LW: It's something that I think would bear more thinking. I have a limited, at the moment, way of speaking about it. But if you talk about a visioning technology that we have built and show it to peoples who have traditionally practiced different visioning technologies - the ability to

leave the body and move and see and travel- so for the Yawanawá, Tashka saw that alignment very clearly. He said, "Oh, this acts like medicine." It opens a portal. It carries you without your body to a place you haven't been. It intensifies color and sound. You meet the Elders, you're given a message and then you return. We can show you something of this because that's what our visioning does. So they wanted, in a way, to co-opt the technology to demonstrate the practice of visioning.

I think if you accept, and I do accept, that there are different ways of being, that we have evolved according to traditions and cultural practices and if there is a technology that can allow us to have a sense of a different way of perceiving this reality then, for me, that's a beneficial process. So, I'm very open to, and was very open to, the Yawanawá request to use the technology, to say this is the way we see the world. And the base of that, I think, is completely aligned with *Collisions* with Martu, because when I said to the Yawanawá, "Well, tell me fundamentally then what this vision should show.", they said, "That everything is alive." So use the technology to show everything being alive.

AA: Curtis, do you feel like *Collisions* is, at its heart, a film or is it ... How do you describe it? How do you relate to it?

CT: More of an experience. But then again, I didn't really ask that question myself, but I kept asking other people and a lot of different people would come up with different answers. Whatever they took out of being in that experience, that was theirs and theirs alone. That's all that mattered to me. But how I see it is, yeah, an experience. Even being kind of deprived from going back home, living in your homeland, and I get to see these landscapes and stuff through *Collisions* because I live in Perth in the city and I don't really have the opportunity to travel up there. I can experience the landscape and the people and stuff like that. I see it is an experience. It's also drama with the Martu story-telling that lies within this experience.

JH: That's really interesting. Do you use it often as a way of going back and visiting?

CT: Yeah, whenever I feel that I need to reconnect in someway, some levels. That's sort of enjoyment and fulfillment to me when I get to put the headset on them I just do, again its different to being on the phone and you're talking to another person on the end of the line, I guess you can experience it time and the place at the time.

AA: It's really exciting to know that innate connection to Country is possible through VR.

LW: We talked about say sometimes when the old people have to go away when they have dialysis and they can't stay the community VR as a way of being able to feel that they're back walking around. It would be great from that kind of perspective to give

that sense of place.

CT: Those are the talks that came out during the time. Show *Collisions* across Australia. We are going to go into places where the hospitals or nursing homes where people are there, maybe they're getting old and cannot go back and forth at least so, be there virtually and hopefully that's good enough for them.

LW: Other people that have seen is like mining companies showing to their staff right?

CT: Yeah to their staff. A lot of people from all kind of discipline, walks of life, seen this, and we showed it to them, hungry and interested, sharing it whether they be in the workplace or their friends and stuff like that. Yeah, it's exciting, yeah.

AA: Curtis, you mentioned you work across a number of different formats and genres. How do feel that these different practices have informed your ability to work in 360?

CT: That all kind of went out the door with me working many sculptural, and film I guess. For us when we tell our stories, reimagine our stories, tell our stories again around the campfire but also do our Ceremonies, we are visiting places with song but also people have the power to transport themselves and we call it '*kapukurryi*' where you're leaving your body to transport yourself, your soul and you, even though you're in a dream state that's real because you come back. Once you come back you have memory of things that you didn't have before and things that maybe were lost that you're maybe trying to reveal or trying to get knowledge of. So *kapukurryi* is a state where that happens when in a sense you can teleport to other time and place and that you'll see you have these experience which are more spatial. *Karninyijarra* right down on the ground, subterranean level that we are now in the landscape to, went over to the sky and beyond.

Those are the places that these songs and stories they hold. Even though when we were filming at the cave, that's the scene where Nyarri's singing, on the other side some really special places that, I was alluding to that before but people were wanting to see the rushes of them, saying, "Okay, that's hidden, that's good you've cleared to use that shot but next time don't do that area because of so and so." Even though paintings that these artists do in the Western Desert look like linear, landscape, it's flat but it's not. Its spatial, it's telling a story of underground, all the different levels and 360 from all of vegetation, rock, river, River and all the place-names, they may have walked through that people told them stories or they had experience of *kapukurryi*. That they tell those stories in this format by painting. It wasn't new territory for us, whether we would place the camera here and what we see. A lot of people would definitely leave where they are, their body. They go and also see 360, like how the camera would see it and that's what we make sure.

LW: So I insisted on the drone even though it was a big expense for us to have that big drone there for the reason Curtis is saying. It was essential that the camera could see the way people can see. The way the Martu see. From this level on the ground and below the ground but also from that level, high above it.

The work wouldn't have been right if it didn't have that way of seeing. So, we worked hard to bring a drone in there and be able to have that perspective but also what Curtis is saying about this way of experiencing something which is a dream, which is a real thing but happening in a dream state is why I think the technology is particularly powerful at this moment in time. I don't know if it will always have the same effect, but at the moment if we observe in terms of people's brain activity, where they're recalling a virtual reality experience they are recalling it as though it was a dream. They're not recalling it as though it was a film, as in something I watched that I saw but didn't happen to me. We are recalling it as though it somehow did happen to me. I know it wasn't real as in this reality but it was real in another realm which is why I think these alignments are working around these states. That state that Curtis just described to you is a practice of the Martu and the potential for that state to be activated or simulated in someway maybe it can help us understand each other. So I'm interested in this time where the VR experience for the moment, we haven't codified it yet as separate. That's why this is a powerful moment for powerful storytelling.

AA: I think another layer to the reason why *Collisions* is so powerful is because it is Country guiding you all along the way in the creation of that story. It's quite a different process to filmmaking, right?

CT: Yeah. That's why a lot of the other old people from the community really wanted see the rushes because they wanted to make sure that it was clear and have us respect them. But also the crew was, you had Nyarri, Nola, and me so we lived in the area, we knew the Country where we shot and we knew which area was okay and safe to shoot. We were respecting, making sure we put that respect into Country but yeah… Lynette was directing and making sure her vision she wanted and envisaged was being shot, taking down the images and stuff like that but also you had the DOP [Director of Photography], the camera-person also.

JH: Are there any Indigenous projects from others you'd like to mention, storytelling using technology?

CT: There's definitely projects worth checking out like *Love Punks* [2016 iPad-based interactive graphic novel created for NEOMAD with Stewart Campbell] up in Roebourne with the kids up there, and *Thalu*, which Tyson Mowarin did.

LW: I think Mikaela Jade's doing really interesting stuff with *InDigital*, because she's working in community,

working with AR and they're building apps, and so I'm super excited at what is going to emerge from the work she's doing. The good thing is now the funding bodies are funding VR.

The benefit of doing *Collisions* is that it opened a lot of doors and meant I could go into the funding bodies and talk to them about funding this form.

I think the wonderful thing is that we have government funding here and this opportunity for innovation in VR now. *Collisions* winning an Emmy was hugely beneficial and significant. That a VR work won that award, a news and documentary award, meant people took VR seriously. It's helped VR's credibility and that all goes towards assisting the funds coming towards it so that more works can happen. The big thing is always going to be access to such swiftly emerging technology and that's the ongoing challenge. How do we foster the sort of residency I benefited from, with people who've got the technology which is cutting edge? You've got one strand of commercially-oriented people with this technology and it's about getting access to the technology those entities are developing. Giving access for telling an Indigenous story. Facilitating this is something that I'm keen to talk with our funding bodies about because I think that's the key. What we need is to find a way to provide access to that swiftly changing suite of tools.

COLLISIONS IMAGE CREDITS

In order of appearance:

1. Photo Credit: Piers Mussared

2. *Behind-the-scenes of the Collisions production.* Photo Credit: Piers Mussared

3. *Nyarri tries virtual reality for the first time.* Photo Credit: Pete Brundle

4. Photo Credit: Piers Mussared

5. *"Spirit Cloud"* Artwork by Jossie Malis, spirit cloud imagery Lynette Wallworth.

6. *Liam recording fire sounds.* Photo Credit: Piers Mussared

7. *Collisions.* Photo Credit: Piers Mussared

8. *The Jaunt virtual reality camera on a drone over a landscape of fires burning spinifex, an ancient Martu land management practice.* Photo Credit: Piers Mussared

PROJECT BIRRONGGAI IMAGE CREDITS

In order of appearance:

1. *Render of the Biame.* Image Credit: Jeremy Worrall / Frenetic Studios

2. *Wugan the Dream guide.* Image Credit: Jeremy Worrall / Frenetic Studios

3. *The Alter at which Wugan draws in the pathways through the Dreamtime allowing you to travel between realms (level selector).* Image Credit: Jeremy Worrall / Frenetic Studios

4. *Wugan accessing the Rites stone (level select).* Image Credit: Jeremy Worrall / Frenetic Studios

5. *Turntable shot of Wugan; An extension of Biame Wugan follows you through the Dreamtime guiding you on your journey and bridging the gap between realms.* Image Credit: Jeremy Worrall / Frenetic Studios

6. *Render of the playzone in its infancy, features Biame and the home tree.* Image Credit: Jeremy Worrall / Frenetic Studios

7. *Another perspective shot.* Image Credit: Jeremy Worrall / Frenetic Studios

8. *Original Concept for the play zone, a chunk of earth lifted into the heavens by Biame the ancient all father and sky god. This is the centre piece for the players adventure.* Image Credit: Jeremy Worrall / Frenetic Studios