# 'Virtual Reconnections': Using VR storytelling to reconnect to Indigenous cultural Artefacts

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> The use of VR and technology to capture stories of our culture and nature is the way of the future. We have seen organisations like AQIS (Australian Quarantine Inspection Service) use VR to promote caring for Land and how this connects to the Torres Strait cultural responsibility. This has proven effective with the youth, the generation of technology. I believe it is the way of the future of storytelling.
>
> (P. Mau, personal communication, July 28, 2022).

Indigenous stories weave together past, present and future thanks to rich, relational, and connective narratives (see Archibald *et al.*; Barrett and Cocq; Battiste and Youngblood; Hopkins; Nakata; Wingard and Lester). A longstanding human practice that still holds great value for First Nations and tribal communities around the globe, storytelling represents a key asset for the maintenance, transmission, and revitalisation of cultural traditions and values (see Nakata, Wright *et al.*). Today, storytelling and its local derivations, such as the Aboriginal Australian practice of "yarning",[1] have been used by scholars and community workers alike as a method to foster wellbeing, heal community fractures and trauma (see Atkinson), facilitate collaborative efforts, and help medical research (see Geia *et al.*) Stories are also key to the ways in which human beings make sense of the world. As Marc Cavazza and Stéphane Donikian explain, with the advent of the mass media, "[n]arratives have evolved from their early role in human knowledge transmission into the main content of cultural production" (v). Developing this point, they go on to illustrate the impact of digital technologies on the ways in which we consume and interact with stories today. The emergence of computer-generated

technologies and their increasing affordability have thus improved the potential of storytelling in terms of reach, reception, and possibilities (immersion, embodiment, etc.).

Since its inception in the 1960s, Virtual Reality (VR) has been applied to the most disparate fields, from the scientific and technological sectors to educational and recreational contexts (see Slater and Sanchez). Therefore, VR has gained popularity over the past forty years thanks to the commercialisation of affordable technological devices that have become more and more ubiquitous and accessible to the general public (Canalys; Cipresso, *et al.*; Flavián *et al.*). Within this panorama, VR constitutes an appealing tool for a holistic, sensorial, and embodied experience that allows for agency, discovery, and the creation of compelling narratives through non-canonical patterns. This is what we call 'virtual storytelling' (see Cavazza and Donikian).

With an eye on its criticalities, this paper reflects on the ways in which VR can be used to engage with Indigenous artefacts and knowledge(s). It does so by exploring 'virtual reconnections', a way to (re)connect people to cultural objects, at a time when more and more marginalised communities have access to and use different technological devices on a daily basis.[2] Indeed, we aim to investigate VR as a symbolic and concrete space for the reconfiguration of storytelling from Indigenous (*Dhoeybaw* from the *Guda Maluilgal* region of the Torres Strait), Tribal (*Temne* of Sierra Leone) and Southern European perspectives. In so doing we are reflecting on the possibilities and limitations of a collaborative venture that investigates the potential of VR to tell polyphonic stories in immersive ways as old and new challenges intervene in cultural maintenance, transmission, and revitalisation. The Bondo Mask in Sierra Leone and the Turtle Shell mask in the Torres Strait Islands carry with them deep transcultural and cross-cultural meanings, practices and traditions that VR technologies and environments can (potentially) enhance.

The national identities of the people involved in the project (an Italian scholar, a Greek VR artist and a Sierra Leonian artist who all reside in London (UK), together with a Torres Strait Islander artist who lives in Australia) are key to understanding VR as a space for

dialogue, and a place to think about the situated and subjective practices which are embodied and embedded in the narrative and structure of the VR experience itself. By combining these realities, we wanted to show the connective threads that hold these different cultures together, from the legacy of colonialism to the routes of contemporary mobility.

This paper thus constitutes a point of reflection, in terms of methods and theories, on some of the key aspects, possibilities, and ethical questions that may arise as the research develops through different phases and the VR experience takes shape. The adoption and interpenetration of different, and yet connected, methods (decolonising methods, Yarning, Community-based participatory research) provide the methodological infrastructure to discuss, negotiate and create ethical work that supports the entire creative and academic process by holding the researchers accountable at the various stages of the project. Therefore, we have embraced Linda Tuhiwai Smith's approach to decolonising methodologies, together with community-based participatory research as key frameworks to understanding cross-cultural collaboration, the handling of Indigenous knowledges and the digitisation of tangible and intangible Indigenous cultural heritage.

**The 'real-virtual' continuum: The life of objects**

First Nations peoples around the globe have always demonstrated a keen interest in the uses and possibilities of new technologies which, despite their limitations and shortcomings (see Gingsburg; Hinkson), can provide spaces for agency, opposition, self-representation, political action, and unbounded creativity. Testament to this ingenuity is a series of experimentations where old and new knowledges come together. One such example is the Torres Strait Islander Virtual Reality (TSVR) project, a virtual reality game that recuperates the traditional culture and history of the Strait. Its creator, Rhett Loban, has found VR a suitable means to promote the culture of his community to a wider public (see Loban's "Torres Strait Virtual Reality: Virtual reality" and "Torres Strait Virtual Reality: A reflection"). Similar endeavours within the Australian continent include the digitisation of Aboriginal Songlines (see Leavy *et al.*, *Australian*

*Aboriginal*; Leavy, "Digital Songlines"), the maintenance of Indigenous cultural heritage (see Trescak, *et al.*), the creation of VR films/documentaries that explore 'Indigenous futures' (see the project *Future Dreaming*), and the exhibition *Awakening First Nations Knowledge* in Melbourne (Australia), amongst others. These are only some of the many projects that help express Indigenous ingenuity and creativity through digital tools. Talking about the potential of Augmented Reality (AR) from the perspective of Indigenous-settler relations, McMahon *et al.* affirm that: "AR holds potential to expose and challenge representations of settler colonialism while invoking relational ethics and Indigenous ways of knowing" (4531). As they further state, AR, and VR "are increasingly used as a digital storytelling medium to reveal place-based content, including hidden histories and alternative narratives" (4531).

Remediated and connected ways of thinking of VR as an instrument for improving human experience have promoted new possibilities to reconsider social interactions and communicative strategies. Tellingly, core human practices such as storytelling have found new avenues to express and represent the world from various standpoints. Primarily, the immersive, perceptive, and interactive characteristics of VR represent key aspects for the enhancement of stories that aim to revive tangible and intangible cultural heritage through embodiment and the arousal of the sensorial and emotive spheres. Studies into the uses of digital technologies aiming to maintain and revitalise cultural heritage and Indigenous cultural artefacts (see Newell, for instance) have shed light on the complexities related to the digitisation of such objects. Indeed, while 'real' (historical/cultural) objects may elicit a series of bodily, spiritual and 'concrete' responses[3] in those who connect with them, digital artefacts can be also regarded as objects in their own right (Witcomb). Therefore, it is pivotal to investigate and question the boundaries between real and virtual as they get more and more indefinite and reflect novel ways to respond to digital innovations.

Within the parameters of this project, both the Bondo mask(s) [4] and Turtle-shell mask(s)[5] have become key objects and 'sites' for the negotiation of personal and collective stories where the material and virtual come together. In the 1990s, Torres Strait leader and

intellectual, Ephraim Bani, travelled to the UK in the hope of starting discussions and negotiations with British cultural institutions about the repatriation of cultural artefacts from his Country. His endeavours have been recorded in the documentary film *Cracks in the Mask* (1997), where he raises important questions about the legacy of colonialism, the ways in which Western museums manage artefacts and how they respond to demands for repatriation. Over the years, various delegations of Torres Strait peoples have visited different British museums, engaging in transformative performances and works of art that respond to specific collections and/or exhibitions. In 2015, Torres Strait artist, Alick Tipoti, who had created a turtle-shell mask with a combination of artificial and natural materials, performed with the Zugubal Dancers of Badu Island (Torres Strait) for the British Museum's exhibition *Indigenous Australia: Enduring Civilisation*. Showing the connections between past and present, the performers offered international audiences a new perspective on the current significance and vitality of the artefacts (in this case the turtle-shell mask), which are commonly associated with a remote past. In an article on Torres Strait Island material culture, Jude Philips highlights the fact that Torres Strait Islanders still consider the objects held in European museums part of their property. As the scholar affirms: "[t]he styles and aesthetic properties are in part a reminder of their past, but more importantly they still have a reference to the present. They are still thought to be owned by Islanders and it is Islanders who own the knowledge about them" (Philip 14).

Acknowledging these views and with an eye on the potential of new technologies, we argue that 'digital/virtual reconnections' could be the first step towards encouraging the younger generations to engage and/or re-engage with aspects of their culture that may feel distant. Indeed, 'digital reconnections' put an emphasis on the possibilities of VR in terms of agency, empathy and affective arousal. Although this article does not engage in a direct analysis of the intricate dynamics between museums and the pressing calls for the repatriation of cultural artefacts, it draws to some extent from museum studies perspectives (see Clavir; Leavy; Marstine; Simpson) with the intention of transcending the complexities associated with

the very concept of digital repatriation. Instead, the article adopts the term 'reconnections' to suggest a broader and more nuanced understanding of 'cultural recuperation'. Several scholars (see Bell et. al.; Christen) as well as key stakeholders have notably underscored that the discourse surrounding digital repatriation often casts a shadow over the imperative for physical repatriation. Simultaneously, it brings forth a host of potential quandaries intertwined with digital data management, intellectual property rights, and the intricacies of copyright laws and regulations, among other interconnected concerns. As Bell *et al*. argue:

> [w]hile digital technologies allow for materials to be repatriated quickly, circulated widely, and annotated endlessly, these same technologies pose challenges to indigenous communities who wish to maintain traditional cultural protocols for the viewing, circulation, and reproduction of these new cultural materials. (196)

In addition, being a multifaceted process, digital repatriation carries complex implications that transcend a basic view of digital objects as mere 'surrogates' (Cameron and Kenderdine). From this perspective, digitised artefacts can be seen as independent from the real object for they have a 'life of their own' (see Newell; Witcomb). In line with this view, but aware of its limitations, this research is interested in the ways in which specific communities can utilise immersive technologies to engage and reconnect with cultural artefacts in potentially novel ways. Primarily, one of our first objectives is to use the VR experience as a proxy to establish a (re-)connection between the younger generations and the Elders through objects both in Patrick's community on Thursday Island (Torres Strait, Australia) and Alim's immediate community in Freetown (Sierra Leone).

In our examination of the chosen artefacts, namely the Bondo/Sende Mask and the Turtle-shell mask, we have adopted alien phenomenology (see Bogost). This approach, which diverges from anthropocentric perspectives while acknowledging the primacy of human-centric perception, entails an "object-oriented engineering of ontology's physics" (29) that situates "things at the core of existence" (6) and assigns equal status to all entities. Indigenous ontological and epistemological frameworks have extensively upheld this standpoint by

ascribing legitimacy to elements that Western philosophical traditions might deem lifeless (see Wright *et al.*). Alien phenomenology is particularly relevant here as we place the masks at the centre of the VR experience, blurring the experiential boundaries between the virtual and real, past and present, human, non-human and more-than-human. Showing the agency, currency and relevance of key cultural artefacts through stories that combine the knowledge transmitted by the Elders with new narratives introduced by members of the two communities in Sierra Leone and the Torres Strait, we thus aim to 're-socialise objects'; not only 'people to objects', but also objects to their contexts and the activities associated with them (See Simpson). In her analysis of museums and restorative justice, Australian scholar Moira Simpson reflects on the fact that "[t]he process of museum collecting can be seen to remove the object from life and remove life from the object" (154). Therefore, engaging with such objects in dynamic ways seems to be the most appropriate course of action, if museums are to promote decolonial approaches to collections, curation and consumption.

**Can objects speak back? A methodological grounding**

Looking at questions of method as a starting point and a foundational aspect of this research and article, it is pivotal to acknowledge the collaborative nature of this endeavour. All involved parties contributed to the ideation and creation of the VR artefact in different and yet complementary ways. Collaboration is indeed a central part of the research as we aim to remove all hierarchical relations and give every participant equal standing, from the researchers to the community members. Indigenous scholarship on Indigenous methods and methodologies has produced a wide variety of approaches, each centred around different needs, local claims, structures and goals. Within such a rich scenario, we have been inspired by Linda Tuhiwai Smith's third edition of her pivotal work on decolonising methodologies as, after more than 20 years, it continues to offer guidance on how to carry out Indigenous research in ethical and decolonising ways. In discussing the articulation of an Indigenous research agenda,

the Māori scholar explains that there are two specific pathways; namely, "community research" and "institutional" projects that originate from academic research centres (146). Covering both domains, our project aligns with the principles of action research as it engages community members, building on their skills and experience, while erasing all boundaries between participants and allowing for organic cooperation and co-creation of knowledge(s) (see Halseth *et al.*; Stringer). Undeniably, "[c]ritical indigenous inquiry begins with the concerns of indigenous people. It is assessed in terms of the benefits it creates for them" (Denzin, Lincoln and Tuhiwai Smith, 2). In its capacity to promote positive interactions, establish strong collaborations and encourage accountability, 'yarning' was also used as a spontaneous and appropriate method (see Bessarab and Ng'andu) for promoting and recording the team's conversations about the creative process, its aims, and objectives.

Incorporating Indigenous perspectives and adopting decolonised research methods that challenge Western epistemology and prioritise storytelling (Archibald *et al.*), Alim Kamara and Patrick Mau, the two creative artists (musicians, rappers, storytellers) involved in the research, willingly embraced community-based participatory research.[6] Their primary goal was to actively involve and connect with members of their respective communities in Sierra Leone and the Torres Strait (Thursday Island). Throughout the project, each participant contributed their unique knowledge and insights, acknowledging diverse approaches to understanding the world. The other participants, an Italian scholar and a Greek lecturer and VR artist, presented views influenced by their southern European background, thus embodying and enacting a partnership model where Indigenous and non-Indigenous collaborators work together, sharing responsibilities, tasks and experiences (see Tuhiwai Smith). Having four different people who represent unique and contextual aspects of different countries, Sierra Leone (Africa), Thursday Island (Torres Strait, Australia), Italy and Greece (Europe), with London (UK)[7] as a connecting point, provided a productive terrain for cross-cultural discussions, despite the complexities of the project. Working in geographically distant places, having to

coordinate research from afar, and communicating from different time zones posed some issues that had to be negotiated and overcome. Reflexivity provided a feasible solution to such predicaments as it allowed us to move away from any pretence of objective inquiry.

Critical reflexive accounts have been flourishing since the reflexive turn in the Social Sciences around forty years ago and, since then, self-reflexivity has become the preferred method to examine the power dynamics, but also obstacles, generated during the research process. Despite its limitations, self-reflexivity can also provide a starting point for critical thinking geared towards collective action aiming at dismantling, and not just reinforcing, systems of privilege (Smith). Hence, the researcher's subjectivity needs to be investigated as a precondition to undertaking research grounded in a strong ethical and decolonising ethos that may reduce the colonial distance between 'researcher' and 'researched' (see Aull Davies). Self-reflexivity may thus help understand one's positionality by referring to the local knowledges that have informed particular subject positions, as well as positions of enunciation. Indeed, "[k]eeping one's location front and centre is a way that individuals can consciously assist from where their strength comes, and ensure that their integrity will not become compromised by the trials of academic research" (Kovach, 98). By acknowledging a perspective that does not claim to be firmly unbiased, we thus value reflexive approaches centred on those factors and experiences that have impacted upon the situated presence of the collaborators, but in ways that are meaningful, contextual and strategic.

**Structure and Design of the VR experience**

First, it is important to note that the VR experience we are referring to in this paper is still under construction. While we have an initial prototype, there are still many technical and thematic aspects that we need to finalise. As a result, this article represents a starting point rather than a point of arrival, or a conclusive piece. By reflecting on the processes that led to the creation of this collaboration, we aim to lay the theoretical and methodological

foundations that will allow us to build a sound and sustainable project as an open and developing 'yarn' (discussion).

Initial ideas for this work emerged from a conversation between me (Minestrelli) and the artists, Patrick and Alim. Having worked with both artists on different projects, we were already connected as friends and collaborators. My previous research in Australian Indigenous expressive cultures, Indigenous politics and media, together with my interest in digital technologies, facilitated conversations where all these elements could come together. We had been thinking about using VR to capture their music performances, but every conversation sparked new thoughts. Eventually, these concretised into a project that would develop in different stages and that responds to Jo-Ann Archibald's principles of "respect, responsibility, reverence, reciprocity, wholism, interrelatedness, and synergy" (382).

The overall project has been thought of as a two-stage experience to be undertaken in the Torres Strait, Sierra Leone and in the UK, where the artefacts are displayed. The first and current phase of the research precedes all other stages and aims to create the theoretical and methodological ground to reflect on the ethical implications of using VR collaboratively, to animate cultural artefacts. Successively, future phases of the project will address Indigenous/tribal youth[8] in the artists' communities of origin and in partnership with the Elders. The final stage will take the shape of an installation within the critical institutions where 'stolen' cultural objects are held (i.e., various museums and cultural organisations within the UK). In this case, the preferred audience would be non-Indigenous audiences and the same cultural institutions with which we endeavour to start a conversation about 'digital reconnections' and the environment in which they originate. Within this context, spatial elements and trajectories of Indigenous artefacts that have been removed from their original place of use to travel to the heart of the Empire have been considered in building the narrative for the VR experience we created as a team.

After some initial discussions about what we sought to achieve with this work, we decided to tell a story from the perspective of cultural artefacts. Patrick and Alim were asked

to choose an object they felt a connection to. They both, serendipitously, chose a mask. Patrick chose the Turtle-shell mask, a popular and iconic object that can be found in the Torres Strait region, between the northern coasts of Australia and Papua New Guinea, and which is associated with rich cultural practices and rituals (see David *et al.*) Alim chose the *Bondo* mask (also known as *Sande*), a wooden helmet mask that represents an idealised form of female beauty, and which is associated with women's initiation ceremonies in West African countries (Sierra Leone, Liberia, Ivory Coast, Guinea). Both artists motivated their choice by pointing to the ubiquitous presence of those artefacts in their communities and homes, their significance and connection to the history of colonial theft with its legacy.

Figure 1: Type of Sande/Bondo mask (20th Century), Sierra Leone, Mende peoples. Sources: Accessed from: https://www.metmuseum.org/art/collection/search/317846 and a Turtle-shell mask in the shape of a crocodile from the Torres Trait. Source: https://australian.museum/learn/cultures/atsi-collection/cultural-objects/crocodile-mask-from-the-torres-strait-islands/

With this in mind, Despoina Zachariadou, the VR lecturer, designed the experience in a way to emphasise the agentive qualities of the masks, which are here seen as animate objects. The idea of shifting the players' positions, changing subjectivities and states through the masks, thus crossing the line between human and more-than-human (Braidotti; Wright *et al.*), presents a powerful aesthetic device for thinking about those boundaries and how we can cross them through immersive storytelling.

Despoina decided to mix 3D with 2D elements, a style that is popular in animation, using 2D to create all the different scenes/environments that will be finalised and animated. These are complemented by key 3D elements that are crucial to the development of the story (e.g., hands and sea turtles). Successively, a VFX layer of 3D animated particle systems (i.e., rain, water bubbles, sunrays, etc.) was added, together with lights, fog, and other natural elements that give greater depth and realism to the experience. These aspects, together with the type of technologies utilised to be fully immersed in the experience (ideally through internal devices)[9] will help generate a sense of presence and connection with the story.

Another important aspect is the interactive element. Interactivity and immersion are key features of VR environments (Cipresso *et al.*), therefore, it was important to consider the ways in which users can interact with the virtual world in an accessible way. Thus, more prominence has been given to the embodiment of the experience through specific elements, such as hand visualisation, different scales and in and out-of-the-mask movement. This way, as players turn around, it will be possible to interact with the surrounding environment.

Visual metaphors and symbols (e.g., water) have been incorporated into the graphics without providing too many details so as to produce an emotive and inquisitive response in participants (both Indigenous and non-Indigenous). In this first iteration of the experience, the narrative progresses in a linear format without requiring the player to press any buttons. Yet, players can see themselves alive and responsive within the virtual environment and can focus on the story without breaking the immersion pattern. As a result, the whole experience will be more accessible to a diverse audience with different technological and physical needs. It will

also incorporate smart voiceover by the two artists who will help users understand what they see.

As I previously stated, the various stages of the project are designed to engage Indigenous/tribal youth from the artists' respective communities of origin as active participants in the experiential process. In this manner, the Indigenous knowledge garnered from community members remains intrinsically bound to and upheld within the community itself. In this phase, our primary objective is to cultivate a profound sense of affinity between the youth and the selected artefacts; a goal achieved through the strategic activation of sensory responses facilitated by the immersive attributes of the VR experience. It is worth noting that this immersive quality possesses the potential to evoke a diverse spectrum of reactions and responses.

It is therefore paramount to acknowledge that despite potential resource constraints in certain remote Indigenous communities, the advent of cutting-edge technological tools has the power to stimulate the younger generations into becoming enthusiastic adopters of these innovations (see Carlson and Frazer; Ginsburg). Consequently, our intention revolves around quantifying the influence of our endeavour at the community level. The ensuing phase entails a more dynamic and heterogeneous engagement with an international audience through an installation that will be held within selected British cultural institutions. In this case, participants embarking on the virtual reality experience will be provided with comprehensive guidance both preceding and following their immersion. Such explanations will be delivered by the artists themselves, who will provide contextualisation and elucidate the VR narrative and its relation to the chosen artefacts.

Throughout the duration of the experience, all participants will be prompted to identify with the mask, effectively experiencing the narrative through the lens of the artefact which, in accordance with the tenets of Object-Oriented Ontology (OOO), possesses animate and agentive qualities. However, it is important to acknowledge that the act of detaching traditional and sacred artefacts from their original contexts does raise a series of ethical

questions. Hence, the ultimate configuration of the experiential design will be meticulously tailored to align with the permissions granted by the Elders, determining the extent to which specific facets of the narratives can be divulged and shared.

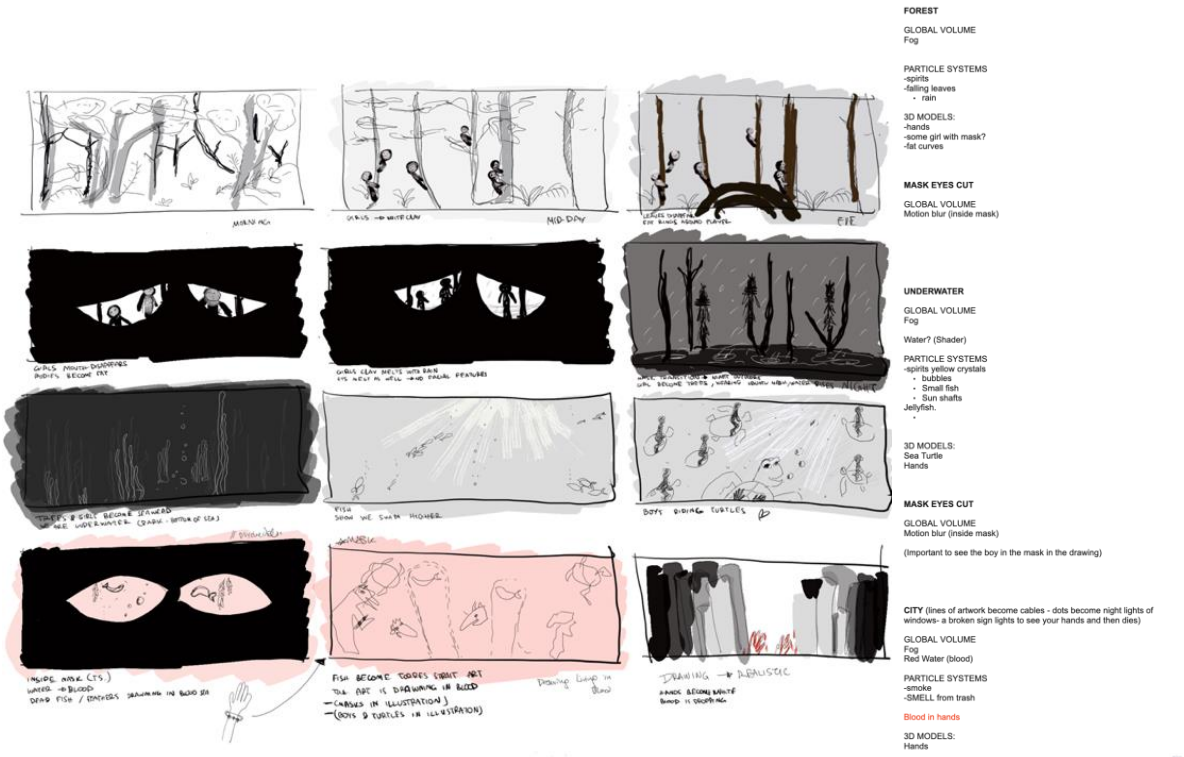


Figure 2: Storyboard with notes

**The story and its ethical implications**

The story starts in the forest in Sierra Leone. Here, users see a group of girls hiding behind some trees. They are ready to embark on a journey towards womanhood. During their initiation, the girls will have to wear the *Bondo* mask that represents the transition from childhood to womanhood. Users are positioned at a distance to observe the girls and the ritual, gaining insight through a note that appears (visually) corresponding to the scene. Once they receive this piece of information, the user's perspective shifts, and they 'become' one of the girls with their hands adorned with clay paint. From this vantage point, the world is perceived through the mask's viewpoint, which is portrayed as a living entity with agency. Guided by the artists' vocal instructions, the mask leads users through the virtual environment. At this stage, users are prompted to imagine themselves transformed into the mask, an

experience enhanced by the storytelling provided by Alim and the soundscape which mimics the sounds of nature and the laughter of the girls. After this scene, the background changes. The trees start to lose their leaves. The girls' mouths and the clay paint slowly melt and the girls, who are wearing the masks, turn into tree trunks. As Alim will explain (within the VR), users will be asked to transcend binary thinking (e.g., human/non-human, life/non-life, etc.). This process aims to help users re-evaluate the significance of each element within the story by acknowledging their interconnectedness and mutual dependence.

In the subsequent scene, rain falls. The rain, which constitutes a connective element between land and water, helps transition into the next scene/environment. This serves both as a graphic expedient and a symbolic element in the story. Water, as a sentient being and a key element for both African Indigenous/tribal cultures[10] and Torres Strait communities,[11] also represents the connective thread between the two cultures. As the rain continues to pour, , the water rises submerging the landscape, and the tree trunks transform into seaweed. Users are asked to embrace a different state of being. The new scene happens underwater. In this new environment, the narrative unfolds as users begin to swim towards the light. They are now in the Torres Strait and are riding a giant sea turtle alongside local kids.

Once more, users see the world through a mask, the Torres Strait Turtle-shell mask. From this vantage point, it is possible to see different types of fish swim and feathers float all around. The boundaries between human and non-human, life and non-life are thus continuously challenged by playing with different subject positions. As the mask fades away, players see the fish morphing into paintings that form a mural with Torres Strait patterns representing children wearing the mask and hunting for fish. After this scene, the black mural slowly turns red, and users are catapulted into a new reality. Participants are now transferred to an urban environment that resembles a metropolis (the reference is to Empire). Here, the tones are dark, and the main hue is given by signs covered in blood. Blood and buildings covered in the corporeal fluid symbolise the violence and cruelty of colonialism, past and present, and the

stealing of Indigenous heritage. At this stage, if players look at their hands, they will see blood on them. The mask vanishes.






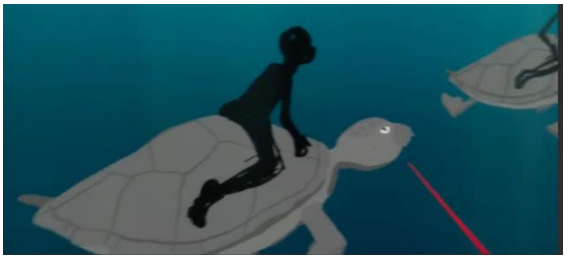

Figure 3: Screenshots from the VR experience

Looking at the ways in which Indigenous communities embrace new materials, media and technologies to tell their stories, Candice Hopkins explains how Indigenous peoples have been successfully using new tools to express themselves, subverting dominant narratives, representations and formats. As she affirms: "[i]t is through change that stories and, in turn, traditions are kept alive and remain relevant" (Hopkins, 342). This principle resonates with the ways in which Patrick and Alim approached the plot, structure and aesthetic choices for the VR experience. Indeed, the story develops by association between natural elements (e.g., water as an element for transition between two environments and a highly charged symbol) rather than internal cohesion. Such associations help strengthen the idea of the continuum between human, nature and more-than-human, life and 'non-life.. As users live the experience from the point of view of the mask, these boundaries are further challenged visually and in terms of narrative. According to object-oriented phenomenology, the mask is not just an ornament that can be worn, but it becomes an agentive life-giving and life-receiving element. Therefore, primacy is given to the way in which the mask[12] becomes one with the participant. This particular point can be one of contestation if not handled with care, as identification with different subjectivities can potentially clash with the beliefs and cultural practices of the involved communities. Therefore, such a delicate aspect will be resolved through direct consultation with the Elders and members of each community. As Cree scholar, Margaret Kovach aptly affirms, "[r]elational responsibilities exist between the Indigenous researcher and the Indigenous community; the Indigenous community and the researcher… non-Indigenous researchers and the Indigenous community; and between the academic community and

Indigenous methodologies" (178). Such a relational approach further promotes accountability, giving prominence to Indigenous methodologies as sustainable and decolonising approaches to collaborative research.

Further, as we were developing the story, we had several discussions about the way in which the initiation ceremony of the *Sende* girls should have been represented, whether or not we should have included 'blood' and how to make the presence of the two artists, Alim and Patrick, more visible within the experience. Looking at the Bondo mask, Alim has always been very careful to avoid any authorial voice over such a sacred and gendered object. Indeed, his approach is one of reverence and respect for knowledges that cannot be disclosed to men or those who are not part of the inner circle within his community. The idea to look at the *Bondo* mask was motivated by the constant presence of this object in West African houses. Growing up between Sierra Leone and London, Alim kept on seeing the mask as an object that anchored him to his culture in unique ways. He talks about the mask as something that people in his community are afraid of. As he says: "if you happen to see someone wearing the mask, you just run". There is a sacrality attached to it and an aura of mystery connected to the practices of female genital mutilation. This particular point was one of contestation within the group, as Despoina, the VR lecturer, affirmed:

> I had a lot of thinking about what to say about the masks and their stories and I found myself struggling a lot with the initiation ceremonies, having experienced myself strong social, work and life stereotypes for being a woman. I am very sensitive to these topics of either young girls or boys getting physically hurt in poor conditions and having to carry the role of a 'good wife' -or a warrior/strong man that kills the prey. (Zachariadou, D., personal communication, May 5, 2022).

Questions connected to such practices are now increasingly challenged by Western African women who are taking action to increase the safety of young girls, as Alim mentioned, but they also constitute core beliefs in other sections of the population. Considering the complexities around debates on FGM, from cultural relativist approaches to the question of

universal human rights, gender equality and safety issues, we decided to look at the Bondo mask from a different angle without wanting to neglect the important implications of the context of its use. We have done so by incorporating blood as an element to end the story, which can be seen as a metaphor for female genital mutilation (FGM), while also symbolising colonial violence. This conclusive part, characterised by a diverse assemblage of symbols, will deliberately retain a semantic openness, strategically designed to prompt discussions surrounding intricate ethical queries. Yet, this deliberate approach ensures that such exploration neither detracts from nor eclipses the core focus of re-establishing profound connections with the cultural artefacts.

**Concluding remarks**

As digital technologies are becoming more affordable, many of the voices who have been historically silenced are now eager to experiment with the affordances and possibilities offered by such platforms. In this paper, we have emphasised the potential of Virtual Reality as a well-consolidated and established tool to tell stories in immersive ways, engage myriad audiences and look at the future through past and present. The *Bondo* and Turtle-shell masks are here considered sentient beings that work in symbiosis with participants, guiding them through the VR experience and questioning the often-porous boundaries between the animate and the inanimate. Each researcher has engaged with the narrative by mobilising personal and community knowledges and connections through a dialogic, relational, and collaborative model.

In the next phase of the project, we will examine the direct impact of virtual technologies within the artists' communities and their relevance to international publics. Looking at points of connections and departures, similarities and differences, as we developed some of the ideas contained in this paper, we started to elaborate a series of questions that will function as guiding principles for the next stages of the project. Primarily, our queries endeavour to investigate the ways in which we can mobilise VR technologies and experiences

to connect, or reconnect, the younger generations of Indigenous/Tribal youth to their culture through stories around 'traditional' objects. We are also asking: how can we spark interest in cultural proximity and differences in non-Indigenous publics? How can we use Indigenous/Tribal artefacts to foster pride and interest in local cultures and encourage cross-cultural communication? Is there value in adopting the latest technological innovations for cultural revitalisation efforts? Such queries will guide us in the future as we set out to examine the value of VR in (re)connecting communities to their cultural objects. With this in mind, 'virtual reconnections' have provided and will provide a productive concept to investigate the complexities connected to the digitisation of cultural artefacts (see Crawford and Jackson). Undeniably, the digitisation of material culture allows creators and participants alike to explore the tangible and intangible aspects of local cultures in unprecedented and ethically complex ways.

***Notes***

[1] Yarning' can be defined as a way to share stories, learn from others and build strong relationships.
[2] Despite greater use of innovative technologies, Indigenous communities often lack access to such resources, as pointed out by several scholars (Hinkson, Ginsburg) who have addressed the question of the digital divide in their works.
[3] Some of these responses could be associated to connections to status, hierarchies, law, etc. These hold key relevance primarily within the Indigenous communities where they belong.
[4] Female Sande (Mende) or Bondo/Bundu (Temne) societies utilised carved wooden helmet masks. These masks were worn by esteemed members of society, specifically the dancing Sowei, referred to as 'ndoli jowei' among the Mende or 'a-Nowo' among the Temne (see https://www.britishmuseum.org/collection/object/E_Af1886-1126-1-a-b). The mask we are referring to here is the one chosen by Alim Kamara and displayed at the British Museum. Yet, for the VR experience, no specific type of mask is referenced.
[5] Turtle-shell masks are 'traditional' objects from the Torres Strait Island and have been used for ritual performances (https://www.britishmuseum.org/collection/object/E_Oc1855-1220-169). Turtle-shell masks can vary in form and typology. Like the Bondo mask, it is possible to see a Turtle-Shell mask at the British Museum in London. The VR experience does not represent a specific mask, but a generic type which is invoked and evoked through the graphics.
[6] More structured community-based research entailing interviews and informal conversations with community members will be conducted in the next phase of the project.
[7] Alim, Chiara and Despoina currently work and reside in London. Patrick, who lives in Australia wishes to promote his work in London.
[8] In many Indigenous communities around the world, the younger generations are often disconnected from their culture, or tend to shift away from the cultural practices of the Elders due to several socio-economic, colonial and generational factors.

[9] We need to differentiate between 'external devices' such as computer screens, smartphones, etc. and internal devices, which facilitate immersion into different locales and realities thanks to their abilities to stimulate the senses (see Takatalo *et al.*)
[10] Water and water spirits/deities hold a significant place in the beliefs of the Sande/Bondo communities, particularly during their initiation ceremonies. Headdresses adorned with water-themed motifs, representing ripples of water or even water creatures/spirits symbolising unattainable beauty standards, also serve as powerful references to cosmic forces and act as protectors of these peoples' medicines (see Drewal).
[11] For Aboriginal and Torres Strait Islander communities, water bears immense social, spiritual, and cultural meaning, beyond its more practical uses. This is evident in Indigenous art, narratives, and rituals. Water is also often linked to ancestral beings, Indigenous cosmologies and ontologies.
[12] The mask will change depending on the story and this will be signalled through a different design for the space around the eyes.

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