TITLE: Using virtual reality in preserving endangered rituals for posterity



ABSTRACT

In this paper Chouette Films explores the potential of virtual reality (VR) technology to be used in the preservation of cult

ural rituals and heritage for posterity. It reflects on the example of the endangered Yasna ritual and its documentation in VR for the Multimedia Yasna (MUYA) project at SOAS, University of London, funded by the European Research Council (ERC). The paper describes some of the challenges faced by filmmakers working in the field and explains the solutions presented by VR technology. It concludes with a call to decolonialise filmmaking through the new possibilities brought by VR.

INTRODUCTION

There has always been an apparent tendency within filmmaking for the craft of documentary production to be lured by new developments in technology. "From Vertov's kino-eye, through the search for portable synch to video's changing formats, its premise has often been seen as being dependent on technological capacities" (Dovey and Rose, in Winston, 2013 :366). In this regard, the advancement of VR has not been an exception to the technology-led trend. However, according to the Strategic Industry Analysis exclusive report released by IABM at the NAB 2018, "premium costs of professional VR

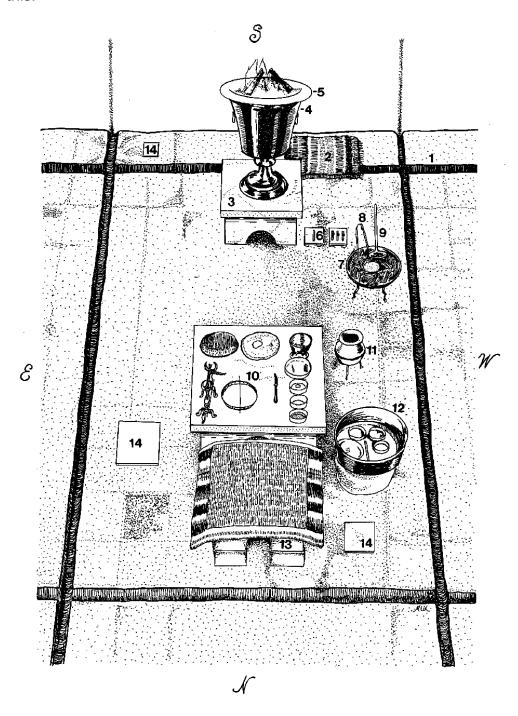
equipment remain too high with the added challenge of producing native VR content remains unclear from a creative perspective" (IBC, 2018). As a result, the industry is gradually abandoning VR in favour of exploring the possibilities of Augmented Reality (AR). However, with the increasing popularity of consumer affordable VR cameras, there is one sector which promises to benefit further from VR and where the technology could take root: the sector of world language and ritual documentation in academia.

ENDANGERED COMMUNITIES, LANGUAGES AND RITUALS

With the changes brought by globalization, urbanization and migration, endangered communities and languages are being lost at an alarming rate. "Of the 7,000 languages spoken by people across the world, 50 per cent are expected to disappear within the lifetimes of today's children. A language dies every 14 days" (Seyfeddinipur, quoted in Positive New, 2016). But languages are so much more than mere words. Languages are the force which perpetuates human culture, every word carrying the wisdom and heritage of a community. When a language dies, that precious knowledge which it encapsulated dies with it. Religious rituals represent one of the few areas of human behaviour which extensively preserve linguistic heritage. With certain surviving practices dating back fro the 2nd millennium BCE among these time-honoured rituals is the Yasna. It is the core ritual of one of the world's most ancient and influential living religions, Zoroastrianism. Originating from Iran, the Zoroastrian faith had been the land's state religion until the dawn of Islam in the seventh century. The population of Zoroastrians, or Parsis as they are called in India, is falling rapidly. Today, the largest surviving Zoroastrian population numbers only about 70,000 and is living in India, where they settled following the Islamic conquest. The performance of the Yasna ritual adheres to a precise sequence of ritual acts and must be carried out in a setting with access to specific facilities, such as a well with fresh water, rendering it increasingly challenging to conduct in the modern world. The practice has now been abandoned world-wide with the sole exception of India, where none but a few priests in Mumbai and Gujarat can still perform the ritual in the particular conditions that it requires. As a result, the Yasna is a highly endangered ritual, whilst the Avasten language, in which the Yasna ritual is performed. vanished from use as a spoken language ca. 2000 years ago. Studying the recitations and actions which accompany the Yasna is crucial to understanding the meanings and functions of the ritual within its historical context. Arguably, the influence of the Zoroastrian faith is embedded in Judaism, nascent Christianity and Islam.

THE YASNA RITAL AND ITS CHALLENGE

The aim of the ERC funded MUYA project with SOAS and Chouette Films has been to document the relationship between the recitation and action of the Yasna ritual and preserve its intricacies. The diagram below illustrates the setting in which the Yasna ritual takes place. Examining this image may clarify some of the challenges faced in the accurate documentation of the ritual and reveal why VR was the most suited medium to achieve this.



Confined and crowded space.

The scene of the Yasna liturgy is a small and furrowed area of only 2 meters (84,5 inches) in width and roughly 4 meters (152 inches) in length. Stepping outside of this confined area would invalidate the ritual and necessitate the priest to restart the practice from the beginning. The two performing priests are surrounded by several items of apparatus, such as the fire table (no. 3), the ritual table (no. 10) and the stone seat (no 13). Each of these pieces of equipment occupy a significant proportion of the furrowed arena's overall area. Furthermore, it is crucial for some of the items to be positioned in a specific relation to one another within the space and not to be moved, as this too would render the ritual invalid. Consequently, the confined area of the Yasna ritual becomes significantly congested, limiting not only the movements of the performing priests, but also the sight range of any camera.

Geographic orientation.

Within these spacial confines, for the majority of the rituals, the priests are sat at no. 13 facing south or east and no. 2 facing east or north, although they also move in various other directions over the course of the performance. Attempting to document the ritual from either the southern or eastern sides would have been counterproductive because the apparatus and the priests themselves would have been obscured, rendering an analysis of their gestures and movement impossible.

One continuous shot.

The seemingly obvious solution would have been to employ two 2D cameras and place them on the eastern and southern sides, or even four cameras on four sides, and then edit together the footage of the various cameras. However, this was entirely out of the question because one of the key aims of the proposed documentation was to provide an authentic and anthropological record of this 4.5 hour ritual in one continuous and uninterrupted shot with no cuts.

Focus on small detail.

It was of crucial importance to the project that the video documentation should capture every possible detail and intricacy of the ritual, so that academics studying the film would be able to analyse it and distinguish a ritual action from other gestures. On top of there being hundreds of ritual actions in the Yasna, the exact

number yet to be assessed, there are also two priests performing different ritual actions simultaneously. This considered, it would be impossible to focus on each act without missing another act happening at the same time elsewhere.

Interaction between performers.

Within this complex ritual, the two priests interact with one another throughout the Yasna, exchanging gestures and gazes. The simplistic solution of splitting the screen into two frames, to show the responses of both priests simultaneously, would not be feasible because no cuts could be allowed. Likewise, a wide shot from afar would be too distant and would compromise the small details that the ritual entails, such as tying a bull's hair to a ring.

VR AS THE ANSWER

These challenges faced by the filmmakers are not particular to the Yasna project alone. Such challenges are common place in the process of documenting rituals in any culture across the globe and they can only be overcome by spherical video. This technology enabled the film crew to place a VR camera in the midst of the ritual, documenting it from within and providing an unprecedented insight. Visually, the observer is transported into the centre of the ritual area. The VR camera shoots in 8K, enabling the viewer to closely examine miniscule details of the performance and to watch the ritual from multiple angles at the same time, creating a unique platform for in-depth analysis. This is a significant turning point from an anthropological perspective. Visual anthropologists and ethnographic filmmakers have always strived to "de-emphasize the filmmaker, because to pay attention to the observer is to draw valuable attention away from the subject at hand" (McDougall, 1998). Indeed, David McDougall, a pivotal figure in the development of ethnographic cinema and visual anthropology, stated that observational documentaries are most effective when they allow the social actors or subjects to become the "bearers of the immeasurable wealth and effort of human experience" (McDougall, 1998). This grants the audience with the privileged position of being an observer, captivating them with the beauty of the subject in focus. Furthermore, by making the filmmakers invisible within their own film, the audience is encouraged to understand and appreciate the crucial principle that the social actors must ignore the filmmaker - "for them to notice the filmmaker would amount almost to a sacrilege" (ibid.).

This observational approach is fundamental to language documentation, where "observed communicative events" (Himmelmann, 1998), with minimal influence from the researcher, are key to the analysis of linguistic behaviour. Therefore, for both language and ritual documentation, VR promises significant potential by enabling the presence of

the filmmaker to be completely removed. The presence of equipment, such as the VR camera itself, would never be as intrusive as a human observer. Moreover, VR solves the risk of a social actor looking directly into the camera, which renders footage unusable by the standards of many filmmakers. Instead, the VR camera is no longer the eye of the filmmaker, but a member of the audience, meaning that the act of looking into the camera actually enhances the authenticity of the film rather than hindering it.

None the less, it would not be correct to claim that VR enables visual anthropologists and ethnographic filmmakers to catch the subjects of their film unawares and to capture the world as it would be if the camera was not there. The promises of Direct Camera have never been fulfilled and they could never be. Documentary filmmakers and academics alike must acknowledge "the defeat of their utopian aim" and strive instead to create an alternative representation of truth which admits that re-enactment is at the heart of documentary. It is certainly much more liberating to simply acknowledge that documentary will never be perfectly representative of the real world and that it is impossible for the filmmaker to capture shots of life in its genuinely natural and unaffected state. Rather than passive footage of the truth, "documentaries are performative acts whose truth comes into being only at the moment of filming" (Bruzzi, 2006: 10). It is therefore imperative to recognise an alternative re-definition of the concept of "truth", which does not deny the presence of reconstruction and artificiality (Bruzzi in Winston 2013: 49). With this in mind, it is significant to apply the theories of Jean Rouch, who proposed that, especially in cinema vérité, people are "infinitely more sincere" when they are being filmed than when they are not, because "they begin to play a role" (Bruzzi, 2006: 134). In other words, sincerity is the recognition of being filmed.

This pressure to accept the inevitable artificiality of documentary, is the very reason why the practice of documenting endangered rituals unlocks the opportunity for unprecedented collaborations between the filmed and those filming. By definition rituals follow prescriptive rules, rendering them the ideal platform for allowing the filmed subjects to take over complete control of the filmed events and to lead the story with minimal intervention from the film crew. At the same time, the purpose of the recordings are for posterity. They will become, to some extent, the manual books for future generations, allowing the communities and researchers to benefit from access to languages, gestures and sacred rituals that have never before been documented. Staged recordings of endangered rituals provide the material to support step-by-step analysis of ritual performances, offering a valuable source for theological interpretation. Moreover, because many religious rituals invite the presence of different sacred beings and spirits, in some communities it may be considered blasphemy or sacrilege to film the actual events. Today, filming re-enactments of endangered rituals is not only valuable but also urgent,

because, as is evident in the case of the Zoroastrians, the number of practicing communities is declining rapidly.

In light of all of the reasons above, the film of the Yasna ritual recorded by Chouette Films has been a re-enactment. It should be noted that non-Zoroastrians are barred from entering the fire temple, which is the Zoroastrian place of worship. To date, the only visual materials available to non-Zoroastrians have been limited to a few sketches, drawings, and photographs used in scholarly works as illustrations to accompany text-based descriptions and reconstructions of the Yasna ritual. Therefore, the VR recording is a unique resource, not only for the academic community and religious scholars, but also for the general public. In addition, it can be used as training material at the last Zoroastrian priestly school, the Dadar Athornan Institute in Mumbai, which currently educates only 23 young boys.



The core rituals of the Zoroastrian religion, in particular the Yasna ceremony, are performed inside a Zoroastrian fire temple. This space is accessible only to Zoroastrians because only Zoroastrians observe the purity laws that puts a person into the state of purity required to enter a Zoroastrian fire temple. The priests who perform the ritual are in an even greater state of purity. To place a VR camera in the middle of the ritual precinct next to the ritual fire and film the performance of the ritual, provides to date visual and audio access to scenes which have been inacessible not only to non-Zoroastrians but even also to members of the Zoroastrian community. The viewer experiences the magic of the ritual, the sound of the recitation and the actions performed by the priest in a way that has so far been only experienced by the priest themselves as they perform the ritual. Making this information available provides access to an experience that has so far been the prerogative of a small class of ritual experts. It is hoped that making the experience available to larger audiences will stimulate the interest in the rituals of the Zoroastrian religion and enhance the tradition, both in ritual practice and in the transmission and teaching of the tradition.

Prof. Almut Hintze FBA, Zartoshty Brothers Professor of Zoroastrianism

Alongside the recording, Chouette Films has collaborated with the Parsi community to create a short VR installation depicting the key messages and meanings of the Yasna ritual in a creative format. It is aimed at reaching out to the general public who may not have the time or incentive to watch the full 4.5 hour-long recording. The VR installation is led by the voice over of a Parsi priest, who has performed a number of Yasna rituals in his life before stepping down from his role to become a scholar and study the Zoroastrian faith. His insight into the meaning within the ritual actions and recitations presented in the VR film is engaging, making the concepts behind the Yasna ritual approachable to the general public and young Zoroastrians alike. This experience gave Chouette Films a tremendous advantage, with the opportunity to build on the concept of a shared anthropology. While working with the Parsis on this installation, Chouette Films has been inspired by the work of Kat Cizek at the National Film Board of Canada. Cizek worked towards using media as a tool for social change through the process of co-creation. This process is the transformation of documentary subjects, so called "social actors", into collaborators. It is important to note that Cizek draws a distinction between participatory and co-creative filmmaking. Co-creation does not mean equipping the social actors with a camera so that they can record the material themselves. Rather, co-creation is, as defined by Cizek, "a collaboration with the intent to make quality media with the partners instead of just about them (italics in the original text), to make media as a media-maker together with people that aren't media-makers: citizens, academics, professionals, technologists, organizations" (Aston, Gaudenzi, Rose, 2017: 39). This idea is in line with Trinh T. Minh-ha's concept of "speaking nearby", as opposed to "speaking about", something or someone. It is a very simple concept, although sadly it is often overlooked in filmmaking practice. When dealing with power relations, speaking for, about, and on behalf of the subject is significantly different from "speaking nearby". An example of this would be the difference in the way in which one speaks about a close relation, for example a mother, in their presence as opposed to when they are not there. If the mother is not present, their close relationship might inhibit the speaker from talking about her objectively. However, if she is present, then the conversation will be significantly influenced by the speaker's awareness of how they address their mother and the mother's response. Likewise, while editing the Yasna project, Chouette films called upon the principle of "speaking nearby". By heightening the team's awareness of the presence and influence of the participants, this impacted on the ethical and aesthetic choices made throughout the project.



FUTURE TRAJECTORY

I am not claiming that the work of Chouette Films on the Yasna documentation is a textbook example of flawless co-creation. On the contrary, I am fully aware of our shortcomings. The project does, however, offer an example of what co-creative collaboration could entail. Firstly, it represents a pivotal phenomenon, in which the development of a new technology enables the revival and preservation of a century old tradition. Secondly, it demonstrates that VR has the potential to break down the barriers to participation and give a voice to people who would not otherwise have access to new media technologies. Thirdly, it enables the film industry and academia alike to employ the latest technology and "get things right this time", ridding filmmaking of the transgressions of anthropology or, in Rouch's words, "the eldest daughter of colonialism". To some extent, VR is a breakthrough of historical significance, giving filmmakers and academics the opportunity to decolonialise filmmaking through co-creation, shared anthropology and "speaking nearby". It is an opportunity not only to accept the filmed subjects on equal terms, rather than as subjects of anthropological observation, but an opportunity to let them lead. During the 2017 Open Doc Lab, Sam Gregory noted that much of the discussion on the subject of agency has been focused on "increasing the agency of the people in a VR experience. We're neglecting the agency of the people we have filmed, the people who are the subjects of the VR experience". This is of crucial importance to VR, as it is a medium which is increasingly used to document issues in vulnerable communities. Going beyond VR projects, others have called more widely for the participation of the people being filmed. In his latest book, Brian Winston said that "Participation is without substance if editorial control is not shared" (2017). Similarly, in "Unthinking Eurocentrism" (year: p.34), we read that if we are to break with Eurocentric thinking, the question that we must ask is not "how one represents 'the other", but "how one collaborates with 'the other' in a shared space". Whilst this may trigger some important questions regarding authorship, the future trajectory of the industry, including VR technology, ought to be moving towards transforming filmmakers into "facilitators embedded in the co-creation process" (Winston, 2017).

It is time to go beyond purely technological collaboration and see VR as a more holistic approach to collaborative filmmaking, in which co-creation plays a vital role. It enables the different stakeholders involved, from the social actors and the filmmakers to the research academics and even the funding bodies, to break away from the silos in which they usually operate. In a world where boundaries are being blurred, where fiction meets documentary, where charities build business models and businesses become more social, it is ever-more important to work "across disciplines and across theory and practice in order to explore VR's full array of potentials" (Open Doc Lab, 2017).

REFERENCES

Aston, J., Gaudenzi, S., Rose, M., 2017, *i-Docs: The Evolving Practices of Interactive Documentary*. Wallflower Press

Bruzzi, S., 2006 (2nd edition, first edition 2000), New Documentary. London and New York: Routeledge.

IBC, 2018, *Technology priorities: Adopting AI and neglecting VR*. [Online] available at: [https://www.ibc.org/tech-advances/the-rise-of-ai-and-the-decline-of-vr/2761.article] Retrieved 12 April 2018

MacDougall, D.,1998, Transcultural Cinema, Princeton, NJ: Princeton University Press.

Positive News, 2016, The last word: protecting our vanishing languages. [Online] available at: [https://www.positive.news/2016/lifestyle/23251/the-last-word-protecting-our-vanishing-languages/] Retrieved 12 April 2018

Shohat, E., 2014, Unthinking Eurocentrism: Multiculturalism and the Media. Routledge

Winston, B., 2013, *The documentary film book*. Palgrave Macmillan

Winston, B., 2017, The Act of Documenting. Bloomsbury Academic USA