Anthrovision
Vaneasa Online Journal

8.2 | 2020
Visual Essays in Post-Digital Habitats

Multisensory Ethnography Through Emplaced Augmented Reality

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Electronic version
URL: https://journals.openedition.org/anthrovision/6563
DOI: 10.4000/anthrovision.6563
ISSN: 2198-6754

Publisher
VANEASA - Visual Anthropology Network of European Association of Social Anthropologists

Electronic reference
Rob Eagle, "Multisensory Ethnography Through Emplaced Augmented Reality", *Anthrovision* [Online], 8.2 | 2020, Online since 31 August 2022, connection on 28 May 2023. URL: http://journals.openedition.org/anthrovision/6563 ; DOI: https://doi.org/10.4000/anthrovision.6563

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Multisensory Ethnography Through Emplaced Augmented Reality

Rob Eagle

Many elements of this article were presented at the VANESA residential workshop 'Crafting the Future of the Visual Essay', September 2019. Additional material on ethnographic film audiences was presented at the RAI Film Festival Conference, March 2019.

Introduction

1 As visual anthropology has incorporated a variety of forms of sensory research, ethnographers have found themselves embracing multimodal methods beyond orthodox ethnographic film, photography and sound recordings (Pink 2009; Cox, Irving and Wright 2016; Howes 2019). A new generation of visual and sensory anthropologists have developed work in formats like animation, illustration and non-linear media like 360-degree film and virtual reality (VR). Augmented reality (AR), in particular, allows the researcher-practitioner to bring 3D imagery and spatial audio together via a digital interface with other potential forms of knowing – such as scent, tactility and a sense of space – through placing the audience in a particular environment.

2 This article examines how site-specific AR can convey spatial and multisensory ethnographic research. I adopt the notion of *emplacement* from David Howes (2005) as situating the stimuli of the mind and body *in relation to* the environment. As Howes argues, the sensory turn in the humanities leads us to consider not just embodiment but emplacement – the way in which the *place* influences the experience of the mind and body: 'While the paradigm of "embodiment" implies an integration of mind and body, the emergent paradigm of emplacement suggests the sensuous interrelationship of body-mind-environment' (Howes 2005: 7). I build on the spatial as well as sensory turn in anthropology and the wider humanities to explore how site-specific AR can translate ethnographic data and forms of embodied knowledge through emplacing the audience and engaging the body and senses in multiple ways.

3 I present as a case study my own practice-as-research, an AR installation *Through the Wardrobe*,[1] as exhibited in Amsterdam in November 2019.[2] The installation requires each visitor to wear an AR headset that presents the stories of four nonbinary people from Bristol, England. As the visitor engages with physical objects (clothes and furniture) in the space, their actions and movements trigger each chapter of the story, revealing spatial audio and interactive 3D animations that look like holograms in the headset. The installation is a case study in how the medium of AR can work within a space to draw attention to the emplaced multisensory experiences of ethnographic research participants.

Through the Wardrobe

4 On the surface, Amstelpassage looks like any other arcade in Amsterdam's Centraal Station with boutique clothing shops, a hairdresser and a tempting toastie and smoothie menu at the Lil Amsterdam bar. Commuters and passengers use the arcade as a thoroughfare on their journey or as a place to wait, rest or shop between trains. For ten days in late November 2019, some of the temporarily vacant shops hosted a handful of immersive nonfiction experiences as part of the International Documentary Festival Amsterdam. One of these shops had 'THROUGH THE WARDROBE' written on the floor with bold and colourful items of clothing hanging in the window.

Amstelpassage in Centraal Station, Amsterdam

Photo by Rob Eagle

5 Visitors entered the shop and were instructed to choose an item of clothing that intrigued them and then try it on in the dressing room. All the clothing was secondhand and was either donated by or closely resembled the garments of four genderqueer and nonbinary people from Bristol,[3] England: Micah, Jamie, Bec and Sammy. Items ranged from a multicoloured wool jumper to a lumberjack-style check shirt to a silver sequin skirt and bright orange heels. Each item had also been subtly sprayed with unisex perfumes that do not conform to the binary conventions of 'masculine' or 'feminine' scents, as produced by European perfume companies.

Clothing hanging and on rails

Inside the 'shop', Amstelpassage in Centraal Station, Amsterdam

Photo by Rob Eagle

6 Each item of clothing had a tag with a name and an icon in a circle. Wearing the clothing, the visitor then put on a HoloLens, an augmented reality headset, and scanned the nametag. An introduction from the owner of the clothing began in the headset, and the visitor was then instructed to enter a mock set of a bedroom in the back of the shop. Directional audio and 3D animations in the headset appeared around the room and prompted each visitor to engage physically with the furniture to reveal more of the story. Approaching and interacting with each item of furniture triggered each chapter – five chapters in total for each contributor. Instructions in the headset invited the visitor to sit or lay down, move through the space, try on additional items, such as boots or jewellery, or apply a unisex perfume.

7 This media file cannot be displayed. Please refer to the online document http://journals.openedition.org/anthrovision/6563

8 VIDEO_TITLE=*Through the Wardrobe*: Introduction to the bedroom

9 VIDEO_LINK= https://vimeo.com/464034415/c56a9df951

10 VIDEO_CAPTION = *Through the Wardrobe*: introduction to the bedroom

11 VIDEO_CREDIT = Video by Rob Eagle

12 Even though visitors are wearing someone else's clothes and listening to their voices, they are never playing a role or pretending to be anyone other than themselves. The HoloLens allows the wearer to view their own body and physical environment with the addition of digital animations. AR is different from VR in that the latter is visually a fully enclosed virtual environment. In fully interactive VR, the person in the headset usually looks down and sees a virtual body in a virtual environment, creating a dissonant sense of both being present and yet not one's real self (Favero 2019). By contrast, *Through the Wardrobe* encourages the visitor to contemplate their body and

gender by creating the feeling of an encounter with a friend in their bedroom. The visitor is challenged to question their own labels, assumptions and gender identity through the intimate encounter form of documentary storytelling via the headset and physical interaction with clothing.

13 This media file cannot be displayed. Please refer to the online document http://journals.openedition.org/anthrovision/6563

14 VIDEO_TITLE=*Through the Wardrobe*: excerpts of animations

15 VIDEO_LINK= https://vimeo.com/465166788/cf12fa951b

16 VIDEO_CAPTION = *Through the Wardrobe*: excerpts of animations

17 VIDEO_CREDIT = Video by Rob Eagle

18 In addition to the AR version of *Through the Wardrobe* in the HoloLens headset, we provided an audio-only version for vision-impaired and text transcriptions for hearing-impaired visitors. We endeavoured to make the installation as open and accessible as possible. Other than Amsterdam, we exhibited free of charge in Sheffield, Manchester, London and Beijing. Witnessing hundreds of people go through the installation reminded me how the output of ethnographic research need not be limited to academic audiences.

19 This media file cannot be displayed. Please refer to the online document http://journals.openedition.org/anthrovision/6563

Audio version of *Through the Wardrobe* (produced for visitors with sight impairment)

Audio link https://soundcloud.com/rob-eagle-documentary/sets/through-the-wardrobe-audio-version/s-WL4TvKFqgHW

The Emplaced Ethnographer and Research Participant from Quotidian to Queer

20 In 2017, I moved to Bristol for my PhD. As I engaged with genderqueer and nonbinary people in the city, meeting people through friend networks and spending time together at queer club nights and cultural events, I found my four participants who agreed to be involved in the project. I had lengthy discussions with people about what genderqueerness means to them: knowing one's gender outside the binary of male/female (including agender, which is a rejection of gender identity altogether) and what that means in the daily choices and behaviours to express that gender. My research focused on forms of expression through clothing, accessories and actions of community and self-care. In contrast to the ongoing political discussions and sensationalist media coverage in the UK that often objectify, pathologise and debate the rights of trans people (Lester 2017), I wanted to start with the mundane and everyday: the act of getting dressed. My contributors shared stories of their methods of self-care, the sensory and emotional feelings of clothing and moments in childhood when they learned how best to conform to social expectations of gendered clothing – lessons that occurred in the home, enforced by parents and siblings. While mainstream broadcast documentaries on trans lives attempt to portray transitioning from one gender to

another as linear, my nonbinary contributors revealed the daily complexities of navigating the way they feel their bodies versus the way that others read and gender their bodies. They echoed how queer theorist Jack Halberstam (2018) describes transness as a constant 'becoming', a process that is never settled, easy or linear from one binary to the other. Consequently, my contributors spoke of feeling gender dysphoria, often induced by others' reactions or social settings or by the anticipation of leaving the home and going into the social world. *Through the Wardrobe* highlights everyday strategies of countering this dysphoria to feel *eu*phoria in one's body, starting from getting dressed in one's bedroom.

21 While ethnographies of transgender groups often examine strategies of community-building and world-making on the margins of society (Valentine 2007; Toomistu 2019; see many of the contributions in Herdt 1993), my research focuses primarily on the moments of individual reflection and the choices of what to wear or how to care for one's body before (or after) entering the social world outside the home. My research participants live and work mostly amongst cisgender people and mainstream society in Bristol. *Through the Wardrobe* highlights the moments of contemplation when choosing clothing and getting dressed in anticipation of going out – or, when a person cannot dress as they wish on the street (owing to dysphoria or social pressure), the methods of privately reclaiming their bodies.

22 I follow anthropologist André Cavalcante (2018) in focusing on the everyday and domestic scenarios of trans participants. Cavalcante's monograph records the experiences of trans individuals in America who came to know and imagine themselves through seeing often transphobic, sensationalist and naive depictions of trans stories in the media before the wave of more positive trans visibility of the past decade. Rather than imagining trans identities as a viable happy future, for many, their dreams of transitioning and being taken seriously and accepted was an impossibility, given the media misrepresentation of trans narratives. Many of those in Cavalcante's work came to embrace their transness through finding, connecting with and learning from others like them, whether online or in person. They shared strategies for transitioning and living lives affirmative of their trans identities. Like those in Cavalcante's monograph, my participants have had to look to social media and others within the city to find models and strategies for expressing their gender.

23 For *Through the Wardrobe*, I audio interviewed four contributors about their choice of clothing and its role in expressing gender identities that do not fit entirely into categories of male or female. In aiming for a method of 'shared anthropology', inspired by Jean Rouch (1978: 7; see Henley 2009 for a more in-depth discussion), I invited my contributors to take part in the production process, including user testing and installation design. Jamie became the production assistant for the installation in London. I wanted contributors to be an active part of the creative process – insofar as they would feel comfortable – and to understand the way in which they would be represented to audiences experiencing their stories. While I shall not explore models of documentary co-creation here, it is worth noting the input the contributors had in shaping and curating the work.

24 *Through the Wardrobe* features clothing they would wear if they *could* wear anything without societal norms; this is why it was important for me to set the experience in the intimacy and comfort of a bedroom. If Tim Ingold (2014: 135) is correct in that creativity and imagination require an 'aspiration' for the self in the future, then

Through the Wardrobe represents and recreates the everyday creativity in imagining oneself out in the world while getting dressed at home. It also forms a creative space where both my contributors and the visitor can imagine wearing items of clothing free from judgement. In the changing room and in the bedroom, there is the potential for the visitor personally to experience gender non-conformity and to question the gendered nature of clothing; these are all daily questions and dilemmas for my four contributors.

25 The installation becomes a space of potential queerness that allows the audience to imagine a freedom of gender expression that does not exist for most people. In fact, *Through the Wardrobe* becomes a space that is radically queer in the sense of queer theorist José Esteban Muñoz (2009: 1) defined as 'not yet here'. According to Muñoz, queerness can be understood in its futurity, as an ideality, as a 'rejection of the here and now and an insistence on potentiality or concrete possibility for another world' (Muñoz 2009: 1). Queerness, as experienced in *Through the Wardrobe,* offers a space for visitors to enact (albeit temporarily within the bounds of an installation) a world in which more bodies can reject gender conformity and occupy a space between or outside gender binaries altogether.

26 Through the use of semi-abstract animation, the visuals in the headset also challenge visitors to form their own interpretations of meaning. These visuals do not attempt to represent or depict the bodies of Micah, Jamie, Bec and Sammy but instead reflect the objects and spaces that make up their lives. Rather than striving for photorealism, the hand-drawn 3D animations exaggerate scale, resembling objects like a giant teacup or nail polish applicator or a miniaturised stone circle or tree. Such a style attempts to harness the medium not for simulation and simulacra of reality but as a tool for imagination and playfulness for the visitor. This pushes the visual 3D image from representational to interpretive and impressionistic, a method used in animated documentaries since the 1990s to recreate moments or portray metaphors and abstract concepts that could not be captured by a camera (Roe 2013). The image no longer attempts to replicate or depict things visually as they are but rather to interpret the essence of a person's story. This form of semi-abstraction opens ways for the visitor to engage with – and create their own meaning from – the stories.

From the Imagined to the Collaborative Audience

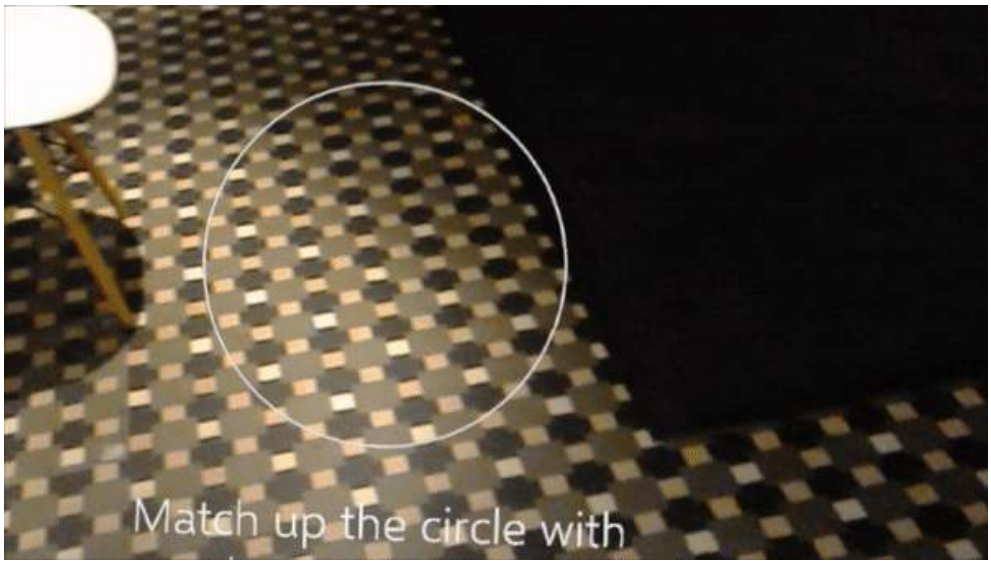
27 The production of any form of media (be it film, audio or otherwise) calls into question: who is the audience? Film-makers produce films in 'dialogical anticipation' of an imagined audience, visual anthropologist Stephen Hughes (2011) argues. A film-maker may shoot or edit sequences to create maximum aesthetic or narrative impact for the audience they imagine will watch it. The audiences of ethnographic films traditionally were restricted to the university lecture theatre (Heider 2006 [1976]) and then broadcast TV audiences (Henley 2020). In the 1990s, applying the methods of audience studies specifically to ethnographic film, Wilton Martinez (1992) attempted to shift scholarship away from how scholars read the film as text to how students make meaning by viewing the moving image. He was looking for what he called the 'interpretive gap' between what the ethnographic film-maker intended and how the student audience understood it. The California-based students in Martinez's studies inevitably brought their own American reading of ethnographic films of far-flung

indigenous communities, often remarking on the difference and exoticism of the ethnographic Others in the films. The cultural context in which media is experienced forms the ways in which meaning is constructed because, as Giulia Battaglia (2014) points out, the audience is never passive. They are always active in the meaning-making of ethnographic media, which may or may not be the meanings the producers (or indeed the contributors in the film) had intended.

28 For ethnographic media makers, the role of the audience in the production process does not only need to be 'anticipated'; the audience can be an active part of the editing process. Timothy Asch, for example, screened multiple iterations of his films for audiences, incorporating their feedback into each subsequent version (Martinez 1995). For Asch, the audience became collaborators in the making process (Lewis 1995). I adopted this view of the audience and applied a similar iterative method to *Through the Wardrobe*. Prior to the exhibition in Amsterdam, the work had been developed in stages over 2018 and 2019 as part of my practice-based PhD research. I presented a two-day installation in Bristol in November 2018 with a proof of concept in the form of clothing and static 3D sketches in the HoloLens. I then conducted semi-structured interviews with 19 visitors, asking them about their interpretation of the characters and topic, their thoughts on the journey and design of the story and their impressions of the technology. Their feedback directly informed the prototype first exhibited at Sheffield Doc/Fest in June 2019, from which I improved on the interaction design and layout for the exhibition in Amsterdam. The audience became active contributors to the design of the experience. I wanted to make the technological interaction as easy and uncomplicated as possible so they could spend more time immersed in the experience and less time learning how to operate the headset. An AR headset was new to nearly every visitor, so I limited the digital interaction commands to walking into virtual objects and gaze activation.

29 In reflecting on four people who transcend the binaries of gender, I wanted visitors to question the division of digital and physical, so that the physical experience would depend on the augmented animations and instructions, and the augmented would be triggered and engaged by physical objects.

Vision-activation, point-of-view of audience



Two examples of vision-activated and embodied interaction with the headset
Photo by Rob Eagle

30 About half of the visitors in Amsterdam stumbled upon *Through the Wardrobe* in the station, knowing nothing about the documentary film festival or AR technology. Because we had curated the windows to look like a boutique vintage clothing shop, many visitors simply wanted to buy the clothes. Only upon closer inspection of the labels on the clothes could they see that there was a name and an icon, no price tag. Some people walked away disappointed that nothing was for sale. Others took up the offer to try on the clothes and headset and explore the installation. There were different types of engagement in the installation: those who wanted to wear something far outside their comfort zone (perhaps heels or a necktie), those who wanted to feel more 'fabulous' (through sequins or a bold colour in contrast to their usual grey) and those who wanted something close to their own style to feel more directly connected to the person. There was no right or wrong way of beginning the experience, but I wanted people to question why they chose what they chose and how they felt in those clothes. Some were confounded either by the technology or by the content of the stories. The most touching moments were sitting down with people after they had been through the AR experience, when they wanted to discuss what clothing meant for them, the way they saw themselves and how they wanted others to view them.

Divisions and Continuities of the Audio-visual and Material Studies

31 In advocating for film to be considered as a legitimate vehicle of ethnographic information and research distinct from text, David MacDougall (1998: 262) contends that 'visual anthropology opens more directly onto the sensorium than written texts and creates psychological and somatic forms of intersubjectivity between viewer and social actor'. He employs the example of the written text that may describe the meaning of digging a ditch, but it cannot capture the embodied method (*à la* Michael Polanyi's model of 'implicit' or tacit knowledge). MacDougall's (2006) vision of

ethnographic film as a 'corporeal image' argues for the medium as a way of examining how our embodied seeing and being produces our understanding of the world. This expresses other forms of information such as subtle emotions, body language and rhythm of actions that cannot be captured in text. And yet, while many forms of embodied knowledge can be represented through audio and an image onscreen, the perspective for the viewer is still restricted by the film-maker's visual framing and pace of editing. My own point-of-view 2D videos in this article, for example, are useful as documentation of *Through the Wardrobe,* but they are poor representations of the pace, scale and multisensory experiences in the installation.

32 Just as anthropology has evaluated the potential of methods and output 'beyond text' (Cox, Irving and Wright 2016), visual anthropologists have embraced nonlinear and interactive media beyond photography and linear film and audio. Since the 1980s, visual anthropologists have used 'new media', such as interactive websites and CD-ROMs, to allow the audience to click around various material, including documents, photographs, sound/film files and text (Biella 2020). Hypertext allowed the (primarily academic) audience to select which hypermedia to explore and at their own pace. This granted an amount of agency in exploring the assemblage of materials, rather than the timed linear format of a film.

33 Immersive media (virtual reality, mixed reality and augmented reality) builds on this tradition of interactivity through granting the audience the ability to choose the view or direction of the story with their body. Visual anthropologists in recent years have evaluated the potential for immersive media to extend vision beyond the rectangular confines of the traditional camera's frame (Shuter and Burroughs 2017; Favero 2018; Westmoreland 2020). Therefore, I shall not recap here the affordances of immersive technology more generally. But it is worth mentioning how indigenous creators have also been using VR to visualise stories and legends, preserve language and imagine their futures (Wallis and Ross 2020). In the tradition of studies of indigenous media (Ginsburg 1991; Turner 1992), just as film was 30 years ago, indigenous VR is yet another form of media allowing the possibility of collaboration between anthropologists and communities. And yet VR, particularly 360-degree film, is a mostly visual- and audio-centred medium and as such is restricted to those two modalities. In his critique of anthropologists' enthusiasm for studying indigenous media to gain insight into the ways in which they 'see' their world, James Weiner (1997) argued that film as a narrow paradigm of Western media is too limited and inadequate to express many indigenous forms of knowledge. Film and photography perpetuate Western ocularcentric methods of academic study. I would include 360 films in this group of vision-centred media.

34 Marcus Banks and Jay Ruby (2011: 8-9) lament that a fascination with the production and interpretation of ethnographic film has dominated visual anthropology scholarship. The conflation of ethnographic film with visual anthropology neglects the other potential forms of investigation and output that comprise the broader field of visual anthropology. Historically, the material and physical were not always divorced from the audio and visual in anthropology. In fact, the study, collection and exhibition of material objects and culture grew alongside visual anthropology. AC Haddon's 1898 Torres Straits expedition, for example, was a seminal moment for what would become visual anthropology through the use of film and audio (Grimshaw 2001). It also resulted in the acquisition of thousands of objects, mostly now part of the Anthropological

Collection at the University of Cambridge. The historical legacy of the concurrent use of film, photography and audio with collecting objects can still be seen in anthropology departments and museum ethnographic collections worldwide today. And yet, by the 1920s, anthropology's early obsession with physical collecting became unfashionable and deemed as inadequate as 'evidence' to understand complex social relations and worldviews (Tilley et al 2006). Further, the acquisition of objects, which had started from a desire to study the ethnographic Other scientifically, had been allied to colonial practices and 'salvage anthropology' (Gruber 1970). 'New' material culture studies since the 1980s have focused on consumption and meaning-making of objects, not on physical collecting (Tilley et al 2006). The use of film and audio, meanwhile, flourished with the growing sophistication of methods of visual anthropology throughout the twentieth century (Henley 2020). Visual anthropologists have produced countless studies on the *production* of objects and material, whilst avoiding the actual collection of said materials. And yet, Sandra Dudley (2011) argues that capturing images of materials is in effect 'virtual collecting' – the modern-day digital equivalent of what early anthropologists did physically. There is a continuity of the anthropological practice of collecting with only a change in format from physical to digital.

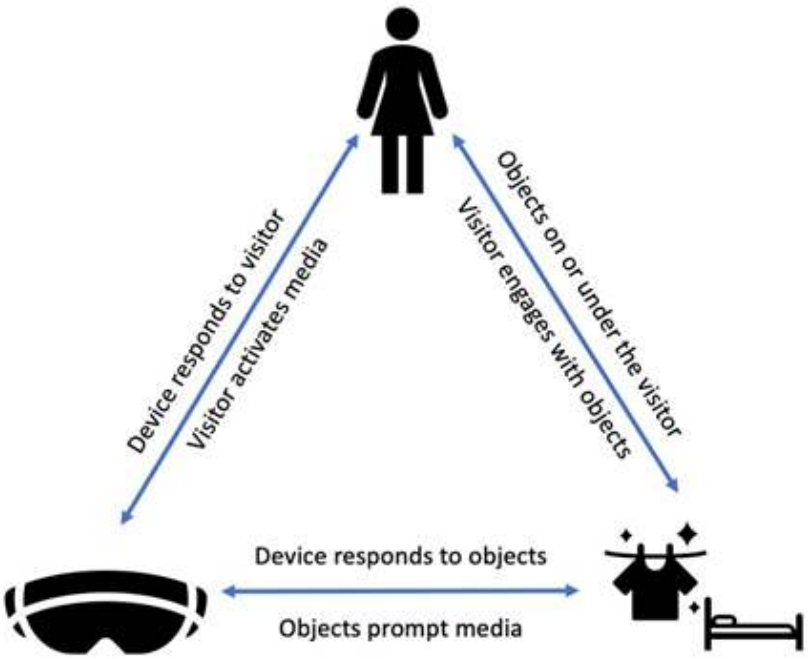
35 Augmented reality and other forms of media that engage with physical objects and spaces help to bridge the gap of modern visual anthropology dominated by film and the studies of material culture and sensory ethnography that call attention to senses other than seeing and hearing. When compared to the montage of film in which shots may be juxtaposed in order to create meaning or induce a shock for the viewer (MacDougall 2006: 20), it is the body of the visitor that allows connections and meaning to be made between objects and media. The body edits the pace, duration and perspective of the work. As some arts practitioner-ethnographers like Steven Feld have turned to galleries for sound installations (Feld and Ryan 2010), others have created and curated outdoor sound walks and smell walks (Pink 2009). Janine Prins (2018) has integrated video into the installation *Legacy of Silence* in which the visitor is free to explore and make meaning between domestic objects and media. Prins's curation of objects and media imitates the intimate process of exploring a person's home, creating a 'private atmosphere'. As Prins (2018: para. 43) reflects: 'Narration through montage in space, or scenography, may be more complex than creating a film meant for projection onto a big screen in the dark, but it has become clear to me that moving image and objects can perfectly complement each other.' The curation and staging of the exhibition relate a sense of intimacy and privacy communicated through the physical experience of the visitor – a sense of non-verbal, non-visual, spatial knowledge that film cannot represent, even through the cinematic language of close-ups and sound design. Similarly, AR in an installation context, such as *Through the Wardrobe*, can combine a number of elements – audio, visuals, material objects, facilitated by a tablet, phone or headset. If traditional linear media like film and audio hold the ability to convey visual and auditory ethnographic knowledge, then a spatial medium like AR can communicate other forms of bodily and spatial knowledge through movement and physical engagement with objects.

36 As Martinez (1992) and Hughes (2011) highlight, ethnographic film audiences are not merely disembodied consciousnesses consuming images, but they experience media through their senses and within a place. The audience is always emplaced. Whether a cinema, lecture theatre, art gallery or laptop screen at home, the same media may be played, but the bodily experience of the audience may be different. With installations,

such as *Legacy of Silence* and *Through the Wardrobe*, the physical space and objects (not just the multimedia content) are integral components of the work. The audio-focused work of Steven Feld in *The Castaways Project* perhaps highlights the dependency on context to an even greater degree (Feld and Ryan 2010). As the work was first exhibited as an artistic experience in 2007, it comprised a sound installation filling a hall at the Whitworth Art Gallery in Manchester, UK, with physical objects. A 5.1 audio mix from a surround sound speaker system enveloped the gallery visitor, imitating the auditory experience of different points around a Ghanaian beach. This played as gallery visitors gazed up at a large wall of whitewashed found objects from the beach, an artwork by Virginia Ryan. The same audio work was then presented in academic contexts and is available as a 62-minute online streaming stereo audio track. The complex sensory interplay in a gallery (e.g. 5.1 stereo audio, the room temperature and smell, the large scale of the visual element and texture and hardness of the grey floors) cannot be replicated in other academic or domestic settings. The listener is not just embodied but emplaced within each listening environment.

37 What does AR in an installation like *Through the Wardrobe* do that is different from other hybrid media-object installations such as Prins's *Legacy of Silence* or Feld and Ryan's *Castaways*? The key is in the integration of visual and audio elements on top of, within, and responding to, the objects. Whereas video screens or speakers sit embedded in the space of *Legacy* and *Castaways*, waiting for the visitor's arrival and discovery, the AR headset in *Through the Wardrobe* is activated in and throughout the space by the visitors themselves. Media plays a more active and dialogical role in the experience (see diagram below). The visitors engage with the AR device, and the media responds to their movements and choices; the physical objects provide visitors with a surface to sit on, a fabric to wear and a scent to smell; the device is programmed to recognise and respond to objects, and the objects prompt the media and provide a surface on which the animations play.

Diagram of the person-device-object relationship



The person-device-object relationship in *Through the Wardrobe*
Figure by Rob Eagle

38 In *Through the Wardrobe*, the acts of putting on both the device and the clothing present a challenge to how orthodox anthropology as a discipline approaches media and objects. In a museum, the visitor usually remains at a cool, reserved distance from a screen or a photo on a wall; objects, such as the spears from Haddon's Torres Traits voyage and dress on a mannequin, sit behind glass in a museum or university anthropology department, wrenched from their original context. Anthropologists have studied the symbols and meanings of their designs - but the visitor is not meant to touch them. Their original use and purpose, therefore, has been removed. Sandra Dudley (2011), in reflecting on the relationship of textiles and clothing to visual anthropology, provides astute insight:

> Certainly, the phenomenological notion that object-human relationships are reciprocal and dialogical (we see and are seen; we touch and are touched) seems especially pointed when considering the relation between a person and the clothes she or he wears. Phenomenological approaches to dress and to cloth may increasingly take over from the earlier, semiotic analyses, which, for dress as much as for the body, focused on display and on artifactuality. (Dudley 2011: 70).

39 Dudley makes the case for the agency of objects that see and touch back. The value then in studying or collecting clothing goes beyond the semiotic reading of its symbols, colours or style. Rather, the objects contain properties like smells or textures to which the wearer responds. This phenomenological approach gives us a different understanding of clothing: how it *feels* over what it *means*.

40 The phenomenological is overtaking the semiotic in *Through the Wardrobe* by *requiring* visitors to touch the objects. It is part of a trend in visual anthropology, as identified by

Banks and Ruby (2011: 14), 'a shift away from language-based models of analysis, and a questioning of representational practices [...] This ongoing phase is characterized by three main concerns: boundary crossing and collaboration; the use of new (digital) media; and a recognition of the full sensorium.' The entanglement of sensory elements (tactility and scent of the clothes, for example) with digital AR elements (directional audio and 3D visuals) within the space of the shop, allows visitors to assemble their own sensory, embodied and emplaced experiences. Visitors determine how they feel, see, listen, smell and move through the installation. As well as allowing greater agency in the meaning-making of the work, the emplacement of visitors in such a format creates and presents a different type of bodily knowledge from that of more orthodox ethnographic media like film, audio recordings and photography.

Conclusions

41 In reflecting on the theme of this special issue of AnthroVision, the future of the visual essay, this article offers some suggestions for visual anthropology to embrace spatial and nonlinear media. Works like *The Castaways Project*, *Legacy of Silence* and *Through the Wardrobe* – products of the 'sensory turn' within the humanities – illustrate that there need not be a dualism between the text and the image, forsaking or denigrating one to advantage the other (Cox, Irving and Wright 2016). Rather, in the embodied and emplaced experience of these installation works, there emerges a hybrid academic discourse, one rich in theory and text-bound forms of knowledge, that works alongside implicit knowledge and artistic craft. For me as an academic-practitioner, the future must embrace new and emerging media to communicate different forms of embodied and emplaced knowledge. Using and presenting these media does not constitute a rejection of theory or of text altogether. Rather, in my example of using AR and objects, the practice is informed by theory (e.g. trans/queer studies and social anthropology), illustrating and challenging that theory, and forms the subject matter for new texts – this article, for instance.

42 Finally, in order to understand the future of visual and multisensory anthropology, we must understand its past. When film and wax cylinders were first used by anthropologists in the 1890s, they too were viewed as novel and emerging (Clayton 1996). Along with the thousands of physical objects measured, collected and brought back to Cambridge, these audio and moving image devices could capture the 'evidence' and data of the ethnographic Other. A spatial medium like AR can also be used to represent the Other – but in the case of *Through the Wardrobe*, it can be used to make the audience reflect on themselves (specifically, their bodies and their sensory stimuli) in relation to others and to their surroundings. The installation format allows them to imagine themselves in a queer world that is not yet here. AR also allows the academic-practitioner to consider the body (and emplacement) of our audience as much as our research participants. As with any nonlinear medium, the viewer becomes a more physically active agent in the experience. In interactive media formats, the narrative unfolds through the choices and actions of the audience.

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NOTES

1. http://throughthewardrobe.net/
2. This project has formed part of my PhD research, not within an anthropology department but within the 'anti-disciplinary' Digital Cultures Research Centre at UWE Bristol. I am funded by the Arts & Humanities Research Council through the 3D3 Centre for Doctoral Training, a consortium of three universities in the southwest of England. We form a cohort of practice-led PhD researchers in the creative and performing arts, especially the interrelated fields of digital design, digital media and digital arts.
3. For more on the distinction between genderqueer and nonbinary identities and expression, introductory information can be found on the FAQ section of the project website: http://throughthewardrobe.net/home/frequently-asked-questions

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ABSTRACTS

Incorporating moving and still images and audio within the text, I examine in this article how site-specific augmented reality (AR) can convey ethnographic research and forms of embodied knowledge through emplacing the audience and engaging their body and senses in multiple ways. I adopt the notion of emplacement from David Howes (2005) as understanding the stimuli of the mind and body in relation to the environment. I present as a case study my own AR installation *Through the Wardrobe*, exhibited 2019-20. As a dynamic practice-as-research project, the installation illustrates the potential for integrating anthropological visual culture and material culture theory via the audience studies of ethnographic media. The combination of multisensory stimuli with spatial media like AR opens the possibility for the ethnographer to present complex ways of knowing.

En incorporant des images fixes et mobiles ainsi que du son dans le texte, j'examine dans cet article la manière dont la réalité augmentée (RA) spécifique à un site peut servir de support à une recherche ethnographique et à des formes de connaissances incarnées en positionnant le public et en faisant appel de plusieurs manières à son corps et à ses sens. J'adopte la notion d'emplacement de David Howes (2005) pour comprendre les stimuli de l'esprit et du corps en

relation avec l'environnement. Je présente comme étude de cas ma propre installation de RA Through the Wardrobe, exposée en 2019-20. En tant que projet dynamique qui s'appuie autant sur la pratique que sur la recherche, l'installation illustre le potentiel d'intégration de la culture visuelle anthropologique et de la théorie de la culture matérielle via les études d'audience des médias ethnographiques. La combinaison de stimuli multisensoriels avec des médias intégrant la dimension spatiale comme la RA ouvre la possibilité pour l'ethnographe de présenter des modes de connaissance complexes.

Incorporando imágenes en movimiento y fijas así como audio dentro del texto, examino en este artículo cómo un tipo específico de realidad aumentada (RA) conectado al lugar puede transmitir la investigación etnográfica así como formas de conocimiento corporizado a través del emplazamiento del público y de la imbricación de su cuerpo y sus sentidos de múltiples maneras. Adopto la noción de "emplazamiento" (emplacement) de David Howes (2005), definida como la comprensión de los estímulos de la mente y el cuerpo en relación con el entorno. Presento como estudio de caso mi propia instalación de RA Through the Wardrobe, expuesta en 2019-20. En tanto que proyecto de investigación de carácter práctico, la instalación ilustra el potencial de integración de la cultura visual antropológica y la teoría de la cultura material a través de los estudios de audiencia de los medios etnográficos. La combinación de estímulos multisensoriales con medios espaciales como la RA abre la posibilidad al etnógrafo de presentar formas complejas de conocimiento.

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Mots-clés: anthropologie visuelle, réalité augmentée, réception du public, emplacement, culture matérielle, anthropologie multimodale, médias interactifs, médias immersifs, études de genre
Palabras claves: antropología visual, realidad aumentada, recepción del público, emplazamiento, cultura material, antropología multimodal, medios interactivos, medios inmersivos, estudios de género
Keywords: visual anthropology, augmented reality, audience reception, emplacement, material culture, multimodal anthropology, interactive media, immersive media, gender studies

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