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VR Kaleidoscope: Reconfiguring space and place through community-based media literacy interventions

Abstract

This paper presents the findings of VR Kaleidoscope, a community-based educational project involving young people from disadvantaged backgrounds in the creation of 360-degree films for Virtual Reality (VR).

VR has been theorised as a 'productive enhancement to human interaction, bringing together people from around the world to engage and interact' (Reede and Bailiff 2016). The project aimed to provide the participants with the tools to 'become actively involved in their worlds' (Hoechsmann and Poyntz 2012), by enabling them to produce immersive films. The research around the project provides empirical evidence, through qualitative interviews and VR projects, of the potential impact of VR in educational settings, exemplified in this project by the notion of Critical Media Literacy, which aims at providing 'marginalised or misrepresented people' with 'the tools to express their concerns' (Kellner and Share 2007).

VR lends itself for thinking about, and representing, 'space' and 'place' in new ways, due to its immersive potential. The young people were provided with VR training in order to create their own 360-degree films responding to the theme 'What does place mean to you?'. The project sheds light on the technological, relational and experiential aspects of VR practice and aspires to prompt media educators, filmmakers and community groups to collaborate using VR.

Key words: virtual reality, VR, community, collaboration, space, place, pedagogy

Introduction

This paper outlines the findings from an innovative collaborative project that took place in 2018 between staff and students from Coventry University and users of a local charity, *The Positive Youth Foundation* (PYF) in order to explore the efficacy of VR as an educational tool capable of being used to engage young people from disadvantaged backgrounds.

Young service users with little, or no, experience of either filmmaking or university, worked closely with student mentors to produce 360-degree films highlighting their experience of the spaces and places they inhabit on a daily basis. The aim was to explore how new technologies - in this case 360-degree cameras and VR - could be used by people with no experience of either filming or of VR to articulate something personal to themselves in order to ascertain three things:

1. How accessible and easy to use the technology was for people with knowledge of digital technologies and social media but no significant filmmaking skills;
2. How these relatively new technologies would be used by VR novices to explore space/place [1] and tell stories about their lives that would be accessible and engaging to a wider audience;
3. How these technologies could be used in larger-scale projects both in formal and informal educational/community engagement settings.

We placed this project within the context of Critical Media Literacy, due to the emphasis on its transformative potential, which is argued to enable marginalised people to tell their stories and express their concerns (Kellner and Share 2007). VR provided an alternative and inspiring means for young people to express their perspectives on issues of space and place, through a novel methodological approach introducing VR films as data in youth research.

Community Creative Practices

This project drew upon a long history of community collaboration in areas such as theatre, photography and dance.

Theatre of the Oppressed is Augusto Boal's interpretation of Paulo Freire's work on transformative pedagogy (discussed in the following section). Boal foregrounded theatre as a means of social and political change and used performance to encourage meaningful analysis and discussion of various forms of oppression. In doing so, he involved community members as participants or performers, using theatre as an alternative language to learn about, share and transform oppressive situations (Howard 2004).

In terms of photography, Photo Elicitation and Photovoice are notable amongst the visual methods relying on community involvement. Harper (2002) defines Photo Elicitation as a process 'based on the simple idea of inserting a photograph into a research interview' and divides Photo Elicitation studies in four areas, including social class and social organisation, community, identity and culture. This approach can provide participants with a more active role, encouraging a more relaxed and aware participation. The idea of dialogue is salient in Photo Elicitation, as it enables a collaborative meaning-making process, establishing a form of communication in which mutual understanding of the physical, social and cultural contexts of participants can be explored (Bignante 2010 [2]). The method of Photovoice is often associated with Action Research, and it is more time-consuming compared to Photo Elicitation, as it requires ongoing work with participants for a long period of time (Rose 2012).

Finally, community dance practice involves choreographers and dancers co-creating dance that reflects the concerns of specific communities (Barr 2015). The purposes, practice and values of community dance has been a subject of critical debate since the mid-1980s (Amans 2008).

What these collaborative creative practices have in common is an emphasis on concepts such as 'voice' and 'oppression', which have been widely critiqued, particularly in light of Post-structuralism and feminism. Such critiques foreground the impact of discourse on constructing subjects, thus challenging the notion of the universal and fixed identity which is often found in Critical Pedagogy discourse. In line with these critiques, we deploy the theory of intersectionality to discuss the findings of this project. Intersectionality refers to the interaction of multiple identities and experiences of exclusion and subordination (Davis 2008). Feminist writers, in particular, highlighted the contextual nature of educative practices and the ways in which difference operates within these contexts (Orner 1992, Gore 1992, McLeod et al. 1994).

In light of these critiques, the trajectory of the work in these areas has moved from working *in* the community to working *with* communities. This apparently subtle semantic difference points to a significant psychological and political shift in how academics and creatives have perceived the types of skill and knowledge that these communities possess. Although not the types of skills and knowledge that attract the highest cultural capital[3], they are nevertheless significant in both constructing certain types of identity and being able to articulate the experience of marginalisation in specific ways: ways that, by definition, have been previously marginalised.

There was an added impetus for this type of project in that Coventry was, in 2018, named as the UK City of Culture for 2021. The City of Culture is an event that occurs once every four years, highlighting and promoting the arts and cultures in that city as a means of celebrating those cultures and providing an opportunity for regeneration within the city and a lasting cultural legacy. The bid to host the City of Culture ties in to a longer City Cultural Strategy which emphasises five goals - Partnership, Lifelong learning, Diversity, Health and well-being and Economic growth - related to seven big ideas: Place Partnership, Creative Production Hubs, City is a Festival, 7 Years Younger, Nation in Coventry, Diverse City, Getting Coventry Moving. Therefore, this project is timely, as some of the ideas at the heart of this intervention resonate with the Coventry City Cultural Strategy.

Methods

This research is innovative in terms of methodology, as it introduces 360-degree film and VR within youth research. A qualitative approach to data collection and analysis was pertinent due to being grounded in the lived experiences of people (Marshall and Rossman 2011: 2). Participants were encouraged to express their own experiences of space and place, producing knowledge from empirical data that moves beyond theoretical discourses.

The actual intervention took place in four main stages:

1. Prior to starting the project, the Media Production students who acted as mentors took part in a youth work workshop which provided them with training in terms of dealing with young people. The initial workshop with participants took place on campus, introducing the young people to the project and VR technology through demonstrating the 360-degree cameras that they would use for filming. At that stage, six young people were invited to attend the workshop, two of whom decided to continue owing to their available level of commitment, passion for working in VR and their initial ideas.

2. The second workshop concerned idea development. Nadira and Kenza were introduced to using VR headsets and watched the VR projects *Clouds over Sidra* (2015) and *The Party* (2017). These projects were selected based on their content and their relevance to issues of identity, as they concerned young people coping with being, respectively, a refugee and an autistic person.

These VR projects provided engaging tools for raising awareness in the context of youth work, due to their immersive potential. PYF work with both refugee and autistic young people and these projects could shed light on their perspectives. As the PYF youth worker pointed out:

> '… to show host communities, Coventry born and raised young people who will help with integration of these communities, (...) a video like that so they can have that perspective on what happens outside of their bubble would really make a difference'. (PYF youth worker).

3. Filming took place on two days in various locations across Coventry and the mentors assisted participants with using the 360-degree camera. The project was completed through a series of editing workshops, during which the mentors collaborated with the young people in order to finalise the projects.

4. In the final editing workshop, we recorded qualitative interviews with participants. We used a semi-structured interview format, as it gave us more flexibility in developing aspects that the interviewees might find more important (Brinkmann 2013). The transcripts of these interviews and the VR projects that participants created provided the empirical evidence that we analysed upon completion of the project.

This methodological approach enabled us to illuminate a gap in the scholarly literature by providing empirical evidence of the use of VR in community-based settings. Given our backgrounds in media practice and our interest in Media Education, Critical Media Literacy provided a suitable framework to explore young people's understanding of space and place.

Critical Media Literacy

The model of Critical Media Literacy has been influenced by the educational legacy of Brazilian educator Paulo Freire (1921-1997). In his seminal book *Pedagogy of the Oppressed* (1996), originally published in 1968, Freire advocated his 'problem-posing' educational strategy and critiqued the 'banking' model, according to which knowledge is deposited from teachers to students. Freire championed doing research *with* communities, not *on* them, thus transforming the power dynamics between the researcher and the researched.

The transformative pedagogy that Freire illustrated contributed to the development of Critical Pedagogy discourses, which influenced educators across the globe. Ira Shor provides a definition of Critical Literacy*,* which points to deconstructing dominant narratives aiming at exposing the meanings and ideologies behind them:

> Habits of thought, reading, writing, and speaking which go beneath surface meaning, first impressions, dominant myths, official pronouncements, traditional clichés, received wisdom, and mere opinions, to understand the deep meaning, root causes, social context, ideology, and personal consequences of any action, event, object, process, organization, experience, text, subject matter, policy, mass media, or discourse (Shor 1992: 129).

In the field of Media Education, such discourses are linked to Critical Media Literacy, which aims at providing young people with the skills for interpreting the various 'meanings' of media texts - constructed through the complex interplay between the factors in the quote above - thus enabling them to have more critical responses to 'socially constructed forms of communication' (Kellner and Share 2007: 5). In addition,

this approach promotes youth agency by developing young people's self-identities and self-expression (Hoechsmann and Poyntz 2012). Media production, and sharing the work with audiences, has the potential to increase young people's confidence through the development of new skills and increased self-esteem.

This research is innovative in terms of implementing VR in Critical Media Literacy, as the use of digital/new media within Critical Pedagogy has been under-researched. In our attempt to implement this transformative model, we worked with young people from disadvantaged communities and collaborated with PYF, which is based in Hillfields [4], an area with high levels of deprivation in Coventry. Participants were recruited through PYF and whilst they did not experience the specific forms of 'oppression' that for example Freire analysed in his writings, such as the consequences of colonisation and illiteracy, their backgrounds aligned with the aims of Critical Media Literacy interventions.

Participants' backgrounds were illuminated in an interview with the youth worker who coordinated their selection. Nadira [5], 16 years old, was chosen as her participation was seen as a means of expanding her horizons. She attended an all-girls faith school which provided a rather sheltered experience:

> '(Nadira) is very creative but doesn't necessarily use that creativity very often, and she isn't necessarily isolated but she doesn't always take part in lots of different things, so it was key to keep pushing her to stay committed to get involved in something that would be a totally new opportunity for her.' (PYF youth worker).

Kenza, 17 years old, had an interest in media and this project was an opportunity for her to develop her media skills towards starting a career. Nadira and Kenza's commitment and enthusiasm were also crucial, considering the challenges of creative community-based projects, which can be time-consuming thus requiring engagement.

Issues of identity and space/place

Places are seen as central in expressing a sense of belonging and can provide 'a locus for identity' (Hubbard and Kitchin 2011, Raffo 2011), due to their connection to the lived experience of people. Hall et al. posit an understanding of youth as an 'expansive moment' which provides young people with contexts to explore their emergent sense of themselves as individuals. In approaching adulthood, young people negotiate issues of shared identities and belonging, which relate to questions of locale (Hall et al. 1999). Therefore, the theme that was given to participants for creating their VR films was space/place: in particular, they were invited to creatively interpret the question 'What does place mean to you?' as a means for the participants to explore their emerging personal identity in specific relation to the places that they inhabit.

Acknowledging the idea of a fixed identity can be problematic, though, as the intertwining of participants' multiple identities emerged as a finding from this project, pointing to the notion of intersectionality which will be revisited in the discussion section of this paper. As mentioned above, Post-structural and feminist discourses that emerged in the 1990s also shifted emphasis away from identity towards difference

and the ways in which place constitutes difference in terms of gender, class, ability, race, ethnicity, religion and nationality (Antonsich 2013).

The immersive potential of VR

360-degree cameras and VR were specifically chosen for this project as we wanted to explore whether or not they provided a greater potential for the filmmakers to tell a different type of story and provide a greater sense of immersion and empathy for the experiencer of the films produced than that produced by 2D films.

Ryan (2015) notes that there are three main types of immersion '... in response to narratives: spatial immersion, the response to setting; temporal, the response to story; and emotional immersion, the response to characters' (2015: 86). Although each of these is applicable to 2D filmmaking, she argues that these types of immersion are different in immersive film and enable a potentially deeper level of embodiment, and therefore a deeper level of understanding and empathy.

Space does not permit a more detailed discussion of Ryan's categorisation of the levels of immersion but we would argue that there is another layer of immersion in the type of non-narrative 360-degree film that were produced by our participants. Through its form and method of experiencing, 360-degree film experienced via VR enables what we call *intellectual immersion*.

As we will see below, the films produced by the participants were 'vignettes of space', rather than linear narratives, that were designed to provide a sense of the participants' place within a certain locale. As such, they might be seen to only really be able to create 'spatial immersion' to a certain extent. So, even though there may be perceived to be a 'lack' in their films because they only really addressed one of the three levels of immersion, for us, the films are enhanced because they require a different relationship between the filmmaker and experiencer of the film: less about 'walking in the shoes' of the participants and more about 'getting inside their heads' to understand what they think about the situations that they are in. So, they are potentially *more* immersive, not less because of the greater intellectual labour required in understanding these situations. The following section provides an analysis of the VR films that were created by participants.

Analysis of the participants' VR projects

Step into my darkest fears (3.03)

From the first workshop, Kenza expressed her intention to create a VR project inspired by horror films. She wanted her project to be about coping with her fears, in order to encourage other people to overcome their own fears.

Filming took place in the former Coventry Evening Telegraph building (CET) in the centre of Coventry, a newspaper office which was used as an art space before, eventually, being transformed into a hotel. Parts of the building were deserted at the time of filming, thus evoking the impact of Kenza's fear on her emotional state.

The opening scene shows a deserted office which is used as a metaphor to describe Kenza's fear of loneliness. We see a door opening, which invites the audience to 'step into' Kenza's fears in line with the title. As the lights turn on, we can discern a young

girl sitting alone in the middle of the room. The door closes and there is a cut to the next scene.

[Insert Figure 1: Screenshot from 'Step into my darkest fears']

Then we see Kenza entering a confined space. She reveals writings on the wall hidden behind picture frames. These writings indicate some of the things she worries that other people might call her- 'bitch, useless, fat, crazy, too dark'. Being in a tight room represents how Kenza feels about how other people might see her, similar to being restricted or trapped in a small space.

Kenza is then seen sitting on stairs, her hair pulled up in two ponytails. This scene relates to Kenza's fear of dolls, which goes against gender stereotypes that are often found in mainstream media. The final scenes depict Kenza's fear of evil clowns, she appears wearing clown makeup and looks straight into the camera. Kenza's decision to use the CET building to represent her fears enabled her to articulate a sense of self, as it was by expressing these fears that she could come to terms with her identity.

Day in the Life of A Muslim Woman (2.45)

Nadira aimed at creating a VR project about the everyday life of a Muslim young woman:

> 'I felt like I needed to portray this message about Islamophobia and how people like me that are struggling as Muslim, as a woman who has to wear hijab, and how after every hardship there is ease and you can go through it, you can persevere.'

The opening of the film is followed by the title: '9/11 took place before I was even born, Islamophobia is all I have ever known', reinforcing the message that Nadira wanted to convey. The next shot shows Nadira wearing a hijab and praying outside Coventry College, a place which she described as familiar in her interview. Then we see Nadira sitting outdoors with another girl wearing a hijab, while passersby mock them.

[Insert Figure 2: Screenshot from 'Day in the Life of A Muslim Woman']

The following shot represents the calmness that Nadira described as coming after hardships. We see her near a tree, which is a symbol of faith in Nadira's culture. She is then portrayed sitting on her own in the canteen and looking sad, similar to how some people might feel, being isolated due to their culture or religion. These shots are intercut with shots of Nadira praying, which she turns to as means of enhancing her perseverance. The film ends on a positive note, as we see Nadira chatting happily with her friend in the canteen. This project offers a different perspective on the term Islamophobia, which is not commonly found in the media, suggesting that Muslim young people might feel vulnerable and distressed in everyday situations.

Findings

This was a small-scale pilot project but, even so, there were some significant findings related to the technological, relational and experiential aspects of this project.

The use of the technology

The technology used - Ricoh Theta cameras and Adobe Premiere - is relatively cheap and relatively easily-accessible to certain groups of people but still out of the reach of other, marginalised groups. The cultural production of films for VR tends to be in the hands of those with existing cultural capital and that was one of the key drivers for this project.

It became apparent very quickly that the participants in the project already had a level of cultural capital around producing, distributing and viewing media, via their phones, that meant that they found it easy to shoot in 360. Unlike traditional video cameras, the fact that 360-cameras 'point and shoot' in 360-degrees means that novice filmmakers working with the medium do not have to have the same knowledge of film production techniques - staging, lighting, composition etc. - that they would need if filming in 2D. Although this requires traditional filmmakers to learn a new 'language', for our participants it was unproblematic. Indeed, it was the freedom that 360-degree filming that enabled them to have a greater sense/ flow of creativity:

> 'I think it enabled the two girls to really become creative and really think outside the box, especially me as well, it made me think outside the box as well, because they had some brilliant ideas but (...) we had to think about how 360 works and I think it was really good in the end because it was simple, easy and that allows creativity to flow a lot better.' (student mentor)

One of the student mentors also mentioned that its newness enables experimentation, as there is no established set of rules related to it. Although possibly a forlorn hope, in that such sets of rules will almost inevitably become solidified, Jones and Dawkins (2018) produced what they called *The Harlot's Charter: A Manifesto for Immersive Experiential Film* in which they argue that immersive filmmakers need to retain a sense of 'promiscuity' in their filmmaking practice- using the technology in ways not intended, drawing inspiration from as many places as possible, telling stories in different ways - in order not to become too tied down with established practices and produce texts that, potentially at least, provide a less mediated, more authentic sense of immersion.

In that sense, this project succeeded. The lack of rules about what they could make or how they could make it for the participants and the lack of intervention on the part of the researchers lead to a greater sense of creativity for the participants: they made a type of films that they would probably never have made before. 'Naive' (in a good way), this seemed to make the film more 'authentic', especially for those experiencing it when finished.

The relationship between filmmaker, film and experiencer

The technology used and process undertaken led to two levels of empathy, both of them equally important in a project of this nature:

1. empathy between the filmmakers and their mentors
2. empathy between the filmmakers and the experiencer of the film

The relationship between the participants, their mentors and the researchers was transformative for all involved. The young Muslim women worked with young white men: a working relationship that neither party had experienced before. At the end of the project, both expressed the view that this had been transformative as it had forced them to consider the views of the other person throughout: often views they had never encountered before.

The participants referred to the immersive potential of this technology with regard to its suitability to explore issues of space/place and its potential to enhance empathy, through understanding the different meanings that people might attach to places. Nadira considered VR to be a useful tool in negotiating different beliefs:

> 'a sense of space and faith is like a personal topic and virtual reality is like you're going into someone's life, you're putting yourself into their perspective so I think this was a really good topic to express and show people because you might know Muslims if you have them as friends, but it's kind of different when you have virtual reality and you're actually inside that person's view'.

Empathy was also highlighted from the point-of-view of experiencing VR, not only creating it. After watching *Clouds over Sidra*, Kenza felt empathetic towards Sidra, the young refugee who is the main character:

> 'I felt really sad because they were living in tents and everything, it felt like a place where you don't want to be in, and I felt like she was feeling, like I don't want to be in it, and I wanted to help them get out of there'.

Identity in relation to space and place

Last but not least, this project encouraged young people to construct and articulate a sense of self that was transformed, in some sense, by the experience of representing it. Participants expressed a sense of achievement due to their involvement in the project, which had a profound impact on them. The youth worker noted that creating VR encouraged Nadira to come to terms with living in Coventry as a Muslim young woman and to feel 'even more proud of her faith and the fact that's part of her identity'.

The young makers also associated the process of making their VR projects with a sense of belonging. Nadira selected familiar places for her project, which she felt other people could also relate to:

> 'So it was in Coventry and that's like my city, where I was born and where I was brought up, and everything is familiar, City College, everyone knows it around my area, and we used school because that's what everyone is used to going, what they can relate to so they can get a feel about the message and everything and the struggles of daily life'.

She also added an emotional dimension to familiar places, which was part of articulating a sense of identity:

> ‘(the theme of space) it’s about deep inside like where you belong and what you are trying to achieve in life, so I think Coventry for me is like a sense of space, like home and like where your feelings are’.

What this conformed to us, as researchers, was that, although the term ‘place’ is often used unproblematically as a fixed entity, it is as fluid and dynamic as identity. Often, there is a tendency especially in the established media, to talk about community as a singular entity: the Muslim community, the Asian community. What research such as this clearly highlights is that the situation is much more sophisticated. The notion of intersectionality is important here as the films produced show that both of the filmmakers identified as Muslim but also as young women and also as people in a specific geographical location. This may seem insignificant but what it does is show the complexity of identity and the layering of identity: as part of ***a*** community, as part of groups ***within communities*** and as an individual with specific characteristics.

Discussion

The above mentioned findings contribute to outlining a way of working - but only *one* way of working, not the *only* way - for creatives and educators collaborating with community groups and university students using VR.

The characteristics of this approach are as following:

- VR provides a powerful tool which did not previously exist and in terms of this project, it enabled participants to be ‘experts’ and articulate their own experience and provide profound insights through a process of creating and pursuing new ideas. The use and experimentation with VR in community-based settings is worth further exploration, due to the accessibility and simplicity of this technology.
- Exposing participants to watching VR projects prior to filming is an important part of the creative process. Both Kenza and Nadira experienced VR for the first time. They found inspiration in the projects *Clouds over Sidra* and *The Party*, due to their content, and enjoyed the immersive experience.
- This project was completed within two months and its structure (idea development, filming and editing) turned out to be beneficial for participants. Towards the end of the project however, it was more difficult to make sure that all participants attended the editing sessions. In terms of future research, delivering short interventions that range from two to three weeks could allow enough time to explore the potential of the technology and encourage reflective thinking. We acknowledge the complexity of young people’s everyday life, and longer projects could result in reduced commitment or engagement.
- In addition, the mentors mentioned the positive aspects of receiving youth work training before the start of the project. Working with young people can be rewarding but challenging, so this kind of training can contribute towards minimising risks. In future projects, providing participants with training on how to edit VR could be more valuable, instead of asking the mentors to use the editing software under the guidance of the young people. This would enable

participants to edit their project themselves, although we appreciate that this would require more time.

- The potential of VR for youth work and charities is finally demonstrated in raising awareness and changing perspectives. Inspired by the projects *Clouds over Sidra* and *The Party*, which promote empathy with refugee and autistic people, one of the PYF youth workers highlighted the impact of VR on enabling a deeper understanding of these issues. VR can be used to put the spotlight on more societal issues in a fun, accessible and novel way which can immerse makers and experiencers in their exploration.

Ultimately, it is worth noting the limitations within this pilot study. The findings of this research are context-specific as these are related to a particular educational context, that of informal Critical Media Literacy. Whilst we value the transformative potential of Critical Media Literacy, we also acknowledge some of its critiques, which resonate with the previously mentioned broader critiques of Critical Pedagogy. Hoechsmann and Poyntz (2012: 118) attribute the problematic results of some community-based youth initiatives to the assumption that all self-expression can be liberating, whereas it can sometimes be 'a limiting or disempowering act'. Such projects may result in replicating the stereotypes often used to characterise young people in contemporary culture, therefore reinforcing social inequalities, instead of undermining them. Another aspect that educators need to pay attention to is that of a form of regulation, which could serve the needs of the Information Age (Hoechsmann and Poyntz 2012).

Conclusions

This was a pilot project but a number of significant conclusions can be drawn from it related to the potential of VR to engage young people from disadvantaged communities. The project was worth doing as it was transformative for the individuals involved in the production of the films, both in terms of their ability to make films and for them to articulate their lived experiences of space to the experiencers of the films. That, in itself, made the project significant.

In terms of methodology, this project was innovative as it introduced VR films as data in youth research. Empirical evidence on combining VR with Critical Media Literacy is scarce and one of the most valuable findings of this project was that the VR technology proved itself capable of having the potential for community-based projects to be significant and transformational for the subject area. In line with other types of community-based activities, projects such as this provide participants with cultural capital, teaching them new skills that enable them to articulate 'voices' that are often marginalised. These have the potential to be transformative for both the filmmakers and the experiencers of those films. This project provided opportunities for the young Muslim female participants to make films with the young white men mentoring them, thus stretching the limits of what can be achieved.

This leads to the idea that these technologies provide a different sense of immersion and empathy compared to traditional 2D films. Participants did not see this project as a filmmaking opportunity, but as an opportunity to talk about themselves in a new language, using a new tool, in the hope of encouraging experiencers to learn about, share and transform oppressive situations.

Further research is needed to evaluate this new technology in education/community settings. Delivering interventions in more diverse communities could contribute to a greater understanding of the transformative potential of the technologies and working practices. It is envisaged that aligning youth research and immersive technologies in a productive and potentially politically transformative way could contribute to realising the promise of Critical Media Literacy.

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References

Amans, D. 2008. *An Introduction to Community Dance Practice*. New York: Palgrave Macmillan

Antonsich, M. 2013. 'Identity and Place'. *Geography* [online] available from <http://oxfordindex.oup.com/view/10.1093/obo/9780199874002-0030> [17 December 2017]

Barr, S. 2015. 'Collaborative Practices in Dance Research: Unpacking the Process'. *Research in Dance Education* 16 (1): 51-66

Bignante, E. 2010. 'The use of Photo-Elicitation in Field Research'. *EchoGéo*

[online] available from <http://echogeo.revues.org/11622> [18 February 2019]

Bollmer, G. 2017. 'Empathy Machines'. *Media International Australia,* 165 (1): 63-76

Brinkmann. S. 2013 *Qualitative Interviewing.* Oxford: Oxford University Press.

Bourdieu, P. 1986. 'The Forms of Capital.' In *Handbook of Theory and Research for the Sociology of Education*, edited by Richardson, J. Westport, CT: Greenwood Press

Coventry City Council. 2016. *Population and demographics* [online] available from <http://www.coventry.gov.uk/info/195/facts_about_coventry/2435/population_and_demographics/3> [18 February 2019]

Davis, K. 2008. 'Intersectionality as buzzword: A sociology of science perspective on what makes a feminist theory successful'. *Feminist Theory* 9 (1): 67–85

De La Peña, N., Well, P., Liobera, J., Giannopoulos, E., Pomés, A., Spaniang, B., Friedman, D., Sanchez-Vives, M., and Slater, M. 2010. 'Immersive Journalism: Immersive Virtual Reality for the First Person Experience of News.' *Presence*, 19 (4): 291-301. http://hdl.handle.net/2445/52803

Freire, P. 1996. *Pedagogy of the Oppressed*. London: Penguin

Gore, J. 1992. 'What we can do for You! what can 'We' do for 'You'? Struggling Over Empowerment in Critical and Feminist Pedagogy'. In *Feminisms and Critical Pedagogy*, edited by Luke, C. and Gore, J. New York: Routledge

Hall, T., Coffey, A., and Williamson, H. 1999. ‘Self, Space and Place: Youth Identities and Citizenship’. *British Journal of Sociology of Education* 20 (4): 501-513

Harper, D. 2002. 'Talking about Pictures: A Case for Photo Elicitation'. *Visual Studies* 17 (1): 13-26

Hoechsmann, M. and Poyntz, S. 2012. *Media Literacies: A Critical Introduction*. West Sussex: Wiley-Blackwell

Howard, L. A. 2004. 'Speaking Theatre/Doing Pedagogy: Re-visiting Theatre of the Oppressed'. *Communication Education* 53 (3): 217-233

Hubbard, P. 2005. ‘Space/Place’. In *Cultural Geography: A Critical Dictionary of Key Concepts*, edited by Atkinson, D. New York: I.B. Tauris

Hubbard, P. and Kitchin, R. 2011. *Key Thinkers on Space and Place*. London: Sage

Jones, S. and Dawkins, S. (2018) *The Harlot's Charter: A Manifesto for Immersive Experiential Film* [online] available from:

https://www.academia.edu/34731740/The_Harlots_Charter_A_Manifesto_for_Immersive_Experiential_Film [06 May 2019]

Kellner, D. and Share, J. 2007. 'Critical Media Literacy, Democracy, and the Reconstruction of Education'. In *Media Literacy: A Reader*, edited by Macedo, D. and Steinberg, S. R. New York: Peter Lang Publishing, 3-23

Marshall, C. and Rossman, G. 2011. *Designing Qualitative Research*. Thousand Oaks: Sage

McLeod, J., Yates, L., and Halasa, K. 1994. 'Voice, Difference and Feminist Pedagogy'. *Curriculum Studies* 2 (2): 189-202

Milk, C. 2015. *How Virtual Reality can Create the Ultimate Empathy Machine* [online] available from <https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_machine > [06 August 2018]

Orner, M. 1992. 'Interrupting the Calls for Student Voice in ‘Liberatory’ Education: A Feminist Poststructuralist Perspective'. In *Feminisms and Critical Pedagogy,* edited by Luke, C. and Gore, J. New York: Routledge

Raffo, C. 2011. ‘Educational Equity in Poor Urban Contexts – Exploring Issues of Place/Space and Young People's Identity and Agency’. *British Journal of Educational Studies* 59 (1): 1-1

Reede, E. and Bailiff, L. 2016. *When Virtual Reality Meets Education* [online] available from <https://techcrunch.com/2016/01/23/when-virtual-reality-meets-education/> [17 December 2017]

Ryan, M. 2015. *Narrative as Virtual Reality: Revisiting Immersion and Interactivity in Literature and Electronic Media.* Baltimore: John Hopkins University Press.

Rose, G. 2012. *Visual Methodologies: An Introduction to Researching with Visual Materials*. London: Sage

Sánchez Laws, A.L. 2017. 'Can Immersive Journalism Enhance Empathy?'. *Digital Journalism*, 1-16 DOI:10.1080/21670811.2017.1389286.

Shor, I. 1992. *Empowering Education: Critical Teaching for Social Change*. Chicago: University of Chicago Press

Urry, J., and Larsen, J. .2014. *The Tourist Gaze 3.0*. London: Sage.

VR Projects

Arora, G., & Pousman, B. 2015. *Clouds over Sidra* [online] available from <https://with.in/watch/clouds-over-sidra/> [11 March 2019]

Bregman, A., & Fernando, S. 2017. *The Party* [online] available from <https://www.theguardian.com/technology/ng-interactive/2016/nov/10/virtual-reality-by-the-guardian> [11 March 2019]

Day in the Life of A Muslim Woman. 2018. [online] available from <https://vimeo.com/272669619> (password: dayinthelifeofvideo)

Step into my darkest fears. 2018. [online] available from https://vimeo.com/272587927 (password: VR)

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[1] We would like to acknowledge the various ways in which space and place have been interpreted to make sense of the world. One the one hand, humanistic accounts emphasise the relationship between the character of specific places and the cultural identities of those who occupy them (Hubbard 2005). On the other, Marxist and materialist approaches foreground space as socially produced and consumed. Our understanding of place/space is informed by feminist and Post-structural analyses relating space to the concept of difference and moving away from a fixed notion of identity.

[2] Bignante used Photo Elicitation methods in the context of a research project on the Masaai and the use of natural resources. She observed that traditional interviews sometimes produced 'vague replies, silence or embarrassing pauses' (2010), thus magnifying the cultural and relational gap between researcher and participants, creating confusion or boredom, or causing them to lose their interest.

[3] We are using Bourdieu's (1986) notion of cultural capital: that is, the social assets of a person (education, intellect, knowledge, skill) that provide the opportunity for, or inhibit, social mobility.
[4] According to the Child Poverty Action group, 45% of children in St Michael's ward in Coventry were in poverty in October-December 2015, after housing costs (Coventry City Council 2016).
[5] The anonymity of participants has been preserved by allocating fictional names to participants.