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Queering Cultural Memory Through Technology: Transitional Spaces in AR and VR

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Abstract: While cinema boasts of a long history that has placed the representation and aesthetics of memory at its centre, virtual reality (VR) and augmented reality (AR) are only starting to shape their own aesthetic and narrative engagement with memory. Through the analysis of Chez Moi *(Caitlin Fisher and Tony Vieira, 2014) and* Queerskins: Ark *(Illja Szilak, 2020), this essay shows how cinematic AR and VR involve the viewers' movement to produce and transform collective memory and spatial habitation. Feminist digital geographies, film and media theory, and the concept of orientation developed by Sara Ahmed in* Queer Phenomenology *give sense to how sound, images and viewers' movement participate in rewriting collective memory and cultural symbols. As these artworks present personal memories of struggles to find a home within present spaces, they queer hegemonic orientations of the subject, and invite viewers to realign body and space within ever-changing virtual and physical spaces.*

Political and social changes arise from history, or rather from what we choose to remember as history. Collective memory indeed develops in canonised and archived films, books and art pieces including digital material, giving shape to cultural symbols that define our everyday. As Aleida Assmann observes, cultural memory forms a sort of social "contract between the living, the dead, and the not yet living", which arises from the double process of forgetting and remembering (97). Through looking at spatial immersion and physical interaction in virtual reality (VR) and augmented reality (AR), this essay examines how the embodied remembering of personal queer memories may create or transform cultural memory, or in other words, *queer* dominant relations of power and normative conceptions of gender and sexuality. In particular, I argue that this queering of cultural memory occurs through the viewer's habitation of space granted by post-cinematic technology, which blurs the border between the real and the fictional and may create resonances of the past in the present.[1] At the crossroad between theories of space, technology and queer studies, this essay is anchored in queer archaeology and the phenomenological study of post-cinema.

Individual and Cultural Memory

In "Communicative and Cultural Memory" Jan Assmann distinguishes three levels of memory that give us a sense of identity: individual, communicative, and cultural. Through this categorisation, Assmann complicates Maurice Halbwachs's concept of collective memory, by opposing two types of collective memory: communicative and cultural. In a table distinguishing communicative from cultural memory, Assmann contends that the former pertains to the genre of everyday embodied communication, a memory that reflects on a recent past with a lifespan of three to four generations, whereas the latter pertains to a "mythical history" mediated through texts and hierarchically structured (117). While Assmann recognises film, art and literature as

mediations of cultural memory, I will argue that AR and VR sit in between what he distinguishes as cultural memory and embodied communicative memory, as they create embodied and informal communication of past events and may also remain in time and form part of "mythical history", that is, enter the canon or the archive.

As Assmann notes, individual, communicative and cultural memory are not wholly distinct, but rather form dynamic poles always in "tension and transition", with individual memory both participating in the creation of and relying on the cultural symbols of collective memory (113, 110). Drawing from Maurice Halbwachs's work, Anna Green also emphasises the importance of individual memory for the formation of collective memory: "Individuals remember […] through dialogue with others within social group […]. Within these groups, Halbwachs suggested, the most durable memories tended to be those held by the greatest number" (38). As we will see, durable memories—gathered in the canon or the archive—form a cultural memory that holds societies together and exclude certain social and sexual orientations by actively or passively forgetting them, purposefully destroying them or concealing them from view.

In her analysis of cultural memory, Aleida Assmann distinguishes between active and passive remembering and forgetting (97–9). While the canon features active remembering of "the *past as present*", the archive features passive remembering preserving "the *past as past*" (98). As mediated narratives enter the canon, they also enter collective cultural memory: they become what we recognise as "culture", what Jurij Lotman and Boris Uspenskij have termed "the memory of a society that is not genetically transmitted" (qtd. in A. Assmann, "Canon and Archive" 97). The archive, then, sits on the border between forgetting and remembering, and it is the task of "the academic researcher or the artist to examine the contents of the archive and to reclaim the information by framing it within a new context" (103). While this essay touches on the question of what enters the canon and what remains in the archive, its principal objective is to look at the process of *transforming* the archive, reclaiming past realities and expressions of identity that have been forgotten or hidden from sight.

Queer Reorientations: In Between Personal Memory and Collective Space

Concerning the power of individual remembering to contest cultural memory, Anna Green writes that individuals continually "negotiate competing ideas or beliefs, or find spaces within or between dominant discourses" (43). In contrast to the canon inscribed in posterity, the archive has lost its original frame or context, which gives the opportunity for the creation of a "counter-history to the one propagated by the rulers", one that is not framed within institutions (A. Assmann 99). In this line of thought, reclaiming information from the past can therefore serve as a political act. As Aleida Assmann and Linda Shortt argue, "memory is not only susceptible to changes, it is itself a *powerful agent of change*" (4). Similarly, the dynamic processes of remembering and forgetting constantly participate in reinforcing and erasing the canon and the archive. As the recollection and mediation of certain narratives over others participate in the making of culture, these mediations also participate in the process of change. As Astrid Erll asserts, however, in order to participate in the creation of cultural memory, a film or a novel must be watched or read as such, that is, as participating in the work of memory (395). As this essay will demonstrate, it is by anchoring personal memories within a real historical context and thus shaping the artworks on the border between documentary and fiction that the *effet de réel* that Erll mentions is achieved (394). This, in turn, creates the possibility to transform cultural memory.

As queer theorists and artists engage in uncovering histories and orientations that have been forgotten—destroyed or hidden—they reorient cultural memory away from heteronormativity. The work of queer artists and theorists is embedded in archaeology, which "retrieves lost objects and defunct information from a distant past, forging an important return path from cultural forgetting to cultural memory" (A. Assmann 98). As they do so, queer theorists "explore the possibilities for desiring in ways that move beyond the politicised regulation and representation of bodies and desire" (Lim 53). Both this essay and the works it examines adopt a queer archaeological approach, which aims to "unlearn, unmake, unbecome traditional social structures and restrictive identities", and to assess the role that personal memory plays in the queering of cultural memory (Cook 399).

While AR and VR have different technological affordances, both create transitional spaces between fiction and reality, and have the ability to establish new relations between the past and the present. As we will see, the artworks analysed in this essay write individual memories into present physical places, and in doing so, they draw new paths beyond dominant discourses of heteronormativity and queer current spatial configurations and practices. By physically engaging the viewer in embodied experiences of individual queer memories established in "real" contexts, they open up spaces for queer embodiment and imagination both in the virtual and in the physical space. The AR work *Chez Moi* (Caitlin Fisher and Tony Vieira, 2014) and the VR piece *Queerskins: Ark* (Illja Szilak and Cyril Tsiboulski, 2020) explore personal memories of being on the margins of heteronormative Western society. Both works audiovisually and kinaesthetically draw attention to the compulsory alignment with heterosexual and gender norms with which queer characters have had to comply—echoing here Butler's idea of the "compulsory performances [of gender]" (26). In both post-cinematic films, lesbians in Toronto (*Chez Moi*) and gay men in Missouri (*Queerskins: Ark*) have felt "misaligned" with their environment and have lost their sense of home. The use of sound, dance and spatial movement in both works produce spatial and kinaesthetic experiences that, I argue, *queer* the archive and therefore contribute to the *reorientation* of cultural memory.

In the analysis that follows, I employ Sara Ahmed's conceptualisation of "queer" as referring both to those standing on the margins of heteronormativity and the creation of an "oblique" path, one that seeks "deviation" from the straight line (*Cultural Politics* 66). In her book *Queer Phenomenology*, Ahmed rewrites queerness in spatial terms, and expands the concept of orientation to mean how we "inhabit space *with*" gender, race or sexuality (2; emphasis added):

> the question of orientation becomes, then, a question not only about how we "find our way" but how we come to "feel at home." [. . .] Orientation involves aligning body and space: we only know which way to turn once we know which way we are facing. (*Queer Phenomenology* 7)

Social contacts, that is, contacts in a spatial environment delineated by power structures, shape our orientation in the world, and our sense of what home is. Being repetitively addressed or referred to in a certain way—as "the black woman" or "asylum seeker" for example—makes one turn in a particular direction, and forces upon the subject a particular view of the world. Drawing on Judith Butler and Louis Althusser, Ahmed explains how this constant "turning" shapes bodies in the direction of the address, "orients them" to follow lines that others—addressed in a similar way—have followed (15). Just as Ahmed does, Anabelle Willox argues for queer politics to emerge from the "actual lived experiences of bodies", which would open up unlimited gender and sexual expressions (96). By rewriting individual memories of queer

characters within present physical spaces, the case studies that help ground my theoretical argument queer normative orientations and open up various ways of being into the world.

Queering the Archive Through Post-Cinematic Technology

Numerous media scholars have shown how communication technologies are tied to a masculinist discourse and binary logics of gender and sexuality (Hayles; Golding; N. Green; Shaw and Sender). In 1999, Nicola Green explained that virtual reality technologies used in museums and game arcades feature primarily as media of disembodiment that generate spectacle and discipline within established gendered conventions and regulations. Twenty years later in 2019, Dan Golding also shows how VR technologies, meant to be used at home, are primarily designed for and marketed to a white male user and spectator. Against this "masculinized transcendence" that still characterises VR (Green 464), N. Katherine Hayles' work proposes to put bodies "back in the picture", emphasising that virtual reality creates embodied experiences. Although users of digital spaces have often been regarded as disembodied because their body physically remains in front of the computer rather than being in the digital space, Hayles reminds us that the body is needed in order to "see, hear, feel, and interact within virtual worlds" (1). In their introduction to a special issue on queer technologies, Adrienne Shaw and Katherine Sender propose that queer theory can "complicate our understanding of communication technologies" as "presumptively masculine", by exploring "the affordances and uses of various media platforms to create space for non-normative gender and sexual collectivities" (1, 4). By looking at the specific uses and affordances of AR and VR, we will see how their embodied involvement of the viewer allows for a queering of norms and spaces.

Through physically inviting the viewer into their virtual spaces, AR and VR have the potential to transmit personal memory in an embodied way that is akin to how memory is transmitted between generations, thereby engaging what Neil Burgess, Eleanor Maguire and John O'Keefe call our "spatial memory". Neuroscientists have demonstrated that the spatial and temporal context of personally experienced events and the individual's orientation and self-motion in that context are essential to activate what Endel Tulving has termed episodic memory, our "memory for personally experienced events set in a spatio-temporal context" (Burguess, Maguire, and O'Keefe 625). Additionally, the authors show that humans recollect events in VR just as in "reality", because of VR's ability to build spaces that engage the participants' movement and orientation (632). As Janet Murray writes, however, VR does not replace physical interactions or supersede "other once-new media of representation", but just as them, it "offers us an opportunity to find more expressive means of discovering and sharing who we are, what we know, what we love, what we suffer, what we wish for, and how we can together make a better world" ("Virtual/Reality" 25).

Following Murray, I am focusing here on how AR and VR create new modes of expression rather than questioning whether viewers remember virtual events as they do physical ones. Neuroscience scholarship, nonetheless, may show how bodily engagement in AR and VR increases the viewer's feeling of inclusion in the personal memories conveyed compared to other more static arts. This "perceived inclusion" is what Jill Walker Rettberg defines as interaction, "not as a formal quality of a work but as a perceived inclusion in the work", partly thanks to the "ontological fusion", or correspondence, between the users' acts in the actual and fictional world (27, 40). In the context of VR, this inclusion has also been termed immersion or "presence", which Carrie Heeter defines as "deriv[ing] from feeling like you exist

within but as a separate entity from a virtual world that also exists" (262). Kinetic interaction in AR and VR conveys a sense of inclusion in the actual and virtual world because of the correspondence of movement in the two worlds. This teaches us that if virtual worlds maintain an indexical relation with the physical one—perhaps in a documentary fashion—their engagement of the viewer's body can have an impact on cultural memory, that is, on the symbols that the viewers culturally associate with determinate places, situations, or social orientations.[2]

By placing the viewer in between a physical and a virtual space AR and VR create what I call transitional or liminal spaces, which make these media particularly appropriate for the aesthetic representation of memory. Through their technological affordances and limitations, both AR and VR create a sense of transit between two worlds, the virtual and the physical, the fictional and the real, and the past and the present. Their transitional spaces echo the act of remembering, an affective immersion into a remote space-time. As the process of remembering is often blurred by the process of forgetting, so are the aesthetic and design of memory in AR and VR. Both *Chez Moi* and *Queerskins: Ark* use cinematic techniques such as voiceover, superimpositions and dissolve editing to produce a *sense* of past events: they use the technological affordances of their specific media—that is, of smartphones and head-mounted displays—to stimulate the viewers' *embodied* act of remembering, or in other words, their episodic memory.

If cinema has above all been recognised as an art of light giving the illusion of movement, AR, VR and video games manifest as arts of space. In addition to relying on images and sound for telling stories, they endeavour to create a specific place that viewers can physically—or digitally—inhabit (and ideally move within it). As Janet Murray and William Uricchio both emphasise, the main feature that differentiates cinema from VR is its potential for interactivity and in fact its *necessity* to act as an interactive medium: "VR is not a film to be watched but a virtual space to be visited and navigated through" (Murray, "Not" 2). While VR uses the affordances of a head-mounted display to *create* a three-dimensional computer-generated environment that immerses the viewer audio-visually and kinetically in a new virtual reality, AR *adds* digitally created elements to the viewer's immediate physical environment filmed through the integrated camera of AR glasses or a smartphone.

Chez Moi: A Spatial Queering of Cultural Memory

By adding digital elements to the viewer's physical environment, *Chez Moi* creates an "interface" through which the viewer perceives and practices space. Theorising augmented reality, Uricchio writes that it functions as an "interface" to our experience of space, by creating what Jonathan Culler calls "markers" of past times in everyday places in the fashion of historical monuments and enabling narrative spatial experiences ("Augmenting" 10). While Uricchio asserts that "[u]rban spaces are loaded with signification bearing the iconic markers of the past's dominant and declared narratives" (10), I suggest that AR has the power to bring less-dominant narratives into space and existence, narratives that do not have monuments or "markers" already indexing them in the physical space.

Beyond its ludic applications (such as through the well-known game *Pokémon GO),* augmented reality has especially been used for memory making. When creatively situating the viewer in the past of specific places through the use of narrative media technology, AR may act as locative art. For example, Janet Cardiff and George Bures Miller's many audio,

photographic and video walks, such as *Alter Banhof Video Walk* (2012) and Julie de Muer's project *Night Walk in Marseille* (2014) (created with Google Maps), use location-based services to offer an augmented affective tour of a city. The addition of storytelling, video, ambient sound, and photography to specific points of interest marked on a map provide a narrative virtual augmentation of physical places. As anthropologists Larissa Hjorth and Sarah Pink write, the entanglement of inhabiting a specific place with the everyday use of mobile technologies emphasises Doreen Massey's "notion of place as being made up of 'stories-so-far'" (43). Locative videos, instantaneously shared photography, and geo-localised applications and games (such as *Tinder, Grindr*, or again *Pokémon GO*) participate in the creation of a collective affective cartography made up of people's personal memories. Similarly, users around the globe share personal memories of queer experiences and create a collective memory of queer life by adding markers on an interactive world map on the website queeringthemap.com. More than annotations on a map, all these locative works provide journeys into past realities that offer alternative perspectives and may present possibilities for the queering of present places.

In the case mentioned by Uricchio, the installations of *Cité mémoire* for the celebration of Montréal's 375th anniversary, AR is used in an institutional framework in order to publicly (re)present a selection of the city's histories. Because of the wide accessibility of the augmentation consisting of large-scale light projections, Uricchio describes this initiative as contributing to public memory. Though it differs from Uricchio's example in the sense that it may not appear as public—although publicly available and funded—*Chez Moi* contributes to a rewriting of cultural memory, offering a queering of the archive of Toronto's cultural history.[3]

Similar to Cardiff and Miller's well-known works, Caitlin Fisher and Tony Vieira create an immersive experience in which the individual viewer navigates a specific location using their smartphone. *Chez Moi* is part of a bigger project called *Queerstory*, a locative app that revives the queer history of Toronto in the form of a walking tour of thirty points of interests marked on Google Maps. Each of these proposes a visit into the past through geo-localised videos, which are also archived on the website Queerstory.ca. *Chez Moi* audiovisually merges actual and digital spaces and offers a cultural rediscovery of a specific place in Toronto through personal memory. In voiceover Fisher invites the viewer to put on their headphones and watch a video on their smartphone while walking down Hayden Street in Toronto, the site of the lesbian bar Chez Moi, referred as the Chez (located there from 1984 to 1989). When viewed in its intended location, this locative video functions as AR as it augments the environment of the viewer both audiovisually and, as I will explore, kinetically. In *Chez Moi*, as in *Alter Banhof Video Walk*, the merging on screen of both the actual street in which the audience is meant to be located and a digital version of what the space looked like offers remote viewers—who might access the pieces sitting in front of their computer—a possibility of an embodied experience (Figure 1).

Figure 1: Mobile technologies merge actual and digital spaces in one image in *Alter Banhof Video Walk* (Janet Cardiff and George Bures Miller, 2012). Screenshot.

Chez Moi calls on the user/viewer to imagine how the lesbians of Toronto in the 1980s met and found themselves a home. Katherine Cook terms this kind of activist and political work "queer archaeologies": the "strategic applications of technologies and media to defy, to confront, to derail, to remix", and "reconfigur[e] structures of engagement [and] intimacy" (402). The AR piece combines Fisher's oral storytelling with an assemblage of news reports, archival and fictitious sounds and images in a subversive way that reminds the viewer of the documentary genre and of media archaeology.

Through the mixing of archival and fictional material, the artwork points to the selection taking place in cultural memory: what the youth of today and the youth of the 1980s remembered and forgot. In voiceover, Fisher describes how the community of lesbians meeting at the Chez had to find the codes of women's sexuality and lesbianism from films, old books "written 40 years ago", or even from heteronormative texts such as the *Playboy* magazine. These evocative symbols that populated the cultural memory of sexuality in 1980s Toronto colour Fisher and Vieira's nostalgic mediation of a personal memory, which resonates with Aleida Assmann's call upon artists and academics to investigate and reframe the archive.

On an aesthetic level, the visual merging of remembered film and book covers with current images of the street (Figure 2) produces a spatio-temporal disruption by bringing into sight a past queer orientation that may have disappeared from present structures of intimacy. Aurally, through voiceover, Fisher draws attention to the basement of the bar. She describes the shadows in which people flirted and had sex and contrasts these with the well-lit bar (associated with a heterosexual culture) that replaced the Chez after its closure. The locative video recreates the underground atmosphere of the bar through ambient sounds and dark blurry images, which audio-visually locates the space within the kind of subcultural framework that Jack Halberstam has defined as an "escape hatch from heteronormativity and its regulations" (323).

Figure 2: Film and book covers embed a personal memory into cultural memory in *Chez Moi* (Caitlin Fisher and Tony Vieira, 2014). Screenshot.

Fisher's text recreates a fantasised queer subculture that formed in the Chez through the gathering of gay and lesbian communities. Her individual memory of this time and space reasserts a collective memory that may otherwise disappear as it may not have been shared by the greatest number (and thus may not be "durable" as per Halbwachs's conception). By doing so, she demonstrates Anna Green's contention that individual memory constantly contributes to and transforms collective memory and participates in combatting the exclusion of memories of certain social groups over others. By constantly bringing in the community of lesbians through the use of "we" in her oral text, Fisher establishes a direct link between the individual and a queer collective, both from the past and the present:

> If you are very young now in a time of beer-sponsored pride […] you might never know the secret I'm about to share and I'm a bit sad for that […] not for the equality part, or the cool swag, or your two married mums, of course not! […] but here is what you missed: what holds us together at the Chez in 1980s Toronto, ssshhh, listen! It isn't what we do in bed, or how we do gender or anything like that, it's that most of us are still having to make everything up from bits and pieces, whispers, the right shelves at the library…

This passage points not only to Fisher's connection to a "queer subculture" (Halberstam), one that was hidden and covert, but also to its distinction from present institutionalised iterations of queerness ("sponsored", "the equality part" and "how we do gender"). By excavating the histories of this subculture, *Chez Moi* brings, in Halberstam's words, a "kind of recognition upon audiences" of its significance and the influential role it played in movement to institutional equality and rethinking of gender discourse (318).

In exploring the connection between past and present, actual and fictional, *Chez Moi* affirms the necessity for a reorientation of current narratives of sexuality and intimacy. This reorientation happens through the evocation of past narratives and the viewer's embodied

imagination. By directing us to go back to the site where the bar Chez Moi was located, and think of our "first bar", the voiceover invites us to inhabit an imaginative queer space-time, as theorised by Ahmed (*Queer* 2). Direct instructions to the viewer such as "walk toward the corner of Yonge and Hayden", referring to actual streets of Toronto, and "hold up your phone [. . .] and walk with me East towards the old Chez Moi" draw a correspondence between our actual habitation of space and an imaginative space and atmosphere.

Hearing naturally becomes the primary sense when watching a video and walking in urban streets, due to the omnipresence and multidirectionality of sound compared to the focus that sight requires, a phenomenon that the immersive power of headphones strengthens. The proliferation of ambient sounds in the video—of traffic, steps, chatting, and moaning—gives life to the Chez and merges with the viewer's kinaesthetic and visual experience of their physical environment. Similarly, images in the video increasingly lose their reference to concrete elements in the story, and instead become abstract symbols of an atmosphere as the camera lingers on details and creates close-ups on carefully chosen objects seemingly left onto the street—such as an old movie ticket, a red high-heel shoe, and sparkler candles (Figure 3).

Figure 3: The camera creates abstractions through lingering on objects in close-up. *Chez Moi*. Screenshot.

Taking up a convention of the documentary genre, the voiceover gives a certain value of historical authenticity and authority to the narrative, thereby engaging culturally with the archive. The text in voiceover, the fictional ambient sound and the visual assemblage of images—newspaper front pages, posters, book covers, scenes filmed in the street, and the mise en scène of fictitious images of the Chez (Figures 4 and 5)—create an immersive experience for the viewer and, in turn, an embodied reorientation of their structures of intimacy and cultural memory. The voiceover in Fisher and Vieira's locative video guides us through what Steven Shaviro would call "an otherwise incomprehensible labyrinth of proliferating images" and provides a historical and cultural context to the story (81). By granting us an embodied "guidance" to the memory of the Chez, *Chez Moi* gives form to the flow of space, time, and memory.

Figure 4 (above): Archival material attesting towards Toronto's queer subculture in *Chez Moi*.
Figure 5 (below): Vaginal shapes give form to the atmosphere of the Chez in *Chez Moi*. Screenshots.

Chez Moi creates new cultural markers in a specific place and reorients our practice of space towards non-normative narratives. While some visual elements may differentiate the three space-times in the video (such as the momentary road works at the beginning of the video), most of the geometry and street buildings will remain unchanged. This has the effect of merging the space of the diegesis (1980s Toronto) and the time of production (2014) with the present space-time of the viewer. The rhythm of Fisher's voiceover and the sound of footsteps that resonate in several instances in the artwork dictate the pace of the viewer as they walk the street and watch their screen. The journey in time and space provides what Shira Chess would recognise as "queer pleasure", through a narrative—and ideally also physical—immersion in a past time and space.[4]

The immersion in queer subculture that *Chez Moi* creates happens through the production of a transitional space: between the actual embodiment of the streets of Toronto and a virtual sensorial atmosphere. As per Halberstam's concept of queer subcultures, the community that Fisher refers to is only *imagined*, "transient": the text expresses a nostalgic "return to some fantasized moment of union and unity" (315). Such a return may allow the participants in the subculture "to believe that their futures can be imagined according to logics that lie outside of the conventional forward-moving narratives of birth, marriage, reproduction and death" (314). Using immersive techniques, *Chez Moi* restores to memory a queer community that formed around the habitation of a bar, the Chez, whose closing, as Fisher notes in her video, marked the erasure of a "women's culture", one that was "so dangerous that it needed to be erased." For the duration of the video, *Chez Moi* invites viewers to experience an augmented reality, to inhabit a transitional time and space in between past and present.

A Place and Memory in Transit in *Queerskins: Ark*

Themes of place, transition and evacuations of hidden histories underpin *Chez Moi*'s formally bold exploration of the link between personal and cultural memory. Similar themes and evocative aesthetics also characterise Illya Szilak and Cyril Tsiboulski's *Ark,* the second chapter of a series of four-chapter cinematic virtual reality experience titled *Queerskins* (2018). *Queerskins* narrates parts of the life and death of Sebastian (Michael DeBartolo), who died of AIDS at a young age, and who was rejected by his Catholic family because of his homosexuality. *Queerskins* VR was born out of an interactive novel, described as such on its dedicated website:

> *Queerskins* explores the nature of love and justice through the story of a young gay physician from a rural Midwestern Catholic family who dies of AIDS at the start of the epidemic. […] Images of the mythic and the everyday, the sacred and the profane, from banal vacation footage to vintage burlesque, interact rhizomatically with text and audio monologues to subvert preconceived notions of gender, sexuality, and morality. ("About")

The website for the VR piece further explains how

> *Queerskins* explores the dynamic tension between the "real" and the virtual, fact and fiction, memory and desire through a compelling, character-driven narrative. […] *Queerskins* explores the quintessentially human desire to transcend ordinary reality through memory, belief and imagination. (*Queerskins*)

While the piece does not explicitly present itself as a documentary or a recuperation of the archive (in contrast to *Chez Moi*), its embedding of personal memory within a broader contextual reality that has fed and continues to feed the imaginary of male homosexuality contributes to the continual formation of cultural memory through offering an immersive experience to both heterosexual and queer audiences.

In the first chapter, *Queerskins: A Love Story*, as viewers mount the VR display on their head, they are taken on a journey on a country road in rural Missouri in the back seat of a "photo-realistic 1986 Cadillac" driven by Sebastian's parents, who are paying a visit to the cemetery where their son is buried. Viewers get to know Sebastian through his parents' intimate conversation and by going through some of Sebastian's belongings, including his diary, placed

in a cardboard box sitting next to the viewer (the 3D scanning of the objects affording the viewer the possibility to actually handle the objects through the use of the remotes). By actively manipulating some of the objects, and perhaps reading passages written in Sebastian's diary, the viewer can learn about his life and the circumstances of his early death. The conversation between Sebastian's father, who is driving the car, and his mother, who sits on the passenger seat, alternates with the voiceover reading from Sebastian's diary, and the sound of a religious speech on the car radio. The cacophony of sounds here helps to illuminate Sebastian's story: rejected by his family (his father in particular) and the local community in rural Missouri, he moved to Los Angeles (LA) where he worked as a physician and lived with his male partner Alex (Christopher Vo), keeping very limited contact with his family in Missouri.

Figure 6: Colourful dots create a pointillistic visualisation of memory in *Ark*. Screenshot.

While *A Love Story* relies on objects to evoke past events, *Queerskins*'s second chapter *Ark* gives shape to individual memory through movement and dance. When *Ark* opens, it situates the viewer in the attic, where Sebastian's mother Mary-Helen (Hadley Boyd) unpacks the box she received from Alex. Seated in Sebastian's childhood bedroom, she reads aloud from his diary. As she does, she imagines his life in LA and the image blurs and progressively gives space to a new image of a remote beach somewhere near LA, where Sebastian and Alex meet, we learn, to celebrate their anniversary. In his dialogue with Alex on the beach, Sebastian hints at his inability to properly "come out" to his conservative Christian family and about his desire to find a home elsewhere. The memory of this intimate encounter between Alex and Sebastian as described in the diary is rendered on screen as a dance between the two characters, first on the beach and then in a completely dark space, in which the bodies of the characters are visualised as colourful dots (Figure 6). While Sebastian and Alex's story is not new—variations of it have formed the basis for many canonical cinematic and literary works—the techniques used to present it establish a new and radical way of communicating personal memory and of expanding concepts of cultural memory.

As I have recently explored in a review of Illya Szilak and Cyril Tsiboulski's work, *Queerskins: Ark* makes use of two different VR technologies, 360-degree video and 3D

photogrammetry, which give the audience different perceptions of the world they view and/or inhabit (Ceuterick, "Post-Cinematic"). 360-degree video places the audience in the well-known environment of a 360-degree stereoscopic film and affords the audience three degrees of freedom (3DoF) by tracking the vertical, rotational and horizontal movement of the viewer's head. 3D photogrammetry capture allows us to inhabit and interact with its virtually created world in a fashion akin to video games (Uricchio, "VR" 4) and affords the viewer six degrees of freedom (6DoF) as the technology additionally tracks the three dimensions of body movement. This provides the virtual world with materiality by conveying different aural and visual output depending on the viewer's position within the virtual world.[5]

In the first part of the VR experience, which takes place in Sebastian's old room, the viewer watches the mother reading just as a cinematic spectator would on a 360-degree panoramic screen: the 3DoF allows us to choose where we look but we remain in a fixed position. As the website explains, the viewer position here is of a "passive" observer: "Unable to move, you can examine the memorabilia-laden surroundings and begin to get an idea of time, place and what the story might be about." As the image blurs, the second scene is introduced. New images emerge of the beach and, later, the dark space where Sebastian and his lover dance. In this sequence, the viewer is invited to move with 6DoF, the artists thereby allowing Sebastian "to break the 4th wall and directly implicate [us] in the scene. [They] position [us] quite close to the two men, just outside their personal space as [we] listen to their conversation" (*Queerskins: Ark*). Our movements therefore have an impact on how we perceive the space and the characters: in the dark space, they *seem* to affect the characters themselves as the colourful dots linger with the movement of our hands and cross our body. The photogrammetry and 3D volumetric video used for these two scenes afford us six degrees of freedom: as we move closer to or further from the characters, the sound grows louder or quieter. The technology therefore gives materiality to the space and allows our embodiment in the virtual space even though our body remains invisible. The 3D volumetric technology grants us a sense of immersion or presence by creating a direct correspondence between our movement in the actual and the fictional worlds. In reality, however, what we are modifying with our movement is our own perception, that is, the perspective from which we observe the scenes. *Ark* deftly illustrates Murray's observation that

> interactive environments demand more explicit partnership than just the willing suspension of disbelief; they become real through the "active creation of belief" […] As soon as we stop participating, because we are confused or bored or uncomfortably stimulated, the illusion vanishes. ("Virtual/Reality" 25)

If we remain static in the fashion of a cinematic spectator, the scene in the dark space only features the dance of the characters without storytelling, but if we purposefully move into the light that the characters leave behind as they move around us, our movements activate a voiceover (the voice of Sebastian) mediating snippets from the diary. This interaction between the two worlds and thus our participation in the creation of the virtual narrative reinforce our illusion of being present in the virtual world. As such, it provides us with a possibility for our embodied cultural memory to be reoriented.

Just as in *Chez Moi*, *Ark* expresses the disorientation that queer people may experience when living in a straight world, a compulsory heterosexuality that denies the protagonists a place to call home. While a community of lesbians could find a home in the Chez, *Ark* only grants its protagonists a home in imaginary spaces, both of personal memory and removed from civilisation. As the memory of Sebastian and Alex's anniversary celebration unfolds on the

beach, the beach fades and turns into a black environment in which the protagonists dance and play with the distance between each other's, and the viewer's body. If *Chez Moi* situates the viewers in a past time of a real place that they are physically experiencing (as is customary for AR), *Ark* transports the viewer into a whole new space-time thanks to the affordances of virtual reality. The aesthetics of the dark shapeless space resonate with the shadows in *Chez Moi*: both evoke how the protagonists' bodies have become misaligned with their environment, and forced to live outside of, or at an oblique angle from, a dominant heteronormative space-time.
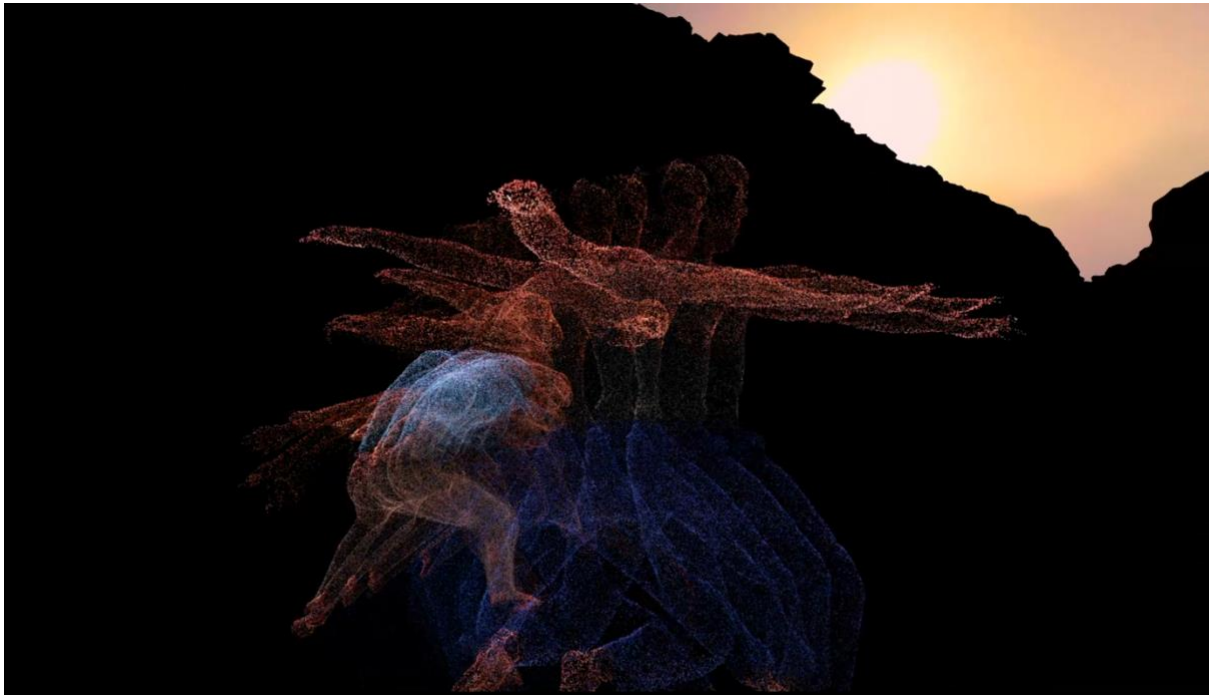
Figure 7: Memory materialises through dance in *Queerskins: Ark*. Screenshot.

While the scene on the beach clearly portrays a sexual encounter between Alex and Sebastian related in the diary, it remains unclear whether the mediation of the memory as a dance arises from the mother's imagination or as an authorial aesthetic representation of the encounter. The queer space in *Ark* does not have an existence in the physical reality as we know it, and—it seems—can only be imagined (Figure 7). Literature and film scholar Serdar Kücük writes that space in queer cinema often manifests as a "non-place" (quoting Marc Augé's term), or a utopian space that stands in contrast with a world that is ruled by heteronormativity (Küçük 106). As non-places, queer spaces are, he notes, "more likely to host characters that are caught in transit" (102). The beach and the dark empty space in *Ark* hold characters in transit. In one of the snippets that the viewer can hear in the dark space, Sebastian's voice tells us:

> Wednesdays Alex would go out. It was our designated, "sleep around" night. I'd usually stayed at the hospital catching up on paperwork. […] We only had one rule. Alex could not bring his lover's home. Home meant something to me in a way that it didn't to him. Then, he broke the rule.

The dark space seems to echo Sebastian's transit, as he struggles to find a home for himself. He is at once detached from and attached to conservative heteronormative rules, which his house in Missouri represents. This attachment is both formal—as the viewer hears snippets of

the diary that the mother reads sitting in another space-time—and diegetic, as Sebastian deplores listening to a priest, he knows in Missouri describing the death of one of his friends as "god's punishment". As Küçük explains, queer spaces offer alternatives to hegemonic spaces while also being attached to them, which makes them unable to offer a real space of resistance (102–4). As he identifies with the priest's statement and expresses an understanding of home anchored in familial kinship, Sebastian does not realise what Halberstam notes as the "unbelonging and disconnection that are necessary for the creation of a [queer] community" (314).

While the dark space offers the protagonists a temporary space where they dance or make love, it is built on Sebastian and Alex's different understanding of queer subculture and community. As Ahmed explains, queerness amounts to being committed to living "in a world that has an oblique angle" (*Cultural Politics* 161), whereby "phenomenology reminds us that spaces are not exterior to bodies; instead, spaces are like a second skin that unfolds in the folds of the body" (*Queer* 9).[6] The spaces the characters inhabit in both *Chez Moi* and *Ark* come to define their construction of a community and a home, albeit being one in constant transit. While the lesbians referred to in *Chez Moi* lose their queer space-time with the closure of the bar, which marks the progressive disappearance of queer subculture in Toronto, Sebastian's home in LA is built on fragile grounds. It is the characters' habitation of space that comes to define their sense of queer identities and the cultural memory that the two pieces are mediating and contributing to.
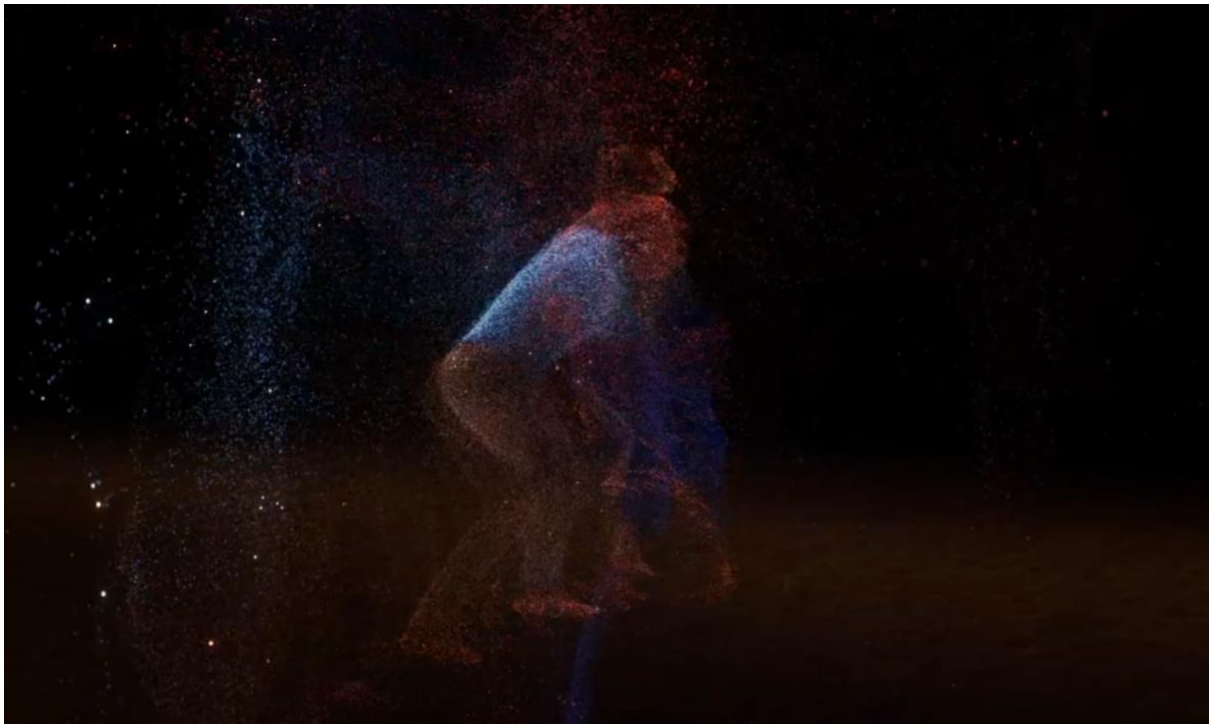

Figure 8: Bodies leave trails of light that penetrate the viewer in *Queerskins: Ark*. Screenshot.

The characters' movements in *Ark* give an aesthetic shape to Ahmed's description of sexual orientation—whether heterosexual or homosexual—as *taking a direction*, a direction that is made visible to us while others are hidden or forgotten.[7] The trail of light coming from Sebastian's and Alex's bodies gives an aesthetic form to how they "extend into the world" (Ahmed, *Cultural Politics* 68). As Sebastian and Alex meet in an intimate encounter, shaped

through dance and movement, their bodies take form as assemblages of colourful dots which move and act just as sand does (Figure 8). This representation of the characters' bodies provides a pointillistic effect, one that has to be looked at as part of a whole social and cultural situation, which has conditioned their misalignment to the spaces they inhabit. The incompleteness of their bodies expresses how they have come alive as part of a memory and their inability to fully inhabit a space that is at a "queer angle" with their environment.

The queer bodies of the characters, living in an imagined non-place, can be related to that of the viewer in the virtual space. Similar to the characters creating a queer space for themselves, when we as viewers inhabit a virtual space, we have to find—and decide—which way we want to face, that is, our orientation in space, and thereby our cultural orientation towards the characters and the narrative. If we activate our belief in the virtual world as Murray proposes, we become malleable to the orientation it gives us. By inviting the viewer to encounter a different reality both spatially and culturally, *Ark* makes available a world of queer lines that aim to reorient present sexual and gender norms.[8] As phenomenology has showed, our habitation of space both contributes to and depends on individual and collective assimilations of cultural memory. Additionally, feminist digital geography (as described by Sarah Elwood and Agnieszka Leszczynski) puts emphasis on the impact of digital experiences on our perception and practice of our physical environment.

Both *Chez Moi*, and *Queerskins: Ark* resist putting a concrete face and body on the characters their narratives create, thereby allowing for the creation of a broader collectivity between the characters and the audience than cinematic images might do. As opposed to the first voyeuristic position in the house or on the beach, the playful dance between the characters and the viewer in the dark environment gives the viewer a sensation of being in the same space-time as the characters. The viewer's movements provide textual access to the memory of the main character, and thereby more insight into the cultural memory on which Sebastian's personal memory relies. The text heard in voiceover diegetically links Sebastian and Alex's oblique reality with the reality of a bigger community:

> In L.A., there were hundreds of gay men with good looks and relative intelligence. Scarred in battle, they wore their sexuality like a medal […] When HIV came, death denuded us all. It stripped away the queer skins of normalcy and perversion. What was left was only human.

The voiceover, now visually disconnected from the mother's reading, gives a certain value of authenticity to the text, as it takes up a convention of the documentary genre, in a way similar to *Chez Moi*. Indeed, the voiceovers in both works create a clear link between personal memory and cultural memory, and the faceless blurry characters in each text *commonise* the queer stories. These characteristics put emphasis on the transformations that personal memory bring about in cultural memory. While *Chez Moi* and *Ark* are anchored in existing places, Toronto and Missouri/LA, they both emphasise the possibilities of a more inclusive conceptualisation of cultural memory and aim to queer present cultural symbols by reinscribing in the present the subcultures that helped form them.

Conclusion

Rescuing individual stories from the shadows through the work of art and memory is essential to the rewriting of collective history and opening of possible futures. As such, the

mediation of personal memories contributes to transforming and remembering forgotten parts of a community's cultural memory. By taking the viewer on a virtual journey and asking them to move in the same pace and place as the one of the video, *Chez Moi* revives a queer space-time, thereby participating in queering the archive of Toronto. In turn, *Ark* aims to reorient the viewer's perception of gender and sexuality through physically inviting them into a dance and merging this moment to queer culture and repression in Los Angeles and Missouri respectively. *Chez Moi*, and *Ark*, along with other works of AR and VR, act as "inclusive digital archaeologies" as per Cook's formulation, as they rescue from the past social relations and spatial narratives that have the power to affirmatively reconfigure cultural memory and structures of intimacy. Through the merging of images, sound, and movement from and in different space-times, AR and VR create liminal spaces between digital and actual worlds. In this article, I have shown how post-cinematic media such as AR and VR place viewers in liminal spaces between their own embodiment and a virtual one to explore alternative social and cultural narratives audio-visually and kinetically. These spaces resonate with the transitional process of memory, in between the actual and the virtual, that is, between what is remembered and what is, may be, or will be forgotten.

As they recollect a personal memory of queer subcultural space-times, *Chez Moi* and *Ark* rescue queer communities from invisibility and point to a collective issue of being forgotten or erased from history and from the archive. Through inviting the audience to inhabit an imaginative past space, they enact a critique of the present, and offer a view of what a queer future may look like.[9]

Acknowledgment

Notes

[1] I refer to AR and VR as post-cinematic media, as they find their audiovisual modes of expression in the cinematic tradition, while also attempting to find their own grammar using the affordances of digital technologies to require the physical involvement of the viewer. On post-cinema, see De Rosa and Hediger.

[2] Similar to film, art and literature, AR and VR works participate in the creation of cultural memory beyond that of a local audience even in case of nonfiction works, since the characters, orientations and experiences they present tend to speak to broader situations than to the specific contexts in which they are embedded. As such, while *Chez Moi* and *Queerskins: Ark* build upon individual remembering of specific places in Toronto and Missouri/LA respectively, their

embodied individual experiences aim to address a transnational cultural memory of homosexuality.

[3] As part of the *Queerstory* initiative, *Chez Moi* benefitted from the supports of public and non-profit Canadian cultural institutions, among which the Canadian Lesbian & Gay Archives, and is available as a freely accessible app and site from the *Queerstory* website. For other locative projects, see also the *year01* website ("Projects").

[4] While narrative pleasure has traditionally been conceived through the movement of "masculine desire" and understood in terms of a single climatic and procreative moment (de Lauretis 107), Shira Chess, drawing on de Lauretis's work, calls for considering pleasure in gaming as "queer pleasure", pleasure arising from the delay of climax, from "moments of narrative middle" (85).

[5] For more technical specifications, see for example Engberg and Bolter.

[6] Ahmed asserts that "staying with these moments" of disorientation may be "a source of vitality" that leads to a different orientation (4), by developing what she has elsewhere called "willfulness", a process that I explore further in the book *Affirmative Aesthetics and Wilful Women: Gender, Space and Mobility in Contemporary Cinema*.

[7] When talking about VR, at the Electronic Organization Conference's "A workshop in VR about VR" (2020), Illya Szilak in fact mentioned Ahmed's book *Queer Phenomenology* as an inspiration for her work.

[8] Similar to how nominalisation gives shape to how we perceive ourselves and move into the world, Ahmed explains that contact with others shapes our orientation, by making visible and delimiting who is, for example, socially available as objects of love and desire (*Queer* 70, 94–5).

[9] The rhetoric I use here echoes José Esteban Muñoz's theorisation of queerness as a utopia that turns towards the past in order to critique the present and form possible futures.

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