Deterritorializing the Future

Heritage in, of and after the Anthropocene

Edited by Rodney Harrison and Colin Sterling



Chapter 7

WATERKINO and HYDROMEDIA: How to Dissolve the Past to Build a More Viable Future

Joanna Zylinska

Figurations

The opening premise of my article is the seemingly obvious yet nonetheless vital fact that water is a key element of our planetary habitat and a condition of our earthly survival. Taking up this volume's call to revisit the human and nonhuman past with a view to outlining a more viable future, I want to examine water's fluid ontology and the forms of life it enables. Specifically, my argument positions water as shared human-nonhuman heritage and a site of geo-cultural memory, while recognizing that water always comes to us mediated. With this, I adopt the critical apparatus of media theory to think about geology, heritage, history and memory in terms of dynamic processes rather than solid objects. I also propose two figurations - HYDROMEDIA and WATERKINO - as conceptual tools that will allow us to view cultural practices as constitutively entangled with their environments. The figure of HYDROMEDIA highlights that water only ever becomes something in relation to its container, body or place. It is thus a quintessentially communicative medium, although its language and purview transcend the human systems of communication. The figure of WATERKINO, in turn, encapsulates a genre of films which are not just about water, but which also mobilize water as a medium of both communication and world-formation. The chapter traces this agential aspect of water by analyzing two artefacts: The Pearl Button, a 2015 film by Chilean director Patricio Guzmán in which water is seen as a carrier of life, death and memory, and Even the Rain, a 2010 film by Spanish director Icíar Bollaín focused on the 'water wars' in Bolivia. It is in this

encounter with cinematic events unfolding in the Global South, outside the dominant nexus of visibility and power – while still being part of global media flows – that the possibility of developing a new mode of engaging with our geo-political vulnerabilities is sought. The ultimate aim of my chapter is to outline a more fluid, and less solidly Western, theory of planetary viability and post-Anthropocene ethics. I do nevertheless remain mindful of Nicole Starosielski's call to move beyond the perception of water in its oceanic and other arrangements only in terms of "fluidity" and to see it also as "a social space" (2012: 165), encapsulating a complex "matrix of power relations" (2012: 150).

What are hydromedia?

The concept of 'hydromedia' offers a mode of understanding water as a dynamic process that temporarily stabilizes into various forms: tears, clouds, rain drops, rivers, oceans, but also, less obviously perhaps, devices, machines, systems, networks and infrastructures - in other words, media. This argument inscribes itself in the framework of environmental media theory (see Cubitt 2005 and 2016; Hjorth et al. 2016; Maxwell and Miller 2012; Parikka 2015), which has developed out of the recent interest on the part of media scholars in the material aspects of the production, consumption and distribution of media. The question concerning the life and death of our media objects and infrastructures has provided ethico-political impetus for the study of media decomposition and waste in the context of the wider environmental destruction of our planet. At the same time, the analysis of media in environmental terms has expanded the very notion of 'media' beyond its conventional understanding based on broadcast practices, to embrace other forms of communication and linkage between a variety of human and nonhuman agents.

Research into the ecological aspects of media has typically foregrounded the more solid aspects of technological degradation, with water being seen as one of the casualties of the contamination process. In *Digital Rubbish* Jennifer Gabrys has looked at the consumption patterns of media users which are anchored in the logic of planned obsolescence, resulting in the regular overproduction of media waste which is then disposed outside of the Global North. She explains that "Just as the production of electronics involves the release of numerous hazardous materials into the environment, so recycling and dumping of electronics unleashes a tide of pollutants, from lead and cadmium to mercury, brominated flame retardants, arsenic and beryllium that spread through the soil and enter the groundwater. From manufacture to final decay, electronics seep into the aquifer and subsoil, settling into longer orders of time and more enduring chemical-material conditions" (2011: 142, emphasis added). Threats to the stability of the hydrologic cycle are also of concern to Larissa Hjorth and colleagues, who link our media consumption patterns to "the rise in global ocean temperatures," as a result of which "the ocean has more potential to generate powerful tropical winds and cyclones" (2016: 42). Important as these analyses are in highlighting the anthropogenic influence on environmental degradation and climate change, they also inadvertently install the subject of the Anthropocene – i.e. Anthropos, the supposedly genderless transhistorical 'human' - at the centre of action. Due to this ontological uncertainty, whereby it is never clear whether it occupies the role of a substrate, resource or indeed medium, water has taken on the more solid form of a bedrock, or Gabrys' aquifer, in many analyses of ecomedia. In this perspective, something seems to happen to water through our excessive use of media, but the mediatic agency of water itself recedes to the background.

Yet we need to be mindful of the fact that water constitutes around 60% of the human body, which means that not only are we *connected to* water but that, by and large, we are water. As well as functioning as a dominant component of our bodies, with 77–78% of the brain being made of water, we enter into many other watery relations through the atmosphere (rain, clouds, snow), nutrition and other forms of consumption. As Jamie Linton points out in What Is Water? A History of a Modern Abstraction, "That we live and think by virtue of engagement with and participation in the water process means that we cannot identify water as something apart from ourselves except through violence of abstraction" (2010: 224). In his attempt to liberate water from its objectified status premised on the reduction of its flowy ontology to a quantifiable economic resource, Linton reminds us that there are in fact many waters, and that 'water as such' only ever appears comingled with other substances

and materials. We could therefore re-tell the history of media (or, indeed, of any other human cultural practice or artefact) as a story of water(y) relations. Water literally sustains the seemingly nebulous digital infrastructures, which enable the production, distribution and storage of our media content today. As Sean Cubitt explains in *Finite Media* (2016: 18),

Typically 1,160 servers will fit into a shipping container, complete with batteries, power, cabling, water-cooling and fans. Each container draws as much as 250 kilowatts of power. The containers themselves, in one facility dating back to 2005, are stacked and networked in buildings holding 45 containers, each drawing down 10 megawatts apiece (including additional cooling and water pumps), which now has three such buildings. The design was subject of a patent applied for early in 2008.

Cubitt (2016: 19) also informs us that "In 2008, Google registered patents for floating wave-powered server farms (the floating part is significant because of the quantities of water required to cool the servers down)."

An attempt to link water with media in a more agential sense, where water becomes a productive (and potentially destructive) agent in the ecomedia process, has been offered by media theorist Max Haiven, who has reported that "[t]he lowest estimates of the quantity of purified water consumed in the production of a personal computer is about 1,500 litres, about twice what an adult should drink in a year" (2013: 213). However, we could go even further to claim, as suggested earlier, that water is not just used to produce media but also that, alongside computers and other electronics, water itself is a medium. This idea builds on the infrastructural understanding of media as communication networks such as railroads and trade routes proposed in the middle of the twentieth century by Harold Innis - a scholar who "thought the fact of media more important than what was relayed" (Peters 2015: 18) - and was subsequently picked up by a junior colleague of Innis' at the University of Toronto, Marshall McLuhan. As explained by John Durham Peters, whose book, The Marvelous Clouds: Toward a Philosophy of Elemental Media, borrows from Canadian media theory, as well as its modulation in the work of Friedrich Kittler, "To study media, you cannot just study media... To

understand media we need to understand fire, aqueducts, power grids, seeds, sewage systems..." (Peters 2015: 29). Peters launches a powerful defence of the expansion of the concept of media beyond messagebearing institutions and proposes we see media instead as "vessels and environments" (2015: 2). This conceptual expansion is arguably just a return to a pre-media studies understanding of media, namely their nineteenth-century conceptualization in terms of natural elements such as water and earth, fire and air (see Peters 2015: 2). For Peters the key task of media theory today lies in reconnecting media to their infrastructures and environments. This task is made ever more urgent by the exigencies of the Anthropocene. Even though this approach partakes of the intellectual trajectory of posthumanism, whereby the human is dethroned from their central position as the source and destination of all action and all meaning in the world, Peters reminds us that "there are profound and urgent reasons not to forget the enormous pressures that human beings are exerting on sea, earth, sky, and all that dwells in them" (2015: 121).

Placing water at the centre of media study (as well as 'media studies') becomes a logical consequence of deciding to take the environmental imperative outlined above seriously, which means addressing our relation to water as both concept and matter - and thinking of better ways of living with water. It also means engaging with economies of water scarcity and water waste, while also raising questions for the reduction of water to a resource for the human. It bears reiterating that water will never stay at the centre of anything because its fluid ontology means it is never just an object or an infrastructure: it is first and foremost a process, a movement and a reaching out - even though, as the editors of the Canadian anthology Thinking with Water remind us, "All water is situated. Moreover, we are all situated in relation to water" (Chen, MacLeod and Neimanis 2013: 8). Interestingly, in proposing such a relational understanding of this most elementary of media which also demands we pay attention to the kinds of relations we enter into with water, and that we see water itself entering into, Cecilia Chen, Janine MacLeod and Astrida Neimanis introduce the concept of "mediation" (2013: 8).

Mediation becomes for them a device that can help us grasp just how "water animates our bodies and economies," but also how it "permeates the ways we think" (2013: 10). There are arguably similarities here between their notion and the way Sarah Kember and I have theorized mediation in Life after New Media: Mediation as a Vital Process. For us, mediation is not "a translational or transparent layer or intermediary between independently existing entities" but rather a complex, hybrid and all-encompassing process in which we humans partake, alongside other organisms and processes (2012: xv). Seen from this perspective, water is a dynamic medium that makes humans - and that goes into the making of our world: not just computers, as highlighted by Haiven, but also food chains, transportation and communication networks, cities, homes. At the same time, humans are engaged in the making and remaking of water into what Linton (2010) calls 'a modern abstraction' fixed by the H₂O formula, a commodity and a resource for our sustenance (source of irrigation and electricity; navigation channel; bottled beverage) - although we are not the only water-making agents, of course. Water is therefore always part of hydromediations: multiple naturecultural processes through which it temporarily stabilizes into "media, agents, relations and networks" (Kember and Zylinska 2012: xv), but from which it also always potentially overflows to form new connections – and new dissolutions. Water, as Linton puts it, is "shockingly promiscuous": "it goes and bonds with practically everything once it escapes the lab" (2010: 4).

Watery filmmaking

The decision to examine two films as sites of hydromediation in this chapter may need justifying, given that, in disciplinary terms, some scholars still see the study of film (usually undertaken under the discrete umbrella of 'film studies') as more attuned to the methodologies of other hermeneutic-textual disciplines such as literature or history than to 'media studies'. Yet, following in the footsteps of scholars such as Friedrich Kittler (1999), Sean Cubitt (2005) and Giuliana Bruno (2014), I want to suggest that the study of film requires the multidisciplinary apparatus of media studies because the latter allows us to see film precisely as a 'medium'. Going beyond the semiotic and the hermeneutic, a media-driven approach allows us to extend the analysis of film to its technological and material aspects. It also allows us to look at film infrastructures in terms of their production, distribution and consumption

practices. A mediatic perception of film is premised on the recognition of film's historical interlocking and material kinship with other media: photography, literature, comic strips. Developments such as 'expanded cinema', 3D cinema, computer games and virtual reality (VR) foreground as well as strengthen this kinship. With the concept of hydromedia applied to the reading of film here, I want to grasp and articulate the liquid and transformative aspect of all the naturecultural relations in the world – of which we are part. But I also aim to locate us – be it specifically media scholars, media users or simply living-breathing organisms composed predominantly of water – in the media fold, while expanding the definition of media beyond standard communication devices and practices.

There are good reasons for beginning a project on hydromedia with the analysis of film - not only because of film's kinship with other media but also because, as Gilles Deleuze put it in Cinema 1, film carries "the promise or implication of another state of perception: a more-thanhuman perception, a perception not tailored to solids, which no longer had the solid as object, as condition, as milieu. A more delicate and vaster perception, a molecular perception, peculiar to a 'cine-eye'" (1986: 80). Deleuze focuses his analysis of water in film on the pre-war French school of directors such as Renoir, Grémillon, Vigo, Renoir and Epstein. He justifies those directors' predilection for water scenes and water themes by this elementary medium's ability to fulfil simultaneously the aesthetic, narrative and social documentary requirement. On the aesthetic level, writes Deleuze, "water is the most perfect environment in which movement can be extracted from the thing moved, or mobility from movement itself" (1986: 77). The abstraction of running water creates for Deleuze a sine qua non cinematic experience which transcends the cognitive reception of the story or even of the images, while also connecting us to the world outside film. Indeed, the image of water on screen can "give us the real as vibration in its deepest sense" (1986: 78). For Deleuze, water thus reveals itself as the original cinematic mediation, an opening to the sensation of materiality which both contains experience in a medium (a film, a scene, a frame) and enables emotions and affects which cannot be easily framed. Water-on-film thus literally moves the viewer; or even, to return to the Bergsonian argument that Deleuze builds on in his book, it makes the viewer feel alive.



Figure 7.1 — Still from H2O.

H2O (1929), a 12-minute experimental silent film by US director and photographer Ralph Steiner (Figure 7.1), provides an illustration of Deleuze's point, while also expanding his argument beyond the context of French cinema – and beyond narrative. H2O offers a meditation on both water and its capture on film, and thus also on the very process of filmmaking as an attempt to capture movement, to contain it in rectangular frames and to stich those frames back together into an experience of life (see Bergson 1944: 169-82). The ebbs and flows of watery movement, presented in the form of light-and-shadow zigzags, arabesques, shimmers, pulsations and rotations, reach out from the screen to the viewer, whose own body is composed of, and being moved by, water flows. Yet there is something pure, or rather purified, in Steiner's meditative piece, with dehistoricized water flows reduced to their aesthetic aspect. We may want to pick up here on a desire expressed by one of the most interesting writers on both water and the materiality of the social world, Ivan Illich, in his book, H₂0 and the Waters of Forgetfulness, "to question the beauty intrinsic to H₂O" (1985: 3) and emphasize instead the "historicity of matter." Illich reminds us that this seemingly nebulous water, elevated, for instance, in

fine art – his examples include paintings by Degas and Courbert – is "the stuff that circulates through indoor plumbing" (1985: 1). Significantly, this link between the nebulous and the social, between movement and matter, is already present in Deleuze, for whom water-on-film, as signalled earlier, offers not just an aesthetic experience but also a socio-political one. The liquid abstract, writes Deleuze, also stands for the concrete environment in which a different way of life, and a different way of sensing and understanding life, can be imagined and enacted. Drawing on films by Grémillon, he suggests that "the proletarian or the worker reconstitutes everywhere... the conditions of a floating population, of a sea people, capable of revealing and transforming the nature of the economic and commercial interests at play in a society" (Deleuze 1986: 78). We could therefore go so far as to say that what I propose to call 'watery filmmaking'. read in Deleuzian terms, leads to political cinema per se, because it captures, aesthetically and narratively, the fluid experience of workers caught up in the flows of capital. More importantly, it also reveals the possibility of the liquidation of the existing socio-political conditions by showing them as inherently unstable. Last but not least, watery filmmaking facilitates a shift beyond the familiar frame of reference, aka the Western colonial mind set, which arguably still permeates our philosophy, history – and art history. Grand as the claim may sound, watery filmmaking could thus ultimately become a device for decolonizing the Western mind and eye.

The two films I look at in this chapter can therefore perhaps be seen not just as geo-cultural locations but also as sites of thought from which a water-rich picture of the world, in all its entanglements, spillages and overflows, can spring. This search for a better picture of the world as outlined from the perspective of water is more than just an intellectual exercise: it partakes of what Mielle Chandler and Astrida Neimanis have termed water's "facilitative capacity" (2013: 62), which allows for the raising of ethical questions about our relationships with human and non-human others, and about the processes through which these relations are configured, maintained and redrawn. Given that the two zones of hydromediation I am looking at in this chapter are *about* water – Guzmán's film is about the Pacific ocean off the borders of Chile and its entanglement with the region's natural and political history, while *Even the Rain* deals with the water supply in Bolivia and an attempt by a global corporation to

privatize it – my engagement with them here could be seen as an ostensible return to the more dominant, hermeneutic tradition of film *and* media studies, where media are primarily analyzed in terms of their content. But I have chosen these two sites because, even though they do indeed deal with water as their subject matter, they also enact a process of hydromediation, in foregrounding how water becomes 'water' for us humans. In other words, they treat water as a medium, thus offering what could be described as a media-sensitive account of water. Being watery-dependent media (the way all media are, as foregrounded by Cubitt (2016), and perhaps always have been through their dependence on steam power and other forms of water-based energy), they engage with water not just on the level of concept, or theme, but also on the level of substance, interweaving the different aqueous layers while also engulfing the scholar – herself largely made up of water – in both the analysis and its object.

The Pearl Button

Opening with the verse line by Chilean poet Raúl Zurita, "We are all streams from one water", Patricio Guzmán's *The Pearl Button* is a meditative documentary on the role of water in human history. The film starts by positioning water as an interplanetary medium that came to Earth on comets as ice, and is believed to have subsequently contributed to the



Figure 7.2 — Still from *The Pearl Button*.

formation of seas (Figure 7.2). This vast sense of cosmic history is anchored in the specific history of Chile and its people in the film – both its native Western Patagonia inhabitants, who were water nomads, traversing long stretches of the estuary in their canoes, and its modern citizens, who are said to have lost intimacy with the ocean. At the time of the Pinochet regime, inaugurated in 1973 after the US-sponsored coup to challenge the democratically-elected government of Salvador Allende which supported the redistribution of justice to many more Chileans, including its first peoples, the ocean took on the role of a silent witness to the operations of the military dictatorship. This role is slowly revealed in the film, via the grim discovery of the remnants of a decomposed body, brought to the shore by ocean waves. Through the collection of oral testimonies, Guzmán patches together a dark story of the ocean as a burying ground for thousands of victims of the Pinochet rule, with metal rails attached to their packaged corpses intended to ensure their undetectable decomposition on the ocean bed. The director then engages the help of Chile's historians to enact a symbolic burial of the washed-up body, using a stand-in package resembling the original wrapped-up corpse and disposing of it from a helicopter, the way Pinochet's army was said to have done with victims' bodies. He also presents underwater footage from the search for other victims' remnants, in the aftermath of the discovery of the first washed-up body.

One of the objects found by the divers is a button that most likely came off one of the victims' clothing, over which the camera lingers for a prolonged time. In its cosmic circularity and everyday objecthood, the button provides a link between the recent events in Chile and its colonial history. In the course of the film, Guzmán introduces us to the story of Jemmy Button, a native of Tierra del Fuego, who was sold to an English sea captain for a pearl button and taken to England in 1830 to be 'civilized' – only to return several years later a broken man, belonging nowhere. The eponymous button thus serves as a reminder of different forms of violence to which human lives and human bodies have been exposed throughout Chile's history, both under its colonial rule and its military dictatorship.

Some film critics have castigated Guzmán for his "gauche poeticism" (Parkinson 2016), the lack of "trenchancy and restraint" and

even for "trying to find resonances where none naturally exist" (Gilbey 2016) - as if the latter was not a sine qua non definition of creative editing. Artistic tastes aside, there seem to be two issues that the (predominantly Western) critics, schooled in the European visual formalism or American fast-paced narrativity, seem to be discounting, or overlooking, in their reviews of The Pearl Button - which also lead to my two propositions for understanding Guzmán's documentary in terms of hydromedia. The first concerns the possibility of seeing the adoption of fluidity on the director's part as a purposeful methodological trope not just for the narrative but also for the filmic medium itself. The second, related one, is that the film's theoretical sensibility may actually be read as an attempt to decolonize the Western filmic 'mind-(and-eye)-set' by opening up to a different mode of experiencing both media and matter. It is a sensibility we could describe, after Chen, MacLeod and Neimanis, as 'thinking with water', i.e. as a way of bringing water "forward for conscious and careful consideration... in remembrance and recognition of the watery relations without which we could not live" (2013: 3). It is also a way of enabling a different relation with water - and acknowledging this relation as mutually constitutive.

The Pearl Button attempts to rethink geo-history as heritage embodied and embedded in the lives and bodies of the people, and in the land and sea they inhabit. Water serves there as a conceptual connector but also as a narratological and visual medium. And thus, alongside its various sources, both archival and present, photographic and filmic, the film features a montage of high-definition shots of ice-covered rocks, rain, hail, river foam, waterfalls cascading down the cordillera, Patagonia's glacial sea line and water droplets. The director plays with scale, perspective and movement to enact a sense of creative displacement in the viewer. This somewhat vertiginous mode of shooting and editing has some deeper significance, beyond mere visual formalism: it de-anchors the human from his [sic] self-awarded position as the pinnacle of the chain of beings, and reconnects him back to the flow of matter across different scales. It also enables a temporary displacement of the standpoint from which theories - and vistas - of what we humans call 'the world' get envisaged and articulated. We could therefore go so far as to suggest that Guzmán's work enacts what I earlier called 'watery filmmaking', with water constituting the material base of both the filmmaker and the medium, the conceptual conduit and the subject matter – but also functioning as an enabler of a new form of 'fluid montage' that does indeed try to 'find resonances where none naturally exist'.

This mode of filmmaking draws on the pre-rational, instinctual form of seeing and making connections. Philosopher Henri Bergson sees the instinctual mode of perception as synonymous with time and movement: it is a way of engaging with the world that renounces any predefined concepts of this world (see 1944: 248-49, 362). Water can become a lesson in reacquainting ourselves with our surroundings and re-experiencing ourselves not just in, but also as part of, the world. As Bergson poignantly highlights in Creative Evolution, "He who throws himself into the water, having known only the resistance of the solid earth, will immediately be drowned if he does not struggle against the fluidity of the new environment: he must perforce still cling to that solidity, so to speak, which even water presents. Only on this condition can he get used to the fluid's fluidity. So of our thought, when it has decided to make the leap. But leap it must, that is, leave its own environment" (1944: 211-12). Guzmán's cinematography can therefore perhaps be understood as an attempt to leap beyond the solid conventions of Anglo-American cinema, both in its narratological and essayistic guises, but also beyond the Anglo-American way of writing history, by reaching out to a different mode of knowing, thinking and perceiving.

The film builds on the visual and conceptual method of Guzmán's earlier documentary, *Nostalgia for the Light* (2010), which also looked at Chile's traumatic history from the point of view of cosmic history, but with a focus on the medium of light. One of the most memorable lines from that earlier documentary comes from an interview with astronomer Gaspar Galaz, who in a conversation with the director reveals that all our experiences have already happened and thus belong to the past:

"The camera I am looking at now is a few meters away and is therefore already several millionths of a second in the past in relation to the time on my watch. The signal takes time to arrive. The light reflected from the camera or from you, reaches me after a moment. A fleeting moment as the speed of light is very fast.... Moonlight reaches us in one second,

sunlight – in eight minutes." "So we don't see things at the very instant we look at them?" "No, that's the trap. The present doesn't exist. It's true. The only present that might exist is the one in my mind. There's always a lapse in time." "Astronomers manipulate the past, just as archaeologists do" (*Nostalgia for the Light* 2010).

In both Nostalgia for the Light and The Pearl Button the camera thus becomes a device for time travel: it is knowingly incorporated as a framing device, of which the viewer is occasionally made aware both through the framing techniques and through the inclusion of filmmaking artefacts - cameras, cables, green screens - into various shots. It is also a reminder of the fact that all images come to us belatedly, and that they are mediated by light that serves not just as a filter, but also, more importantly, as a vehicle that carries an image through air and time. The presence of the camera as a device for purposeful seeing with a view to obtaining fixed images visualizes this process of temporal deferral in perception, and hence in experiencing, the here and now. Yet The Pearl Button also takes some steps towards overcoming this temporal gap by providing a material link between present and past in the form of water, which, in Guzmán's words, is "an intermediary force between the stars and us" (The Pearl Button 2015). This explains why his second documentary returns to the astronomic imagery so prominent in Nostalgia for the Light, with several shots in the film featuring large telescopes situated in the observatory on the Atacama desert, 'the driest place on Earth'.

Indeed, Guzmán's story of water as outlined in *The Pearl Button* is thus narrated through the lens of not only Chile's history but also its geography, with its estuaries, 4,200 kilometres of rugged coastline, archipelagos, glaciers, streams – and deserts. It could thus be said to offer an indirect challenge to the abstraction of water criticized by Linton as the dominant aquatic narrative of the modern world. Through his multilevel account, Guzmán opens up one of the foundational structures of Western hydroepistemology, namely the hydrologic cycle, where water is understood in terms of standalone substance which is removed from social relations as well as specific geographical locations (see Linton 2010: 98, 103). Represented in mathematical terms, water in the hydrologic cycle is expressed in the "Rainfall = Evaporation + Runoff" equation (Linton

2010: 133) – which allows for it to be subsequently subjugated to management, quantification and, last but not least, commodification. In his analysis of the construction of 'modern water' as an abstraction, Linton throws light on what he calls "hydrological Orientalism" (2010: 123), i.e. the privileging of Northern geographies and Northern perspectives in the accounts of water's ontology. This attitude is manifested in the "dominant (Western) apprehension of deserts and arid lands as barren, poor, uncivilized places that must be hydraulically re-engineered in order to be made civilized" (ibid). Yet the Atacama desert, in all its aridity, is a pinnacle of technoscientific sophistication and power, with its observatories "funded by the international scientific community, searching the sky for the universe's past, the place from which the very matter from which humans are constructed originates" (Martin-Jones 2013: 712).

Guzmán tells us in a voiceover that "for both the Indigenous people and the astronomers, water is a concept that is inseparable from life itself", with telescopes attempting to bring the universe closer to what we once knew. The film also introduces the cosmological framework developed by the Selk'nam (one of the Indigenous people of the Patagonian region), who believed that, after death, they would turn into stars. The juxtaposition of the images of the starry sky captured by modern telescopes and the photographs of the bodies of the Selk'nam painted with multiple round dots establishes an intriguing cosmology of mediation



Figure 7.3 — Still from The Pearl Button.

that poses a challenge to our own, seemingly rather parochial, Western epistemologies (Figure 7.3). Going beyond the hydrologic cycle from which humans are absent, while lending an ear to human suffering in different moments in time, Guzmán eschews an easy humanism by reinscribing humans into the cosmic cycle - in the form of stardust. Indeed, all of the carbon, iron and nitrogen, not to mention water's key component, oxygen – chemicals that make up our bodies – were already present in the primordial cloud that appeared as a result of the death of the ancient stars, and that went on to form the solar system. In this sense, to turn to the Indigenous wisdom of 'stardust people' is not to engage in a naïve celebration of cultural difference, with our supposed appreciation of the other's way of life and mode of thought only ending up re-confirming our own standpoint as rational (while highlighting the other's viewpoint as interesting). What I am proposing to see as happening here, drawing on Eduardo Viveiros de Castro's theory of perspectivism, is therefore far more than a relativism that accepts the plurality of viewpoints within different cultures, without posing any foundational questions for the Western idea of rationality, relation - or, indeed, 'culture'. As explained by Peter Skafish in the introduction to the Brazilian anthropologist's Cannibal Metaphysics, "Viveiros de Castro treated the suppositions of Amerindian cosmology not only as demanding a critique of ostensibly universal Western concepts but also as a possible and actual basis for our own thinking" (2014: 12). Amerindian myths adopt a different perspective towards who counts as 'human' and what counts as 'communication', with various cosmic entities, those we Westerners term animate and nonanimate, being able to communicate with each other. As Viveiros de Castro explains,

if a subject is an insufficiently analyzed object in the modern naturalist world, the Amerindian epistemological convention follows the inverse principle, which is that an object is an insufficiently interpreted subject... The most common case is the transformation of something that humans regard as a brute fact into another species' artefact or civilized behaviour: what we call blood is beer for a jaguar, what we take for a pool of mud, tapirs experience as a grand ceremonial house, and so on. Such artefacts are ontologically ambiguous: they

are objects, but they necessarily indicate a subject since they are like frozen actions or material incarnations of a nonmaterial intentionality. What one side calls nature, then, very often turns out to be culture for the other (2014: 62).

If all beings do indeed perceive, reach out, communicate and form culture(s) (see Margulis and Sagan 2000: 27; Zylinska 2012: 204), the socio-political designation of some of these beings as occupying a central position in a particular cosmology, and of others as being their servants, inferiors or food, needs to be accounted for. The cosmology of mediation outlined by Guzmán is premised on the role of water as a "shockingly promiscuous medium... that goes and bonds with practically everything" (Linton 2010: 4). Water is a communicative medium in the sense of the term as used by Canadian media theory discussed earlier, but it is also an elementary medium that can work as a liquefying agent for our entrenched socio-cultural concepts and positions. An element that joins, ontologically, not just humans with nonhumans, but also those we twenty-first century Western subjects recognize as humans with our cosmic heritage, it reminds us of the way theories are made, thought is produced and borderlines are drawn. In its different modes of circulation and identification, water as hydromediated by Guzmán and other works of critical anthropology that see non-Western views as more than just "interesting" challenges the positioning of "the subaquatic as the domain of the ethnically Other" (Starosielski 2012: 150) in early environmental cinema - an approach that contained the power of 'native' bodies by equating them with animals while also foreclosing on a deeper examination of the complexities of aqueous geopower. It thus opens up a possibility for "the permanent decolonization of thought" (Viveiros de Castro 2014: 40).

Even the Rain

This possibility has also been explored by another film from the Spanish-speaking world that deals with the problematic – and problem – of water: *Even the Rain* directed by Icíar Bollaín and starring Gael García Bernal (2010). Bernal is Sebastián, an honest young director, who, accompanied by a cynical and world-weary producer Costa (Luis Tosar), is making a

film about Christopher Columbus's arrival in the New World. The crew are shooting in Cochabamba in Bolivia, the poorest country in South America, where the rates of pay are so low that the local Indian actors – who, owing to the lingering ironic logic of colonial equivalence, are to impersonate the Taino Indians from Hispaniola (today's Dominican Republic) in the film - can all be paid as if they were mere extras. "Two fucking dollars a day and they feel like kings," announces Costa. However, the production comes to a halt when the actors in Sebastián's film take on a role in a real-life drama: protests against the Bolivian government's attempts to privatize the water networks by selling their management to a multinational corporation. Presented by the authorities as a conflict between modernization and native-like victimhood on the part of 'illiterate' Indians, who have distrust 'embedded in their genes', the protests are based on real-life events that occurred in Bolivia in 2000. For several years the impoverished Bolivian government had been selling the nation's 'commons', i.e. its communication and transportation networks, to foreign investors. Yet its attempts to privatize the water supply met with unexpectedly strong resistance, led by the 'Coordinadora de Defensa del Agua y de la Vida' (Coordinator of Defence of Water and Life), as a result of which the multinational dropped its plans and withdrew from Bolivia. The film's title comes from the impassioned speech made by one of its leads. The Indigenous actor Daniel (Juan Carlos Aduviri), who is also the leader of the Cochabamba protests, cries out at one of the demonstrations that form part of what have become known as the 'water wars': "Against our will they sell off our rivers, our wells, our lakes and even the rain that falls upon us! By law!... What are they going to steal next? The sweat from our brow? All they'll get from me is piss!" On being released from jail, in which he finds himself after one of the protests, but without knowing that the film crew have already struck a deal with the authorities to hand him back as soon as the filming is finished, Daniel pleads with Costa: "You don't understand. Water is life."

Even the Rain contains many scenes of cinematic knowingness, with the violent acts of the *conquista* mirrored in the cultural and economic colonization enacted by the Spanish-led film crew on the Indigenous population. One of the most powerful scenes depicts the forced conversion, prior to their crucifixion and burning, of the Taino rebels in an attempt to ward off further resistance against the Spaniards' attempt to extract precious resources, such as gold, from the local land. On being reassured that 'good Christians go to heaven', Indian chief Hatuey, aka Daniel the leader of the water protests, spits his tormentors in the face and shouts: "Send me to hell!" At another moment, when the Indigenous mothers refuse to simulate the drowning of their babies instead of ceding them to the conquistadores - partly because they fear for their babies' safety, and partly because they cannot accept that "it's what happened" -Daniel poignantly reminds Sebastián, who insists that "it's really important for the film": "Some things are more important than your film". The dramatic arch is reached when Daniel's daughter, who also has a role in the film, is severely injured in the city protests, with Costa - interpellated by Daniel's wife Theresa's appeal to him as amigo – abandoning his previous mercurial attitude to his impoverished employees and driving through the violence-ravished city in order to save the girl's life. The film ends with Daniel presenting Costa with a boxed thank-you gift: a small bottle of water, or *yaku* in Quechua, which symbolizes 'life' (Figure 7.4).

While it may be easy to accuse Costa's transformation of being rooted in sentimentalizing Hollywood tropes, the film itself is too knowing about different film histories and genres to allow such an easy dismissal. Costa's moral dilemma and its subsequent resolution can perhaps instead be seen to be a rearticulation of the problematic raised by Viveiros de Castro in the following terms: "what do anthropologists owe, conceptually, to the people they study?" (2014: 39). The question of filmmakers' responsibility not only for the people they film but also for those they



Figure 7.4 — Still from Even the Rain.

employ, as actors as well as crew, resonates strongly in *Even the Rain*. The main shooting of the film is accompanied by assistant director María's (Cassandra Ciangherotti) simultaneous shooting of a black-and-white documentary about the film, but also about the socio-political situation unfolding on the ground. As viewers we are therefore presented with multiple instances of 'film within the film', with various other media such as cameras, cables, dollies, props and bits of script making their way into the visual frame.

Like *The Pearl Button, Even the Rain* inscribes itself in the logic and structure of hydromedia, I suggest, because it is more than just a film *about* water, where water would be reduced to a resource for human consumption, in either 3D (e.g. as a substance for drinking, washing or construction) or just 2D (as a visual object on screen). In its media awareness, the film therefore mediates water and is mediated by it, turning it into both a narrative device and a conduit for a politico-ethical enquiry. Outlining a cosmology that links first-world historical consciousness with Indigenous knowledges, water becomes an actant here, playing a crucial role alongside the human actors – those starring in Icíar Bolla's, Sebastián's and María's nested films, but also those appearing in the trajectory of what the modern West calls 'history', and in its non-Western 'storied' counterparts. As Viveiros de Castro explains,

The ethnography of indigenous America is replete with references to a cosmopolitical theory describing a universe inhabited by diverse types of actants or subjective agents, human or otherwise-gods, animals, the dead, plants, meteorological phenomena and often objects or artifacts as well-equipped with the same general ensemble of perceptive, appetitive and cognitive dispositions: with the same kind of soul. This interspecific resemblance includes, to put it a bit performatively, the same mode of apperception: animals and other nonhumans having a soul "see themselves as persons" and therefore "are persons": intentional, double-sided (visible and invisible) objects constituted by social relations and existing under a double, at once reflexive and reciprocal – which is to say collective-pronominal mode. What these persons see and thus are as persons, however, constitutes

the very philosophical problem posed by and for indigenous thought (2014: 56).

The theory of hydromedia therefore allows us to read water as an actant and a person, one among many others. As "each watery entity has been somewhere, sometime before, cycling through its various articulations through millennia" (Chandler and Neimanis 2013: 74), water can be said to trouble Western linear historicity by opening onto a different time and a different knowledge. Water also enacts a rupture in the modernist logic of human development and progress by breaking the naturalness of the flow of capital associated with modernity. Unvesseled water challenges the corporate logic of containment while also denaturalizing the modernist water imagery which, to cite Janine MacLeod, implies "the movements of capital" (2013: 42). Through this, we can glimpse the fact that "water is profoundly shared among the living, the dead and the unborn" (MacLeod 2013: 51) – a statement that echoes the Indigenous cosmologies which make their way into *The Pearl Button*.

The ethics of hydromedia: a conclusion

While the Western way of thinking normally deduces politics from ethics, we could perhaps suggest, in conclusion, that the cosmopolitical theory of watery entanglements described by Viveiros de Castro, where the polis includes all sorts of human and nonhuman 'persons', opens onto ethics. Given that all beings in the world are made of water, and that "Our watery milieu are enfolded into our bodies, repeating our ancestors differently", Chandler and Neimanis go so far as to suggest that "water constitutes a proto-ethical material phenomenon", or even that water actually "makes ethics possible" (2013: 62). Water is an ethical medium because it foregrounds the fact that no being is a self-enclosed entity that can 'encyst' itself from others. Indeed, it is this fact. Water thus literally liquidates the liberal stand-alone subject of ethics. Yet for an ethical event to occur, and to be acknowledged as such by watery humans, a cut is needed in the aqueous flow (see Zylinska 2014: 38-44, 98-100). This will need to take the form of an account on the part of those who call themselves human to recognize and take responsibility for the multiple forms of watery enfolding, where one entity's flourishing can signal another's demise.

The ethics of hydromedia can thus be seen as an enactment of what Kember and I have called "an ethics of mediation", which names "these processes of agential resolution that carry a human inflection: they are processes of 'differential cutting', of making pragmatic in-cisions into the flow that also have the force of ethical de-cisions" (2012: 171). To bring back the human into the cosmology of multiple 'persons' as enabled by the texts and practices discussed in this chapter is not to reinstate humanism, or express preference for the human modes of flourishing and facilitation. The interrogation of the latter is precisely what constitutes the primary task of such ethics. Yet it does involve the recognition of the human capacity for story-ing, and the need to turn such an account into an ethical interpellation. Because, as Donna Haraway has poignantly highlighted, "It matters what thoughts think thoughts. It matters what knowledges know knowledges. It matters what relations relate relations. It matters what worlds world worlds. It matters what stories tell stories" (2016: 35). In other words, it matters what we see, show and tell, about whom, with what and why. Film is a medium that is capable of taking on this task.

References

Bergson, H. 1944. *Creative Evolution*. Trans. Arthur Mitchell. New York: Random House, The Modern Library.

Bruno, G. 2014. Surface: Matters of Aesthetics, Materiality, and Media. Chicago, IL: University of Chicago Press.

Chandler, M. and A. Neimanis. 2013. Water and Gestationality: What Flows beneath Ethics. In *Thinking with Water*, edited by C. Chen, J. MacLeod and A. Neimanis, 61–83. Montreal and Kingston: McGill-Queen's University Press.

Chen, C., J. MacLeod and A. Neimanis. 2013. Introduction. In *Thinking with Water*, edited by C. Chen, J. MacLeod and A. Neimanis, 3–22. Montreal and Kingston: McGill-Queen's University Press.

Cubitt, S. 2005. EcoMedia. Amsterdam and New York: Rodopi. Kindle version.

Cubitt, S. 2016. Finite Media: Environmental Implications of Digital Technologies. Durham, NC: Duke University Press. Kindle edition.

Deleuze, G. 1986. *Cinema 1: The Movement Image*. Trans. Hugh Tomlinson and Barbara Habberjam. Minneapolis, MN: University of Minnesota Press.

Gabrys, J. 2011. Digital Rubbish: A Natural History of Electronics. Ann Arbor, MI: University of Michigan Press.

Gilbey, R. 2016. The Pearl Button seeks to reveal Chile's suffering – but doesn't quite hold together. *New Statesman*, March 17. https://www.newstatesman.com/culture/film/2016/03/pearl-button-seeks-reveal-chiles-suffering-doesnt-quite-hold-together.

Haiven, M. 2013. The Dammed of the Earth: Reading the Mega-Dam for the Political Unconscious of Globalization. In *Thinking with Water*, edited by C. Chen, J. MacLeod and A Neimanis, 213–31. Montreal and Kingston: McGill-Queen's University Press.

Haraway, D. J. 2016. Staying with the Trouble: Making Kin in the Chthulucene. Durham, NC: Duke University Press.

Hjorth, L. et al. 2016. Screen Ecologies: Art, Media, and the Environment in the Asia-Pacific Region. Cambridge, MA: MIT Press.

Illich, I. 1985. H_2O and the Waters of Forgetfulness: Reflections on the Historicity of "Stuff." London: Boyars.

Kember, S. and J. Zylinska. 2012. *Life after New Media: Mediation as a Vital Process*. Cambridge: MIT Press.

Kittler, F. 1999. *Gramophone, Film, Typewriter*. Stanford, CA: Stanford University Press.

Linton, J. 2010. What Is Water? A History of a Modern Abstraction. Vancouver: UBC Press.

MacLeod, J. 2013. Water and the Material Imagination: Reading the Sea of Memory against the Flows of Capital. In *Thinking with Water*, edited by C. Chen, J. MacLeod and A. Neimanis, 40–60. Montreal and Kingston: McGill-Queen's University Press.

Margulis, L. and D. Sagan. 2000. What Is Life? Berkeley: University of California Press.

Martin-Jones, D. 2013. Archival Landscapes and a Non-Anthropocentric 'Universe Memory.' *Third Text* 27(6): 707–22.

Maxwell, R. and T. Miller. 2012. *Greening the Media*. Oxford: Oxford University Press.

Parikka, J. 2015. A Geology of Media. Minneapolis, MN: University of Minnesota Press.

Parkinson, D. 2016. The Pearl Button Review. *Empire Online*, March 14. https://www.empireonline.com/movies/pearl-button/review/.

Peters, J. D. 2015. The Marvelous Clouds: Toward a Philosophy of Elemental Media. Chicago, IL: University of Chicago Press.

Skafish, P. 2014. Introduction. In E. Viveiros de Castro, Cannibal Metaphysics, 9-33. Minneapolis, MN: Univocal.

Starosielski, N. 2012. Beyond Fluidity: A Cultural History of Cinema under Water. In Ecocinema Theory and Practice, edited by S. Rust, S. Monani and S. Cubitt, 149-68. New York; London: Routledge.

Viveiros de Castro, E. 2014. Cannibal Metaphysics. Trans. Peter Skafish. Minneapolis, MN: Univocal.

Zylinska, J. 2012. Bioethics Otherwise, or, How to Live with Machines, Humans, and Other Animals." In Telemorphosis: Theory in the Era of Climate Change, vol. 1, edited by T. Cohen, 203-22. Ann Arbor, MI: Open Humanities Press.

Zylinska, J. 2014. *Minimal Ethics for the Anthropocene*. Ann Arbor, MI: Open Humanities Press.

Filmography

Even the Rain. 2010. Directed by Icíar Bollaín. Film. DVD.

H2O. 1929. Directed by Ralph Steiner. Film. YouTube.

Nostalgia for the Light. 2010. Directed by Patricio Guzmán. Film. DVD.

The Pearl Button. 2015. Directed by Patricio Guzmán. Film. DVD.