Voicing Waters; (Co-)Creative Reflections on Sound, Water, Conversations and Hydrocitizenship

By Owain Jones, Luci Gorell Barnes and Antony Lyons

Abstract: This chapter offers a creative, exploratory, non-representational ecology of narratives about water and sound. Water is, clearly, vital to life. It is present in the world in an abundance of seepings, percolations, flows, evaporations, precipitations etc. This fluid profusion is enabled by water's liminality and loose materiality, and consequential response to pulls of gravity, surface tension, wind, and so on. Water is present on the earth in many natural 'bodies' - oceans, seas, rivers, streams, lakes, ponds etc., but also via many techno-cultural forms, such as drinking, waste and irrigation, fountains, swimming pools, and combinations thereof. Water dissolves other compounds, carries material as it flows; it mixes, joins, assembles and disassembles. Sites such as bodies, cities, houses, stand within and between inter-woven networks of such flows. These sites are soundscapes as well as landscapes. To human ears and minds, flowing, or moving, bodies of waters 'sound', i.e. they make noises, and can be said to have 'voices'. Here the authors draw upon a selection of projects dealing with conversations with water and hydrocitizenship.

Keywords: voicing water, gravity, flow, bodies of water, non-representation, hydrocitizenship, conversations with non-humans.

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> But in the mud and scum of things, there alway, alway something sings.' (from the poem, *Music*, Ralph Waldo Emerson, 1904).
>
> The sound track to this text could be considered to be the compositions 'Summer Water' and 'Bubbles Which on the Water Swim' from 'The Golden Morning Breaks' by Colleen (2005).

We offer a free-flowing, reflective, creative ecology of narratives on 'voicing waters'. It draws upon a group of research projects, and longer running interests, in the research/writing trajectories of Owain as a cultural geographer, delving into various aspects of nature-society relations, Luci's artistic explorations of hidden waterways in her home city of Bristol (UK) and Antony's eco-creative research practice situated largely in diverse water landscapes.

These interests, attuned to sensory experiences of water, intersected in a project called '*Towards Hydrocitizenship*'[i], (*TH*) and in tidal landscapes of the Severn Estuary (UK). We On occasions we break into single voices as we reflect upon, separate work and experiences:- signalled by (OJ), (LGB) and (AL). Owain and Antony also draw upon a participatory research project with non-humans, including workshops with trees and water conducted with a small group of artists and scholars - 'in conversation with water' (ICWW) [ii] see also Bastian *et al*, 2017).

We share ongoing interests in tides; a sustained period of researching floods and communities, particularly the dramatic 2007 and 2014 floods of Gloucestershire and Somerset (UK) (OJ with others[iii]); a project on drought (Luci with others[iv]); and, as mentioned, the *TH* project, an arts and humanities centred project addressing how people live with water, and with others and nature, *through water* in urban and rural settings in the UK. In the following discourse, threads of *TH* work bubble up, particularly in sections written by Luci and Antony towards the end of the chapter, so we briefly introduce it here.

This interdisciplinary project involved, academic teams in four UK case-study areas, working with creative consultants, artists, community partners, and other stakeholders. The approach taken was imaginative, co-productive and emergent. This involved the teams holding many conversations, and allowing local water-community stories and issues to emerge and evolve into new narrative forms and settings, which were then aired, shared, connected-up, woven

into films, performances, art works and festival events. It was, at heart, a *creative* rather than representational enterprise, thus embracing non-representational approaches' fundamental principle of being avowedly actively in the unfolding world, rather than somehow standing outside and representing. In particular, elements of the Bristol-based case-study entitled Water City Bristol[v] are drawn upon.

In the spirit of such non-representational theory (NRT) (Thrift 2008; Anderson and Harrison 2010), and the affective registers to which they pay particular attention (McCormack 2003), which insist on creativity and non-modern logics as fundamental tropes of knowledge-creation, the account offered is episodic, collagist and impressionistic. It draws on personal memories, literatures, academic writings, collaborations, and moments where sound has featured in our watery explorations. We seek to communicate an ecology of narratives, which we feel, lies at the foundation of individual and collective human becoming.

Water is quintessentially multiple in its becomings. For example, waterfalls, eddies, standing waves, are quite palpably things and places, but also they are always just, and more than, flows of ongoing water. And, of course, waterfalls and the like sound in ways which speak deeply into culture, art, identity, place, landscape.

We have reflected that sound has been – echoing the orientations of this book – a somewhat under-regarded sensory/affective register in all this work on water. Having said that, on certain occasions, sound has also been very much to the fore, particularly in collaborations with others such as ICWW[vi]. Although water is now being creatively explored/studies around the globe as an active and embodied, lively, life-enhancing element, fundamentally linked with bodies and places, e.g. hydrofeminisms (Neimanis 2017), the voicings of waters are perhaps only just beginning to emerge. We seek to present examples of the sound-voices of water, and also examples of 'speakings' of, to and for, water in everyday life.

Richard Bright interviews Basia Irland about her explorations and writings on world rivers.

> RB: You have written a series of essays for National Geographic about seeing from the perspective of a river. Can you say more about this?
> BI: It is indeed a privilege to be a writer transcribing the stories of our rivers' moist stories. It has opened my eyes and my heart to the depth of knowledge a river accumulates over thousands of years as it traverses the land.
> … *because every river has its own voice, personality, and problems*. I have written about rivers around the world, including ones in Thailand, Cambodia, India, China,

> Japan, Nepal, Canada, the United States, and Europe. Lucy Lippard writes, "The genius of these essays, remarked upon by many on-line comments, is the fact that they are written in the first person, the persona of the river herself (Bright and Irland 2018: online, emphasis added)

We also have a shared thread of on-going attention to trees, woods, orchards and forests and their affective agencies. We are alive to the wealth of interplay between trees, woods, waters, rivers, and the sounds therein, and thereof, and the immersive qualities of the sound-places they can produce. These are pertinent examples of ways in which waters, and imaginaries of waters, flow and speak through other bodies, stories, registers and places.

Tudge (2006) points out that the voices of trees change if they are thirsty. And he adds a yet more striking suggestion about the interplay of trees and water; 'how they [trees] draw up prodigious quantities of water from the ground, send it up into the atmosphere, and then (so some have claimed) may call it back again, by releasing organic compounds that seed fresh clouds' (Tudge 2006: 8).

What this tells us is that the whole biosphere is a weave of flows (as Lovelock's Gaia Hypothesis emphasises (2000). And water is at the heart of that, percolating, leaking, flowing, trickling, evaporating, precipitating, rising, ebbing, flooding, draining, breaking (waves). And all these have voices, from the loudest roar to the faintest whisper, or something in between. Lyons writes how 'embracing the thinking of 'dark ecology' leads one further, wider, deeper – into plutonic hydrothermal flows, abyssal vents, stratospheric clouds, tsunamis, industrial/sewage effluents – all of which are less readily conversed with, but each as 'real' as a pastoral or sublime riverine landscape.' (2018: 57) With a background in geology and geophysics, Antony often addresses the 'undercurrents' – the parts of the water-cycle that lie hidden, underground, in the pores, whilst embracing Joyce's poetic concept of a 'commodious vicus of recirculation' (Joyce 1939: 1) and Coleridge's description of waters flowing 'Through caverns measureless to man, Down to a sunless sea' (Coleridge: 1816).

The UK-based artist duo Reiko Goto and Tim Collins and have devised systems to hear the watery breath of city trees in daily rhythms: 'Goto references the human need to hear the breath of people and living things we care for to assure ourselves of their well-being. This technology provides one way of listening to the breath of trees' (Goto & Collins 2010: 8).

Elsewhere Goto writes, ‘touching water is a beginning of the discourse to listen to others, including people, things and the environment at deeper level.’ (Goto 2013: blog online).

The film *‘Transgression – Regression* ’[vii] (Lyons 2017), which was partly derived from *TH,* talks of tidal waters, deep time, the geomorphological processes of transgression and regression, climate change adaptation, power and Modernity. It is replete with geopoetic creative reflections, with seepings and surging of tidal waters.

‘All water wants, all water ever wants, is to fall’ (Bell 2013: radio broadcast)

> I (OJ) did say, on a few occasions, we had not discussed gravity enough. We did seek out the high places to start with, where the waters on the upper slopes seep through the culm, amass into tiny rivulets, into ditches, and then into a discernible stream. The head of the river, with a journey to make, down through the stream, the river’s upper, middle and lower reaches, then mingling with the tidal ebb and flow in the river mouth. But who is to say where the catchment really starts and ends? Does the gravity that pulls the rain down form part of the catchment? What about the clouds carrying the water vapour, what about the prevailing winds that might carry falling rain across country into the catchment’s “air space”. (Jones 2013: online)

The above is a blog extract from the ICWW project. In that experimental workshop we continued Antony’s exploration of the River Torridge and its catchment, begun in the project *Confluence* (Lyons and Pigott, 2012). This project focused on bringing to life various hidden ecological registers, including the turbidity of the water flowing in the river, through data-fed kinetic sonic sculptural works called ‘Aliveness Machines’. Through the mediation of sensors, data, materials, motors and microphones, ‘voice’ was given to - or perhaps taken from - some of the changing conditions and states of the water ‘body’. Continuing in the ICWW workshop, we swam in the river to feel the pull and push of the water, and, from boats, listened to the flow of the river through hydrophones and tested for salinity and fresh-water layerings of flow (figure 1).

Figure 1: here

> “I'm tempted to subtitle the hands-on exploratory workshop *'From Flowforms to Floodplains*'…How would we converse with water bodies without anthropomorphising them? We commonly apply human qualities and behaviour to water bodies - 'raging floods' in rivers, lakes as 'placid'; the sea as 'treacherous', perhaps 'troubled waters' and even the use here of the word 'body'. But could a water-body 'speak' to us in any way that not a reflection? Or is this binary perspective (human/non-human) simply missing the point?” (Lyons 2013:online).

(AL) This quote is from a blog post I wrote in preparation for the ICWW workshop. This topic was explored in a kaleidoscope of immersive ways. One memory is of the watery

splashes, squelches and occasional mutterings uttered as the assembled party strove to locate the 'true' source, or headwaters, of the River Torridge. As we traversed the hummocky, soggy *culm* grassland, we could hear rivulets of water within the ground below us. 'In a limited way, we (through our squelching footsteps, like the grazing cattle) were interacting with, and adjusting, the locality's water processes and patterns.' (Lyons 2013:online).

Only after some hours of struggling in marshy ground did we accept that fluidity and fuzzy-ness of the situation which exposed a deeper reality than our blinkered notions of intention, expedition and success. In the closing discussion of the workshop, one of the emerging ideas was the prospect of speaking *as*…a river, a water molecule, a cloud. The meaning of this differs significantly from speaking *with* (in conversation) or speaking *for* (a spokesperson). All three are imaginative, poetic leaps, but 'speaking as' involves an inhabiting of watery-ness. This leans towards geopoetic and even shamanic sensibilities, and perhaps, it is not about porosity to the otherness of water(s), but a oneness with water(s)? A breaking down, or dissolution, of an insider/outsider duality?

Another (sonic) duality was brought into sharp focus in these field/water/body explorations – that of the underwater world and the 'in air' perception. The phenomenology of the experiences is completely different. Above the surface we were disconnected individuals, reaching out to one another vocally, throwing our voices. Underwater, we were enmeshed in a denser material and sensory connection, a unity of disembodied and dislocated vibrations. The concordance of multiple sound sources was palpable, contrasting with the apparent discordance of our noise-making in the aerial realm.

(OJ) As a child, the sound of roaring water entered deep into my memory and dream life. This has stayed with me ever since, and certainly played out in my research and writing about water and tides.

> My memory is patchy and damaged, I think, by shock or trauma. I went "away to school" aged seven years and six months. I was a small, shy, needy, "backward" (dyslexic) child and the whole experience, especially the first few years, repeated at the beginning of each term, was deeply upsetting. I remember weeping and begging to stay home, weeping in the car, and then weeping and begging when finally deposited at school. [] The one solace of the school that slowly emerged in my imagination was that it stood by the banks of the River Severn, on the outside of the great horseshoe bend, some miles below the city Gloucester. So I still saw the tides, and heard them as the Severn bore rushed by (sometimes deep in the night), and had plenty of opportunity to gaze across to the far shore, a place at once in hailing distance yet also remote as a dreamland. (Jones 2015: 19).

On quoting this passage now, I am surprised I did not make more of the sound of the bore, the famous tidal wave that washed up the tidal reaches of the river. To hear it at night, while lying in the dark dormitory along with perhaps twelve other, mostly sleeping, companions, or when miserably sitting in the hall doing 'prep' (homework), was quite a thing.

A tidal flood (rising water) happens twice every twenty-four hours in the lower Severn estuary, but if the tides are low, this grows only to a rushing upstream surge, fighting the ocean bound freshwater, setting up a flurry of ripples – the sound of which on one occasion reminded me of the dry rattle of geese settling their feathers after preening. But on about ninety days a year, there is a discernible, more vocal *wave* - a huge crashing polyphony of sounds. Perhaps one of the most evocative sounds of water is ocean waves breaking on sandy or rocky shores. But the Severn bore is a continuous voicing wave, as it keeps breaking, moving upstream.

As we have already pointed out, water voices when it is on the move in *turbulent* flows. Still water not only "runs deep" but – to human senses - is also relatively silent. Of course sound moves through water faster and further than air, but that is another whole question. There is something of a water Zeitgeist going on in artistic and publishing circles, with very many recent art projects and books about waters in various forms, and the ethics, politics and cultures thereof (Jones 2017; Roberts and Phillips, 2018). Perhaps, as the environmental failure of the modern project becomes so stark, artists and scholars are reaching out to the element of nature that is so palpably and vividly ecological, close to home and body, and that connects us all to all, this is all to obviously vital.

In Cardiff (Wales UK), the once very vocal (tide, water, bird , mud, boat songs) and rich estuarine mouths of the rivers Ely and Taff – where they joined in daily ebb and flow with the tidal Bristol channel – were silenced by the building of a barrage (2001: non-power generating) to create permeant high 'blue water' in the city for the purposes of real estate development. The lower reaches of the both rivers are, as a consequence, more like ribbon lakes; still, silent. On satellite imagery, they are 'the wrong colour'. I (OJ) called this flumenicide – the murder of rivers; the silencing of rivers.[viii] Cardiff Bay, what the Taff estuary is now called, has another watery voice. That of regular patches of softly gurgling bubbles, as the water is artificially aerated to stop it becoming stagnant. The diminishing of these rivers being just two examples of the way in which perhaps a third of the rivers in the

world (Welland 2009), and their geo-forming and life-forming agencies, have been severely disrupted by engineering, water extraction, hydro-power dams etc.

"What is Water"? Linton (2010) asks. It is rains, rivers, seas, oceans, tides, lakes, puddles, ponds, springs, brooks, streams, reservoirs. It is bodies of, *and* flows of, waters. These have multi-lives in themselves, as processes, and also life therein. They have their voices. To be empathetic to water as an inert objectified substance is one thing. To be emphatic to something like a river is quite another thing, to heed, perhaps, the agency of the river.

It is difficult to be empathic to water as a Modern abstraction (Illich 1985) and to hear water voices as anything other than mechanical noise or, at best, randomly attractive sound. But there are those who feel we can care for water, to think of water in very different ways. Following Schwenk, (e.g. Schwenk and Schwenk 1989) fluid dynamics can be attended to in deep ways. In his Flowform research (figure 2), Sculptor John Wilkes was influenced by Schwenk, and examined how these patterns of water can be incorporated in designed environments so that human-made channels and vessels can support and enhance the essential movements of water. These have both practical (aerating) effects and more multi-sensorial effects, including letting water flow and sound in ways it does in 'natural' waterways.

Figure 2: here

In 2017, the river Whanganui River in New Zealand was famously (in an 'environment matters' sense) granted 'personhood' rights by the New Zealand state based on the local Māori tribe of Whanganui iwi world views of the river as kin. This community does not see the river (landscape) as a lifeless chemical assemblage, but a living assemblage, where the water and its ecology and landscapes and spiritual values/qualities are due, ethical, legal and empathic consideration.

The turn to distributed human-non-human agency and becoming as a matrix of co-process, within non-representational forms of knowledge, holds great potential in terms of empathies, ethics and politics for ecological forms of citizenship and becoming.

> In the case of rhythm, water must be called its very element. The word "rhythm" is derived from the Greek verb "to flow". And water does indeed flow rhythmically. This can be seen in the rhythmic patterns of waters and meandering water course, just as it can be heard in the audible rhythms of brooks and oceans (Schwenk and Schwenk 1989: 11).

Joyce memorably described the rhythmic sounds of the seaweed-heavy tidal waters of the River Liffey's estuarine mouth around which Dublin City clusters;

> In long lassoes from the Cock Lake the water flowed full, covering greengoldenly lagoons of sand, rising, flowing. My ashplant will float away. I shall wait. No, they will pass on, passing, chafing against the low rocks, swirling, passing. Better get this job over quick. Listen: a fourworded wavespeech: seesoo, hrss, rsseeiss, ooos. Vehement breath of waters amid seasnakes, rearing horses, rocks. In cups of rocks it slops: flop, slop, slap: bounded in barrels. And, spent, its speech ceases. It flows purling, widely flowing, floating foampool, flower unfurling. Under the upswelling tide he saw the writhing weeds lift languidly and sway reluctant arms, hising up their petticoats, in whispering water swaying and upturning coy silver fronds. Day by day: night by night: lifted, flooded and let fall. (Joyce 1960: 65).

This is a watery blue-brown-grey-green-white planet, with its gossamer biosphere in deep crisis in terms of its current settlement as a particular form of Gaia. A biosphere of flows, evaporations, precipitation, water doing much of the work, as water in plasma in human blood. All these flows, and they bodies they temporarily occupy, fold into affective performances of everyday places, spaces and lives. They create, connect, transform, transport, and destroy. And the sounds, the voices of various forms of water, bodies of water, are also affectively woven into space, place and cultures, in many ways and on many scales. Nichols (2014) in *Blue Mind* suggests we are hardwired by evolutionary psychology to love water and its immersive capacities both as an elemental space and the sonic fields it is endlessly generating.

Looking now at many literatures on water, we see the sound of water is often under-considered compared to its visual, landscape-related, ecological, amenity values. Although perhaps not so for the margins of the seas where the sound of breaking waves is so ubiquitous and iconic, and places like waterfalls, which voice so loudly and constantly. But the quieter sounds of slower flowing rivers, lakes and streams are less regarded, or even lost, in the noises of Modernity. There is much attention paid to the beneficial roles urban rivers can play for city well-being. Sound, again, is arguably underplayed in that.

A number of artists have worked with the Severn bore as a soundscape. Louisa Fairclough, in particular explored the sonic qualities of the Severn Bore and the wider estuary in the art work *Body of Water*. For her, this landscape was a place to explore, cycle, record, camp and sleep, sometimes with her young son, as she sought places conducive to creative expressions

of grief. See Jones and Fairclough (2016) on this in relation to the tragic suicide of Louisa's sister. The river, ebbing, was a place to sing grief into for it to be carried away to the mouth of the estuary and into the vastnesses of the Atlantic Ocean. The bore itself was a shriek of kinds. As Louisa explains;

> Body of Water is a field recording made the night following the full moon on 1st March 2010. There are two main events you can hear in this recording: one is the surge of the tidal wave along the river, the second is the ringing of church bells in the distance which are swallowed by the immense noise of the wave. Around this are details: a dog barking in the distance, something that sounds like a helicopter (but wasn't), the glop and gurgle of the water as it rises up the muddy bank. [ ] We set one microphone on a stand facing away from the river to gain a sense of the wider landscape and another microphone was handheld on a boom following the line of the tide, gently moving the mic to capture the details of the eddying water. Standing on the banks of the river, waiting for the bore tide, there was the insistent circular tune of bell ringing practice a mile or so away. (Fairclough in Jones and Fairclough 2016; 101).

Upstream the riverside village of Upton also hears the bore and it , and the following high tide brings the risk of flooding. When also combined with local heavy rain, or heavy rain further up the catchment, these can produce severe local flooding. The village is protected with embankments, flood gates, and various flood water depth markers.

Floods and water go hand-in-hand. Floods are, of course, devastating for those who are affected by them. Their danger, violent impact and lasting trauma cannot be doubted. But in terms of rhythms of geo-life and geo-formation, floods are as natural and necessary (and beautiful) as the seasons, and features of the seasons such as the autumn fall of deciduous leaves.

Floods have aural registers which is often remarked upon in accounts of them – from the roar of rushing-rising water; slowly trickling, but remorselessly rising water; to calmer lappings and gurglings of high water, and its subsequent retreat.

There are plenty of melodramatic accounts of floods in literature which major on the sound of water, the soundscapes of flooding where human and water shouts mingle.

> She heard somebody shouting, and looked round. []Simultaneously she became aware of a great roar, which, before she could move, accumulated to a vast deafening snarl. []. She looked round, behind her. And to her horror and amazement, round the bend of the river she saw a shaggy, tawny wavefront of water advancing like a wall of lions. The roaring sound wiped out everything. (Lawrence 1930: online).

In the research conducted on the 2007 Gloucestershire floods, the roar of the flood was similarly remarked upon, but even more so, quieter flows and trickles, the silence of high flood water, and the effect it had on the local soundscapes, as the following interview extracts show.

> Yes, and you can hear it as well coming over the flood bank. You open the window and you hear this roar.
>
> We couldn't sleep much after that because we realised [ ], it was flowing. There is a certain noise about the river when it's still coming over. Of course if it's still coming over it's got to go somewhere and that means that very gradually [the] level of water is rising and that noise was incessant wasn't it? Water rushing over, just rushing towards us.
>
> And I can hear it break the banks. [] I can hear it [] running. I [] hear the water trickling over. When I say trickling, it's quite a fast [] but not like a weir. But it is like a miniature weir because it's so quiet, [but] you will actually hear it.
>
> My wife stayed awake all night and the water of course meant that the church clock striking the hour would bounce off the water and was very, very noisy indeed.
>
> Very slowly, it was just creeping along the road. And everything was quiet, that was the strange thing… Jonathan said that was when they boated across the village in pitch black. You could hear the badgers screaming, which was the horrible thing about it because it was very silent and eerily quiet. They were going to where they thought they were safe but they got caught up and they drowned. In that respect it was quite emotional, it was a very surreal experience.

In Bristol, similarly serious floods in 1968 triggered substantial flood defence engineering. This entailed putting the river Malago underground as the last few miles of its course cuts through the city centre to join the River Avon.

Here the voice of the river in the city is lost. But memories of both the flood and the river, abound, including the sound of the underground workings running under the houses when the tunnels were being built (figure 3).

Figure 3 here.

And now there is talk of "daylighting" a least some culverted and piped water courses in Bristol. This is to bring all the benefits that water courses can have in a city in terms of visual and aural quality back to life. Lost water courses and their voices, can also be 'delighted' imaginatively, through memory, story-telling, site specific drawing and performance. This is some of the work the TH project did.

Where the River Malago is diverted underground, in a park in the southern suburbs, there are concrete chambers and channels topped by metal cages over the water. And the riverm a quiet, gently flowing, murmuring flow, on the summer's day we walked its upper course, suddenly ROARS and it plunges below into the engineered darkness of the subterranean channels.

One can lie on the bars of the cage, and gaze into the bubbling, swirling and foaming water, and be immersed in the roar that is constant, but endlessly varied, until it mesmerises (Figure 4).

Figure 4: here.

> Water's ability to act as a metaphor for life, and by extension, health, is endless. In its mobile flow through the landscape, the course of a river is representative of the sinuous life-course of human health. In its often still presence as lake or pond, the therapeutic and calming natures of water are regularly invoked []. As a raging torrent, or wild-waved sea, the volatile and ambiguous nature of water is visible as an element of contestable health, capable of both good and harm []. In such meanings 'water has a nearly unlimited ability to carry metaphors' (Illich 1986). (Foley 2016: 2)

Ryan, in her book about affect, non-representation, and people's relationship to the coast, inevitably touches upon the sounds of edge of the sea. In an interview, a coastal resident says, 'The south wall is a musical instrument. It's amazing. sort of, you know, booming and lapping, like it's really loud in under the south side of it? (Ryan 2012: 226). The sound of the breaking waves is, indeed, a celebrated soundscape. But in a storm, on a vulnerable coast, it can become a fearful soundscape to those at risk of flood or erosion, or who have lost loved ones at sea. Ryan suggests that, 'a close awareness of the sound of the sea has an important contribution to make towards articulating a detailed embodied knowledge of the coast' (2012: 226)

But what of other (watery) soundscapes? To what extent are they valued or otherwise? Ingold asks; 'is hearing the predominant sense of dwelling? To regain an appreciation of human dwelling in the world is it necessary to rebalance the sensorium, giving greater weight to the ear, and less to the eye, in the ratio of the senses?' (Ingold 2000: 155). Furthermore, Ingold adds; 'hearing [] since it rests on the immediate experience of sound, is said to draw the world into the perceiver, yielding a kind of knowledge that is intuitive, engaged, synthetic and holistic.' (2000: 245).

Water has unique qualities as a compound. It is the key to life even though not providing nutrients. It is an embracer, transporter, a dissolver, a mixer, the ultimate networking matrix. As Neimanis (2018) says;

> in my book, *Bodies of Water*, all waters engage in a kind of "amniotics." Water is what constantly transforms itself so that other forms of life can emerge; water bathes other bodies of water (human, animal, vegetable, other) into being. Water in this sense dissolves sovereignty – it lets go of the need to be an individuated, discrete and self-sufficient body that protects itself at all costs; instead, it gives itself over to other bodies that are becoming something different (2018: online).

And the rare freshwater mussels on the River Torridge (to return to Antony's Conflunece/ICWW work) – we are told – live in the flow of river water for maybe a hundred years, putting on their shells like tree rings, a layer each year. But they have not bred for fifty years. The connections and the carryings of the river are troubled. Unless conservation efforts can change what the water carries from land to sea, these will be the last generation of mussels. But all the while the water of the river will still sound. But perhaps, for those who might treat the river and its ecology as kin, its symphony will be diminished.

The loose materiality of water is heavy. Pick up a bucket of water, it's is a heavy thing. Animated by wind, currents, gravity, ocean waters can throw huge, heavily loaded steel ships around like leaves. The heaviness of water is workable; by fin, webbed foot, oar, flipper, or diesel driven propeller. Water voices as it moves, as it is disturbed, especially if parted, and then, coming together again with a plop, crash, sigh, or gurgle - as it *falls back into itself,* or onto some other surface, as it tumbles over itself, or what it encounters.

One of English literature's most celebrated poems, despite to the point of hackneyed cliché, puts this very well; *The Brook* by Alfred Lord Tennyson. In it, the tumbling water of a hill stream flows to join a river and flows to sea. In turn the water 'bickers', 'chatters', 'babbles', 'chatters' again, and finally 'murmurs' in the slower flowing, lower reaches. The metre of the lines, and anthropomorphic metaphors of human speech, have become common currency.

Non-representational approaches, in contrast to modern approaches of divide and rule, are potentially ecological forms of knowledge that seek to creatively embrace the interconnectivity of all processes, and evolutionary understandings of how the earth and cosmos advance through space-time in a burgeoning, creative becoming of which they are a collective part. Immersion in water, as element, is now receiving attention, as in Neimanis cited above, and others. And of course one can be immersed in sounds, and sounds of water,

as well as in water itself. As Foley states ‘The idea of immersion draws on phenomenological concerns, updated within NRT, with person– place interactions and the specific relations between bodies, practices and multi-sensual environments, where surround-sounds, touch, and proprioception have explicitly embodied dimensions’ (Foley 2015: 2018-19).

There is a music to this immersive becoming; the world as waterscape, as soundscape, or perhaps a series or ecology of soundscapes. Serres begins *Biogea*, his raging lament for the destruction of the earth and its waters, with two quotes. The second (quoting George Bernanos) containing these words; ‘for forests, hills, fire and water alone have voices, speak a language. We’ve lost the secret of it … The voice that we no longer understand is still friendly, fraternal. A maker of serene peace.’ (2012: preface).

Rigby (2011) considers the atmospheric ecopoetics of Gernot Böhme, and his discussion of German romanticist Eichendorff as the ‘master-craftsman of poetic atmospheres’, particularly in his treatment of sound. She reports that the Böhme explains;

> how sounds modify the space in which they are heard, informing the listener’s disposition, sometimes reaching “directly into his or her corporeal economy” … Particular combinations of sounds contribute to the acoustic character of specific lifeworlds” be they natural ones, like the sea, the forest of other landscapes, or be they the life worlds of cities and villages. (Rigby 2011: 95-66).

Such atmospheres are a key ground of ecocide and otherwise. The loss of soundscapes, such as birdsong (Vidal 2012) and rivers that are dammed, or depleted to the point of exhaustion, are some of the subtler sonic registers of ecocide. As Rigby has it, ‘the unspeakable ecstasy of air passing through tangled bows in the weather-word and of free flowing waters making their winding way across the land, acquires a new significance’. (2011: 101).

As we have said, water flows/falls, and voices as it does so . But there is another gravity, a minority gravity, that of the White Goddess, the moon in play on earth. Then water tries to climb away from its earth home, to its old home of celestial bodies, to the pull of the moon. The tides move water, bring it into voice in other registers. And the incoming tide – heightening into the funnel of the Estuary, rushes the sea level higher; as much as *fourteen metres* higher at the Spring tides in the ports around the estuary. Filling up the space made by the sea walls to the very brim, and then in a matter of hours, departing to leave a dizzying, far-reaching space of sand, mud and channels. A high tide soundscape, with the extraordinary swirling patterns of silty water, looping and glooping and gurgling; then an ebbing soundscape of draining, then, at low tide, an utterly different soundscape of seepings and

quite poppings. Then the rising tide again. The soundscape changing to a complex set of rhythms: hour by hour, day by day, month by month, season by season as much as the landscapes itself. Linked the tidal bore of the Severn discussed above – there are a number around the world - this estuarine soundscape is as rich in aural senses as it is in ecological and visual senses. Luci's new art project *Tidal Village* draws upon the extraordinary sensescape that is the mid Severn Estuary[ix].

Unless we live by a river or the sea where sound is an integral part of the landscape, we only hear fragments of water's voice: the running tap as we fill the kettle, our feet splashing through puddles, or the swish of car tyres on a road, our own pulse on occasions. Despite our absolute dependency on it, we often forget water until a flood or drought brings it sharply back to our attention.

In the following, I (LGB) write about some different ways that voicing water is happening in my practice, which could be seen as different streams of thought that include: Voicing as; Voicing for; Voices by; Voicing about; Water; and, Voicing water's voice.

This draws on recent TH work but also previous work on a watercourse in my neighbourhood. Several years ago I made a piece of work about the culverted stream near my house. My neighbour, Jean, who lived there for 97 years, told stories about this watercourse, which affected my sense of belonging in the area and, in *This Long River* (Gorell Barnes 2018a), I explored the "mnemonic memories", Jean and I shared, our embodied understandings of the place where we both lived.

> We watched the sun touch our garden walls on winter mornings, climbed the steep hill to school, and listened to the stream as it rushed through the storm drain after rain (Gorell Barnes 2018a, no page number).

In this inquiry, I gave voice both *about* and *as* water as I experimented with writing from points of view beyond the human. I gave voice *to* the stream as a character in my process and I also imagined myself speaking *as* the stream when it flooded the area before being banished into a culvert in 1959.

> I thought the spring was on Doreen's farm on Boiling Wells Lane, but the map says it is on Noel's land further up on the left. The big metal gates are padlocked and I cannot get in. Bob said the water bubbles straight out of the ground and that's why it's called Boiling Wells. I can smell the

stream in the storm drain as I walk back down the lane and words pound out with my feet, which I write down when I get home.

The hectic mills now sleep, cocooned in quiet dust.

Rains fall, tides turn, and my borders bulge and break. Unleashed, I creep under doors, soak corridor carpets and curl muddy slicks round polished table legs. In the night I climb trellised wallpaper, defiling photographs of lost soldier boys.

Morning finds me sprawled foul breathed on floors. Unwelcome, I am brushed shrieking into gutters.

Ruined rugs dry stiffly on front walls.' (emphasis as original, 2018b: 39).

A while later, mainly due to my experience in participatory mapmaking processes, I was brought into the TH, Water City Bristol *Hidden Waterways and Daylighting* project to work in the local community, stimulating and supporting creative conversations about Colliter's Brook and the Malago, two largely culverted rivers in South Bristol.

This project recognised the need for public engagement that was attuned to people's feelings, attachments, values and beliefs about their locality and its waterways. We decided to work with participants from either end of the age spectrum, making contact with two local primary schools and three older people's groups.[x] Watery chats were held in places where conversations are staple forms of exchange; the local launderette and hair salon. Using conversational models of knowledge production to support people's specific cultural contexts and concerns, we deepened our understandings of the connections between people, place and water. We called this process 'creative daylighting' as we felt that it performed the function of bringing lesser heard voices to light, as well as making the hidden rivers more visible and vocal.

We used creative processes of vernacular map making and storytelling to engage with our participants, allowing people to reveal their memories, thoughts and feelings around water in individual, idiosyncratic and subtle ways. Meetings and conversations with each of the older people's group enabled exploration of the roles that the local rivers had played in people's lives, giving voice *about* water they had lived alongside all their lives.

Maps and water related objects played pivotal roles as prompts and people shared their stories about fishing for tiddlers, working in the tannery and doing the family laundry. Some people drew their own maps with personal landmarks on them and Pat from *Making Time* wrote a poem about the Malago from the point of view of the river itself, voicing *as* water, (echoing the metaphors of Tennyson).

> '…I mumble, I grumble, I rumble, I stumble, I scumble, I rough
> and tumble, I bumble along the way […]
> I burble, I warble, I'm herbal, I'm verbal, I bubble and I can boil
> and trouble on my path through your life…'
> (Gregory 2016, unpublished)

Everyone remembered when the floods struck South Bristol in July 1968 and their stories and maps they were asked to draw carried a sense of their shared resilience in the face of such a challenging local event and their realization of their utter connection to their local waterways.

We found that their watery memories were not complete narratives so much as visual and in some case, aural fragments, which I illustrated by painting what seemed to be key moments, and letting everything else drop away. This became the book *Tales of two rivers: older people's stories of Colliter's Brook and the River Malago*, (figure 4), and copies were given to participants and stakeholders.

We also worked with pupils from Year's Five and Six in two local primary schools which were close to the rivers. The sessions began with me showing examples of my work, revealing my own vulnerability before asking others to engage in quite a personal way, and to demonstrate that I value the nuanced and particular knowledge that people's narrative maps can represent.

We encouraged the children to make maps based on their own feelings, memories and ideas of their local area. We didn't mention rivers at first because we wanted to start with the children articulating their own perspectives and concerns, rather than immediately imposing our own agenda. By taking this oblique approach gathered subtle and often tacit local knowledge, accessing the unexpected and hearing answers to questions that we didn't know needed asking.

By studying at their maps we started to understand how the young people experienced their neighbourhood and waterways, and themselves within it. We then went on field trips to explore the environments around their local rivers. Where possible we walked along the river banks, making notes and taking photos as we observed their courses, learned a little about their history, listened out for wildlife, and began to visualize how the riparian area might develop in the future.

> Luci 'Do you remember what we did when we were on the bridge?'
> Pupil 1 'We closed our eyes and we listened to see what we could hear.'
> Pupil 2 'We could hear birds singing and some people said they heard leaves. Some people said they could hear the river.'

Colliter's Brook is culverted under Greville Smyth Park and on one field trip the children doused with hazel rods to see if they could locate the culvert, and used lengths of parachute silk to mark out the river's route. As they did this, they played with the silk, spontaneously 'becoming' the river - calling to each other, quacking and making splashing and bubbling sounds - and for a brief but magical moment, the water was brought back into daylight, pouring out of the imaginations of sixty children.

Parts of the Malago, on the other hand, flows through an industrialized area and has been engineered to serve smelting works, tanneries and other factories. As we walked along its banks we talked about pollution, climate change, flood management, wildlife habitat, and whose responsibility it is to look after our local waterways.

Pupil 3	'I think people should care more about the river.'
Katherine	'Who should look after it, do you think?'
Pupil 3	'Everyone should.'

Back in the classroom we laid tracing paper over satellite maps of the area, and the children worked collectively to create future maps of the area taking factors such as flood risk, wildlife habitat and human friendly spaces into consideration. They advocated *for* the river, negotiating to reach decisions and coming up with some innovative ideas that clearly demonstrated their desire for green spaces and a more playful and watery city .

As part of the concluding exhibition of all this work, some of the team walked up the course of the Malago River. I gave myself the assignment of talking with everyone I met *en route*, as

a way of hearing voices *by* the water. There were women with their children who told me about how they had played there themselves as children. There were van dwellers and homeless men who spoke to me about how beautiful they think the river is, acting like water custodians and cautioning me to 'take care'. For me, the high point in the walk came when the river suddenly appeared above ground again after being in a culvert and I felt my spirits lift as I heard its voice. In the artists' book I made about this walk I wrote.

> 'I hear the sound of water as I climb to the top of the slope and
> there it is again – hurray! We played on the grille and it felt joyful.

The daylighting project helped me to pay attention to water's voice and how it speaks to culture, society and space and I am still immersed in water with new streams of research emerging. For example, as part of the work I do with socially vulnerable families, we are telling *Water Stories,* where people share their experiences of and practices with water. This project responds to the need for new and different voices to be heard in discussions about water, environment and climate and the stories we've heard include a participant's family donating a well in Bangladesh in their late father's name, Zem Zem day in the Moroccan festival of Achoura where people spray each other with water, and how one participant got a scar on her head as she fetched water from the well in her native Uganda.

Having started listening to water I can now hear it everywhere. When Owain asked me to contribute to this chapter, I walked up Boiling Wells Lane to listen to Jean's and my stream and noticed that it is much louder in the culvert than above ground, and I wrote this in an attempt to voice the water's voice.

> Up above, work on the railway line continues.
> Down here, I'm fragile.
> In dry weather I don't rise above a trickle,
> And my whisper is drowned out by the heft and clang
> Of metal upon stone.
>
> If I had to describe my voice
> I would say that I speak with a long silver tongue,
> But down here,
> Every colour is black.
>
> Your footsteps pass above,
> Walking across my ceiling.
> A train goes by in one direction,
> A bike in the other;

A woman calls helplessly for her dog…

You forget I'm here.

Up above, there is just one place where I sing my fall
Over discarded house bricks.
For the rest, I'm sleepwalking,
Gliding soundlessly under my skin of scum.

The yellow machine looks like a toy
Scooping up tons of gravel,
Spreading it smooth
For new trains to rattle
Along new tracks.

If you were down here with me
You could crouch in the damp dark,
And hear my voice,
Wide awake and
Echoing on the culvert walls. (unpublished).

Affects are inherently relational - about exchange between and through bodies (McCormack 2007). They are about how bodies function moment by moment and interact with each other and with(in) the environment. It is important to realise that these affective registers lie largely outside the realms of language, thought, rationality and reflexive consciousness. The social sciences which operate in and through representations, constructed in and of language and reflexive thought, thus struggle to "see" and work with affective life. This is, in part, Thrift's (2008) justification for non-representational theory which attempts to extend social science work into the affective spectrum. It is important to note that ecofeminist thinkers such as Plumwood (2002) have long argued that we need to re-enter realms of feeling and senses in order to build effective knowledge of human-nature/animal relations. Sound is an important part of this process. As Ingold (2000) has suggested

> If only we could redress the balance [between seeing and hearing] by restoring hearing to its proper place in the sensorium, it is claimed, we might hope to regain a more harmonious, benevolent and empathetic awareness of our surroundings. Then, perhaps, we may rediscover what it means to belong.

Acknowledgements

We indebted to: all those who we have worked with on the projects mentioned in this chapter; the editors for sticking with us and helping this along so much; our respective families, and all waters as forces of life.

Notes

[i] For all details of this project see https://www.hydrocitizenship.com/
[ii] For all details of this project see http://www.morethanhumanresearch.com//. Lead researcher, Michelle Bastian, University of Edinburgh.
[iii] For details of this project see https://www1.uwe.ac.uk/et/research/cfcr/researchprojects/sustainablefloodmemories.aspx. Lead researcher Professor Lindsey McEwen, University of the West of England.
[iv] For details of this see https://www1.uwe.ac.uk/et/research/cfcr/researchprojects/dry.aspx Lead researcher Professor Lindsey McEwen, University of the West of England.
[v] For details of the Water City Bristol case study see https://www.watercitybristol.org/
[vi] See http://www.morethanhumanresearch.com/conversations-with-the-elements.html
[vii] See at https://vimeo.com/242727746
[viii] This was tweeted on @owainontwit 01/06/2012.
[ix] See https://tidalcultures.wordpress.com/2018/06/18/tidal-village-night/
[x] This process was directly supported by research associate Katherine Phillips, and Helen Adshead, a community enabler and wildlife guide, and lead researcher Lindsey McEwen and creative advisor Iain Biggs.

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List of Figures

Figure 1: Antony and Niamh Moore ‘sounding the river’ (Photograph O. Jones).

Figure 2 : Flowform by John Wilkes; Vortex Garten Darmstadt (Photograph J. Wilkes). CC BY-SA. Original image online at: https://commons.wikimedia.org/wiki/File:Flowform_Vortex_Garten_Darmstadt.jpg

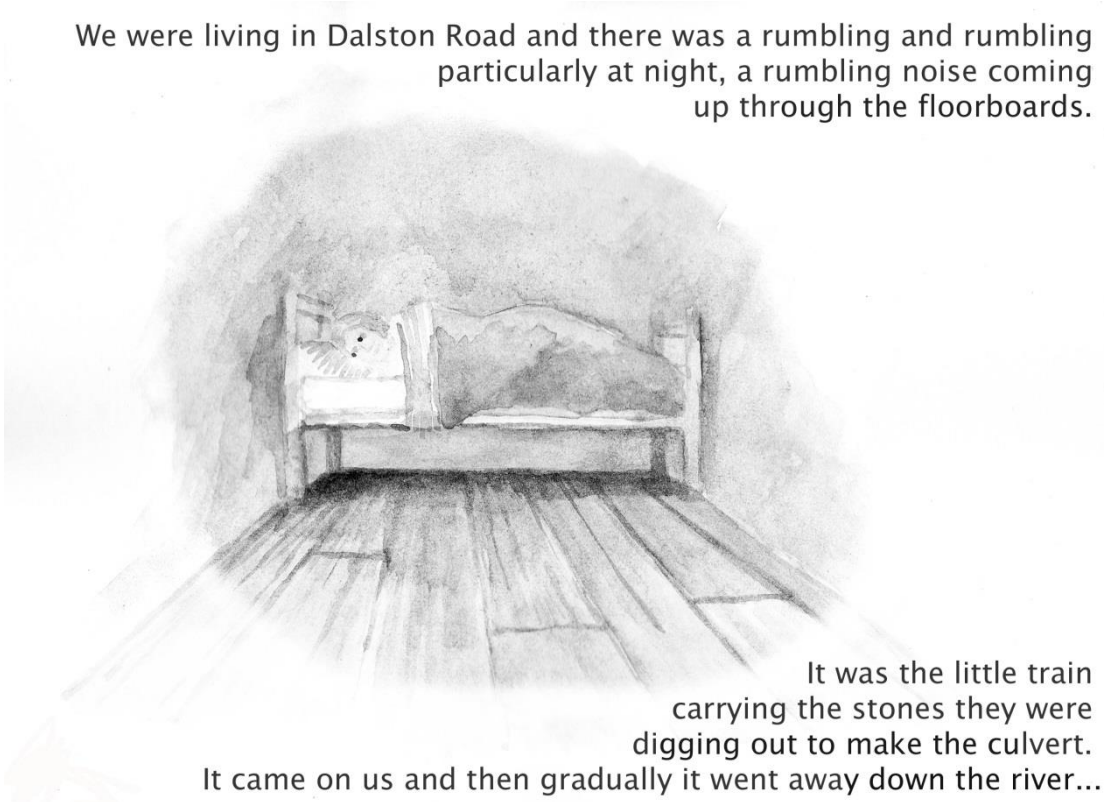

Figure 3 : Illustration from Gorell Barnes (2017a) (illustration by L. Gorell Barnes).

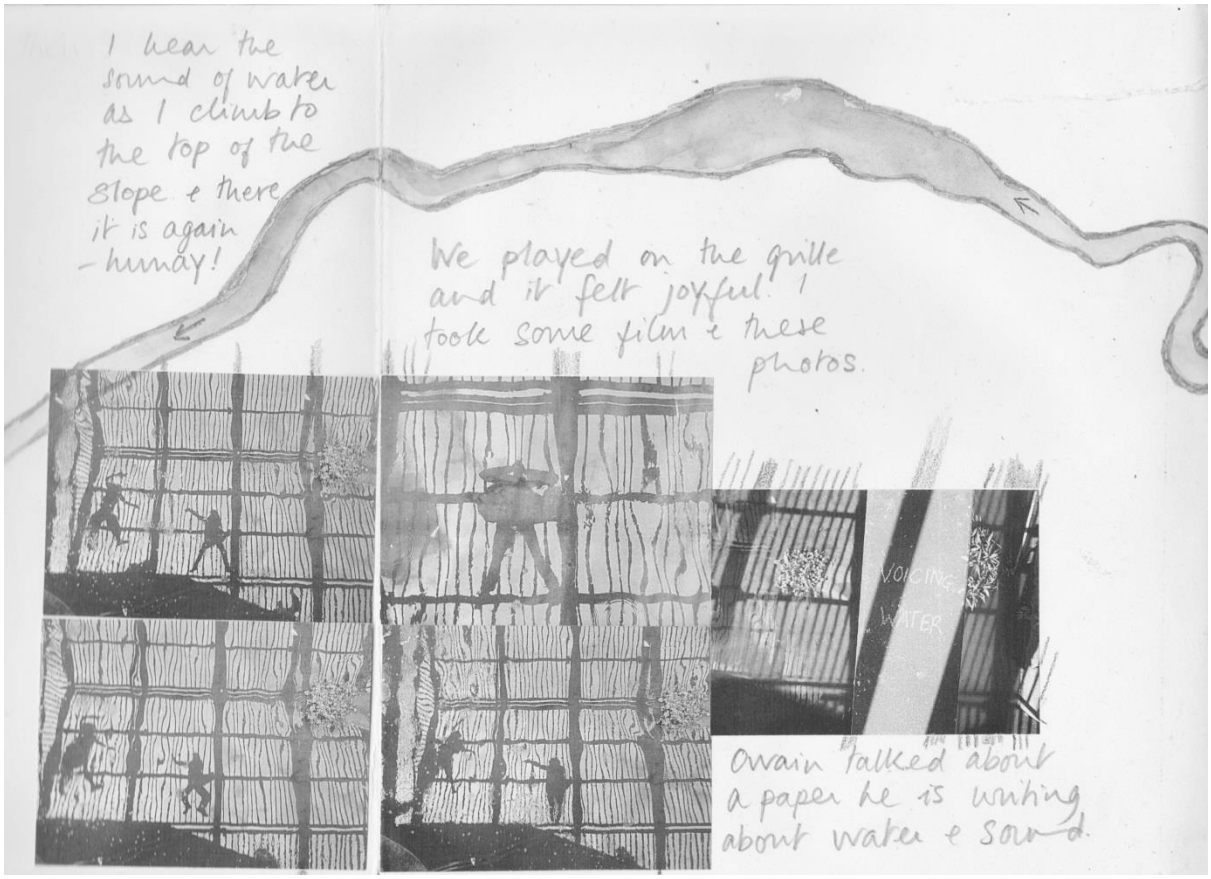

Figure 4 : Journal pages from (Gorell Barnes 2017b). (Illustration/photograph, L. Gorell Barnes).