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Concrete Buys Time

Art and Anthropology in the Anthropocene

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Abstract

Recent engagements with deep time within anthropology have urged an expansion of our time horizons in order to confront the contemporary ecological crisis. Here, we explore this theme by considering concrete's material properties as a substance that reveals the troubled relationship between the present and deep time. We combine discussion of the life cycle of concrete in Orkney, Scotland, with reflection on sculptural interventions that seek to capture concrete's character as both solid and fluid—the pouring of concrete has the potential to congeal a fleeting moment in time. Yet, recognising the impact of the production of concrete, understood at the geological level, we see a pernicious feedback loop: attempts to secure the land/water boundary contribute to the climatic changes which threaten those very environments. The task of tracing concrete's place within the geological record illustrates both the challenge and the necessity of recognising humanity within deep time.

Keywords

concrete – cement – geology – Anthropocene – sculpture



FIGURE 1 Concrete pebble from the West Shore of Stromness, displayed as part of Anne Bevan's exhibition *Walking the Sound* (2017)

A pebble on the beach, smoothed and rounded by the sea. Paler than the sandstone cobbles that surround it, it catches the eye. Cement flecked with gravel. What structure might it have broken from, and when? What is its history?

Zalasiewicz (2012) invites us to see a planet in a pebble. The history of the earth congeals in the piece of crust we hold in our hand; a chance find on the beach becomes a device through which he can narrate the whole of deep time, from the origins of the matter contained within the pebble, through the processes of formation and erosion that led to its being worn and deposited on the beach. So what kind of planet is seen, what story of deep time revealed, by a concrete pebble? The relatively recent anthropogenic provenance of the concrete places it in a very different temporal register to the sandstone surrounding it. Yet it would be a mistake to bracket it out of the time of geological formation—the materials that compose the concrete pebble, after all, are drawn from much earlier geological periods than the Anthropocene of which

its existence serves as a visible marker. In this respect, the concrete pebble might serve as what Hecht (2018: 115) terms an “interscalar vehicle”: a means through which to navigate by “connecting stories and scales usually kept apart”. It is a reminder that our contemporary era does not stand outside geology, but is entirely reliant on the extraction, recomposition, and use of resources from our planetary history. In this way, the deep time which it embodies is at the same time what the anthropologist Laura Bear (2014: 20) has described as “modern time”, the often awkward and dissonant interaction of “disparate social rhythms, multiple representations of time and non-human time”.

This sense of dissonance presents a particular challenge. Ever since its early twentieth century professionalisation and redefinition as a discipline grounded in ethnographic fieldwork, social anthropology has wrestled with the distorting effects of its reliance on the present as the principal—if not the only—point of encounter with its subject of study (see Evans-Pritchard 1950, 1961; Fabian 1983; Stocking 1992). Contemporary ecological crisis brings new urgency to this concern, placing the shallow time-depth of social anthropology under scrutiny (Irvine 2014a): how can we expand our temporal perspective of ‘the field’ in order to recognise the geological and ecological rhythms which human rhythms depend upon—rhythms which extraction-driven social life grind against? How can we push back our time-horizons to trace the deep future impacts of present-day activity?

Evidence of a renewed struggle with these questions in anthropology can be found in three recent books which take the human encounter with deep time as their subject. *An Anthropology of Deep Time* (Irvine 2020) attempts to place social theory in dialogue with the history of the earth sciences to argue for a grounded understanding of the relationship between human life and geological formation. A central argument is that an expansion of our time horizons is necessary in order to recognise the character of contemporary life as ecological disjuncture and the disembedding nature of our “extraction from deep time—a present fixation that severs humanity from the material conditions of its existence ... Life is hacked out from the ground where it resides” (2020: 189). *Deep Time Reckoning* (Ialenti 2020a) also calls for an escape from the “shallow time discipline” that “traps billions of minds in the narrowness of the now” (2020: 143). Building on ethnographic research with nuclear safety experts in Finland whose day to day work involves envisioning environmental scenarios tens or even hundreds of thousands of years into the future, Ialenti invites us to find creative ways of embracing such long-term thinking: defamiliarizing the present moment by imagining how the landscape around us changes over time; learning to think in terms of long-term chains of causality; recognising the need for succession beyond the limits our own present. *The Book of Unconfor-*

mities (Raffles 2020) takes its cue from ‘unconformity’, the geological term for a break in the sedimentary sequence—a fossil surface of erosion—to explore juxtapositions “revealing a cleft that can’t be closed” (2020: 5–6). Again, geology affords a change of scale, and indeed a contemplation of scale itself. Instances of the disruptive presence of rocks in human life, and the disruptive presence of humans in the life of rocks, open up to histories of displacement of both people and materials; fossil surfaces of exploitation, harm, and loss.

Here, following in the footsteps of Raffles’ meditations on specific rock types, we respond to some of these emerging themes in the anthropology of time through an engagement with concrete as a geological entity. A material manifestation of contemporary economic activity, concrete aptly illustrates the need to expand time horizons along the lines argued by Ialenti. It is a material that mediates transience and endurance—what Simonetti and Ingold (2018) describe as a solid fluid—simultaneously fixing the present while implicating deep time in that moment. As we shall go on to explore, concrete is simultaneously a figure of endurance (Bloch 1968) and of uncertainty (Elinoff 2017). Taking as our ethnographic foreground the coastlines of Orkney, an archipelago off the north coast of Scotland, and considering the role concrete plays mediating the relationship between people, land, and sea, we bring together perspectives from anthropology (Irvine) and sculpture (Bevan) to examine the potentials of the concrete: what it reveals and what it obscures.

1 Coastal Defences

The West Shore of Stromness, Orkney’s second largest town, became a focus for our work precisely because it is so engrained in people’s day to day life—a place of memories of swimming, of walking the dog, of taking tangles of seaweed to use as fertiliser for the garden. We approached the coastline with very different degrees of familiarity: for Bevan, who grew up in Stromness, the shore was rich with stories and memories. For Irvine, coming from ‘South’ (as the rest of the UK is known in Orkney) it was new terrain, previously unknown to him. As part of a collaborative team curating a public ‘Festival of Deep Time’ with Orkney’s Pier Arts Centre, we walked repeatedly along the West Shore, listening to different perspectives, trying to eke out the biography of the coast (Irvine et al. 2021). Here, deep time forms a background to the everyday.

The exposed geology all around consists of Old Red Sandstone, the laminations of which reveal the conditions of its deposition in the massive warm freshwater Lake Orcadie during the Devonian period 420 to 360 million years ago. This is a fine grained record of annual conditions in the deep past: we see

dark clastic laminae, recording the accumulation of sediments due to water run-off and river discharge during the wet season, and light carbonate laminae, the result of carbonate precipitation triggered by seasonal photosynthesis (Andrews and Trewin 2010). So where does concrete rest within all of this?

Along the West Shore stand the remains of World War I and II defensive structures. Built as artillery and searchlight emplacements, now they are places to shelter out of the wind and rain. If the bottles appearing there are anything to go by, they are places to pass a drink around while looking out over the sea. As historic sites, they stand testament to a time when concrete played a key strategic role securing the natural harbour of Scapa Flow as the Royal Navy's principal naval base. Kali Rubaii (2022), examining the militarized role of concrete in Iraq, notes the sheer mundaneness of concrete as a technology of violence; its seeming ubiquity causing it to assume a material neutrality and taken-for-granted quality even as it builds warscapes. Here, it is a mundane presence past which people walk their dogs—a fossil of a past conflict and Orkney's past geostrategic location, though all the while concrete's fluid properties lend it to militarized uses (poured to produce what Rubaii terms 'concrete soldiers') throughout the contemporary world.

Earlier histories are visible within this concrete, too. On one walk along the shore we were accompanied by Andy Hollinrake, archaeologist and caretaker of the Ness Battery, who showed us pink colouration within the concrete, indicating the aggregate used contained granite from the basement rock which underlay Orkney prior to the deposition of the Old Red Sandstone (and thus considerably older than 420 million years). Concrete is part of the geological sequence here, but such a sequence is never purely linear; it reaches back into itself for materials and disrupts itself with discontinuities. A superimposition on the landscape—but as Andy also explains to us, during wartime, stone was scattered on the roofs of the emplacements to break up the shape and allow them to blend into the coastline from above, making their human manufacture less obvious to enemy bombers.

Today, the role of concrete in defending Orkney is as vital as ever. The action of the sea is constantly reshaping and reducing the islands, a continuous gnawing eroding the glacial till and the underlying sandstone. As the islands are reduced year on year, the cultural environment of the coast is threatened. A particular source of concern is the potential loss of key Neolithic, Iron Age, and Viking archaeological sites, a problem believed to be exacerbated by climate change (Gibson 2008). It is here that concrete acts as Orkney's protector.

To take a particularly famous example: Skara Brae, a Neolithic settlement occupied from around 3180 BC to 2500 BC, was only revealed to modern Orkney after a storm in 1850 battered the west coast of the Orkney mainland and

stripped the grass off the land. A heavy seasonal instance of the gradual work of erosion had brought a forgotten past into the present: what is now believed to be Europe's most complete Neolithic village, prompting over a century's investigation and reflection. Erosion here is a source of revelation, but revelation in the course of destruction.¹ Now a concrete wall holds back the sea in an attempt to stop it taking away what it uncovered, while the land is eaten away at each end of the defences. Here, as in so many locations around Orkney, concrete buys time, holding the line for a little while at least.

Such presences of concrete on the shoreline can appear stark; an obvious and disproportionate mark of very recent human presence superimposed on geological history. Yet, crucially, it is within this geology—part of it, not alien to it. Returning to Stromness' West Shore, grey concrete defences punctuate the coastline. From one perspective, they seem to interrupt the geology. The laminations of the sandstone, records of accretion over millions of years, seem to stop and start as the concrete interjects. Concrete's presence in the calendar of time revealed by the varves² is ambiguous: it is part of that calendar, but at the same time seems to obscure it, and to hold it in suspended animation.

Yet the concrete along the West Shore shows its own processual history (Irvine et al. 2021: 597–600). Different attempts have been made to secure the coast with concrete at different times through the 20th and 21st century. Concrete blocks cast separately and placed in gabions; concrete cast in situ; concrete bearing the traces of the materials used to shape it—the timber framework used to cast concrete left the impressions of its grain running across the seawall, like an expanse of wooden panelling, while hessian sacks filled with cement and left to plug gaps waste away in the sea water, leaving only their impression in the solidified cement (and occasional threads of sacking in the crevices). Strikingly, in many locations, the concrete laminations follow the same bedding as the flagstone, implying a human participation in the geology rather than a contradiction of it.

This is Orkney's Anthropocene bedding. It challenges us to pay heed to the fact that we are living in a geological epoch of our own making. The search continues for the most appropriate stratigraphic marker indicating the presence of the Anthropocene in the geological record. Concrete is surely a good candidate. As some members of the Anthropocene Working Group³ have argued,

1 See also Irvine (2014b) for a discussion of the dynamics of erosion as revelation and destruction in the context of the East Anglian coast, and Bevan and Downes (2018) on coastal erosion as a creative resource.

2 Layers of deposited sediment.

3 This working group of the Subcommission on Quaternary Stratigraphy was convened in 2009



FIGURE 2 Varied concrete defences on Stromness' West Shore

concrete is a conspicuous reminder that humans have made a significant addition to Earth's inventory of rock types (Zalasiewicz et al. 2014). And indeed this concrete shows something about the particular relationship contemporary life has with the geological time scale: here is an intervention which seeks to fix the landscape and restrict the effects of flux, inflating humanity's short timespan on the deep time of earth's planetary history by perpetuating the present—for as long as it can.

2 Congealing Time

Working with cement as a medium is like witnessing geology in a short time-frame—speeding up the process, accelerating formation. As Simonetti and Ingold (2018: 26) remark, it sustains “the illusion that geological processes extending over vast spans of time and space could be artificially compressed”. In this sense, we might talk of the way in which it *congeals* time. As a mate-

in order to determine whether or not the Anthropocene epoch should be formally included within the International Chronostratigraphic Chart, more commonly known as the Geological Time Scale. In August 2016 the working group announced that it would indeed recommend the Anthropocene's inclusion.

rial, cement moves from a fluid medium to a solid medium; in doing so it is capable of capturing transient phenomena and casting them into something fixed.

This potential is something that is explored within Anne Bevan's sculptural work. At a 1997 exhibition in the Pier Arts Centre, Stromness, the mixed media installation "Shimmer" plays with this idea of congealing transience. The installation involved light, water, cast concrete and the movement of people in space. A raised timber floor was installed over the existing floor, at one end a concrete form cast from layers of cloth, next to it a galvanised steel tank filled with water. A light was focused on the surface of the water, and as the viewer walked in the space, their movement caused the reflected light to cast a shimmer on the wall, echoing the form of the cast sculpture. The ephemeral ripples appear to be captured in the cast concrete form, one moment in time preserved.

This relationship with water's movement captured in time is one that is borne out of interactions with Stromness' West Shore. The location well remembered by generations of Stromnessians as a place for swimming in the sea, the "tender tables", consists of gently sloping beds of Devonian sandstone, the rippled surfaces of which preserve Lake Orcadie's agitations. 400 million years ago this was a bed of mud; oozing, shifting lake sediments. Upon this surface are layered the memories of the generations who learned to swim on this shore; towel sheets wrapped tight around salty skin, numb with goosepimples, running excitedly into the surf on a summers day.

This capacity of sandstone to capture the fluid actions of water on sediment and fix a moment of time is strikingly described by the 19th century Scottish geologist Hugh Miller, for whom the West Shore was an important hunting ground for Devonian fish fossils. "The entire surface was ridged and furrowed like a bank of sand that had been left by the tide an hour before ... I had observed it a hundred and a hundred times, when sailing my little schooner in the shallows left by the ebb. But what had become of the waves that had thus fretted the solid rock, or of what element had they been composed?" (Miller 1841: 38). Resonating with Ialenti's (2020a: 61) call to imagine how familiar landscapes have changed and will change over time, this realisation of being brought face to face with the fossil ripples left by some ancient body of water—together with the knowledge that this shoreline is rich in fossils of the extinct species of fish that inhabited that water—gives a powerful sense of time-depth to movement along the shore. Biographical memory is cross-hatched with the preserved memory of a past environment.

In attempting to capture the significance of these ripple beds on the West Shore across multiple registers of time, the potential of concrete as "liquid rock" (Simonetti and Ingold 2018: 22) was once again called upon for Anne Bevan's

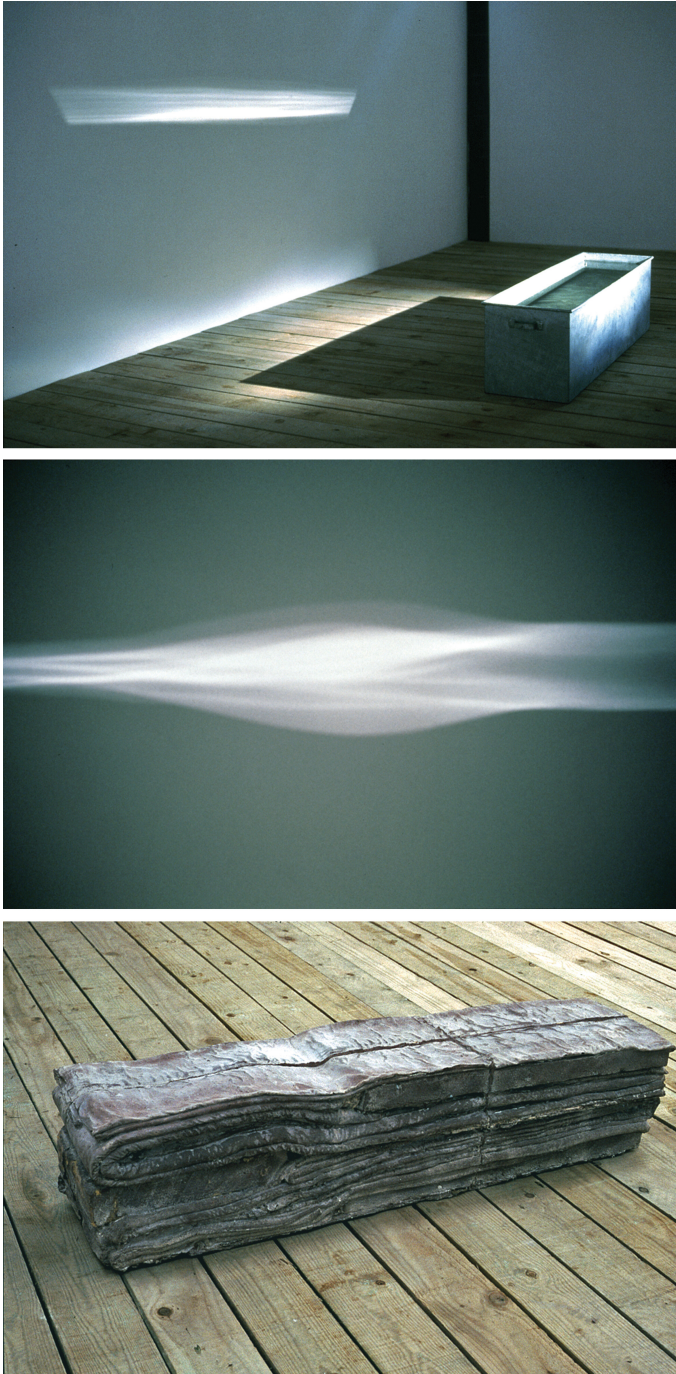


FIGURE 3 Anne Bevan, *Shimmer* (1997), mixed media installation



FIGURE 4 From Anne Bevan, *Walking the Sound* (2017)

2017 exhibition “Walking the Sound”, which emerged out of our repeated cross-disciplinary walks along the West Shore. Having poured liquid silicone across the surface of the sandstone to create a mould, this was used to make multiple casts of the undulating traces of Lake Orcadie. Silver leaf applied to the casts not only draws attention to the unexpected enchantment⁴ of an encounter with deep time captured in the apparently mundane and industrial medium of concrete, but also makes a visual connection between the concrete ripples and the shimmer of the light playing on the water. Here, cement is once again a skin capturing a transient moment in time—except the transient moment was some 400 million years ago.

Bloch (1968: 100) describes the tombs of the Merina of Madagascar, with their walls of stone and cement, the top “usually capped by a huge stone slab

4 See Ginn et al. (2018: 218–219) on enchantment as a mode of encounter with deep time.

covered in concrete”, as monuments of endurance. They stand as manifestations of a social order “unaffected by day to day events and which continues to exist as generations come and go”. The materiality of concrete here is well suited to conveying an impression of permanence: an intervention in the landscape that fixes time, forever. This resonates well with what we have described so far—the employment of concrete sea defences to hold the line, and cement’s capacity to preserve a particular ephemeral moment. Yet imagining concrete as some agent of stasis obviously oversells its capacity to endure. As Elinoff (2017: 594) writes, “Although concrete projects often have an air of monumental fixity, precisely what such built forms come to commemorate is highly uncertain”. He writes in the context of urban development in Bangkok, where concrete looms large in public scandals. There, the uncertainty of concrete’s promise is visible in failed structures and fragmentary ruins. What remains are monuments not to endurance, but to the ephemerality of the visions that were promised in these grand schemes.

This gives us cause to ask, what is the afterlife of the concrete? In a different context—that of nuclear waste expertise in Finland—Ialenti (2020b) reflects on the memories summoned up of a deceased expert to challenge the idea that contemporaneity only consists of synchronous encounters in the present. This ‘afterlife’, as he describes it, confronts us with the question: who (or what) is contemporary to who? As ‘technofossil’ (Zalasiewicz et al. 2014), concrete built for specific purposes in the present inserts itself into long-distance relationships with future actors: such ‘afterlives’ have the potential to unsettle and transform (Ialenti 2020b: 265). Returning to the object we started out with, and pondering the kind of planet that might be seen in a concrete pebble, the fragment broken off an unknown structure gives us a sense of concrete’s fragility, expanding our sense of time beyond the present which the sea defences seek to perpetuate.

3 The life Cycle of Concrete

As the sociologist Barbara Adam (1998) has argued, calling into question the present-orientation and unsustainability of the contemporary use of resources, it is necessary to expand our time horizons in order to recognise the full implications of economic activity. As Ialenti (2020a) puts it, we need to be able to zoom out. The production of concrete is a process that needs to be understood from a perspective that expands from the present into geological time.

The production of the cement used in concrete draws on material from multiple phases in geological history; not just digging into the past, but drawing on

the availability of resources from distinct episodes in the sequence of that past. To take as an example the production of cement at Dunbar, Scotland's only cement works (and thus the nearest, geographically, to Orkney): variations in environmental conditions during the Carboniferous era, some 359.2 to 299 million years ago, led to alternating strata of limestone and clay-rich shale.⁵ The limestone, as a source of calcium carbonate, and the shale ground for clay, as a source of alumino-silicate, is mixed with water to make a slurry, which is then fired at high temperature in the kiln. In the kiln, the materials fuse to create the compounds for cement. The end result of this process is the clinker, dark grey nodules which are then milled down to the fine powder which is bagged up and sold. During this fusing process within the kiln, the calcium carbonate is decarbonised.

The result is the release of carbon dioxide into the atmosphere—indeed, it has been calculated that when we consider the by-product of decarbonisation alongside releases from fuel sources used in firing the kiln, the manufacture of cement is responsible for up to 8% of anthropogenic carbon emissions (Barcelo et al. 2014; Lehne and Preston 2018), a significant impact on the composition of our atmosphere. It is here that a deep time perspective helps to reveal the temporal disjuncture at the heart of contemporary economic activity. What we are describing is the release of carbon that has accumulated under oceanic conditions over millions of years, enabling the production of an economic resource in the present, the consequences of which contribute to alterations in the composition of our atmosphere that may only be fully understood in the future geology of the earth.

If a proper understanding of the concrete present on Orkney's shorelines requires an expansion of time, it also requires an expansion in space: the cement used within the concrete is by no means an indigenous material to the islands, the requirement for calcium carbonate drawing on different geological strata to those present in Orkney's Old Red Sandstone. As noted above, the nearest cement producer is in Dunbar, some 200 miles away in lowland Scotland, owned by Tarmac, part of the Irish-domiciled multinational CRH plc. As Forty (2012: 142) points out, the geopolitics of concrete expand beyond national borders, and the bag of cement is very much a globalised product, with producers relying on an international portfolio of quarrying and production sites to manage currency fluctuations, energy costs, and cycles of construction demand. Such outsourcing also enables countries such as the UK to reduce car-

5 On the stratigraphy of Dunbar cement works, see Scrutton et al. (2008). For further anthropological reflection on limestone and its role in concrete production, see Simonetti (2017).

bon emissions within national boundaries, without any mitigation of the global carbon emission levels.

Yet as the cement is combined with sand and aggregate, this global commodity is brought into contact with materials of a local provenance. Yet if sites of sand and aggregate extraction in Orkney do not delve into the same depth of time and expanse of space as the stratigraphy of cement production, they nevertheless have their own dynamics of revealing the past. For example, sand extraction for use in concrete at Bu Sands, Burray, has uncovered important artefacts revealing Orkney's Pictish history (see Hunter 1993). The point to be made here follows that of Elinoff (2017: 588): "Concrete, as a composite, is materially relational", and what we are describing here is that the composite of cement, aggregates, sand, and water brings multiple temporalities and localities into contact with one another. The irony, then, is that the work of congealing a particular time and place involves the transient use of materials which are historically and geographically expansive.

To return to the sea defences which constitute Orkney's Anthropocene bedding, then: these are geological interventions seek to fix the landscape and restrict the effects of flux, inflating humanity's short timespan on the deep time of earth's planetary history by perpetuating the present. But in being employed for that purpose, concrete also reaches that impact forward in time: production of cement for concrete is one of the biggest contributors to human carbon dioxide emissions, both through the use of fossil fuels to heat the kilns, and through the direct release of carbon dioxide in the breaking down of calcium carbonate. In this sense, concrete may be considered an artefact of what Rob Nixon (2011) has termed slow violence—harm whose full extent is displaced in time, manifesting itself at temporal scales that fan out well beyond the time frame in which the action took place. When we consider the sea defences at Orkney, then, we see a particularly sinister feedback loop: our attempts to secure the land/water boundary contributes to the climatic changes which threaten those very environments.

Concrete's work punctuating time, buying time, somehow locking it in—at least for a while—tells us something about the troubled relationship with the fluidity of land and sea. This fluidity is well captured in Orcadian folklore of 'Hether Blether' and other "islands that come and go"—the idea that sometimes, in the humid summer days, you catch a glimpse of what seems to be land rising out of the sea, just before it vanishes. Islands that are not on any map, but you could have sworn that you saw them. Islands that appear and then disappear into the sea: from a deep time perspective, all of Orkney is Hether Blether.

Recognising that mythology and environment, past forms and future imaginings are interlinked in places like Orkney, we would argue there is a particular

richness in such stories for thinking through our relationship with the coastline, bringing time and process into focus in new and sometimes unexpected ways (Bevan and Downes 2018). Stories of Hether Blether show evocatively how traditional stories can be imbued with new insights. Historically, there have been many stories of islands that come and go in Orkney. Walter Traill Dennison (1893) describes stories of islands hidden from view except to those with eyes that see the unseen, to which shape-shifting ‘finfolk’ took those who loitered near the coast; while Robertson (1924) relates the tale of a fisherman who reaches the shore of an unknown island appearing out of the mist, where he finds his daughter, believed lost many years before when she went to cut the peat and never returned home. The stories surrounding Eynhallow, a small seemingly inaccessible and currently uninhabited island between the mainland of Orkney and the island of Rousay, are some of the most evocative here: once a coming-and-going island, home to finfolk, it was only made solid when it was freed from the finfolk with consecrated salt, winning over the island for Christendom.⁶ What is evocative here is the materiality involved in fixing such islands in time. Other stories tell of how those who hoped to land on Hether Blether should hold steel firmly in their hands while rowing toward the island, never letting it out of your sight (Muir 1998). And we’re still trying to win over islands that come and go, making solid footing for humans: the presence of concrete in the geological record is testament to that.

But when we told the story of Eynhallow in the presence of the West Shore sea defences during our Festival of Deep Time, one of the group who had walked with us came up to speak afterwards: “ah, but the finfolk won in the end, didn’t they? After all, it had to be abandoned. There’s no-one lives there now.”

4 Expanding the Present

What we have offered here are reflections on concrete’s peculiar relationship with time, as manifest on an Orkney shore. The potential of concrete to ‘speed up’ geology and to fix an ephemeral moment in time, as explored in the sculptural work of Anne Bevan, render it a material that sustains the present. It is this present-orientation that is manifest in the coastal defences we have described

6 This Eynhallow story is relatively well-known in contemporary Orkney, and a version is told in Muir (1998). Eynhallow, described as Orkney’s “Holy Island” (Mooney 1923) on account of its monastic remains and association with folklore, as well as its present-day uninhabited status, continues to figure in the popular imagination as an uncanny place.

here. Concrete defends the shoreline, buying time: an Anthropocene bedding fixing the landscape and restricting the effects of flux.

Yet in order to understand concrete as the mark of a particular present, we have to understand in relation to the processes of geological formation which it punctuates. What is required is a full awareness of the time-depth and future effects of the resources used to service the present. Such an approach becomes clear, for example, in the work of the media theorist Sy Taffel (2016a; 2016b), who takes a life-cycle approach that expands into deep time as he works to unpack the condensed time-frame of a contemporary material culture that can all too easily be dismissed as ephemeral, tracing the formation, extraction, consumption, disposal, and afterlife of the resources used. This use of resources long in formation only to be discarded and replaced at a rapid rate not only leads to “industrial rhythms that are out of alignment with those of the earth” (Taffel 2016a: 357) but is a necessary condition for the sustenance of those industrial rhythms.

For us to envision the future worlds that emerge from this one, as Ialenti has argued (2020a: 111)—the worlds we are headed for if we continue to lock ourselves into present behaviours, as well as other worlds which might yet be possible—we need to break out of our shallow time discipline and learn to think through multiple time-perspectives simultaneously. What is required, then, is a sense of concrete’s contemporary use alongside its expansive life cycle, paying forward carbon from the earth’s deep history. In this sense, looking closely at concrete in the world around us—as a specific presence, as well as an ubiquitous presence—might serve as an ‘interscalar vehicle’ (Hecht 2018), opening up our imagination to the radically different spatial and temporal scales that concrete’s production, use, and afterlife opens up—without losing sight of its specific presences and impacts.

This is what is what we want to open up through these stories from the shore and the art inspired by it: showing how the temporality of concrete’s production and use seek to congeal a present while contributing to environmental changes which ultimately undermine its sustainability. This is the challenge of tracing concrete within the rhythms of formation revealed by the varves of the Old Red Sandstone: learning to see humanity within deep time.

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