Geologic Landscape: A Performance and a Wrecked Mobile Phone

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Abstract

Veronica Vickery brings a geologically focussed inflection to landscape studies. Using a non-representational approach to practice, informed by geo-aesthetics and feminist materialisms, she reflects on a performance in a stream, the site of flash-flood in Cornwall (UK). This reflection neither precludes thinking landscape in terms of the political consequences of visual representation, nor as performed, subjective process. Using the disruption of performance by the accidental demise of her mobile phone, she speculates that landscape is additionally marked by ephemeral material process and agential geologic process, human and of the Earth. As a result, she suggests there is a need for artists to attend to the political landscape via the intimacies of mundane, everyday narratives to engage with material and geologic landscape encounters.

Keywords

Landscape, performance, geologic, materiality, extraction, mobile phone

An unnamed stream, a trickle of water, runs for only a mile or so off the moors through the valley of Pennance until it joins the Atlantic at Porthglaze Cove, just south of Zennor. In 2009, a localized storm came in out of nowhere, straight off the Atlantic. Across two hours, the stream swelled into a raging torrent, the rab trackway bridge that leads to the house on the cliff collapsed, and a car carrying four young people was swept down into what had become a torrent of a gorge. Three of them lost their lives.[1] ***

Prologue: a performance

It was a bitterly cold day in February. There was just me and my dog, the wind whistling through the trees in a sodden copse overgrown with stunted willow and blackthorn — the low trees providing some

shelter from the never-ending far-west Atlantic wind.[2] I hung my camera in a tree; it swayed somewhat precariously above the shallow spread of the stream in what was little more than a boggy ditch. I removed my walking boots and put my bare foot in. Or rather, gingerly poked a few toes into the wet. It was cold. Dirty. Brown stuff, the texture of a thin molten chocolate underfoot; but my foot wasn't cloaked in silkiness, it was covered in a sludgy viscosity, a brown mire that despite its fine grain had more akin to the farmyard than a warm soothing cup of hot sweetness. Somewhere between sludge, sponge and slime, squidgy, slightly revolting, off-putting, a place of feeling ungrounded. My toes finding only nothingness, the bottom lost in depths, nothing firm, nothing solid beneath my feet. It was like *stepping in something*.

Figure 1.[3]

So, a stream, a boggy trickle and a performance. I lay right back into the water in my everyday working getup, submerging myself fully into the stream. I forgot my phone was in the back pocket of my jeans, and you can guess the rest… When I got home, I futilely left the phone to dry out on a radiator. Reviewing the video footage later, there it was, plain to see, hiding in full sight poking out above my right back-pocket. That phone appeared undeniably dead (to me at least) and useless as far as its primary purpose of connecting with the *real world* goes.

Figure 2.

Introduction

This was the first part of a performance to camera (Vickery, 2015b). It took place about three quarters of a mile from the stream's abrupt 190 feet fall down the rugged granite cliffs into the remote, tide-washed Atlantic cove at Porthglaze. I was to repeat this performance at several points along the course of the stream over the coming weeks, later making a composite 8 minute film called *Ophelia* (Vickery, 2015b). I should be clear that my intention here is not to overtly contribute to the rich debate on art practice-as-research (Barrett & Bolt, 2007; Nelson, 2006, 2013) or the workings of art-geographies which have been covered extensively elsewhere (e.g. Dear, Ketchum, Luria, & Richardson, 2011; Hawkins, 2013a). Rather, I am interested in using a research-led art practice — paying attention to, and reflection on, the performance of the *ordinary*, the *unexceptional*, the mundane — to make a contribution to critical landscape studies and to wider geographically oriented debates (G. Rose, 1993, p. 22). Following Nina Williams (2016), a project such as this is "a form of geographic method in its own right" (p. 5). The drowning of my phone is a strange interruption that abruptly cuts through and disrupts any idea of landscape as representation, to resist any possibility of writing this practice as an

embodiment of the natural world. Following Yusoff (2013), this incident points to the human as geologic agent "explicitly located alongside other Earth and extraterrestrial forces that possess the power of extinction and planetary effect through the ability to capitalise on and incorporate geologic forces, making the *geopower* […] of previous fossilisations their own" (p. 781).

Recently I was at the colloquium *Proving Ground — Earth Lab* in which Sasha Engelmann and I had a conversation remarking on the way that so many art projects, attempting to explore environmental imperatives, work with large-scale landscapes such as the Arctic.[5] These projects are able to play a role in awareness-raising in a manner that perhaps the intimate scales of non-representationally aligned engagements with landscape are often unable to do. However, there is also the danger that in drawing attention to the spectacular by working with sublime landscapes of immense scale, we reinforce the power of representation and gloss over geo-political and social complexity. In response, I suggest in this chapter that there is a need for artists interested in landscape and the environment to grapple with politically and materially complex sites, by performing the intimacies of mundane, everyday narratives of landscape and thereby reveal the politics of geologic human and Earth landscape encounter.

I begin with an overview of landscape studies and its embrace by non-representational theory, before shifting the focus back to Cornwall, and the relationship between seismic fracture in the Lands End granites and flash flood. With these theoretical and locational contexts as the backdrop and prompted by the disruption of performance by the submersion of my mobile phone, I then story the past-present-futures of geologic extraction as they relate to Cornwall, and the mineral materialisms of a mobile phone. I conclude with a discussion of how this intimate performance of landscape has echoes of the circular, material relationship between deep-time earth forces and the "human lock-in" to contemporary fossil fuel consumption and future mineral extraction (Yusoff, 2013, p. 793).

The non-representational turn in landscape studies

The cultural turn in landscape studies within geography has seen a burgeoning of interest in the themes of "*affect, emotion, embodiment, performance* and *practice*", projects which can be "parcelled together"

under the umbrella of non-representational theory (Waterton, 2012, p. 66). With landscape understood traditionally to have been concerned with visuality and representation, this non-representational critique – concerned with the political operation of representation – found an obvious home in landscape studies. As John Wylie (2006) points out, a tendency to adopt a distanciated, expert 'eye' — and thereby a spectatorial and externalized landscape — has been countered by a series of related discussion drawing heavily on representational critique, Marxist- and feminist-oriented thought, and more recently, work in art-geographies and heritage studies (p. 520). Themes include an emphasis on landscape 'as always already a representation' (Wylie, 2007, section 3.4.2, unpaginated); 'a way of understanding social life and relations' (Till, 2004, p. 349); a cultural practice productive of meaning (Mitchell, 2002, p. 1); and landscape 'embedded within power structures and ownership simultaneously mask[ed …] behind the aesthetic form' – a horizontal pictorial or cartographic frame (or scene) that can be controlled whether through the boundaries of the state or the fences of ownership (Olwig, 2013, p. 258). Gillian Rose (1993) provides a feminist critique of landscape as being representative of power structures, particularly acting to render the feminine passive, naturalized and subjugated through the power of the (male) gaze. Landscape where "vision and visual representation become equated with generalized notions of masculinism, imperialism and oppression, Nash (1996) argues, leads to "deep unease about representation [as] a form of critical iconoclasm" (p. 151).

Meanwhile, landscape studies, taking a "performative turn", became a significant context for the development and articulation of non-representational accounts, questioning the conflation of landscape with representation and landscape painting ((Hawkins, 2013b; Waterton, 2012). These non-representational accounts of landscape emphasise the habitual, corporeal and productive nature of our interactions in the landscape and acknowledge that landscapes are multi-sensuous in how we experience them (for example Lorimer, 2006; Macpherson, 2010; Wylie, 2005), in alignment "with the way in which our bodies participate in the world that surrounds us" (Waterton & Atha, 2008, p. 67). Practices of walking, writing, performing… become "a meaningful act [of landscaping] through which worlds are narrated into existence", set in motion in the "expanded field" beyond the frames of both art and landscape (Hawkins, 2013b; Vickery, 2015a; Wylie, 2012, p. 8). Similarly, there has also been a proliferation of projects engaging with landscape using devised performance, digital technology such

as mobile phones and locative media (Cardiff & Miller, 2018; Frears, Myers, & Geelhoed, 2017; Myers, 2011); and aligned practice-based work by sonic geographers (Gallagher & Prior, 2014).

Edmunds (2006) describes practices working with non-representational theory as romantically treading "in the steps of the Solitary, the Wanderer and the Poet" (p. 186). Sheller (2015), like so many others, questions this romantic inflection of landscape. She proposes non-representational approaches (to landscape) cumulatively serve to create "hybrid spaces" that "reweave relational interactions between people, places, environments, and technologies that might alter, or create anew, our sense of place, presence, embodiment, spatiality, and temporality, while enacting a critical consciousness of a politics of the everyday, both analog and digital" (Sheller, 2015, p. 135). Wylie (2006) however, counsels against binary opposition. He suggests that these practices, whilst bearing the marks of romantic inheritance, also offer an inherent, embodied critique of landscape as a way of seeing: "landscape is not a way of seeing the world. Nor is it *something seen*, an external, inert surface. Rather, the term `landscape' names the materialities and sensibilities with which we see" (p. 520).

This simultaneous embrace and critique of non-representational approaches to landscape is taken up by others, with Mitch Rose (2010) arguing that the performance of subjectivity is only possible in so far as our field of operation can be the representational political terrain – the only terrain where a subject can be a subject (p. 356); (see also Cresswell, 2003; Lorimer, 2008; M. Rose, 2010b; M. Rose & Wylie, 2006). It is this landscape complexity that particularly interests me - the political space of meeting between the performative and representational: the tensions between absence and presence (M. Rose, 2010a; Wylie, 2009); the immediate and the distant (Wylie, 2017); the "illusion of unbroken horizontal space" and the geologic vertical (Kirsch, 2015, p. 822; Olwig, 2013). Olwig (2005) describes how in the "substantive political landscape … alienation enters the scene because landscape is not simply scenery" (p. 36). I would add, nor is this political landscape simply an embodied non-representational experience. Rather, landscape takes place in mutable and materially composite encounters in which "landscape is apprehended always as withdrawal" (Wylie, 2017, p. 16). Through the rest of this chapter, I speculate that it is in this withdrawal we might find echoes of the geological Earth.

Interlude

It is Spring. I wander down the lane, my sleeves pulled right up my arms, bathed by the sun with the hedge resplendent in a dance of pink campion and bluebells; wisps of hair blown by the breeze about my shoulders, the sea stretched out across the horizon in front. Walking, wandering, taking it all in. It is so good to *be out in the landscape*. And yet, often there are times as I walk out when all I feel is a sense of alienating numbness. My head is crowded, and the landscape offers no release. In this place, I struggle to make contact with any sense that landscape is emergent, set in motion as I put one foot in front of the other; or that my movement, my guarded presence, could be said to be animating the landscape (Merriman et al., 2008, p. 192). I am not at 'one with nature' out there, or indeed nature within. There is no sense of a romantic transformative or redemptive sublime. I take myself with me as I return indoors. The next day when I wake, the temperature has plummeted, and there is a deep shroud of sea mist encasing the house. We have a saying in Pendeen "when you can't see the Scillys, it's raining; and when you can see the Scillys, it's going to rain".[8]

Geologic echoes[9]

The mile-long washed-out stream running through the Lands End Granites has been the primary focus of my practice since 2012, and indeed before — with photographic traces of the flood aftermath sitting on my hard drive since 2009. Despite protective designations, tourist brochures and cream teas, this is no bucolic landscape.[10] Flash flooded in the space of three hours and swelling from two inches to between ten and fifteen feet deep, the stream became a raging, murderous, torrent.

There is a fracture in the granite stretching from the southern side of the peninsula near Penzance cutting through the High Country of the West Penwith moor, following the valley of the stream through Pennance to the rugged North Atlantic coast. In the late Devonian period, folding tectonic movement resulted in the formation of the Lands End granites, and the rising of the Variscan Mountains. Granite is an igneous rock formed from rapidly cooling volcanic flows that came from deep below the Earth's crust intruding through sediment, at the time of continent-to-continent collision. These intense compressive forces led to the formation of folds and fractures in the granite body. The

igneous flow escaped through the lines of fracture, baked the sediments and formed a deeply mineralized aureole around the evolving granite, resulting in mineral formation, including metal ores rich in tin, copper, lead and zinc. Many of these rocks are rich in natural radioactive and therefore unstable isotopes, including those of thorium, potassium, tantalum and uranium. The force of this tectonic collision resulted in the crust below this mountain range being up to 40km in places. Further tectonic activity then resulted in a collapse, with gravitational pressure leading to a kind of rebound situation, and the resulting development of fault-lines in the granite under-lying the former mountains. Residues of ash from volcanic activity can still be found in the rocks around Mounts Bay, Penzance. Geological maps reveal the stream lies along one such fault in the granite. Developed through deep-in-time geological process, the line of geological fracture formed the geomorphic structure of the valley and is therefore clearly implicated across the depths of time in the flood event of 2009. Re-writing Noel Castree (2012), the fracture that underlies the river, with its ability to swell from trickle to torrent sweeping away all the interventions mankind puts in its path, serves as a reminder of the potentialities inherent in Earth surface processes and forms, and decries any view that significant change relies on anthropogenic forcings or global humanity (p. 547). Nothing is really solid beneath our feet, nothing static or fixed.

These deep Earth scaled temporalities were at play in the tragic flood event, faint geologic echoes I later encountered in the demise of my mobile phone. This is what I came to understand as the disjuncture of the stream, a folding landscape in passage, in motion — disrupted — across the macro-scale of deep time and the micro-scale of traumatic event. It seemed to me, as an artist and researcher, that here there is an over-riding need to attend to the physical world, the world of deep-in-time-and-space. In this landscape, it cannot be escaped.

A wrecked mobile phone

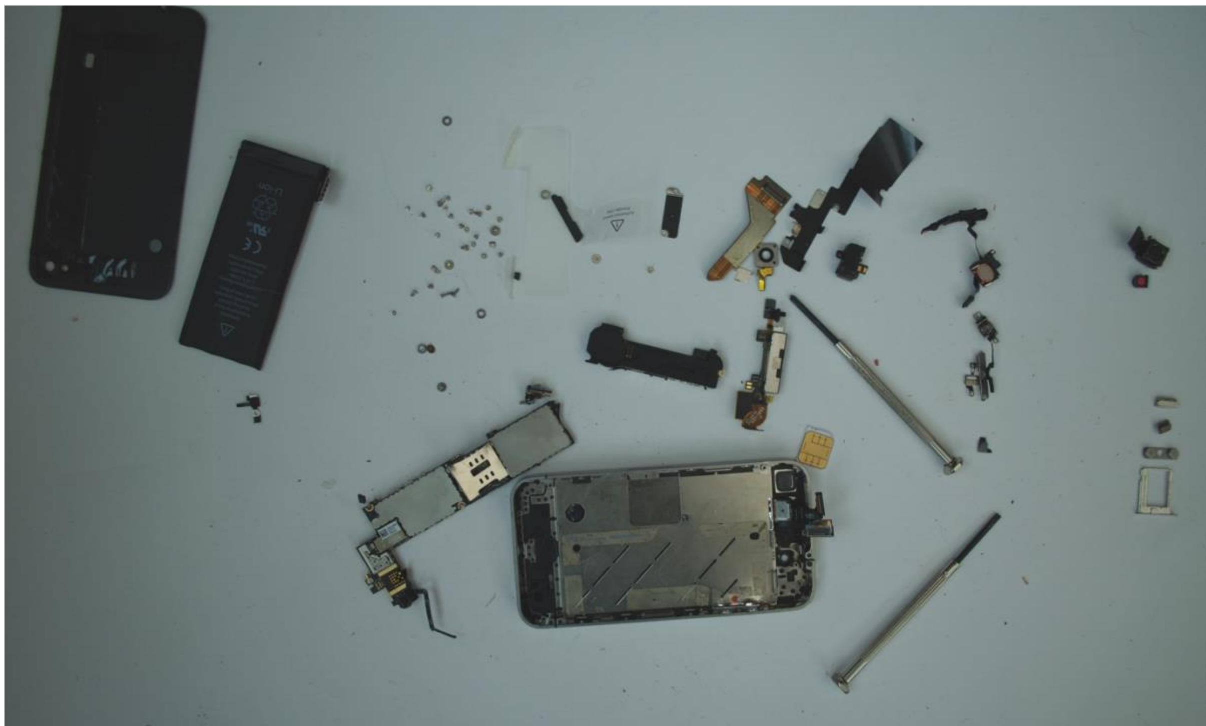

Figure 3.

I have of course now replaced the derelict mobile phone. The original (see Figure 3) has been knocking around the house ever since, moved around from here to there, caught in a no-man's land of dereliction and human inaction; supposedly somehow finding its way to the tip for recycling, staring at me to stop it from being binned. How many phones will I get through? And just how dead is a dead phone? I catch myself wishing, like Cohen (2015), that stories might "cross inhuman gaps in time, stones to assert themselves as something more than a trace of histories lost" (p. 76).

My mobile phone has become essential within my life. It is my memory. It ensures I am on time for appointments, the calendar set with a two-hour reminder to allow time to organise myself and do the hour-long drive it takes to get to the university campus from my near clifftop home; it keeps me in touch with my family now scattered globally; it supports my parenting and stops me feeling isolated, and more. Like many people I know, I have numerous apps that make my life 'easier', tools that extend my ability to write; that facilitate my relationship with the outdoors (landscape): weather forecast, tide

times, maps, compass and transport tickets; and an essential tool for me, a camera always in the right back pocket of my jeans… In short this — now end-of-life and in parts — assemblage of Earth metals and human invention became an extension of my brain and life of affect. Its withdrawal into "stuff that … becomes otherwise than it is" was made known and felt (Bennett, 2013, p. 52). That phone will not ring again, it will tell no more tales. Or perhaps it just might have one more story to tell, one of minerals and extraction.

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Tin and copper mining in this area stretches back thousands of years, the granite landscape of Cornwall replete with the widest range of known mineral deposits anywhere on this planet. The moor above Pennance, like the rest of the area along this coast, is riddled with derelict mine adits (see Figure 2). I am reminded of the day I went out with geologist Robin Shail to Wheal Owles with a Geiger counter and watched it click off the scale, the lump of radioactive pitchblende we found on the spoil heaps, and the phosphorescent glow of algae I saw in a cave the other day down at Cot (*Porthnanven* to give it its Cornish name).[11] The traces and scars of thousands of years of mining are everywhere, now re-presented as heritage. Mining came to an end in West Cornwall when the last fully operational tin and copper mines, Geevor just to the back of my house and South Crofty between Camborne and Redruth, closed in 1991 and 1998 respectively, following another collapse in world tin prices. Geevor is now a museum and heritage site, its 20th century workings large enough to drive lorries through are now flooded.

Reminded by the mineral materiality of the phone — "of the 83 stable and non-radioactive elements in the periodic table, a total of 62 different types of metals go into the average mobile handset" (Desjardins, 2016) — there is another episode in this story of extraction. The conditions in world metal markets have changed dramatically over the last few years. The price of tin has quadrupled and the price of rare metals needed for magnets has gone up 50%, driven by a spike in demand from the electronics industry and renewed confidence in international money markets for investing in exploration (and renovation of old mines). With complex geo-politics surrounding the extraction of metals — possible trade wars between the US and China (a major tin producer) and significant ethical concerns related to the instability/conflicts in major producer countries such as Myanmar and Congo — there is now substantial political will for the reestablishment of mining for metal and critical minerals in the

UK, and in Cornwall in particular (Guarding Cornwall's Mineral Wealth, 2016; Lewis, 2018). Member for Planning Cllr. Edwina Hanniford, referring to Cornwall Council's "Minerals Safeguarding Plan" (2018), proposed during the consultation phase that "the Plan aims to safeguard our indigenous minerals. It reminds us we are the guardians of the future for mining and quarrying in Cornwall and that what we do now, in terms of safeguarding our mineral resources, will influence what is possible in the future" (Guarding Cornwall's Mineral Wealth, 2016). It remains to be seen how this ambition will play out within a UNESCO World Heritage Site.

In a post-fossil fuel age, extraction of Earth resources is once again a resurgent industry – with one of the prime drivers being lithium batteries for 'energy-saving' electric cars. There are vast reserves in Cornwall of many of the metals and isotopes needed for the electronic industry, with satellite technology revealing a major find of lithium, dubbed "the metal of the future", an essential component of rechargeable batteries and the fastest growing commodity. New technology potentially makes lithium mining viable, even in an urban area like Camborne-Pool-Redruth[12]. The Cornish Lithium company has secured access to the mining rights at South Crofty from the Canadian mining company Strongbow Exploration who now own the site. All necessary permissions are in place and attempts to put together an international finance package to restart mining in 2020 are underway (Cornish Lithium Ltd, 2018). The future for Cornish mining looks suddenly very different.

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The muddy water contaminated the phone. Whilst it was almost funny… seeing my phone disruptively poking out of my back pocket on the video footage, it also gave me occasion to think of the phone as being no mere "inert, stable object" (G. Rose, 2016, p. 4). The muddy demise of the phone can be thought of as a mutable interface "where the agencies of hardwares, softwares and humans meet to create a temporary entity (the entity formerly known as a cultural object) assembled from code, gadgetry and practices" (p. 13). It also operated in this performance I suggest, as an mutable and disruptive interface between human agency, landscape and the mineral Earth. Gabrys (2011) uses materialist thought to chart the stories of electronic debris through "the technological trajectories and markets, methods of manufacture and consumption, and imaginaries and temporalities", the processes by which "materials congeal and fall apart" being "essential for understanding things as matter" (p.

156). Water and mud laden with traces of minerals and metals, and human stupidity arrested my phone; in its *then* form, it will never call Siri again. Whilst still looking the same, whilst still named a phone, it became something different – an assemblage of metals, rare mineral isotopes and river debris, all now with very different potentials. I wonder does it still store anything in its memory?[13]

Matter in this way is intimately bound up with time; in the words of Solnit (2013) "the river changed but never ceased" (p. 252). Thinking through the unexpected demise of the mobile phone, allows for a glimpse of the Earth, the seismic granite intrusion that led from fracture to flood, from minerals to mining, the circulations of electronic devices, and back again – and to an understanding of the permeable agency of "excessive and differential geologic and non-organic forces" on the performance of "human corporeality and subjectivity" (Bosworth, 2016, p. 23).

Its demise, as *phone*, cut through what was already and deliberately an uncomfortable, de-romanticized performance of landscape to foreground the way in which we meet deep-time earth forces through the "radically disjointed experiences which result from the more typically human-scaled passage of time coming up against high consequence physical processes that can take anywhere from seconds to eons to do their work" (Clark, 2010, p. 201). As Bennett (2004) points out "culture is *not* of our own making, infused as it is by biological, geological, and climatic forces… these impinge on us as much as we impinge on them" (her emphasis p. 115). This landscape of the stream, in which "entities [are] not entirely reducible to the contexts in which (human) subjects set them, is never entirely exhausted" by the "semiotics" or representations of landscape (Bennett, 2010, p. 5). We, therefore, encounter the Earth through micro events, collisions and assemblages of matter, in and through, practices and representations of landscape. Bosworth (2016) suggests "feminist geo-philosophy might be defined by its particular attention to, on one hand, intervals, fissures, and ruptures, and on the other, fluids and flows" (p. 24). This marginal, boggy location highlights the need for a renewed attention to the materiality of these fissures and flows, bodies and devices in thinking landscape. Whilst acknowledging the complicity of landscape and representation, marginal locations can almost defy description; geopolitically unstable landscapes are so politically laden they are overburdened and oppressive in their representations; geologic forces we can barely glimpse relentlessly grind plates one

up against another. Stretching imagination, the solid granite mass of Cornwall rises and falls by 10cm with each tide (Massey, 2005, p. 138).

Materialities of landscape and geologic echoes from the Earth

Neither precluding thinking landscape as visuality and representation nor as performed process, this reflection on the demise of my phone, points to the geological fracturing of landscape as `landscape' – and phone as `phone' – both cut through with echoes of geologic presence and subsequent withdrawals. Thus, this landscape of the stream, in which "entities [are] not entirely reducible to the contexts in which (human) subjects set them, can never be entirely exhausted" by the "semiotics" or representations of landscape (Bennett, 2010, p. 5), or indeed human agential performance. Echoes of deep Earth forcings thunder through.

In summary, this chapter has used the accidental wrecking of a mobile phone during a performance to camera in a stream to reflect on and extend non-representational accounts of landscape. In so doing, I look to contribute an increased inflection of material process into politically-facing landscape studies. I use this collision between a performance of landscape — in all its complexity — and the mineral materiality of a phone to speculatively bring the ephemerality of material processes into conversation within the withdrawals of the geologic Earth, to reveal the politics of geologic human and Earth landscape encounter. I propose that the performance, cut through as it was by the wrecking of a mobile phone, leads to questions around human-landscape relations (p. 793). It points to a need to bring landscape studies into conversation with the past-present-futures incarnations of the geologic Earth and exemplifies a more geological and politicized inflection to how we might, as artists, practice landscape.

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Notes

1. As I write, I am only too conscious of the tragic events that led me to work with the stream several years ago now. And, as such, I write hesitantly here without any intention of trivialising a story of loss that is not my own. I hope this infers no lack of respect.

2. On the Atlantic-facing north coast of the Lands End peninsula, Cornwall (UK)

3. This performance can be considered as an appropriation and feminist response to Ophelia, the well-known Pre-Raphaelite painting by Millais, depicting a scene in Shakespeare's Hamlet. Driven

to desperation by her father, she falls into a stream and drowns. Despite the tragic undertones to the story, the image is heavily romanticized, a representation in which the feminine is heavily conflated with the natural world/landscape under the masculine gaze (Nash, 1996; G. Rose, 1993, pp. 86-112).

5. Convened by independent curator Rob La Frenais, University of Westminster, London, 2017.

8. The Isles of Scilly are an archipelago off the southwestern tip of Cornwall, about 30 miles out to sea from where I live.

9. I rely heavily here on Colin Bristow (1996) and conversations whilst out walking the cliffs with geologist Robin Shail from Camborne School of Mines, University of Exeter.

10. Area of Outstanding Natural Beauty (AONB), part of the Devon and Cornwall Mining World Heritage Site (UNESCO), and incorporating Sites of Special Scientific Interest (SSSi) and planning/development restrictions (Conservation Areas).

11. Pitchblende (uraninite) contains a range of radioactive elements. Poldark is a heavily romanticized, iconic BBC drama, set in the time of nineteenth-century tin mining, filmed on the cliffs just along from Levant. The local tourist industry has had a substantial boost since the annual screenings started in 2015. 'Wheal' means mine in Cornish. It refers to the engine house — nowadays an archetypal representation of Cornwall. Wheal Owles, the main mine setting used in Poldark, is rather ironically renamed for the series as Wheal *Leisure*.

12. The location of South Crofty, and the most intensively deep mined part of Cornwall. Early records date Crofty back to 1592, with continuous production until its original closure in 1998 (Cornwall in Focus, 2018).

13. There is the potential here to think further into cyberspace via data storage (memory).