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Above and Below: The sounding of haunted geologies
Louise K Wilson

Abstract

This article investigates uses of sound in contemporary artists' time-based work in relation to the concept of 'haunted geologies' (Bubandt 2017). Works by Ben Rivers, Derek Jarman, Mark Jenkin, Shift Register, Louise K Wilson and others are utilised as a means of exploring and enriching the concept of the haunted geological. Combined uses of field recording, post-production and the manipulation of frequencies are examined, as suggestive of affective acts of divination and evocation, which evidence both visual and sonic signification. The visible forms and discrete voids of 'difficult' and unquiet locations (in UK and Australia) that have been disturbed, unsettled, or remain resistant to knowledge, provide the focus for a discussion, appertaining both to the realm of the 'above' and to the 'below'. The concept of ghost strata enables a consideration or navigation of that which has been misplaced, providing a useful and productive means for imaginative reflection on the impacts of loss. While suggesting this loss, nonetheless, ghost strata remind us of the persistence of stone as a form of vibrant and sentient matter - providing evidence of material agency which foregrounds and heightens the sense of the destructive nature of the current environment. The potency of materiality is further present in the media utilised to 'capture' or co-create phenomena across a variety of scales and states of rock and stone, and to this end, the powers of analogue film, audio recorder, or hard drive to document and manifest phenomena are collectively explored in order to unearth a recent past of spectrality in the geologic, and the ghosts that we have created, which foretell of future hauntings in the time of the Anthropocene.

Above and Below: The sounding of haunted geologies

This article explores lines of thought around the spectral geologic in artist moving image and audio work, weaving together examples from the 'above' domain of anomalous monoliths and stone arrays to the resonant hollows of subterranean caverns. These disparate realms, categorised as visible and discrete respectively, are each communicative of 'deep time' - that sublimely unfathomable and immense model of geological measurement. There is a spectrum of scale in this inquiry from the volcanically congealing to the comminuted. These are vibrant *and* haunted modes of matter. All the works

discussed subtly capture and mediate unsettling and ominous landscapes and the fraught histories they hold. They are often powered by strong and affecting appeals to the ear. The mediation of places by and through sound can radically disrupt or reinforce our relationship to them. Unease can be manufactured in post-production techniques such as manipulated field recordings (where frequencies may be pitch shifted, sounds slowed and reversed) to condition a disjointed and uncanny relationship with the geologic. In this sense soundtracks may become suggestive of acts of divination or evocation, producing visual and sonic signifiers that resound at physical, visceral and emotional registers.

This inquiry begins with a voice-over that introduces 'ghost strata' and moves from the visual apparition to the auditory hallucination, from the utterance to the dense soundtrack. In differing ways, the chosen examples all give voice and shape to embodying the ghost/spectre, inscribed on film and carried through the air on projected light.

Above: ghost strata

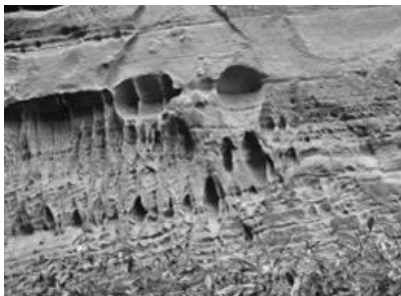


Figure 1. Film still, *Ghost Strata* (2019), Ben Rivers.

In the 'March' sequence from Ben River's 2019 experimental and episodic documentary *Ghost Strata*, the camera describes a rock face first in monochrome and then colour. Still and moving images reveal lines of strata in a former railway tunnel in central Nottingham. The tunnel, excavated out of sandstone cliffs, allows an implied glimpse into a timespan beyond our comprehension, compiling trails of sedimentation that have been revealed by the actions of humans. The spoken voice fills gaps in comprehension.

Standing before this scored backdrop, geologist Jan Zalasiewicz proposes the notion of 'ghost strata':

one of the little ideas or conceits which help in the whole business of putting rocks together not least because rocks can get technical whereas what one wants to get at is the real nature of things and the history of things and the idea that even rocks are impermanent and

they will go, they will pass. So going through me, going through all of us at the moment here is the ghost of those strata that we can see in the rock face. (Rivers 2019)

He describes the plane surface as a two-dimensional picture of something which once had three-dimensions and from which the geologist can imaginatively recreate the previously existing rock. Ghost strata then, are phantasmic lines – a residue of strata where rocks were present but have since eroded or been moved or simply annihilated by humans. This is the fuller sense of Zalasiewicz's claim that 'even rocks are just passing through'. Like humans, their time on Earth is indeterminate yet despite their absence, they offer hints of an earlier presence. These are projective strata, both invisible and pervasive and which 'cumulatively amount to the entirety of Earth's history'. They are images indexical to different points in time: the 'deep time ghosts' therefore are 'the ones which tell us how landscapes evolve [...] they are our imagination of the past'. The concept is of course deeply entwined with the Anthropocene (for which Zalasiewicz has been involved in evaluating the scientific validity of this proposed time-unit). The inference here is that humankind has created present-day ghosts that tell of how we have become firmly embedded within a geological epoch. The conceit of ghost strata haunts the subsequent chapters in Rivers's film in its exploration of scales of human impacts on the Earth's past and into the future (like the antique objects found in the mud of the Thames riverbanks, cave paintings and so on). Temporality is evoked in multiple ways – such as in the opening divination sequence where Rivers is told his film is 'about time' in a tarot card reading and the inclusion of an audio sample from Jonathan Miller's masterclass in the eerie *Whistle and I'll Come to You* (1968), adapted from the short story by MR James.

Ghost strata, in short, provide an imaginative and lyrical way to think about time, absence and rock. Zalasiewicz' concept can be considered productively in relation to Nils Bubandt's 'spectral moment' (Bubandt 2017: 128), a proposal that we are living in an era in which 'the deep time of geology becomes the political history of the present' (137). It is a moment of 'undecidability but also a time of spirits and ghosts' (128), where the origin of specific volcanic activity, for example, may have been triggered by human *or* natural activity. The cause of which is ambiguous. Bubandt's thesis is elegantly illustrated with reference to the toxic mud catastrophe of Lusi (Indonesia), and his anthropological research into the resultant 'geospirits' that have been released and set free from the earth in response to political corruption and environmental damage from extractive practice.

Spectrality, Bubandt goes on to argue, characterises the Anthropocene in a more general way, inviting us to 'imagine a world in which an alien geologist from the future detects in the strata of the ground evidence of the presence of

humans long after we have gone extinct' (Bubandt 2017: 135). We ourselves are the geologic sediment to come. This speculation is articulated in River's 2009 film *I Know Where I'm Going* (with lines of thought which the 2019 film builds on). Zalasiewicz is also present and asking what traces might or might not be left of human existence in the geological records 100 million years hence.

For a solo exhibition at Matt's Gallery in London in 2018, Rivers presented a first version of *Ghost Strata* where the 16 mm film was projected through a hole cut roughly in the wall of the space. The projector was located outside of the room with the image thrown onto the surface of a back projection screen, floating as if in mid-air. Rivers has described his love of the projected film image as 'more like a ghost, or a magic trick to create the illusion of a ghost, unlike digital which is hard, bright, and familiar' (2020). Indeed this projected light as it cuts across the space of the gallery creates its own ghostly strata, a projective imagination of this deep time hauntology, as a spectral void becomes luminous presence. This term hauntology, a Derridian neologism from *Spectres of Marx* (2006), suggests that essentially both present and future are always haunted by the past:

To haunt does not mean to be present, and it is necessary to introduce haunting into the very construction of a concept. Of every concept, beginning with the concepts of being and time. That is what we would be calling here a hauntology. Ontology opposes it only in a movement of exorcism. Ontology is a conjuration. (Derrida 2006: 202)

For Derrida, time is 'out of joint' (2006:201) since past, present and future are unstable categories. As Colin Davis clarifies 'Hauntology supplants its near-homonym ontology, replacing the priority of being and presence with the figure of the ghost as that which is neither present nor absent, neither dead nor alive' (Davis 2005: 373). While not explicitly stated, the notion of hauntology pervades the projected *Ghost Strata*, a spectral ontology of geological process.

This luminous air borne presence within the installation also suggests the concept of the 'projective imagination' proposed by Guiliana Bruno. This affirmative reading of atmospheric projection proposes a potential transformative energy, the projected film's productive openness to new readings. Connected to the outside world and to others, 'projection can, indeed, create an ecology: an environment of relationality and interrelational movements' (Bruno 2022: 286).

For Giovanni Marchini Camia 'the strata that Rivers is drawn to are comparable to [...] the latent image captured on a film's emulsion that can only be rendered visible through photographic processing' (Camia 2020). Camia implies that Rivers would manifestly be drawn to this concept (of ghost strata) because of his enduring investment in the hard chemistry and materiality of the medium. His steadfast devotion to analogue, hand-processed filmmaking (notably developed in the kitchen sink, a strongly tactile procedure) is intrinsic to the work. There is weighty investment in capturing the long duration, which is emblematic of slow cinema.

This is not the first time that otherness and eeriness of stone has of course found its way onto the material(ity) of film. Derek Jarman's hypnotic short *Journey to Avebury* (1973) inscribes a peripatetic encounter with this stone circle onto super 8 mm. This work has come to attention with a contemporary fascination with the eerie. As articulated by Mark Fisher, the eerie is constituted by a failure of absence or by a presence of failure.

The sensation of the eerie occurs either when there is something present when there should be nothing, or there is nothing present when there should be something. It concerns the unknown, when knowledge is achieved the eerie disappears. Crucially there must be a feeling of alterity, a feeling that the enigma might involve forms of knowledge, subjectivity and sensation that lie beyond common experience. (Fisher 2016: 61)

As Fisher draws attention to, there is a tendency for the eerie to be found in the landscape, away from the quotidian and the enclosed. There is something strangely virtual (in the Deleuzian sense of the term) about Fisher's characterisation of the eerie, in its focus upon ambiance rather than people, objects and actual things. This concept as it is materialising in British landscape art (and literature) is consolidating contemporary relevance through exhibitions such as *Unsettling Landscapes: the art of the eerie* at St Barbe Museum (2021/22) and, in a related vein, in Tate Liverpool's *Radical Landscapes: art, identity and activism* exhibition in 2022 where *Journey to Avebury* was recently shown.

Jarman uses the film medium not simply to mediate or document the stone array, but to fuse a register of attention. The distinctive visual and sensory aesthetic of Super 8 mm, with its ability to be replayed at different speeds, prompts the possibility of empathic temporal exchange between the 'vibrant matter' (Bennett 2010) of film, audience and stone. Art historian Susan Owens notes *Journey to Avebury's* sense of unease as the filmic technology comes up against this deep past to generate an 'oppressive sense of unease' in so doing

the work makes us ask 'why have we been taken [t]here?' (Owens 2021: 266). Robert McFarlane observes the vital importance of super 8 graininess to create unsettled atmosphere 'Super-8 flickers and blebs. It bleeds. Colours thicken within it. Its scratchy textures suggest another set of frames underneath, showing through here and there: other stories trying to pry their way out, buried forces rupturing the surface' (Macfarlane 2021:14). A description analogous to a geological becoming, as 'something long covered up and beginning to seep through, buried layers of history clawing their way up through the surface' (Owens 2021: 267). This blurring of the past and the present day is made further unsettling by a skewing of the film's colour palette. Edward Parnell writes of the film's colour palette 'oddly saturated yet somehow washed-out colours beneath a tobacco-tinged sky' contributing to a post-apocalyptic look, where humans are near-absent (Parnell 2019: 414). These readings continually point to the enigmatic and unsettling quality of this place, one where its (human/ otherworldly) provenance cannot be comprehended.

While the camera's gaze is generally theorised as a distancing one, compositions in *Journey to Avebury* have an aesthetic painterly quality. At times these read akin to 'haptic images' (Marks 2000) where grainy, distorted images may be said to prompt enhanced tactility in their reception when the eye functions more as an organ of touch. Jarman's journey offers an Avebury in temporal and spatial fragments: the duration, the route of the walk (akin to a pilgrimage) and the monument as a whole are not clear or complete. Each standing stone (or sarsen) of the circle has been individually committed to film, the attention to each is almost ritualistic and recalls Cohen's idea of the 'tactile archive' (Cohen 2015: 77) that lures and incites a more than proximal encounter:

To touch the towering or toppled megaliths is to enter a human lithic world participation that gathers millennia, layered and deep, opening to expansive historical scales, material insistence, environmental embroilment, densely sedimented temporalities, a community of peoples, things and forces enmeshed through story and stone. (Cohen 2015: 78)

Jarman's originally silent film (for which the viewer could conjure up their own remembered or felt sound) was superseded by a version with a posthumous soundtrack (made in 1995, remastered in 2018). For this, the musicians Coil – who had previously created soundtracks for Jarman – added thick electronica, undulating, pulsing, constant, with layered skylark song, an element redolent of a lyrical bucolicism. The overall result is hypnotic, restless but not natural. It signifies a permeable surface akin to that of the film material.

Commented [RM1]: Could this section be cut? While it is interesting, it is perhaps less relevant to your overall argument?

As an aside, human voice may likely have been an important feature in ritual (at this Neolithic site) and the qualities of transmission would be conditioned by the structure and layout of the stone circle and surrounding earthworks. Archaeoacoustic work conducted at Avebury over twenty years ago reveals acoustically dynamic features of echoes and reflections that would enhance the voice and features that would contain it (Watson 2023). This research may determine the acoustical specificity but cannot reveal the linguistic content of the human/stone event. Latterly narratives (and soundtracks) have been broadcast where the voice is firmly reinstated in the myth making of Avebury. The monument recurred on film some years after Jarman's, featuring in the era of the childhood eerie. In *Children of the Stones* (1977), the Neolithic stone circle is depicted as a central sentient character (or rather characters) in a menacing narrative around archaeology and occult ritual. The soundtrack, composed by Sidney Sagar and released on vinyl record in 2022, overdetermines the tension as dissonant keening voices (the Ambrosian Singers) fashioned an atmosphere of supernatural unease. In the absence of viewing the accompanying visuals while listening, the short (0.27") track 5 entitled *Adam Touches the Stones* (Sagar: 2022), for example, invokes a startling sonic image from half a minute of intense screechy, female-voiced torment. The soundtrack was apparently informed by the *Children of the Stones* producer Peter Graham Scott having heard a composition by Polish avant-garde composer Krzysztof Penderecki (Fischer). That this 1970s series and its soundtrack continue to invite speculation and interest is testament to a persisting and revitalised contemporary fascination with ancient stone formations in a time of political and environmental turbulence and anxiety. This is apparent in the popularity, for example, of online and hard copy publisher/events organisation Stone Club. Founded by artists Lally MacBeth & Matthew Shaw in 2021, it was set up 'as a place for stone enthusiasts to congregate, to muse and most importantly to stomp to stones' and encourages 'people to pause and think about place in new ways; connecting ancient sites through community and conversation' (Stone Club 2023). In Facebook and Instagram posts, the prolific material culture of relevant music, books and films is circulated and accompanied by members own images and pilgrimages to both iconic and less well-known stone sites.

Rivers' focuses on a blasted rock face, Jarman on a standing stone array – one of many where we can still only conjecture on why these were hewn, transported and arranged. Visible and highly visual structures, rocks manhandled and moved elsewhere. In this current age, there is a focus on the geologic and lithic not being haunted by, but being productive of, haunting.

Above: The eerie geologic

An interest in the fictive rendering of the unsettling power of the geologic in cinema has informed two related artworks by the author of this article. Peter Weir's 1976 filmic adaptation of Joan Lindsay's 1967 novel *Picnic at Hanging Rock* offered a focus to consider how a complexity of cultural and psychological responses may be prompted by a geological anomalous mass. *Missing Scenes: Evening at Hanging Rock* (Wilson 2012), and *Everything begins and ends at exactly the right time and place (signal/noise cut)* (Wilson 2012) attempted to unpack how these aggregated impacts, constructed through narrative devices (book and film) and sonic affects (film) create enduring cultural memories.

These works were made for *Topophobia* (2012), a touring group exhibition curated by Eggebert-and-Gould that sought to dissect the fear of place as manifested in contemporary art. Although the term 'phobia' in the exhibition's title might imply that the fear associated with these places should be construed as irrational, the premise ranges over a complexity of instances where fear is manifested. The enigma and archive of Hanging Rock (the place, the book, Peter Weir's 1976 film adaptation, the related literature, the gaps of knowledge in the State Library of Victoria when researching the indigenous histories) made it a productive vehicle to consider this concept of situated fear.

Some brief key contextual background is necessary. The horror in Weir's film unfolds in broad daylight at noon. In this, the story follows the book closely in conjuring up a story of the disappearance of four schoolgirls and their teacher, on a languid afternoon's picnic on St Valentine's Day in 1900. At the centre of the narrative, is Hanging Rock itself (known as 'Ngannelong' by its traditional owners), a jagged outcrop in the Macedon Ranges in Victoria, Australia 'created 6.25 million years ago by stiff magma pouring from a vent and congealing in place' (visitmadedonranges.com). When the schoolgirls approach the iconic, eponymous rock from a horse-drawn carriage, one of the company, Irma, remarks that the rock has been 'waiting a million years, just for us' (Weir 1976). Relationships between humans and deep time (frames) and the recurrence of temporal and geological anomalies saturate the film visually and sonically. The Rock exudes a palpable aura, a malevolent one albeit one vividly teeming with life with glimpses of shrieking rainbow lorikeets and busy ant colonies.

After the picnic itself, time seems to momentarily stand still (watches stop) as the quartet of girls embark on a quest to climb the Rock, before vanishing within the convoluted mass of this unique mamelon formation. The mystery of the disappearances is never solved.

From the first frame of the film and on the inside page at the start of the novel, the expectation is created that the story is a mystery based on fact. As Joan Lindsay writes

Whether *Picnic at Hanging Rock* is fact or fiction, my readers must decide for themselves. As the fateful picnic took place in the year nineteen hundred, and all the characters who appear in this book are long since dead, it hardly seems important. (Lindsay 1998: 6)

Mark Fisher has observed that 'sometimes a disappearance can be more haunting than an apparition' (Fisher 2016: 122), referring to the unresolved gap that was opened and the tragic ripples it subsequently created. The haunted nature of this place at that time is painfully complicated. There are multiple layers of unease, difficult unresolved tensions and anachronisms present in this narrative - of the surreal colonial presence in this ancient land, the cruelties of adults toward children, of the love of suffering and death. The novel contains other uncanny elements: while Hanging Rock is a real (natural) place, Lindsay embellished its volume and size in her story. To fit the scope and complexity of the original draft (where the mystery is 'solved'), an extra fictional 'level' was seemingly added on in the descriptions of the mamelon, swallowing up those Victorian girls dressed in (virginal) white.

In the commissioned work *Missing Scenes: Evening at Hanging Rock* (presented for one night at Exeter Phoenix in July 2012 as part of the presentation of *Topophobia* at Exeter's Spacex Gallery), Weir's feature film was screened in its entirety, bookended by two short films. The preface film featured aerial video footage that I shot (from a light aircraft) flying over and encircling Hanging Rock spliced with black and white super 8 mm shots in which the Rock was revealed in fragments, as the camera roamed over lichens and old graffiti messages scored into the rock surfaces. It included short voice overs from three 'readers' (from a specially assembled ad hoc reading group tasked with reading the novel). Each reader had previously been interviewed about their recollections of the story, of the Rock and their theories of the unsolved disappearances. In the feature film their voices continued to momentarily and intermittently interrupt (like an invasive director's commentary). They sometimes speak over the film, whilst at other times the screening was paused.

Extracts included:

For me the rock is almost something that consumes the girls without ever really indicating either a supernatural or a natural force, it's left incredibly open as to what happened to them as if they became as vaporous as the rock is portrayed.

It's bright and then there's an interlude where they stop on the journey to the rock and have tea [...] they travel on. There's about four lines that really stick in my mind that form the gateway between that colourful world and the dark bleak atmosphere that permeates the rock so it's almost 50/50. It's not spatial beyond that small sequence [...] it becomes otherworldly. I think that small sequence marks the divide between what we are to take as being natural and what we take to be supernatural.

You began to feel that was something simmering away under the surface and it was when the girls moved onto the rock and somewhere in the book it says something like it was as though they were stepping on carpet and I thought that was a very strange metaphor to use.

Commented [RM2]: Could some of this section be cut?

The recorded observations from the 'book club' often portrayed the rock as a sentient and omniscient character, existing within an impersonal, and yet affective and emotionally charged atmosphere. The readers reflected on their own experiences of uncanny places (one was reminded of a childhood holiday to Limerick and visiting a woodland reputedly inhabited by a witch, where no birds sang) The evening concluded with a short film in which the last chapter (Chapter 18) of the original draft was transcribed, one word at a time but played back at a speed so that no comprehension was possible. This chapter which reveals what happened to the girls, had been removed prior to publication at the insistence of Lindsay's publisher who believed (rightly so) that the novel would be stronger without it. It has been posthumously published as *The Secret of Handing Rock* (Lindsay et al. 1987).

At its core *Missing Scenes* exhibited the need to lay bare the attempts to deal with unfinished business, to try (somewhat forensically) to visually and contemplatively pull apart and make sense of the anomalous Rock, the fraught landscape where it sits, the gaps and differences between the book and the film adaptation, to make audible those spaces where personal memory intersects with the text. In effect, to dissect the film/ book's affective power with recourse to the reader's own subjective interpretation.

The second piece created specifically for the showing of *Topophobia* at the Bluecoat Gallery in Liverpool was a projected video work entitled *Everything begins and ends at exactly the right time and place (signal/noise cut)* (Wilson 2012) and was produced in direct response to the evocative and affecting power of the film's soundtrack. Acknowledging the strangely geological quality of sound layering in post-production¹, the process involved initially logging the

breadth and dynamic range of all audio elements inherent in these 'strata' (both diegetic and non-diegetic sounds). All speech and recognisable music – the so-called signal – were then edited out from the entire film. This excised the familiar music themes – the incongruous use of western classical music by Bach, Beethoven and Mozart, as well as the signature pan pipes. This haunting 'Flute de Pan', by Romanian folk musician Gheorghe Zamfir, was chosen by Weir for its 'pagan qualities' (NFSA). All verbal communication was also removed, leaving largely 'background 'noise' and the less legible or categorizable music. This was now largely a soundtrack of ambient sounds – of room tone, animal noises such as the crescendo of cicadas, synthesiser-made wind sounds, non-speech utterances (breathy sighs, gasps) and significantly the low frequency tremor and the silences that pervade and punctuate the film.

This revised soundtrack was then pieced together with a shorter re-edit of the original film (repeated on top of the audio, so that the sounds would be heard under different images). The selected filmic section was the approximately first third of the film, from the opening frame to the last glimpse of the girls on the Rock, as they disappear on their ascent. This section was then speeded up aside from selected short sections involving the girls climbing the Rock. Imagery of the small parts of the Rock in direct contact with the girls (touched or brushed against) had been pixelated, the (digital) indistinctness drawing attention to these small zones of human/ mineral exchange.



Figure 5. Video still. *Everything begins and ends at exactly the right time and place* (signal/noise cut) (2012), Louise K Wilson

The sound for Weir's *Picnic at Hanging Rock* was designed to generate a significant underlying and tactile atmosphere of disquiet and dread. With the 'signal' removed in the manipulated version, sounds such as the sub bass tremor (apparently made by slowing down a recording of an earthquake) came to the fore. This resonating rumble is repeated several times throughout the original film and relates (in meaning) to the agential Rock. As Johnny Milner argues 'the rock's magnitude and gravity in size (both sonic and visual) correspondingly reduce the weight and significance of the human figures that

come within its presence' (Milner 2017: 90). The audio works spatially in Weir's film to construct a power dynamic between the human and mineral bodies. A sub-bass speaker in the gallery for the showing of *Everything begins and ends at exactly the right time and place (signal/noise cut)* deterritorialized this resonating material beyond the immediate projection space, enabling it to operate on a dispersed corporeal level. In so doing, it recalled Steve Goodman's observation that 'In film, you hear the pounding of impending doom, [...] the gut-wrenching tension of imminent catastrophe long before you see its face' (Goodman 2010: 50).

Milner has observed how the low frequency sound used for Weir's film resonates 'at physical and visceral levels' and was used as a way of 'accessing the audience's unconscious, since this sound is supposedly part of those collective memories that we all have' (Milner 2017: 87). He elaborates on how 'the vibration heightens the irrational qualities and mythical aura given to the rock and helps to outweigh any empirical geological assessment of it' (Milner 2017:87). The specific timing, positioning, and manifestation of this phenomenon evoke an eerie, almost supernatural atmosphere in an otherwise natural setting. It transforms the landscape into an 'unstable terrain' (Milner 2017: 90). Milner argues that this highlights the insignificance of European concepts of time within the context of this ancient landscape.



Figure 6. Film still. Mary Woodvine as the Volunteer in *Enys Men* (2022), Director Mark Jenkin.

The potency of the film soundtrack to produce anxieties and agitation recalls Mark Jenkin's recent *Enys Men* (2022) where unease is subtly created through manipulated (on and off) location recording. There is less a foregrounded sense of a malign natural geological entity at play here, than a more 'traditional' spectral revenant. The past is visibly leaking through to the present. What is heard and seen however is a singular person's auditory/ visual hallucination, a descent into madness. This follow-up film to *Bait* (2019), continues the practice of creating a dislocated and uncanny experience for the viewer in the marrying of the image (on aged 16 mm film stock) with post-synch sound. Meaning 'stone island' in Cornish, *Enys Men* conjures up a scenario of a haunted and

malevolent island, experienced through its sole temporary inhabitant. Her role is never gleaned overtly but it involves observational field work. In the cast list she is named as 'the Volunteer', not unlike the nomenclature of characters moving around in another uncanny landscape, the Zone of Andrej Tarkovsky's *Stalker* (1979). The correspondence between these two films isn't limited to this, since both films portray sentient landscapes, capriciously prone to change.

The audience is alerted to the dread weight of history that never truly departs: with images such as a recurring shot of a plaque memorial to a lifeboat disaster, a chorus of swaying women in traditional bonnets and aprons, and a spectral cluster of period-attired miners (with candle headlamps) underground. While the location of the Island in *Enys Men* is not named, shots of the ruined workings on the surface and the mute witnesses underground attest to the formation of the British working class in the west country, where these sites are undeniably graves of a form of nineteenth century class-consciousness. The extractive practices that took place in the ground have borne ghosts who won't stay still. These 'ghost miners' point to some unspecified residual 'haunted' fallout of human intervention and damage but also recall an esoteric lineage of entities encountered in the spaces opened for extraction. In this regard, they recall the longstanding tradition of supernatural beings who may be mischievous or helpful to miners in warning of impending catastrophe such as the 'knockers' of Cornish mining lore and the 'venerable looking' 'little miners' cited in Georgius Agricola's *De Re Metallica* (1556), meaning 'On The Nature of Metals' in Latin, this first illustrated treatise on the mining, refining and processing of minerals which was a standard text book on such matters for the next century.

Shots of a single menhir (or standing stone) recur throughout *Enys Men*, a vertical presence in direct line of sight from the front door of the protagonist's dwelling. It alludes to a far older time frame than the spectral miners, completely outside of human memory. At times it is reminiscent of a shrouded figure, other times, a phallic totem. As the Volunteer's hallucinations become more intense in frequency, more dramatic temporal and mobile events occur. The façade of the house is instantly ruined in one shot and in another the single standing stone has changed position, it is now immediately outside the front door. Is there anything more terrifying than an ancient megalith that can move? ⁱⁱ

The soundtrack of *Enys Men* subtly provokes more sustained emotional and disquieting affect than the visual images always achieve. Jenkin notes that '[w]ith sound, you can do stuff that sounds almost real, but you know the audience are going to be slightly unsettled by it.' This post-synch – slightly out of synch – sound allows almost imperceptible correspondences between objects and the sounds they make: a clock ticks in the house but never at the same rate, the protagonist walks forwards, but the recorded footsteps are

playing backward, for example. As Jenkin observes 'It's funny when people say, "there's a real uncanny eerie feeling to it, in the way it looks," and I'll be thinking – it's not in the way it looks – it's the way it sounds that makes it uncanny and eerie!' (Walden: 2023). The audience are unsettled and know something is wrong but find the sonic mismatch to be less recognisable than the visual one.

The expectation is that the sound and image originate together and are profoundly bonded (even when Jenkin's films clearly signal the contingency of the form). Michel Chion writes of synchresis as 'the spontaneous and irresistible weld produced between a particular auditory phenomenon and visual phenomenon when they occur at the same time' (Chion 1994: 63). The inference is that the weld is generally seen as 'natural'. Even with the knowledge that the audio and the video would have been collected separately (at different times and in markedly different ways), the ethereal and ruptured qualities of the material (in all senses of the word) make us suspend awareness of this fact. Despite the transparency of the filmmaker's method and despite the pattern of sonic disinformation, *Enys Men* creates a convincingly beautiful and eerie world of relationships and human/other subtle energies.

Below: the haunted underworlds

In *Enys Men*, the Volunteer's work involves arcane and ritualistic scientific method: after collecting visual data and taking the temperature of a rare flower daily, she drops a stone down a well. It is unclear what the point is of this performance. However, it recalls poet W H Auden who was enthralled by disused mine workings of the North Pennines, and in his *New York Letter* poem (Auden: 1940), recollected an experience of self-awareness and discovery at the age of fifteen:

There I dropped pebbles, listened, heard
The reservoir of darkness stirred

The experience of dropping a pebble down a mineshaft had been drawn on in previous poems, described as 'the seminal event of his conscious creative life' (Bucknell: 1996). These voids invite dialogue and speculation, a 'sounding' out of unfathomable interiors, listening to the hole speak back. This activity gains additional significance in light of contemporary debates surrounding panpsychic materiality, in which consciousness is deemed to be a fundamental part of the natural world.

The subterranean world (caves as much as mines and other holes in the ground) offers an alluring primal quality, a zone of contact with the eerie, enabling the possibility to journey into habitats of absolute darkness and

reduced sound. In recent years, there are examples of artists conducting sonic experiments – using field recording, the manipulation of frequencies, and material sonification – to divine and listen to the underworld. Durational processes of listening, recording and listening again have been enacted. The appeal to collective memory, of chthonic, oneiric imaginaries as well as more clear-cut fascination with resonant acoustics, may be seen to underpin these endeavours.

Artist Martin Howse has described the descent into a mine as a ‘journey towards a dark interior, into the unconscious, in a disturbed dream’ (Howse 2022: 9). Mines are indeed productive spaces to consider the sharp relief between human and mineral timescales and the psychological impact of this understanding. However an increasingly significant dimension for ‘thinking though’ the mine is in comprehending the materiality of media through its ‘geology’ (Parikka 2015). Jussi Parikka proposes a rethinking of deep time in not just the geological usage (of the term), but as a concept in media arts (notably adopted by Siegfried Zielinski), since the ‘media history of matter’ is ‘another aspect of geological deep time’ (Parikka 2015: 52). An awareness of the (mined) materiality of media is intrinsic to this.



Figure 7. *Earth Observatory Array Elements* by Shift Register for AND Festival 2017. Photo by Chris Foster

An ongoing collaborative project which blurs the seemingly factual with the esoteric was made strikingly real when Shift Register (Howse working with Jamie Allen and Jonathan Kemp) created multimedia sound installation, *Earth Observatory Array Elements – Treak Cliff (EOAE-TC)*. This temporary work for the show caves of Treak Cliff Cavern was made for the *Digital Dark Ages* exhibition as part of Abandon Normal Devices (AND) in 2017 in which ‘artists were invited to think about how meaning is transferred and preserved in the long-term’, reflecting on how we ourselves are changed by the tools with which we record and store, and so proposing a series of ‘prophetic, provocative and uncanny reflections on what is fast becoming the new normal’ (AND 2017). The Shift Register intervention was created using an array of technoscientific mappings - scientific experiments and techniques and initiated as a ‘core particle and cosmic ray observatory structure’. The artists/ researchers independently collected the cosmic, terrestrial and telemetric signals being

filtered through the earth. They then transformed the datum, measuring and translating it into sound, storing it in obtuse instrumentation and communicating these findings via elaborate fiction-making (AND 2017).

The Cavern offered a particularly resonant complex of existing/ excavated chambers in which to situate these artefacts, sounds and speculative fictions. The AND website published vital textual material to signal and mediate the fictions the Shift Register work requires, before the visitor experiences the visible and audible components in Treak Cavern. This text captions the enquiry as part of a global set of observatories within key sites of industrial, infrastructural and scientific interest:

Of late, EOAE-TC's key researchers appear to have hurriedly abandoned this particular facility for reason which remain obscure, although three seemingly operative observatory structures remain within the cave structure. Their purpose only inferred by weak audio signals which these devices continue to emit.

The earth is media, filter, and an archive. It registers and processes terrestrial and cosmic signals as they descend and decay. In the moment of their capture by instrumentation, through their observation, cosmic subatomic particles and rays are consumed, they die out ... (AND 2017)

An attempt has been made (or alluded to) to capture and store valuable earthly and cosmic signal data on obsolete technology. A theatrical conceit is operative here – which reifies and mythologises the refusal of phenomena to submit to capture in relation to our desire for it to do so. There is a mythologising of the underworld that resonates perhaps with the knowledge that this realm is already used as observation chamber for scientific enquiry. Deep down in a laboratory situated in a belt of silver rock salt in Boulby, East Yorkshire for example, scientists search for Dark Matter. Robert Macfarlane, observing a young physicist at work, writes of the paradox that to 'watch the stars he must descend far from the sun. Sometimes in the darkness you can see more clearly' (Macfarlane 2019: 55). The technological assemblages of Shift Register imply a more earth-bound examination of the dark matter of human technological infrastructure.

The mine as an environment can be a lure for other forms of embodied speculation, for both testing the intensities of the site/ situation and extracting audio and video material. While a pebble can be dropped in from above, journeying in can be made through an adit entrance. I was one of a group of four: three artists (Alan Smith, John Bowers and myself) and engineer Peter Matthews, who spent seventy-two hours dwelling underground in Smallcleugh

Mine, a disused lead mine in the North Pennines for *Chthonic; 72 hours below Earth Day* (Bowers et al. 2017). The trope of extraction evolved as a conceptual term to shape and produce creative and practical thinking, evolving as a touchstone for our participation in this durational and exploratory performance. Just as the (lead) miners would hack out materials into the light for further cultivation and distribution, so 'things' (in the form of aesthetic responses and experiences) would be surfaced for further refinement for *Chthonic*. The experience was made audible in a range of individual and collaborative expressions including field recordings and videos, live improvised performances and in the production of written and visual documentation. The mine could be said to have been ingested too, inhaled and absorbed into the body's cavities after a time of dwelling. As A. Laurie Palmer, who has explored US extraction sites for over a decade, notes 'as much as we wrestle matter into shapes and press it into utility, matter shapes us too; it pushes back, choreographing our movements by its resistances, affinities, transformations, temporalities, preferences' (Palmer 2014: 6). It is no surprise then that our unconscious states register and resonate differently in contact with dense mineral sites.

The complete darkness and stillness of the mine was unexpectedly overwhelming, producing a combination of sensory, physiological and psychological affects. Auditory (and visual) hallucinations are not uncommon for those who travel through such reduced sensory spaces, and we quickly became accustomed to and less fearful of the everydayness of hallucination. Above ground too, there is an uncanniness that results from the intangibility of sound: 'a phenomenal presence both in the head, at its point of source and all around – so never entirely distinct from auditory hallucinations' (Toop 2010: xv). The fleeting ephemeral nature of sound, as it vanishes into the air 'often functions as a metaphor for mystical revelation, instability, forbidden desires, disorder, formlessness, the supernatural, for the breaking of social taboos, the unknown, unconscious and extra-human' (Toop 2010: xv). The mine environment itself exerts its peculiarities, sounds that quickly become filled in with meaning. When walking into Smallcleugh, a compelling sound (on the threshold of audibility) was the 'vocal' formant heard in water falling on different surfaces. Standing not far in from the adit entrance, an echoey babble of 'voices' (young children) could be heard emanating from the interior. This effect, no doubt, is produced by water dripping into resonant shafts further in (this architecture is arguably analogous to the mouth cavity). Once the suggestion was made, it was impossible *not* to hear 'them'. Smith has returned numerous times to gather and process field recordings in order to detect the originating location and grain of these acousmatic voices. A method was established using a parabolic microphone, recording sections of the mine beginning at the entrance and inside, stopping and recording for one minute every metre. Playing the recordings back while still underground the voices were there.

Returning to studio, the tracks were loaded into Audition and layered to model the tunnel's acoustic (shape). Using a graphic equaliser, Smith strived to produce a sense of linear distance in the tunnel and listen through the layers for the voices but they were absent. A strange inverse of Electronic Voice Phenomenon (EVP) in that these voices will *not* be recorded. This led Smith to question whether the voices existed in situ or in his head '[...] and what influence the mine has on my perception and its efforts to find a shape, to recognise something' (Smith 2022).

This acculturation to perceptual phenomena informed the relationship with the 'lived in' space. The 'Ballroom Flat', a cavernous space deep in the mine's interior cut out of solid limestone by lead miners, measures approximately forty by ten-by-ten metres at its largest. At the far northern end some pockets of minerals are present in the limestone (anchorite, zinc blende, some quartz and galena). It is a richly resonant sonic space with a reverberation time lasting around twenty seconds and accordingly, the desire to work with its spatial echoes was paramount. The 'sound mirroring' technique devised by American composer Alvin Lucier in his iconic *I am sitting in a room* (originally performed in 1969) in which an architectural space could be an instrument (Collins: 1990), informed two collaborative works made in the Ballroom. The acoustic 'room' of the Ballroom accommodated and then melded with the *Chthonic* participants' speech as recording were mirrored repeatedly (recorded, played back in the space and re-recorded). It was a demonstration that added to the existing archive of vocal utterances ever made in that space. Aden Evens writes how 'vibrations do not disappear, but dissipate [...] Every sound masks an entire history of sound, a cacophony of silence' (Evens 2005:14). This conception suggests a constant reservoir of energy in mutation and transition. These Ballroom sonic experiments – obliquely perhaps - recall the idea that stone(work) can act as a recording medium, memorably explored in Nigel Kneale's TV film *The Stone Tape* (1972), which in turn gave its name to a theory of residual haunting.

Portable recording devices used in this context could be considered as agents for divination and detection. The material make-up of the hardware is strongly mineral and may be said to have an indeterminate role in auralising the ground and air. In *High Static Dead Lines: Sonic Spectres* (2019), Kristen Gallerneaux notes the complex and subtle activation of comminuted mineral elements in sonic research:

In order to unlock the sound that exists on material bases (be it a disc, a tape, a hard drive or a cloud) it must be commingled into a new network, one where signals move through the geologic (germanium), filtered electrical impulse, magnetic, circuits, speakers. (Gallerneaux 2019: 204)

John Bowers refers to his 'way of doing' activities as a kind of infra-instrumentation with sound, which tends towards improvisation. During *Chthonic; 72 hours below Earth Day* in the style of composer David Tudor, he resonated sounds through wood and rock found deep in the mine's interior. A battery-operated Koma Electronik Field Kit was used to route feedback through these materials as well as acoustically through the Ballroom's reverberant space. Two microphones, powered by a field recorder, first gathered the sound of the room, before envelope-following it in the Field Kit to trigger a solenoid to tout another form of feedback, as it percussed the wood and rock (Bowers 2017). In this fashion, the immense space was made tangibly lively with amplified sound waves. Bower's procedure foregrounds the relationship between a tool, a piece of apparatus, and what it measures, senses, and transforms. Bowers credits Karen Barad (2007) for the idea that the matter and the apparatus co-create the phenomena they pick up. There is a relationality here, which is brought about by relational contingency – a happenstantial touching together. Bowers work reminds us that devices themselves have voices. The idea of 'voice' here, is a way of trying to think the brute relationality of the world, and that the way in which the relationality of a specific device enables a certain acoustic character.

Conclusion

If we get the ghosts that we deserve (Bubandt 2012), and artists and filmmakers are reflecting or refracting our inadvertent creations back onto ourselves, then works such as Jenkin's *Enys Men*, strongly assert a sense in which we are not at home in this world – or that we are not in fact of this earth. At a time of existential threat to our delicately balanced ecologies and environment, there is a need to be reminded of the fundamentally transformational character of a geology that nevertheless endures.

In the recent turns to materialism we have become enchanted by materiality and material strata – operationalised as the residue of deep time, and the nested layers of kinetic being. Despite this material emphasis, ghost strata can be found everywhere – not only in the in the spatial, and the temporal, but in our constructed layers of media, and our processes of remediation. They likewise lurk in the promise of a promise with respect to the future – serving to haunt us, perplex us - driving us further in our enquiries, and urging us to act.

The 'spectrality of the Anthropocene is full of ghosts of many kinds' (Bubandt 2017: 136) and this multiplicity is evident in these artefacts, projects and endeavours: it can be predicted in Jarman's uneasy and queasy celluloid Avebury stones which disturb with the threat of rupture and Smith's desire to

'prove' that the babble of voices emanates from the hollowed-out land itself and doesn't reside just in the recordist's head – or the recorder. We can learn (many things) from stones if we listen. While Nils Bubandt observes 'For both indigenous spirits and the spirits of the new geological idea of the Anthropocene ask us to notice the magic of the forces, human and non-human that shape the atmosphere, biosphere, and lithosphere' (137), it remains to be seen what future artistic manifestations, new methods and strategies will be needed in this spectral moment. This may require more than a recircling of the eerie but no less than a re-mythologizing of our environments and the stories we will tell.

The perpetually pervasive and elusive qualities of ghost strata, serve as an all too palpable reminder that even lodging oneself on a stratum – the first, seemingly solid step in Deleuze and Guattari's approach to research, which served as the epigraph to this paper, involves no less of a play of intensities than any subsequent enquiry - accompanying every stage of enquiry is the ontological whisper, of spectrality, horror and dread.

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ⁱ Since each track sits visually on top of another in the DAW software, noting however that the digital age of audio editing was developed after *Picnic of Hanging Rock* was made.

ⁱⁱ The uncanny mobility of this menhir is in contrast to the static Longstone in the film *A Year in a Field* (Morris 2023) This documentary portrait of a 4,000 year old Cornish monolith presents its subject as an enduring and reassuring presence in a world of unprecedented change.