On MythoGeoSonics

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Introduction

Since 2015, Bowers and Shaw have developed a creative practice we call mythogeosonics. We study the many, layered significances which can be attached to places and investigate their traces by working with sound. Adapting the concept of mythogeography, we acknowledge the multiple and contested characters of place and the value there is in creatively juxtaposing them, making this friction audible. Walking is key to our practice as a means for researching the places we work within, for gathering materials through field recording, photography, geophysical data gathering, paranormal investigation, concurrent writing, and as on-site performance. This is our first extended published reflection on mythogeosonics and we will discuss its conceptual and practical development, the works we have made in its name, the techniques and technologies we have formulated and made, and how our practices critically engage with a variety of topics, from debates over site and artistic agency to how we extend conventional techniques of field recording. We close with some speculations about how mythogeosonics might relate to fashionable concerns artists have with the archive.

Figure 1 John Bowers using the Earth-Probe

Figure 2 DIY Aerial for Atmospheric Listening

Mythogeosonics: The Very Idea

In terms of its scholarly and artistic lineage, mythogeosonics can be regarded as lying at the remeeting of two drifts, both of which take psychogeography as a starting point, one taking us via mythogeography, one via psychogeophysics. Let us take a moment to introduce and stroll around these waymarks.

As Guy Debord (1955: 23) outlined it, psychogeography is "the study of the precise laws and specific effects of the geographical environment, consciously organized or not, on the emotions and behaviour of individuals". This compact presentation of the concept has the advantage that it is easy to identify points of departure from it.

Debord's emphasis on precise laws and specific effects could come from any manifesto for a new scientific discipline. It has a rationalism about it which runs in tension with lawlessness, playfulness, the speculative, the slapdash and the sketchy. This is, of course, somewhat curious given the practices of many who work in the name of psychogeography, and we grant that it has been the subject of many corrections and adjustments before us. Psychogeography as a portmanteau word combining psychology and geography, together with Debord's emphasis on the emotions and behaviour of individuals, creates a primary focus on the individual and ways of understanding them which borrow from psychology. The psychology Debord had in mind would be a détournement on psychoanalysis, one that is "envision[ed] for situationist ends" and is concerned "not with the individual structure of our minds, nor the explanation of their formation, but their possible application in constructed situations" (Internationale Situationiste #1, 1958: 49). While this is a heterodox psychology, there is still ontological and epistemological work going on here which restricts room for scholarly and creative manoeuvre. In addition, the individual is seen as experiencing the emotional effects of the geographical in a way that seems to set the two apart as cause and effect and makes it harder to see more entangled relationships of place-making – or at least harder to see them outside constructed situations of revolutionary potential.

We do not wish to deny the continued relevance of a Debordian psychogeography, nor do we wish to downgrade the value of the methods of exploration its practitioners engage in, nor even do we wish to rule out the possibility of a hijacked psychoanalysis for counter-spectacles. But we would like to explore a more open ontology, one which sees many existents, and, accordingly, brings more varied understandings to the epistemological party. In this, we have been influenced by Phil Smith's (writing sometimes as Mytho or Crabman) formulation of mythogeography (Smith, 2010). By substituting psycho with mytho, a more diverse field is opened up.

Mythogeography "describes a way of thinking about and visiting places where multiple meanings have been squeezed into a single and restricted meaning (for example, heritage, tourist or leisure sites tend to be presented as just that, when they may also have been homes, jam factories, battlegrounds, lovers' lanes, farms, cemeteries and madhouses). Mythogeography emphasises the multiple nature of places and suggests multiple ways of celebrating, expressing and weaving those places and their multiple meanings" (Mythogeography website). This is a very different picture from Debord. The single and restricted meaning of a site (or, for that matter, of a Debordian spectacle) is seen as a contingent accomplishment, something which can be undone through recovering other identities and initiating new celebrations. This is a rather different framing from how the individual is an effect of geography in the Debordian scheme, or elsewhere in his thought, from how the subject of capitalism encounters the spectacle. It allows more strategies for participation in the remaking of places and, through that perhaps, more scope for political optimism.

Our second drift takes us via psychogeophysics, formulated as an expansion of psychogeography by Jonathan Kemp, Martin Howse and colleagues (see Psychogeophysics website). "Psychogeophysics expands this artistic research [psychogeography] to embrace geophysics, defined as the quantitative observation of the earth's physical properties, and its interaction with local signal ecologies." Over the last 10 years, numerous public workshops, performances and related events have taken place under this banner, including two extended Psychogeophysics Summits (one in London in 2010, one in Suffolk the following year), an extended handbook and reader has been published online, and schematics for building DIY sensing

technologies have been made available. One of us has participated in several psychogeophysical events. For example, at the Piksel Festival in Bergen, Norway, 2012, as part of a workshop leading to a participatory performance, Ryan Jordan, Jonathan Kemp and John Bowers explored the claim that electromagnetic anomalies around particular rock formations can have a subtle influence on people's perception – perhaps giving rise to an uncanny sense of the presence of otherwise imperceptible beings. As part of the summative performance from the workshop, the electromagnetic fields around various locally scavenged rocks were amplified and made audible to the audience as well as relayed to 'God Helmets' worn by two of the performers who reported on their experience.

Our work exemplifies several features of psychogeophysics as a form of artistic research. There is a concern for making sensing technologies and using them to extend our everyday perception of a site. In particular, signals which are otherwise imperceptible are often amplified or processed to make them audible. Our work is typically conducted onsite with members of the public being able to participate or intervene. A performance or installation summates the work. And interestingly, there is an openness to the kinds of phenomena and theories that might be broadly called Forteana – the forms of marginal epistemology that Charles Fort (1919) referred to as "the procession of damned data". In this, psychogeophysics has a relation with Smith's practice where "occulted and anomalous narratives are among those available to mythogeography, not as ends in themselves, but as means and metaphors to explain, engage and disrupt" (see Mythogeography website).

This last proviso sets the mythogeographic interest in Forteana apart from, say, professional paranormal investigation as much as it does from the scientific sceptic or debunker. The occult, the anomalous and other damned data are not of a special character requiring the conspiracy theorist, red pill taker, debunker or other ontological warrior to pull back the curtain of ideology or deception. What hides the occult is the monolithic understanding of a site as a Roman Fort rather than also a jam factory. In this way, damned data can strategically open up monological understandings of place to the mythic.

Investigations

Over the course of the last five years, we have conducted 11 different mythogeosonic 'investigations' at varied sites nationally and internationally. Let us present an account of three of these to give a flavour of our workings.

Bergen Invocation, Piksel Festival, Bergen, Norway, 2015

In Bergen, we aimed to create a performable installation that offered an imaginative remapping of the city. The materials for the installation were gathered through soundwalks undertaken with other attendees at the festival. We explored the place of execution of Anne Pedersdotter, tried as a witch in 1590, making recordings of the ferries which pass the point today and placing electrodes in the soil, amplifying the current flow between them and recording this as sound. We made underwater hydrophone recordings at the site of the sinking of the German cruiser Königsberg in 1940. We rode and recorded the Fløen funicular railway and at the top recorded ice on a lake creaking as we stepped upon it. We walked out of the city around Svartediket lake, retracing the steps of the mysterious and tragic Isdahl Woman. Amongst other walks. We collected artefacts along the way, rubbish that seemed poignant, rock and earth samples, and took many photographs. We made recordings in the busy shopping centre and at tourist locations. Over the course of the three days we worked in Bergen we incrementally created an installation which layered our collected materials, sounds, images and scavenged objects, together intended as a layered mapping of the city. On the final night of the festival, we moved our installation into the main concert space and performed a duo improvisation with all the materials collected.

Walk Write Repeat, Algomech Festival, Sheffield, UK, 2016

Algomech in Sheffield was a cross-arts festival which, broadly, explored the intersection of the algorithmic (the computational, the digital) and mechanical movement. Our contribution took as its conceit the idea of

the city as being a massive, distributed repository of symbolic data which we access by walking, writing (to our own recording devices), and repeating the procedure. We imagined the movements of the head of a Turing Machine, reading and writing to tape and moving over it, as in Alan Turing's classic 1936 thought experiment in the history of computing, as if they were instructions as to how to walk the city. We traced the line of the River Don, making above and below surface recordings, and encountering the city's trams. We recorded the electromagnetic fields around malfunctioning lights set into pedestrian walkways. We recorded the resonances of the chapel in City Road Cemetery and the sounds of a broken parking meter nearby. We walked through T J Hughes store recording the store announcements, escalators, laughing toys, and other noisy merchandise as a continual soundscape. Amongst many other activities over the course of two days. We brought our materials together in a 25-minute improvised performance which also featured animated collages based on photographs we had taken.

Berlin Sensor, Transmediale/CTM Vorspiel, Berlin, Germany, 2018

In Berlin Sensor we worked with the conceit that the city itself was a giant sensor device which could report on various features of its history, geography, politics and ecology, and which our devices could tap into. We walked to the site of Spandau Prison where Rudolf Hess, Albert Speer and five other Nazis convicted at Nuremberg were imprisoned from 1947, with Hess's suicide in 1987 leading to its swift demolition. While some older buildings still stand, a supermarket that is part of the Kaufman chain occupies the prison site. We made recordings of the shopping trolleys and filmed a security screen which was showing CCTV images until we were asked to leave. We noted that some of the trees from the prison garden remain around the supermarket car park and collected fragments of tree bark that had fallen from them. We walked on to Teufelsberg, the Devil's Mountain, constructed with debris from the bombing of Berlin as the city was cleared for rebuilding. On the top of the hill, a US listening station was active between 1963 and German reunification. The buildings that remain are privately occupied and in varying states of disrepair. As we passed we recorded a soprano singing in one of the giant radomes that once hid the station's antennas. From Teufelsberg, we walked to Langenscheidtbrücke, the iron bridge where the angel Damiel comforts the dying motorcyclist in Wim Wenders' 1987 film 'Wings of Desire'. We recorded the resonances of the bridge as traffic crosses it and the suburban trains passing underneath. Amongst many other recordings in these sites and between. The following evening as part of the Vorspiel of the Transmediale/CTM Festival we performed our recordings and showed photography from the sites we had visited prefaced with a performative lecture concerning mythogeosonics and the concept of the city as a sensor.

Techniques

For our mythogeosonic investigations we have developed a number of technologies which accompany us on our walks. These include artist-made technologies, some repurposed mass-market devices, and our own DIY 'makes' of varying sophistication and scientific soundness, some developed in our studios, some in the field. In this section, we informally discuss some of our many devices and how they are put to use in our work.

• Extended Field Recording

Field recording is a foundational technique for our investigations, and on walks we take a selection of different devices for environmental listening. These include air-pressure microphones for acoustic sense data, contact microphones for surface vibration, hydrophones for underwater listening, inductive coils for electromagnetic interferences and accelerometers to record movement. Not only do we use these devices to record these data but we also respond to live microphone feeds in our on-site performances.

• I Am Sitting In An X, Impulse Responses and Feedback

Adapting Alvin Lucier's technique in 'I Am Sitting In A Room' (1969) of recording from one device to another until the original signal is smoothed by the accumulated reverberation of a room, we have conducted a number of similar experiments in both indoor and outdoor environments. As another strategy for making the reverberant quality of an environment an active feature of our work, we have collected many Impulse

Responses (IRs) using both of the common techniques of recording the response to a noise burst or a sine wave glissando. We also commonly create feedback arrangements using small portable amplifiers and microphones.

- Earth Synthesizer

We place electrodes of dissimilar metals in the earth and amplify the signal. This technique can sometimes pick up telluric currents running through the earth's surface or act as a natural battery as earth salts interact with the electrodes electrolytically to power attached circuitry. Sometimes a current source is also added in to the circuit so that a sample of earth can be used in a voltage divider design to send varying control voltages to, say, an attached portable synthesizer.

- Rock Harmonium, Sonifying Geological Textures

Drawing on the work of UK artist Ryan Jordan, we place rock samples in a circuit to function as a transistor and amplify the result to create interesting sonic effects which are sensitive to the kind of sample and its internal structure. We have also experimented with sonifying geological textures by scanning images of geological formations using a digital camera or microscope.

- Radio

We have developed a number of ways to use radio in our investigations. These include listening to radio signals with an 'All Band Receiver' which receives a broad bandwidth of signals at the same time. We have made very low frequency (VLF) receivers which pick up natural radio from lighting strikes and other atmospheric phenomena. We also experiment with receiving signals using non-conventional aerials including trees, large metal objects (such as bridges or lampposts) and aerials constructed onsite using found materials.

- Scavenged Materials

We commonly collect materials and objects from the sites we visit taking care not to remove anything that might be someone's property or anything that is ecologically important. Indeed, most of what we scavenge would be deemed by many to be rubbish but, even so, we do not always permanently remove objects or materials from where they were found, often preferring to work with them in situ. We often explore this material using various microphones, such as a contact microphone, or by reverberating them by direct contact with a transducer following David Tudor's technique from his various Rainforest performances and installations (1968 onwards).

- Esoteric Devices

A number of the devices we take for a walk in our investigations have been influenced by the use of the technologies used by paranormal researchers. For example, we have developed and made a spirit box, a Raudiver receiver, an electromagnetic Field Recorder and an Electromagnetic Pump.

- Environmental Data Catching and Tracking

As well as listening to and recording acoustic data we use a variety of sensors to record environmental data. These sensors include those that can record light, temperature, humidity, air pressure, wind speed and direction. These sensors are wired through a small microcontroller (usually an Arduino) and data can be sent to other devices or written to an SD card for later use. Similarly, we sometimes record the trajectory of our walks using mobile phone apps which track and plot our wanderings through GPS data. We have also used apps which record the phone's movement. Tucked into a sock, this can serve as a pedometer which gives some insight into the shape of our strides over the course of a walk.

- Journalling and Photography

We typically document our walks as we do them by writing a concurrent journal. While there is no rule to this, the journals often have the character of a series of essayistic impressions and responses to the unexpected contingencies we encounter while walking and sounding, to the way heritage or other authoritative historical discourses are present or disrupted as we investigate a site, to the presence of anomaly or anachrony, and, in particular, to any procession of damned data that we pick up on. We take many photographs too. As well as illustrations for our journalling, we are also drawn to textures which perhaps suggest a mythogeographic complexity to a site or otherwise catch our eye. We sometimes scan textures in digital audio software we have made to create audible waveforms. Layerings of our photographs and extracts from our journals are often present in our performances and installations.

• Interfacing to Synthesizers

We often carry with us small, portable, low-priced synthesizers, made by us or other artists and musicians. When conducting a mythogeosonic investigation we often accompany our activities with some environmentally responsive sound synthesis, in which we take one of our data streams, e.g. from the environmental sensors, and attach it to one of the inputs of our synthesizers. This gives us another sound to accompany the feeds coming from the listening devices and to record for later use.

Upshots, Reflections and Emerging Concerns

Mythogeosonics is an open, developing practice for sound walking, performance and installation, drawing on traditions of psychogeography, mythogeography, psychogeophysics and other byways which encourage us to extend and rethink our relation to place and movement.

Mythogeosonics is a multifaceted way of working that incorporates many different creative practices including field recording, data collection, electronics, software and hardware development, instrument building, writing and photography. We like to keep our investigations open and experimental. With each investigation we research and build new devices and techniques but also draw upon old ones from previous walks. Our walks can be done with just the two of us or can be opened to collective participation. The making of our devices can be the basis of accompanying workshops for public participation. We can present our work in various formats from gig-like appearances on a bill of musical acts to installations which themselves can be made performable. While out walking we often stop and play to whoever or whatever might be listening. Let us close with a few of the topics that mythogeosonics has encouraged us to think about.

Extending Field Recording Practices

Sometimes field recording is understood as the act of moving sound material from one place to another. A recording is made in one place, taken back to the recordist's studio to edit and process and then at a later date presented in a gallery, cinema, music venue, warehouse or squat, or as part of a published release, a CD or whatever. Mythogeosonics approaches the act of field recording (and data collection in general) as a live and embodied process, rather than just the transportation of audio material from one site to another. Within media theory, some writers consider the act of sound recording to be a disembodying process, removing sound from its source (e.g. Kittler, 1986). We see (and hear) mythogeosonics as a practical, embodied engagement with sonic phenomena. To this end we attempt to reorient field recording, or more generally field work, as an activity which flattens process and presentation and where the artist leaves an inevitable agential trace. Often mythogeosonic investigation involve us playing back field recordings within the site itself. It also involves extended field recording practices, such as using experimental aerials for picking up radio broadcasts or inductive coils for hearing hidden electromagnetism. From time to time, these devices may be themselves built onsite. We are concerned with real-time listening, data collection and phenomenological experience. Our investigations work with the immediate environment as a source of data and we often perform with this within the site itself. If we finish a mythogeosonic investigation with a public performance, these are more like reports on the activity of investigation and, indeed, we often read from our journals or otherwise introduce our performances to emphasise that framing. Furthermore, since we inaugurated mythogeosonics, towards the end of the calendar year, we have performed an Annual Report

(2017 in Newcastle, 2018 in New York, 2019 in Plymouth) drawing on all our materials gathered in the year. In this way, field recording is an activity we extend and embed within our overarching practice.

Site, Technology and Significance

'Site-specific' (or one of its variable permutations) is a term used by many artists who engage with walking as an artistic methodology. As mythogeosonics responds to various sites it would be naive of us to ignore reference to this artistic concern. With mythogeosonics we choose to participate within a site, rather than just respond to it. In a similar vein to our approach to field recording, rather than move material from one place to another, we prefer to, whenever possible, work directly with features of the site in our creative work. In practical terms this could include performing from within the site using portable equipment and battery-powered sound systems or working with the characteristics of the performance venue as productive and responsive elements in the creative work. We do not use technology here to recreate a virtual 'realistic' space, rather we allow the site and our chosen devices to intersect, using technology as a way of revealing aspects of the site not normally within perceptual reach.

In our work here we have approached the technologies we make as intrinsic to artistic processes, rather than as mere means to an aesthetic end or presentation tools or products. We have resisted solutionist approaches to technology, whereby technology is rendered invisible or used to solve problems, create products, market services or be encapsulated as an 'application'. The devices we use are in constant development, evolving with each mythogeosonic investigation. Indeed, we see the technologies we use as creative material in their turn – material that is continuously revisited and reshaped.

Our techniques and devices each give their own account of the character of the sites we visit and the walks we undertake. A Raudive receiver will pick up a lot of stray electromagnetism and, if we are very lucky, something that can be heard as a voice from the other side. An arrangement of devices to create acoustic feedback will be sensitive to the resonances of the site and to our activity within it. A synthesizer based around electrodes plunged into the earth will respond to its saltiness and the movement of the particles which compose it and of ourselves as we stomp around. We have many such devices, all with their own sensitivities and 'voice'. As such our approach is suited to the mythogeographic sensibility to open out sites to multiple significances and to have fun at the expense of monological readings of geographical and historical identity. This is further reinforced by our adoption of what we have called 'conceits', ways of framing an investigation by taking a sideways glance at the sites we walk between and around, and what we might be doing. Regarding a city as a giant sensor or as a program that gives us instructions as to how to walk, read and write, or as a contradictory layering in need of equally enigmatic remapping and invocation are all framing devices that give organisation to our activities and suggest the development of technologies for the investigation while redistributing received understandings.

Archiving Walking

As we continue to present mythogeosonics in different contexts and in response to different invitations we have built up an archive of sounds, images, salvaged and scavenged objects, listening devices, and other paraphernalia. All of these materials have formed an archive for our walks and we keep personal collections of these things. It is now over 15 years since Hal Foster (2004) wrote about artists' 'archival tendencies'. It seems to us that it is time for us to reflect on what archival tendencies mythogeosonics should have. In a recent performance during a day examining the work of artist John Akomfrah in relation to archval sources, as well as mixing in our various recordings along with some live synthesizer improvisation, we presented our scavenged objects underneath a rostrum camera, creating live assemblages of the things we had collected. In addition, across two screens we presented images of these objects photographed in a tongue-in-cheek archivist's style, flat against a white background. One of these screens layered up multiple photographs slowly transitioning from one layering to another to create an animated collage effect. In this way, we were mixing and juxtaposing the objects collected in a manner that was similar to the combination and layering of recordings while counterposing this to the separated neutral backgrounded photography in the archivist's style. This seemed to us to be a strategy in which we can connect mythogeosonics to the archive in ways

which are self-consistent and begin to juxtapose institutional practices to our personal artistic ones. How one might walk up to, through and around archives of walking's own making is one of our current concerns.

Mythogeosonics: The Manifesto

With mythogeosonics we study the many, layered significances which can be attached to places and investigate their traces by working with sound. Adapting the concept of mythogeography, we acknowledge the multiple and contested characters of place and the value there is in creatively juxtaposing them, making this friction audible.

We work with multiple and extended timescales.
Think of the simultaneity of cosmology, geology, landscape, history, biography, fiction.

We resist fixed uniform ideologies of the sort that can be found in heritage discourse. Rather than 'responding' to a space, we prefer to participate within it, unfixing and reformulating its many meanings.
Think of this place as a noisy transmission that can be tuned in to and played with/in.

Mythogeosonics works with an extended conception of field recording to incorporate such diverse practices as geophysical data sonification and paranormal investigation.
Think of all the fields: radio, magnetic, electric, esoteric.

We cross between on-site investigation, installation-making, soundwalks, and an improvisatory performance practice combining soundscapes, documentary recordings, film, text, and process material using modular synthesizers, resonant found objects, DIY software and self-made instruments.
Think of all the ways that the mythogeosonic can be heard, witnessed, appreciated and transformed.

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