We’re going down to some of the deepest physical spaces for music today, and we’re going deep inside our own listening to find strange echoes and weird reverberations. We’ll find musical works created as soundscapes for our listening: attending to musical compositions that become physical spaces, and which need bespoke physics of acoustics and architecture to function. We’ll think about a handful of pieces from the 19th to the 21st centuries that are designed as sonic environments as much as they are made as musical works - and thanks to the composer Jez Riley French, we’ll listen to environments from the depths of the earth to the resonances of empty concert halls so that our ears attend to the profound sonic experiences we can have when we open ourselves up to deep listening.

And to Deep Listening, with a capital D and L: because we’ll hear the band, the practice, and the way of relating to the world that the composer, improviser, and sonic explorer Pauline Oliveros created in the late 1980s in Washington State in a disused military cistern - and which became a philosophy that has spread all over the world, something we glimpsed in the last talk in this series with the composer Rolf Hind.

But before all that - a note on that word, “soundscape”. It was coined as part of the musicological and compositional lexicon in the 1970s by R Murray Schafer the Canadian composer and thinker. Schafer’s broad approach is to treat sonic environments, whether man-made or natural, urban or rural, as a network of sounds and energy that deserve scrutiny in the same way that musical works have been paid close attention and analysis. Schafer’s goals are as ecological as they are musical: they prove the point that to listen deeply to these soundscapes that shape us and which we shape, is to realise the environmental power of music, and the musical power of the environment.

He puts it like this: “The soundscape of the world [is] a huge musical composition, unfolding around us ceaselessly. We are simultaneously its audience, its performers and its composers”. A beautiful summation of our combined responsibilities to our soundscapes!

Schafer regards music - in the way we usually define it at least! - as one small part of the soundscape of the world - and he’s right, of course, as Jez Riley French will prove to us later. But in the first part of this talk, I want to turn Schafer’s ideas around, and ask what happens when we treat musical works themselves as soundscapes, as total environments instead of as self-contained objects? Our soundscapes aren’t only those of the whole world: for the time they last, pieces of music too are immersive sonic environments. As we’ll discover, the idea of treating musical works as soundscapes requires a broader way of thinking, and a deeper way of listening, than we’re used to.

To do so, we’ll need to think of musical works through all of the parameters of their creation, the contexts of listening created by their acoustics and the architectures where they’re performed; we’ll need to understand the symbiosis between composition and listening culture that these pieces create; and all four of the situations I’ll briefly describe for you so that we can glimpse what this approach might offer - soundscapes by Wagner, Mahler, Oliveros,
and John Luther Adams - require the existence of a way of listening in which we give primacy to the musical experience as the focus of our attention in concert halls or on the recordings where these pieces are preserved, instead of thinking of the opera house or auditorium as a place of social transaction - as we've demonstrated in earlier talks in this series.

Schafer invokes Richard Wagner in one of his discussions in Our Sonic Environment and The Soundscape: The Tuning of the World: “To the eye appeals the outer person, the inner to the ear”.

And so, let’s start in a place that looks like the most unlikely candidate for a progenitor of an ideology of deep listening. The fabulously ornate Margravial Opera House in Bayreuth, one of the jewels of rococo theatre design, completed in 1750 to the specifications of Margravine Wilhelmine.

But fascinating as the Margravine is, as is the cultural splendour she brought to this North Franconian town in the 18th century, the kind of listening that happened here then would have been of the sort of gilded showy noisiness of the contemporary Paris opera, as we experienced and re-created in the second of these talks. Instead, it’s what happened here in the late 19th century that inaugurated a new kind of musical work, a new theatre, a new music-drama.

Because amazingly Richard Wagner originally thought that this theatre, with its disproportionately large stage, could have been the vessel of his music-dramatic dreams - he considered it as a potential place where the four parts of Der Ring des Nibelungen could have its premiere. From what we know happened later, that seems almost unbelievable - the mythos of the Ring is another world from the gorgeous ostentatiousness of this theatre. Wagner realised it wasn’t right - too small, too rococo, too bright, even after Ludwig the Second had installed the theatre’s first electrical lighting rig. Wagner though did conduct Beethoven’s Ninth Symphony here in 1872, to commemorate the laying of the foundation stone of his new theatre on a green hill just a short walk up from the train station, that he was building as the true realisation of his compositional dreams.

The Festspielhaus is a fusion of Ancient Greek theatre design with modern technology by Otto Brückwald, based on an unrealised design by Gottfried Semper for an opera house on the Isar in Munich. It realises Wagner’s dreams for the democratic distribution of the audience, so that no-one is more privileged than any other in terms of what they see on the stage. No aisles, no boxes in the body of the theatre. But while there’s a democracy in the way the theatre is made in terms of sightlines, and there being essentially no seat in the house which is better than any other - as in the outdoor amphitheaters of Greece - there is a hierarchy here in a different sense. Sitting on the exquisitely uncomfortable rattan-backed chairs - there are no arms either side of the seat, no velvet of any colour to accommodate or cosset the bustles and finery of what audiences still wear, ludicrously, at Bayreuth - there is a complete focus on the stage - on art. On Wagner’s music dramas.

Wagner’s democratic theatre is really a place of total subjugation to the art-work - to his art-work - in which our individuality is effaced by the absolute concentration we are now forced to give to what’s happening on stage, and to the world-changing and world-ending dramas that play out there.

Compare that to the Margravial theatre, or the vast majority of 18th or 19th century theatres - remember the Paris Opera from a few talks ago?, or think of the gilded extravagance of the Goldener Saal of the Musikverein in Vienna, a golden temple to visual as well as musical splendor, made for music in 1870, or the wild extravagance of the Opera Garnier in Paris, which was also being built at the same time Bayreuth was constructed. Bayreuth’s interior is positively austere by comparison. It’s not only the discomfort of those seats, it’s the lack of ornamentation, and the fact that there is nothing to distract your eyes or your ears from the dramatic mythologies of Wagner’s music-dramas happening up there on the stage, the Bühne.
Something else you’ll notice - or rather, you won’t notice, because you can’t see them! The musicians are invisible. For the first time in an opera house, the whole orchestra, and even the conductor, are unseen. They are hidden because Wagner wanted the illusion of his theatre to be as complete as possible: the messy choreography of the conductor, the bows and breaths and reeds and brassy tubes of those hundreds of instruments are the means through which the musical illusion is made, but their conjuring should not be seen: music itself is turned into a mythic, unseen force of illusion in Bayreuth. And that’s what it sounds like at the start of the Ring Cycle, as that E flat major chord emerges from nothing, from the depths of the theatre, underneath the audience, until that huge musical inundation cascades over the stage to reveal the Rhinemaidens at the start of Das Rheingold.

The Orchestergrab - the orchestra pit - the orchestra grave, literally, as that phrase translates from German: there they are down there, and here is an image of the meeting of those two worlds - the musicians in their t-shirts, the public in their tuxedos. In Stefan Herheim’s production of Parsifal from 2011, the grave is two-fold, because the mound that crosses the threshold is a recreation of Wagner’s grave; Wahnfried, Wagner’s villa, just a short walk from the theatre.

I’ll come back to Parsifal: but there’s something else that Bayreuth incarnates in the service of a new focus and concentration on the new religion of Wagner’s music-dramas. Darkness - complete darkness in the theatre. That’s something we take for granted in theatres, cinemas, and opera houses today, but it was Wagner who did it first. Well, sort of: in fact, the darkness that the audience were plunged into in 1876 when Bayreuth opened with the four operas of the Ring Cycle was a mistake - the gas lighting system had only just been fitted, so it wasn’t ready to be used - instead, Wagner just turned the lights off - and inadvertently discovered another essential feature of the Bayreuth experience - the near total darkness in the auditorium, just a faint glow from down there in the depths of the Orchestra-grave… and then the sound starts.

But it’s not the Ring Cycle I want to play you. It’s the opening of Parsifal: that Bühnenweihfestspiel - a stage-festival-consecration-play - that was premiered here in 1882, the year before Wagner’s death. Look again at that production from 1911, because as you can see, that staging, the set-design, literally merges the architecture of the theatre into the structure of the Grail Room of the Knights of Montsalvat - the climax of the first and third acts of the piece - so that life and art are fused together through the illusion of Bayreuth’s unique architecture and acoustics, so that the whole theatre - and everyone in it - is transformed into the temple of the Grail. Everyone in Bayreuth at Parsifal - which was only allowed to be performed at Bayreuth, a ban only broken in 1903 with the first production at the Metropolitan Opera in New York, unsanctioned by the Wagner family - is a celebrant at this ceremony of art as religion, and religion as art. It’s the fulfilment of Wagner’s grandest ideas on the new role of art and music in culture and society.

And Parsifal is the only piece that Wagner actually composed for Bayreuth - after he knew what his theatre sounded like, looked like, felt like. His music, his score for this musical and dramatic ritual is a site-specific soundscape for the kind of listening that Wagner knew he had created at Bayreuth, and it conjured a new kind of music from him. In the sounds that Parsifal makes, the orchestra is conceived as a series of sound-masses rather than an assemblage of different instruments: Wagner makes his orchestra melt and merge into weightless, dream-like vapors and exquisitely blended atmospherics: he is making a new music for the acoustics of Bayreuth, in which the orchestral sound is thrown to the back of the stage thanks to the design of the orchestra pit, so it comes to the audience in a blended, mixed, intoxication of sonority.

We’ll listen to the opening paragraph of this overture, in a recording from Bayreuth - but have a look at the score. You can see how Wagner dissolves instrumental sounds into one another - this melody is played in unison, but it sounds uncanny, he creates a halo of timbre and colour around the sound because it’s shared among strings, bassoons, clarinets, and cor anglais. And this opening line, etched out of the ether down there in the orchestra pit, also melts harmonic stability and our sense of pulse - it liquefies musical space and time. The notes float above and beyond the bar-line, and what starts as an A flat major arpeggio subsides into C minor, before returning, less sure of
itself, to an A flat major which is then consecrated not by a definite sense of arrival, but by the whole orchestra seeming to melt - those shimmers of arpeggios in the violas, the total dissolution of time that’s going on in the flutes and bass clarinets, so that you have relationships of 9 against 16 - divisions of 9 notes in the woodwinds against 16 in the violas - going on! That sounds mechanistically precise, but melted and mixed by Bayreuth’s acoustic, the point of these precise rhythmic dissolutions is exquisitely calibrated by Wagner: the effect in the theatre is of a veil through which the whole drama of Parsifal then takes place. This music is nothing less than a consecration of a deep listening practice that transforms an aesthetic idea into an environmental, immersive, transformative soundscape. Here’s what this opening sounds like - just before we hear it, here’s Wagner’s working score of the opening; you can see how precisely the illusions of Parsifal are conjured.

Parsifal as a stage festival consecration play? More like a site-specific environment for deep listening, the depths of where the sound comes from, and the depth of the experience in which it invites us to participate.

Wagner’s innovations were a direct influence on possibly the greatest operatic conductor of all time, who was also a composer - Gustav Mahler. And Mahler’s symphonies - taking further the innovations of Schubert, Beethoven, Berlioz, Tchaikovsky, and above all, Wagner - extend the idea of the musical work as soundscape, as environment for new kinds of listening. His symphonies turn concert halls into simulacra of forests and alps - the First Symphony, the Third - sites of apocalyptic atheistic Resurrection - the Second stages for dramas of love, death, and tragedy - the Fifth, the Sixth - but in terms of using the symphony as an environment for a heightened - or rather, a deepened! - listening soundscape.

I want to show you the last page of Mahler’s Ninth Symphony, composed in 1909-10. And without having to tell you about the network of references on this page to the material of the whole piece, whose epic, vertiginous 80-minute journey has its climax - or rather, its apotheosis of liquefaction - right here - or that the melodies on this page refer to Mahler’s Kindertotenlieder, his songs on the death of children, you can see that this is a page in which the vast resources of the huge orchestra that Mahler requires for this piece - over a hundred players - are radically reduced to a few gossamer filaments of string sound. Even without knowing how to perform these notes, the score itself looks voided, empty - tendrils of sound that are hanging - just! - onto sonic existence. Mahler’s words give the musicians clues how they should play this music - very slowly, and very quietly! - and there’s more. You see that word in the second system, the lower part of the map of musical time that this page represents? Mahler asks his violas to play this phrase, “ersterbend”, “dying away”. That’s a word that sums up the experience of this piece, both for Mahler to compose, and above all, for us to listen to. It’s music that crosses a threshold from existence to non-existence - not just pianissimo but four P’s, pianiss-iss-issimo.

In performance, this music has to be created through the virtuosic sensitivity of the listening culture of an orchestra - and an audience. It’s a place in which Schafer’s tripartite responsibility that we all share for our soundscapes, that we are simultaneously their audience, performers, and composers, is realised when this page of music is created. We’re all involved. It’s fantastically vulnerable and fragile; in these sounds of radically disembodied quietness and a river of time that becomes slower and slower:: the players have to use their listening bodies to make sounds that are on the edge of audibility, where any slip of bow or breath or posture could create a scar on the musical experience; one player performing too loudly - or playing the wrong notes! - would wound the fabric of musical space-time that Mahler’s music is all about. So too would a rogue cough, or mobile phone call. In performing this music, the musicians have to be hyper-conscious of their own contributions to this collaborative ultra-quiet, and yet they are hardly aware of where their sound ends and that of their neighbour, their fellow violinists and viola-players and cellists, begins. They have dissolved into each other - and to truly perform this music, they must! As must we in the audience.

The performance I’m going to play you is led by the conductor Claudio Abbado in 2010 at the Lucerne Festival, with the Lucerne Festival Orchestra. Silence - non-existence: in fact, the end of this performance is none of those things. As you’re about to see, there are minutes after the musicians have finished playing, after the performance, in which the musicians don’t make a sound, and in which the audience, too, maintain a breath taking quiet after the
notes of the violins and violas have finally given themselves over to a supposed silence. "After the performance?" Not true: this collective quiet was the true destination of this performance. It's a region not marked on the page of Mahler's score - it happens after that double bar! - and yet this breath taken for all those seconds and minutes was the real purpose of this performance. This was the meaning of Mahler's 9th Symphony. It's the loudest and the most present "silence" I've ever heard. The rhetoric of the symphony - no loud ending here, no affirmatory cadence - is turned inside out - and so is our listening. We are invited not to witness, passively, but to participate in this deep listening - to make the music with our ears. The end of a symphony turned into a soundscape for deep listening.

The concept of deep listening has a precise history, because it’s a practice and a sound world that’s indebted to the American composer and improviser Pauline Oliveros, who died at the end of 2016 at the age of 84. It’s not just that Deep Listening is her idea - it's also her album, it’s her band, it’s her philosophy, it’s the basis of her teaching, and it comes from a very specific moment in 1988, where Deep Listening as practice and as pretty terrible pun gets cemented as an idea in Pauline’s life and music-making, thanks to a disused military facility deep under the ground of an otherwise unremarkable bit of country in America’s Washington State.

In the autumn of 1988, the trombonist Stuart Dempster asked Pauline and the vocalist Panaiotis to stop off on their way to a concert to experience one of the most amazing man-made acoustics ever created: a cistern, an underground bunker, built by the military, at Fort Worden in Port Townsend, 70 miles northwest of Seattle. What they discovered, in this cavernous space, 14ft underground, was a place with a 45 second reverberation time. When you think that the reverberation time - how long it takes for a sound to dissolve into silence - of St Paul's Cathedral, one of the longest man-made acoustics in this country, is around 11 seconds, that gives you a sense of how vast this acoustic of Fort Worden really is. With vocals, didgeridoos, and Pauline’s accordion - and, thankfully, their friend who had a Nagra recorder with them, the Deep Listening Band was formed.

Playing in this acoustic has special qualities - and special problems: any mistake that you make is going to last in the air for nearly a minute; and all of the musicians reported the uncanny sensation that they didn’t know what was reflected sound and what were the ‘new’ notes they were making: effectively, all of them were performing with the shadows of the sounds they made; playing with echoes; so that the performance is a feedback loop with their own musical pasts: as the reverberations loop and shift on top of one another, it’s as if the music is listening to itself: the players respond to the echoes of the sounds they have made, and add to that panoply of reverberating musical shadows with new present tense - and new musical presences. It’s - mercifully! - much better to listen to than describe: and if Parsifal is a site-specific musical environment made for the Bayreuth acoustic, so too and even more powerfully is the Deep Listening Band’s music a soundscape made from this acoustic, this architecture.

I want now to introduce an orchestral soundscape made in the wake of a lifetime spent making soundscapes with a directly environmental and ecological impact: it’s the American composer John Luther Adams’ Become Ocean, the single longest evocation of the sea in the orchestral repertoire. The title, by the way, comes from John Cage, writing about his friend Lou Harrison’s music:

Listening to it
we become ocean.

Luther Adams has made pieces for performances by 100 musicians in landscapes and cityscapes, he works to make us attend to our environment, forcing us to reevaluate our responsibility for the soundscapes of which we’re a part, whether we’re deep in a megalopolis like London, or on the tundra of Canada, or in the caves of our concert halls, participating in soundscapes like those by Mahler and Wagner we’ve heard today.

Is Become Ocean an evocation? No, it’s much more than that. It’s another piece that takes the idea of a deep listening to and with our environment and transmutes it into the fabric of an orchestral work. It’s music that doesn’t depict
the ocean, it’s not about our human gaze on the vastness of the sea, it’s a piece that generates its own power, it has an impassive and oceanic awesomeness. It’s made as another site-specific soundscape for these instruments - have a look at one of the harp parts and you’ll see that combination of precision of composition, the teeming currents of sound John Luther Adams achieves in this piece, part of the overwhelming richness of the experience of this music - as precisely calibrated as Wagner’s Parsifal, and as finely made in order to create a sense of liquefication - of instruments submerging into one another, of an oceanic consciousness in the concert hall.

_Become Ocean_ aspires to the existential condition of the ocean because it doesn’t care if you listen. What I mean is that this music is radically objective: it surges - into massive upswellings of orchestral sonority and saturated harmony - and then subsides into Sargasso-like moments of stasis... it moves according to its own laws that seem to be independent of human ideas like structure and time and story: like the ocean, it’s born of - and borne along by - its own currents and trajectories; driven by mysterious tides of motion that you feel exist outside the smaller dimensions and time-scales of our human hearing.

Like the ocean, this music has a sublime, cathartic power: we are moved by it because we are moved along with it. We are taken on its currents, through this piece, you feel you glimpse another world of perception, as if we could access the way the ocean might feel if it was a conscious being.

And that cathartic power has a point; and a truly tragic, cathartic point at that. As John Luther Adams says

“Life on this earth first emerged from the sea. And as the polar ice melts and sea level rises, we humans find ourselves facing the prospect that once again we may quite literally become ocean”...

Like all the most powerful environmental art - and this music truly does become an all-encompassing soundscape in its all-enveloping immersiveness of sonority, colour, and harmony! - _Become Ocean_ makes its point by embodying an experience rather than preaching a message. It takes us over. The effect is sumptuously overwhelming: “the loveliest apocalypse” in music, as the writer Alex Ross has put it.

So, musical works - an opera, a symphony - as soundscapes, as environments for deep listening; the sounds of listening in the depths of the underground, thanks to Pauline Oliveros, and immersed and inundated by a musical soundscape that is made for concert halls but which floods them as the orchestra takes on an oceanic ecological power with John Luther Adams.

But what happens when we listen deeply to the soundscapes of environments themselves; and tune in to the sounds of ecology - as well as the ecology of sounds?

Discussion with Jez Riley French follows – please refer to video on the Gresham College website: [https://www.gresham.ac.uk/lectures-and-events/deep-listening-quiet-music](https://www.gresham.ac.uk/lectures-and-events/deep-listening-quiet-music)

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