around). Indeed, spatial breadth is highlighted (if not produced) through the recording method: a single Zoom microphone in one of central London's churches; as a result, there is an immediacy to this track. The distance between listener and players - something not convincingly replicable through DAWs - places one in St Giles' Cripplegate, and one has the sense of what it might be like to hear Lonsdale's music live in a fitting acoustic. The natural reverb captured through this single microphone does well to organically blend the timbres, particularly when the piece waxes at 9'30". However, the trade-off for this method of 'haze production' is a loss of the detail that feels important to the ambiguities Lonsdale is working with and which Apartment House and recording engineer Simon Reynell captured so beautifully. That said, this commitment to uncertainty, even within the title track of an album, is commendable. The recording style leads me to imagine how Clear and Hazy Moons might be extremely effective as a spatialised, performed installation (indeed, this might be said for any of the pieces on the album), capitalising on the possible ethers created by Lonsdale's music, made particularly apparent here by the slow fade-out, which allows the ensemble to artfully sink into the ambience of the recording space.

The disc closes with the fullest and longest piece on the album, Anatomy of Joy. At first glance, this musical stature and seemingly uplifting title might seem assertive, but there is a loss of Lonsdale's compositional voice. The feeling of 'joy' being alluded to here detracts from the nuance and novelty of expression in the previous three pieces. The loosely would-be-poignant atmosphere feels empty, like it might accompany a generic montage sequence in a romantic drama. Where Lonsdale excels in the previous pieces is in writing music that balances doing something alongside composing stasis through repetition. Anatomy of Joy only does the latter, which, make no mistake, is both graceful and pleasant, particularly in his use of the double bass low pizzicato at 19'00". But having heard what the composer can do elsewhere - that is, write really rather stunning music - I can't help but feel a little let down: musical moons irregularly wax and wane, but not in a way that beguiles me.

When using this sort of sound palette and these structures, as is not uncommon for emerging composers, it is very easy to write *nice* music, but considerably harder to write distinctive music. Long, slow and fragile sounds can conceal questions of craft because, well, they sound *nice*. However, what Lonsdale does over

the course of *Clear and Hazy Moons* is arrange this idiom in a way that is continuously compelling and his own: there is nuance to each of the four eclipsing realms, which is deftly paced to encompass and cradle listeners. Certainly, then, Lonsdale is a composer to watch.

Ed Cooper

Matthias Kranebitter, Encyclopedia of Pitch and Deviation. Jäch-Micko, Klangforum Wien, Warsaw Philharmonic, Black Page Orchestra. KAIROS, 0022006KAI.

The album *Encyclopedia of Pitch and Deviation*, released by Kairos earlier this year, presents a selection of pieces with electronics for solo violin, mixed ensemble and orchestra by Austrian composer Matthias Kranebitter performed by violinist Gunde Jäch-Micko, Klangforum Wien, the Warsaw Philharmonic and the Black Page Orchestra.

Matthias Kranebitter is a composer of instrumental, electroacoustic and electronic music based in Vienna. He is the co-creator of the Black Page Orchestra, a contemporary music ensemble focusing on the performance of mixed music and multimedia by emerging composers. His music is rich in variation and nuance. His soundworld is characterised by dense sonorities: from saturated, distorted synthetic sounds with influences of glitch and 8-bit aesthetics, through midi sounds of acoustic instruments, to massive over-the-top sound design combined with highly expressive instrumental writing, which ranges from rough gestural and mechanisticlike textures to refined musical moments of acute clarity. Kranebitter takes advantage of the referential charge of sounds as socio-cultural signifiers to create complex and compelling musical works that link different themes and topics through sound beyond the inherently musical.

The first composition on the album, *Pitch Study no. 1*, from 2016, for violin and electronics, performed by Gunde Jäch-Micko, begins with a short electronic bleep, which 'presents' the pitch of the 'étude'. The title of the composition becomes explicit in this very opening: the tuning protocol before a performance of concert music. The violin 'takes' the pitch and plays it, changing the timbre somewhat, and is followed by samples of different kinds (sounds of instruments, musical sequences and electronic sounds), instances of the pitch presented in an episodic fashion. In subsequent sections, the violin and

electronics interact in different situations, one mimicking the other, with the electronic part building up to overtake the acoustic instrument in several moments. The complex electronic textures and the solo instrument create a dense and compelling electroacoustic landscape full of unexpected turns and shifts, with some humorous passages.

The second piece, which gives the album its title, Encyclopedia of Pitch and Deviation, from 2020, is a composition for large ensemble with electronics performed by Klangforum Wien. Following the title, the piece is a collection of sonic entries (musical and extramusical), which are arranged first in descending and then in ascending order, starting from 443 hz. Every entry in this encyclopedia is accompanied by a short description provided by a synthesised female voice. Each presentation of a new frequency brings with it a new musical context that gradually deviates and unfolds in a unique fashion. The disparate-seeming frequencies are bound together by the framing of the encyclopedia: a taxonomic collection of concepts organised in a clear fashion. The encyclopedia's vast collection of pitches are taken from a wide range of contexts: tuning, astrology, electronic appliances and other machines, geology, zoology and surveillance technology. Matthias craftily takes the listener into uncharted territories: the diverse nature of the entries corresponds to rich and diverse musical moments, all cleverly orchestrated. The engagement with extramusical, yet sound-related subject matter in an explicit way adds a conceptual depth to the piece that enriches the listening experience.

60 Auditory Scenes for Investigating Cocktail Party Deafness, from 2021, performed by the Warsaw Philharmonic, is a piece for orchestra, electronics and machine listening system. The title humorously emulates the scientific tone of the field of music perception research. It suggests a collection of musical moments conceived for or inspired by scientific research involving sound and music perception. Kranebitter clashes the artistic with the scientific, the referential with the abstract, the serious with the trivial. The format of the piece, which brings to mind the shortformat, informative and somewhat sensationalist videos one encounters on social media platforms, is taken to its absurd extreme. Throughout the three movements, the music unfolds with an accompanying synthesised female voice that both explains and exemplifies machine listening based on what the orchestra plays. The result is a humorous and absurd display of machine listening virtuosity. The

imaginative orchestration and the diversity of compelling sonic landscapes (auditory scenes) presented as short episodes of increasing absurdity take the listener from one sonic space to the next in a somewhat erratic fashion.

Nihilistic Study no. 7, for mixed ensemble and electronics, from 2013, performed by the Black Page Orchestra, begins with a synthesised female voice announcing the beginning of a listening example followed by the musical realisation thereof. The title alludes to the pedagogical, formative and virtuosic character of the étude in the history of Western music. The piece combines extreme electronic sonorities with fast instrumental gestures. Each example points to a different sonic context, as if these were part of a collection of sorts. With sharp humour, Kranebitter presents a wide referential space of human activity involving sound production. Ranging through musical tropes from the Western music canon, abstract textural composition, free improvisation, radio advertisements and soundscape, the piece charts a wide selection of sonic activity through diverse music and sonic landscapes. Starting from this piece, one can follow the way in which the composer in later pieces, including on this album, developed classification and referentiality as creative devices of his music.

The album closes with *Le Vertigo*, from 2016, performed by the Black Page Orchestra. The composition is a free rearrangement of a Baroque piece of the same title by Joseph-Nicolas-Pancrace Royer, an eighteenth-century harpsichordist, organist and composer from Turin. The traces (or remains?) of the original composition are presented in contexts varying in 'disfiguration'. The traces of the past, ever present in the existing musical instruments and the harmonic system, are distorted, filtered and aggressively manipulated, producing an imaginative recomposition while maintaining a recognisable imprint of the composer's imaginative style.

Kranebitter's music embodies the current anxiety vis-à-vis the growing incorporation of new technologies hyper-technologically in our mediated way of life while also nodding to the commodification of sound, and with it, the continuous and ever expanding fetishisation of classical-music culture. The compositions comprising this album give a clear sonic impression of his rich, witty, musical and conceptual soundworld. Depending on the topic, hinted at through the titles of his compositions, the pieces address, with a humorous didacticism, their subject matter and take it to its absurd extreme. The information, excess of often disparately

organised, establishes a link to the sensuous saturation we are continually under.

In a way, Matthias Kranebitter brings into the context of contemporary written music an iconoclastic critique of the values and rites inherited from – and still present in – Western classical music, with its clear, delimited context. Relying on plunderphonics – that is, the use of sampled material as a means of accessing different referential spaces – Kranebitter includes the extramusical, the social, even the scientific, all fields in which sound is a discursive agent. The pieces on this album invite the listener to engage with the world through music and sound in its multiple spaces of signification, while also acknowledging the privileged role of music in the discursive sonic treatment of ideas.

Andrés Gutiérrez Martínez 10.1017/S0040298223000517

Eliane Radigue, *Occam Delta XV*. Quatuor Bozzini. Collection QB, CQB 2331.

Since 2011, the compositional project of Eliane Radigue (b. 1932) has been a series of pieces titled Occam; at the time of writing there are over 80 such pieces. The title is derived from Occam's razor, the principle that all else being equal, explanations and choices which are simple are likely also to be the best. The musical material for *Occam Delta XV* for string quartet is certainly minimal, though the listening experience is anything but.

This release from the Montreal-based Ouatuor Bozzini, published on their own label, was recorded in the Panthéon in Paris in November 2021. A huge cathedral-like space that looks from the outside like a Greek temple, the neoclassical Panthéon is a national site of homage to great men (and a very few women) of the past. A video released alongside their album, made by Gilles Paté, offers glimpses of the building and of Foucault's famous pendulum, which is housed inside. The CD features two interpretations of the quartet, both just over 35 minutes in duration, with the first being over a minute longer than the second. In the sleeve note, the first violinist, Alissa Cheung, says, 'You can't recreate the performance, it's so much about the time and the place.' Cheung rightly believes that the quartet demands 'an

Like the other pieces in the Occam series, this work is not so much written for a particular medium as for a particular performer or group of performers. Occam Delta XV was developed through a collaborative process with Quatuor Bozzini, who are its dedicatees. Kate Molleson interviewed Radigue for her fascinating book Sound within Sound, and one insight she gleaned was: 'Every new piece in the Occam series begins with Radigue and a performer sitting down in her apartment and talking about water.'2 In fact, the Occam Ocean works in the series are for ensemble - suggesting a larger body of water - while Occam Delta are for chamber formations, Occam River for a duo, and those simply titled Occam are for a solo instrumentalist. The quartet write in their programme note that Occam Delta XV (2018) 'is like jumping in a lake when you know the water might be cold. It's a question of trusting the people you're playing with.'

The experience of watching the sea, or being immersed in water, is probably the best analogue for a listening experience which is ever changing and yet eternally the same. Occam Delta XV consists of long sustained string lines and a constant four-part texture. This is a completely nonhierarchical work, with all four voices having equal value and making an equally important contribution. Quatuor Bozzini play without vibrato: their sound is at the same time pure and yet not in any way austere. Molleson writes that Radigue's music is all about 'perpetual transition', 'a recurring process of fade-in, fade-out, cross-fade', and links this to her musical origins as a composer of musique concrete.³ But the rich circular droning of Occam Delta XV never sounds electronic: the cello usually sounds more like a murmur, and the deep listening the piece prompts means that we are aware of a bow changing direction, of the friction of hair on string, of harmonics and resonances. Occasionally the ear is drawn to one or other of the voices: I found my attention shifting, creating my own path through the music. Is that a violin line ascending, the viola suddenly bringing itself to my attention? Quatuor Bozzini realise an extraordinary feat of concentration and sustained bowing, enabling us as listeners to immerse ourselves completely in the soundworld. The very

extended listening mode, between meditation and hyperconsciousness'.

A preview of this video can be found at www.youtube.com/ watch?v=AfW1Wv-1z90 (accessed 1 August 2023).

² Kate Molleson, Sound within Sound (London: Faber, 2022), p. 267.

³ Molleson, Sound within Sound, p. 249.