

Curatorial > PROBES

In this section, RWM continues its line of programmes devoted to exploring the complex map of sound art from different points of view, organised into curatorial series.

Curated by Chris Cutler, **PROBES** takes Marshall McLuhan's conceptual contrapositions as a starting point to analyse and expose the search for a new sonic language made urgent after the collapse of tonality in the twentieth century. The series looks at the many probes and experiments that were launched in the last century in search of new musical resources, and a new aesthetic; for ways to make music adequate to a world transformed by disorientating technologies.

Curated by Chris Cutler

- PDF Contents:
- 01. Transcript
 - 02. Selected links
 - 03. Notes
 - 04. Acknowledgments
 - 05. Copyright note

At the start of the seventies, Chris Cutler co-founded **The Ottawa Music Company** – a 22-piece Rock composer's orchestra – before joining British experimental group **Henry Cow**, with whom he toured, recorded and worked in dance and theatre projects for the next eight years. Subsequently he co-founded a series of mixed national groups: **Art Bears**, **News from Babel**, **Cassiber**, **The (ec) Nudes**, **p53** and **The Science Group**, and was a permanent member of American bands **Pere Ubu**, **Hail** and **The Wooden Birds**. Outside a succession of special projects for stage, theatre, film and radio he still works consistently in successive projects with **Fred Frith**, **Zeena Parkins**, **Jon Rose**, **Tim Hodgkinson**, **David Thomas**, **Peter Blegvad**, **Daan Vandewalle**, **Ikue Mori**, **Lotte Anker**, **Stevan Tickmayer**, **Annie Gosfield** and spectralists **Iancu Dumitrescu** and **Ana Maria Avram**. He is a permanent member of **The Bad Boys** (Cage, Stockhausen, Fluxus &c.) **The Artaud Beats** and **The Artbears Songbook**, and turns up with the usual suspects in all the usual improvising contexts. As a soloist he has toured the world with his extended, electrified, kit.

Adjacent projects include commissioned works for radio, various live movie soundtracks, **Signe de Trois** for surround-sound projection, the daily year-long soundscape series **Out of the Blue Radio** for Resonance FM, and **p53** for Orchestra and Soloists.

He also founded and runs the independent label **ReR Megacorp** and the art distribution service **Gallery and Academic** and is author of the theoretical collection **File Under Popular** – as well as of numerous articles and papers published in 16 languages. www.ccutler.com/ccutler

PROBES #9

In the late nineteenth century two facts conspired to change the face of music: the collapse of common-practice tonality (which overturned the certainties underpinning the world of art music), and the invention of a revolutionary new form of memory, sound recording (which redefined and greatly empowered the world of popular music). A tidal wave of probes and experiments into new musical resources and new organisational practices ploughed through both disciplines, bringing parts of each onto shared terrain before rolling on to underpin a new aesthetics able to follow sound and its manipulations beyond the narrow confines of 'music'. This series tries analytically to trace and explain these developments, and to show how, and why, both musical and post-musical genres take the forms they do. This programme looks at some of the more oblique and extreme performance techniques applied to wind instruments and percussion.

01. Transcript. Studio version

[Gregorio Paniagua, 'Anakrousis', 1978]

[Bob Drake, "Fanfare", 2014]

[Paganini, 'Moto perpetuo', transcript for trumpet Sergei Nakariakov (Rafael Mendez), 1835]

Winds

Although uncommon in the Western Classical tradition, circular breathing is a staple of many of the world's folk instruments. As we just heard, it brings freedom from having to work in sentence-length phrases. No Western composer before the mid-twenties would have written the piece we just heard for winds; it would have been considered unplayable. In fact it was written by Niccolò Paganini for the violin back in 1835.

So what is circular breathing? Essentially it's learning how to become a human bagpipe: you breath in deeply, you fill your cheeks with air and play – then, as you approach the end of a breath, you maintain the flow of air moving into the horn from the mouth cavity using cheek muscles and the tongue, while at the same time quickly breathing in through the nose. You can practice with a straw and a glass of water. It takes time and a great deal of skill to sustain an even tone, but the results speak for themselves. By the middle of the last century the technique was being used by a number of jazz musicians, notably **Rahsaan Roland Kirk** and **Evan Parker**, and it changed the nature of the solo, which no longer needed to be broken into smallish chunks¹.

[Rahsaan Roland Kirk, 'Slow Blues' (excerpt), 1991]

Today, circular breathing can be found in all musical genres. Here is **Conrad Bauer**, the remarkable East German trombonist who, back in the seventies, was using a whole range of extended techniques: harmonics, singing into the horn, blowing chords and employing various exotic forms of tonguing – all while circular breathing.

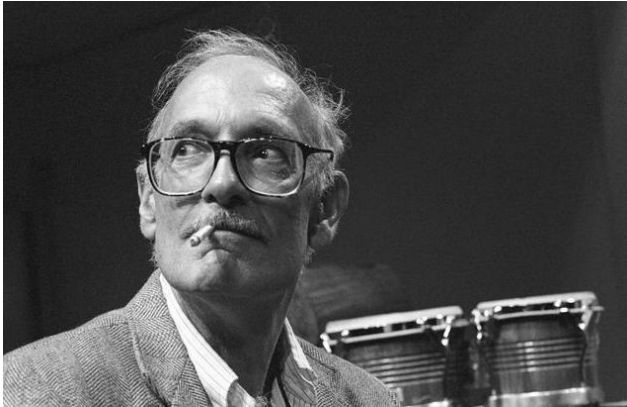
[Conrad Bauer, 'Märzfeber' (excerpt), 1985]

Art music took a less organic approach. Here's part of **Luciano Berio's** 'Sequenza for trombone', played by **Vinko Globokar**.

[Luciano Berio, 'Sequenza No. 5' (excerpt), 1966]

And here's **Evan Parker**, with his highly personalised accumulation of unorthodox fingerings, multiphonics, double-tonguing and circular breathing.

[Evan Parker, *St Michael and All Angels*, Chiswick, London, (excerpt), 2001]



[George Crumb]

And this is Rahsaan Roland Kirk playing three horns at the same time. On two of them he plays the keys in the usual way, one hand for each, the third he uses to play drone-like pedal tone.

[Rahsaan Roland Kirk, 'Three for the Festival' (excerpt), 1961]

Kirk, in fact, pioneered a whole catalogue of novel techniques. Here he is playing the flute while singing into it at the same time – a style he made famous and that was much imitated, though seldom equalled. The curious whistle you can also hear in this recording is a nose flute, which Kirk fits in between the flute notes.

[Rahsaan Roland Kirk, 'One Ton' (excerpt), 1969]

And now, by way of contrast, here's the opening of George Crumb's great 'Vox Balaenae', which is a veritable catalogue of extended techniques for flute, piano and cello. Here the flautist is also singing into her instrument.

[George Crumb, 'Vox Balaenae' (excerpt), 1971]

Of course, singing into wind instruments was hardly new – Tricky Sam Nanton was doing it on that Duke Ellington track we heard earlier. And it's the secret of the classic rock'n'roll horn sound:

[Duane Eddy, 'Peter Gunn' (excerpt), 1959]

A new aesthetic emerged in the late nineties, in part in the ambit of composers like Helmut Lachenmann. It quickly shifted into the world of free improvisation; here's the German trumpeter, Axel Dörner, one of several improvisers who began to move in a more minimal, quieter, direction. A development that also shifted improvised ensemble playing onto more sonically abstract and dynamically empty terrains. Here he is playing but without creating sufficient pressure to form actual notes – just shades of white noise – which he controls by varying his embouchure, operating the valves and using the metallic architecture of the trumpet. This is extracted from quite a long piece that doesn't move far from where it begins...

[Axel Dörner, '2' (excerpt), 2001]

And here's a wind trio in which even the pitched tones seem to be acting as timbral modifiers. What kind of music is this? A contemporary composition, a jazz improvisation? When you decide, what gave it away?

[Roscoe Mitchell, George Lewis, Leo Smith, 'L-R-G' (excerpt), 1978]

That was Roscoe Mitchell, George Lewis and Leo Smith. The instruments saxophone, trombone and trumpet. It's taken from an improvisation recorded in 1978.

You probably made the genre identification because of the saxophone; an instrument now indelibly associated with jazz. But although the saxophone was invented primarily for use in military bands, its inventor, Adolphe Sax had always had a hopeful eye on its use in the orchestra. And in its youth, Debussy, in 1901, and D'Indy, in 1903, did compose works for it. In general, however, few composers did, and no repertoire evolved to establish its legitimacy. Meanwhile, through its military connections it quickly found its way into popular music, especially jazz – although not as a regular solo instrument until the mid twenties, when the great early players, like Coleman Hawkins, Ben Webster, Johnny Hodges and Lester Young, began to probe its expressive possibilities. More importantly, perhaps, the saxophone appeared as an unclaimed treasure; it was waiting, protean, to be given form. And jazz players, who loved it, claimed it and gave it form. A well defined form, so that by the time it began to appear again in orchestral compositions – which happened in the early thirties – it appeared because of its existing association with jazz, usually making direct reference to it.

So contemporary composers never really committed to the saxophone in its own right and it was left to band orchestrators and jazz soloists to explore and uncover its depths. And, of course, to find the rich, smooth sonorities of saxophones deployed en masse – like orchestral strings, except with more blood and muscle.



[Sun Ra Arkestra]

There's a more general observation to be made here too: orchestral instruments, like their players, are expected to eschew individuality and personality while, in a jazz context, the great soloists raise their instruments to a state so human and profane that – in an orchestra setting they would have been, as Raymond Chandler put it, 'about as inconspicuous as a tarantula on a slice of angel cake'. Orchestras, like national radio stations, learn to speak in received pronunciation, while jazz musicians jive in dialect and slang. You can identify any great soloist after just a few bars from their sound alone, never mind the style: think Ben Webster, Lester Young, Pharoah Saunders, Lol Coxhill or Earl Bostic. In short, the saxophone was avoided by the Art Music world because, consciously or unconsciously, it was considered too compromised by its low associations and excess of personality. The small repertoire of contemporary music that has been written for the saxophone, with a few noteworthy exceptions, has tended therefore to be either referential or exotic, and has been sustained by commissions from individual performers in need of repertoire – like Daniel Kientzy – who imports jazz techniques, mostly toned down and cleaned up, into the more formal discourses of the art music world. But here's a non-referential extract from a contemporary work. In this section, composer Vitor Rua gives far more space than usual to a percussive wind technique usually heard only in passing: this is Daniel Kientzy playing part of Vitor Rua's 'Saxopera'.

[Vitor Rua 'Saxopera' (excerpt), 2001]

By contrast, here are just two of a vast number of jazz orientated saxophonists, separated by some fifty years and wholly incompatible backgrounds

From jazz, the Arkestra's John Gilmore:

[Sun Ra Arkestra, 'Shadow World' (excerpt), 1970. Tenor saxophone played by John Gilmore]

And this is the New York composer John Zorn:

[John Zorn, unidentified solo recording (excerpt), probably from the eighties]

And now, a drier, more neutral, more European approach to the saxophone – which could only have emerged in the post-jazz milieu of the late eighties. This is John Butcher in more extreme mode with 'Swan Style', from 2002.

[John Butcher, 'Swan Style' (excerpt), 2002]

And, because I love it, I'm going to play the whole of this short concerto for tenor saxophone and wind orchestra. This is Michael Mantler's 'Preview'. Performed by the Jazz Composers Orchestra in 1968. The tenor saxophone is played by Pharoah Sanders.

[Mike Mantler and The Jazz Composers Orchestra, 'Preview', 1968. Tenor saxophone played by Pharoah Sanders]

Finally, an excursion through the fringe zones of the clarinet. This is Tim Hodgkinson.

[Tim Hodgkinson, assembled by Bob Drake, 2013]

Percussion

Extended percussion techniques are concerned, for the most part, more with what you hit things with, than how you hit them. Candidates include knitting needles, coins, vibrators, screw-rods, egg whisks, electric razors and rolled up newspapers. Cymbals, gongs, bowls, vibraphones and miscellaneous metal resonators can also be played with a bow – usually a cello bow. Drummer, Eddie Prévost, fifty years in AMM on his CV, has a Summa Cum Laude in cymbal bowing. Here he is in 2001, on 'Mostly Bowing'.

[Eddie Prévost, 'Mostly Bowing' (excerpts), 2001]

And here's Seijiro Murayama playing a snare drum with... I don't know what...



[Seijiro Murayama]

[Seijiro Murayama, '4 Pieces for Snare Drum, No.2' (excerpt), 2009]

Now a light probe, but one that produces, especially in concert, an unusual intimacy. The palette is narrow, but the technique gives performers minute control over the sound and its resonance. Four percussionists are playing twelve tuned tom-toms, using only the balls of their fingers and thumbs... but keep it down: this is John Cage's 'She is Asleep'.

[John Cage, 'She is Asleep' (excerpt), 1943]

And in this piece by Robert Moran four marimbas are played with knitting needles, a necklace, ping-pong balls, Mardi Gras beads, a bow, rubber spatulas, rainsticks, some cardboard tubes and a ball on a stick. This is the Iowa percussion ensemble Interpreting 'Stems and Roots', a graphic score dating probably from the late sixties.

[Robert Moran / Iowa Percussion Ensemble, 'Stems and Roots' (excerpt), sometime in the sixties or seventies]

And finally a borderline extended drum technique that uses only brainwaves. In 1965, the American composer Alvin Lucier, who was then working at Brandeis University, met Edmond Dewan, who was working next door on brainwave research for the US Air Force. Lucier managed to borrow some electrodes and a brainwave amplifier, which he reconfigured so that it would route his alpha wave data directly to some loudspeakers. The speakers reacted strongly, but made no sound because brainwave frequencies fall outside the range of human hearing. But, by placing the speakers on or near various percussion instruments, Lucier could play them by controlling his alpha waves. And since alpha waves are at their strongest when an attentive mind is at rest, in order to perform, Lucier had to learn to regulate his mental states through a kind of focussed inactivity². Here's the beginning of a revised version of the piece that Lucier recorded in 1980. This is 'Music for Alpha Waves, Assorted Percussion and Automated Coded Relays'.

[Alvin Lucier, 'Music for Alpha Waves, Assorted Percussion and Automated Coded Relays' (excerpt), 1980]

[Steve Feld, 'Sardinian Tenores and Sheep bells' (excerpt), 2006, field recording]

Ah! There's the bell...

In the next programme we'll turn our attention to the extended voice.

[Gregorio Paniagua, 'Anakrousis', 1978]

¹ Some orchestra wind players have this skill, but it was not written for or exploited in an obvious way in the art music field until quite recently. It was jazz musicians and improvisers who took it up and probed it.

² Alpha waves are neural oscillations in the frequency range of 8-12 Hz and originate for the most part from the occipital lobe during wakeful relaxation with closed eyes. They are reduced with open eyes, drowsiness and sleep.

02. Selected links

Andrew Hugill

www.andrewhugill.com/manuals/violin/extended.html

Jesse Nolan

www.jessenolan.com/brasstech.pdf

Roland Kirk

www.rahsaanrolandkirk.net/

Luciano Berio

www.lucianoberio.org/en



[Derek Bailey]

Evan Parker
www.evanparker.com

George Crumb
www.georgecrumb.net

John Butcher
www.johnbutcher.org.uk

Michael Mantler
www.mantlermusic.com

Tim Hodgkinson
www.timhodgkinson.co.uk

Seijiro Murayama
www.seijiromurayama.com

John Cage
www.johncage.org

03. Notes

On length and edits.

The purpose of these programmes is to give some practical impression of the probes we discuss. This necessitates for the most part extracting short stretches of music from longer wholes, which, of course, compromises the integrity and disrupts the context inherent in the original works. I have also, on occasion, edited different sections of a longer work together, better to illustrate the points under discussion. So the examples played in the programmes should not be confused with the works themselves. Wherever the word (excerpt) appears after a title in the programme transcript, this indicates that what follows is an illustration, not a composition as it was conceived or intended. If something catches your ear, please do go back to the source.

Notification

If you want to be notified when a new probe goes up, please mail remegacorp@dial.pipex.com with subject: Probe Me.

04. Acknowledgments

With thanks to Bob Drake, Bill Sharp, Dave Petts, John Zorn, Vitor Rua, Charles O'Meara and Eddie Prevost.

05. Copyright note

2014. This text is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.

Ràdio Web MACBA is a non-profit research and transmission project. Every effort has been made to trace copyright holders; any errors or omissions are inadvertent, and will be corrected whenever it's possible upon notification in writing to the publisher.