

Curatorial > PROBES

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

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

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**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, The Science Group and p53 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 regularly 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...), The Artaud Beats and The Artbears Songbook. Adjacent projects include commissioned works for radio, various live movie soundtracks, *Signe de Trois* for surround-sound projection, the daily year-long soundscape project *Out of the Blue Radio* (for Resonance FM) and p53 for Orchestra and Soloists.**

He founded and runs the independent label ReR Megacorp and the art distribution service Gallery and Academic, is editor of the occasional sourcebook *Unfiled*, author of the book *File Under Popular* – and many articles and papers published in 16 languages. He was on faculty for a while at the Museum School in Boston and lectures irregularly on theoretical and music related topics worldwide. He has appeared on over 160 recordings.  
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# PROBES #26.2

## Auxiliaries

The PROBES Auxiliaries collect materials related to each episode that try to give a broader – and more immediate – impression of the field. They are a scan, not a deep listening vehicle; an indication of what further investigation might uncover and, for that reason, most are edited snapshots of longer pieces. We have tried to light the corners as well as the central arena, and to not privilege so-called serious over so-called popular genres. This auxiliary examines the fully integrated musical applications in rock, pop, classical, jazz and film scores of car horns, auto-parts, doorbells, scrap metal, asphalt, foghorns and power tools.

### 01. Playlist

[00:00 Gregorio Paniagua, 'Anakrousis', 1978]

[00:04 Magnus Lindberg interview in New York (excerpt), 2010]

The Finnish composer and pianist, Magnus Lindberg (b.1958) studied with Einojuhani Rautavaara, Paavo Heininen, Franco Donatoni, Brian Ferneyhough, Vinko Globokar and Gerard Grisey and became prolific, especially with large-scale works for orchestra. 'Kraft' (1983-5), the piece of which he speaks here, is massive (the score is a meter thick) and employs a great deal of scrap metal as well as the usual orchestral resources and speech.

[02:00 Henry Threadgill, 'Airtime', 1976]

Threadgill studied percussion, flute, saxophone and composition at the American Conservatory of Music. In the sixties, he was an early member of the famous Chicago-based Association for the Advancement of Creative Musicians, before going on to form a series of bands that steered jazz into unusual directions – while at the same time continuing to write for theatre, chamber ensembles and orchestras. He also invented the hubkaphone, featured here.

[02:45 Wendy Mae Chambers, 'Sleigh Bells' (excerpt), probably 2000]

The car horn organ heard here was built in 1983 by the American composer Wendy Mae Chambers, best known for her large-scale public works. She says she got the idea when she woke and heard a traffic jam on the Brooklyn Queens Expressway 'sounding like a Mahler symphony'. The organ is made from 25 assorted car horns linked to a homemade keyboard. It's driven by a car battery-charger. The horns are pitched and were retrieved through careful selection from various junkyard. It has appeared on commercials, at car shows, in galleries, clubs, TV talk shows, museums and miscellaneous outdoor events.

[03:54 Mark Weber and Beth Custer, unknown title (excerpt), 2011]

Mark Weber is a broadcaster in Albuquerque and a hubcap aficionado who plays a version of the hubkaphone, which consists of a number of hubcaps suspended on a wooden frame, played with mallets. Weber uses six metal hubcaps here, collected from the sides of various roads, and a seventh, made of plastic. Selection was made on the basis of sonority rather than pitch. In 2011 he released a CD – in a private edition of 200 – showcasing duets with a range of different musicians. Beth was one of them. A composer and clarinetist based in San Francisco, Beth composes widely for theatre, film, dance and television, as well as leading several ensembles including the Beth Custer Ensemble and the Clubfoot Orchestra. She also authored four musicals with writer Octavio Solis, and her work with sound artist Trimpin resulted in the 'Vinculum Symphony' – a site-specific, large-scale work that brought chamber musicians together with experimental instrument builders.

[04:38 György Ligeti, 'Car Horn Prelude', 1974-7]

The great Hungarian composer wrote his extraordinary opera 'Le Grand Macabre' between 1974 and 1977. It was a way-post in his change of compositional focus, and – appropriate to the subject-matter – full of quotations and pastiche. The



[Wendy Mae Chambers]

vast percussion section included – apart from a wide array of exotic noisemakers – a lot of everyday non-musical objects, often in multiples, such as music boxes, electric doorbells, a steamboat whistle, sirens, a large alarm clock, sand blocks, newspapers, a giant metronome, a wind machine, a paper bag, a saucepan, a tray of crockery, a pistol – and the 12 bulb car horns heard here – each tuned to a specific pitch – which open the opera’s first and second acts.

**[05:50 Paul Steffler & Don Wherry, ‘The Matthew’ (excerpt), 1997]**

From the first edition, in 1983, of the biennial Sound Symposium – the most imaginative of all North American contemporary (music) festivals – pieces had been specifically commissioned for the horns of the ships berthed in the harbour of St. Johns, Newfoundland. This piece, ‘The Matthew’, was written to celebrate the 500th anniversary of Cabot’s landing in the so-called New World – and the visit to the island of a replica of Cabot’s ship, the Matthew. In a thick fog some 80.000 people were serenaded by horns, a 21 cannon salute and a swirl of gunpowder, smoke and explosions. Hats off Paul and Don.

**[07:52 Yuliy Meitus, ‘Dnieper Water Power Station’ (excerpt), 1930]**

Yuliy Sergeievitch Meitus was a pianist in the First Cavalry and, between 1923-24, leader of the Kharkov Opera Theatre, and manager of the music section of the Proletcult Theatre. In 1920, he composed a work dedicated to the building of the Dnieper hydro-electric power station, at the time the largest hydro-electric plant in Europe. It was composed between 1929-30, in parallel with the building of the dam itself, using percussion to portray the different stages of construction: commencement, excavation of the foundations, installation of the pylons, and completion. This historic recording was made in France, in 1931, by the Orchestra Symphonique of Paris, conducted by Julius Ehrlich of the State Opera, Leningrad. Mossolov’s ‘Steel Foundry’ is on the other side.

**[08:51 Hal Hutchinson, ‘Wreckage Installations and Metalworks’, 2014]**

A British noise artist, who uses chains, pipes, sheet metal and scrap – dragged, smashed and beaten – layered into unrelenting sheets of sound, Hutchinson is highly prolific – and works under several names, to broadly similar effect.

**[10:41 The Nihilist Spasm Band, ‘Oh Brian Dibb/Destroy the Nations Again’ (excerpts), 1968]**

This freewheeling Canadian band, formed in Ontario in 1965, uses only modified and invented instruments. In fact, none of them can play any conventional instruments – and none of them plays in any other band. But, fifty years on, the ones left standing still get together in a bar every Monday to improvise – with a lot of amplification, because they like to be loud. Note the amplified kazoos. And they do regular gigs. They don’t tune their instruments to each other and they avoid regular meters, or trying to play in time. ‘The only requirement for a Spasm Band instrument is that it be completely flexible,’ founder member Hugh McIntyre wrote, ‘for example a piano produces the same note every time the same key is struck. This is not good... it imposes a scale.’

**[12:22 György Ligeti, ‘Door Bell Prelude’, 1974-7]**

Also from ‘Le Grand Macabre’.

**[13:04 Harry Partch, ‘Speaks’ (excerpt), 1958]**

A key American theorist, composer, instrument builder and pioneer of just intonation tunings, Partch incorporated shells, nose-cones, carboys, light bulbs, bottles, hubcaps and kitchenware into his orchestra. This excerpt is taken from the 1958 documentary *Music Studio*, directed by Madeline Tourtelot.

**[14:34 The Shangri-Las, ‘Leader of the Pack’ (excerpts), 1964]**

Written and recorded by producer and songwriter George ‘Shadow’ Morton (Jeff Barry and Ellie Greenwich also get composing credits) this classic song was a no.1 hit for The Shangri-Las, in 1964. Many stories are told about it but one of the group – they were two sets of sisters – is sure the motorcycle sounds were taken from an effects record.

**[16:48 Bill Milbrodt, ‘Interrupt’ (excerpt), 2009]**

In 1991, Milbrodt’s car, a battered Honda Accord (b.1982) with 200,000 miles on the clock was failing fast, so he thought he’d turn it into a band. Professional auto mechanics were hired to dismantle it, and the metal sculptor, Ray Faunce



[The Shangri-Las]

III, was commissioned to construct viable instruments from the parts – winds, brass, percussion and strings. There were ad hoc concerts in the years that followed until, in 2005, the Car Music Project was formally established. Instruments used are the exhaustaphone and the strutbone, both constructed from the struts, shifter linkage and exhaust system; the tank bass, which is made from the gas tank; the air guitar, a stringed instrument made from an air cleaner and brake and percarsion, a fifteen-foot diameter circle of racks from which springs, gears, windows, pistons, and crankshafts hang. In addition, there's a drum kit that uses the wheels and trunk; with cymbals made from floorboards.

**[17:43 Craig Richey, 'Ode to the New Ford', 2008]**

Hollywood film composer Craig Richey was commissioned to write this and asked Bill Milbrodt to repeat his earlier trick and supervise the building of 31 musical instruments from the dismantled parts of a new Ford Focus five-door hatchback, fresh from the production line with which to play it.

[www.youtube.com/watch?time\\_continue=18&v=w4y272N17J8](http://www.youtube.com/watch?time_continue=18&v=w4y272N17J8)

**[18:38 Asphaltophone, 'America the Beautiful', 2015]**

The principle – that bumps or grooves in a road when driven over will produce tones according to their spacing and the speed of the vehicle – was first realized in practice in 1995 in Gylling Østjylland, by two Danish artists, Steen Krarup Jensen and Jakob Freud-Magnus. In 2007, the Hokkaido National Industrial Research Institute, created their first Melody Road in Hokkaido (there have been 30 more built since) based on experiments by Shizuo Shinoda, who used grooves rather than raised areas to sound pitches. America followed in 2008, in Lancaster, California – they messed it up though, by miscalculating the spaces. This one, in Albuquerque, New Mexico was built by the National Geographic on Route 66 with the intention of controlling driver speed – or as they put it: 'fun experiments to change social behaviour'. For the Danes it was just fun, for the Japanese, it was to attract tourists but this one is a 'nudge' social control experiment. It uses metal plates covered with asphalt and rumble strips. You have to drive exactly at the speed limit or you can't hear it. Mexico and Korea also have singing roads.

**[19:08 Barbara Benary, 'Amtrack' (excerpt), 1997]**

The American composer and ethnomusicologist Barbara Benary (b.1946) is a specialist in Indonesian and Indian music and in 1976 with fluxartist Philip Corner and clarinetist Daniel Goode, she co-founded the innovative Gamelan Son of Lion – whose instruments she mostly built, like all American gamelan, incorporating hubcaps and scrap. Her major works include two shadow puppet operas: 'Karna' and 'The Story of Esther'.

**[21:22 This Heat, 'Metal' (excerpt), 1980]**

Formed in 1976, This Heat was an English experimental trio who mixed improvisation and sound manipulation with extreme precision and hypnotic song form - and whose concerts attracted experimental, punk and new-wave audiences alike. They worked day-in and day-out, when they weren't touring, in their own now legendary studio (Cold Storage) in Brixton – sited in a disused industrial meat refrigerator. They disbanded in 1982 but maintain cult status to this day. 'Metal' was recorded (and not released) in 1980 as a secondary experiment, outside their studio, using the scrap collected in the yard.

**[22:28 Test Dept., 'Statement' (excerpt), 1986]**

Formed in the London suburb of New Cross, in 1981, Test Dept. were famous both for their integral employment of scrap metal and heavy machinery – and for mounting large-scale multi-media events where they collaborated closely with other media and other disciplines. They were also strong in promoting highly politicised anti-Thatcherite positions. This track, for instance, from the 1986 album *The Unacceptable Face of Freedom*, features the voice of the striking Kent miner Alan Sutcliffe. *The Unacceptable Face of Freedom* was also the name given to the proto-industrial rave event that launched the Ministry of Power – a multi-sensory assault that was a radical art-political three-ring circus: Alan Sutcliffe in particular generating great flapping in the hen-coops of propriety by declaiming the Irish republican hunger striker Bobby Sands' text 'I Fought A Monster Today' – draped in a blanket. This was the best of Test Department, who on a musical level were pretty numbing and mindless, though their hearts were



[Barbara Benary]

definitely in the right place – and they got things done. The band split up in 1997.

**[24:10 Peter Griggs, 'Solar Winds' (excerpt), 1979]**

The American guitarist and composer Peter Griggs studied at the Juilliard with (amongst others) Wilfred Mellers (composition), Marion Brown (jazz improvisation) and Pandit Sharda Sahai (tabla). He then studied in India, Nepal, Indonesia and Japan and became a member of Gamelan Son of Lion in the late seventies, composing a number of pieces for them, including this one.

**[26:14 Raymond Scott, 'Confusion Among a Fleet of Taxicabs Upon Meeting With a Fare' (excerpts), 1936]**

Composer, bandleader and inventor Raymond Scott is one of the unsung heroes of experimental music. He was a child prodigy, playing the piano at the age of two. Then he went to the Juilliard, joined the CBS radio band and began to compose – this piece is from that early period. In 1936 he formed the Raymond Scott Quintette and sold a lot of records. Today much of his music is familiar to us because of its widespread use in cartoons; he never wrote music for cartoons, but his pieces from this period were so whacky and full of absurd tempi, superimposed melodies, additive rhythms and eccentric arrangements that cartoonists used it. In 1938 the Quintette became a big band and in 1941 he put the first racially-mixed studio orchestra together for CBS, before starting to concentrate on musicals. Out of the blue, in 1946, he founded Manhattan Research, the world's first commercial electronic music studio. With an Ondes Martenot, an Ondioline and a specially modified Hammond organ, the studio mainly produced futuristic sounds for advertising, and experimental snippets by Scott himself, most of which were not released. Then in 1949 he invented the Electronium – one of the first synthesizers – designed to generate original music via random sequences of tones, rhythms, and timbres. He also invented the Karloff – an early sampler, the Clavinox, a keyboard theremin and the Videola, a film/music editing aid. The first of the three-volume LP set *Soothing Sounds for Baby*, came out in 1964. Essentially, this was ambient electronic music way before its time. By then Scott was concentrating on electronic music only, and his newly designed programmable polyphonic sequencer landed him a job as head of Motown's electronic music R&D team. He retired a few years later, though he continued to write music until his death in 1994. This performance is by the Dutch Metrople Orkhest, founded in 1945 – which, like a classic Hollywood film orchestra, integrates a classical orchestra and a jazz big band.

**[27:26 Annie Gosfield, 'EWA7 1999 - Impulse Turbine: Inlet, Exhaust-combustion Chamber' (excerpts), 1999]**

The New York composer Annie Gosfield wrote 'EWA7' in 1999 as a commission from the Siemens Culture Programme – some countries and businesses still think art is worth funding... For weeks she collected factory samples, and then acquired two percussionists before settling into one particular factory – EWA7 – for the performance, which made use of all the machines and scrap metal on the premises. There's no recording of the original but here's a bit of later performance at the Huddersfield Contemporary Music Festival, in 2011.

**[28:49 Faust, 'A Hard Rain' (excerpts), 2007]**

The German band Faust released their first record in 1971, an amalgam of rock and electronics bound into an updated modernist collage-based aesthetic. Their performances have always included power tools, agricultural machinery, cement mixers and non-instrumental resources, though they don't make a fetish of it, they just include them. Two of the original members, still regularly performing, employ a power hammer drill, an angle grinder, a thermic chainsaw, a 1500 gram hammer and a regular sledge hammer on this updated version of 'A Hard Rain's a-Gonna Fall', recorded at a concert in France in 2007. The vocals are directed through a 200-litre oil barrel.

**[30:26 Gregorio Paniagua, 'Anakrousis', 1978]**



[Annie Gosfield]

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## 02. 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.

For your listening pleasure I have, as always, been cavalier in editing the tracks together, overlapping them, making sometimes hard-to-spot joins, etc. – so, for the sake of clarity, I have prefaced each track with its start time.

### Notification

If you want to be notified when a new probe goes up, please mail [remmegacorp@dial.pipex.com](mailto:remmegacorp@dial.pipex.com) with subject: Probe Me.

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## 03. Links

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## 04. Credits and acknowledgments

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