



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

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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, 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 #27

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. In **PROBES #27** we track the modern composer from the scrapyard to the office, then through the living room and into the kitchen in search of new musical resources – including scrap-metal, typewriters, vacuum cleaners, dot matrix printers, industrial quantities of paper, telephones, and the humble bean.

01. Transcript. Studio version

[Gregorio Paniagua, 'Anakrousis', 1978]

[Car crusher]

In America, around the end of the fifties, carried forward by gathering interest in the gamelan – the composer Dennis Murphy decided to build a set of his own – a process he documented in detail in his 1975 doctoral dissertation *The Autochthonous American Gamelan*, a text that quickly became a practical manual for other instrument builders... of whom it turned out, there was quite a number: by 1983, according to Barbara Benary, there were over a hundred imported or constructed gamelans in the USA. Unlike Harry Partch or John Cage, Murphy wasn't designing *new* instruments so much as trying to get as close as possible, using local materials, to instruments that already existed. And although he mostly cut and hammered his version out of rolled steel, he also repurposed coffee tins and orange juice canisters to serve as resonators, and used milk strainers, circular saw blades, hubcaps and pieces of scrap to substitute for other parts of the standard array – but it all winds up sounding like a gamelan. There are no recordings of Murphy's instruments. However, out on the West Coast, Daniel W. Schmidt was one of many who followed his example, and here's an excerpt from his 'And the Darkest Hour Is Just Before the Dawn', which was recorded somewhere between 1978 and 1982.

[Daniel W. Schmidt, 'And the Darkest Hour Is Just Before the Dawn' (excerpt), 1978]

On the East coast, the composer and founder of Gamelan Son of Lion, Barbara Benary, also built her own instruments on Murphy's model incorporating, in her case, a set of hubcaps as surrogates for various small gongs. What is especially interesting about Son of Lion is that they use their instruments in non-traditional and experimental ways; and they seem more concerned with probing the new sounds and techniques their instruments can produce than imitating the patterns and approaches associated with the traditional gamelan. Son of Lion was founded in New York, in 1976, by three composers: Benary herself, the clarinetist Daniel Goode and Fluxus alumnus Philip Corner. With a flexible constitution and a halo of affiliated composers, it remains to this day an independent composers' collective, answerable to no-one. Here's a short excerpt from Daniel Goode's composition '40 Random Numbered Clangs' – which makes much use of the hubcaps. Written for nine players, and a variety of different sized hubcaps, it's performed here by Gamelan Son of Lion.

[Gamelan Son of Lion, '40 Random Numbered Clangs' (excerpts), 1982]



[Gamelan Son of Lion playing in a loft in Soho, Manhattan in 2007]

3000 miles away, on the other side of the country, the American composer Lou Harrison and his partner William Colvig had premiered their set of home-built percussion in 1971; in their case not so much trying to replicate the gamelan as to design instruments with which to play – following their friend and fellow Californian, Harry Partch – in just intonation. In fact the first set of instruments they built was designed specifically for the premiere of Harrison's puppet play 'Young Caesar'. This required not only instruments tuned in just intonation – representing Western culture – but also instruments tuned pentatonically – to represent eastern culture. The name 'American gamelan' was just an afterthought, coined to distinguish *their* instruments from the traditional kind. Harrison – like John Cage, with whom he was closely connected – had already scored several works for scrap metal, brake drums, hubcaps, tuned bowls, sets of wine glasses and the like, so it was no great stretch when the American gamelan incorporated tin can resonators and steel conduit tubing, or a set of hanging dustbins and two oxygen tanks – which had to be played with baseball bats. Here's an excerpt from his 1973 composition, 'La Koro Sutro', written for American gamelan, organ, harp and a hundred voices.

[Lou Harrison, 'La Koro Sutro' (excerpt), 1973]

The American jazz saxophonist, Henry Threadgill, first studied percussion and then flute, saxophone and composition at the American Conservatory of Music. He was an early member of the famous Chicago-based Association for the Advancement of Creative Musicians in the mid sixties, before going on to form a series of bands that drove jazz into less familiar territories – at the same time composing for theatre, chamber ensembles and orchestras. He was also the proud inventor of the hubcapophone, an instrument that surfaces only now and then in his work, as it does here in 'Release', recorded in 1976.

[Henry Threadgill, 'Release' (excerpts), 1976]

Scrap metal and power tools were staple fare for the German percussionist Frank-Martin Strauss, later known as F.M. Einheit who, in 1981, joined the Berlin industrial band Einstürzende Neubauten – a band who made a pretty fearsome racket. For a while. But the truly hard-core junkyard band was the London Docklands based Test Department, or Test Dept., who emerged just as the post-war values of redistribution and reconstruction began to give way under the rule of Reagan and Thatcher to the eighties rehabilitation of greed and inequality¹. Test Dept., at least in their statements, declared war on all of this – forging their weapons out of scrap and industrial hardware – which they worked up into musical sculptures that they could beat the hell out of on stage. They quickly became the premiere team for large-scale, site-specific events – which started popping up in railway stations, abandoned warehouses and empty factories across the country. And they liked to collaborate – making collective work with filmmakers, sculptors, dancers and political groups. A Test Dept. concert was generally more cathartic than musical, and more to do with spectacle than nuanced commentary: it let the hammers and metal and deafening amplification do the heavy lifting. At root, the band offered corporeality and intellectual erasure – and, if considered musically – most of what they did seemed depressingly symptomatic of the thing they claimed to reject, except that – unlike, for instance, the Serbian group Laibach – there was no saving irony or sly wit to give it edge. Let me play two excerpts from Test Dept.'s fourth release, *Programme for Progress* – a video that contained early footage by band member Brett Turnbull as well as various film students from London's Goldsmiths College. This covers the period between the band's formation in 1981 and its release in 1984.

[Test Dept., 'Shockwork', 'The Fall from Light' (excerpts), 1984]

A few years later, in 1985, the Finnish composer, Magnus Lindberg, revived the tradition of bringing junk to the classical stage with his massive 'Kraft', scored for orchestra, electronics, five amplified soloists and a great deal of scrap metal. Every performance has to be preceded by a trip to the nearest junkyard so that the composer and assorted percussionists can pick out nice-looking objects to take back and hit. In the end, though, the music sounds rather familiar, and the scrap metal seems to play a largely cosmetic – or promotional – role, leaving a battery of more conventional percussion instruments to do most of the work. You



[Test Dept.]

might identify scrap metal in this excerpt, but it's pretty blended in. It may be that this piece has a different character in concert.

[Magnus Lindberg, 'Kraft', 1985]

Like circuit-bending, building instruments from scrap is now a commonplace – not just amongst the avant-garde but also in the mainstream entertainment industry. The long-running theatre show *Stomp*, for instance, is – at least in respect of its musical content – not so unlike *Test Dept.*, inasmuch as it showcases somewhat similar, muscle-driven, four to the floor rhythmic workouts... except that theirs are more artful and forego the deafening amplification and dark accoutrements. *Stomp* was the culmination of a long-standing partnership between drummer Luke Cresswell and theatre director Steve McNicholas – which had evolved through street bands and small-scale theatre work, into the presentation of large, ambitious outdoor events that all showcased one or other form of massed percussion. The theatre show was developed at their own initiative and expense in 1987 – as a linked collection of movement-driven musical routines in which all the sounds would be made using multiples of everyday objects – like boots, brooms, buckets, metal sheets, dustbins, wooden poles, chalk, sand, bananas, water or cigarette lighters. Thirty years on, it's still going strong and is now syndicated around the world. In the following excerpt, the cast are playing dustbins and lids while leaping around in a very tightly choreographed routine that seems to owe as much to Hollywood fight-direction as it does to contemporary dance.

[Stomp, 'Bins' (excerpt), 1987]

And here they are again, jumping and spinning while they hit lengths of plastic pipe on the floor, and against one another.

[Stomp, 'Pipes']

More elaborate, more musical and more radical is this extraordinary piece masterminded by the New Zealand composer Philip Dadson; first performed by his ensemble *From Scratch* at the Auckland Girls Grammar School, in 1982. Three identical sets of invented instruments were employed, each consisting of a large array of tuned PVC pipes – which are struck at the open end with what look like rubber paddles – and three matching sets of metal chimes and kerosene cans. Dadson, a founding member of the London Scratch Orchestra, has built a lot of instruments in his time, many of them from scrap or household objects. This piece, '*Pacific 3-2-1-Zero*', was conceived in 1981 as a protest against nuclear testing and waste dumping in Oceania. It's about twenty minutes long and has many sections. This is an excerpt from one of them.

[From Scratch, 'Pacific 3-2-1-Zero' (excerpts), 1982]

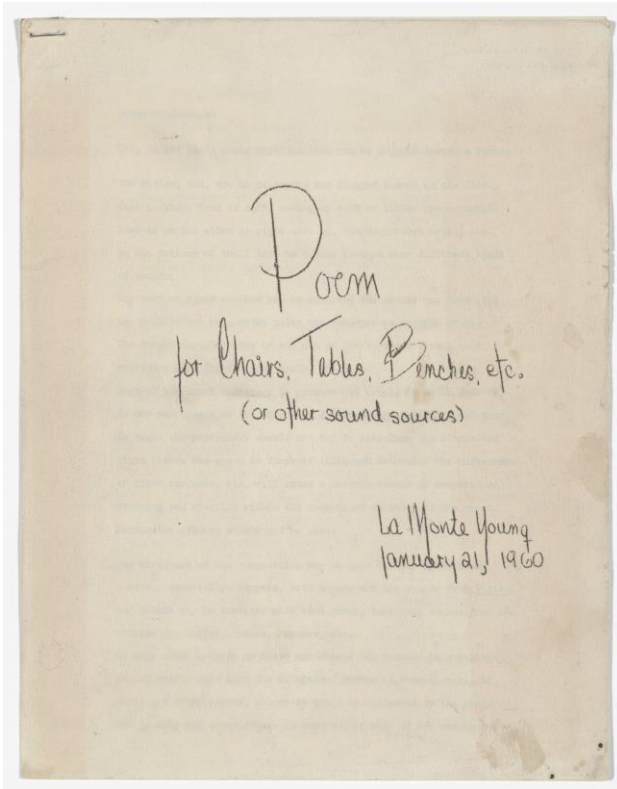
The American composer and microtonalist, Skip LaPlante, specifies pipes, Styrofoam, bits of wood, alarm bells, glass rods, cooking pots, juice jars, bottles and soda straws for this composition, '*Glyptodont*', which he wrote for his *Music for Homemade Instruments Ensemble*, in 1982.

[Skip LaPlante, 'Glyptodont' (excerpts), 1982]

Bands who make music with scrap are everywhere today; it's taught in schools. My generation made model trains with toilet rolls and egg cartons, now it's music with found materials. But there's an intriguing twist on the notion and, although it doesn't fall obviously into our brief, I think it's worth mentioning anyway. And it does make very instructive listening, especially if you concentrate on the *sound*, rather than the music.

[Footsteps]

In Paraguay, in 2006, an environmental engineer, Favio Chávez, and a rubbish picker, Nicola Gómez, founded the Recycled Orchestra of Cateura – Cateura being the home of the country's main landfill. They began by running a programme at the tip to show the workers how to make their own instruments out of the refuse, and how to play them: this means cellos made from tin cans and



[La Monte Young, 'Poem for Chairs, Tables, Benches, Etc. (Or Other Sound Sources)', 1960]

forks, or flutes made with spoons, buttons and old locks – orchestral instruments, quite difficult to copy. So just solving the problem of how to put them together so that they worked properly, took a lot of imagination and ingenuity. To construct an entire orchestra and teach busy rubbish-pickers to play difficult instruments to a fairly high level of competence is impressive. But that's what they did.

Unsurprisingly, the project soon became an inspirational news story and the subject of a film documentary – which in turn provoked a morally complex tangle of responses that were animated variously by politics, sentimentality and opportunism. The orchestra was invited to play at prestigious venues, not so much because they played Beethoven or Vivaldi particularly well, but because they played it with their fascinating junkyard instruments. And they play well enough. In fact, from what they earn, I'm sure they could buy new instruments – if music were the principle goal of their existence. But it's not. They didn't form to play their own music – and neither is theirs a story of new sonorities, since they mostly play traditional repertoire with some Paraguayan folk music and the occasional popular arrangement thrown in. Nor is this really a story of creative poverty; at least, they didn't fashion their instruments to play a music they wanted to play – like the spasm bands and jug bands of old – but rather were taught and inducted into the Western classical canon – for no less noble, I'm sure, but surely more impenetrable – reasons. This is a *project* – with complicated motivations. And it has succeeded greatly: the orchestra has appeared around the world and played to civilians, politicians, royalty and the pope. They even got to work on stage with the metal band Megadeth. So why do I bring this up? Because, although it's an unintended consequence, you will hear that there really is an extraordinary cumulative timbral quality to the sound of these instruments that gives voice to the materials from which they were made. There's something here if there were composers who *wanted* this sound and were ready to probe it more deeply, or if someone were inclined to commission new works specifically *for these sonorities*; I mean, to take these sonorities seriously. It's a unique opportunity. Here's the sound, animated in this excerpt by Beethoven's great workhorse, the Fifth.

[Ludwig van Beethoven, 'Fifth Symphony' (1804-1808), played by The Recycled Orchestra of Cateura (excerpt), 2014]

[Footsteps]

Junk either doesn't sound like anything in particular – or it sounds like noise – or it acts as a cheap substitute for something else; it's a material without evocative quotidian content and its use as customised percussion generally reflects that. But Mossolov with his metal sheet really did mean industry, workers, productivity and power; Satie and Cocteau really did mean the workaday world, with their typewriters, lottery machine and loaded pistol – and Avraamov's sirens, planes and ships-horns really did mean the October Revolution and Soviet power. So, with this in mind, we'll now open the door to the domestic world of useful and familiar things; items that can be picked up around the house; and which inevitably come freighted with *meanings* – because we use them all the time. Sound is important but so is the fact of creative subversion, of seeing the sculpture in the stone. So, let's just do a quick round of one, unexceptional, suburban house.

[Walking up gravel path, bing bong, opening door]

First out of the traps is La Monte Young, whose 'Poem for Chairs, Tables, Benches, etc.', written in 1960 for a Fluxus event, requires that all these things – and any other pieces of available furniture – be dragged across the floor, observing precise timings which have to be calculated in advance by each performer, using a telephone directory or a random number generator. This is a particularly well-recorded version; you'll struggle to make it sound this good at home.

[La Monte Young, 'Poem for Chairs, Tables, Benches, etc.' (excerpt), 1960]

Now let's pop into the office for a moment and have a word with the American composer Leroy Anderson; a student of Walter Piston and George Enescu, he was also a multi-linguist who spent the second-world-war in Iceland, working with American counterintelligence – still finding time to write and arrange highly



[Tan Dun, 'Paper Concerto', 2003]

popular light concert music. His *Blue Tango*, for instance, released in 1952, was the first instrumental record to exceed a million sales. And one year later, he wrote this: 'The Typewriter' – which you will immediately recognise. I'll play you the original 78 RPM recording, which is still the best.

[Leroy Anderson, 'The Typewriter' (excerpt), 1953]

And here's the not-so-light Polish composer Krzysztof Penderecki's take on the same instrument, which he included in the 32 strong percussion section of his 'Fluorescences', in 1962; an extraordinary work when played well, and well worth listening to in its entirety.

[Krzysztof Penderecki, 'Fluorescences' (excerpt), 1961/62]

The typewriter's nemesis, the dot matrix printer, was also the subject, in 1998, of a composition many times performed by two Canadians – the architect Thomas McIntosh and the composer Emmanuel Madan. In this piece, twelve dot matrix printers, each programmed with patterns of letters, and other characters calculated to produce rhythms and pitches, are networked to a co-ordinating computer.

[[The User], 'Symphony No.1 for Dot Matrix Printers. Part 16' (excerpts), 1998]

And here's a stack of paper to feed all these machines with – that's a material explored in some depth by the Chinese composer Tan Dun who says that, in the village of his youth, the local shamans used to use paper to make mysterious and expressive sounds. Dun, in the 4 movements of his 34 minute 'Paper Concerto', gives us the results of his considerable researches into different kinds of paper, and different ways of making them sound. I can only give an impression; it's a long and varied piece for an orchestra and three paper percussionists. In this excerpt the paper is first blown, like a reed or blade of grass, and then the whole orchestra turn their music pages in rhythmic unison while the main paper percussionist plays a huge strip of very strong paper – about a metre and a half wide and 10 metres high, suspended from the fly tower above the stage.

[Tan Dun, 'Paper Concerto' (excerpt), 2003]

And here, all three paperists are snapping small sheets of strong paper to make, first accents, and then a subversive jazz rhythm.

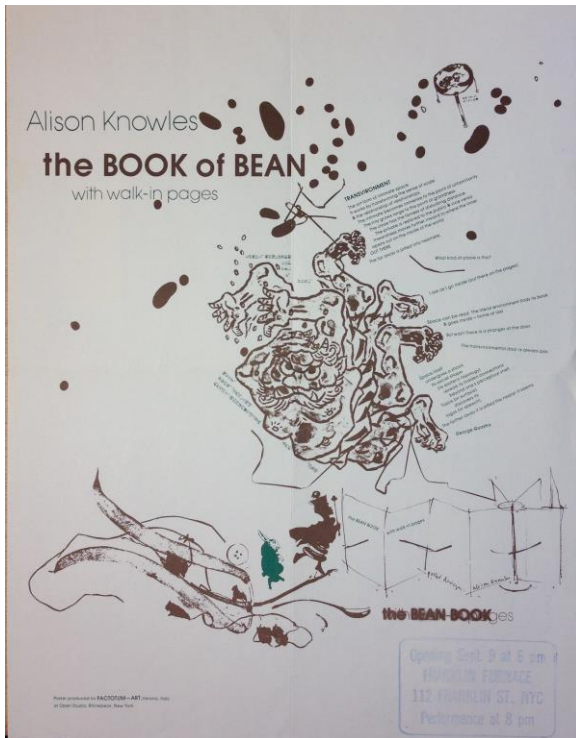
[Tan Dun, 'Paper Concerto' (excerpt), 2003]

Right next to the printer, here's the mobile phone. 'Dialtones' is a large-scale concert piece that's realised solely through the choreographed dialling and ringing of its audience's mobile phones. That is to say, the audience *is* the performance – although they don't actually control anything themselves. Before the concert, every attendee has to register their phone with administration – in exchange for which they are assigned seat numbers and new ringtones. In the course of the concert, their phones will be controlled by a small group of musicians, who dial them using customised hardware. Since everyone's exact location is known, there is total spatialisation – with every sound precisely positioned, counterposed and moved around the listening space. The performance lasts about 30 minutes, during which some 5000 calls are made. 'Dialtones' was composed for the Ars Electronica Festival in 2001, and is performed here by the composers, Golan Levin, Scott Gibbons and Gregory Shakar, using their audience's phones.

[Golan Levin, Scott Gibbons, Gregory Shakar, 'Dialtones' (excerpts), 2001]

OK, so a quick once around with the Hoover and we can leave. Vacuum cleaners as performing instruments do turn up now and then, but mostly in the context of comedy. In the following work, however, they're taken perfectly seriously. This is the American composer Annie Gosfield's homage to her youth – 'Electric Sweepers and Vacuum Creepers', written for the Ecstatic Music Festival in New York, in 2015.

[Annie Gosfield, 'Electric Sweepers and Vacuum Creepers' (excerpts), 2015]



[Alison Knowles, 'The Book of Bean', 1981]

I think we can give the kitchen a miss, don't you? We all know about pots and pans and food mixers by now. But a quick stop-off in the pantry might be in order.

Fluxus artists were famous for their use of old rubbish and found objects, but Alison Knowles just honed in on the bean. She wrote about beans, spoke about beans, made objects and installations with beans – and used them as her instrument of choice. Here's an excerpt from her *Sounds from the Book of Bean*, which was recorded in 1981 in the studio of the glass and soundscape artist, Annea Lockwood. In passing – since we are still in the pantry – I should say something about Knowles' most famous performance piece, 'Making a Salad' – which consisted of Alison making a vast salad, on a tarpaulin – and then serving it to the attending public.

[Alison Knowles, 'Sounds from the Book of Bean' (excerpt), 1981]

In the next episode, it'll be down the garden and into the toolshed.

¹ 'There is no such thing as society. There are individual men and women, and there are families... people must look to themselves first.'

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.

Notification

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

03. Related links

- danielgoode.com
- gamelansonoflion.org
- www.music.sisu.edu/music/contact/other-groups-and-links/lou-harrison-1917-2003
- discography.backstrom.se/threadgill
- testdept.org.uk
- www.fimic.fi/fimic/fimic.nsf/mainframe?readform&lindberg+magnus
- stomponline.com
- sonicsfromscratch.co.nz
- misucatskills.org/staff/skip-laplante
- www.recycledorchestracateura.com
- www.kylegann.com/lmy.html
- www.leroyanderson.com
- www.krzysztofpenderecki.eu/en
- transmediale.de/content/emmanuel-madan
- www.undefine.ca/en/artists/thomas-mcintosh
- tandun.com
- www.scottgibbons.org
- golanlevin.com
- anniegosfield.com
- aknowles.com



[Gamelan Son of Lion, with Barbara Benary]

04. Acknowledgments

Thanks to: David Petts, Annie Gosfield, Fred Frith, Jeff Breeze, Jonas Vognsen, Bob Drake.

05. Copyright note

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