



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.  
[www.ccutler.com/ccutler](http://www.ccutler.com/ccutler)

# PROBES #2.2

## 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. In this installment we look further at alternative tuning systems based on the naturally occurring harmonic series, opening up a potentially infinite series of customised Just Intonation scales.

### 01. Playlist

#### 01 Programme icon

02 Harry Partch, Documentary excerpt from *A New Note in Music*. Universal International News (undated, ca late fifties)

03 Harry Partch, *An introduction to Just Intonation*. Recorded in early 1967 for a presentation at an *American Society of University Composers Symposium*. A maverick and autodidact, Partch championed and theorised Just Intonation, starting from the laws of physics and his readings in the music of Classical Greece. His influence was immense, though not inside the mainstream musical establishment, and most of his music remains unperformed today for want of instruments – he made one set – and willing performers. Recording has been his immortality – a fact of which he was himself highly conscious when he founded his own Gate V label in the early fifties.

04 Gerard Grisey, 'Partiels pour 16 ou 18 musiciens', From *Partiels / Dérives*, 1981, 3<sup>rd</sup> movement  
Gerard Grisey (who studied with Olivier Messiaen, György Ligeti, Karlheinz Stockhausen and Iannis Xenakis) was one of the founders of the French school of spectral music – a genre honed at IRCAM in which compositional decisions were informed by sonographic representations and mathematical analyses of sound spectra, natural harmonics and noise. Today the term has expanded to include all music in which the essential focus is on timbre being structurally essential. The opening of 'Partiels pour 16 ou 18 musiciens' is built from an electronic sonogram analysis of the attack of a low E2 on a trombone, each partial assigned to a different instrument in such a way as to model the dynamic temporal evolution of the attack. Multiphonics, microtonal pitching and difference tones are also used throughout.

05 Tony Conrad, 'Pythagoras, Refusing to Cross the Bean Field at His Back, Is Dispatched by the Democrats' (excerpt), *Slapping Pythagoras*, 1995  
Best known as an experimental Filmmaker, Conrad is also a violinist – and an early champion of Just Intonation, to which he introduced La Monte Young when he was a member of Young's Theatre of Eternal Music in the early sixties. The whole piece lasts more than 25 minutes. [tonyconrad.net/index\\_fri.html](http://tonyconrad.net/index_fri.html)

06 La Monte Young, 'Trio for Strings' (excerpt), 1958. Just Intonation version prepared 1984-2001-2005  
A jazz musician, who studied electronic music with Richard Maxfield, attended the Darmstadt summer school with Karlheinz Stockhausen and became closely associated with Fluxus, Young settled into the minute exploration of the natural harmonic series in the sixties and hasn't deviated since. His earlier *Trio for Strings* is generally recognised as a landmark of early minimalism and drone music, and was revised in the eighties to be performed in Just Intonation. The recording, from which this extract is taken, is 54 minutes long.  
[www.melafoundation.org](http://www.melafoundation.org)



[Image still from the documentary *A New Note in Music*, ca. late fifties ]

**07 David Hykes, 'Kyrie Opening' (excerpt), *Soul Alone: The Art of the Solo*, 1996**

Founder of the Harmonic Choir, which draws heavily on Siberian and Tibetan overtone singing techniques, Hykes ploughs a lonely, but exquisite furrow. Like many we shall encounter, these innovations require exacting work and great dedication. Orchestras, instruments and choirs do not exist to reproduce their work, they can't fit the into the industrial reproductive machinery of classical music. [www.harmonicworld.com](http://www.harmonicworld.com)

**08 The Beach Boys, 'A Young Man Is Gone', *Little Deuce Coupe*, 1963**

New texts set to Bobby Troup's 'Their hearts were full of spring'. In the absence of equal-tuned instruments constantly muddying the water, unaccompanied Barbershop ensembles are a natural habitat for instinctive just intonation pitching – in which harmony is felt not calculated.

**09 James Tenney, 'Septet for Electric Guitars' (excerpt), *Just Intonation*, 1986**

Tenney (who studied with Chou Wen-chung, Lionel Nowak, Paul Boepple, Henry Brant, Carl Ruggles, Kenneth Gaburo, Lejaren Hiller and Edgard Varèse – and performed in ensembles with Steve Reich, Philip Glass, Harry Partch, John Cage and Fluxus alumnu) flew many probes; he will turn up again. Here he is working through the natural harmonic series.

**10 Jon Catler, 'Sleeping Beauty' (excerpt), *Queen of the Ogres*, ca. 1986**

Guitarist, instrument designer and Just Intonation proselytiser, Catler has also worked with La Monte Young (he's the featured soloist on the Gramavision double-CD *The La Monte Young and the Forever Bad Blues Band*).

**11 Erling Wold , *Tune for Lynn Murdock #2*, *Just Intonation*, 1986**

[www.erlingwold.com](http://www.erlingwold.com)

**12 Glenn Branca, 'Third Movement' (excerpt), *Symphony No. 3 (Gloria)*, 1983**

Like Charlemagne Palestine, amongst others, who use volume, mass and speed to excite strings into the natural amplification of higher harmonic resonances, Branca follows a similar procedure with massed electric guitars and unconventional tunings. The third leans heavily on the natural harmonic series. [www.glennbranca.com/bio.html](http://www.glennbranca.com/bio.html)

**13 Dan Stearns, 'Sigmata. Kietyux' (excerpt).**

A guitar quintet in seven-limit just intonation.  
<http://homemademusic.com/sigmata/index.php>

**14 Carola B. Anderson, 'Shibboleth' (excerpt), *Just Intonation*, 1986**

**15 Programme icon**

Gregorio Paniagua, 'Anakrousis', 1978

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## 02. Credits

Curated and produced by Chris Cutler. Engineered and mastered by Bob Drake at Studio Midi-Pyrenees, Caudeval, France. Recorded with Studio Projects C1 microphone, home-made mic preamp built by EM Thomas, designed by Yasushi Utsunomia and a home-made compressor by EM Thomas. Edited with a PC and Samplitude Pro version 12.

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## 03. Acknowledgments

With thanks to Bob Drake and Jon Leidecker.

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## 04. Copyright note

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