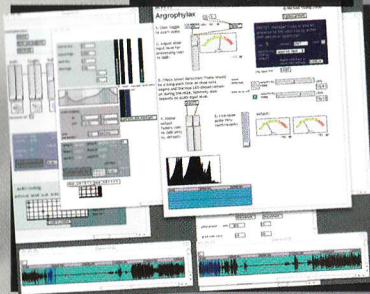


oboe +: berio & beyond

screenshot from the software written
by Michael Young in Max/MSP



Christopher Redgate, photo by Paul Medley

Christopher Redgate

oboe +: berio & beyond

Christopher Redgate - oboe/oboe d'amore
Julian Warburton - percussion, **Roger Redgate** - violin

Producer: Michael Young Recording Engineers: Ben Bayliss, Paul Archbold

Recorded at Coombehurst Studio at Kingston University, London, on the 13th to 15th July 2006. Edited and produced at the Stanley Glasser Electronic Music Studios, Goldsmiths College, London.

Oboe and oboe d'amore by Howarth of London

Publishers: Editions Henry Lemoine, Paris (*Ausgangspunkte*), ContemporaryVoices, c/o British Music Information Centre (*Recoil*), Universal Edition (London) Ltd assigned to Universal Edition, A.G. Wein (Berio). The other works are unpublished.

Cover picture: Music from Michael Finnis's *Pavasiya*
Cover and CD design by Steam
Oboe image courtesy Howarth of London

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email: mail@oboeclassics.com, web site: www.oboeclassics.com, which has an article by

Christopher Redgate on listening to extreme oboe music, plus details of other Oboe Classics titles.

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- | | | | |
|---|---|---|---|
| 1 | Christopher Redgate (b1956): 5:30
<i>'...sting of the bee...'</i> (improvisation, 2006)
(solo oboe)
Christopher Redgate | 4 | Michael Finnis (b1946): 14:35
<i>Pavasiya</i> (1981)
(solo oboe / oboe d'amore)
Christopher Redgate |
| 2 | Roger Redgate (b1958): 11:26
<i>Ausgangspunkte</i> (1982)
(solo oboe) Christopher Redgate | 5 | Sam Hayden (b1968): 9:33
<i>Recoil</i> (2001)
(oboe and percussion)
Christopher Redgate, Julian Warburton |
| 3 | Michael Young (b1968): 19:37
<i>Argrophylax</i> (2004)
(oboe and interactive computer)
Christopher Redgate | 6 | Luciano Berio (1925-2003): 8:00
<i>Sequenza VII</i> (1969)
(oboe and drone)
Christopher Redgate, Roger Redgate (violin) |

Total Time 68:58



Excerpts from Michael Finnis's *Pavasiya*

Oboe+: notes and track commentary by Christopher Redgate

French and German versions of these notes are available at www.oboeconcerts.com.
Follow the 'more details' link for this CD.

Oboe+ brings together a group of works for oboe that, with the exception of Berio's *Sequenza VII*, have not been recorded before. *Sequenza VII* was written at the end of the 1960s, a time that had seen a great deal of experimentation with composers exploring the wide range of new sounds available. The *Sequenza* is an exceptional work that brings together many of the sounds and techniques of the period and integrates them into a work of extraordinary beauty and power. Alongside the development of new sounds and extended techniques came music that demanded from the performer a great deal technically, musically and emotionally. The other works recorded here are fine examples of music from this genre.

Introducing the 'New Sounds'

The 'new sounds' can be divided into different categories.

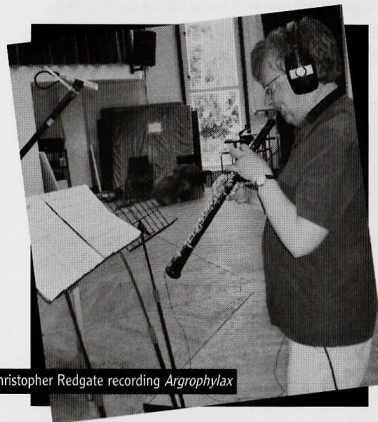
Firstly there are the sounds that are easy to make on the instrument. The only example on this CD is the use of key-clicks - this is simply produced by tapping the keys of the instrument hard enough to make a noise. Examples of this can be heard in *Argrophylax* at 5:10 or 16:18 - in both examples the sounds are amplified.

Secondly, there are the new sounds that are an extension of techniques that already exist: double, triple and flutter tonguing, range extension and quarter tones. A combination of double and triple tonguing can be heard in *Argrophylax* at 9:20, while flutter tonguing can be heard in *Ausgangspunkte* at 2:09. The extension of the range can be heard in *Ausgangspunkte* at 6:20. Quarter tones are used extensively in many of the works, but a particularly fine example can be found in *Pavasiya* at 4:17. *Sequenza VII* uses a few microtonal trills an example of which can be heard at 1:14.

Thirdly, sounds that take the oboe into new territory: multiphonics. The performer, through a careful use of exotic fingerings and careful control of the embouchure, creates several pitches simultaneously. Every work on the CD uses these sounds often in combination with other techniques. *Recoil* uses multiphonics extensively from the opening bar while in *Sequenza VII* the multiphonics are almost 'ghost like' at 6:50. You can also find examples of trilling between different multiphonics in *Ausgangspunkte* at 10:06.

Circular breathing, the technique which allows oboists to maintain very long phrases without seemingly taking a breath is also used - the most obvious example can be found in '...sting of the bee...'

One of the striking features of the music on the CD is the way in which the composers are thinking about and writing for the instrument, often creating a sound world that many would not relate easily to the traditions of the oboe. In a masterclass a few years ago I was demonstrating the highest notes of the instrument and was told that it 'didn't sound like an oboe'. A better comment might have been 'I have never heard an oboe sound like that before'.



Christopher Redgate recording *Argrophylax*

Virtuoso Music

While the other composers on the CD may not necessarily point to Berio as an influence in their work, the *Sequenza* is a good starting point for music that explores some of the most technically challenging music in the repertoire.

Berio had a great interest in virtuosity, which is expressed and explored in his series of *Sequenzas*, he emphasises however that this virtuosity is not simply that of fast fingers but a virtuosity of the intellect as well. Similar statements could be made about the other works on this CD. This is music that demands a great

deal of listener and performer alike. It is virtuoso music in the sense that there are many notes and great technical challenges, but unlike much music that could be placed under the banner of 'virtuoso', this music is neither frivolous nor is it easy listening. There is great passion here, focused intensity, intellectual depth; it is music that is exuberant, moving and challenging.

Michael Finnissy talks in his programme note for *Pavasiya* of stretching the 'virtuosic limits of the oboe(s) to the utmost'. This statement could equally be applied at different levels to the other works on this CD, each of which stretches not only the instrument but also the performer. During the course of these works you will hear most of the significant technical developments that have taken place in recent years.

Playability and performance

One of the aims I had in the recording was to maintain the physical nature of this music. An essential aspect of a number of these works is that they live on the edge of being unplayable. In live performance things do go wrong, notes are missed, the performer can sound as if he/she is struggling to play the works. In this recording I have tried to maintain this quality by not editing out some of the struggles and obvious areas where I find the works technically challenging.

Improvisation

The CD opens with one of my solo improvisations. Most of my recitals include improvisation not only in works that demand it, but also improvisations that I myself have developed over a period of time. Improvisation in the 'classical' world is seen usually to be the domain of the organist or of the expert baroque specialist, all of which I welcome. In my case however I perform solo (and sometimes duo/trio) improvisations to which I give names. Each improvisation has elements that I wish to explore. These can be technical ideas, formal ideas, pitch ideas etc, and the music is frequently a mixture of many different elements.

But improvisation does not stop here. Many of the works on the CD have some elements of improvisation. The Berio asks for an improvisatory approach to the placing of some of the pitches within a very strict framework - the performer's response to the written text is a vital part of the performance of this work. Young's work also has a great deal of improvisation both in terms of choice of pitches and the pacing of the work through to the response to the computer's input.

Track 1: '...sting of the bee...'; an improvisation for solo oboe by Christopher Redgate

The 19th century oboist Antonino Pasculli wrote a piece called *Le Api* (The Bees) [performed by Christopher on Pasculli, Oboe Classics CC2006]. It is a typical showpiece with lots of fast arpeggios and runs that requires circular breathing. '...sting of the bee...' is an improvisation that is in part based upon *Le Api* and is a homage to Antonino Pasculli. I have taken some aspects of the form of Pasculli's piece but instead of using fast arpeggios and other typically florid 19th century gestures common in the virtuoso music of the period, I have used a range of trills, the most common being the 'double trill'. On the oboe there are several keys that double each other, thus making some things easier to finger. They can also be used to create fast trills by alternating the fingers on each side of the instrument - thus the name 'double trills'. I also create other trill effects - there are some triple trills that can be produced and then many of these trills can be turned into multiphonics and so I have multiphonic trills. While performing these multiphonic trills I alter the embouchure pressure in order draw out the full range of the pitches possible from the fingerings. Part of my aim is to create different levels of sound that occur almost at the same time - a sort of polyphonic texture. This is in a sense a 21st century version of a 19th century virtuoso idea. The piece also uses circular breathing.

In order to maintain the integrity of this kind of performing activity the recording is just one take, as it would be in a concert performance.

Track 2: *Ausgangspunkte* for solo oboe by Roger Redgate

Roger Redgate wrote this piece for me in 1981-82 and it had its first performance at the Purcell Room, London on 15 April 1982. The composer writes about the composition of the work... "The main musical material is developed from a series of six archetypes which are heard at the beginning of the work (at 0, 3, 7, 10, 12 and 14 seconds) and are extended to control large scale formal units. The superimposing of these developmental techniques creates a music of extreme virtuosity which, however, is not considered to be of central concern to the work, rather a culmination of various extreme states of development of the materials."

Ausgangspunkte (points of departure) is a tour-de-force for the oboist, demanding a wide range of instrumental techniques. Even today, many years after its composition, I still consider this to be the most difficult work in the repertoire. From the outset the technical demands are enormous. Within the first ten seconds there are very wide leaps, a glissando, flutter tonguing, fast quarter tones and the range used extends from the oboe's bottom C to its very highest A. The music is very intense but at the same time has a certain excitement, a *joie de vivre*. Even what appears, on the printed page, to be the most relaxed section (5:16 - 8:26), where the tempo slows and the notes get longer, is in fact as demanding and tension filled as anywhere in the piece. Much of this section is written well above the official range of the instrument and there is a sense of 'will the oboist survive or will he fall off?' This sense of intensity, of 'will he survive' is very important in the work - there is risk here and danger. These ideas are more important and much more significant in the work than the idea of a performer demonstrating their technique and appearing to be in control of every aspect of the performance.

Ausgangspunkte has no improvised sections - it is a very detailed score where everything is exactly notated. However, because of the demands on the performer the work has an improvised quality - an interesting paradox. Roger's music has sometimes been likened to the improvisation of the pianist Cecil Taylor (see Christopher Fox's article in the New Grove Dictionary).

Roger has written three works for oboe of which *Ausgangspunkte* is the longest. The other works are *Éperons* for oboe and percussion and *Oboe Quintet* for oboe and string quartet.

Track 3: *Argrophylax* for oboe and interactive computer by Michael Young

Michael Young says of this piece "In myth, *Argrophylax* is a silver stone with magical properties found in the river Pactolus, bought by wealthy Lydians and placed at the threshold of treasure houses. If thieves ever tried to enter, it emitted piercing trumpet-like alarm sounds and, deranged, the would-be robbers would 'go over the cliffs' as if chased by guards. This story can be found in Concerning Rivers, a text attributed to Plutarch. The term itself does not exist outside of this source, but is close to other words; 'argos' (bright) and 'arguros' (silver). An 'argrophylax' was a rural guard in charge of farmlands where as an 'argurophylax' was a church father and keeper of silver. All these references have served as inspiration for this piece; although not 'programme music' as such, it intends to create strong musical evocations of these references: alarms and surprise, intensely shining objects, the swirling waters of a river, maddening confusion and flight.

"The oboist negotiates a "proportional" score with rhythmic and pitch freedoms while the computer processes the live sound in real-time. It employs spectral and granular techniques creating drastic timbral transformations, reiterations, webs of echoes and sheets of dense sound. The player has to react and adapt to these events. The system, written in Max/MSP (a software environment originally developed at IRCAM) constantly 'listens' to the oboe, and is at times empathetic, reactive or provocative, but generally unpredictable in behaviour."

This work is great fun to perform! The electronics are designed to produce 'composed' results and freer, unpredictable (and sometimes quite drastic) effects. As this contribution



differs on each performance there are always new challenges to meet. The oboe part is a mixture of specific text with a level of improvised freedom, particularly in the placing of phrases, timing of notes and some of the faster, double-tongued, passages. This allows the performer to adapt to the electronic environment; it is essential to listen and react, just as the computer does. The pacing and impact of the performance is a real collaboration between the human and computer performers.

Michael uses the entire range of the instrument and exploits sensitive and unstable playing techniques that the performer cannot always control directly. As the oboe is amplified in performance, otherwise weak or airy sounds have an original, strong, presence. Score instructions include 'shaky: allow to break up/reform', 'airy tone, allow multiphonic to speak at will'. In the second section the performer plays rapid notes in the lowest register but with an excessively high lip pressure: key clicks and muffled breath sounds can be heard, punctuated uncontrollably by pitches speaking with a sforzando attack. There are also dramatic and provocative instructions such as to play "beyond frenzy" or "as if decapitated".

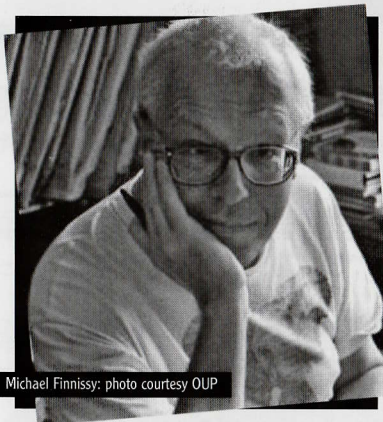
Michael wrote this work for me at a time when I was looking for works for electronics and also for longer works for the repertoire. It was first performed at a BMIC Cutting Edge Series concert in October 2004.

Michael and I are grateful to John Birchall for his additional research into the title and its historical sources.

Track 4: *Pavasiya* for oboe and oboe d'amore by Michael Finnissy

Michael Finnissy is considered by many to be one of Britain's most important composers, he is a pianist of enormous capacity, a profound intellectual and seminal teacher. He has contributed substantially to the repertoire of the oboe, writing solo works, works for oboe and percussion, works for oboe solo with ensemble and an oboe trio (three oboes).

Michael writes about the work, "*Pavasiya* is part of a projected trilogy (or maybe tetralogy) inspired by Hopi Indian creation mythology - in which the gods progressively BREATHE life into man (and thus



Michael Finnissy: photo courtesy OUP

provide the link to using wind instruments - the other completed piece is for solo flute).

In other respects the work, written for Chris Redgate, stretches the virtuosic limits of the oboe(s) to the utmost - not I think in the same spirit as an 'etude', but rather more as an extreme 'adventure' or act of reckless daring-do. The 'extreme' nature of which is also in recognition of the 'extreme' physical or mental disturbance at any moment of creation."

The piece uses both oboe and oboe d'amore and alternates from one to the other six times during the work - beginning on the oboe. It uses a wide range of contemporary techniques including flutter tonguing, quarter tones, lip glissandi, multiphonics and the extreme high range of the instruments. The multiphonics

don't appear until the very end of the piece (beginning at 11:11) and then are used on both the oboe d'amore and the oboe. This is the only time in Michael's music for oboe that multiphonics are employed. It is a particularly beautiful and unusual way of writing them as it combines standard pitches with multiphonics in trills, trills from one multiphonic to another and ordinary pitch trills.

In this piece there are timed silent sections of 13 seconds, 17 seconds, 12 seconds, and towards the end several smaller gaps which are written into the music as rests rather than timed in seconds. These silences are an essential part of the compositional shape of the piece - they also give the performer time to change from one instrument to the other. I like to imagine the gaps rather in the way of something that happens on a journey: I see an interesting view which is then obscured by something, when the view reappears it is from a slightly different angle and I gain a new insight into the view by the change. There is a sense that the music continues in the silences.

The work was first performed at the Purcell Room, London in February 1982.

low oct., high press. pitches speak at random

air tone: III speaks at will

52 *f* *p:(sfz)* *meandering, legato, flat, fluid* *pp:(mf/f)*

55 *p* *mf > pp* *mf > pp* *p* *mf > pp* *mf > pp* *pp* *mp*

58

61 *...into a rush!* *molto* *ff*

64 *ff* *ebbing away to shudders...* *explosive!!*

67 *p* *mf > pp* *mf > pp* *mf > pp* *mf > pp* *fff* *ff*

The musical score consists of five staves of music. The first staff (measures 52-55) features a melodic line with a dynamic range from *f* to *pp:(mf/f)*. The second staff (measures 55-58) shows a rhythmic pattern with dynamics *p*, *mf > pp*, *mf > pp*, *p*, *mf > pp*, *mf > pp*, *pp*, and *mp*. The third staff (measures 58-61) continues the rhythmic pattern. The fourth staff (measures 61-64) is marked *molto* and *ff*, with a note *...into a rush!*. The fifth staff (measures 64-67) is marked *ff* and *explosive!!*, with a note *ebbing away to shudders...*. The sixth staff (measures 67-70) shows a melodic line with dynamics *p*, *mf > pp*, *mf > pp*, *mf > pp*, *mf > pp*, *fff*, and *ff*.

Track 5: Recoil for oboe and percussion by Sam Hayden

Sam Hayden comments that "The title of this piece refers to recoil, in the sense of a sudden flinching or springing back in fear of something unpleasant or shocking, and also in the sense of the recoil of a gun that rapidly moves back after firing."

"In the back of my mind was a tribute to Iannis Xenakis in the year of his death. The untuned percussion instrumentation and the instrumental writing show intentional links with some of his works, especially *Rebonds*."

The oboe part is made up largely of multiphonics with melodic fragments, some of which are distorted by flutter tonguing. The part is performed mainly without vibrato giving a hard-edged sound to the oboe, which is quite stark. The work, with one exception, is marked fortissimo throughout.



Sam Hayden



Julian Warburton

About the percussion writing Sam states, "The percussion generally plays polyrhythmic pulses in combination with a series of rapid gestures. The oboe could be said to 'recoil' from the loud percussion attacks, either with rapid melodic figures using the full range of the instrument, or with multiphonics..."

Recoil was written for the London based duo 'New Noise' who premiered the piece during the 2001 Hoxton Festival, London.

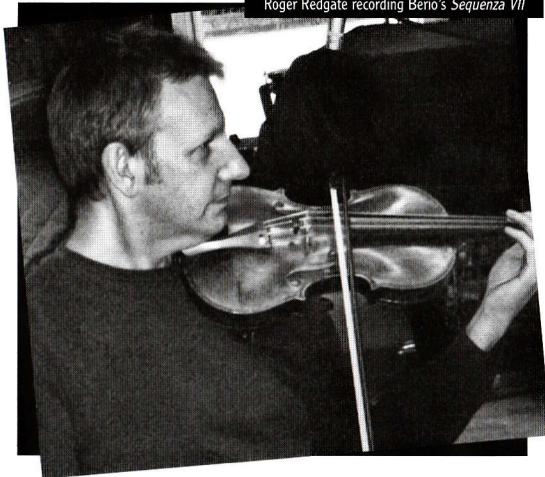
Track 6: Sequenza VII for oboe and drone by Luciano Berio

Sequenza VII was written for, and first performed by Heinz Holliger in 1969. The first performance however was of an earlier version of the work, which is now published as *Study for Sequenza VII*. The work has become a seminal piece for oboists. It is a model of composition and is beautifully written for the instrument. Two aspects of the work have been the focus of much attention: firstly, the *klangfarbenmelodie* of the opening line, (which is simply a series of b naturals that are performed with six different fingerings - giving a sense of colour change) and, secondly, the b natural that sounds in the background throughout the piece which gives a 'resonance' to the solo oboe part. This b natural can be performed using an electronic sound or a live musical instrument. I have chosen on this recording to use a live violin. In the recording the violin is played by Roger Redgate who performed in the room with me rather than being dubbed on afterwards.

The work uses a wide range of contemporary techniques, which, at the time of writing were still relatively new and little explored by composers. Berio uses these techniques in an exemplary fashion, thoroughly integrating them into the writing for the instrument and in service to his musical needs. Interestingly the only extended area that Berio does not use is that of range. By the 1950's a high 'a' had been written and in the 1960 composers were beginning to write up to 'b' - albeit only occasionally.

Berio has commented that there is an echo of the cor anglais solo from the third act of *Tristan* in this work. The reference is very oblique, as is often the case with Berio's musical references. The reference is

Roger Redgate recording Berio's *Sequenza VII*



to the use of the interval of the 5th that appears in the work and especially in the multiphonic fifths that appear occasionally.

There are a number of interesting interpretative issues that the performer needs to address, which are related to the extended techniques. Firstly, the multiphonic fifths: I perform off a copy from the 1970s which has the fifths written as 'perfect fifths' contemporary editions however have fifths that are microtonally altered – notating a wide fifth. This change is very significant because these fifths are notoriously difficult to

achieve on many oboes. Paul Roberts (an assistant of Berio for a number of years) comments that being a practical composer, Berio recognises the problem of reproducing these fifths accurately and offers some leeway for the performer.

Secondly, is the issue of 'overblowing'. Berio uses a symbol to indicate that he wants the pitches indicated by the symbol to be overblown. This indication often appears in a register or on pitches that will not produce any real effect. Oboists have over the years offered a number of different solutions to this problem, using fingerings etc. The version for saxophone even suggests growling down the instrument! I have chosen in this recording to take the 'overblow' instruction literally and let what comes from the instrument stand as it is – and so many of the 'distortions' are quite small. The various

versions of the *Sequenza* offer a great deal of insight into its performance. The printed text offers no linguistic instructions as to how to interpret the work but an examination of the *Study for Sequenza VII*, of *Chemins IV* (the version for oboe and strings) and the edition for Saxophone can shed a great deal of light upon the interpretation of *Sequenza VII*.

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Engineer Ben Bayliss

Acknowledgments by Christopher Redgate

The best way to make music is to make it with friends. The performers and most of the composers whose works are recorded here are good friends. (The one exception is Luciano Berio; I did not have the opportunity to meet him.) My thanks go to each of them for their support of this project and their skills in performance and composition.

On the production side - special thanks go to Michael Young for his hard work and time spent in producing and editing the recordings - thanks Michael.

Thanks also to Paul Archbold for his help with the recording and support of the project in general. Thanks to Ben Bayliss for his patience and skill as the recording engineer.

Thanks also to Michael Finnissy for the use of his music on the front cover and on page 3.

The recording would not have been possible without financial support, and so many thanks go to the following:

Goldsmith's College, London for financial support and the use of their studio.
Kingston University for the use of Coombehurst Studio at Kingston University.
The **University of Sussex** for financial support.

Lastly, special thanks to Celia, who has heard too many practice sessions.

Biographies

Christopher Redgate

For 25 years Christopher Redgate has specialised in the performance of contemporary music. He studied at Chethams' School of Music and the Royal Academy of Music where he won several prizes. As a soloist and chamber musician he has performed across Europe, the USA, Mexico, China, Canada and Australia, performing with many of the leading contemporary music ensembles.

Many composers have written for him including Michael Finnissy, Roger Redgate, Christopher Fox, James Clarke, Paul Archbold, Michael Young, Ignacio Baca Lobera and Fabrice Fitch and he has given the first performances of a large number of works.

He is active in teaching both masterclasses for oboists and workshops for composers. From 1986 to 1992 he was the oboe teacher at the Darmstädter Ferienkurse für Neue Musik and with his ensemble 'The Redgate Oboe Quintet' is currently a 'Musician in Residence' at Goldsmith's College, University of London.

Other recent recordings include Oboe Quintets and other works by contemporary British composers and Fernyhough's *Algebrāh*. He has recently written articles for Contemporary Music Review on *Sequenza VII*, contemporary approaches to practice and performance preparation and an overview of contemporary oboe techniques.

His current interests include developing solo improvisation in the concert hall, further extending the possibilities of the oboe, encouraging young composers and developing the repertoire of the instrument.

Julian Warburton

After leaving the GSMD in 1996 Julian Warburton has been at the forefront of a new generation of Percussionists. He is much sought after as a Soloist, Recitalist and Chamber musician.

He has given recital tours in Brazil, India and Switzerland and is a regular performer with many contemporary music ensembles including, Endymion, Nash, Expose, Composers, Apogee, Topologies, BCMG and the London Sinfonietta.

Julian broadcasts regularly on BBC Radio 3. Recent performances have included Joby Talbot's *Incandescence* and a Performance of Bartok's *Sonata for 2 Pianos and percussion*, and a critically acclaimed performance of Xenakis' *Rebonds* at the BBC Proms.

An immensely versatile artist Julian has also performed and collaborated with the Richard Alston Dance Company, the Corrs, V. Selveganesh and Ed Harcourt.

Roger Redgate

Roger Redgate was born in Bolton, Lancashire in 1958. He first studied at Chetham's School of Music in Manchester, and subsequently at the Royal College of Music where he won prizes for composition, violin, harmony and counterpoint. A DAAD scholarship enabled him to further his studies in Germany, studying composition with Brian Ferneyhough and Klaus Huber. From 1989 to 1992 he was Northern Arts Composer Fellow, and has lectured at Durham and Newcastle Universities. He was invited as guest composer and conductor at the Darmstädter Ferienkurse für Neue Musik in 1984, 1986, 1988, 1990, 1992 and 1994 where he received the Kranichsteiner Musikpreis for composition.

He is conductor and artistic director of Ensemble Exposé, with whom he performs regularly at European festivals and on BBC Radio 3, and is currently preparing a CD recording of recent works by Brian Ferneyhough. He has worked in the fields of jazz, improvised music, film and television (including programmes for the BBC and Channel 4), and performance art.

His compositions have been performed extensively throughout Europe, Australia and the USA and he has received commissions from the BBC, the French Ministry of Culture, the Darmstädter Ferienkurse für Neue Musik, the Venice Biennale and Ensemble 21 New York. He has published articles on music and culture, the music of Brian Ferneyhough and Michael Finnissy, including a chapter in the book *Uncommon Ground: The Music of Michael Finnissy*.

CD recordings of more of his works are available on the NMC and Edition Zeitklang labels and further recordings are in preparation due for release on the Metier and NMC labels.

Michael Young

Michael Young was born in South Shields, in the North East of England in 1968. He studied at Oxford University and with John Casken at Durham University, and was awarded a PhD in Composition in 1995. He now lectures at Goldsmiths College, University of London.

His music uses an eclectic range of conventional and electroacoustic resources. One strand of his music combines a freely expressive musical world with contemporary ideas, (e.g. *She Tells He Love While Half-Asleep*, 1991). He has also collaborated with jazz musicians and improvisers as a pianist, laptop musician and composer, and has created electroacoustic music for theatrical productions and gallery exhibitions (e.g. his surround-sound-scape for John Goto's *New World Circus*, 2006).

His more recent work focuses on instrument(s) + computer using Max/MSP. *Argrophylax* is from a series of works best described as "living" computer music. In all these pieces, performer(s) make music in collaboration with an intelligent music system - unique for each piece - designed by the composer. Other works include *Chatterbox* (2000) for flute, *ebbs-* (2005) for violin and 'cello and *au(ora)* (2006) for solo instrument, all with interactive computers. Michael is co-founder of the Live Algorithms for Music network, an organisation created in 2004 to bring together performers and researchers in music, cognition and software engineering. www.myoungmusic.com

Michael Finnissy

Michael Finnissy was born in South London in 1946. Having started writing when he was about four years old, he eventually went to the Royal College as a Foundation Scholar, and studied with Bernard Stevens and Humphrey Searle. He also studied with Roman Vlad in Italy.

He has performed, broadcast and taught across the world, currently holding a professorship at Southampton University.

Sam Hayden

Sam Hayden was born in Portsmouth in 1968 and studied composition with Martin Butler and Jonathan Harvey at Sussex University, Louis Andriessen at Den Haag Conservatorium and Brian Ferneyhough at Stanford University.

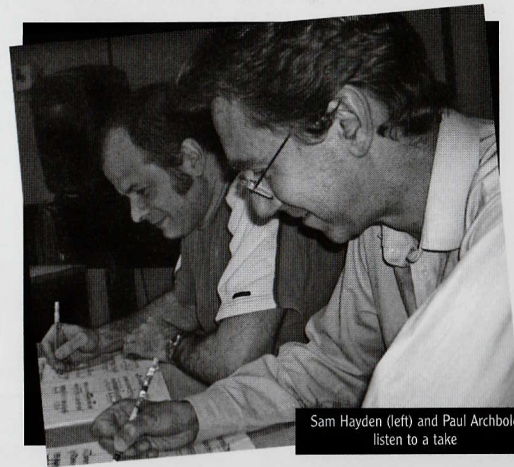
Collateral Damage (1999) for 14 instruments, commissioned for the Faber Music Millennium Series, was premiered by Kokoro in 2000, and subsequently performed by Ensemble Intercontemporain and the London Sinfonietta. *Sunk Losses* (2002) for orchestra won first prize in the Christoph Delz Foundation Second Competition for Composers and was performed by the Saarbrücken Radio Symphony Orchestra in May 2003.

Recent commissions include *Le Retour à la Raison* (2003) for solo percussion and live electronics, written for Miquel Bernat of Ictus, and *Emergence* (2004) for solo accordion, ensemble and live electronics, written for Frode Haltli and the Oslo Sinfonietta/NoTAM and performed at the 2004 Ultima and Huddersfield festivals. *Relative Autonomy* (2004) for ensemble, written for the London Sinfonietta, was performed at a BBC invitation concert at LSO St Luke's, London in 2005 and at the Berlin Philharmonie during MaerzMusik 2005. *Impetus* (2005) for solo percussion, written for Claire Edwards was premiered at the 2005 Huddersfield Contemporary Music Festival. Hayden is currently writing a new work for the BBC Symphony Orchestra.

Hayden's works have been recorded on the GROB, NMC, UTS and Divine Art labels. He is currently working as a lecturer in music at Sussex University and co-directs ensemble [rout].

Luciano Berio

Berio was born in 1925 in Oneglia, Italy the son of a musical family. He studied at the Milan Conservatoire from 1945 and in 1952 with Dallapiccola in Tanglewood. Berio was influential in the founding of the Studio di Fonologia, an electronic music studio in Milan and became, along with Maderna, a co-director. In 1958 he began his series of *Sequenzas* - the first being for solo flute. He died in 2003.



Sam Hayden (left) and Paul Archbold listen to a take