South Bank, London (1979-1988) – Australia, Belgium, Denmark, Finland, France, Germany, Holland, Hong Kong, India, Indonesia, Malaysia, New Zealand, Norway, Philippines, Sweden, Thailand, UK, USA – Performance Space, Sydney (1996-2001), Canberra (2002-2007), Sydney Conservatorium of Music (2003-)

An international sound and intermedia ensemble, creating, performing and producing new work, composed and improvised.

"phenomenal musicianship" (Sydney Morning Herald, 1995)
"cutting edge ... eclectic ... consummate" (BBC Radio 3, 1997)
"ever challenging" (Sydney Morning Herald, 2000)
"continue to push the parameters of music and multimedia…probing the nature of performance art" (Sydney Morning Herald, 2004)
"those doyens of computerised music" (Sydney Morning Herald, 2008)
John Shand (Sydney Morning Herald) on our recent CD release: 'a trail-blazer', 'exquisite', 'surprising and disquieting' (2013). The album received 5 stars in Jazz Journal.

SoundVision 2014
at the Recital Hall East, Sydney Conservatorium of Music

PROGRAM

Sunday 9th November 2014, at 17.00
austraLYSIS presents

Journeys and Constructions

Performers: Roger Dean, Andrew Milne, Phil Slater, Hazel Smith, Greg White.
Other contributors: Udo Rink (Germany); David Worrall (Australia/Germany).

austraLYSIS An international sound and intermedia ensemble, creating, performing and producing new work, composed and improvised. Director: Roger Dean. Go to www.australysis.com to see austraLYSIS's current and recent activities.

austraLYSIS incorporates LYSIS, the former European contemporary music group, founded in 1970 in the UK. Both were founded by Roger Dean (double bass, keyboard, improviser/composer, computers). LYSIS was co-founded with Hazel Smith (violin, text-creator), John Wallace (trumpets, composer), Ashley Brown (percussion), and Colin Lawson (clarinets). austraLYSIS has premiered, commissioned and/or created more than 150 musical compositions and new media works. It has appeared in most parts of the world, including Europe, Asia, North America, and Australasia. In 2010, for example, it presented its new work in Australia, Canada, Denmark, UK and US, and in 2014 in the UK and US as well as Australia. It has made more than fifty commercial sound recordings, intermedia and radio works, and web-pieces, and its broadcasts have been heard all over the world.

austraLYSIS is committed to both composed and improvised new music, sound art, and text and image intermedia work. It presented a concert devoted to Stockhausen on the South Bank in London in 1980, in association with the Philharmonia Orchestra and the composer himself, and it has given many performances of his works elsewhere—it has similarly focused on the work of Xenakis, Cage and Reich in presentations in Australia and elsewhere. We have also placed particular emphasis on work from Australia and the UK and collaborated with some of the most imaginative performers involved in contemporary music, sound and new media in Australia, including Keith Armstrong (intermedia artist); Simon Barker, Tony Buck, Ken Edie, Nick McBride and Daryl Pratt (percussion); Anthony Chesterman (oboe/cor anglais); Laura Chislett (flute); Elliott Dalgleish and Sandy Evans (saxophones, flute); Peter Jenkin (clarinets); Georges Lentz (violin); Stephanie McCallum (piano); Martin Ng (computers); Georg Pedersen (cello); Ian Shanahan (recorders); Phil Slater (trumpet and computers) and Greg White (computer interaction; sound design. Originally primarily a performance group, austraLYSIS is now primarily a creative group, producing electroacoustic and computer-interactive music and multimedia.

Thus, austraLYSIS frequently relates its sound works and performances to other artistic media. For example in the case of the visual arts, it has performed compositions by the artist Tom Phillips (UK); collaborated with Alan Davie (UK); created music related to the painters Fred Williams and Michael Johnson (Australia) and Frans Widerberg (Norway); and collaborated with Australian 3D artists such as Keith Armstrong, Sieglinde Karl and Darani Lewers. Similarly it has been been involved in developing music/movement works such as TimeDancesPeace with the theatre and dance group Kinetic Energy. austraLYSIS has also created a number of text and sound pieces which were commissioned by the ABC including The Afterlives of Betsy Scott (2007), The Erotics of Gossip (2001), Returning the Angles(1998), Nuraghic Echoes (1996), and Poet without Language (1991) — all by Hazel Smith and Roger Dean — Poet Without Language was the ABC's nomination for the Italia Prize in 1992. austraLYSIS collaborates with other ensembles, notably in 2010 (and again in 2012) with the enterprising vocal ensemble Halcyon, a fellow-member of the New Music Network. The combination of vocal and electroacoustic expertise allowed some rare and some premiere performances.

The breadth of style of austraLYSIS is illustrated on its many recordings and on those of its member musicians. Amongst the recent CD releases are Multi-Piano (Tall Poppies, Australia 2012) and Sonic Stones (Tall Poppies, 2006). The double CD Resounding in the Mirrors was released on the UK label Future Music Records (2001); the austraLYSIS Electroband's Present Tense is also on Tall Poppies Records, and another unusual double CD comprising two 60 minute improvisations, The Next Room, is available on Tall Poppies (TP 050) joining the earlier Moving the Landscapes (TP 007). In addition, Windows in Time (TP 039) represents a range of austraLYSIS's work, with music from Xenakis to Cresswell, as well as by members of the group. austraLYSIS has also contributed to Hazel Smith's sound and performance-text CDs, Poet Without Language (Rufus RF 005), Nuraghic Echoes

(Rufus). Amongst other releases are Walking the Faultlines, chosen for inclusion on the International Computer Music Association Cyberquilt CD-Rom, their first; Wordstuffs : The City and The Body commissioned by the Australian Film Commission for their Stuff-Art site; and Returning the Angles (CD-R of sound and 3D-interactive image, SOMA 787). One of austraLYSIS's recordings was listed as a Record of the Year, by Records and Recordings, UK, and several have been nominated for ARIA awards. Substantial works of audio and intermedia feature on the CD-Rom published as part of Hazel Smith's The Erotics of Geography: poetry, performance texts, new media works (TinFish Press, Hawaii, USA, 2008). More recently, austraLYSIS's new media collaborations with video artist Will Luers have been showcased at the Electronic Literature Organisation's New Media Arts show in West Virginia (US) 2012 and Wisconsin US 2014, and at the File Festival in Brazil 2014

austraLYSIS also creates jazz and improvised musics. The austraLYSIS Electroband is our unique forum for computer-interactive and networked improvisation, using both acoustic and electroacoustic sound, compositional patches written in MAX/MSP/JITTER, and sound processing both live and mediated by such patches. The Electroband, a morphing combination of Roger Dean, Sandy Evans, Phil Slater and Greg White, has developed since 1995 both as a hyperinstrument and as a polymorphic ensemble with orchestral and industrial sound capacities. The first austraLYSIS Electroband CD, Present Tense (TP 109), was released in late 1997; newer work is included on Resounding in the Mirrors, and on Sonic Stones. austraLYSIS made a major live webcast in the international 'Cathedral' 48 hour event, December 2001.

Fulfilling commissions, and engagements for arts centres, festivals, broadcasting, recording and for international touring are all recurrent austraLYSIS activities. It has completed ten overseas tours since 1990, and in 1992-3 performed all over Australia. In one such tour it was featured in three events at the leading new music festival in UK, Huddersfield, and on BBC Radio 3. It has previously been supported by the Australia Council as a 'Key Organisation' for its creative and performance work, and its work is presented by the ABC and other international broadcasters, as well as in multimedia formats. austraLYSIS is also concerned with educational work and other means of fostering appreciation. Examples of such work include Roger Dean's presentation of an ABC radio documentary on improvisation, and in 2010 two programmes for the BBC in London on Australian Jazz; his books Creative Improvisation (Open University Press, UK), Sounds from the Corner (about Australian contemporary jazz, Australian Music Centre), and recently The Oxford Handbook of Computer Music (OUP, 2009); Hazel Smith's book The Writing Experiment (Allen and Unwin, Australia), and their jointly edited book Practice-led Research, Research-led Practice in the Creative Arts (Edinburgh University Press, 2009).

For more about austraLYSIS, and open access sound and multi-media works, see our web-art page at www.australysis. com).

BOOKINGS and Enquiries to : austraLYSIS, PO Box 225, Milperra, NSW 2214, Australia. Telephone : + 61 2 9501 5399. email : dr.metagroove@mindless.com

Journeys and Constructions

The performance presents sound and audio-visual works on the themes of the walk, exploring and creating environments, and dislocation. It will pose the question: can we make a new environment? If so, will this make new sounds or do we have to make new sounds for it? The event includes premieres of several new works by austraLYSIS members and collaborators, together with important electroacoustic works by Xenakis and Dhomont, rarely, if ever, presented in Australia.

Performers: members of austraLYSIS. Roger Dean (director; piano, keyboards, computers, sound diffusion), Phil Slater (trumpet), Hazel Smith (texts), Greg White (computers, sound diffusion). Andrew Milne (guest performer, computers)
Other contributors: Udo Rink (Fraunhofer-Institut, Germany); David Worrall (Australia/Fraunhofer-Institut, Germany).

Program:

**indicates works receiving their premiere, and *indicates those apparently receiving their first presentation in Australia.

Weaving the Rugs (2014)**, for trumpet and algorithmic sound; by Roger Dean (7')
Diamorphoses (1957), acousmatic music; by Iannis Xenakis (7')
Bird Migrants 2 (2014)**, for speaker and electroacoustic sound; by Hazel Smith and Roger Dean (7')
Replicant 2 (2014)**, for saxophone and algorithmic processing; by Greg White (c.6')
Corpo Real (2014)*, audio-visual composition; by David Worrall and Udo Rink (5')

INTERVAL

Metaphorics 2 (2014)**, for voice and live coded sound; by Hazel Smith and Roger Dean (c. 5')
Here and There (2003)*, acousmatic music; by Francis Dhomont (10')
Serial Meantimes (2014)**, for piano and live algorithms, by Andrew Milne and Roger Dean (c.6')
An austraLYSIS *Bimblebox Anthology* (2014)**, for saxophone and acousmatic sound; by Roger Dean, Andrew Milne, and Sandy Evans (c.8')
The concert will conclude with a short tribute to the late trumpeter, Kenny Wheeler (5').

For those unused to the terminology above we offer some cues: *Algorithmic sound* refers here to the use of a computer program written by the composer that runs autonomously and generates a sonic stream. *Algorithmic processing*, on the other hand, indicates that the algorithm manipulates an incoming sonic stream and gives a new output. This may be without user interaction, or may permit it, in which case the result is closer to the normal concept of a *live algorithm* (see below). *Acousmatic music* is that which is entirely pre-recorded, and intended for projection with high quality audio equipment in a listening space; the word originated from the Greek usage, and implied that the performers were not visible. Here there are no performers: we merely control the progression of the pre-recorded material. *Live algorithms* are those that are designed for real-time manipulation as they run: in other words, they have parameters accessible to the user, who is expected thereby to influence the nature or progression of the algorithm. In contrast, *Live coding* is a process in which a performer writes new algorithmic code for the purposes of the ongoing piece; most commonly, as tonight, by line coding, in which computer commands are written as characters, and executed by line or groups of lines. Quite often, live coders choose to display the code as they write and/or execute it. The gradation between *live algorithm* and *live coding* is a continuum, and practitioners occupy just about every possible position on this continuum, often changing from performance to performance.

Notes on the pieces:

Weaving the Rugs (2014)**, for trumpet and algorithmic sound; by Roger Dean (7')

The title of this piece is an affectionate reference to Carl Ruggles, the pioneering American composer. The composed algorithmic piano part has harmonic reminiscences of his work, though addressing a more heterogeneous set of tonal and atonal implications. The algorithmic process generates the frame of the work, and besides four sections with normal piano tuning, there is a section of bell-like sounds that continually transform. These bell sounds employ my own unique microtonal tuning system, in which there are no octaves, indeed no repeating interval in the sense of the intervals between the successive keys of the piano (which have a constant frequency ratio to each other). Phil Slater improvises a melodic and timbral weave across the frame.

Diamorphoses (1957), acousmatic music; by Iannis Xenakis (7')

Program note by Makis Solomos:

'*Diamorphoses* provided an opportunity for Olivier Messiaen to render tribute to his former student: "The preliminary calculations of these huge spider-webs are transformed into a music delight of the utmost poetic nature." Messiaen was certainly thinking of the passage of glissandi between 6:00 and 6:16, but in essence, his comment could be applied to the entire piece. *Diamorphoses* is, in fact, based on a specific formal preoccupation: a sort of study of white noise and its graduations through the process of densification. However, the musical result is far from the genre of an "étude", due perhaps to its ternary form – not unlike many of Xenakis' instrumental works – which gives a certain "dramatic" effect. In another connection, the listener can easily distinguish the origins of certain sound sources used: earthquakes, a plane taking off, or bells.'

Bird Migrants 2 (2014)**, for speaker, electroacoustic sound and algorithmic image; by Hazel Smith and Roger Dean (7')

Bird Migrants 2 is a piece for voice and electronics. It uses transformed bird and environmental sounds, transformed voice samples and electronic instruments. The piece is based on the poem, *The Great Egret*, by Hazel Smith. The poem was inspired by the wedding scene in Theo Angelopoulos's film, *The Suspended Step of the Stork,* where a couple marry each other from the opposite banks of a river that flows through a divided country. The great egret can be seen to represent the tragic history of the country, but also the longing for flight and freedom. The poem was written for the Bimblebox project, a project which is being developed by musician Boyd and artist Alison Clouston (see below for more), concerning the 153 bird species that have been recorded on the Bimblebox Nature Refuge in central western Queensland. The home of these birds, and the ecosystems that support them, is in the path of a proposed coal mine.

Bird Migrants 1, a radio version of the piece commissioned by the ABC for the Radio National program SoundProof, can be heard tonight at 20.30, and is then available online as a podcast for several months.

Replicant 2 (2014)**, for saxophone and algorithmic processing; by Greg White (c.6')

Replicant 2 is the second piece in an ongoing series for acoustic performer and autonomous software. The *Replicant* series explores the shadow between the composer's idea and the performer's realisation, to borrow from an image from T.S. Elliot's *The Hollow Men – V*. Initial phrases from the performer are replicated, processed and projected into the performance space in a way that obliges the performer to comment on themselves. Each piece in the series introduces more algorithmic interaction between the live performer and the replicated textures.

net – path – flow, from *Corpo Real* (2014)*, audio-visual composition; by David Worrall (concept and sonification) and Udo Rink (visualisation) (5')

Program note based on information from the artists:

Sonification, the use of sound as a tool for investigation and understanding, is a long-standing application. Consider the auditing of accounts in ancient Egypt, and more recently the stethoscope and the Geiger counter. The Fraunhofer Institute in Germany has established an Experimental Audio Research group, from which this piece emerges. It is part of a project to investigate the use of sonification to reveal temporal structures in the data flow of communication networks, on which our contemporary society depends. These initial experiments take an artistic approach, arguably giving greater opportunity to explore the uses of sonification than would a purely analytical approach. Packet flow in the network at Fraunhofer is rendered by synthesizing sound at a very elemental level (no instrument recordings are used); the visualisation is then determined by the sound and its parameters, such as pitch, loudness, duration, apparent spatial location, etc.

net – path – flow provides the perceptualization of the rate of flow of data across the entire institute network. Pitch and timbre are used to represent the flow rate: the pitch rises and falls as the duration between network flow events increases and decreases; its melodic nature helps us to hear the structure of the temporal flow, which is being monitored 100 times slower than real time. The accompanying image contains two ring forms. The larger polygonal (green) form is chosen as one path through the network topography, and the smaller, wandering rings expand and contract in relation the intensity of the flow. The direction of this form is determined by the interaction of a set of complex rules.

Udo Rink was born in 1972 in Erfurt, Germany. He holds a degree in Media Computer Science and currently works in the IT department of the Fraunhofer IIS research institute in Erlangen. For the last 20 years, he has created photographs and motion graphics. In more recent years he has also created generative designs and programmed media art installations, using such tools as Processing and VVVV.

For brief biographical information about David Worrall, see the austraLYSIS members' information below.

Data filtering for this work was done by Wolfram Nitsch.

INTERVAL

Metaphorics 2 (2014)**, for voice and live coded sound; by Hazel Smith and Roger Dean (c. 5')

Historically, metaphor —seeing one thing in terms of another — has been one of the main tools of poetry. Attitudes towards metaphor have been very important in contemporary poetry and poetics, but have also caused divisions in the poetic community. Some poets have clung to metaphor as a traditional mainstay of their craft. Others have reacted against the idea of metaphor because they felt that it was always working at one remove, or was being used to stitch the different parts of a poem together into a fabricated unity. As a result these poets have tried either to excise, question or complicate metaphor.

The first section of *Metaphorics*, 'metaphor', takes a stance to writing a poem adapted from contemporary conceptual poetry. It was written by cutting and pasting from the Internet — with some modification— statements about metaphor; it also includes two rather grotesque metaphors taken from student exam papers quoted on the web. The other two sections, 'the unanswered question' and 'windfall', consist of a poem and a poetic monologue. They employ a variety of different kinds of metaphor, but in ways that are somewhat unorthodox.

Metaphorics reacts against the idea that metaphors in a poem should be consistent and unified; the metaphors keep changing or dropping out, and there is no obvious through-metaphor (except, perhaps, metaphor itself).

The live-coded sound, using the platform Gibber by Charlie Roberts (University of California at Santa Barbara) here involves samples from a recording of parts of the text,

together with electronic and possibly sampled instruments.

Here and There (2003)*, acousmatic music; by Francis Dhomont (10')

    (Notes on tonight's Dhomont piece and on the composer, are based on those accompanying his empreintes DIGITALes CDs, particularly his own comments on the piece, from the CD on which it appears … *et autre utopies*.)

    Of the CD as a whole, Dhomont writes: Utopian, these aural images surely are — not in the political sense of the Ideal City, but in the etymological sense of ou-topos: belonging to no specific location, except for imaginary territories. … these sonic structures attempt to avoid traditional music codes.

    Of the piece itself (dedicated to Darren Copeland and David Eagle) he continues: The title could have been "Spatial Planes", since the piece's intention mainly presents different models of sound progression within three-dimensional space. It is therefore a study. But a very liberal study that does not try to demonstrate, or rule out lyricism. Formally, it is presented like a suite of short pieces aimed at the various perceptions of spatialised sounds. The listener will be able to identify various types of spatial gestures — moving/still, punctual/plethoric, near/far — as well as acoustic images playing with localizations, trajectories, masses and sound textures. However this principle of articulation, even if it provides the focus of the piece, does not have to hinder the simple pleasure found in aural immersion.

Biographical note on Dhomont:

    Francis Dhomont was born in Paris in 1926. He studied with Ginette Waldmeier, Charles Koechlin and Nadia Boulanger. In late 1940's Paris he discovered with magnetic wire what Schaeffer would later call "musique concrete", and conducted solitary experiments with sound recording as musical source. Later he ceased instrumental writing and focused exclusively on electroacoustic composition. He has a continuing interest in morphological interplay, and the ambiguities of interpretation of sounds. He has received numerous awards and prizes, especially since 1988.

    Since 1978 he has divided his time between France and Canada, and taught at the University of Montreal from 1980-1996. He now spends his time entirely on composition and theory.

Serial Meantimes (2014)**, for piano and live algorithms, by Andrew Milne and Roger Dean (c.6')

    Andy Milne is a self-taught musician (principally keyboards) hailing from the UK. He has played in experimental post-rock bands exploring freely-improvised and pre-composed music (soundcloud.com/andrew-j-milne). He is also a builder and designer of computer music interfaces and generators. He has a passion for microtonal music, and has developed a large suite of software (www.dynamictonality.com) that facilitates the composition and performance of such music. Andy has recently been exploring the application of well-formed scale theory (pitch) to rhythms (time), and will be using his MeanTimes rhythm generator, recently developed in conjunction with Roger at MARCS Institute, University of Western Sydney. MeanTimes produces an infinitely variable family of deeply nested rhythms: some of which have simple regular pulses; some of which have no underlying pulse. The latter may still 'groove' deeply, but contrary to expectations, it is sometimes impossible to tap your foot along with them.

    In this performance, MeanTimes will algorithmically provide the rhythmic impetus for the pitches generated by Dean's Serial Collaborator algorithm, heard at some previous austraLYSIS events. The resulting melodic and rhythmic materials provide the seed for Roger's real-time improvisation at the piano and Andy's real-time manipulation of the two (live algorithm) generators. Here we will modulate between rhythms with simple unambiguous pulses and those with no discernible regular pulses. We progressively ascend through a variety of rhythmic forms until we reach the most irrational and irregular possible

rhythm: one where all different beat durations are related by the golden section.

The austraLYSIS Bimblebox Anthology (2014)**, for saxophone and acousmatic sound; by Roger Dean, Andrew Milne, and Sandy Evans (c.8')
      This is part of a project initiated by artist Alison Clouston and musician Boyd. It included the commissioning of musical bird 'calls' from 153 musicians: one for each of the birds recorded in the Bimblebox reserve in the period 2003-2013. The reserve is now under the threat of erasure by coal mining. Each contributor essayed an image of a specific bird, without necessarily using any recordings of the bird, rather primarily relying on ornithological text descriptions of it. All composers were also invited to create a call for the Australian Bustard (*Ardeotis australis*). For this presentation Roger Dean has made a montage of calls by our three participants, together with some electroacoustic processing, in 4 Channel sound; Sandy will also provide live saxophone. Sequence: RD: Pheasant Coucal; SE : Singing Bushlark; AM: Red-backed Fairy Wren; RD/SE, Australian Bustard.

The concert will conclude with a short tribute to the late trumpeter and composer, Kenny Wheeler.

Further information/materials: www.australysis.com.
Many austraLYSIS commercial recordings are available for digital download or CD purchase at the Australian Music Centre site, and on iTunes, Amazon, CD-Baby, and Spotify.

After the event: please stay around for a while, and talk with the members of austraLYSIS and fellow audience members. Stay in touch via our website, where there are often new works free-to-listen or -view; and see below for details of membership of our association, austraLYSIS Productions Inc.

SPECIAL thanks to the chairperson of austraLYSIS Productions Inc, Ms. Darani Lewers, AM. austraLYSIS would also like to acknowledge the major contribution of the MAX/MSP/Jitter software collaborators, including Miller Puckette and David Zicarelli; and of the Python language software community. Thanks also to Charlie Roberts, and the live coding community at large. Their efforts and the public availability of their software tremendously facilitate creative work such as ours.

About the members of austraLYSIS appearing or represented in this event:
Roger Dean (Director, composer/improviser; keyboards, computers, real-time animation). Roger is a composer-improviser, and pianist/computer performer. He was based in London (UK) until 1989, when he migrated to Australia. He has worked extensively on the European music scene, as well as in Asia, Australasia, and North America. He studied the double bass with Eugene Cruft and was Principal bass in the National Youth Orchestra (UK). He gave a solo performance at the Wigmore Hall at the age of 15. He played bass with European groups such as the Berliner Band, London Sinfonietta, Music Projects/London, Nash Ensemble, Sonant, Spectrum, London Jazz Composers' Orchestra, and the BBC Symphony Orchestra; and subsequently with the Australian Chamber Orchestra. He has given premieres of many works for solo double bass (e.g. Bush, Bussotti, Feldman, Ferneyhough, Finnissy, Henze, Holmboe, Kagel, Knussen, Lovendie, Nicholson, Wallace, Xenakis) and many have been written for him. He has also been keyboard player with other ensembles (such as Spectrum and the Wallace Collection) and has worked extensively as accompanist with Hazel Smith (violin), John Wallace (trumpet), Peter Jenkin (clarinet) and also with Gerald English (tenor). He was the keyboard player with the eminent European jazz group Graham Collier Music between 1974 and 1988, rejoining them regularly since. After Graham's death in 2011, he performed in a tribute concert at the London Jazz Festival(2012) and in the final recordings of Graham's last two major pieces (*Luminosity,* recorded 2013, released 2014). He has played both bass and piano with Sydney Alpha Ensemble, and was amongst their

featured soloists in 1995. Dean has collaborated with numerous musicians in Australia and overseas, across a very wide stylistic range. He formed the European group LYSIS in 1970, and it became austraLYSIS in Sydney.

Dean has composed extensively, particularly for jazz and improvising ensembles: one of his extended works was a feature for Ken Wheeler (trumpet/flugel) and an enlarged Lysis, and is on Lysis Plus (Future Music Records, UK). With Hazel Smith, he has created numerous performance works that employ text, such as Poet without Language, Silent Waves, Nuraghic Echoes, and The Afterlives of Betsy Scott, recorded for the ABC, and more recently Ubasuteyama, Disappearing and The Blue Bus, available on the Internet. His compositions include Elektra Pulses for string quartet (with computer tape), and Raising not Climbing, a solo cello work. His It Gets Complicated for piano/speaker has been recorded by Michael Kieran Harvey, and released on Red House Records (cd RED 9401). His computer music has been presented at the International Computer Music Conference and in many other contexts. His largest commission to date, SonoPetal, was from the Australian Chamber Orchestra, supported by the Australia Council, and he conducted it around Australia in 1996. He also has completed commissions from Peter Jenkin, Rob Nairn, b'Tutta, Sydney Alpha Ensemble and the Wallace Collection, and recently provided sound for an interactive multimedia installation, Finitude, by Keith Armstrong and collaborators. His scores are available through the Australian Music Centre, and published by RedHouse Editions, La Trobe University Press, and in many books. Since 1998 much of his work has been for CD-Rom and for the web (He has developed techniques of animation, first using VRML and now Jitter, which establish extensive algorithmic interaction between sound and image generative components of real-time performance works. Since 2011 he has collaborated with renowned installation artist Keith Armstrong, and with American video-artist Will Luers.

Amongst his more than 50 recordings are The Wings of the Whale (with Lysis; Soma 783; now available on Spotify, iTunes,Amazon and at the Australian Music Centre), Moving the Landscapes (with austraLYSIS; Tall Poppies 007), Xenakis Epei with Spectrum on the Wergo label, and music of American 'Bang on the Can' initiator, Michael Gordon, on CRI.

Roger is also intensely active in research. His book Creative Improvisation was published by Open University Press (UK/US, 1989), and is a highly theorised yet practical book on improvisatory techniques. His companion analytical volume, New Structures in Jazz and Improvised Music Since 1960, was also released by them, in 1992. Improvisation, Hypermedia and the Arts since 1945, written in collaboration with Hazel Smith, analyses and theorises improvisation in the arts besides music (Harwood Academic 1997). His book (with CD-Rom) Hyperimprovisation: computer-interactive sound improvisation was published by A-R Editions (USA; 2003), the leading specialist publisher on computer music. Since then he has published on Australian Jazz recordings (with the Australian Music Centre), and has edited the Oxford Companion to Computer Music (2009), and co-edited Practice-led research, research-led practice in the Creative Arts (with Hazel Smith; Edinburgh University Press 2009). Dean is a subject in Jazz: The Essential Companion, Jazz : the Rough Guide and the recent Grove Dictionaries of Music, and of Jazz. His work, and that of austraLYSIS, is reflected in more than a dozen index entries in the 2003 Currency Companion to Music and Dance in Australia (eds. John Whiteoak and Aline Scott-Maxwell). Dean is the author of numerous research articles, originally in biochemistry, and since 2006 in music cognition and computation. He is currently also co-editing the Oxford Handbook of Algorithmic Music (with Alex McLean, UK).

Besides his musical activity, Roger has had a long career as research biochemist, becoming a full professor at the age of 35 at Brunel University, UK. From 1988-2002 he was foundation director of the Heart Research Institute, Sydney, and from 2002-7 he was the Vice-Chancellor and President of the University of Canberra, Australia. In early 2004, he formed the Sonic Communications Research Group (SCRG) at the University, together with Hazel Smith, and other research colleagues. In 2007 he joined the MARCS Institute, University of Western Sydney, as a research professor in music cognition. His research

career outside music is summarised in the Wikipedia article on him (Roger Dean, musician).

Sandy Evans (saxophones, composer)
After studying at the NSW Conservatorium Sandy played with the Bruce Cale Orchestra, the KMA Orchestra, and Great White Noise. She formed the important group Women and Children First in 1982–3, which recorded, and toured extensively in 1984–5, reaching most parts of Australia. Later she played at the Esso Australian Jazz Summit with her trio, and joined the group Ten Part Invention with which she still plays. In 1987 she worked in the UK, and co-led the saxophone quartet SAXTC with Scottish saxophonist Tony Gorman, while also working in a rhythm and blues band and on Scottish TV. She currently co-leads the band Clarion Fracture Zone, and plays with many other groups including the catholics. She has composed two suites for Ten Part Invention, and much material for her own groups. She also composed and performed music for the dance/performance piece Walking Long Country and for the Australian Art Orchestra. She has been acclaimed as one of the leaders of a new generation of Australian jazz musicians, and her recordings, such as Blue Shift (an ARIA award winner) with Clarion Fracture Zone have been extremely well received. Subsequent Clarion Fracture Zone releases have appeared on Rufus records, and Sandy is also to the fore on most austraLYSIS recordings including Moving the Landscapes and The Next Room (Tall Poppies). Outside Australia she has performed in Europe, India and Canada, and with austraLYSIS in New Zealand. She was extensively featured, in interview and performance, in the TV series Jazz Az Now on Australian jazz, and in the films Beyond El Rocco and Dr Jazz. In 1993, she was commissioned by austraLYSIS to produce with Hazel Smith the sound-text work Black Desert, presented in the 1993 season, and broadcast on ABC radio in December 1993. In 1995 she became a 'Young Keating' fellow. In 2000 she performed at the opening ceremony of the Paralympics in Sydney, and was featured as a soloist on the roof of the Sydney Opera House at the dawn of the new millennium playing Ross Edwards' 'Dawn Mantras' to a worldwide TV audience. She dueted with drummer Han Bennink at the Wangaratta Jazz Festival, 2000, and is a member of Waratah, an innovative trio of saxophone, koto and percussion. She composed Testimony, a major music theatre work for ABC Radio Drama. This piece is a tribute to Charlie Parker and features the poetry of Yusef Komunyakaa. It has been adapted and evolved for performance by the Australian Art Orchestra during the Sydney and Melbourne Festivals in 2002. Sandy was the winner of the Inaugural Bell Award for Australian Jazz Musician of the Year (2003). Sandy has recorded with her own trio, of which the first CD release was Not in the Mood (Newmarket Records). Currently she also has a larger ensemble Gest8, colead with Tony Gorman, and involving Greg White on computer, as well as Satsuki Odamura on koto. It released its first CD on Tall Poppies in 2007. Sandy gave the Peggy Glanville Hicks annual lecture on behalf of the New Music Network in late 2008. The most recent releases with her own groups are The Edge of Pleasure (an EP with her Trio), a sextet album When the Sky Cries Rainbows and Cosmic Waves, an album collaborating with Indian musicians, and including some continuously transforming 'drone' sounds specially created for her by Roger Dean. In 2014 she received a doctorate for her research and creative work on the interface between Jazz and Indian music. For more information: see her own website.

Phil Slater is a trumpeter and composer based in Sydney. He is the leader or co-leader of several prominent Australian groups, including Band of Five Names and the Phil Slater Quartet. He has performed with a wide range of artists both in Australia and abroad, including Simon Barker's Daorum, Matt McMahon's Paths and Streams, Lou Reed, Sandy Evans' GEST8, Baecastuff, Bobby Previte, Jim Black, Barney McAll, Mike Nock, Missy Higgins, Karaikudi R. Mani, and the Australian Art Orchestra. He has released two recordings as a leader: Strobe Coma Virgo (2002), and The Thousands (2007). Phil has performed with austraLYSIS since 2001.

Hazel Smith (Texts and performance)

Hazel is a research professor in the Writing and Society Research Group the University of Western Sydney. She is author of The Writing Experiment: strategies for innovative creative writing, Allen and Unwin, 2005 which was shortlisted for the Australian Publishing Association Awards for Excellence in Educational Publishing and Hyperscapes in the Poetry of Frank O'Hara: difference, homosexuality, topography, Liverpool University Press, 2000. She is co-author of Improvisation, Hypermedia And The Arts Since 1945, Harwood Academic, 1997 and co-editor with Roger Dean of Practice-led Research, Research-led Practice in the Creative Arts, Edinburgh University Press, 2009. Hazel is currently completing a monograph on the contemporary literature-music relationship to be published by Routledge in 2016.

Hazel is also a poet, performer and new media artist, and formerly a professional violinist. She has published three volumes of poetry, three CDs of performance work and numerous multimedia works. Her latest volume of creative work, with accompanying CD Rom, is The Erotics of Geography: poetry, performance texts, new media works, Tinfish Press, Kaneohe, Hawaii, 2008. Her next volume of poetry will be published by Giramondo publishing in 2015. She has performed her work extensively in US, Europe, UK and Australasia; has been co-recipient of numerous grants for austraLYSIS from the Australia Council (including a key organization grant 2000-2004); and has had six large-scale commissions from the ABC. Hazel was the founder editor of infLect, an online international journal of new media writing based at the University of Canberra (2004-6), and is now co-editor with Roger Dean of soundsRite, a journal of new media writing and sound, based at the University of Western Sydney. In 2013 she held an Australia Council Digital and New Media Writing grant, which supported work on her new media collaboration with Will Luers and Roger Dean, *motions*. Recently, her new media collaborations with Will Luers and Roger Dean have been showcased at new media arts festivals in West Virginia, US, 2012; Wisconsin, US, 2014; and Brazil 2014. Her website is at www.australysis.com

Greg White (sound manipulation, sound projection, computers).
Greg is a performer, composer, programmer and educator. He is currently Associate Dean (Production) and Head of Composition & Music Production at the Australian Institute of Music (Sydney), having also designed and presented courses at the Sydney Conservatorium of Music, Australian Film Television & Radio School, Macquarie University, University of NSW, University of Wollongong and University of Tasmania. He has been a core member of austraLYSIS (from 1991) and jazz/world music group Gest8 (from 2004). His creative output has been presented at the British Film Institute, Cannes, Clermont-Ferrand and Sydney film festivals; Huddersfield (UK), New Crowned Hope (Vienna), Festival International d'Art Lyrique, Aix-en-Provence, (France), Lincoln Centre (NYC), Auckland, Wangaratta, Sydney and Melbourne Festivals; all major museums and galleries in Australia's eastern states; all major theatre companies in Sydney; in many web projects (including William Duckworth's 48 hour Cathedra Project in 2001 with Roger Dean) and in many national and international collaborations with artists such as Ross Gibson, Kate Richards, Richard Vella, Norie Neumark, Lynette Wallworth and Susan Norrie. In 2007 Greg spent a month residency in CCMIX (Center for the Composition of Music Iannis Xenakis), Paris. In 2010 he performed The Hollow Air with the Australian Art Orchestra at the Melbourne Festival, and worked in Denmark and UK with austraLYSIS.

David Worrall (composer. programmer, sonification and sound spatialisation expert).
David became a member of austraLYSIS in 2004. He is a freelance experimental composer and sound artist working in sound sculpture and immersive polymedia as well as traditional instrumental composition. He performs and exhibits internationally. Worrall studied music composition at the Universities of Sydney and Adelaide with Peter Sculthorpe, Ross Edwards, Richard Meale and Tristram Cary. Other studies were in mathematics and philosophy. He has won several composition and research awards. He joined the Faculty of Music at Melbourne University in 1979 where he taught twentieth-century music

composition techniques and orchestration as well as undertaking research in computer music. In 1981 he designed and taught the first undergraduate course in computer music in Australia. In 1986 he was appointed Director of the Electronic Music Studios at the Canberra School of Music. He established and became the Foundation Head of the Australian Centre for the Arts and Technology (ACAT) at the Australian National University in 1989, a position he held for over a decade. During that time ACAT offered the first Australian postgraduate degrees in Electronic Arts. David has held artist-in-residence and visiting fellowship positions in universities in Australia, UK, France, Spain and the USA. Worrall was a founding member of the Electronic Music Foundation and the Music Council of Australia, and has served on a number of organisational boards, including the Australia Council's Music and Innovative Projects (later Mixed Media) Boards, the Australian Music Centre and as president of the Australasian Computer Music Association. In addition to his artistic activities, Worrall designs and builds portable multimedia event spaces, speculates in the capital markets and teaches technical analysis and trading. His PhD, partially funded by the Capital Markets Cooperative Research Centre, was on the development of a software framework for the sonification of information in large or high-frequency multivariate datasets such as from trading engines. He subsequently received Australia Council funding to develop a voice-synthesiser with Australian dialect pronunciation. Most recently he has been working at the Fraunhofer-Institute in Germany, in the Experimental Audio Research Unit, investigating sonification as a display tool and a component of artistic work. He is also a visiting senior research fellow at the Australian National University. His website is worrall.avatar.com.au.

Other members of austraLYSIS, not appearing in this event: Daniel Blinkhorn; Peter Jenkin; Stephanie McCallum; Daryl Pratt; Ian Shanahan; Neil Simpson.

About some austraLYSIS recording/publishing releases:
MULTI-PIANO (Tall Poppies 225, 2012): a double CD of solo and interactive piano by Roger Dean…. Our 7th album on Tall Poppies.
CYCLES, Dualyses, and Superimpositions : re-released 2012 in the LYSIS reissue series (SOMA 788 double CD). Vintage improvisation from LYSIS.
The Erotics of Geography: poetry, performance texts, new media works, by Hazel Smith (TinFish Press, Hawaii, USA, 2008), with CD-Rom of sound and intermedia works performed by austraLYSIS.
Hyperimprovisation: Computer Interactive Sound Improvisation (book and CD-Rom including 2 austraLYSIS works and software), A-R Editions, USA, 2003.
Returning the Angles (a sound technodrama with interactive 3D animation; cross platform audioCD/CD-Rom): Soma 787.
austraLYSIS Electroband CD, **Present Tense** Tall Poppies 109.
Acouslytic : acousmatic music by Roger Dean (Tall Poppies TP153).
Resounding in the Mirror : music by LYSIS and the austraLYSIS Electroband (Future Music Records, UK).
Sonic Stones (Tall Poppies TP 182) released 2006. Sonic Stones represents two aspects of austraLYSIS innovative work in computer-mediated sound.
The Next Room (double CD: Tall Poppies TP 050) features Sandy Evans (saxophones), Tony Buck (percussion/ samplers/ electronics), Roger Dean (piano/ keyboards/ samplers/ electronics).
Moving the Landscapes (Tall Poppies TP 007) features Sandy Evans (saxophones), Tony Buck (percussion/electronics); Roger Dean (keyboards/electronics).

These and other recordings involving austraLYSIS (or LYSIS) and some of its members are also available from the sites listed above; in case of difficulty contact austraLYSIS directly (address below). To keep in touch with austraLYSIS's activities, fill in the Mailing list form below...To obtain any recordings, scores or publications of members, contact us at the same address or via dr.metagroove@mindless.com. See also www.australysis.com.

austraLYSIS Mailing List
If you would like to receive advance information on sound/image/text events and commercial releases by austraLYSIS please email us on dr.metagroove@mindless.com, give this form to the interval/ticket person, or post it to :
austraLYSIS Productions Inc, PO Box 225, Milperra, NSW 2214.

Name:

Email:

If you would like to be more actively involved in helping the creation of austraLYSIS's and related work, you can become a member of austraLYSIS Productions Incorporated, for an annual subscription of 10 dollars, and an initial entry fee of 20: contact austraLYSIS. austraLYSIS Productions Inc, is a non-profit organisation supporting the presentation of new sound and intermedia work, particularly that of austraLYSIS. It is eligible for tax deductible donations, and your contribution is invited, and can be acknowledged as you choose.

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The NMN is a collective of organisations principally and strongly dedicated to the performance of new music in the broadest sense. It provides a support structure for contemporary performance groups through shared resources and information, joint marketing initiatives and concert date coordination. NMN also acts as a lobby group for venues and funding.

Enquiries can be directed to:
NMN, PO BOX A661, SYDNEY SOUTH NSW 1235.
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