

Handwritten notes in the bottom left corner of the collage, including "Hermes", "Carr", and "26/04".

sonic archaeologies Ros Bandt


Fragment of a classical building with columns and a detail of a stone inscription with Greek text.



sonic archaeology

Archaeology involves the uncovering and studying of remains and remnants, usually fragments of an unknown whole. When the term is applied to sound, which is invisible and time-dependent, questions emerge. Can we hear the sounds of the past and if so how? Are they whole or fragments? Is it a philosophical possibility to try to rehear the past, given that no moment can be repeated? The physical listening environment is constantly altering every moment; we have different acoustic spaces with different soundscapes and the listener is a very different conscious being in the twenty-first century from that of the Homeric world, or the inhabitants of ancient Lake Mungo. Sonic archaeology investigates the remnants of ancient language and ancient land as they exist today, as the source material for a modern electro-acoustic reconstruction which celebrates them. Sonic Archaeologies attempts to re-sound antiquity so that some of its essence may be rekindled.


Mungo and *Thrausmata* are two independent sonic archaeologies dealing with past worlds. *Mungo* is archaeology of the land, the ancient dried salt landscape of Lake Mungo, in the central western area of New South Wales, home of some of the oldest human remains dating from over 40,000 years ago. *Thrausmata*, the ancient Greek word for Fragments is archaeology of text, delving into the worlds of Homer, Sappho, Bacchylides, Euripides, Democritus and Parmenides through the original spoken ancient Greek, alive with its speech rhythms but not heard by most of us. Both pieces are new reconstructions illuminating the passage of time as it affects the physical environment and the culture of communication through language. The superimposition of the ancient Greek language, the root source of Western culture, upon the ancient physical



topography of Australia, sharpens the notion of Australian identity not only as a palimpsest of re-inscription, but also as cultural amnesia. Many languages have disappeared or are endangered. These two electro-acoustic reconstructions aim to fuse the old and the new.

In the studios of Cologne radio, old and new technologies have been used to provide vignettes through which we can examine the past, as if looking backwards through the telescope of time, to rehear the perennial constants that these ancient archaeologies still hold.

The land and the text remain in some form, even if not original, for us to rehear, decode and come to understand. The veils of each successive oral rendering bring with them variations, adding layers to the palimpsest. Together, the present and the past fuse in time. Sonic Archaeologies are the result.



mungo

sonic archaeology of the land, 1992

Dedicated to all endangered wilderness sites and to Alice Kelly, Mutti Mutti elder.

Lake Mungo is an ancient dried salt lake which was an important meeting place and trading centre for aboriginal tribes over 40,000 years ago. They came from all directions to eat, fish, exchange rituals and stories and find husbands and wives. The land has been ravaged by wind and time since the Ice Age.

The lake is dried up and the presence of the wind is everywhere. It has eroded fossil-like forms, carved into human-sized shapes standing erect like spectres, and the layers of the ancient earth are revealed beneath the feet in a map of geomorphic history, complete with pre Ice-Age fossil fish and shell middens, signs of the first human habitation. Each day the wind cleanses the marks of daily activity on the high sand dunes of the lunette surrounding this ancient dried salt lake. It is a wind driven soundscape.

Here in this interior wilderness, the composer's aeolian harps could find the sensitive quiet needed to record them. Larger soundboards were made to trap more resonance and the tuning pegs, originally wood, were turned in stainless steel to be more stable in the extreme temperature conditions of the desert environment. The best time for the sound was at dawn or approaching nightfall when the harsh desert temperatures of the day abated and soft breezes cooled the earth. The heavenly music of slowly changing polyphonic voices in just intonation went on for hours. In the hot winds, they screamed their overblown upper harmonics, activated by the wind's force and the over-dried strings. At dawn they whispered new awakenings in soft cool breezes.



The harps were inspired by the form of a cobweb, made to stand up vertically. Every second section was removed, so that a person could enter into its centre in order to play them. They were designed with two aerial harps and four ground harps oriented north, south, east and west to maximise the possibility of the wind playing them, given that the wind has to be at a right angle to the strings at the right pressure to produce a sound. Each of the harps interlocks around the central pole with Japanese joints so that it can be moved from site to site and taken and played indoors.

Strung in fifty-pound nylon filament, each harp has 22 strings, individually tuned like a lute in courses to encourage sympathetic vibration. Various scales were tried around the dorian or pentatonic scales, around G and D below middle C, the latter being chosen as the most suitable and stable. Given the number of strings and their delicacy, the sound design mirrors the cobweb; fine silk strands of intricate complexity weave a delicately fine but strong polyphonic musical fabric, almost invisible and suspended in time, like a cobweb. The desire to blend in with what was there was an essential factor in designing the installation. It was not to dominate in any way but to be a medium to elicit what was already present. As the Mutti Mutti elder, Alice Kelly, said, the harps seemed to be reaching right back to the Dreamtime, drawing us all together in what has been and what is. The great beauty of the just intonation was making this relationship for her as she had often heard very similar sounds in the casuarinas as a child.

The harps became integrated with the natural environment. When the weeklong recording session was over, the harps returned to the city without leaving a trace.

In Cologne, the field recordings of pardalotes, feet on sand, leaves caught in dried saltbush and gorse, sound sculptures of fossils, sampled kangaroo bone rhythms, snail shells stirred together like paper bells and a sampled PVC didgeridoo were spatially overlaid in a scenario re-enacting the actual environment. The wind and the sand and the voices moved. All else was static, in situ, left and right of the recorded image. Two streams of harp recordings continue to bind the piece together, the ancient forms themselves becoming a conduit into this primeval landscape. The spirit of this place challenged the composer to come to terms with its history and immensity of spirit. Australian identity, temporality, antiquity and acoustic space in *Mungo* are constantly under review.

Mungo was premiered and performed as an installation performance by the artist in Cologne in 1992. It was a shared Sound Art Australia prizewinner and gained an honourable mention in the Prix Italia Prize 1992. *Mungo* was first published by the ABC in 1994 on The Listening Room CD entitled *BETA*. A small excerpt also appears on the double CD *Riverrun* published by Wergo records. *Mungo* was made possible by the ABC and the Goethe Institute in collaboration with the WDR.

Aeolian Harps and Environmental Sound Recordings On Site:

Ederic Slater and Andrew McLennan (ABC).

Performer: (Aeolian harps sculpture, fossils, virtual didgeridoo, sampler, kangaroo bones, quandong nuts, snail shells, sand, feet, sculptures and sound installation) Ros Bandt

Harp Design and Construction: Ros Bandt with Steve Naylor
Voice: Aboriginal Tribal Elder Aunty Alice Kelly, Mutti Mutti Tribe.
Sound Engineering: WDR studios Cologne; Benedikt Bitzenhofer (WDR)
and Steven Tilley (ABC)
Studio Assistance: Hans-Georg Andres
Sound Editing: Mechtild Austermann
Co-Producers: Andrew McLennan (ABC) and Klaus Schöning (WDR)



thrausmata: 7 ancient greek fragments 1992-1997
sonic archaeology of text

Dedicated to all endangered languages

Thrausmata is seven different renderings of six fragments of ancient Greek texts chosen by the composer for their enduring subjects of love, hospitality, war, sport, sexuality, philosophy and atomic theory. The Sappho text has two different renderings, one in female voice and the other in male. The language is alive in the readings, a rare occurrence in the twenty-first century. Much of the meaning would not be apparent if it weren't sounded in the authentic voice.

Each fragment is interpreted from the actual utterance of the ancient Greek text itself. Key words and phrases were treated by a variety of new and old technologies including the Fairlight, the vocoder, the ring modulator, the sampler, the computer and the mixing desk. New and virtual instruments were made to simulate the ancient extinct instruments of the period; the seven-string lyre and the water organ, and to make new relationships, the text driving the instrument and the sampler redistributing the text. Each fragment is a new interpretation of the original meaning and tries to convey this, whether it is linguistically decipherable or not. The essence of the context, the tone of voice and the narrative convey enduring feelings common to every generation and language, so powerful are the texts of these works. They transcend the English translations which can be helpful cues in appreciating their richness.

This re-sounding provides an opportunity to try to catch some of the spoken phonemes as they roll through the centuries emanating from a world which has almost slipped beyond our reach. *Thrausmata* catches some of these moments in the net of time.

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- 1 **Parmenides Fragments 1 & 5**
- 2 **Homer Iliad XI 618-652**
- 3 **Sappho Fragment 1, Realisation 1**
- 4 **Bacchylides Ode 5 16-49**
- 5 **Sappho Fragment 1, Realisation 2**
- 6 **Euripides Hippolytus 1199-1233**
- 7 **Democritus Fragment 9 (DK 68A, 128)**

Parmenides Fragments 1 & 5

The steeds that carry me took me as far as my heart could desire, when once they had brought me and set me on the renowned way of the goddess, who leads the man who knows through every town. On that way was I conveyed; for on it did the wise steeds convey me, drawing my chariot, and maidens led the way. And the axle blazing in the socket—for it was urged round by well-turned wheels at each end—was making the holes in the naves sing, while the daughters of the Sun, hasting to convey me into the light, threw back the veils from off their faces and left the abode of night. There are the gates of the ways of Night and Day, fitted above with a lintel and below with a threshold of stone. They themselves, high in the air, are closed by mighty doors, and avenging Justice controls the double bolts. Her did the maidens entreat with gentle words and cunningly persuade to unfasten without demur the bolted bar from the gates. Then, when the doors were thrown back, they disclosed a wide opening, when their brazen posts fitted with rivets and nails swung in turn on their hinges. Straight through them, on the broad way, did the maidens guide the horses and the car. And the goddess greeted me kindly, and took my right hand in hers, and spake to me these words:

'Welcome, o youth, that comest to my abode on the car that bears thee, tended by immortal charioteers. It is no ill chance, but right and justice, that has sent thee forth to travel on this way. Far indeed does it lie from the beaten track of men. Meet it is that thou shouldst learn all things, as well the unshaken heart of well-rounded truth, as the opinions of mortals in which is no true belief at all. Yet none the less shalt thou learn these things also—how the things that seem, as they all pass through everything, must gain the semblance of being.'

It is all one to me where I begin; for I shall come back there again in time.




Homer Iliad Book XI 618-652

Now when the others came to the shelter of the son of Neleus, they themselves dismounted to the prospering earth, and the henchman Eurymedon unharnessed the horses of the old man from the chariot. The men wiped off the sweat on their tunics and stood to the wind beside the beach of the sea, and thereafter went inside the shelter and took their places on settles. And lovely-haired Hekamede made them a potion, she whom the old man won from Tenedos, when Achilles stormed it. She was the daughter of great-hearted Arsinoos. The Achaians chose her out for Nestor, because he was best of them all in counsel.

First she pushed up the table in front of them, a lovely table, polished and with feet of cobalt, and on it she laid a bronze basket, with onion to go with the drinking, and pale honey, and beside it bread, blessed pride of the barley, and beside it a beautifully wrought cup which the old man brought with him from home. It was set with golden nails, the eared handles upon it were four, and on either side there were fashioned two doves of gold, feeding, and there were double bases beneath it. Another man with great effort could lift it full from the table, but Nestor, aged as he was, lifted it without strain. In this the woman like the immortals mixed them a potion with Pramneian wine, and grated goat's-milk cheese into it with a bronze grater, and scattered with her hand white barley into it. When she had got the potion ready, she told them to drink it, and both when they had drunk it were rid of their thirst's parching and began to take pleasure in conversation, talking with each other, and Patroklos came and stood, a godlike man, in the doorway. Seeing him the old man started up from his shining chair, and took him by the hand, led him in and told him to sit down, but Patroklos from the other side declined, and spoke to him:

*'No chair, aged sir beloved of Zeus. You will not persuade me.
Honoured, and quick to blame, is the man who sent me to find out
who was this wounded man you were bringing. Now I myself know,
and I see it is Machaon, the shepherd of the people.
Now I go back as messenger to Achilles, to tell him.'*



Sappho Fragment 1, Realisation 1, with live prepared psaltery

Richly-enthroned immortal Aphrodite, daughter of Zeus, weaver of wiles, I pray to you: break not my spirit, Lady, with heartache or anguish;

But hither come, if ever in the past you heard my cry from afar, and marked it, and came, leaving your father's house,

Your golden chariot yoked: sparrows beautiful and swift conveyed you, with rapid wings a-flutter, above the dark earth from heaven through the mid-air;

And soon they were come, and you, Fortunate, with a smile on your immortal face, asked what ails me now, and why I am calling now,

And what in my heart's madness I most desire to have: 'Whom now must I persuade to join your friendship's ranks? Who wrongs you, Sappho?

For if she flees, she shall soon pursue; and if she receives not gifts, yet shall she give; and if she loves not, she shall soon love even against her will.'

Come to me now also, and deliver me from cruel anxieties; fulfil all that my heart desires to fulfil, and be yourself my comrade-in-arms.

Bacchylides Ode 5 16-49

*as the eagle, messenger of Zeus loud-thundering
whose realm spreads wide,
cleaves the deep sky, high
on the pulsing beat of wings, swift,
confident, trusting in his mighty strength,*

*and the screeching birds cower in fear;
the mountain peaks of the great earth
do not confine him
nor the towering waves of the tireless sea;
he, driving on restless wing, featherlight,
high in the endless, empty sky,
rides on the breath of the western wind,
a sight well known among men.*



*So now, high-minded children of Deinomenes,
I too have on all sides
numberless pathways of song
to praise your excellence,
by the grace of dark-haired Victory and the bronze-armoured god of war.
I pray that the god will not grow weary doing good.
The morning sun whose arms are golden
watched him win, the chestnut colt Pherenikos,
the colt that runs on the wind,
beside the wide-swirling stream of Alpheos,
and at holy Delphi too.
Calling the earth to witness I declare:
never yet, as he rushed to the line in a race
was he stained by the dust
of horses in front.*

*For with onrush matching the wind from the North,
responsive to his rider's hand he flies,
aiming to bring again applause and victory
for Hieron, friend of guests.*



Sappho Fragment 1, Realisation 2, text ring-modulated and vocoded, with live performance on a 1535 Ganassi alto recorder.

Euripides Hippolytus 1199-1233

*When we were entering the lonely country
the other side of the border, where the shore
goes down to the Saronic Gulf, a rumbling
deep in the earth, terrible to hear,
growled like the thunder of Father Zeus.
The horses raised their heads, pricked up their ears,
and gusty fear was on us all to know,
whence came the sound. As we looked toward the shore,
where the waves were beating, we saw a wave appear,
a miracle wave, lifting its crest to the sky,
so high that Sciron's coast was blotted out
from my eye's vision. And it hid the Isthmus
and the Asclepius Rock. To the shore it came,
swelling, boiling, crashing, casting its surf around,
to where the chariot stood.*

*But at the very moment when it broke,
the wave threw up a monstrous savage bull.
Its bellowing filled the land, and the land echoed it,
with shuddering emphasis. And sudden panic
fell on the horses in the car. But the master—
he was used to horses' ways—all his life long
he had been with horses—took a firm grip of the reins
and lashed the ends behind his back and pulled
like a sailor at the oar. The horses bolted:
their teeth were clenched upon the fire-forged bit.*



*They heeded neither the driver's hand nor harness
nor the jointed car. As often as he would turn them
with guiding hand to the soft sand of the shore,
the bull appeared in front to head them off,
maddening the team with terror.
But when in frenzy they charged toward the cliffs,
the bull came galloping beside the rail,
silently following until he brought disaster,
capsizing the car, striking the wheel on a rock.*

Democritus Fragment 9 (DK 68A, 128) with live performance on a replica of Percy Grainger's slide air whistle.

*Democritus says that the air is broken up into bodies of like shape and is rolled
along together with the fragments of the voice.*

Ancient Greek Reader, Arthur Scott McDevitt, classical scholar, who also made the English translations available.

Translations:

Parmenides Fragments 1 & 5, *The Presocratic Philosophers*, G.S. Kirk and J.E. Raven, C.U.P. 1957 (repr. 1969) pp.266-8.

Homer Iliad XI 618-652, *The Iliad of Homer*, trans. Richmond Lattimore, Chicago University Press, 1951 (repr. 1967).

Sappho Fragment 1, *Sappho and Alcaeus, (an Introduction to the Study of Ancient Lesbian Poetry)* Denys Page, Oxford, 1955, pp.3-4

Bacchylides Ode V 16-49, translated by Arthur McDevitt, (unpublished).



Euripides Hippolytus 1199-1233, trans. David Grene, in Euripides I, University of Chicago Press, 1955 (repr. 1966).

Democritus Fragment 9 (DK 68A, 128), The Presocratic Philosophers, G.S. Kirk and J.E. Raven, C.U.P. 1957 (repr. 1969) p. 423.

Thrausmata was premiered 30th May 1998. It was made in Cologne during August 1996 and December 1997. It represented Australia for the International Society of Contemporary Music in Bucharest in 1999 where it was highly commended. A detailed paper on the construction of the piece was published by the Australian Computer Music Association in 1999.

Producers: Klaus Schöning and Ros Bandt

Sound Engineering: WDR Studios Cologne, Benedikt Bitzenhofer

Voices: Arthur McDevitt (Ancient Greek Text Readings),
Ros Bandt (Woman's voice)

Performer: (Renaissance recorder, slide whistle, medieval psaltery, sampler, vocoder, Fairlight) Ros Bandt

Soundscape recordings were made over a 5-year period at the Mediterranean sites where these texts were first uttered, Olympia, the shores of the Aegean Sea, Delphi, Santorini, Mycenae, Eressos, by Ros Bandt. Thanks to Arthur McDevitt for Greek translation, ancient and modern.





biographies

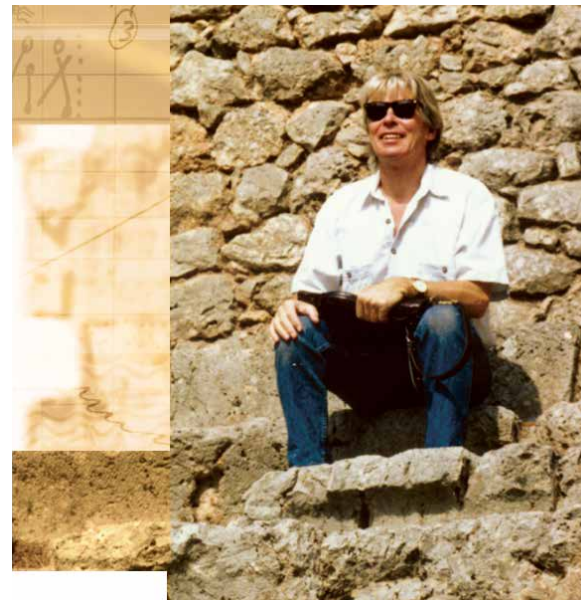
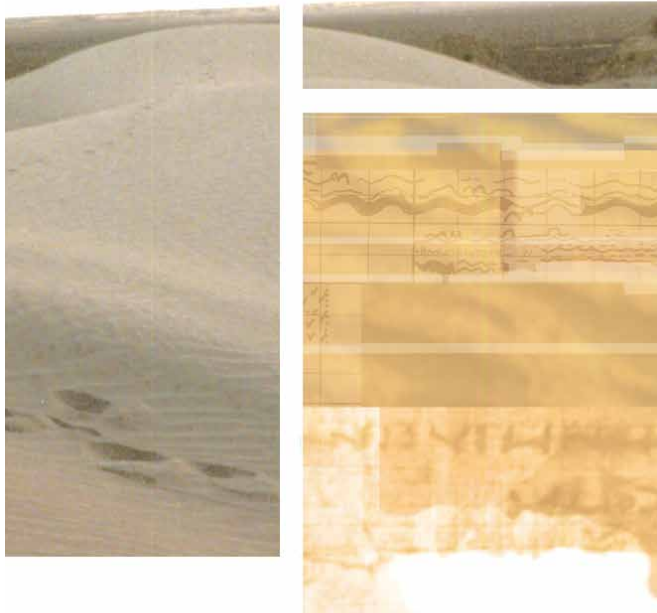
Ros Bandt is an internationally acclaimed sound artist, composer, performer, researcher and installation artist. She has pioneered many forms of sound art including original glass music, sound playgrounds, and interactive mixed media installations and sound sculptures since 1977. She has been awarded the Don Banks Composers Award, many national and international innovation awards including the inaugural Benjamin Cohen Peace Prize and three Australian Research Council Grants. Her books and writings on sound are well known. As well as her artistic practice she directs the Australian Sound Design Project at the Australian Centre, The University of Melbourne. She is published by Move, Wergo, EMI, New Albion Records, and Fine Arts Press.

Photo: Arthur McDevitt



Arthur McDevitt is a classical scholar who studied classics at Cambridge. He taught Ancient Greek language and literature in Australia at Armidale and Monash Universities. He is an expert on Greek Tragedy and is preparing a new translation of Bacchylides.

Photo: Ros Bandt



production credits

Ros Bandt at the Studio Akustische Kunst, WDR, Cologne, Germany.

Both *Mungo* and *Thrausmata* were commissioned by Klaus Schöning, director of the renowned Studio Akustische Kunst, West Deutsche Rundfunk, Köln, whose vision and insight made these works possible.

Thanks to Andrew McLennan and Klaus Schöning, Aunty Alice Kelly, Muttti Mutti elder, Jim Bowler, geologist. Thanks also to Professor Pat Easterling, Fellow of Newnham College, Cambridge, for encouraging the creative reconstruction of ancient Greek texts in this way.

Thankyou to Arthur McDevitt, whose powerful reading of the Greek and insightful preparation and rendering of texts and translations have provided constant help and inspiration over the past years.

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