

BRUCE CALE, SERIALISM AND THE LYDIAN CONCEPT

by Eric Myers*

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When the Australia** Music Centre's film on Australian composers *Notes On A Landscape* came out in 1980, it was apparent that most of the ten composers included, picked themselves: Don Banks, Anne Boyd, Colin Brumby, Barry Conyngham, Keith Humble, Elena Kats, Graeme Koehne, Richard Meale, Peter Sculthorpe. In addition to them, there was one composer who, on the face of it, might not have been regarded as such an automatic choice: Bruce Cale.



Bruce Cale on the verandah of his house in the Blue Mountains, with his dog Muffin... PHOTO CREDIT MARGARET SULLIVAN

**When this was written in October, 1985, Eric Myers was editor of the Australian Jazz Magazine, and writing jazz reviews for The Australian.*

***Australia Music Centre was at the time the correct spelling. Sometime later 'Australia' was changed to 'Australian'.*

After all, he was principally known as a jazz composer and performer, and when the film was planned, had been back in Australia only two years, following 13 years in Britain and the United States. On the other hand, there were some eyebrows raised in the Australian jazz world that Cale was "the only jazz composer" included in the film. But those who were aware of Cale's work knew that he had been included because of his orchestral writing as well as his jazz composition; his work had certainly emerged from jazz but, in a highly individual way, he was seeking to merge jazz and classical traditions.

Now, five years on, he has to his credit well over 20 major works for orchestras of varying sizes, and can stake a realistic claim as a composer of — for want of a better term — Serious Music. Before Bruce Cale left for overseas in 1965, he was one of Australia's leading jazz bassists, one of the central group of innovative musicians associated with Sydney's legendary jazz cellar, the El Rocco. He played there in the late 1950s and early 1960s.

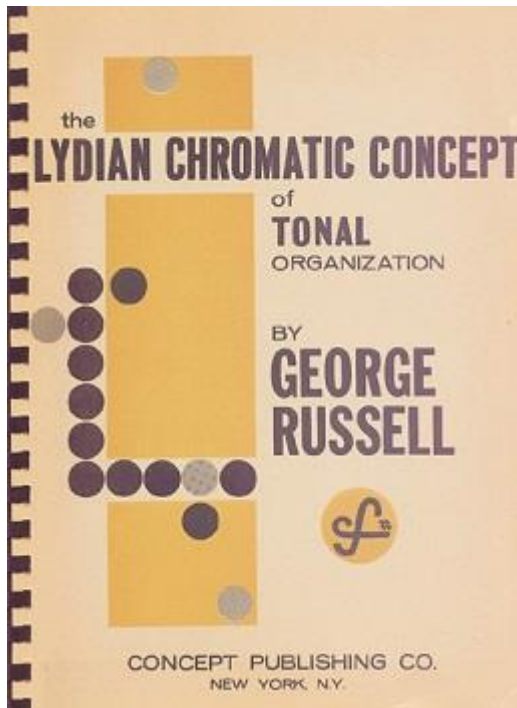


Bruce Cale (right) then one of Australia's leading jazz bassists, is pictured here with the Australian pianist Bryce Rohde on the ABC-TV program This Is Jazz in 1963...

When he went to England in 1965, he had done little composing of consequence; his list of compositions begins in 1967. Even so, he did not come to composition seriously until well into the 1970s, so he's been composing for only a little over ten years. But he has made rapid progress, considering this late start.

His short orchestral work *Land Of The Aborigine* (1976-77) was recorded in 1979 by the Melbourne Symphony Orchestra, conducted by Len Dommett. About 11 minutes in length, this piece explores concepts which have been espoused for some years by the 62-year-old American composer George Russell. Cale studied with Russell in

Boston in 1981, where Russell teaches at the New England Conservatory, and is an exponent of the theories articulated by Russell in his 1953 book *The Lydian Chromatic Concept of Tonal Organisation*. These theories are fundamental to Cale's music.



In the American magazine *Jazz Times* (December, 1984) Francis Davis explains Russell's theory: "In essence the [Lydian] Concept invokes the laws of physics to restore the ancient Lydian scale to its former position of dominance over the diatonic scale, which has governed Western music only since the late 15th century. In categorising tonal movement as vertical or horizontal, active or passive, outgoing or incoming, the Concept also embodies a philosophical critique of goal-oriented Western civilisation".

Russell began his theory over 30 years ago by focussing on the ladder of fifths which produced the Lydian scale. In *Down Beat*, (October, 1983) he said: "That's when I knew I was onto something, because the ladder of fifths is a piece of objective truth rather than subjective knowledge. The ladder of fifths has been around for centuries; the pentatonic scale, the primary scale of ancient musics, is basically five fifths. Pythagoras discovered the mathematical relationship of the interval of the fifth and all other intervals; we in the West based our tuning system on the Pythagorean ladder of fifths for 1,500 years. The Lydian was one of four primary modes in church music, and the Major scale was not — it was a derivative mode. But in the 16th century, the Major scale came to dominate our culture's secular music and began to challenge the Lydian scale. The church finally, with great resistance, allowed the Major scale to become a primary mode around the Council of Trent in 1547. Then we turned it around, and began to use the Major scale.

"Why did we deviate? The Major scale fools us: it seems to sound its tonic tone, but it's really on the way to becoming its tonic tone. It's the scale of becoming; it's goal-oriented. The Lydian is its tonic tone, the scale from which gravity emanates. Some

people hear the Lydian scale and say, 'It's not going anywhere.' Well, it isn't going anywhere but up; it's evolving to higher levels. It finally evolves to embrace the whole chromatic scale, which is simply two Lydian scales, on C and F sharp.

“... The Lydian scale, which is the scale of fifths, is the scale of gravity, whereas the Major scale could never be justified that way.

"That's when I knew I had justified the concept in a scientific way. I had taken gravity and justified its existence in music. As I proceeded to write the book, I demanded logical proof for everything. It all had to relate to the ladder of fifths and the overtone series. Music to me is the highest of sciences, because it reflects life in the way it behaves. So the concept has nothing to do with what I like or don't like; it's not about taste, or about dictating taste. It is the approach to music that allows the practitioner the widest possible range to express his essence in, and yet be within an organisation."

Bruce Cale puts it this way: "The Lydian Concept assists you in defining how much tension each interval of the chromatic scale creates in a given time-space of a chord progression. The chromatic concept is very carefully analytical as to how much tension each tone of the chromatic scale creates in a given chord progression, in a given tonality.



Four Australian composers at the premiere of the film Notes On A Landscape, Sydney Opera House, May, 1980. From left, Peter Sculthorpe, Richard Meale, Barry Conyngham, Bruce Cale.

"One has to remember that, when we use the word 'chromatic' with Russell's theory, we're not talking about equal status for each tone of the 12 tones of the chromatic octave. Some people who don't know what the Lydian Concept is about, get that

impression. It's more related to the grading of tones. In the Lydian Concept there is a tonality, and there are tones that are very consonant, and tones that are very dissonant; but they're graded in gradual terms."

Land Of The Aborigine opens with a short ballad section, utilising a rich, dark melody scored for strings. This is followed by a section in 5/4 which builds in momentum, with a number of rhythmic developments throughout the orchestra, and gradually moves into two keys.



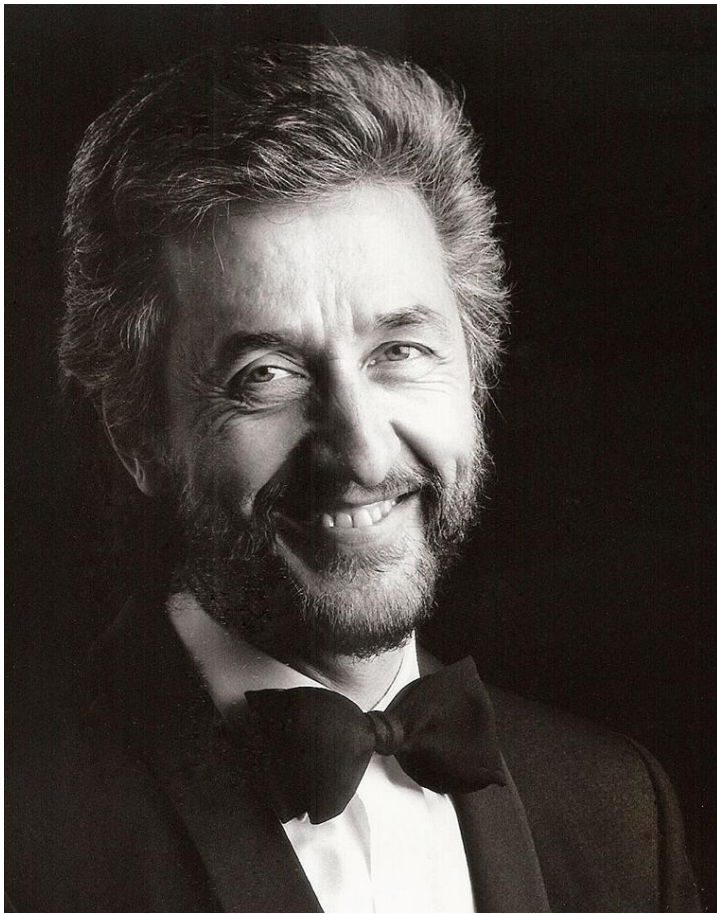
Land Of The Aborigine album cover: hopefully, a poetic statement, symbolising one Australia...

"I develop the piece from a chromatic point of view," says Cale, "so I use many variants, many harmonic and rhythmic possibilities. At one point, two keys explode together, and this symbolises for me the clash of Aboriginal and Western cultures. Later, there is a resolution and one large statement, which is a reversion back to the original melody. It is, hopefully, a poetic statement, symbolising one Australia."

Cale has a number of other works which he particularly prizes. His *Concertino for Double Bass & Orchestra Op 33* (1979) was recorded in 1981 by the Melbourne Symphony Orchestra, conducted by Patrick Thomas. Cale himself was the soloist. His *Violin Concerto Op 43* (1982-84) is to be recorded on October 18, 1985, by the Brisbane Symphony Orchestra, with Patrick Thomas conducting, and violin soloist Len Dommett.

Now in his third year as composer-in-residence at the Bondi Pavilion, Sydney, Cale has written a number of works for brass band, the outcome of his work in the community. His *Concerto for Trumpet & Brass Choir, Op. 49* (1984) was performed at the Contemporary Music Festival at the Bondi Pavilion Theatre on December 19,

1984, conducted by William Motzing, with the trumpet soloist Michael Cleary. At the same concert, the Sydney Conservatorium String Quartet gave the first performance of Cale's *String Quartet, Op. 41* (1981-83).



William Motzing, who conducted Cale's Concerto for Trumpet & Brass Choir, Op 49 at the Bondi Pavilion Theatre on December 19, 1984, with the trumpet soloist Michael Cleary...

The last three years have seen Cale producing a number of works for brass band, which have been performed by the Waverley and Willoughby municipal bands. In October the trumpet concerto and another work *Ode Suite* (1983) will be recorded by the ABC, performed by the Willoughby Brass Band (musical director Peter Walmsley and soloist Michael Cleary).

So, Bruce Cale has a substantial body of works behind him and has had considerable success in having many of them recorded. He also has two LPs released, devoted entirely to his jazz compositions: *Bruce Cale Quartet Live At The Sydney Opera House* (1978) and *A Century of Steps* (1981). 1985 is the first year in which he has basically been able to survive on composing commissions. He lives in the Blue Mountains, in a small farmhouse near the Jenolan Caves Road, overlooking the Ganbenang Valley. The Cale family has been in the area since 1878, and the house belonged to his grandmother Florence Annie Cale who lived there until she died at the age of 101. The orchestral suite *A Century of Steps* (1969-80) is dedicated to her memory.



The album Bruce Cale Quartet Live At The Sydney Opera House (1978), was devoted entirely to his jazz compositions...

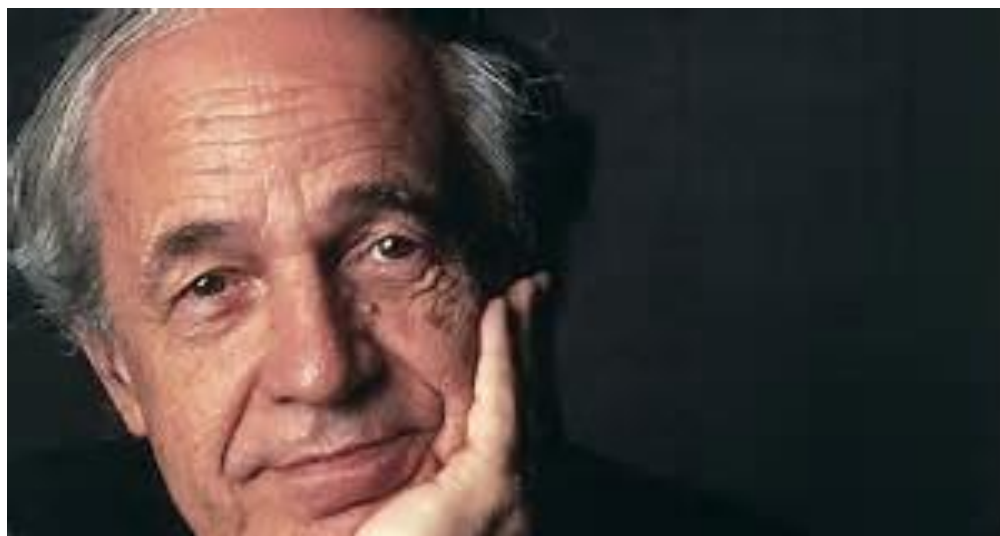
Basically Bruce Cale's training as a musician has involved many years in Australia, England and the United States as a professional jazz bassist; study at Berklee School of Music, Boston; continuous study of George Russell's Lydian Concept; and, particularly from 1973-77, self-tuition in serial technique. He has had a continuing interest in serial music since those years and, in the solitude of the Blue Mountains, where he listens keenly to any contemporary music on ABC Radio, he has developed firm views on serialism — the school of writing which has exerted such hegemony in 20th century composition. He is, in short, sceptical of the influence that serialism has had, and feels that dwindling audiences for contemporary music, in some cases, are an indication that such music is saying very little.

"One of the most important prerequisites for me, for writing music, is hearing it first, then writing it. That's the pleasure in it," says Cale. "The thing that's happened to 20th century music is that we've gotten hundreds of composers without any talent whatsoever who, if they're intelligent, can sit down and write myriads of music and never have heard one note of it."

He quotes the case of a well-known Australian composer of serial music who, in conversation, mentioned that he liked to compose with the radio on softly in the back-ground. When questioned further, the composer said that this background noise did not bother him, as he was basically able to write his music without hearing it in his mind.

"What he was saying, to my mind, was because it's an intellectual approach to music, the composer could sit down and, through pure mathematics, invent the most wonderful effects through serial techniques and the surrounding techniques that have been developed; you don't necessarily have to hear the music you're writing."

Cale feels that the experience of the French serialist composer Pierre Boulez is instructive. He went to the United States in the late 1960s, where he had an enormous influence on American composers. A highly intellectual person, and a brilliant pianist, with a wonderful ear, he formalised his music by stressing equally all aspects of music — dynamics, timbre, notation, rhythms, phrases, form — so that his music became like a perfect mathematical equation.



French serialist composer Pierre Boulez: he went to the United States in the late 1960s, where he had an enormous influence on American composers...

But, in America, Boulez had a low opinion of most contemporary American composers, who tended to write more intuitively from the heart; he preferred the European serialist composers who were more scientific and intellectual.

"Music to me, needs the science of intellectualism", says Cale, "but, it is really a thing that comes from the heart, essentially. Nature in its purest sense is what I learn from, living out here in the countryside. If I listen intently enough to my innermost self, then the music begins.

"It doesn't matter if you're using serial technique or parts thereof, or traditional harmony, or the modal approach, or whatever. I think the most essential thing is that the music should have a heartfelt, creative intent behind it, rather than a purely technical approach. We have a lot of music out there that appears to have a perfect, theoretical approach, but which is lacking in that heartfelt experience. And when you hear the composers talking about the way they create their compositions, they give themselves away."

Cale concedes that there are some composers who can be genuinely creative within the limits of serial techniques. "Barry Conyngham's *String Quartet* - I'm not sure if it's No 1 or 2, or further down the line — is just brilliant, to my mind, in that approach. But Barry is a very creative person, he's had a lot of experience, he's well-trained, and he has a real talent for writing. I've heard other composers using a similar approach — the one that's current in all the Conservatoriums — but few of these composers say anything musically, generally speaking.



The composer Barry Conyngham: Cale says his String Quartet is just brilliant...

"The inventive person with a real heart for creating music will produce wonderful music; it doesn't matter where it comes from. I'm not putting any of that down. What I am putting down is the music that lacks heart, that is very mathematical and calculated. Much serial music creates an effect, but it's not an atmospheric effect as far as I'm concerned."

Cale feels that there are important basic differences between serialism and the Lydian Concept. Both are chromatic approaches, but serial technique gives equal status to all the tones. When used together these tones can produce clusters of sound which can be said to be dissonant or non-chordal. The composer may want to set up this effect, but frequently this does not amount to a musical statement. Many composers create an endless series of effects, without any musical vision. The Lydian Concept, on the other hand, has a chromatic scale on every tone of the 12 tones of an octave.

"There are seven Lydian scales for each one of those semi-tones," says Cale, "so there are 84 modal possibilities for those 12 tones. Each one of those modes contains a Major and a Minor scale, as well as every conceivable ethnic scale, and a vertical chord on each interval of its mode.

"There are endless colours available to the composer, which I think all my writing clearly shows. Then you move into other areas, like an interesting melody, an exciting rhythmic approach, subtle dynamics . . . So, you're still using the four essentials of what constitutes sound in music; you use them all as intelligently as you possibly can, and come up with something that is personal, that you have complete control over, and that you know you're actually hearing as you create it, which gives you tremendous pleasure.

"The serialists may have tremendous fun in solving their puzzles, too. But if it's not inspired in an artistic sense, you're going to get a puzzle that is solved with hundreds

of effects. The results might just be like looking at a concrete wall and asking 'what is it?' "

The Sydney Improvised Music Association (SIMA) has put an ambitious proposal to the Australian Bicentennial Authority for major performances of Cale's work in 1988. This would involve expanding his *Land Of The Aborigine* to major proportions, and utilising a classical chamber orchestra, a 16-piece jazz ensemble, and a 20-voice choir; the Aboriginal & Islander Dance Theatre would provide choreography and dance; and the American jazz musician Anthony Braxton would be invited to perform as a soloist with the orchestras.



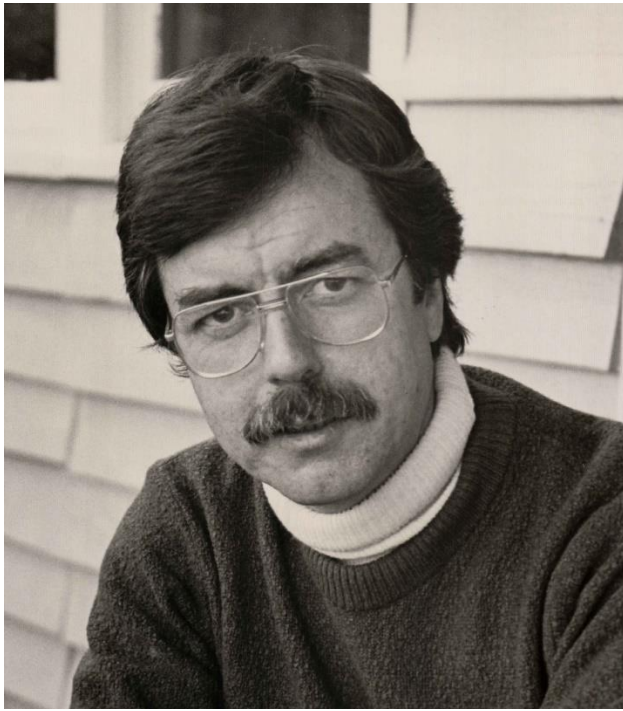
American jazz musician Anthony Braxton (pictured above) would be invited to perform as a soloist in Land Of The Aborigine... PHOTO CREDIT JAN PERSSON

One of the obstacles to bringing this project to fruition is the scepticism — and it is a perfectly understandable scepticism — of many Aboriginal groups about the 1988 celebrations. Younger Aborigines in particular feel that the Bicentenary should be ignored. Cale, who worked with white Americans, black Americans and Indians during his 11 years in the United States, hopes that the optimism he saw there in coping with racial tension, will come about increasingly in Australia, despite the problems of the past.

"I hope that people will come around to saying 'what can we do to enjoy life, and celebrate life together, as we stand?'," he says. The project is an exciting one, not only because it would involve Aboriginal dancers and musicians working with performers from other art forms. It would also bring together jazz and classical orchestration, which has happened only rarely in Australian music.

"It could be an event which brings an awful lot of people together in happy, creative terms," says Cale. "Everybody would have to work hard to bring it off, but it could be a beautiful celebration."

Also, the invitation to Anthony Braxton to participate in the project is, in Bruce Cale's view, a highly significant one. Braxton, one of America's most innovative composers, is a student of ethnic musics around the world, and believes in the unity of black peoples on the planet. He could be expected to be enthusiastic about Aboriginal music and working with an Aboriginal dance company. Cale met Braxton in Los Angeles in 1972, when Braxton visited that city with the group Circle; he feels that a trip to Australia by the American would be of enormous importance to Aboriginal artists, and also the jazz world.



Cale: the real jazz artists devote every minute of their lives to jazz... PHOTO CREDIT MARGARET SULLIVAN

"In Australia, we have a tendency, in the jazz area, to want to use people who are in the 'safe' area of the jazz world," says Cale. In both Australia and the United States, he contends, there are people who have big reputations as jazz musicians, usually because of popular recordings but, in reality, they play jazz for fun, while their professional lives are spent in other areas of music, such as studio work.

"The real jazz artists devote every minute of their lives to jazz, and Anthony Braxton is one of those people. He's not your copybook alto saxophonist, but he has devoted his life to creating music, and I think this country does not see enough of that standard of performer. He knows classical music, Afro-American jazz of course, and he also orchestrates for symphony orchestra, so I feel that, if I wrote something for him, I know, from doing some playing with him, and talking to him about music, and looking at his scores, that he would empathise totally with what I was trying to do as a composer. His enthusiasm would be infectious."

"Also, I wouldn't be surprised, if he comes here, that the visit will start a whole new phase in his musical career. He would probably want to spend a lot of time with Aboriginal musicians and get something from them, and add that to his experience.

He has a way of bringing people together, and getting them excited about something. If this comes off, we'll have a real event on our hands; if you didn't put it on film, you'd be a fool."



An older Bruce Cale: if the music is not accepted there's no point in it, he says...

Bruce Cale has strong musical views which, on paper, might appear provocative. But his expression of them is tempered by a good deal of humility and self-doubt. While he has been pondering the merits of serial music, he has also been examining his own composing, and wondering about the worth of his own contribution.

"For about the last three years, because my output is getting a lot larger, I've been analysing what my music is saying, and whether it is authentic — whether it has any worth. I've had some success playing my music to different audiences, particularly my jazz music; sometimes an audience responds, at other times you'll draw a blank; it may be because the music is not happening, or it's not being played well, or the audience is just not interested in where you are at the time.

"I'm analysing that, because I do want my music to be accepted by a reasonable audience, even though I'm virtually writing it out of a desire to satisfy myself. If the music is not accepted there's no point in it. Sometimes I feel as if I can't go on; I feel like ripping up all my scores, and wonder if I'm having myself on.

"I have a similar feeling about jazz here in Australia. I know there's a group of musicians here who play what I consider high-grade commercial jazz music — and they're considered the leaders in the art form. But I know, from first-hand experience, that that's not so. The art form has gone out the window. But it's difficult to find a way to get my point of view across.

"One has to respect music which is perfected out of habit for stage performance purposes. This is what I call 'entertainment music'. Music that is art is born out of creative vision, sound knowledge and experience, coupled with hard work and a belief in oneself. This music also has to be perfected for performance for the enjoyment of the listener. But the listener, in turn, must truly listen."