

Source recognition of environmental sounds in the composition of sonic art  
with field-recordings.

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## PART TWO

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### NEW ZEALAND COMMENTARY

### ENVIRONMENTAL SOUND IN ELECTROACOUSTIC MUSIC: ATTITUDES OF NEW ZEALAND COMPOSERS

**ENVIRONMENTAL SOUND IN ELECTROACOUSTIC MUSIC:  
ATTITUDES OF NEW ZEALAND COMPOSERS**

1. Introduction

In order to provide a background to the place of the electroacoustic medium in New Zealand music and the role of environmental sound, eight composers were interviewed by this author and transcriptions of these interviews are presented following this commentary. Most of the discussions centred on each composer's approach to environmental sound (whether in actual use through field-recording, or overall influence) depending on the particular view or polemic of the person. In addition to this, more general areas were discussed with the composers: the overall role of the electroacoustic medium in their work and the aspects of their approach to composition from which their use of the medium has sprung, as well as its continued relevance to their creative aims. In addition, thoughts on the New Zealand identity in music were addressed. This discussion takes the form of a background and commentary on those interviews.

2. The Composers Interviewed

The eight people interviewed represent four generations of New Zealand composer: Douglas Lilburn (born Wanganui 1915), who pioneered the use of the electroacoustic medium in serious New Zealand composition; John Rimmer (born Auckland 1939), John Cousins (born Wellington 1943), Jack Body (born Te Aroha 1944) and Ross Harris (born Amberley 1945) who belong to the next generation of composers influenced by Lilburn's involvement with electroacoustic music; Annea Lockwood (born Christchurch 1939) an

"expatriate" New Zealander now living and working in New York; Chris Cree Brown (born Christchurch 1953) and Louise Johns (born Christchurch 1966) who represent two further generations of New Zealand Composer.

These interviews revealed the variety and depth of the practical use of the electroacoustic medium in New Zealand music through, in some cases, the sharp division in approach to materials and language. At the same time, a strong consistency of environmental and "place" awareness in all was evident, but in different ways. Polarities of approach can be seen between composers such as, on the one hand, Ross Harris and John Rimmer who consider "abstract" musical expression to be of the greatest significance in sonic art, and on the other hand, Chris Cree Brown and John Cousins, who have concerned themselves with the use of referential sounds in the creation of works which extend from documentary recordings. Jack Body spoke of his use of field-recordings in the electroacoustic medium as a means of embodying his own reaction to the sounds of Asia, while Louise Johns spoke in more general terms of the importance for her of a feminist awareness, that is: deliberately concentrating on the female experience, and the significance of that in terms of the society and cultural heritage. Annea Lockwood, who works a good deal with live mixing and performance elements in her work, is the only person interviewed who is no longer resident in New Zealand, and this provided a useful perspective on a composer whose work in the electroacoustic medium has been undertaken outside this country. Douglas Lilburn is a key figure in the consideration of all this, as his example of following intuitively one's creative needs and finding the media which most closely serve those needs remains a key influence on many composers.

### 3. Interview Précis

Lilburn's involvement with the electroacoustic medium - which began in the mid-1960's, when he was already a mature composer of conventional instrumental music - marks a major turning point in his career. From 1964 onwards, he concentrated almost exclusively on work in the electroacoustic medium, for in this he found a strong affinity between the potential sound-world of the medium and his own internal conceptions of the sensation of rhythm and timbre. In other words, a medium without direct and obvious links to the European instrumental connections and structuring of rhythm. In this way, environmental influence and the acknowledgement of the uniqueness of his own geographical and cultural identity were significant factors in Lilburn's approach to the electroacoustic medium. The simple integrity of Lilburn's stance as a composer - finding the means which best suit the expressive requirements of the individual - remains a valuable model for many younger New Zealand composers.

John Rimmer has probably the most purely abstract musical approach towards the electroacoustic medium of all the composers interviewed and he is certainly international in outlook, his strong interest in development of computer technologies having taken him to work in many overseas studios. The "conventional" musical basis of his work in the electroacoustic medium can be discerned through his concentration on works for acoustic instruments with electroacoustic music on tape<sup>1</sup>, involving synthetic materials and transformed instrumental and natural sounds. Rimmer's approach to the electroacoustic

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<sup>1</sup> Notably in the Composition series, which numbers ten works for solo or groups of instruments and electroacoustic music on tape, as well as Seaswell (1979) for trumpet and tape, Soundweb (1978) for trombone and tape and Tides (1981) for horn and tape.

medium is not through the making and presentation of field-recordings in his works, but in the movement away from natural sounds or from the influence of natural sounds towards abstract expressions, so that a process of progression out of the literal sound through compositional control and synthesis is suggested. This attitude is clearly enunciated in his interview. Further to this, environmental influence is a significant feature of much of John Rimmer's abstract electroacoustic music, with patterns drawn from the scale, space, motion and the experience of natural phenomena, such as in the works De Motu Naturae (1985) and the computer generated work Fleeting Images (1986).

Jack Body speaks of his work with "found music" - musical objects or performances from other cultures taken intact from their usual cultural role or setting - which capture his attention. This has occupied much of his recent work, using Asian (especially Javanese) found musics. Field-recording is a vital factor in this as it is the means by which Body captures the material he wishes to use, either for transcription (so that the music can be presented through another medium for performance) or for actual use of field-recording in electroacoustic works. While the works which involve transcription into a new medium (Melodies [1984] for orchestra, for example) concentrate on the actual content of the materials in a purely musical sense, the electroacoustic works of this kind embody some sense of the context from which the sounds were taken with ambient sounds - conversation, laughter or incidental street sounds. This kind of content has given rise to works which involve a process in which literal recordings are "framed" within textures derived from morphological transformation of those materials (such as in Fanfares [1981]) - or in which a graphic "street" scenario has, abstracted from it as part of the process of the work, sounds of street musicians and "motivic" sound signals to which the composer is drawn as used by street sellers (such as in Musik Dari Jalan [1976]). A

New Zealand (non-Asian) perspective on such materials and processes in Body's electroacoustic music hinges for him on the way certain aspects of the content are interpreted - that casual laughter and "street" ambience" are heard as contextual elements, or that cries of street-sellers are appreciated for their appealing "motivic" nature. Essentially, he is concerned with the innately musical and gestural qualities of these materials, because for Jack Body, one of the attractions of Asian cultures is the way in which music is integrated in ordinary, daily life, far more so than that of his own cultural background. Body also works in photographic and theatrical media<sup>2</sup> and it is not difficult to discern, in his makeup as an artist, a concern for environmental scrutiny through documentation. In using "found musics", Body's work of this kind stems from, and deals with, the integrity and wholeness of the already extant musical objects to which he is drawn.

John Cousins has a strongly personal, autobiographical basis to his work, and field-recordings have been especially relevant to this artist in his documentation of himself and others in natural situations - using the medium to capture and explore facets of life experience. In his interview, he describes the ways in which this has continued to be important in his work. The electroacoustic medium can be seen as an appropriate medium for Cousins' intuitively realised need to place his own persona in his works, as a means of self-discovery as well as expression. Also, since the late 1970's, his sculpturally-oriented performance works have included himself as direct subject matter for the work and as performer, for example, Sleep Exposure (1979) which is centred around the description of

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<sup>2</sup> A work such as Runes (1984) combines photographic and sound media in the creation of an installed environment, while Encounters (1980) is a combined audio/theatrical work based on verbal descriptions by people of various cultures of the way people greet each other in each of their own societies.

a dream by the artist about his grandfather, and includes photographic, video and sculptural materials<sup>3</sup>. Cousins' electroacoustic and performance works are linked by the artist's sensitivity to bodily, physical presence and especially voice and its centrality to his sense of being, communicating and potential for self-expression. The intensely personal basis of Cousins' work has made the artist acutely aware of his particular experience of the creative process and the integration of subconscious, intuitive processes with objective formulation. Recent work of this artist is extending into the area of video field-recording (image and sound), with focus for extended periods on natural environmental processes (such as the movement of shadows across the Earth) sometimes also involving meditative tasks and performance rituals which involve a direct interface of human sensibility and selectivity with natural environmental relationships. Such relationships involve subtle redistribution of objects within a particular environment or locality, integrating the body to a high degree with natural objects within the environment, and the construction of musical instruments to create sounds from environmental movement (for example, aeolian tones extracted from wind and water currents)<sup>4</sup>.

Ross Harris is one of the most wide-ranging of New Zealand composers of serious music, having worked not only in different media - conventional instrumental, electroacoustic and theatrical (especially the opera Waituhi of 1984) - but has also explored different stylistic possibilities within his own work, including rock music, and

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<sup>3</sup> Other performance works which have involved Cousins in physical interaction and process with materials are Soundings (1980), Birthday (1982), In Real Time (NZ tour 1982) with Colleen Anstey and Chris Cree Brown, Membrane (1984) and Bowed Peace (1986).

<sup>4</sup> See Cousins, John. Study Leave Report 1987. University of Canterbury, for more detailed description of these projects.

forming the Wellington-based group "Free Radicals" to experiment with improvised structures through electronic and conventional instrumental media. In interview, Harris speaks about the importance for him of sound synthesis and control technologies (having, for the present, largely turned away from the direct use of environmental sound in his work) and the influence of this on his creative processes - for Harris, creativity and inventiveness are linked to the extending of musical content to the limits of the technology with which it is realised. Harris also speaks of some works as being environmental in an emotional sense, with abstract sounds (derived from synthesis or sampling) which have the influence of natural or environmental shaping and patterning, but which for him embody a more internal world or environment.

Annea Lockwood's work in the electroacoustic medium began in Europe in the early 1960's (at around the same time as Lilburn's work in the medium began in New Zealand) and, while considering herself to be a New Zealander, has continued to work outside of this country - in England and the United States. In her interview, she describes the way in which initial contact with music realised with purely electronically generated sounds led to a re-evaluation of sound materials in her work and a focus on the natural qualities of acoustic sounds, especially environmental sources, beginning by exploring the natural morphologies of sounds possible through vibrating and breaking a variety of objects made of glass. Field-recording is an important part of Lockwood's work in the electroacoustic medium, which often involves the combination and presentation of recorded natural sounds with minimal manipulation or transformation of materials. Lockwood's concern for untreated sound stems from the idea that working in this way enables exploration of the natural phenomenon of sound, that the reception of sound is a form of bodily nourishment and a way of gaining a sense of integration with the Earth's natural

forces and inter-relationships. In working from the natural intrinsic characteristics and qualities of sounds, Lockwood is attempting a language which directly embodies the perception of these, rather than the subjugation of sounds to abstract or external organisational methods or manipulations of internal structure. A further aspect to her work, which is discussed in interview, is the mixing of the constituent sounds of a piece in performance (such as in World Rhythms) as this is a way for the composer to more deeply explore the intrinsically related sensations of her materials with each performance.

The interview with Chris Cree Brown centres on the composer's work Black and White (1987) for orchestra and tape, a work which uses many field-recordings documenting the 1981 Springbok Rugby Tour to New Zealand. This work received its first performance shortly after the interview was made. Cree Brown speaks of Black and White very much in terms of the work as an attempt to make social and political comments on the attitudes and confrontations brought to the surface by such a major issue as the 1981 Tour - the use in the work of literal field-recordings of sounds such as clashes between riot police and anti-tour protesters is a way for this composer to be very direct in content. A wider perspective on this composer's attitude to music can also be found in this interview, as he talked about what he terms the political basis of his work - this being a matter of personal statement, musical language and content resulting from a desire to find the most clear and direct individual expression that an artist can achieve. This notion links very much to the concern spoken of by Cree Brown for response and sensitivity to his own surroundings and context, whether social or ecological. Chris Cree Brown's work has also extended into the area of music theatre and mixed media

performance<sup>5</sup>, gallery sound installations often based on political or social issues such as the proposed aluminium smelter at Aramoana on the mouth of the Otago Harbour (1980), and for Amnesty International (1986), as well as a long-term project for the building of a massive Aeolian harp as an environmental sound-sculpture.

Louise Johns is a composer very much involved in making music-theatre performance works<sup>6</sup> and in her interview speaks of the strength and directness she finds in working with recorded sounds - even in considering relatively old technological means such as tape splicing. She describes the importance for her of the directness and physicality of such studio processes as being a sensation analogous to working with actual objects. Johns' feminist approach to art is also significant, being for her central to the understanding and placement of herself within her own cultural framework.

#### 4. Comparison and Context

While the common denominator of concern for the natural soundscape can be discerned amongst all the composers interviewed here, the way in which this awareness is embodied in works shows there to be considerable conceptual differences of approach towards the electroacoustic medium to have emerged in New Zealand.

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<sup>5</sup> With works such as In Sympathy (1981), In Real Time (1982), Piece for Anzart (1985) and Deep Music (1988).

<sup>6</sup> For example, The Fuck Piece (1987) for solo vocal performer; Childless Woman (1987) for solo vocal performer with instrumental ensemble; which require physical action from performers (sometimes verging on dance) which contributes significantly to the message and form of the works.

So while all the composers interviewed indicate their affinity with environmental sound, some are concerned with it more as an overall influence, while others are involved with its direct use and presentation. As an example of the latter, there are the very personal works of John Cousins where material from the domestic environment is often used directly in documented form (especially voice), or in his performance/sculptural work, where not only artifacts directly taken from the personal world are integrated but also his own physical presence as performer. On the other hand, the more abstract electroacoustic works of John Rimmer, who has worked a great deal in European and North American studios to harness new techniques of synthesis and control, attempt a more general environmental influence. Rimmer concerns himself very much with the combination of conventional instrumental resources and electronically generated sounds on tape - which speaks especially for what is basically an extended musical approach in the essentially abstract nature of his language. This kind of contrast shows up the difference between influence and direct use of environmental sound: on the one hand the desire to draw on the "vernacular" of the indigenous environment for natural shapes and patterns which can be translated into more "international" abstract languages of electroacoustic music (whether using synthetically produced sounds or treated natural sounds); and on the other hand, the use of the recording medium to document and explore the natural soundscape in a direct way, which uses the reference meaning of sounds and the implications of their natural contexts.

The environment is a significant factor in New Zealand culture - New Zealanders tend to spend a lot of time outdoors or in open spaces and this is not unusual for a country with considerable amounts of accessible unpopulated space and a temperate climate. The role of interior/exterior spaces in the shaping of the sensibility is also a

factor worthy of consideration. In a lecture on her work given in Christchurch, New Zealand sculptor Pauline Rhodes spoke of the pattern she associated with her childhood of the contrasting feeling of indoor and outdoor spaces<sup>7</sup> - always being told to run outside and then called back in again - and the possible analogy in her work between that phenomenon and exterior "object" space and interior "emotional" space. This kind of attitude quite clearly illustrates a way that a creative artist sensitive to, and concerned with, the environment makes a link between an affinity with her own particular surroundings and its role in life experiences, and the emotional responses which are associated with the expressive needs and outlets in making artworks.

Len Lye is another New Zealand-born artist who wrote about these kinds of early influences (mainly through simple remembrances) of particular associations and patterns of signs and feelings.<sup>8</sup> One particularly relevant idea of Lye's was on the automatic focusing of the sensibility on a particularly striking perception made soon after waking up and the overall influence it has - that if, for example, one had an intense reaction first thing in the morning to a sound then it would be (in Lye's words) "a sound day" and furthermore, that all kinds of stimuli received in this way (of colour, touch, weight or distance) could result in days with associated perceptual intensities. Lye felt that the kind of stimulus by which one is consistently touched may result in a disposition towards expression through that aspect or quality of perception.<sup>9</sup>

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<sup>7</sup> At the Robert McDougall Art Gallery, Christchurch, 19 June 1988. Pauline Rhodes has worked a great deal with materials such as rock, steel and wood, in both gallery installations and environmental re-situations of crafted materials.

<sup>8</sup> See Lye, Len (Wystan Curnow and Roger Horrocks eds.). Figures of Motion. University of Auckland Press, Auckland, 1984, especially pp. 27-35.

<sup>9</sup> See *ibid.*, p. 31, for Lye's description of this.

While there is no reason to assume such attitudes as being specifically New Zealand in origin, the relevance of such experiences to a creative personality belonging to a culture without a long history or tradition of artistic endeavour of its own (that is, Pakeha New Zealand society) may be a valuable insight.

While an environmental basis is a significant factor for many New Zealand composers of electroacoustic music, distinct polarities have emerged in the way this basis is used in the making of work. This is largely dependant on the value placed by the composer on either an "abstract" final result or the direct use of environmental materials and referents. One possible reason for the gradual emergence of such polarities is the maturity that has been reached by the "second wave" of New Zealand-resident composers of electroacoustic music - those immediately influenced by Lilburn. This group is represented here by Rimmer, Body, Cousins and Harris, all of whom have been involved in the running of studios in their respective institutions, have produced considerable bodies of work, and have had (and continue to have) influence over further generations of younger composers through their teaching. In this way, polemic can be seen as a natural and positive result of diversity and continuity of practice by a variety of people.

##### 5. Lilburn's "The Return"

Distinction between these two basic approaches to the electroacoustic medium is discernable from the early days of the practice, dissemination and discussion of this medium in New Zealand. One particularly noted example of this was in 1968 when, in

response to a review in Third Stream<sup>10</sup> of the first release on record of Douglas Lilburn's electroacoustic work The Return, a younger New Zealand composer - Robin Maconie - wrote an essay in which he compared the Lilburn work to Karlheinz Stockhausen's Gesang der Jünglinge<sup>11</sup>. Maconie's comparison of these two works, and the fact that he found Lilburn's work to be wanting in relation to Stockhausen's, is indicative of the European-based view that electroacoustic music should not be direct in its relationship to literal images and, more importantly, that structural relationships not be created on the basis of the sign reference of recorded sounds. Maconie spoke of The Return as being "full of literalisms . . ."<sup>12</sup> and it is clear that Maconie's approach to this work was based on his alignment with the methods of Stockhausen in Gesang der Jünglinge, namely the process of mediation between polarised sound sources - recorded singing of a boy soprano and electronically generated textures based on sine wave material.

Maconie, in attempting to describe the elements in The Return from the basis of whether or not they were electronically generated, and especially, whether sine waves had been used in the synthesis of sounds<sup>13</sup> further exhibited the linking of his approach with that of Stockhausen. In making a list of comparative features of the two works, Maconie spoke of The Return as being "evocative rather than meaningful" and of Gesang der

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<sup>10</sup> See "The Return and Elegy". Reviewed by M[urray] B[rown]. In Third Stream, n.1, 1968, pp. 73-74.

<sup>11</sup> In Third Stream, letters, n.3, 1968, pp. 35-36. In a reply letter, Douglas Lilburn, in defence of his own approach pointed out a number of factual inaccuracies in Maconie's discussion of The Return. (See Third Stream, n.4, 1968, p. 8).

<sup>12</sup> Maconie. Op. cit., p. 36.

<sup>13</sup> See Ibid., p. 35.

Jünglinge as being "deeply meaningful as well as evocative"<sup>14</sup> In relation to the discussion in the previous chapter on the use of sign sounds as a basis for meaning in sonic art, this is a relevant point of discussion.

While Stockhausen's aim in Gesang der Jünglinge extends from an aural basis (that is, the acoustic melding of polarised sound sources) the matter of whether this gives rise to "meaning" beyond the perception of this phenomenon itself is a significant issue. The metaphorical relationship suggested by the mediation between voice (with biblical text) and an obviously non-human form of sound-production (perhaps as an element external to the "physicality" of the voice) is not extended to any other groupings of sound sources. Therefore, in terms of an overall "meaning", the piece functions very much in an "abstract" way: the mediation being a pivotal part of the textural and morphological manipulations in the work. On the other hand, "meaning" in The Return centres around the text - Alistair Campbell's poem of the same name<sup>15</sup> - and the composer's creation of sound imagery which underlines and extends from the imagery of the poem (contrary to Maconie's statement that the "text" of this work was a "collection of Maori words")<sup>16</sup>. In this piece, groupings of reference sounds contribute to the formation of sound images.

Lilburn's aim in The Return was to make unity within his work on the basis of content and reference of materials, rather than purely gestural or morphological manipulations and associations. The Return deals with sounds which extend from the

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<sup>14</sup> Ibid., p. 35.

<sup>15</sup> Reprinted in The Penguin Book of New Zealand Verse. Edited by Ian Wedde and Harvey McQueen. Penguin Books, Auckland, 1987, p. 320.

<sup>16</sup> Maconie. Op. cit., p. 35.

actual meaning of the central text. While Maconie did acknowledge that "Lilburn's intentions are not the same as Stockhausen's . . . but it is not a justification"<sup>17</sup>, Maconie's denial of the validity in the processes and relationships in a work such as The Return was seemingly based on his stance that complex morphological manipulation and relationships should be axiomatic in electroacoustic music. This would suggest why a critic such as Maconie should have such great difficulty in coming to terms with the structural and formal possibilities in the actual content (literal meaning as well as poetic imagery) of a spoken text, and therefore be drawn to the comparison with Stockhausen's work.

This issue reflects, once again, simple aesthetic polarities of approach to the use of environmental sound in electroacoustic music - on the one hand the juxtaposition of sign sounds to articulate a new expression or meaning (extending from content) and, on the other hand, the desire for actual manipulation and control of the acoustical parameters of sounds being regarded as a fundamental aspect of a sophisticated "musically" based form. As a reflection of New Zealand attitudes and culture the examples of European method in composition may have been, in 1968, an indication of the general isolation of New Zealand musical activity from the avant-garde of Europe, as well as a time when a number of younger composers were beginning to make direct contact with influential European and North American composers.<sup>18</sup>

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<sup>17</sup> Ibid., p. 35.

<sup>18</sup> For example: Maconie himself (in Paris 1963-64 with Messiaen, Cologne 1964-65 with Stockhausen, Pousseur, Eimert and others); Annea Lockwood (from 1963 in Cologne with Koenig and London with Peter Racine Fricker); Jenny McLeod (1964-66 study with Messiaen and Stockhausen); Gillian Whitehead (from 1967 study with Peter Maxwell Davies); John Rimmer (1967-68 in Toronto, with John Weinzwieg and Gustav Ciamaga); Philip Dadson (1968-69 in London with Cornelius Cardew); Lyell Cresswell (1969-70 study in Toronto); Jack Body (1969-70 in Cologne with Mauricio Kagel and Utrecht with Koenig); Gillian Bibby (from (continued...))

## 6. The New Zealand Identity

The question of the New Zealand identity in music has often been considered, notably by Douglas Lilburn in two lectures (now published), given at the first Cambridge (New Zealand) Summer Music School in January 1946 entitled A Search for Tradition<sup>19</sup> and the other given at an open lecture at the University of Otago in 1969 entitled A Search for a Language<sup>20</sup>. In both these papers Lilburn addressed the nature of the "displaced European" heritage of many New Zealanders and called for an internal search amongst such composers in order to draw on a greater acknowledgment of the nature of their own makeup and experiences. From this simple and genuine basis, Lilburn suggested that the eventual resource of a larger cultural definition could emerge through art. In a collection of essays called Aspects of New Zealand Composition: 1950-1980<sup>21</sup> several New Zealand composers and musicologists considered the nature of New Zealand music, especially Jack Body ("The New Zealand Musical Identity"<sup>22</sup>), Allan Thomas ("Pacific Awareness in New Zealand Composition"<sup>23</sup>) and John Rimmer ("Recent Developments in

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<sup>18</sup>(...continued)

1970 study with Stockhausen and Kagel); Barry Anderson (initial study in London in the 1960's as a pianist, but by 1971 had set up the West Square Electronic Music Studio, Kensington); Denis Smalley (1971 in Paris, with Messiaen and Groupe de Recherches Musicales). Source: Norman, Philip. Bibliography of New Zealand Compositions. Volume one: second edition (-1982). Nota Bene NBIE18, Christchurch, 1982.

<sup>19</sup> Alexander Turnbull Library, Wellington, 1984.

<sup>20</sup> Alexander Turnbull Library, Wellington, 1985.

<sup>21</sup> Published as Canzona, v.3, n.10, 1981.

<sup>22</sup> Ibid., pp. 18-26.

<sup>23</sup> Ibid., pp. 27-34.

Electronic Music in New Zealand"<sup>24</sup>). Body, in his essay, considers the stereotyped New Zealander image of reticence, difficulty with sensuality, showing emotions or being articulate in public - and the greater acceptance and ease of physical action and a kind of camaraderie of mediocrity based on an egalitarian attitude and the idea of this as a cultural framework from which to see New Zealand art.

In the interviews conducted by this author, the overriding attitude towards a New Zealand musical identity was that it is not an issue to be consciously approached by composers or to be deliberately sought with particular materials or language of composition. Chris Cree Brown, for example, holds that if he maintains the closest contact he can with his own surroundings, environmental, social and political, his work will naturally reflect something of those concerns, while for Jack Body all cultural experiences - whether in New Zealand or Asia - are for him part of his makeup and the expression of his personality. John Cousins, although deeply involved in audio and video work in the environment, maintains that the motivation for his work stems from fundamental and universal, human concerns - although his use of material which constitutes his immediate environment and which is central to his own personal world necessarily means that his work is related to New Zealand cultural and geomorphological identities and phenomena.

Annea Lockwood described some early perceptions of relationships between people and the land from her experiences as a New Zealander growing up - attempts by humans to exert control over the land as well as the power of natural forces over people's lives,

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<sup>24</sup> Ibid., pp. 60-61.

and she considers these early kinds of awarenesses to be a great influence on her work. However, she also pointed out that now living in New York, access to the Rocky Mountains has enabled her to regain the kind of environmental awareness that alpine terrain instilled in her from childhood.

To this it must be added that the perspectives outlined in these interviews are all those of European descended New Zealanders, and this is a reflection of the domination by that cultural group of electroacoustic music in this country. Furthermore, at the time of writing, the growing awareness in New Zealand in the issue of biculturalism may suggest the imminence of a more fully realised bicultural society. Through this there is being revealed a depth and richness of the indigenous Maori culture of New Zealand, and the relationship between this background and the basis of cultural displacement for those of European descent is an alive and vital matter.

## 7. Conclusion

The environment is a major source of stimulus and actual sound material for many New Zealand composers of electroacoustic music - whether as an influence on composition with otherwise neutral synthetic materials, or in the use of recorded natural sounds. As Douglas Lilburn has observed:

. . . I notice that every composer that comes into this studio [at Victoria University, Wellington] is fascinated by natural sounds, and several of them have a distinct preference for certain sounds, like sounds of the ocean, or of running

water, and curiously, of things like cicadas which are in our ears through the summer.<sup>25</sup>

The New Zealand environment is rich and diverse in its character and patterns, with a great deal of accessible coastline, large rivers, alpine terrain, native bush with a variety of native birdlife and considerable variations in climatic conditions, all within the space of a relatively small land area. Added to this is a strong national emphasis on outdoor life and pursuits, as well as general accessibility (due to the small actual land area of the country) to the range of its environmental characteristics. Such factors may be underlying influences on the role of the environment in the work of New Zealand composers of electroacoustic music. Although there is no completely consistent pattern to the way these composers approach and use environmental sound (as is notable in the interviews conducted for this study), the use and influence of the natural sound world can be discerned in the work of many younger New Zealanders working in the medium such as Kim Dyett, Warwick Blair, Louise Johns, Matthew Fisher and John Young.

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<sup>25</sup> Jack Body interviewing Douglas Lilburn. Typed transcript of taped interview [1976], unpublished, held at Alexander Turnbull Library, National Library of New Zealand, Wellington, MS papers 2483, Folder 97A, p. 5.

## 8. Interview Transcripts

### 8.1 Interview with Jack Body 27 March 1988

JOHN YOUNG: What were the influences and needs that brought you to electroacoustic music?

JACK BODY: Just young and foolish! When I was still a student I met Douglas [Lilburn] and heard about the studio [at Victoria University] and asked if I could come and work there, which I did. He showed me how to use the studio and then left me to it. Although I wasn't a student at Victoria, I was committed to doing a piece and asked for time in the studio . . . but that's history!

JY: Prior to that you had only worked with conventional music?

JB: Yes.

JY: How do the two fit now that you work with both media?

JB: Well, I've never really worked with electronic sound - I have an invitation to go back to Bourges later this year and they've got Barry Truax's POD system so I'll have a chance to work with that, but I've never really worked seriously with electronic sounds.

JY: Why do you make that distinction from the kind of work you have done?

JB: Oh, I think that the technology of synthesis and so on requires you to learn basic techniques, which I never really have. It's to do with temperament, it's to do with how one's mind copes with technology, whether one's got prejudices or particular talents. I seem to have avoided that, or it just hasn't seemed appropriate to work in that area. You have to know the technology well to make it work for you, otherwise you're a victim of it . . . it's controlling you. So you really have to know how the machines work in order to get the sounds you want. If you're working with natural sounds they're there and can be transformed in simple or complex ways but at least you've already got the basic material. If you're working electronically then you start from nothing, unless you ask the machine to give you something which might mean that you're not actually in control of the sounds.

JY: Do you think that electroacoustic music which uses synthetic sound sources is a different thing again from instrumental music?

JB: Oh I think it is. A lot of synthesiser development has been simply an imitation of instrumental sound, but in a sense there's a very pure school that sees electronic and computer sound as capable of producing sonorities that have never been heard before, as creating a new sound world - that was one of the basic tenets of the first experimenters. And that's possible more and more, but you really have to be in control of the machines.

- JY: Does a language or a way of working stem from the nature of the technology and the sounds themselves?
- JB: I suppose new sounds develop into a new syntax, a new language but, in a way, that happened at the beginning anyway didn't it? With say, Stockhausen's works, that there were new ways of thinking of sound structure - musical structure.
- JY: The approach to structure and the musical thinking in some of your conventional works like Melodies for orchestra, seems quite similar to your electroacoustic music with the use of Asian musical material; how do you feel about that?
- JB: Well, that's another question again really. While one obviously sees the impact of synthesised sound in the instrumental music of many people - like John Rimmer - particularly in the relationship between his orchestral music and his electroacoustic music. But Melodies is related to my interest in transcription (musical transcription into notation) and then from that notation into another form. Also the use of "found" musics - in other contexts. In one of my electroacoustic works Jangkrik Genggong the musical process in that is similar to Melodies - taking found musics and encasing them or gluing them together. There's not really any extrapolation involved because the bits in between don't go very far - they're just giving the found sounds a new package. I would see those two pieces as using similar techniques but one is purely instrumental and one is electroacoustic.
- JY: What particular kinds of things are you able to do with the electroacoustic music?
- JB: Well, the use of the Emulator means that in Jangkrik Genggong one can take elements of the found music and actually create a synthetic music which provides the links - it's quite simple in the way I do it in that piece. Maybe it's the kind of thing that Stockhausen was thinking of with Telemusik - but he perhaps takes it further, even though his technology was far less advanced, he wanted to process his material further.
- JY: With the use of orchestral resources too though there's the whole question of the live performance and a great deal of flexibility with minute details of the sounds.
- JB: Yes, of course. In fact that is another kind of transformation because it's no longer "found music". By putting it into notation and giving it to Western instruments you have actually transformed the original materials. I've never heard the orchestral version of Hymnen but that's a similar kind of thing I think, using an orchestra and having the electroacoustic extrapolation from that.
- JY: You were talking before about the Emulator - what kind of advantages do you see in that kind of technology and what is your attitude to the deployment of it?
- JB: The Emulator is a miracle really - high quality sampling and what that can mean. There are still acoustical problems - if you want to get a sample that is too short the sound can change so that you may end up with a harmonic or something - I don't know whether the Fairlight is able to do this any better, to loop a sample so that you get a sonority that does actually relate to the original sound - very often it transforms it into something else because you're missing some of the harmonics.

But the capability of the Emulator is to take whole chunks of music or recorded sound and work with them - the kinds of things done to the human voice in say Berio's Visage and Homage to Joyce, which would have been months and months of work for him - with an Emulator it would be days! Then if you don't like the sounds you can just change the parameters. A lot of this technology enables you to get that immediate feedback. I think what's interesting then is the impact of that technology on the processes, because I've had this experience myself - you have sounds in the machine, you throw your hands onto the keyboard and out comes this incredible cascade of sound from one sample - well, you can't do it anymore. You have to do something else because those things have become too easy. When one labours with all those bits of tape joined together and multi-tracked you might work for a week, switch it on and there's the sound - and you've earned it - you've controlled it all the way so you feel a part of that structure. But when you put your hands on the keyboard and it does exactly the same thing then you don't feel that same amount of commitment or control.

JY: What kinds of things do you think you'll look for?

JB: I'm not sure at the moment because I'm really working more with transcribed material and live music. With my stage three composition students I do a project like that. They have recordings of music from a tuned percussion instrument just arrived from the Philippines - they have to choose a track, transcribe it and then from the transcription play it on this instrument. By putting it into notation they can see more clearly the structure. So it's less of a transformation than a transference.

JY: Why is the Asian influence in your music so important to you?

JB: I suppose it's a deep romantic attachment to Asia and who knows the reason why, except that maybe it's because New Zealanders don't have a clear identity of who or what they are. Hearing Boulez talk about tradition as he did<sup>26</sup> I felt wasn't convinced when he said he was interested in New Zealand music. I felt that he would probably have no consideration for thinking that there might be anything interesting here because he would see it as a completely transferred tradition which in most ways it is - something without a five hundred year old tradition. But in other ways, I've spoken to European composers who regard the lack of tradition as an incredible liberation and I think one could see American music in those terms and perhaps the beginnings of a similar awareness in Australia and New Zealand. Asia perhaps is somewhere where I happened to go where one discovers traditions which are thousands rather than hundreds of years old and a sense of time that was different because of that. A sense of native place in the world and of the function of culture, which was again quite different from anything that I had experienced - different forms of social behaviour and social structure. Anybody who has had contacts with traditional cultures is struck by how music functions within the

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<sup>26</sup> Pierre Boulez had just concluded a visit to Wellington including concerts and a seminar in which Body also took part.

culture in such a tangible, powerful way. In China<sup>27</sup> I had small contact with the Miao people and for them as in some aspects of Maori culture, all events are marked by a song. One night in the street there was a couple, a man holding a bicycle talking to a woman but not actually talking at all - he was singing to her (he was saying good night before riding off to his village) and, after he sang, she'd sing her response. Also drinking songs - you go to somebody's place for a party and they sing to you. It might be something like "you've got to drink three bowls full and here we go ho, ho, ho!" - in song. In a tea house I saw this singing which was a game, a competition of exchange between a man and a woman, love songs to a poetic form - improvised. On one particular occasion, perhaps partly because of my presence (the songs were becoming a little risqué) and partly because somebody didn't wait their turn, the manager was trying to shut this person up and he was shouting, telling them to stop but the man just kept singing. The only way the manager could communicate was to join the singing. That meant that the ritual of singing was on a much more potent level than speech - so this man had a perfect right to sing - nobody could stop him unless somebody joined in singing. It was incredible!

JY: You obviously respond to that integration of music into everyday events.

JB: I can't say that I'm influenced by it or that I try to reproduce it or anything like that, but it simply keeps one's mind blown open. Suddenly ways of thinking of how music can function, what it means and also with respect to other arts in society generally - that's what is important.

JY: As part of that whole awareness, the tape recorder has become an important tool?

JB: Yes. I was thinking that in a way I'm a little disturbed that some of my transcriptions are absolutely literal and I think, "well maybe I should be developing this". Boulez said that one shouldn't simply appropriate music or carry it across, but learn to make one's own thing within one's own culture. But that doesn't necessarily happen for me. When I encounter something special I'm so filled with admiration for this music, I transcribe it to learn its secrets. Then I'm filled even more with wonder and what I might make of this or turn it into seems so much less than the object itself. So it seems better to present the object in its original form - it has been transformed in terms of the arrangement that I would make - the instruments I use and all those sorts of things, the different context I put it in - but I still want to honour that piece, that music.

JY: So you don't want to start working with the pitch patterns or structure as a western composer would do.

JB: No.

JY: That seems even more significant in terms of the electroacoustic music.

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<sup>27</sup> In 1987 Body undertook an extensive visit to China, observing and making many field-recordings of indigenous music and musicians.

- JB: Yes, that you hear exactly what it was. You don't try and destroy it to recreate it. In Jangkrik Genggong you hear the sections in the middle as transitions but you do get a chance to hear the original material, in its original form.
- JY: Also you retain a lot of the incidental sounds.
- JB: Well yes, but again that's partly necessity because its impossible to get the perfectly clean field-recording. The individual sounds are there and one has to accept that and make virtue of necessity.
- JY: Do you make transcriptions of the musical materials that you use in the electroacoustic music as well, do you explore it in that way first?
- JB: No, not usually. If one is presenting the recording in its purest form it exists there there's no purpose, except for analysis, to transcribe it. Obviously if one is using another medium this has to be done.
- JY: Are there any problems from the culture that you take the material from? Have you encountered any difficulties.
- JB: Well, one is particularly sensitive being a New Zealander as a Pakeha in relation to Maori society and the fact that it is now very inappropriate to work in that area, because it is so sensitive. I think that one tries to be responsible in what one does and I think in relation to the Pakeha/Maori situation at present there will be a different view in ten, twenty or thirty years. It's just that this time is very sensitive - and so it should be. It's not a balanced view currently - but it's a very necessary transitional process. There was the case of David Hamilton's commissional piece for the Schola Musica which included Maori instruments. One of the players who was supposed to play refused to participate, I don't know what the exact reasons were, but somebody had to be substituted<sup>28</sup>. I think those things should be talked about a lot to get us through them.
- JY: What kinds of reactions have you had from performances of pieces like Music Dari Jalan or Jangkrik Genggong in Indonesia?
- JB: Well, I think the present Maori/Pakeha situation is because the Maori are rediscovering and rebuilding an identity for themselves so that's what makes it sensitive. But when you're dealing with cultures which are thousands of years old, as in Asia, they know very well who they are, where they come from and what their tradition is.
- JY: They're not under threat in the same way?
- JB: That's right, and my music really isn't really for them, it's for myself and for people of my own culture. But they sometimes find it very amusing, or perhaps plain silly. But sometimes they might find it illuminating.

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<sup>28</sup> See Kerr, Elisabeth, "Maori Flute Lessons". New Zealand Listener, v.121, n.2516, 1988, p. 84, for a report on the events surrounding this specific issue.

- JY: All of your electroacoustic works use some natural sound element which is clearly recognisable and now found musical objects . . .
- JB: Including found music has been the hard thing to do technically so it took some time to get the courage to try.
- JY: How do you see a balance between those kinds of very strong reference elements and the use of more abstract sounds in these kinds of works?
- JB: It's a very simple solution, to join the natural elements or to give them a frame - with transformed sounds from the original material.
- JY: It seems to me that in a work like Music Dari Jalan the context is set up with a very graphic scenario of literal sound and then the main idea is that what are perceived as musical elements are revealed out of that situation. So that the music is drawn out of that, almost like the polarities of the abstract and literal are very self-contained because the literal elements are "found" musical things but those things are able to give rise to further musical treatment within the piece.
- JB: Music Dari Jalan is a bit problematical in that for anybody knowing the origin of the sounds the references are very strong. For instance, you hear somebody shouting [in Indonesian], "Bananas, bananas!" And you know immediately what it is. So for Indonesians hearing that is very amusing and I don't think they find much music in it because it's so referential. And yet for somebody not knowing that, it is actually very musical because you don't recognise "bananas", you hear somebody singing a little motif. For an unaware audience the trick of the piece is simply that you hear the sounds in isolation - just hanging in space - then you hear them in their street context. So that's the clue for hearing them as functional street calls or as musical motifs.
- JY: Do you think that there's difficulty in the two sides to the approach - transforming the literal sound into an abstract entity and using it for its pure sound quality? Do you think that there's a problem in establishing a musical argument?
- JB: In Music Dari Jalan I don't think there's a problem, because the materials are simply "sounds" - they have a strong reference if you know it - but I heard them immediately as musical. But the problem is of course, when you move towards actual musics - found musics - because they are somehow intractable, they have their own structure and they don't need anything else. Fanfares was a move towards that because those are found pieces of "music" which are not really music, they are "wallpaper" music, in other words music which simply begins and ends whenever it likes, the recordings are simply of street vendors - they are signals. That's an interesting kind of music which can be transformed into anything you like because that is its function. Jangkrik Genggong was much more difficult because the recordings were of a song - it's got a verse and it begins and ends with that verse and it is contained - its form is closed.
- JY: There's quite a definite progression in that piece of the different versions of the song.

JB: Well, it's just trying to get from one to the other as best I could. Taking different tempi and different tonics, it was really hard to put together.

JY: The last version of the song in that piece seems very Westernised.

JB: Yes it is. It's a pop version. In a way one can see an analogy in the Sinfonia of Berio, but at least if you're working in instrumental terms you can change tonics or tempi much more easily than when you've got it on tape. Even the Emulator works like a tape recorder, the more you speed it up the higher the pitch becomes, which is especially difficult with voices because very quickly the voice becomes unnatural if you take anything up more than a tone, its timbre is transformed. That was a problem in The Return<sup>29</sup>, with the sped up and slowed down voices.

JY: Do you think that some technical possibilities in the medium can be too obvious for what they are?

JB: It depends on the piece. Each piece sets up its own aesthetic which might simply be to take a fragment of speech and explore all the different ways of using it. If a piece is about transformations of material in evolving stages then that's one thing, or if sound has become quite unrecognisable from its origin then that's another kind of piece. I think that the idea of gradual transformation and of that being what the piece is "about" (or the subject of a piece) is interesting. It seems to me that in John Cousin's work he very quickly in the early stages almost rejected synthesised sound and used the simplest techniques that tape recorders were capable of and has continued to develop that. In a way one senses that his pieces are about the medium. But I don't think I've done that.

JY: Is there a danger, do you think, in the technological basis of the electroacoustic music being too much a part of the way works are realised, or the reason for their realisation? Do you recognise the potential for pushing technology for its own sake without real consideration for the kind of material content and ideas which are actually involved?

JB: The tendency has been with synthesisers and computer music programmes to make them "user-friendly" so that the composer doesn't have to know a great deal about technology in order to use it but the result of that, of course, is that the more friendly it becomes the less actual control you have on what it is doing and you accept or reject what it gives you. If you want to play a violin or make music in that traditional way - and in many cultures there's no distinction between the composer and the performer - if you want to make music you have to make the instrument or if you're given an instrument you have to know how to make it go, technically. If you can't do that you can't get very far - unless the instrument plays itself which is not really the kind of thing composers want. In that analogy with conventional instruments you can see that you have to be able to play the instrument to make music.

JY: What about some of your works which employ visual elements, especially

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<sup>29</sup> Douglas Lilburn's electroacoustic work of 1965.

photography, is that a separate activity to music?

JB: It is so far. It's just that the experience is something which in a way gives me more pleasure - it's immediate and one is working directly with whole objects and the work is easier I think. But to relate the two I find not easy because if one is working one's ears and one's eyes at the same time one's eyes tend to win out. So in a few experiments with video I've tried things like making the images very slow or static which enables the ears to exercise the focus.

JY: I'm thinking of a work like Runes which combines in performance sound and vision, comprising slides of toilet graffiti and water sounds from cisterns.

JB: Well that's really the other way around, the images were first and the sound simply fills out the silence to avoid nervous giggles or anything else [laughter] and to create a continuity from beginning to end. But really it's an adjunct to the images.

JY: The images in that piece have transformed colours.

JB: Yes. Only because the original images were so drab and impossible - it's really just to heighten the impact. I did that show as an "environment" in a blacked-out room. I covered the walls and ceilings with Xerox photocopy which is quite strong and had everything painted black - the audience carried torches and the tape played at the same time. That was quite strong because the sound filled the environment and one got the sense of perhaps being in a cave - with the sound of water and the darkness - but the first thing was the images. I also had the images done in Cibachrome for an exhibition of the images by themselves. It's actually a misuse of a type of film which alters the colours - a high contrast, very slow film which is for making transparencies off negatives - so it's a reversal film but has bizarre colour reactions, so the film does the transforming for me. What I've been doing recently (in fact I did this in Runes) is taking them and recopying and recopying, reversing each time so that the colours become more and more bizarre - I've been doing that with portraits.

JY: Are you interested in visual documentary as in the way you are with found music?

JB: I'm interested in a certain sense in documentary, but not with people. The strongest push in New Zealand photography is to do with documentation of people and events but that's not what I'm interested in at all in that the camera is such an aggressive thing - people feel very self conscious . . .

JY: Is the tape recorder like that?

JB: No, in China for example, I used a Professional Walkman with a little [lavalier] microphone - very unobtrusive!

JY: Do you have a particular view of yourself as a New Zealand composer and of New Zealand composers in general?

JB: Not so much as a New Zealand composer, but as a New Zealander. I played a piece for Douglas [Lilburn] a few years back, I can't remember which it was, he

listened to it and said something like, "That sounds like a real contribution to Indonesian music!" But you just do what you do, you can't worry too much about why.

JY: Is it important for New Zealand composers in general to try and have a particularly New Zealand sensibility?

JB: I think it's to do with the problem that maybe all New Zealanders suffer from not knowing quite who we are. If you really do know who you are then you really can't not be you and you don't have to be overly conscious of yourself and what you do. But I think many of us are very self-conscious of what we are and what we do - that might mean that we want to escape from where we are and create music in a certain European style or instead be really "Kiwi" and use Kiwi symbols - both are equally self-conscious. But I don't think I'm self-conscious, I just do what interests me and I have no concern for where that puts me.

JY: And whatever happens, happens?

JB: Yes, and my experiences in China are part of me and not necessarily a lot to do with China at all and still less to do with New Zealand, but had a great deal to do with me and my experience of being alive - so they've become part of me. I know that this is my home and recognise that so much of my character is a product of where I am - and being interested in and visiting China or Indonesia is no conflict or paradox.

JY: Do historical roots present a dilemma - that many artists still feel the necessity to reject European things and "open" in other ways - is that not too much of a concern to you?

JB: No, but obviously it is a concern to many artists because we don't know who we are - in a sense - because there is no tradition. So one answer is to consciously look for it or build it. I think it's why we should all travel because it's only by putting yourself in an alien context that you can sort out which part is you as a unique personality and which part is you as a representative model of New Zealand culture - and every culture no matter how young or old has its own characteristics. I mean, the culture might be beer, rugby and football and there's a part of that in all of us albeit by reaction - but it's only really by travel that you give yourself the shock of confronting another way of thinking and another sensibility, so that one can start to separate those two things. I think I know who I am and what parts of me are Kiwi which I can use or disregard. But if one can't make those distinctions then one is much more self-conscious about what one does.

JY: You work from your individuality, from your unique aspects.

JB: Yes. I think it's to do with age and reputation, you become self-assured. When you're young it's terribly important to fight for the right to be recognised, the right to be yourself and everybody does that - but in middle age one hopefully establishes oneself. And also in love, having relationships with a person or people, is a kind of assurance of oneself.

8.2 Interview with John Cousins 9 November 1988

JOHN YOUNG: What led you to start working with electroacoustic media?

JOHN COUSINS: The first thing was access to a tape recorder. What happened was this actually, in the first year I was teaching in the department, that must have been 1967, Ross Harris was in the Stage Three class, Denis Smalley was too, and Ross owned a Sony quarter track reel-to-reel tape recorder, one of those ones with the lift-off speakers, you know. I went to a party at his place and he was recording music on it so I borrowed it, and used it to record a piece for orchestra that I'd written for the [University of Canterbury] training orchestra which they performed in the University Hall. Then for some reason or other I decided that the department should have one and so we purchased a similar model. Then I discovered an old Ferrograph, that the department had, that I didn't even know existed.

I don't know why, but I started making animated lectures on the overhead projector with a roll of acetate. I'd put the sound-track on this tape recorder and I did really stupid things like the "life of a dot and a line". They would jump all over the place and I'd wind the thing along while the tape played. I used to do stereo things so that the dot and the line would talk to each other. I started using it like that and then I animated the sounds by speeding them up and slowing them down. I knocked out the erase head by putting a piece of cardboard over it, used tape loops and just sort of mucked around with this thing. I've still got some of the tape recordings from it actually. This was really in the context of teaching a stage one course in harmony based on Murray Shafer's ear cleaning method. I also conducted the University Singers, and I used one of the rehearsals each week devoted to "crazies" where we used to do all sorts of mad improvisations (vocal improvisations and things like that) which developed into a sort of "In Real Time"<sup>30</sup> thing - just play really. That was the state of things. I was still writing conventional music at that stage.

Then I went on leave in 1972-73. After that we came to the new department at Ilam and we set up the studio. From the setting-up grant, I ordered the Ampex, the AKS and a couple of Revoxes.

JY: And between that, contact with Douglas Lilburn?

JC: Oh yes. It was in the 1970's. What happened was the department of Extension Studies in Wellington put on a "tape recorder weekend" for secondary school teachers using the facilities of the Wellington Studio. Douglas Lilburn was sort of presiding. I went to that because obviously I wanted to get my hands on more

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<sup>30</sup> In Real Time. Live improvised performance/ activities/ works carried out by John Cousins, Colleen Anstey and Chris Cree Brown. Involved simultaneously independent or interactive improvisation by using found objects in sculptural performance. Videotaped by Bronwyn Officer. Tour of North Island, New Zealand, May 1982.

tape recorders. I had already written music and Douglas knew me, just from the music really, and he gave me access to the main studio for a whole night in that weekend. Then I told him I wanted to come back and work in the studio in the August holidays of that year. I think he went down to his bach at Cromwell and I went and stayed in his house and had the studio to myself. That's when I first really started working. I went up on a number of occasions, it must have been two or three times for blocks of weeks in the holidays. I stayed in his house and worked in the studio. Then I went overseas on leave with the idea of coming back and setting up a studio, I worked at Utrecht and I did ygUDuh in Toronto, so I was involved by then.

JY: And you made the letter tapes for Parade on that trip?

JC: Well, I made the tapes but I didn't think about Parade. I hadn't made any field-recordings at all up to that point. I had recorded sounds, but only in rooms because we didn't have any portable tape recorders before I went away. So it wasn't in my mind to use that material at all - it was just to send back.

And then after 1974 I didn't write a lot more conventional music I really just concentrated completely on the tape music and then started teaching composition in the "In Real Timish" sort of way. We did Co-Active Play<sup>31</sup> and all those sorts of things in the Sonic Circus, we toured with Phil Dadson. That led to the sculptural performance works, really, over a period of about ten years - and the conventional music stopped. So, it was a completely practical thing. I think the thing which really locked me into it was that I got a microphone, made a recording of my voice, played it back to myself and that was it. It's interesting because I think that's where the autobiographical thing started - right there. There's something about me listening to my own voice - my own voice just talking - which was extremely meaningful for me. It's been the same ever since really, I'm not just constituting it in retrospect either, when I think back (and I've never really put my finger on this before) that's actually what it was. That's why the soundtrack

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<sup>31</sup> Co-Active Play (C.A.P.). The title of this activity stems from the term Co-Active which describes the absence of interaction in a group working completely independently but in the same time and the same space. This involved "eyes closed" activity (literally) resulting in body movement driven by an attitude termed "musement" a combination of movement and "musing" (a contemplative attitude). Linked with In Real Time through the pre-cognitive aspirations of both activities - allowing things to happen rather than contriving them, with principles of patience and stillness giving organic integrity. The prime aim being therefore, to gain access to the specifically unique aspects of the individuals creative resource (to allow it to happen).

Prior to the development of Co-Active Play, which later led to In Real Time, this attitude emerged from Cousin's efforts to teach composition from a feeling base - to try and enable people to maximise their feeling world and thus to prompt everything else involved in the making of work (such as technique).

of the film Run<sup>32</sup> is filled with stream of consciousness material. For years I did these stream of consciousness tapes - just sitting in a room talking - thinking back into my childhood - letting the memories come out, I was fascinated with the way they sounded when I played them back, not just because I could relate to the content in a really personal way because they were saying things about these people that I knew and felt about, but because it was my voice and I liked my voice. I liked the way it sounded, I liked the way it felt and somehow or other, just the recording of it was an expressive act - it somehow gave me a sense of getting something out - and it wasn't just the content. I could have written it all down, but I didn't. Sometimes even now if I really want to find access to what I'm thinking about I'll just put on the cassette player and talk, rather than type.

JY: So a mixture of the content and the real-time stream of consciousness?

JC: Yes, that's right and the fact that it was me talking.

JY: So while a lot of your pre-1970's music is vocal what you're talking about now doesn't come from an interest in vocal sounds, but an attempt to make personal kind of work.

JC: Yes. Well, some of the early songs are of my own verse, my own words, which were about personal experiences and the others were poetry that I particularly responded to. I realise that when I listen to that work, like the Wilfred Owen<sup>33</sup> songs and especially the early songs for strings and voice of 1968<sup>34</sup> (which I think was the first real piece I wrote) particularly after attending the recent sonic circus<sup>35</sup> and listening to some of the vocal work there - there is an integration in my work

<sup>32</sup> Run. Film by John Cousins for television in 1974. Produced and directed by Bruce Morrison. Concerned a conviction of Cousins in the similarity of experience between physical ecstasy (or exhilaration) and creative ecstasy or euphoria - in that "esoteric" and "normal" activities possessed the same vent of expression, a parallel between recreation (in sport) and creation (in art). The ideas were expressed using materials similar to In Real Time - sculptural constructions, an eight foot steel cube, natural landscapes - and the cube in the landscape.

The film showed a preoccupation with the idea of imaginary states so strongly inhabited that they form a complete reality.

<sup>33</sup> The work referred to here is Dulce et Decorum est Pro Patria Mori (1971, Revised 1976). Settings of poems by Wilfred Owen for baritone, orchestra, chorus and tape. First performed in Christchurch by Michael Tatchell (baritone), Canterbury Orchestra Trust, Christchurch Harmonic Society, Dobbs Franks (conductor).

<sup>34</sup> The Reason Why (1968). Settings of lyrics by Linda Krenis.

<sup>35</sup> The eighth New Zealand Sonic Circus, sponsored by the New Zealand Symphony Orchestra for their Fortieth Anniversary, organised by Jack Body, Wellington, 31 October, 1987. A whole day of performances of work by New Zealand composers in and around the Michael Fowler Centre, Wellington, New Zealand.

of the voice and the instruments, and the whole musical material, the way the vocal line is written. It feels natural, it feels like it belongs - it doesn't feel like it's been "put in". I think Anthea [Moller] had a lot to do with making that real for me, the fact that she and Bruce Greenfield did the first performance of the Three Songs of 1970 from manuscript. That was an extraordinary experience the first time they read those through - I can remember it as being very significant. It was the first time that I realised yes, that's exactly right. You know? Anthea's voice had something about it which seemed to transfer the meaning of the words somehow, it was a big, heavy, thick, strong voice - it wasn't a light voice. I realise that if I had taken the songs to a soprano soprano . . .

JY: It wouldn't have been the same?

JC: Exactly. I've heard sopranos sing those songs since and I don't feel the same - they're not me any more, they work but they're something else, whereas when Anthea sang them, she had the sort of voice that just made my hair stand on end. It was the same thing with Michael Tatchell singing the Wilfred Owen settings, he just had the voice. Chris Doig sang them first and he didn't have that sort of voice, they were just songs. But as soon as Michael Tatchell sang them there was just this edge - and the intelligence behind the voice, which Chris didn't have. It gave me the same feedback as when I heard my own voice on tape - that's what I'm trying to say: direct. So that's the link with the voice I think, and I've got an idea it's the whole bloody Irish background. Maybe that's fatuous, but I mean the storytelling, the whole spinning of a yarn. My father's like that, he just likes telling a story. When he was younger, at parties they always asked Ted to tell a joke because he could always do it brilliantly, superbly - it was just his voice. Also the way I related to popular singers like Bing Crosby. There was something about it, I didn't use Bing Crosby's voice for nothing in that Sleep Exposure document<sup>36</sup>, he's singing that particular song but it's the quality of voice - it's almost got to do with the actual sonic characteristics, the actual timbral characteristics of the vocal qualities themselves, quite apart from the words and what they're saying - to which I seem to relate somehow.

JY: So you're after a really direct link between yourself, your feelings and the actual object.

JC: That's right, absolutely direct, yes. Crying place direct. All the time it's just got to be there. And there is absolutely no intellect at all applied, I think, in probably any of those early works; both the electroacoustic ones and the conventional works. It was a sense of just absolutely one hundred per cent alignment with this enormous sense of personal investment - that's what drove it.

JY: Is making recordings now quite central to all the activities involved in making work for you?

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<sup>36</sup> Sleep Exposure: a Sound Document. Electroacoustic tape sound document, based on material from Sleep Exposure (1979) a performance installation work. Performed CSA Gallery, Christchurch, 1979.

JC: I think so, I think it's like that. I think the voice is still critical and I think I do it now just automatically. Like the field-recording of the paces and stations in the Sunwalk<sup>37</sup>. I make the recording, I take it home, I play the whole thing right through and I feel moved. I feel immensely moved when I listen to it - but I could never really say why exactly except for, as I said, it's being me . . . it's my voice, there's something about it I can't put into words, but it's still there. That's why I'll link that sound recording into a work, but not just for the data that comes out, because if it was anybody else's voice I wouldn't use it, you see?

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<sup>37</sup> Sunwalk. An environmental/sculptural process/ event created by John Cousins (in which this author acted as assistant) at Birdlings Flat, Canterbury, New Zealand on July 29, 1987. This Sunwalk involved the following:

At sunrise, as soon as there was perceivable shadow on the ground, Cousins stood, back to the sun so that his shadow was directly in front of him. A white nylon line was extended (by the assistant) from a peg between his feet towards the horizon so that the line touched the left hand edge of the shadow of the head. When the shadow had moved so that the line was in the centre of the head, a colour photograph was taken (by the assistant) through Cousin's legs, incorporating in the frame the shadow, line and horizon. When the shadow moved further so that the line touched the right hand edge of the shadow another photograph was taken and a new peg was placed at the top of the shadow of the head. Cousins then moved in a straight line to the next peg (the next Station) -recording on tape the exact time at which he left the previous station, counting in real-time onto the tape the number of paces to the next station and finally recording the time at which the new station was reached. This process was repeated throughout the entire day until sunset (with over sixty stations on this occasion over almost nine hours), the resulting overall movement over the earth following a huge, semi-elliptical path. The Sunwalk had the following formal consequences:

- (1) A sense of pace determined by celestial periodicity. For example, the speed with which the tasks involved had to be carried out - longer, thinner shadow at sunrise and sunset meant a frantic pace while shorter, wider shadow in the middle of the day meant the pace slowed considerably (with up to fifteen minutes between stations).
- (2) An awareness of time and the progress of the day (the progress of the earth around the sun) in a sense entirely on its own terms (without everyday distractions or socially regimented time). The day existed as a complete unified and continuous entity in the perception of the participants, dominated by the presence and control of the sun and the motion of the earth.
- (3) A static but progressive sensual experience of the landscape through the movement from one station to the next - as each station assumed a discrete, fixed locality.

The photographic and audio documentation of this event is presently being used by Cousins in the preparation of a number of audio-visual works.

- JY: So it comes quite naturally just to have the tape recorder there when you're doing things like that.
- JC: Yes, it does - and I find that obviously if you turn the tape recorder on, you know it's there, there's a certain contrivance, but the contrivance doesn't worry me at all. Chris [Cree Brown] has sometimes said to me, "What you've got to do is to get somebody else to work the tape recorder so that you don't know whether it's turned on or off, and then you'll get a candid recording of yourself", and he's right of course, but I don't care whether the recording is candid or not providing the recording is of me, that's all that matters. If you look at Tense Test, what I tried to do there was to engineer interactions with myself which were impulsive - there was no script. I didn't know how I was going to answer the questions I asked myself. I just kept on asking and answering, asking and answering on and on and on until the thing felt completely impulsive. I mean, there's no way that thing could be scripted that particular way. But I turned the tape recorder on before I asked myself the question, I made sure I was the right distance away from the microphone and all that sort of thing - and for me that's not a problem - that's part of making the work - it's part of stepping back, or out from the me that speaks and talks in real life, in real-time. Stepping out from that into a work, that's why the whole idea of "What does the recording do?" and how does it function has become such a preoccupation, that's what Tense Test was "about" at one level.
- JY: But it's a preoccupation through you too . . .
- JC: Yes, absolutely through me.
- JY: And those objective things have gradually been brought in over the years?
- JC: Yes, they have, that's right. There are a couple of works though which aren't about me, like Edit for Pauline and Anna. Anna doesn't involve my voice at all - it's just a straight documentary work really. Edit for Pauline involves my voice but only peripherally. Yet I still feel very strongly moved when I hear them so that even quite early on I was able to relate to situations which were outside of me, and still make a work - it doesn't have to be about me directly in that way, for me to make a work. But as far as the tape medium is concerned, the voice and that link that I've described, obviously was the main drawback. That's the thing that seemed the most natural source into my expressive world.
- JY: Although Anna and Pauline are both biographical pieces, with a documentary aspect.
- JC: They are that's right. It will be interesting to see what happens now, but I think I will always be in these works, I really do. I think probably I'm going to be in them more and more, but in a much more complex way than before - like this piece I'm working on at the moment. I think they have to be much more multi-layered and multi-dimensional. Situations can occur in them which don't have me in them at all, but that's the business of the intellect, I think, the distancing of myself. I think I achieved that with Tense Test. I remember the first version of Tense Test which was much longer. It had all kinds of material in it about my

marriage and my children - about all sorts of things all mixed in together. Then there was a real necessity for me to look at that and recognise that it had no form. It was unformed still, it was just a great bag of stuff that was out of me, but it wasn't able to speak on its own.

JY: What do you mean by form in that sense?

JC: Well I'm talking about actual semantic form. What the piece was about. So that in the first version you sit back and you say to yourself (or I say to myself), "ah yes, that's me in there and all those things have happened to me and isn't that wonderful, it's terribly significant because it's me." Not that it's significant just because it's me but that I'm a person and everybody else is a person too and this happens to everybody, you know? But essentially I'm making that statement through the things that have happened to me. Then I was able to step back from that and say, "all right, well what is it actually saying?" In other words not just to say, "Ah yes, I respond because it's me", but to say "I have another requirement now" and that is, of things that are being said - the content, the narrative - what are they saying and what has that got to do with why things are where they are in the temporal structure of the work. Are there metaphors being put forward? Is there symbolism being put forward? Are these signs, or are they not? How are these sounds supposed to work? In other words, I started to think about the work in those terms, not just sitting inside the work thinking, "yes, this is me - isn't it wonderful?"

JY: Or just enjoying the sounds?

JC: Yes. Then I came out the end of that thinking, "no, there's no clear message coming from this piece, there's no consensus of relationships in those terms - and there has to be." So then I said, "all right, I'll restrict my material to one question and one answer - from the original interview", and that's what I did. I chucked out any of the other material that didn't relate to that. That helped me enormously. Then I thought about it some more and realised that some of the material was semantic and some of the material was metaphorical. That's how I put it. A Venezuelan composer I met recently in England put it as "theatrical" and "musical" which I think probably is even better. It was theatre, it was sound-drama that I was working with in the first half of that piece, but it depended on narrative and semantic content. So, I knitted together a particular structure which was dramatic in that sense - and I worked with personas. It could all have been completely scripted, and the script would have given you a tremendous sense of what that section of the piece was about, without hearing the work at all. Whereas the second half of the work wouldn't. It depends much more on the actual sonic transformations and the expressive, more musical, morphological alterations, the repetitions and the temporal control. So I realised the piece was actually in two halves - it was two facets of the one thing - so, I made a formal decision not to mix the two up, and to start with I kept them absolutely separate. Then, I found that there were certain elements of the second half which were referring back to the first half like the telephoned question, for example, the telephone call asks; "what do you think about something which has been discussed in the first half." I thought, "do I like that? - yes I like that." It linked it, but it linked it in a sort of oblique, distant kind of way. But the actual intention and

direction of the second half is still commensurately different to the first - and I felt a much cleaner formal balance between those two things. I thought they are really complementing each other - they're not equal but they're complementing each other. They're representing two different facets of things and when you put them together you get a whole. Then, I added the postscript, because I felt that the piece evolved too completely, it tied up the impact of the second half, which I didn't want. So I opened it out. But all of those things were directed by an awareness of the formal effect of the materials.

Since then I had an idea to put a performance element in that piece, . . . extending out of the two telephone calls in the second half - one I call myself and speak and there's no answer (or you can't hear it) and then at the end of the piece I answer the telephone call with the answers that obviously belong to the first call. So I rigged up a telephone at home on a table. When that particular bit comes along on the tape I pick up the telephone and make the call, the phone then naturally rings in the room, I pick it up and I give the appropriate answers to the questions and then at the end of the tape, just before the phone rings on the tape, I dial the number - listen - the phone rings on the tape, it's picked up, the voice [on the tape] says hello, and I ask the questions,[live]. It was sparked and completed really by the suggestion about theatre. I thought, "well all right, if this is theatre let's make it real theatre, let's bring the whole thing another step forward into reality and have an actual phone." It all worked out perfectly mechanically. I could do it fine. There was no problem. I thought, "now what do I do for the whole first half of the piece? Ah, I know what I'll do, I'll get the programme note and I'll read it, I'll have a tape recorder, with me and I'll sit down at the table and read the programme note to the audience. But I'm actually recording it, and then I wind back and I listen to what I've said and then I start making corrections to the programme note and then at a certain point the tape starts - same voice, same person - the personas start to invade. I thought, "it's just perfect, it's got to work." So I did it - and it was a complete and utter failure. It didn't work at all. The whole piece just went into a mess. I knew it wasn't working, but I kept on trying because I thought, "it's a really nice little performance aspect to the piece that one could do so easily", but it just didn't work at all. The telephone conversations fitted but they were just banal and the fact that the questions you couldn't hear the answers to on the tape were actually being given and answered when they were being asked, ruined the whole thing - they became banal and ridiculous. They lost their power. That they lost their power was because [originally] you had to wait for the whole second half of the piece to go through before you got the answer. Not only that - but the way the [original] telephone conversations were working was that they were recorded telephone conversations they weren't real telephone conversations - they were field-recordings! They were recorded actualities, not actual actualities and that's what gave them their power too. They were in the distance. They weren't up front, there were these big sounds at the beginning of the second half of the piece and then this person is somewhere in the two-thirds ground away. Also, it's different when I answer, I'm right up close at the end of the piece. And all of these things I realise, were critical and they actually helped the whole. They were parentheses within which the emotional content of the second part of the piece existed. And when the phone call gets answered at the end, it links right back to the phone call that's made at the beginning formally that's one of the reasons it made such a

completion. If I interfered with that I buggered it completely. And the postscript was impossible. If I had had the real phone I couldn't possibly have had the postscript - it was irrelevant, it didn't mean anything.

JY: So to bring the phone call into real-time distorted its dimension in the tape.

JC: Totally. And as far as the beginning was concerned, that was absolutely hopeless, because, I remembered then that I had terribly carefully engineered the context of the semantic content of the material at the beginning so that it slowly starts to focus, and then finally the question is asked by the woman, five minutes into the piece, so that it's just these innocuous phrases being asked and you don't know what it's about or anything - the piece slowly sort of starts to happen. That was a formal decision which is critical, because it then takes off in layers. If I put something in front of it, it just ruined the whole layering and distorting of things that happened after that.

JY: That's similar to the real-time performance in Edit for Pauline where the piece starts with the editing of the interview, but with that it's a banal activity which is made more significant by the piece.

JC: That's right, as the narrative comes along.

JY: Right, and maybe with Tense Test to use the phone in real-time, the material is too potent in itself to treat it in that way.

JC: That's exactly right. It overdoes it, it has to be left implied. It has to be left sitting in there, you know. I realise all those things had been completely intuitively put in, not just the material itself, but where it was, its level, everything worked. Then there were the dilemmas I had about how to get from the first part to the second part . . . I had the tape recorder rewinding and saying, "we'll have to go back and listen again", the tape recorder fast forwards into silence, then initially it emerged again and the second part started. Then I decided on a pause of silence in between the two parts. In the final version the fast forward sound diminuendos into silence, followed by a three second pause and part two enters suddenly. I now realise the final version was so right that if I started pushing just any little thing around even one phrase, and shifting it slightly closer to another, the balance was disrupted. So that my formal sense - and by that I mean the way all the expressive ideas build and link and integrate with each other into a whole, was very finely balanced indeed, and it was very far from being a mess. That was really good for me to realise and it's only now that I understand how finely tuned that piece is. It's not just at one level - just the temporal level, - it's how loud they are, what sort of texture they are, what their semantic meaning is, how it links to other things, whether it's implied or explicit, whether the content is juxtaposed or whether it's not - like the postscript, all of that. To a certain extent I think it lacks a certain "rawness", it lacks something the first version had - just this huge sort of gigantic ball of stuff just going on and on and on and on - very expressive. The first version was much more expressionistic - but overall I don't think there's any comparison between the two at all.

So that's what I mean by formal considerations. It wasn't all just "brain", there were certain areas of brain involved that I don't think had been involved structurally before. But basically it was still intuition working, but a focussed intuition. It was a really new situation for me. The whole persona thing I'd never done before. It was much more theatrical than anything I'd ever done before. I'd never thought of my voice that way. I was faced with a lot of material and working in a way that I'd never had to deal with before - that's what made it so hard I think.

JY: Aspects like the voice which in that piece, like in many of your pieces, gives a lot of informational cues which inform the stream or the narrative of the piece - is obviously still really important in that piece.

JC: Yes it is, there's that simple narrative level which I think is there in most of the pieces.

JY: And there are other sounds as well like the sound of mowing the lawns and you in the shower, sounds like that . . .

JC: Right. Those are things which I think are really interesting to investigate because those are situations which, again, are simple situations which I'm involved in, which I do all the time anyway, and then I record them. In that piece, you see, I did those things and I talked about the ideas of the piece while I was doing them. Those voices weren't mixed in! I had a shower and I talked to myself about what I was thinking about the piece! Or, talked about he, or him because there were these "other two people" who were making statements about it - I became completely immersed in the personas and what they were all thinking about. The same when I was mowing the lawn. I think the motive behind that is very similar to the motive I was describing earlier about listening to my own voice and being moved because it's me talking - a recording of me talking. Well, this is the same thing - a recording of me mowing the lawns. That's where the photograph thing comes in. I see a photograph of myself doing something and I feel moved by that too. That's because I think it's a very complex psychological link down into the whole business of one's mortality - one's life, one's experience of being alive - in terms of the simple small things. I'm not really interested in the big, momentous things. It's the whole domestic thing which seems to be becoming more and more important actually. For me the thing that make those field-recordings have to be included in the work is, that they work on a metaphorical level, but they also function as signs. Here is somebody "in-the-shower", "digging-the-garden". The thing that links it is my voice. When you're in the shower or digging the garden or mowing the lawn normally you don't talk - so I just institute this device where I talk to myself. I mean, I think to myself all the time. All I do is just think out loud that's all. That's an absolute contrivance because the digging of the garden itself, a-garden-being-dug is no good - it's got to be me digging-the-garden before it's any use in the piece.

JY: That's one of the things that allows those kinds of images to work in this piece too, because one associates you with the activity.

JC: Yes.

- JY: So it's not necessarily you to someone who doesn't know you and doesn't make that kind of special link but it's the same person going through all these situations in the piece, and as signs they can be like icons, those kinds of images, like cultural bubbles of meaning.
- JC: I think they are, I think they can function in that way as well - I hope they do and for me they do. That's what makes them significant. If they were just straight garden-digging I don't think that I'd feel they were significant.
- JY: Because they're small but rich activities.
- JC: Yes, they're rich cultural activities and I think that's one of the things that the tape recorder can do so well just like the camera can. It's the fact that the event has been recorded that makes it significant. Just like the fact that a woman breastfeeding a baby on the bus and is photographed makes that significant. The photography makes it significant. What I'm trying to say is it's just the straight content and the fact that it's been lifted out of life, that's the signifier, that's the thing that for me is moving - you don't have to do anything to it.
- JY: And then in addition to that there are abstract sounds which are derived from other sources - how do you work in that way?
- JC: It's interesting because if you listen to all the tape pieces you'll find the same sound in just about all of them. Usually it's a continuous, deep, very rich sound which slowly grows and changes and reveals other things in it, often other situations, or sometimes other sounds. I think my attitude to all of that work is essentially documentary in that sense. The only work that I've made which uses sounds in a much more abstract way is Wouldn't You Say? - but you see all of that is completely vocally triggered and it uses my voice - only put through a voltage controlled mess! So, it's vocal gesture still. That's a work which you could "score" as an abstract texture all the way through - but it's the only one. I think those big sounds - they're almost like they're the opposite polarity . . . it's almost like they're how I feel sonically about the significance of the situations that I'm recording - do you know what I mean? So rather than transfer the situations, they are included unchanged. The abstract sounds are my musical response to the implications of the situations. They represent my feelings about and show other facets of the situations - expressed in purely musical terms.
- JY: And it's integral to the form?
- JC: Yes it's got to be there. It's interesting though in Tense Test in the whole first half of that piece - there is no musical manipulation, there's none of the abstract sounds at all - it's all completely concerned with semantic innuendo and ambiguity in that sense.
- JY: One of the difficulties that some critics have had with your work is that direct parallel of two kinds of formal arguments - specific semantic things with a more musical kind of underpinning.
- JC: Yes, that's right, I don't think there's much I can do about that really.

JY: Do you think it's valid?

JC: I just don't worry about it really. I used to. I went through a period of worrying about it a lot, but I accepted that's just me, that's just the way I do it - there's nothing much I can do about that. There's not a problem for me. It doesn't formally cause an incoherence for me, and so if it doesn't, then I'll use it.

JY: Did you have any kind of model for this documentary and enhanced documentary forms that you have worked in?

JC: You mean influences?

JY: Yes.

JC: I think when I heard Red Bird and read [Trevor] Wishart's book<sup>38</sup> that that was a fairly significant thing for me, although very quickly I realised that it was too pat - that there was something missing. I don't think Red Bird works, not for me, not with that sort of overall unity that I'm talking about. Rather than an influence it allowed me to become more convinced and obviously reassured me in a way that a lot of the stuff that I'd been working with was all right, I think. I read it, felt excited about it and went into a whole thing for a while like I usually do of thinking, "now this is the answer to my problem," [laughter] and then thinking up all sorts of situational scenarios that I might use just from the field-recordings that I already had . . . and then coming out of the other end of that and realising that that wasn't the way to do it. The way for me is the way that you've already described, that is, to set up the tension by having an actual, built-in incongruity between the situational recordings themselves and the other sounds.

At the beginning of this year I decided to go through all my field-recordings and I thought, "which ones shall I use?" The answer came back loud and clear, "use them all! If I've recorded them they're important." I listened to them and I've kept them - if I didn't want them then I wouldn't have them - so therefore they're all relevant. I didn't put them under headings or anything, there's no reason why I shouldn't use any of them, whether the situations are related or whether they're not situations or whether you can recognise them as signs or symbols - I don't care - they're all there and I'll use them.

JY: That's new for you, isn't it?

JC: Yes, it's spreading the net far wider than I've ever spread it before, I think. I mean I've always worked with quite limited material, and that's been enough, now the whole thing is broadening. I think that could be a sort of indirect influence of Wishart - the whole idea that one can move, one can broaden. Tense Test helped with that, because the whole formal solution of Tense Test was an important step for me, very important, because it really was a solution which fitted the material - what the material was wanting to do and how it was being manipulated. I think that now I trust myself enough to know that I'm just generating material that feels

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<sup>38</sup> On Sonic Art, Imagineering Press, York, 1985.

good and at a certain point I'll start putting it together and if it doesn't work it won't work until I find a way - and then there'll be enough resistance to find the form.

JY: Do you think that in Tense Test you were able to do that because it came from a situation in which you were interviewed - rather than you actually dictating the whole basis - in that you were being manipulated initially?

JC: Yes, it could have been. The other thing that I liked about Tense Test, which actually enabled me to generate the material, was that I was actually "de-bunking" myself. I had said these terribly significant things and then there I was laughing at them and actually saying, "well, you know, he says this but when you look at it closely the guy's just saying it because she wants him to say it". I was serious about that - I meant it - I needed to find out, reach ground about that, it wasn't just a nice thing to do, it was a process which I was actually caught up in my real life. I think that was important and that's what actually in the end allowed a lot of my real feelings about the feminist questions that were being asked to come out and the whole second half of the piece to emerge. It emerged quite quickly and very surprisingly. I mean, there was nothing I could do about it, it tapped into very, very deep fears and angers and even erotic feelings - all kinds of levels of response which I wasn't really expecting. I think because I was that involved, the sort of material got produced which allowed a formal solution to occur. I think you've got to have the right bricks, you've got to have the right stuff to get the form. I think one of the problems is you can get so far with making material and then the form starts to become apparent but if you start thinking, "oh well, what I need now is this, this, this and this", and then try and make it that way it doesn't work. You've got to say, "Right, the form is not complete yet? Right, OK [clapping of hands] keep on making [laughter], keep on making, now is it ready yet?"

If at any point in this process you say, "Oh, I only need one more piece and it needs to go . . . there - all right I'll make that!" - you've had it! Straight away. Because that way of thinking is inappropriate if the overall form of the work is to reflect its constituent parts. I think it's the whole way in which that looking feeds back into your making process. Obviously your making process has to be buoyed by an enormous momentum and it has to be about something that's really significant and important. You've got to be moved by the material all the time - and if you're not then I think you just can't make anything - it's that simple. The other requirement is like swimming around in warm water and every now and then you get a really cold current, you know? That you can actually feel the width of in the water, you can put your arm in and feel it go over you like a snake - that's the sort of feeling that I get off this intellectual stream, it's sort of like a coolant that goes through the sort of intuitive things I've just said. It's more and more there and I really like it because it complicates things. It's saying to me, "yeah, OK, but look, you know, there's more than one way to skin a cat, you think this is absolutely inevitably the way the things are going to go, well just give it a bang, or just knock it over . . . ". It's the whole business about "killing you darlings" making sure that you demolish the thing that's most important to you which I read in Picasso years ago and thought, "Jesus Christ no, that's not right". Now I know what it means - don't be your own voyeur. That's the problem with

really feeling strongly, you become "voyeuristic" about what you're doing, you relate too well to it and so you make the piece complete rather than it being complete. That's where this other "cold stream" sort of sits. What ideas may be included or not in a particular work can never be decided before the work is complete. They can go off in all sorts of complex directions and ways, provided they are all informed by the power of the idea that they're around. They're co-opted by it. Like gravity, they're held there simply by the force of the idea. Not by any actual links. That's the trouble with Red Bird, it's too linear, but it becomes so difficult when you try and telescope those things - I think it's very hard to do, but it's necessary because when you do that then - you go in, you've got this depth and the opportunity for really simple, linear things too. Like coming out of this immense amount of undergrowth and suddenly here's this beautiful little clearing - and then in again! I don't know whether I've got the ability to do it or not, but that's the thing that really excites me about what's happening now.

JY: Is that what you mean about what you've said before about a piece being a reflection of your state as a person at a given time?

JC: Yes I think so, there's no doubt about that. If your work really reflects you then it's going to reflect the changes - it's going to reflect what you require. It's interesting because before, there never used to be any thinking, or contemplation it was always Whumm! Poof! You know, and out it would come. Now there's much much more conceptualisation, as the process is going along - especially this year - with the work I'm doing outside. The whole thing of laying it down and then thinking about things and saying, "all right, then, that all makes sense", and as soon as the circle comes round and touches . . . [gesture of right hand looping in a circle and touching in a point the index fingers of each hand] it has got to come around and like poles, they won't come together [same gesture but with hands missing each other] - they want to, they get so far and . . . that's got to be there - that's me. That's the me thing that has to be put in - that's why I'm in the performance works. That's got a lot to do with the nakedness - the vulnerability - using that one thing as something which just stops the completeness, you know. The urine in Membrane does that - if it was water it would be just a complete circle.

JY: That's what you call a "so-what"?

JC: It just becomes a pretty idea.

JY: But it's closed within itself.

JC: That's right. That's where the autobiographical thing for me comes back in you see. It's the me thing. I can't really put it clearly. It's not like it sounds. It's not just me - it's "the human thing", that's what I really mean but the only way that I can manipulate it or use it is via my humanity. As soon as I get out and think of things like you might feel them or like someone else might feel them it loses it's immediacy. I don't have any certainty about it -and anyway, it's not so important for me.

JY: It becomes too general?

JC: Yes. It's that specificity of the actuality of me.

JY: That carries through into all the kinds of material you use not just in the electroacoustic medium - that things extend from your life as well as your voice.

JC: Yes, that's right. More and more actually. In the performance work Sleep Exposure it was family material - a photograph of four generations of male blood, my grandfather, my father, me and my two sons together in one photograph. Very obvious things were done with that, a silk screen was made of it and it was destroyed and then reconstituted and destroyed over and over - it's so obvious -but I never for a moment knew why I was doing that. It just felt terribly significant. At the same time these huge anatomical slides of the human body, of the skeleton and the musculature - going inside - and myself naked, absolutely still, but naked - and the pendulums. That piece in many ways, I think, didn't have any formal coherence it was formally flawed, badly, I think. Now it's the sun and celestial movement that I'm working with - and the interface of the body - and natural forms. That's the difference from a lot of the environmental work that sculptors have been doing over the last twenty five years - like walks in the landscape, observatories, changing natural features, painting natural features, things like that, taking rock circles and putting them in art galleries - the whole archeological attitude. Then the other side of that is the performance artists who have done just straight self-deprecating things like banging nails through their hands or having their hands shot or putting themselves in a tin container for six days and nights or lying in a hospital bed for a month - those absolutely body things . . . personal things. What I'm doing is somewhere in between those. I'm using my body and the me part, but now putting it out and situating it in these celestial periodicities - in the world. For me that's a very powerful idea because I can link into it, so I keep being moved by it. Also I can recognise it conceptually as a big, strong, simple icon-like idea as well - so it's a very capable vehicle for specific expression within a very general sort of trans-universal situation. I think I've tended to go away from the specific autobiographical things like the family and the stream of consciousness and more towards the individual metabolism, both psychological and physiological, "in" the world.

JY: Growing out of your family and into the world?

JC: Sort of - yes, I think that's probably what's happening -but the requirement, especially with all these things I've been making like the aeolian harps and the water current transducers and the tripods in the landscapes and so forth all of that - and the work I've done at Paturau - that's all capable of being a "so-what". It all has to be fired, when it's a work - not just an activity that I've been doing for a year, but a work. It's got to have this inability for the circle to be actually made [makes the same circular gesture with hands not meeting]. In fact, in the very first tape piece that I made in the Wellington Studio, called So Nobody Is, it's got this poem in it that I wrote - do you know that poem?

following the wide circle

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conjure the possibility

of an end<sup>39</sup>

which just sort of came out of me one day when I was in the studio thinking, "what am I going to put here?"

JY: You wrote that poem in the third form at school didn't you?

JC: Yes, and it's still there - that's it. It's this whole thing that never really comes together. For example, the residue from the Sunwalk - circular marks on the landscape these big ellipses and so on - that's why they're so powerful for me, because they've got this absolutely inevitable thing - the earth goes this way and the sun's there and that's the mark you get. Then this thing of the human being's presence and the inevitability being distorted by the body and the truncation of the shadow - one's physiological ability to move a certain distance in a certain time - all those sorts of things. It's the whole interfacing of the two things which I find significant. The problem is to get it expressed in a work.

I know we're talking about aesthetic things and that depends a lot on the perceiver, but I think I can tell the difference between something I'm putting in and something which actually is given off by it [the piece] - more and more I can tell that. The question is "how to do it", and I don't think I've got that solved yet, except that it's got to be done simply and yet have a complex repercussion - to get this [circular gesture] otherwise it just goes . . . [tongue click]. I'm thinking about the performance work for the Sunwalk, and it's more or less complete. There's one interesting thing about it and it's got to do with this [makes the same circular gesture with the hands not meeting]. The slides of the shadows are dissolved on the wall they're shadows in the landscape and they're moving (big shadows) and I've got to use my body, so I went through this whole scenario of shadows and my body in the space somewhere else - "oh well, I'll have a light that I carry and it will give a shadow, everywhere I go the light will be in the same place because it's over my shoulder on a pole. If I follow my shadow - it just goes wherever I go, and that makes a statement about the inevitability of the direction with the sun and the movement of the earth and the removal of that inevitability". Then I had all sorts of other ideas about this shadow - with my eyes closed and holding a light - all sorts of things like that. Then suddenly the whole thing completely disappeared and I realised, no, there mustn't be any shadow at all, and something said to me, "yes, that's much, much better. You have a circle of very, very bright light, so bright and coming from so many different angles that when you go inside

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<sup>39</sup> This is the printed form of the poem, see accompanying notes for New Zealand Electronic Music, Reed Pacific Records, Kiwi SLD-44/SLD-45/SLD-46, 1975, p. 14.

that, there's no shadow anywhere, they're completely removed." For me that makes a much more complex juxtaposition with what's going on in the Sunwalk images than for me to manipulate shadow again.

JY: Because that would be too complete, too obvious?

JC: That's right. No matter how different it might be, if I'm using shadow in real-time while things are going on - all right, it makes a relationship, but too complete. So it's surface is white, white chalk, the circle is quite small and isolated from the slides - otherwise there'd be too much spill, but it's that sort of thing. For me that's a step forward in the complexity of the relationship. It's simple, I know, but it expresses what I'm trying to say. Then I was thinking, now, I've got to speak, otherwise with the sound that comes out of the paces and stations from the Sunwalk that will be amplified (the field recording) as the slides dissolve - nobody will know that it's me. What I really mean is I won't know it's me, I've got to speak too and then there's the same thing as in Tense Test - so I think, "what do I say, oh well, stream of consciousness, of course. Childhood, yes, that will be quite nice - no - that's no good. Dates, I'll have all these significant dates that have happened to me in my life and I'll just say them each time the paces are called out on the field-recording, I will move in the circle - very small, almost unnoticeable movements, every time a new situation comes up I'll say the dates - well - that's not bad. People won't know what they are - they'll be very enigmatic." Then I thought, "I know what I'll do - I'll speak to myself quite softly the stations and paces as they're spoken on the amplified tape and then slowly as the piece progresses, the soundtrack from the field-recording will fade down and I'll be left acoustically speaking the paces and stations synchronously with the dissolves - yes - that's right." And that's the opposite, you see. What that's done has made an absolutely direct sort of link between my movements in this circle and the soundtrack. It's the sort of thing that one would think would make a perfect circle and yet inside of me it doesn't - it makes a relationship which is direct and yet which is extraordinarily expressive. Mainly because the field-recordings will be loud they'll be very strong, big sounds filling the whole space and then slowly they'll disappear and then people will realise that I'm actually talking the whole time to myself, so it relies completely on the few things that are there to juxtapose in such a way so that they get locked in a kind of a bracket - they bracket each other, you know? so that each one wants to move somewhere else but it can't - rather than just being an imbalance. The balance has to be got through opposition. That's another way of stating this incomplete circle. Things can't be equal otherwise they cancel each other out. They've got to be unequal but somehow or other incapable of giving or taking and that produces another structural impasse which can give pressure, that's what squeezes out the expression.

JY: Is that because links that are too congruous or too much the same seem tritely intellectual?

JC: Yes, that's right. So what I do is I think of all these things. I think back and say, "now what is going on here, what are the mechanics of the situations? How might it be read by someone who knows nothing about it?" I do all of that . . . and then I think, "right, now, if I do this, this, and this, based on that, is it going to work?" - and I wait for my sense of the inexplicable to come up and if it

doesn't come up then it's no good. And that sense gets harder and harder to identify with this work, the whole Sunwalk thing is just so complex there are so many aspects to it and I realise it's a whole hierarchy of different ways of displacing and relocating material in the small, little, wee area right out to the great big world shift. I've got to become aware of it as a language. Then I've got to know how to present it so that the tension is there. The tension from me - it's got to be brought down so that it's significant to the human level, you know, to that thing [circular gesture with the hands not meeting]. A huge landscape is one thing, a huge landscape with a really tiny human figure on it is another thing, and it's impossible to relate to them both in the same way - one, you could just look at as an abstract form, you've got no idea of scale - the other says something entirely else, it's got this narrative in it, it's got this representation in it of something which is the same as you -but isn't you. That's in all the work actually that's the human thing, the me thing again. That's a bit off tape music isn't it? It's about structure really.

- JY: It does give a sense though of the way you work from reality - environmental actualities, rather than just manipulating sounds. You're dealing with time as an experience whether it be through tapes and field-recordings or actually in the real-time of environmental experience, like you're doing now with the Sunwalk and the Paturau work.
- JC: Yes, you can see why I related to that [tape] medium - because it allowed me to do that. I was actually doing it in the conventional music anyway - I mean that music has a particular way of speaking - those few pieces that were written, it's very tangible there, but when this other possibility came along it was just so much more accessible to me and so much more natural, that I just relinquished the other way.
- JY: With the works from the early 1970's, like Christmasmusic, that's a piece which in relation to all the other work that was going on in New Zealand at that time - and which must have been very exciting - is very different.
- JC: That's a real one-out-of-the-box piece. The only thing I had heard before that was some text-sound music.
- JY: Henri Chopin?
- JC: Yes, and some of the Scandinavians. I think that sort of informed some of the vocal stuff that went on - that I was actually doing with the other people. But as far as the actual piece was concerned - and the whole allegorical thing, I mean had just no idea that that was being stated until after the piece was finished - and then it became very clear what it was. I think the only way that could have been done was because I was completely confident that I could do it, obviously. When I think about it now, being faced with something like that it just makes me tremble in my boots, you know - and the whole idea that people might say, "this is rubbish," and not be able to relate to it - that it was too personal or too anecdotal . . . those things just never occurred to me. The whole idea that I expressed at the time quite often: "to hell with the audience! To hell with everybody! The only person that matters is me and what I think" - I was totally and completely

protected by that. It's the only way that piece could have been done. When I think about it, it was terribly important that it did because it set the whole way I worked from then on. Imagine if I had made a piece on the AKS! I think in many respects that was a real, absolutely one off, unique piece, not just for me but in the whole context and milieu of what was happening then - and it was recognised as such too, mainly by people who were totally perplexed by it. [Now] I think it's terribly vague, it's terribly unformed in all sorts of ways - but the intriguing thing is that it got made at all, I think.

JY: How do you think that all those kinds of things relate specifically to New Zealand music and culture? Do you think that electroacoustic music is particularly appropriate in that sense? Do you feel especially like a New Zealand composer yourself?

JC: No. I used to. I use to buy that and I think it's true in a very simple sort of way, I suppose. But now I just have a "no comment" response to that really. I think that it's not an important question to be addressed and there's no way that you can come up with any evidence for or against except, I suppose, peoples subjective feelings and mine are absolutely quiescent about it now. I think it's a way of working that has suited me and that was that really. When you really try and extrapolate that out to being specifically, acutely "New Zealand" I think you just come a-cropper. I really do - there's no way you can sustain that argument. I'm convinced that the sorts of concerns that make me make work are absolutely ordinary concerns that ninety nine per cent of people have everywhere. There's nothing specifically unique about it, even from a general point of view of humanity let alone it being particularly New Zealand.

There's the whole cultural thing about going to England and seeing landscapes and being in landscapes that have been worked over by thousands and thousands of years of people and that not being the case here, I think that's probably true and I suppose the isolation thing - not being up with the very latest developments and having an attitude that that didn't matter - a non-eclectic attitude. I think that there are plenty of other people in the world who work in that exact same way. So the factor, the New Zealand factor, is unpredictable and I don't think it's all that great really. I certainly don't go along with the McCahon, Lilburn sort of idea of birds and sea and trees and round hills and bright light and so forth. I mean, I don't really - I don't think I do.

JY: Too romantic?

JC: I think so, and very characteristic of an emerging nationalism. It happened in America too - exactly the same thing . . . to hell with Europe, you know, we've got our own voice. I don't think it's a real frontier mentality. It's the corollary that may be applicable, that is because of the isolation and because of the lack of a cultural precedent maybe that allowed a work like Christmasmusic to be made. In other words, just pick oneself up by the bootstraps and just do it, you know? That sort of creative confidence . . . but I think that's as much a personal characteristic as a national one.

8.3 Interview with Chris Cree Brown 19 and 21 October 1987

JOHN YOUNG: You have worked in both conventional and electroacoustic media - do you find the two very different?

CHRIS CREE BROWN: Yes. I think there are big differences. The way I go about working in each of the mediums is entirely different; in the electroacoustic music studio the number of sounds you can obtain or use is virtually limitless compared to the five lines of conventional music. In the studio with electroacoustic music one is the performer as well as the composer, whereas with conventional music you have to wait until a rehearsal before knowing exactly what the music sounds like.

JY: A lot of your conventional pieces use unusual or extended kinds of instrumental techniques - non-traditional techniques - does that show an influence of electroacoustic music? Or does it just show another side of your interest in sounds generally?

CCB: Probably a mixture of both, I'm not the only composer to extend the compass of instrumental music of course, so that's one thing. I think there are other reasons and other ways that electroacoustic music has influenced my work in conventional media, basically in the matter of timing. Having worked with tape and having structured things in space on tape I then find that that's influenced the way I approach conventional music. For example, working with blocks of sounds, or perhaps juxtapositions of unrelated material fitted together in an overall structure.

JY: In some of your pieces in the last half dozen years or so you've used lots of recognisable sounds in your pieces, like in Street and Music for Limbs and in your new piece Black and White<sup>40</sup> which is a piece for orchestra and tape about the Springbok Rugby Tour to New Zealand in 1981. How do you feel about that kind of dichotomy that there is in sounds, between sounds as acoustical patterns and sounds as information - as an image thing or as a pictorial element?

CCB: Well, I think primarily what you've got to look at is the function of a particular sound in a particular work. It often amazes me that when I look back over some of those works over the last half dozen years that there are a number of things which I have done which are completely different. For instance, in Black and White my new orchestra and tape piece, the tape material is used purely in a documentary sense. Bringing the outside sounds that have been recorded from a variety of sources into an orchestral work. The function of that is different from, say, using the sound of a bagpipe band as I did in Music for Limbs. So basically it's a matter of the function of what you're trying to do and if how you use the material serves the function to make a work, well then that's OK. But I think that each work of art I do - and I hope this is the case - has a different function, so that there is a whole area of grey, it's not just "black and white".

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<sup>40</sup> This interview was held just prior to the first performance of Black and White by the New Zealand Symphony Orchestra conducted by Francisco Feliciano, at "Sonic Circus", Michael Fowler Centre, Wellington on Saturday 31 October, 1987.

JY: In Black and White how have you gone about conveying the documentary information with the material?

CCB: Well, I've got from a variety of sources material - some of which I've made myself - and I've mixed the contributory tapes in particular ways which I think will be effective for the purposes of the piece. These include literal field-recordings of events which happened at the time of the 1981 Springbok Tour of New Zealand - Rugby matches, protest marches, clashes between police and protesters, helicopter sounds, pub sounds, two prayers by Alan Pyatt (former Bishop of Christchurch), the singing of a treble boy's choir and comments made by various people such as politicians and rugby officials. I've interlaced them with the orchestra at times, juxtaposed them with the orchestra at times and put the material that's on the tape amongst the orchestra sounds. I've used the material that I think will work, that I think is important and that I like - and have allowed the documentary sense to be conveyed by mixing the material in ways which allows it to have impact, but with no treatment of the sounds at all - so that all the sounds are literal and retain their "rawness".

JY: That kind of material combined with orchestral sounds is a pretty stark sort of contrast isn't it between those two kinds of medium - especially when it's that kind of raw documentary material - is that an important thing?

CCB: Mostly yes, there is a stark contrast and the orchestra has the function of making an emotional comment, I think, on what's going on in the tape. However, it's not always like that. There are times like, for example, when I used the Television News theme in both the tape and orchestra, the same happens with God Defend New Zealand, where the orchestra plays the National Anthem first and is interrupted by the tape with a recording of the tune being played and sung before a rugby match.

JY: You spoke before about sounds which have been recorded and about the different sources from which you got the sounds, some have been recorded by other people and some by yourself.

CCB: Yes.

JY: Does that have a different feeling for you? Is it different in any way, when you're involved in recording the sounds?

CCB: Once again there are a variety of answers to that. There was the time when a friend of mine and I went to a Rugby match to try and record a crowd for Black and White. It didn't work quite as I had envisaged, but that was more a functional, fact thing that we did; I wanted a sound, I went and got it the best way I thought at the time and I used the sound in the piece. There was another time with the same friend when I went to record a pub and I wanted to make some personal comment for the end of Black and White and that I found extremely difficult - I find it difficult to have my own voice on tape and I didn't like listening to it when I went back to the studio. And other times I've tried to marry having a good time with recording such sounds such as another occasion when I went off to the pub to get some pub sounds with a couple of good friends of mine.

JY: So, in going to the pub to make these recordings you're hoping to catch the atmosphere - as well as the sounds?

CCB: Very much so. Again, I think every time you do a recording there is a slightly different feeling, like I was slightly more nervous the second time, not only because I was involved but also it was a different feeling I had to go and make some comments myself - with the previous time the getting the recording was a very important part of it, but if it didn't work it didn't matter too much because there was another Friday night that I could go and catch the same atmosphere - or a slightly different atmosphere. Every time you go out doing recordings they always seem to be slightly different. Slightly different reasons, slightly different atmosphere - some of the sounds are there continually, sometimes you have to go and catch them only once. So you have to make use of that opportunity. A friend of mine and I went out to try and get some sounds from Lady Wigram [car race] once (as it happened the batteries were flat so we didn't do it) [laughter] but that was a time when I thought, "oh I'll have that for a sound library, I'll go and get it," - and I heard them from my house so I made the special effort to go and get them. Not because I needed them for any particular purpose, but because I might need them some time in the future.

JY: So you do think in that way too - of having sounds that you collect, that you may use in the future.

CCB: What I always like to do, and I succeeded in Port Chalmers really well, although I haven't succeeded here because I've been a bit too busy to organise it but I like to have a separate bag, with my recording equipment, new batteries, microphones all in one place so if something happens like, for instance, Lady Wigram, it's not a matter of going to the shop and buying batteries, trying to find where you've put the microphones last, having them all scattered around the house . . . it's just a matter of picking up your bag and going. Also, by doing that it encourages you to take the bag whenever you might be going out on a day trip somewhere, so it's a very special thing and I'd like to think that I always took that bag wherever I went. But of course you don't - you forget it or you don't think that there are going to be any sounds.

JY: So you're always interested in the sounds that are around you, wherever you are?

CCB: Very much so.

JY: And you're interested in recording them on tape?

CCB: Yes. Another friend of mine and I recently went to Lyttelton, where there are some amazing sounds, particularly of nylon ropes as the ships sway: "rrraagh", and the sound travelled right up this rope. At some stage obviously - now that I've heard that sound - I'm going to go back and record it at the best time - which is a windless night preferably.

JY: That would be an example of a sound that you were interested in as a sound rather than for any environmental links that it might have.

- CCB: Yes. There's a place I've got in mind for it in a performance piece I'm going to be working on over summer, I might not use it, but I want to catch that sound so I can have it there and try it out.
- JY: Why didn't the football crowd recording for Black and White work? Why wasn't it exactly what you had wanted?
- CCB: Well, I made the simple and obvious mistake that I took the recording device right into the heart of the crowd, whereas it was obvious to me afterwards that I should have been twenty feet away from the crowd - even under the stands would have been a far better place. Obviously if you're right there, my own breathing was even audible at times, let alone my sniggers as anything happened - and that's not to mention the quite audible shouts and talking of people around me - at one part in the tape I think somebody said what they were going to do that night and that's not really anything to do with the reason I wanted the crowd sound and it wasn't the sound I wanted. I wanted the sound as a surge, and it wasn't a surge where I was. It was an obvious mistake and I'm annoyed with myself that I made such a blatant mistake [sardonic laughter].
- JY: You have talked before about political purposes in your music, involving social messages and so on, could you maybe just talk about what that means for you.
- CCB: There are three reasons why I compose. The first is for political purposes, the second is for aesthetic pleasure and the third is egoism. Egoism isn't so much a reason why I compose, rather it is the energy or the oil which makes me compose. As far as the aesthetic pleasure goes - that's also important in things like the Aeolian harps which have been extremely important to me and can to some extent be considered environmental sounds - capturing the sound of the wind or what the wind does is important to me too. And political purposes - well I know that a piece that has a political purpose is always going to be a better piece than a piece that doesn't have a political purpose. And political here really means in the broadest sense of the word. It's a statement of where I am as a person, it's a statement of where I think society ought to be going to make a better society, it's a particular standpoint of me. Overall politically is meant in the broadest sense of the term. Sometimes it's more specific - and Black and White is an example of this - and I always find that such political works are rather difficult to do. It's very difficult to actually pinpoint exactly how you feel about a particular political issue, because if you think about it hard enough you'll always find that in fact the whole thing is a grey area. The Springbok tour was very much a part of that . . . I know where I stand now having thought about it - I was opposed to the Springbok tour and there were lots of reasons for that. But there is also the other side of things, people have got the right to make their own decisions - although I think they ought to do it responsibly. Also, on some of the anti-tour marches people were saying things like, "Springboks out of Vietnam" and that actually set me into a lot of confusion because obviously there were a large percentage of the people who were on the marches who were there for fashionable social reasons even, and certainly weren't there because they felt deeply and strongly about it. A lot of people used it as a nostalgia throwback to their student days - for the Mount John marches and things like that - that's really what I mean by the shades of grey. I think it's important to say that I mean political in the broadest sense. I

have to say something of me about where I stand. Music for Limbs is like that even though there's no politically contentious issue that I'm talking about.

JY: So it can be to do with a political issue like Black and White or like The Neap Tides which is an orchestral piece about the proposed Aramoana smelter?

CCB: Yes.

JY: Or it can be a more intensely personal statement of you feelings, which is in all the works whether there's an issue involved or not.

CCB: Right. To take that further I think probably a good analogy would be in painting. There are certain painters of trite landscape works and the like, for whom it is my personal feeling that there is not in any sense anything of them in the paintings. Such works are done because the painter knows that there's a large percentage of the population who will sit back and go, "oh wow! Look at those . . ." Just a couple of brushstrokes and it looks just like a rock or a bit of marram grass - such things are done for reasons which don't stem from within the person. These paintings are made because they know that by doing those things they can use their time to earn money. On the other hand, if you compare it with someone like Toss Woollaston or Ralph Hotere - to have some of those objects in your house can be quite devastating . . . it's a very personal statement about exactly where they are in their environments. A personal statement has to involve what's going on in your milieu, social, geographical and every other sense. And I think it's extremely important that artists say something of themselves - how they are responding to their social, political, geographical milieu.

JY: What is it that brings that out though, in a piece? Are you relying a lot on the attitude of the artist - or formal things within works themselves?

CCB: Well, I think that it's very difficult to actually pinpoint what it is. I can't pinpoint, for instance, in Music for Limbs, what it is which makes that, in my opinion, a highly political work. Things like the strong juxtapositions between odd materials like balloon sounds put down a few octaves, container wharves and the Blackball Bagpipe Band on Anzac day, those things are highly different and the juxtaposition makes something new, something potent. It's not something that I would expect people to sit down and listen to pleasantly, but it's something very much of me, and of the way that I say things. I don't think that the fact that bagpipes were recorded on Anzac day has really got anything much to do with the piece, more I think is just the juxtaposition of that with what else is going on in the piece. Not only the juxtapositions and the odd combinations but then what happens to it, an obvious thing like getting sped up with the variable speed machine.

JY: Are you conscious of the humour aspects in that kind of situation?

CCB: Yes, I know, I think that there are humour aspects and I think a lot of my work has got humour, but I would like to think in that as well there is a lot of pathos in it and I don't think that it's the sort of humour that you sit back and laugh at - it's not slapstick by any means. It's an "oddity", peculiar sort of humour which has that sort of tragic aspect to it too. There are some times when I've looked at, say,

In Sympathy and I've almost cried about the sorts of things that have happened, even though they are extremely funny. What I think I'm trying to do - although I haven't done it consciously - is push it to the edge of that point where you don't know whether you want to cry or laugh and if you're doing that then you're actually getting to a space which is pretty deep and I'd be pleased if I did that.

JY: In a recent performance that I did here of In Sympathy there were some children in the audience who were laughing quite a lot at the start which was nice and then adults who laughed as well as the piece went on. But the feeling certainly for me was that the people were laughing but in the end they were either not laughing any more or laughing in a completely different way, feeling something else other than mirth or frivolity. They were feeling something a lot deeper.

CCB: I think so. I've got the feeling that - you know I was just so touched when they laughed - it obviously meant that they were reacting to it and to get that sort of response from an audience . . . I was just so thrilled and I think it was an extremely good performance which encouraged that. I think that the naivety of the children just laughing at it persistently really, really encouraged the adults to do it, who sort of felt maybe they shouldn't.

JY: It's like people's diaphragms are made to vibrate at the start of the piece and they keep laughing on and off, but they find that the laughter is actually transformed, it disappears inside them into a far deeper space.

CCB: If that is the case then I think that I would have done a successful piece - on my terms - in that limited way. I think if I've done that then I've achieved one of the things I want to set out to do. There are lots of differences in that piece - lots of differences in emotions that should come out, not only the laughter with the sounds to start off with, but the way there is communication then between the performer and the other two suspended trumpets which are in the piece. There are lots of emotions that the performer should lead the audience through - and you're right - they laugh because of the funny sounds and then by the end of the piece even if they are still laughing or not laughing they have gone somewhere. Their emotional space has been transformed.

JY: One strand which comes up a lot in your ideas is that of composing "on-the-edge", and being "on-the-edge" when you write with the ideas and the music. What do you mean by that?

CCB: Basically I think that creating music on-the-edge can be taken in very many ways, all of which I like, but maybe if you're looking for an analogy it's a bit like a road that goes around and follows a cliff edge. I think everyone's heard of the phrase "it's middle-of-the-road" and that in my way of thinking is diametrically opposed to walking on-the-edge. If you do something that's middle-of-the-road you're not going to offend anybody, you're doing something that's nice "wallpaper" music, you can sit and relax and just have a conversation over it. That's middle-of-the-road, it's not dangerous, it's not going anywhere, it's not going to offend anybody - it's easy listening. As you get closer to the edge you run the risk of falling off the edge! In other words you're running the risk of doing lots of things like perhaps offending somebody - that's one aspect to it. But there's also another

aspect of maybe trying something that's so dangerous that in actual fact it doesn't work - in the context of the artwork in which you are involved. You could fall over the edge and not get back up which means that you basically perhaps failed. But it's an exciting place to be because of that danger that you might "fall over the edge". And although it's not necessarily exciting to offend people it's something I think you have to be prepared for. I see the role of an artist as actually (and this comes back to the political nature again) of actually saying something that's important, and as soon as you do that you are in actual fact running the risk of offending somebody. It's a strong work if it's close to the edge, and that's as I said, really tied in with the political thing.

JY: The danger element is important isn't it?

CCB: Oh very much so. Ralph Hotere has said exactly that in relation to works that he's been doing on corrugated iron. That's something he considers to be on-the-edge and I think I agree with him because there are dangers; corrugated iron is an obvious material to use because it's around every back shed in the country, virtually every quarter acre has got some sort of corrugated iron on it somewhere - it's a very New Zealand thing - it's an obvious thing for him to use. He was asleep one night when a gale was blowing and a whole lot of these things were flying around and hitting against fences and that was a very, very dangerous thing - physically. He enjoyed the fact that the material he was using for his art in a dangerous way in that sense (as a medium to work in) was also dangerous in a direct, physical sense. He said, "well, that's what art should be, it should be able to fly up and cut your head off." That's my opinion too.

JY: Pushing ideas to their limit and working with real, tangible living forces?

CCB: It's dealing with something real as opposed to dealing with something middle-of-the-road which isn't real. It's certainly not a matter of finding something outrageous to do and then going and doing it because you think people are going to sit up and listen. If you do that then you're not really on-the-edge at all because you're not going on-the-edge within yourself - it's outside of yourself. I think some of the Futurists and Dadaists, for example, had problems in that particular area which is why perhaps some of their work hasn't survived in a larger sense. Whereas I think Beethoven and Stockhausen are two examples of artists who did go close to the edge and are very powerful when you look at what they're doing and what they're saying.

JY: So those kinds of composers are significant because the values they're working with are "real", in the way that you have suggested.

CCB: Real, yes.

JY: As opposed to manipulative or on a technical level?

CCB: Right. Some artists begin to abandon works of art because they think their life is an art work and that's real. Another thing is that if you look at Black and White there are recordings of specific images that were and are real that haven't been transformed by electronic means, only mixed, and they are real . . . or they're real

in the sense that they actually happened or they actually occurred, and that they are powerful documents, involving very direct strong feelings and issues. So that's using real-life raw material. So the material has to be real as well as the creative motivation behind its formation.

JY: So with a lot of those sounds in Black and White you've left them untreated, you haven't attempted to explore or to manipulate any kinds of musical things out of them by transforming the sounds - so you're concentrating on the electricity which is in the recordings themselves.

CCB: That's the reason I wanted it in a purely documentary sense - it's real and it's there. But on thinking about it now, I also think that if I did try and transform some of these things in a musical sense, it might very well take away some of the very electricity of the raw materials by themselves.

JY: And in fact, the orchestra's functioning at another level again - it's providing a kind of dramatisation of the whole thing as well.

CCB: Yes it is, and the statements that it makes, and the orchestral explosions, sometimes the mimicking of the tape, for example in the case of the news theme, quarter tones, what I've tried to do, I think, is take elements of that time which have been recorded and mix them into a coherent space in time allowing the orchestra to make a small comment on it and to build an orchestral texture around the texture of the tape sounds and thereby hopefully creating a successful work!

JY: How do you define aesthetic pleasure within your work?

CCB: Well, the enjoyment of sound itself, sounds like the Aeolian harps which are absolutely magical to me. That is a sound which I just totally and utterly enjoy for reasons of aesthetic pleasure. Or it might be the way sounds are combined and juxtaposed and the feeling that that gives. They are all feeling ideas, the enjoyment and the sensuous side of one's being.

JY: So that's a subjective view of aesthetics, for your own subjective rather than catering for the presumed tastes of lots of other people.

CCB: Oh definitely. I think that almost being definition as a composer working in serious art for the time that I have, I know that there's absolutely no sense whatsoever in deliberately doing something that you know people will like or, at the other extreme, outrageous. The only success you can have is in doing something for yourself. And in fact if you do that, I've found that people relate to it in a stronger way and that it's more successful. You've got to be true to yourself. That's part of being "on-the-edge", it's part of any political purpose that anything has, it's absolutely essential I think, for any creative artist. It's called integrity - artistic integrity.

JY: Do you think that the different kind of media that you yourself are involved in more or less simultaneously (conventional instruments, theatre, electroacoustic music, sculpture) possibly represents a larger divergence for future composers, that there may be specialisation as each form becomes more important in its own right?

CCB: I guess the answer is yes, but then again it always surprises me how diverse my own work is, I would never have thought that it would have been so diverse. As a student I would never have thought that I would have used anything visual in any of my works whereas now, there's hardly anything that's done that hasn't got a visual aspect. Even the live voice in Black and White, where somebody stands up and shouts is a visual aspect - it's meant in that way and there's a music theatre aspect to it. But every work that I attempt to do, for instance building large scale musical sculptures like the Aeolian harps, all seem to be so entirely different. I'm surprised in a way but glad that they are, it means that every work that I attempt hasn't been set upon a particular formula that I know will work, rather it's using things in different combinations, different emphases and different areas, implying that every work I do involves different hurdles to jump over in terms of forms and structures.

JY: Tell me about your work with Aeolian harps.

CCB: Aeolian harps, for me, are amazing things. I'm not really quite sure where I got the idea for them first of all but I remember sitting outside in Wellington on a really windy day listening to some telephone wires humming with the action of the wind and I thought, "this is an area I'm going to get involved in, I'm going to find out about it and build myself an Aeolian harp." Well, the first model consisted of a fruit packing box with guitar strings strung across it, and of course it didn't work. But after four models of it and finding and reading everything I could about it, even though there was virtually nothing, and also doing a lot of tests and controls with my brother (who happens to be a civil engineer) I figured the way to make them - and it worked brilliantly! I've used them in many different pieces. Basically while I was building this I had the idea to build a large Aeolian harp and three other sculptures based on fire, earth and water as well as air (which was the aeolian harp) which came to mind at the same time. I designed these large Aeolian harps, but because they cost so much it's going to be pretty impossible to build them! However, I'm convinced that at some stage in the reasonably near future I will actually succeed in building a large Aeolian harp, even if it's not the massive thing that I first intended. But they are absolutely amazing things and I find them exquisite. There's a whole area of learning about acoustics that is a whole adjunct to that - there's a wealth of information to be learned, just simply about Aeolian harps and the weather for instance, laminated flows of air and how you can create them. Growth rings and how instruments should be made. There are so many different areas just on the subject of Aeolian harps which I've learned about and enjoyed learning about, that I think is not only part of being a creative artist but being a human being - to find something that fascinates you and then go into it so deeply, although at times I've been quite poor and been frustrated because I haven't had enough money but I'm still extremely lucky in that I've had the time and the space to go into these different areas of learning and experience as opposed to perhaps working in a factory between eight and twelve - although I've done my fair share of that.

JY: In some of your electroacoustic pieces for magnetic tape you've juxtaposed the taped sounds at a certain point with an actual live sound, such as in Music for Limbs where there are balloon sounds on the tape which at one point in the piece turns into a live balloon sound which is played by someone in the audience, and

also with some vocal material in Black and White. How do you see the function of those elements in your pieces?

CCB: It's very difficult for me to say how, because when I first started doing those sorts of things in Music for Limbs I just knew it worked, it knew I was adding another dimension to the sounds in the piece.

JY: Because that's a dance piece really isn't it, and one of the dancers played the live balloon.

CCB: Yes, but even without the dancers it works musically. But I just intuitively know it feels right to me, and to try and say why is difficult for me. But there is something about extending the structure and form of the piece and there is something about making it more "real". Both of those aspects are very strong in that idea. There's also something about the music theatre of it - in a tape piece the sounds are only coming from loudspeakers, but if someone does something live it adds a new dimension to what's going on. It's a new plane, a new sphere of reality. It's another sphere, another way in which I can get some depth into a piece. Another thing is that I've always liked a whole family of things, maybe slightly different sizes, like a human family, a big man and big woman and maybe two or three children, then I like adding something different in like perhaps a dog, so if I can continue the analogy, I might have a large sound and a very similar sound and other sounds that are also similar and then introduce something that's quite different. I think in Music for Limbs it's like that, there are all these balloon sounds, and then there's one balloon sound that's exactly the same but it's entirely different because it actually happens live.

[Interview continued 21 October 1987]

JY: What is the idea behind Black and White and how does it relate to the political thing?

CCB: It's my contention that there are a lot of differences inherent in New Zealand society. A lot of divisions - things like geographical divisions, a certain amount between the rural community and the urban community - that comes out not only on polling day, but it also comes out pretty strongly in the tour. There are economic divisions, racial divisions, we are actually a society made up of a lot of divisions, and I think it's my contention that the Springbok tour was a catalyst for all those divisions to become apparent - and I would even suggest violently apparent. I think people think that we're living in a nice little homogeneous society with no problems, but in actual fact there are deep seated things which lie just below the surface and that in the course of Black and White - the strongest thing I want to point out. There's also why it happened, the political purposes that is - Muldoon thought all the marginal seats were pro-tour, therefore he let it go ahead so that he would get back in at the next election - which incidentally seemed to work because he did win the following election by a very small margin. I think particularly the rural seats - or semi-rural seats - saw Muldoon as being a strong man in allowing the Springbok tour to happen and therefore voted for him. They didn't want some weak liberal or whatever in. So that I think is a general resumé of the reasons I wrote the piece. Other reasons like the material is so

forceful that it makes any artist sit up and think, "what can I do with this?" - you know? But I think the political aspect is one of the strongest reasons for writing the piece.

JY: So you've used the recorded documentary sounds because you wanted that specific kind of message - using specific content to make specific comments.

CCB: Yes I think I have. And a lot of it is actually just reflecting on what happened and in some ways an attempt to remind people of what happened, of the violence that was around in that situation. Hopefully that will get people talking about the subject and thinking about it and reflecting on it - it's now six years ago that the tour happened and I think it's time our society stopped sweeping it under the carpet, pretending it didn't happen, but begin to confront the reasons why it happened. I know that it's like a small drop in a large ocean. To be realistic, as far as society is concerned Black and White will only have a small influence in making people face up to the issues involved, but I think it's still nevertheless very important to try and attempt this. Also of course, the very people who may end up hearing this piece are the "fur coat brigade" and I think they're the very people who should listen to it for a variety of reasons. I think maybe they can reflect on it a little more clearly having seen some of the other things that have happened since that time and also they're generally people who hold reasonably powerful positions in society. They're reasonably reactionary but nonetheless that's the person to whom I want to communicate. Usually when I'm doing most of my art I don't think about an audience at all, but in this particular case it's the "fur coat brigade" that I think will benefit most from this. I'm pleased to be able to say it to them and hopefully a lot of other people as well. I know that a lot of people are going to criticise me for dragging up old wounds but I just don't think that one should sweep things under the carpet. I think we should stand and face these issues.

JY: Do you feel the tape and the orchestra to be part of the same argument or are they on two different planes?

CCB: I think they are on two different planes in that mostly the orchestra is commenting on what's happening. The links are made via the ways we've already talked about. But there's a unity there I think between the tape and the orchestra. But they do act on totally different planes in that the tape material is largely documentary - there are opinions on the tape, there are straight field-recordings on the tape, but the tape is never used in a musical way - only in, I believe, a documentary way. I've tried to make the timings as potent as possible, but then so does a tape editor working for Radio New Zealand. I had to try and make sure the rhythms of the sounds worked together, I'll have to wait till I hear it with the orchestra but I believe basically I've succeeded reasonably well. The biggest difficulty I had with the tape material was that I had absolutely hours and hours of material, I think well over thirty, yet the amount that I've used would be about one tenth of one percent of the whole. I'd go through it several times and I made note of material I thought I'd use, documented it all, but often if there was on particular phrase I had remembered somewhere in a section of three or four hours worth of stuff, I'd have to go right through the whole lot to find it. Similarly, I had recordings from Radio New Zealand of rugby matches from the actual time and I had to go through the

whole of the games several times before I picked out the parts that I thought suited my particular purpose. So that was actually one of the difficulties - I had almost too much material to really get a handle on.

JY: What was the kind of content that you were looking for? It's got a lot to do with verbal content hasn't it?

CCB: There's a very strong verbal content. For instance, in the rugby match I've just referred to, I had to go through it several times and I found a phrase by one of the commentators saying, "we've certainly got a kicking machine going here." Now, obviously what he was referring to was the goal kicking abilities of Botha who was, I think, the fullback for the Springboks. But obviously a kicking machine here could also apply to the South African regime and therefore I got what I thought was a really good connection, because the meaning is ambiguous. It's a bit like the whole title, Black and White, we've got something that's as an argument, the question of whether there were any grey areas in the argument, well, I believe there were. Not only that but black and white in terms of skin colour, and those sorts of things, I think, strengthen the piece because they can be taken two ways.

JY: Could the "kicking machine" also refer to the police and protester clashes and the violence that there was there? The law and order issue that was made out of much of the tour?

CCB: Yes. A "kicking machine" to me could also stand for the whole kiwi clobbering machine. There's a whole realm of potential within that particular phrase. There were several phrases that were similar and I had to pick out the right ones. I also had options from previous New Zealand/South African matches from the early 1970's with things such as "the South Africans are feeling the effects of some of these kicks at the moment", but I had decided that I would stick as much as possible to the actual 1981 tour, so I didn't actually use those in the end. Then there are things like helicopter sounds in the piece. They are Hughes 500 helicopters and I slowed them down to give a more ominous feel about them (these are sounds that come from speakers above the audience) but it would be really nice to have got [the sound of] Iriquois helicopters which were actually the ones that were used at the time [of the tour] and they give a far more menacing sound.

JY: The helicopters were a dramatic feature of the protest marches at the games.

CCB: They were, very much. In fact out of most of my material from the protest marches you can always hear a helicopter in the background somewhere - it was a continuous sound that went right throughout all the material. It hasn't gone necessarily through all the material that I've used, because sometimes I've equalised that sound out in order to let other sounds come forward and be heard more clearly, but in the raw materials there's always the helicopters whenever there are protest marches - even in some of the recordings of the games themselves.

JY: It's almost like a symbolic presence over the whole, the progress of the sounds in the piece.

CCB: Yes, they have a menacing sound. I think that menacing sound is a very major part of my use of helicopters in Black and White. When the introduction of the piece is over there is a recording of someone screaming a particular phrase, then the helicopter comes in extremely loudly and that's the beginning of the confrontation as I've expressed it in the piece. The helicopter functions as both sign and symbol in the piece, as well as a very strong, punchy sound in itself. Also that time when the helicopter first enters the strings of the orchestra enter with a kind of aleatoric section in which each string player has a different part starting pianissimo and getting gradually louder. The way I see it is that that sound grows out of the helicopter sounds. Then there's the piano which enters with a very idiosyncratic version of the tune Jesus Loves the Little Children which had previously been heard sung on the tape in the introduction to the piece.

JY: Where did that idea come from with the strange accented left hand piano part?

CCB: Well, that comes from a time when some friends and I were at a pub and there was someone playing the piano doing that particular style of playing - it's quite prevalent in pubs. It's also, I think, very "Sunday Schoolish". Not only the tune itself, but also the way of playing the tune. It's a way of making the piano sound good with those kind of singing effects - a great big bass note and then a chord struck really heavily with the left hand, and the tune on the top.

JY: Pub sounds themselves also have a role to play in the piece.

CCB: Yes they do too. There are lots of reasons for that. A lot of the rugby-going public are also pub-going public and a lot of what happens after a match is that the supporters of a particular side will go and either drown their sorrows because their particular team lost or celebrate because their team won. What they usually end up doing is getting horribly drunk and also very "macho" in the typical New Zealand way, so I think that is a very strong link and an extremely good reason to use pub sounds in the piece. Also, the pub sounds give a feeling, particularly at the end, of an entirely natural setting for certain things to happen. It is also interesting that here's the New Zealand Symphony Orchestra playing a piece with something from a typical New Zealand social situation in it, that is, a public drinking house. Usually what you hear in the orchestra is how somebody felt in Vienna in the 1870's or someone felt in Salzburg in the 1770's, but here we've got something which is just so typically New Zealand being stated through an established cultural avenue. That's another reason why I really like the idea of doing something about the Springbok tour, the whole Black and White piece. I'm only interested as a composer in making a statement about how I feel as a New Zealander in 1987. I'm not interested in making a statement about how Germans feel in 1987 or how Australians felt in the early 1960's - I'm a New Zealander - I feel that very strongly as a composer and I think that what I do reflects how I feel about my cultural and social milieu. Going back to the pub sounds - if the pub sounds are in that sort of space I really enjoy it because it's about New Zealand in 1987.

JY: How did you go about getting the pub sounds?

CCB: Well, I didn't envisage when I made the recordings in the pub actually getting somebody raving on about the protest movement and how "students would bloody

protest about a bloody fly on the bloody wall", [part of the content of one of the recordings] I just wanted a rowdy sound from a pub. So on a Friday night I went around the pubs which I considered to be the best for recording such sounds. What I really wanted was, you know, rowdy males maybe making sexist or racist jokes, the possibilities of fights breaking out . . . in actual fact in the pub in which I did the actual recording there wasn't actually that type of male there, there was another type - a student sort of nouveau riche crowd who were into a slightly different social setting - not too far removed though really and the sounds I got I'm really happy with. But one of my assistants started deliberately saying some things which were typical of exactly the sorts of things that I wanted and I listened to the material and it suited my needs exactly. I don't think it would have worked had that particular person not been at least a wee bit inebriated at the time and I think that helped the whole thing. Had he been asked to start saying those things I don't think it would have worked for all sorts of reasons. He had to raise his voice for a start because the hubbub of the rest of the pub was so loud, that by raising his voice to come over it, it made what he said (that plus a bit of intoxication) came really alive and uncontrived. I don't like things that are contrived, and in this particular case although the material was contrived to the extent that the person speaking near the microphone knew that there was a recording being made, he went about it in a completely natural way, in the real-time ambience and atmosphere of the pub so that the result didn't sound contrived at all. That should have never ever happened had I said, "oh, look can you go and say some things that are the sorts of things that I want", - it just happened and in that way is not contrived. We didn't talk about it first, had we talked about it first it wouldn't have worked, it was spontaneous.

JY: So does the information that comes over in that case with the voice close to the microphone surrounded by the real pub sounds add a depth to the information making it more specific although it's still natural?

CCB: Yes. What it does to any audience that's listening to the piece is put in their mind exactly the sort of attitude from the general rugby pro-tour people at the time of what was going on. How they felt, where their heads were, what their attitudes were to the whole contentious issue of the Springbok tour and how they dismissed the protest message. Also with well-worn reasoning like "build bridges, that what it's all about", which is a quote from that part of the piece - that was a very strong argument at the time for the Springbok tour to go ahead - if the whole aim was to smash the apartheid system (which was the aim) then an argument for the tour to proceed was to have the tour to build bridges and show them [the South Africans] a better way to do it, by making friends, saying, "come over and play rugby, and while you're here we'll have a little chat about this apartheid business, which we find abhorrent and you can go back and influence everyone else there," which of course is absolute nonsense. My point of view is that rugby in South Africa is a very, very important thing, it's a part of their culture and by ostracising them from it and giving them the reasons why; that's a very powerful tool in making a statement about how we don't like their system and don't like apartheid.

The other part of the piece for which I used a pub sound was right at the end and it was a setting for me to say precisely what I wanted to say about the piece - sort of a coda perhaps, epilogue might be a better word and the last thing that people

will hear before the tuning of the orchestra starts, which is the very end of the piece [tuning up marks the start of the piece as well], allowing those thoughts of mine to maybe be prevalent in people's minds as the piece ends. I think it's important also for me to say what I actually feel about it and although I find it very difficult to have my own voice on tape - very difficult - I'm really pleased that I did it and that I made that statement. And that was done in a situation where other people were sitting down watching rugby which was really nice. But in the first case with the other pub recording specific vocal sounds are not so closely miked, other more general pub sounds are very strong too. I actually helped that by adding another bit of pub sound so that you could only just pick out the main voice through the hubbub - that, to me, made it sound less contrived because you have to strain to hear what the person is saying most of the time. What it actually sounds like is that I'd gone to a pub after a rugby match and sat next to a group of people who were arguing about it and pointed my microphone surreptitiously in their general direction - that's why it sounds uncontrived. But there is specific meaning in those words which is extremely important, the context of the place where there being recorded is important too, so the words add far more to the piece than the general pub sounds alone. Also if those words had been said outside of that context they would not have had nearly as much impact, in my opinion. When I went from the pub that time I thought, "I won't use that, it's someone doing something on purpose, it doesn't seem right." But when I got to the studio and heard it, it was precisely the sort of thing I wanted.

JY: Another piece in which you used pub sounds is Street but those sounds don't, to me anyway, come across as pub sounds - I've always heard them as the sound of a party - it's the sound of a group of people but doesn't for me seem to convey the pub image so well.

CCB: I think it's interesting that if I had gone to a different pub from the one I went to to make the Black and White recordings, I would have got a different result. I find that sort of thing absolutely amazing. Like the whole thing with electroacoustic music and tape pieces that what you end up with can be so vastly different if just one small, tiny element is changed only marginally. It could be anything, the weather - if someone is feeling cold they don't do the same things, if it's a different pub and the atmosphere is just slightly different with slightly different people in it, different decor, slightly different drinks even, then the result you'll get is entirely different, and I find that amazing. Of course with uncontrivance, it all depends on the function of the material. There's a performance piece I'm going to do which negates all that. In this piece I want to "talk" to my subconscious, musicality and other parts of my psyche . . . and those things (which will use my voice on prerecorded tape) in that context will be fine. But mostly field-recordings for me should be representations of sounds as they really are and not set up. That way they feel natural, and for me as a listener, if I hear somebody saying something and it sounds contrived, I shrink from the piece, I shrink from what I'm listening to.

In relation to uncontrivance, I'd like to tell you about a time I went to Stewart Island to make some field-recordings. I thought that what I would like one day was a bit of a holiday with my younger brother on Stewart Island and it also occurred to me that it could be a good source of raw [sound] material, so I took

my tape recorder. We went to Stewart Island and what I was really after was in fact the Morepork, I had hopes of getting the Kakapo as well, or maybe the Kokako which I believe is down there but I really thought that they were pretty unlikely - but the Morepork and the Kiwi are both birds that are down at Stewart Island - in fact there's a Stewart Island Kiwi. So I went down there with the aim of getting some of those sounds. One night I set off from base camp, which was near the sea, to record some of these night birds. To avoid getting lost I made a number of axioms under which I would work; I wouldn't get so far away that I couldn't hear the sea, I knew that I could get to such a point inland where I could see the sea but with my directional microphones pointed away from the sea I wouldn't get the sound. I also went up a valley or what I thought was a valley and thought if I follow the stream I can't possibly get lost because all I have to do is follow the stream back down towards the sea and from there I can find base camp. Fifteen people had died in the previous two years or so from being lost on Stewart Island and I did not intend to be one of them. So I set off, and of course the inevitable happened, the sound of the sea got bounced around the hills that were there and the river became a squashy quagmire and although I didn't really believe that I was a hundred percent lost, there was that time when I really wasn't quite sure whether I was or not and I certainly knew there was the potential to be lost. I was only perhaps three miles at the most from camp by this stage. So what I endeavoured to do was to make contact with my brother, so I yelled out as loud as I could, and he responded. So there was this really, really loud, "NICK" and this little voice saying, "I'm here, where are you?", coming back, and I slowly, over a long period, got closer and closer to where my brother was and I made it back. Later on I actually discovered that I had had the tape recorder going and so I had a complete document of what happened from the initial fear and panic of feeling lost which was very evident in my voice to the under-the-breath swearing as I climbed through trees and bracken and bush that was actually quite dense and also the acoustical perspective of my brother getting louder and louder as I got closer and closer to him together with my consistently really loud sound, which went down in another way as I began to realise that I wasn't lost any more. I'll probably never use it in a piece, but I'll always keep it as a sound document.

JY: How do you feel about the fact that when you're making a recording in that uncontrived way, there's a certain amount about the sounds that you have to accept isn't there in terms of the way the sounds happen? How do you deal with that? Do you make lots of recordings so that you can find the one that works best for you?

CCB: That's certainly the way I've done it in the past. I've recorded sea sounds and been out to several beaches many times and the reason why I've done that is because I know that every recording I'm going to get is slightly different. The idea is to get a lot of them and then use the best one. Maybe part of it is that one is always reasonably inexperienced at these things - going out to St Kilda beach for five days running at different times of the day and staying there for two cassette lengths on different rocks gives you an option - they're all going to be different but what you've got to do is find the one that suits best. I've waited sometimes for several weeks to get a day where there's no wind so as to get no microphone wind noise - those sorts of things one does all the time. Even for Music for Limbs and the balloon sounds there, I made hours and hours of material

and then went through and found the ones which, because they're so expressive, emotionally fitted where I wanted the piece to go at a particular time. But as I'm learning more I can get a better set [of recordings] to use, I know that it's not so good to make recordings on a windy day and as I touched on before, I know that there is a different ambience late in the evening or early in the morning as opposed to the middle of the day. All these things you learn as you do more recordings. Early in the morning I think you do actually hear a freshness in the sound. The birds are chirping for the first time, your own voice is deeper because it hasn't been talking all day and it isn't up to a high pitch. There's a crispness in the air that does seem to come across somehow on the tape. What it is exactly I haven't a clue. It might be humidity as well as sounds that make it sound like the world is just waking up - they tend to be really prevalent. Whereas perhaps at midday the sun's hotter, there might be crickets, or other sounds which give the feeling that it's midday. They are different. Obviously early in the day there is no traffic noise of those sorts of things but I think it's just a general ambience and I'm not sure exactly what it is apart from the things I've suggested, but there is certainly a difference. Sometimes your aims might be a sound from the middle of the day other times it might be the freshness of early morning, sometimes late in the evening with no birds for instance, after dark and those things are very important. When I've done music recordings, say of classical guitar, we particularly chose two o'clock in the morning as the time to do it because there is little or no traffic, and no birds, allowing for a clear recording.

JY: So in using these kinds of sounds in your work and making uncontrived recordings of where you are all links to the way you're experiencing life at the time.

CCB: Yes, very much so. It goes back to what I was saying about being a New Zealander in 1987. How I am, the sorts of things I experience are going to influence me as a person, and me as a person is how I am as a composer. All those things are very influential. Therefore what one should do is grow as a person, then composition will grow. I am opposed, I think, to the idea of sitting down and making a composition consisting of intellectual relationships within an aesthetic framework which might come from parameters like, for example, pitch - that belongs in Webern's Vienna! Not Chris Cree Brown or anybody in New Zealand in 1987. The sorts of important things that affect me are the Springbok tour, therefore it's only logical that I should write a piece about the Springbok tour. I know I'm going to be more true to myself than if I sit down and make a relationship between an F sharp and a D natural (or indeed an E double flat). The kinds of links I am interested in making are conceptual links embracing music and sound as well as any other aspect to the medium that's also involved - like the sculptural one in In Sympathy, or through political/social statements such as in Black and White. I've been lucky in a lot of ways but I suppose that's an important part of the creative process, you just sort of sit there and brew over things and all these connections start forming in your head - as far as Black and White is concerned - over the last six years those things have made themselves obvious to me. Things like the prayer at the start and end of the piece along with the children singing Jesus loves the little Children does several things. At the beginning of the piece the prayer is part of the introduction - it's a quiet statement from an anti-tour bishop about how he felt at the time - so in the introduction it's part of "setting the scene". Another thing is that at the end it completes an arch

form as a reference to the beginning helping the unity of the structure. It shows up also, in my opinion, some of the divisions on our society that I've talked about. Divisions that I've always felt are those that are right wing and often religious at the same time. Here [in the prayer] we've got a bishop who's anti-tour and yet many religious people from the older age group were actually anti-tour even though they went along to church, the paradox being that while here we've got someone who's anti the government policy, usually people who are in the church shouldn't do anything "wrong" or apposed to the law. There are other kinds of things too, like the [sound of the] referee's whistles functioning both on the football field and also as a percussive, musical staccato figure.

JY: So in that way you've used the tape sounds with the football matches and the referee's whistles as a strong link into the feeling of the game, the feeling of being at the game and playing the game in a kind of dual sign/symbol way - but extending that sound into the orchestra shows it to be a musical unit as well.

CCB: That's right. Those are the sorts of things which I hope make the piece very potent - a referee's whistle being played by a percussionist and that stopping the orchestra and being a point where a rugby crowd starts. Those are the sorts of things that make it very real and will be important links in the end - a referee's whistle being a punctuation mark where the orchestra stops and the tape of a rugby crowd starts. But those things I've done from inside, and of course I haven't actually heard the piece yet.

JY: And within your creative process all the links you make and the whole form of a piece is ultimately reached intuitively?

CCB: Yes, completely. There have been times in the last six years because of all the links in Black and White that I've been thinking about such as how I could use the referee's whistles, that I've realised those links are an important part of the piece. I personally think that those links, even though they are extremely direct and could be considered a bit naive, are far better than trying to do a piece for orchestra and tape using esoteric electronic sounds - I can't understand that personally. I know a lot of people who do it and a lot of people now are writing instrument and tape pieces but I don't think I could ever do that - abstract sounds with instruments. That's I suppose, why all my tape material in Black and White fulfills a documentary role.

JY: Do you think the tape medium in general has different potentials and different things to say?

CCB: Oh certainly, but in a piece like Black and White I think the tape material can only have that sort of role, why have any other sort of material? There's no reason to have any other sounds except for the material that I have.

8.4 Interview with Ross Harris 30 November 1987

JOHN YOUNG: What led you to electroacoustic music, and what were the influences?

ROSS HARRIS: I guess in the late 1960's I was interested in composing pretty well in the newest ways of expression I could find which included listening to a lot of Stockhausen's music - Gesang der Jünglinge and Berio's Homage to Joyce. Things like that seemed very interesting and the fact that Douglas Lilburn was doing things, that there was a studio in Wellington, seemed pretty exciting. At that stage I wasn't terribly keen on what Douglas was doing, I didn't actually ever read Robin Maconie's criticism of the Lilburn pieces, but I probably felt a little bit of that - that it was sort of "low tech" in comparison with the European music; so I've been influenced by that attitude. But when I actually got into the studio myself - I came up to play in the New Zealand Symphony Orchestra on French horn and then started to do an M. Mus. Prior to that I'd just been fiddling with a couple of tape recorders at Canterbury [University], very crude stuff - not much higher than a kind of Goon Show level in some ways. Then I started to do the M. Mus. and took to the studio and that was the best thing I could be doing really, I loved it. That was the opportunity for me to actually develop my composing, I hadn't ever really studied with anybody or done sophisticated pieces for instruments or voices, but with the studio I was able to develop my ideas and then gradually move back in the other fields, so I sort of learnt through electronic music. Douglas didn't teach but he showed me how to use the gear and he'd come in and listen to pieces and comment on them so that was the only feedback I really ever got from anybody approaching a teacher. So I've been in it ever since. I had a sort of dry patch in the middle of the 1970's where I got a bit bored with the synth<sup>41</sup> and what the studio could do - it suddenly seemed rather limited - that's when Douglas was doing the things that are on the Soundscape album<sup>42</sup>. During that time I only did Shadow Music which was based on orchestral sound and Syndrum I did at the end of the 1970's, that was all over that period. I was really looking for something with more sophisticated processing - and [more sophisticated] sounds. We were imagining samplers as they are today - to be able to transform natural sounds in sophisticated ways and they didn't exist, so you just had to wait or do something else -or compromise, as Douglas did, he compromised, he just said, "these synth sound like this, I'm going to use them". It's not the greatest sound, but they do interesting things, they transform sounds in interesting ways through voltage control. So then once things started to change again and the [Yamaha] DX7 came, I went to Sweden in 1978-79 and studied computer music - I've been there a couple of times and so got an idea of a more advanced technology - but now the DX7's have come along and all this amazing equipment

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<sup>41</sup> The EMS Synthi AKS, an analogue voltage control synthesiser with small sequencer and touch sensitive monophonic keyboard, designed for EMS by Dave Cockerell. Used extensively in New Zealand electroacoustic music in the 1970's, especially by Douglas Lilburn.

<sup>42</sup> Soundscape: Electronic Works by Douglas Lilburn. Kiwi Pacific Records SLD-59, New Zealand Composer Edition.

that's around that I find absolutely fascinating really, and I'm back into it in a big way - very happy to use it as just some way of expressing myself.

JY: So do you think that the technology is a way of achieving maximum flexibility in working with sounds?

RH: I'm not quite sure what you mean, but you can't do anything without the equipment - you can dream about amazing processes, but if you haven't got anything to actually work with it's no use. I mean, the whole medium is terribly dependent on what anybody is going to release as the available technology. I'm not a person who can write software or design synthesisers so I'm dependent on what other people produce and as it gets better it's more interesting.

JY: You're interested in getting right down into the sounds themselves, because you've said before that you try and avoid mechanical aspects of tape recorders and so on - things that sound like the machines too much.

RH: Maybe I've changed a bit. I certainly like the idea of pursuing whatever technology I'm using into some kind of corner where it's either struggling or is going to do something a little bit less satisfactory in terms of its own design. I think with FM sounds, for example, you can get amazing, really rather vague sounds - wispy kind of material - that I don't think anybody else is using DX7 type technology for at all. So I just follow my ear with whatever that technology is - dig out a little corner that I can call my own. But it's getting more powerful, more flexible, the sounds are much cleaner - it's good.

JY: Are you influenced by environmental listening generally - are you that kind of person?

RH: Well that's interesting in a way, because I'm not a trumper - I don't spend weeks in the bush, I mean I like to go walking in bush and listening - obviously any composer who's worked in electronic music, however long - fifteen or more years - has obviously got their ears open to sounds as wherever you walk you hear things and listen carefully. It's always been a bit of an embarrassment in a way that it seems a bit like cheating to, for example, use the kokako when you've never even seen one let alone heard it or recorded it! I've recorded Tuis and been to places like Kapiti Island to get some of my own source material but not the really good recordings that the Internal Affairs [Department] have collected over the years - some of those are incredible. I suppose in a way, it goes back to what Douglas [Lilburn] was saying about the reason that he got into electronic music being so that he could write music that, in a way belonged to New Zealand by using the sounds of the environment. If you're writing a string quartet there are an awful lot of "bells" saying Mozart, Beethoven, Bartok and all those, but if you just go out and record what's there, those bells don't ring anymore, so other things start to happen from the material. I guess I followed along like that. I think it's probably important for New Zealand to get some sense of belonging - here I mean Pakeha ones - and that's very difficult to do because we haven't been here that long [laughter].

JY: Have you moved away from that?

RH: Because of getting into synthesisers?

JY: Yes.

RH: Well no, I don't really think so in a way because if you were to listen to the last piece that I did - Haiku, that uses FM sounds, but I think it's got all kinds of allusions to natural shapes and envelopes in the sounds. I suppose they become the sort of sonic environment of the landscape as [Trevor] Wishart describes it - not one that you can pin down to an actual place. I mean you're not "by a lake" or anything, but you are in a kind of ambience and in a more emotional sense you are in a space - but you can't say this is the sound of the sea, or this is the sound of cicadas. I suppose it's become more abstract because I'm not using those natural sounds as "quoting" material - at the moment anyway I might easily go back to it. I became a bit conscious of that when Denis Smalley last came through and he complained about New Zealand composers being too referential and not transforming their materials so that they become abstract sounds . . . and I hadn't actually realised - I mean, a lot of people find New Zealand electronic music really easy to listen to in comparison with European music and it may be so simple that New Zealand pieces actually refer to some landscape that you can imagine - a sonic environment in some ways - like in The Return there's a narration and you can sort of imagine . . . it's all being described for you even - I mean it's a bit sort of "basic".

JY: Not cerebral?

RH: Certainly not, and I think it is probably good to have both really, to be able to move from concrete things into abstract things and that's where the technology comes in because it's very difficult to transform material without good technology and Emulators are not good enough. You need to be able to filter materials and transplant the harmonic spectrum of one sound onto the envelope of another and all that kind of thing. That's only really starting to happen with computers. At the moment everything that I do with FM sounds is a compromise and, as it has always been with "musique concrète", it's a kind of art of illusion. You appear to transform something into something else by cross-fading and all kinds of crude tricks and the best you can do is to become really sophisticated at transformation or at that art of illusion really. Trevor Wishart talks about it and the Red Bird piece has some really basic examples - in fact, I hadn't read that when we last met but the book turned up here, then I had another listen [to Red Bird] and I played Tense Test [by John Cousins] to my tutorial class this year and they actually loved it - very interesting - but I can hear [in Tense Test] there's a telephone going into a lawnmower which is very like the sort of thing that Wishart was doing and I could see that John [Cousins] was influenced by that - and I think it's great! It doesn't have anything other than a sort of imaginative use of sounds and surprise when you hear it, it's great!

JY: What is your response to Red Bird. Do you like it?

RH: Oh, it's a bit heavy, a bit too emotionally heavy I think. I would like to see it much more compact and tightened. I've really only heard it once carefully, but I remember it seeming a bit diffuse - I'd like to see it tightened up. That's the same

problem with Chris's [Cree Brown] Springbok [Tour]<sup>43</sup> piece. When you become so literal with the references, it gets quite quickly away from music into politics. The effect of it is not a musical one - it may be incredibly effective but it's not a musical expression, at least not first on the list of things. I suppose I'd rather try and keep it "musical" because music is sufficiently ambiguous to be finally probably more powerful than that direct statement - because that dates, it sets people against it, for whatever reason, I mean they might be rugby fans - but if you can do it without actually putting the rugby stuff in front of them and still get them to feel strongly - it might be better, I mean that's what music should be.

JY: You still work in both conventional and electroacoustic media, how do you see the two, is there a dichotomy?

RH: Oh no, they're absolutely interwoven - and in the most valuable kind of interaction imaginable, mostly from electronic to the instrumental, I think - that's the way I imagine it happening - but all kinds of processes of evolution that I try and achieve in my instrumental pieces are really probably stemmed from electronic ones. Rather than writing forms that are clearly defined sort of ABA - the whole thing that Varèse started off with organic forms. Electronic music enabled that to happen much more graphically - that sounds can hit each other and change in the process of a physical collision you can easily use those kinds of analogies in instrumental music and those are the kinds of mental arguments I would have for composing instrumental pieces, rather than a "theme" and its development, recapitulation and all those concepts - so the sort of organic growth of material which I think electronic music demands is pretty important and a very important influence. I think that in time people are going to see that electronic music has been much more influential than they realise now - because even with people who don't stay in the medium, almost all composers have a go at it, are stuck in a studio for a year or two of their lives, struggling with sounds in a really interesting and completely unprecedented way and they come out changed, I'm convinced. I'd like to see it as a compulsory course for music composition students really.

JY: So that's the most important link for you, but where do the two working processes separate, or do they - writing notes and listening to the actual sounds?

RH: Yes, well, they're starting to separate less because, this is something that I feel ambiguous about at the moment but I do actually have software now for the MacIntosh and sufficient synthesisers at home [to produce sequence versions]. I've just written a [piano] piece for Judith Clark to give to her students and I have a Mirage version of that piece so that I can tell what the whole piece will be like. I can hear it at the right tempo with the right durations and the right dynamics - it's not expressive - it's terribly mechanical but the proportions of the piece are all there for me to decide whether I'm happy with it. So it's like an electronic version of an instrumental piece and I think I can probably use this more, Nigel Key is using the same technology and I think he's actually composing on the computer. At the moment I just sort of check things afterwards and see what happens - I don't know where that's going to lead, but it makes writing

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<sup>43</sup> Black and White, for orchestra and tape.

instrumental music very like writing electronic music - except that the timbre is not a part of the evolution of the material and that of course is significant. I mean, it's a piano piece, but with all the proportions and the way you can manipulate the material - then the computer technology starts to influence you - dangerous stuff! But it's really quite similar, it's the same sequencing package that I used for the electronic piece Haiku so I've done a piano piece and an electronic piece and I'm putting the notes into the machine in exactly the same way.

David Farquhar has always observed, and I think there's some truth in it, that there's been a big difference between my instrumental and electronic pieces in terms of the pace. I tend to write instrumental pieces compressed, because you've got the notes and you're fiddling with them on the paper and you know, I don't want to waste people's time, I'll put all these ideas here - but with the electronic music (when it's entirely aural) I pace things differently, so I could spend quite a lot of time in an electronic piece doing rather little, but I would never - although it's coming, especially in the early part of the 1970's - have had the courage to write instrumental music which was so thin on the ground. That's not a comment on the quality of the music, because Beethoven is incredibly thin for large hunks of pieces but it all adds up. I suppose that those two processes are starting to merge, partly influenced by the computer of course, but I think it's happening anyway - just some growing up or maturity of a kind. I don't think it's a major thing but he's [Farquhar] observed it and commented on it several times and I think one of the things he's said is that he has observed it with others as well - not just me.

JY: Do you think that maybe hearing the sounds as you work encourages hedonism?

RH: Well it could be that you see, yes! But I think he's implying that he prefers the spread out quality of the electronic pieces - that the instrumental ones are too compressed, and now you suggest the reverse which is interesting. I think that Haiku is much more compressed and the piano piece is much more expanded than they would have been if I had written both ten years ago and I think they're probably both better for it. So I'm just learning things about pacing things in music - electronic music influences that.

JY: What about live electronic music?

RH: Yes, this is interesting. That's another thing that the technology has now made available, safe live electronic music possible . . .

JY: Safe in what sense?

RH: Well going on stage with an AKS synths or with tape loops running around are dangerous things to do. I mean it's all fraught with danger, which is exciting - and there's a lot of an improvised quality to it, but I never found that really satisfying. So, writing for an instrument and a tape is one solution to that, but that's limited as well - that's another medium which requires incredible sleight of hand to try and create the illusion of duet and integration and argument between two beings rather than a machine and a poor person struggling to keep up. But the live electronic music, especially with the kind of sequencing packages that I've got now, looks as though it could be really great - very satisfying and interesting, and

I'm getting away from the rock stuff altogether, there are rhythmic things but they're much more abstract, there are metric things that I'll be working on - the work we did with Free Radicals at the sonic circus was a sort of a first step in that direction. I was looking to find out whether rock music would actually allow me to express myself and I've finally decided that it doesn't - that it's too limited or my kind of experience and my kind of life hasn't really meant that it's meaningful for me to use that, so now I'm slithering back to where I feel best - but without rejecting all those things. So live electronic music is very interesting and I can imagine that I'll keep on doing that - I'll get my flugel horn going again and playing the guitar, I'll work with Jonathan Besser and I think we'll probably do quite a bit.

JY: The technology aspect in rock music is very high now too, isn't it, with great effect on the sounds - like the drum sounds which are becoming very rich.

RH: Yes it's a sophisticated area, definitely. It's a kind of crossover with different people moving from one area to the other. I hope it's going to be fruitful, I haven't listened to much rock music recently at all so I don't know what's happening in the commercial sphere - I tend to do that in relation to the classes when I need to teach it, when I think that it should be part of the introduction to the electronic music that I teach, that it is very wide in its range and really doesn't limit any kind of electronic music - then I always try and catch up on what's been happening for that.

JY: Because you have used some literal recorded sounds in some of your pieces - what kind of feelings have you had about those to do with the recognisable qualities that they have as against purely acoustical aspects - have you ever been interested in sound symbolism, that kind of thing? A piece like Horizons has those dreamlike water sounds.

RH: Yes well, water is a symbol of all sorts of things - I don't think I was particularly conscious of it there, I just liked the sound in relation to the birds. The piece was commissioned by Michael Smither and in a way it was a homage to his work and the fact that he paints lots of islands and mountains and hills that he transforms natural elements through the way he paints them - so I used natural sounds and tried to transform the material by creating electronic analogues to the natural sounds, like the whale sounds that appear briefly have an electronic version of them which accompanies them - it was almost rather a simple process throughout the piece to do that. When the wind chimes are hit there's an electronic version or they trigger electronic sounds but it's really so subtle that you'd hardly notice it. But I wasn't really trying to create a "scene" with that material so I suppose it was pretty much in my mind abstracted into the sounds that went together and the evolution from one kind of sound to another is just, I don't know, that's the way I work and I don't really know why I make those choices - they just sound right.

Something like To A Child I suppose, where the child's voice is so clearly that floating around amongst the electronics that's a strange juxtaposition isn't it? So that was probably deliberately trying to create an emotional response to something that's already often fairly emotional - a child's voice - but putting it in a slightly

uneasy space, is that a musical expression or not? I don't know - maybe not - am I creating a kind of image, an environment.

JY: An emotional image?

RH: Yes, something like that. I don't know.

JY: Is that though largely a way of working that you've left?

RH: Well Vocalise is all voice sounds. Would you hear that as literal vocal sound?

JY: I don't, certainly not anywhere near speech.

RH: No, one could imagine a scenario for that piece which would be really gruesome in some way and I think that was partly intentional.

JY: There is a lot of "throatiness" in the sounds, which it's hard to know if you'd pick up without the title - you can never say for sure after you know the source material like that.

RH: That's right - although you forget how little people know about sounds - I mean, somebody who works in electronic music I'm sure would pick ninety percent of it as vocal but the average listener may not pick any of it, so they'd be left high and dry from that side of it - they would have to be listening to it in a completely abstract fashion. I think it's a mixture - that's probably one of the good things about electronic music, you can actually play with literal and abstract meaning so that if somebody is not an educated listener they may still relate to the sounds in just a simple human way, not a particularly or specifically musical way - and that's interesting. But I'm probably moving away from that as well actually, I don't know.

JY: A piece like Vocalise compared with To A Child is a much more integrated model of those two kinds of things - the elements aren't as separate.

RH: Maybe. I guess that comes with practice and wanting to express different things, being older. I've never really used environmental sounds with reference, with a conscious memory of what that environment was as part of the music - I can't think of any case.

JY: In one of the programme notes that you wrote for Horizons you mention that the water sounds were recorded in Picton, but of course that's nothing to do with the form of the piece - it doesn't mean anything to the piece.

RH: No, except that we had a place there where we stayed . . . yes they were recorded there - I might have said that they were sounds that Douglas [Lilburn] and I had recorded at Makara on one occasion, because we went out there at five o'clock in the morning and collected sounds on a quiet morning. It ended up sounding a bit like that Luc Ferrari piece, do you know the one I mean?

JY: Presque Rien?

- RH: I was influenced by that piece, Jack [Body] had it, that is very close to being just a "photograph", a literal landscape - soundscape. I was fascinated that a piece could be so peacefully environmental - natural sounds and day to day activity - it opened the doors to Horizons I suppose.
- JY: Do you think that there is a special voice now from New Zealand? Does it matter?
- RH: I don't know any more. I think it does matter actually. I'm interested in that. If this place has got any character it should be reflected in the music shouldn't it? I mean, it's reflected in the literature, in the painting very strongly, and partly in the theatre, it's much harder with music because it's abstract so it's got to be a feeling, an emotional thing, it's got to be whatever music communicates that it comes through in and so could say that you feel it -yes, I feel it - but what is it, you can't say [laughter], but is it the same thing for Anthony Ritchie and David Hamilton and you? There's such a huge variety of things happening in New Zealand music that you can't see any pattern really. With Lilburn and the generation immediately following, he was a big influence and they picked up on that. When people have asked about New Zealand music in the past, I've always said, "well Lilburn defined it" - he was somehow sensitive to being here and then he wrote his music, not consciously trying to reflect it particularly and that has become, you know, like Sibelius's Scandinavian thing - that's the sound you associate with that country - one person can do it. Artists do this all the time, they change the whole world's perception of one place by the way they see it and then put it into their work. Whether Lilburn has enough influence to pervade everybody still, as it were, I mean, I've been influenced by that kind of aspect of his work.
- JY: What about Pacific Island influences?
- RH: Well, I think it would be impossible for me to try and write Polynesian music, because I'm basically of European background. That's what I was saying about not belonging here really. We're just sort of planted here on an island -but we don't belong back over there, that's for sure! So we've got nowhere to go but to try and dig our heels in and try and make this place seem like it's home! [laughter].
- JY: It's a shame too, because one way that a people, as a culture or a society, can be made to feel more like they belong is through their art.
- RH: Yes, New Zealanders are very bad at that, they don't appreciate it. There's an article in the latest Canzona<sup>44</sup>, an interview between Aulis Sallinen and Bill Southgate and he talks about the many artists in Finland who are on full-time pensions from the state, their job is to create Finnish music because they know that that's important to the whole nation, that those people get ahead and do it - and they're not a particularly rich country. I guess they can't be as poor as us! But wouldn't it be nice if some politician could have a vision like that. It's inconceivable actually. So we muddle on with other jobs and the results are going

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<sup>44</sup> Canzona, v.9, n.28, 1987, pp. 12-13.

to be later coming, I think. The Finns have had a lot of time to get going so they can see . . . they know they've got something with their whole history of folk music and composition.

8.5 Interview with Louise Johns 6 April 1988

JOHN YOUNG: What sort of things have attracted you to the medium of electroacoustic music?

LOUISE JOHNS: What I like about it is that the sounds are physical and immediate. You are in very direct contact with the sounds you are working with - like crafting with solid, malleable things and it's like you can see the material in a space when you work with it, especially with panning and so on. I enjoy splicing and things like that - I feel as if I'm physically doing something to the sound.

JY: You haven't felt that with conventional media?

LJ: No, not really. With tape there's more of an immediate incentive, because you are working with the sound right there and then as you compose, which feels more real to me than working first on paper towards sounds.

JY: At this stage much of your output has been in performance works, theatrical kinds of performance, with use of your own voice especially - does what you're doing and seeking in the electroacoustic medium relate to that?

LJ: It does in the fact that I'm thinking of the compositional process in tape music in a concrete way as a kind of performance. But also the definitely theatrical elements of sounds, for instance, in the piece I'm working of at the moment which uses sheep sounds I want to try and use these sounds in a way which approaches something theatrical.

JY: Theatrical in what sense?

LJ: I think using the sheep sounds as though they are a kind of language - as vocal signatures - thinking of the bleating of sheep as a type of vocal communication, in the way that humans use the voice for communication. But using your own voice in tape music is wonderful, because you can expand the voice itself.

Because over the last few years I became so much involved with theatre-type performance pieces I began to wonder whether I was in fact a "sound" composer - but the studio has made me realise that I am sound first, even though now I'm also becoming interested in film making and I feel quite comfortable with those kinds of visual things, I really feel that the studio and electroacoustic music has become an important part of my work - and I want it to continue to be. I think also the fact that the studio is a place that one goes to and comes away from again is quite important too - that it's like a workshop - that going to it and working and going away again is an important kind of routine for me.

JY: And that the sounds happen there?

LJ: Yes, and you work on them there. I find that makes me feel very comfortable with the medium.

- JY: A work like Tape Piece '87 which uses a spoken phrase from your own voice seems to stem almost from your performance work.
- LJ: Yes, and in fact I did actually start off with that piece thinking of it as a work for solo performer, then I thought of it as a work for performer and tape. But as I worked more and more with the tape the idea of involving performer left me - it was too baffling! In the end, in making the work a pure tape piece I managed to say what I wanted to in the final form as a tape piece alone. That is the nice thing about tape especially if, like me, you have used your own voice, you can be more objective about a work as it evolves because you are actually hearing it develop. Whereas when you perform live you only have friends who might give good criticism, or a recording of the performance heard afterwards, which can be useful but is removed from the actual performance.
- JY: So with the kinds of vocal material you used in Tape Piece '87 you were able to use familiar material of your own voice, but work with it and shape it in a medium right outside of yourself?
- LJ: Yes, and hear the results as you work. I like that - rather than make the piece and hear it afterwards - that actually gives me more incentive to work.
- JY: What were the problems in trying to combine the live performance with tape?
- LJ: I felt like I was involved in making two pieces - there was more material than I needed. Working with just the tape material provided enough formal problems alone - those things being what would happen where in the piece and how it would evolve. What I like about using just one vocal phrase is in the limitation of material. I enjoy having limited material and building from there - say, one phrase being the whole basis of a piece without bringing in any other elements. In the piece I'm doing now with sheep sounds I'll probably only use "baas" - though I went to a saleyards to make recordings and there were wonderful vocal sounds that the men make when they're rounding up the sheep - I'm wondering whether that will be part of the piece too - it's such a temptation [laughter]. On the other hand one shouldn't limit oneself just for the sake of a principle - the nature of the material should be the thing which determines what one does in a work.
- JY: Did those kinds of practical things that you encountered in recording sheep influence the possibilities you see in the piece? Because you found all these other sounds associated with sheep while you were making field-recordings, could the way you went about getting the sounds influence the piece?
- LJ: Possibly. I'm at the stage where I've collected my material and I've gone to a number of places - all different - and now I've taken from all these sources the "baas" that I like and I'm going to try and build up a resource of gestures - different types of "baas" and that's my starting point. So far I've taken the work to my initial idea but now I can see that the extraneous sounds could be part of the piece - sounds like cicadas and birdsong which set a particular kind of ambience - that's one kind of sound. Then there are the saleyard sounds that I mentioned before. Also on a farm which belongs to an uncle of mine there was a ewe and a lamb that had been separated which produced a really tense situation, as

well there were sounds of clanking gates and in the saleyards lots of trucks. Again, there is a whole lot of vocal material from the men on the farm which is just wonderful - although that might point to another kind of piece.

One of the things for me about using natural sounds is that the sounds can become symbols. I've considered an idea about people in relation to sheep - sheep being animals which follow and that maybe being used to say something about people. Or the whole idea of sheep being taken off to the works, like the Janet Frame story of the sheep following each other down the road to the meat works. There's a possibility to make a real narrative out of the piece and I don't know at this stage whether that's what I want. So I think I'll try and stay with the first idea of building the piece up just from the sheep sounds.

JY: There's a whole different world that you've encountered in making these recordings - particular kinds of people and places.

LJ: There was one place I went to on the Otago peninsula which is above a beach (it was early evening) and the signatures of the place were so ingrained - I've tried to extract the "baa" of a sheep from a recording made there and there's this wonderful echo in the space (it was a deep-voiced sheep) and it just resonated in the place. As well there were the calls of the Pied Oyster Catchers and the sea in the background - and I couldn't use a recording like that for the kind of piece I'm planning at the moment because the ambience would just be too obvious for an abstract piece, which is what I want to work towards at the moment.

What I've learned from these recordings is that there is a feel about a place that gets recorded and you perhaps can't take away from that. I recorded another set of sheep sounds at the Addington Saleyards and in that there are traffic sounds, a train that goes past and an aeroplane that goes overhead - those kinds of sounds for me are separate and I may not be able to use them.

Since I've become interested in film making, looking at story-boards and so on has made me think about field-recording a lot. I feel quite food approaching film with an audio background. I saw an old French film recently in which there were things like an ambulance going past while the music consisted of a triangle being played - and other sounds like doors - I've thought of using a repetitive sound-motive like a door slamming or alarm bells or clocks against an image to produce a greater expressive result. I think a lot about sound with image, like in the same French film at one point there was music getting louder and louder until just as it got to a climax suddenly there were machine sounds with a visual factory setting. Sound in relation to image interests me very much.

JY: How do you see yourself as a woman composer in New Zealand?

LJ: I think women composers in this country compared to painters and writers are not as advanced as far as a feminist identity is concerned. In the other arts there are a number of women artists who want to be called feminist and I think that while there are a lot more women composers around now, many haven't begun to see themselves as feminist or started to produce feminist work. Writing is the art form that really has women involved that way at the moment - painting has been

established for quite a while, Rita Angus was the catalyst for that really in the same way as Douglas Lilburn was for New Zealand music. But it's only in the last ten years or so the feminist artists have been calling themselves that.

JY: What is important about a feminist basis?

LJ: It's important to place yourself and to start questioning your own ideas and what is important to you because of being a female in what is basically a male system. I think though, between female and male composers there is a very supportive community, male composers are very supportive and usually respond to hearing material that is feminist. Some women like to think that they aren't feminist and that they are a person first, that their music is of a composer and then a female but I don't think it works that way really. The idea of an equal society is still an ideal at the moment I think.

JY: So because it's not an equal society it is important for you to have that feminist polemic?

LJ: Yes. Over the last year especially, I've become very aware of the need for women composers to reclaim that heritage of women artists. There are certain role models that become important too. If you're brought up in a tradition knowing that people of your gender are really active and make things and discover things and live very rich lives then it's exciting to know that you're going to be part of that heritage. That's why it's exciting to find role models - especially New Zealand ones - to know that someone like Annea Lockwood studied at the same university as I did makes me feel part of something, the same environment that someone like her has felt alive in being the same environment that I live in. Even for example, in Amberley, there was a woman who used to write stories called "Sarah Courage" - and to go past the street there called Courage Street is like proof that she was there (even though her family ostracised her). That's a small example, but things like that can be important. Working at the CSA gallery has been good for me in that way too - meeting women artists, like Doris Lusk, reading about them and seeing their work. Being a woman composer is really important to me because it's part of my own experience - not because it's a band wagon to jump on but because it is a really significant part of myself.

JY: What about being a New Zealand composer in general, is that just as important as being feminist?

LJ: Well they're both important because they're part of everyday life. I was born a New Zealander and born female. You grow up with New Zealand experiences and you grow up with female experiences - those things are always there and can never disappear.

### 8.6 Douglas Lilburn

(Based on an interview with the composer, 29 October 1987)

When Douglas Lilburn began working in the medium of electroacoustic music in the early 1960's he was already indisputably established as New Zealand's leading composer of serious music - having produced three symphonies and other orchestral music, a large amount of chamber and vocal works as well as much incidental music for theatre and radio.

After the completion of the Symphony No. 3 in 1961 (a composition realised with serial methods) Lilburn began to feel that following European based methodology such as serialism was not going to continue to be productive for him - that it did not hold the key to a continued development of his musical language relative to the particular qualities of his experiences as a New Zealander - which has always been a matter of concern to him. In fact, that Lilburn had become involved in serial composition allowed him to sense very clearly the impasse into which serialism ultimately led, not only for him but for all composers.

In 1963, Lilburn had the opportunity of overseas leave from Victoria University of Wellington and this proved to be a crucial point in his involvement with the medium of electroacoustic music. Sometime earlier, Lilburn had been offered a commission by the NZBC for music to an anonymous play The Pitcher and the Well, for which Lilburn decided some kind of electroacoustically realised soundscape would be appropriate. His experience with electronic means, however, was limited and overseas leave in 1963 presented the opportunity for him to gain a more thorough knowledge of the medium through contact with established European and American studios and composers.

During that time overseas, there were two especially significant contacts for Lilburn; the time spent working in a small tape studio which had been set up in a barn in Wiltshire by an ex-Victoria University student, Peter Crowe - and at the University of Toronto where, under Myron Schaeffer, Lilburn spent three months gaining a basic knowledge of studio set-up and technique. Other places visited included the Columbia-Princeton University Studios (with the RCA synthesiser II) and the BBC Radiophonic Workshop, which in view of its leanings towards sound effects production and no access to composers, was a disappointment to Lilburn.

Through all this, Lilburn was seeking in the electroacoustic medium, not purely the most advanced technical means but a genre in which he could develop his musical language very much on his own terms. Lilburn's concern for musical matters over technical ones was in evidence even at this early stage. In 1963 he wrote to Peter Crowe from Toronto:

There's an obsession here with gadgets and too little talk of music . . . Nobody will talk about musical problems, only gadgets.<sup>45</sup>

At this stage, Lilburn was near the end of his three month stint with Myron Schaeffer and although he expressed the feeling that their two ideas of sound were incompatible, he did acknowledge the thoroughness of the instruction he received and Schaeffer's generosity with equipment and his own time.

Central to the electroacoustic music of Douglas Lilburn is his conviction that art should embody a direct relationship between the experience of the individual and the language of the artwork.<sup>46</sup> Lilburn saw clearly in the 1960's that for composers in New Zealand seeking to develop a sense of identity away from that of Europe, this could be difficult in the realm of conventional instrumental music, given the European origins of orchestral instruments as well as the whole evolution and refinement over centuries of the musical ideas and concepts involved with them in that continent. It is from this basis that his electroacoustic music can be seen as a liberating force in New Zealand music.

If composers here have not yet achieved some common ground of belief, I doubt whether we should deliberately try to compose in an assumed international style. Rather, I think we must search for the truth of our own experience. If this is done, and if the experience has any common basis, some valid common language may result of its own accord, may flourish for a time and then, of course, be rejected by younger composers for whom it is no longer relevant. This is history.<sup>47</sup>

The influence of the environment is a significant factor in Lilburn's electroacoustic music. Lilburn puts great emphasis on the role of environmental influence in the shaping of the individual sensibility, both conscious and unconscious - and is quick to point out that this has been important for many composers throughout history. He is sensitive to the notion of musical conditioning achieved not only through one's musical education and the kinds of music to which one is exposed, but also in the crucial role environmental sound plays in the development of an individual's innate sense of rhythm. Lilburn has always

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<sup>45</sup> Lilburn, Douglas. Letter to Peter Crowe, 5 December, 1963. Published in "Douglas Lilburn". Ed. Valerie Harris and Philip Norman, Canzona, v.1, n.3, 1980, p. 67. The series of letters written by Lilburn to Peter Crowe at this time are published in this issue of Canzona and give an excellent account of much of Lilburn's growing interest in and knowledge of the new medium.

<sup>46</sup> See Lilburn, Douglas. (Ed. John Thomson). A Search for a Language. Alexander Turnbull Library, Wellington, 1985, p. 10ff.

<sup>47</sup> Ibid., pp. 20-21.

been a composer more interested in rhythm than meter. The notion of rhythm, in the true sense, as the motivation or forward moving flow in music (or indeed in all natural phenomena) is important to him in describing the influences and aims of his music. This essential feeling for natural rhythm is of prime importance in his electroacoustic music - not only as a deep conviction from which to reject ideas of rhythm overly embedded in metrical patterns ("Sibelius was a composer who knew rhythm while Stravinsky was a composer who knew meter")<sup>48</sup>, but also as a key to the directness of environmental influence so important to Lilburn.

Thus, for Lilburn, musical and creative influences involve not just composed sounds but the total sound world within which one grows up. In the light of such an approach towards his work, it is no small wonder that Lilburn should have had such an influence on the development of music within this country, for in acknowledging the importance and validity of his own indigenous conditioning, together with finding in electronics a medium of expression with no historical background of use (unlike conventional instrumental media) he was able to begin to work in a way which resonated far more directly than before through his own sense of individuality.

Lilburn's work in the electroacoustic medium shows an interesting perspective on the whole question of European influence and approach. Of the three major developments to emerge from the post 1945 avant garde - the extension of serial technique (especially total serialism), indeterminacy and electroacoustic music - the first two involve ways or methods of dealing with conventional musical materials, while electronics opened up a whole new medium of expression, not only new sound materials which in themselves enabled radical divergence of approach (of natural and synthetic sound sources) and new possibilities in the structuring and forming works, but new ways for the composer to work - with the actual sounds, allowing the composer to hear a work emerge in its entirety. For Lilburn, not really one for methodology or the application of organisational means derived from outside his own material and sensibility (such as models based on number sequences), the possibility of a new medium, was of course quite appropriate and natural. The electroacoustic medium offered to Lilburn a way out of links with European concepts of method - as a medium wide open to the exploration of an individually realised musical language, form and content. Electroacoustic music offered a way of reassessing and redefining the nature of his personal expression so that his own sense of the uniqueness of his environmental influences and responses could be more fully and directly embraced in music.

In relation to this Lilburn said in 1969:

I was not born into a musical family, and had no proper musical training before a late age of 17. But rather than regret this, I've always remained grateful for a childhood on a central North Island sheep station, a richly varied and

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<sup>48</sup> Lilburn, Douglas. From a conversation with the author 29 October 1987.

potent human and natural context to shape a young imagination.<sup>49</sup>

and linked this with the possibilities he felt in the new medium:

. . . timeless, natural sounds have been in my ears since childhood, consciously or unconsciously shaping my musical thinking. That oldest instrument, the human voice, can now be used in many new ways. Less well known is the vast range of natural resonances locked away in material objects, now able to be recorded and used. To the enquiring musical ear many of these have an intrinsic beauty similar to those organic patterns revealed by a microscope.<sup>50</sup>

This can only be seen as highly appropriate in an isolated, young nation with artists eager for their own unique sense of being. Important too, for any composer in gaining confidence in a sense of individuality is the performance and sharing of works with others and for Lilburn the advantages offered by the electroacoustic medium in that respect were significant.

The actual way of composing in a studio also appealed to him - hearing sounds as soon as they are created and being able to modify and adapt them from this direct experience of the material is a process Lilburn (a man greatly interested in the visual arts) likens to painting, as well as suggesting parallels with the type of manipulation of raw materials in visual collage works to his approach to electroacoustic music involving natural sounds.

Direct use of natural sound as well as the underlying influence of the environment is evident in Lilburn's electroacoustic music. Works such as Dance Sequence for Expo'70 (1970) and Soundscape with Lake and River (1979) which employ literal recordings of birdsong and the movement of water respectively are very clear in this way. Summer Voices (1969) - in which a recording of children from a school on the East Coast of New Zealand singing an old Maori lullaby "Po Po" is transformed into a cicada-like sound, while retaining the rhythmic basis of the chant - involves a less obvious but nevertheless implicit environmental basis.

Lilburn's sensitivity to the natural sound environment of his own surroundings shows in all his work in this medium. In the recording of wave sounds, for example, for a soundtrack for an NZBC radio play, Lilburn was not satisfied with the substitution of a "sound effects" recording of waves breaking on a North Sea beach - insisting on his own field-recordings from this country. Lilburn does not hold that environmental sounds are international, the evolution of wave sounds is affected very much by the uniqueness of

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<sup>49</sup> Ibid., p. 17.

<sup>50</sup> Ibid., p. 19.

physical features - what kind of surface the waves break onto (the type of stones, shells or sand), tidal patterns and the continental shelf.

Other works of this kind included music for plays based on Maori legends, for which Lilburn felt the electroacoustic medium offered the potential for greater integrity than the use of conventional instrumental resources with their implicitly European historical associations.

The relationship between Lilburn's feeling for natural sound and electronically generated sonorities is most evident in the context of a single work - Soundscape with Lake and River - where literal sound recordings from Lake Taupo are used as structural transitions between sections of electronic music - the lake recorded in the evening, and a river recorded in the early morning. The polarity of these two sound sources underlines one of the most fundamental aspects of Lilburn's approach to working with sounds - that of rhythm. The electronic and the natural sound sections are all characterised by a hypnotic rhythmic sense which flows gently and implies a feeling of cyclic motion, while at the same time each section possesses its own sense of underlying stillness and completeness. This aspect of the work underlines Lilburn's belief that rhythm is a musical value of equal importance and potential when working with both synthetic electronically generated sounds and literal recorded sounds themselves. Further to this is demonstrated Lilburn's feeling for the musicality in all sounds - and that the polarities of electronic and natural sounds are also linked in their potential towards the complexity of white noise.

Birdsong is a sound source found by Lilburn to be quite intractable as shown in Dance Sequence for Expo'70 in which bird sounds remain intact as sign sounds, with minimal manipulation of their acoustical qualities. It is observations such as these which show Lilburn to be a composer interested in not just environmental influences in the underlying shaping of abstract works, but also in the direct fusion of environmental sound with other sound sources, such as synthetically generated ones.

There are baffling problems inherent in the machines, the techniques, the materials, and in the limitations of the composer too. I've become very aware that the natural sounds of this environment exist in their own right, as do the songs and chants of our Maori tradition, intractable, not to be won easily into any synthesis. And although tapes travel quickly round the globe, carry precise information, need no translation in performance, I'm increasingly aware that the whole medium of electronic sound is no ready-made international language - these technical freedoms don't encourage a common language, but rather a greater profusion of individual styles. Nor does that more general international style of music, idealistically hoped for by two decades of composers, seem any closer to realisation.<sup>51</sup>

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<sup>51</sup> Ibid., p. 20.

Other, purely electronic works such as Carousel (1976), Winterset (1976) and Three Inscapes (1973) show Lilburn's sense of rhythm derived from environmental influence and patterning. Carousel, for example, owes much to the influence of childhood images and sensations while Three Inscapes seeks to speak directly from an internal source of rhythmic shape and patterning.

Lilburn's views on eclecticism are very much towards seeing external influences as being of value in the technical achievement of the composer's self-determined aims - and should not be regarded as antithetical to the emphasis he placed on indigenous experience and sensation - that there is value for a remote and growing country in an awareness of developments from elsewhere where there are traditions of practice and research. Lilburn did note in 1976<sup>52</sup> however, that in New Zealand, that kind of awareness was turning away from Europe towards Asia and Polynesia, something which he felt to be quite natural in view of New Zealand's geographical situation in the Pacific. On the other hand, making explicit use of traditional Maori music is an anathema to Lilburn - for although fascinated by it, he is wary of the idea of taking such meaningful elements from another culture without full and proper understanding especially in the light of what remains at present in New Zealand a lack of full cross-cultural understanding or integration.

It has often been noted that Lilburn's influence through the use of the electroacoustic medium has been not through the composers closest to him in generation, but to the following ones - Jack Body, John Cousins, Ross Harris and John Rimmer who epitomise that generation of still resident New Zealand composers who were studying in the 1960's. His influence, however, continues with successive generations. The integrity and vitality displayed in Lilburn's music and his writing will always continue to be a positive influence, because the values stem from the basis of a genuine sense of the validity of his own experiences and surroundings.

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<sup>52</sup> See Body, Jack. "Interview with Douglas Lilburn". Unpublished typescript of taped interview, 1976. Alexander Turnbull Library, National Library of New Zealand, Wellington, p. 4ff.

8.7 Interview with Annea Lockwood 7 August 1988

JOHN YOUNG: What did the electroacoustic medium hold for you that you began to work in that area - rather than with pure electronics or conventional media?

ANNEA LOCKWOOD: It was 1963 or 1964 when I started working with electronics, when I went to Bilthoven. I hadn't heard much from France of the Groupe de Recherches Musicales studio, except for early [Pierre] Schaeffer pieces which didn't strike me as being particularly strong musically and I hadn't heard [André] Boucourechliev or even [Iannis] Xenakis at that point. What I was hearing was coming out of the German studios - [Herbert] Eimert's music, [Epitaph für Aikichi Kuboyama for example (which is really electroacoustic) and [Stockhausen's] Gesang der Jünglinge were beautiful - but I was studying with [Gottfried Michael] Koenig and he was "rein elektronische" ["pure electronic"], just electronic signals, that was a very rigorous, austere approach and the sounds didn't strike me as being sufficiently interesting to warrant all that intensity - you know, they just weren't interesting - sort of grey and homogeneous, no inner vitality to them. When I tried to make sounds myself they were similarly grey and homogenised, laboriously constructed and with no resulting vitality in the morphology of the sound. So I figured that in part it was the state of electronics as I saw them to be at that point and in part it was my own sensitivity, I wasn't hearing or listening to sounds with enough acuity to analyse the inner component layers with sufficient precision to be able to replicate that sort of complexity. So I turned to acoustic sounds, but non-instrumental ones - without all those semantic associations - as an ear training course to heighten my sensitivity to morphology. Then, I thought, maybe I'd be able to get back to working with electronics at a more sophisticated level but I never did go back to pure electronics.

JY: Just kept on . . .

AL: Just kept going . . . !

JY: And Glass Concert<sup>53</sup> came out of that process?

AL: Yes, working with glass was the turn away from instrumental sounds into working with sounds with an inner complexity which I could study. Then it turned into a piece and then, as I said, other ideas accumulated around that original interest in the vitality of acoustic sounds so I just kept working that way. But why did I turn away from instrumental music? . . . I don't have an answer really. It ceased to interest me as an area that I wanted to work in, and I really liked working in real-time with sound - in the sense that in working with tape the sound is concretely there. You hear as it's physically there it's not an "optimistic projection" which may or may not be accurate. The way the German's enthusiasm for having the sound there fully under their own control as opposed to having to go through performance for the sound to eventuate (and putting a sound through all those "filters", so to speak, which performance entails) rubbed off too. But once I was

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<sup>53</sup> This work (of 1966) is documented in Source, n.5, (v.3, n.1) 1969, pp. 3-10.

into working with acoustic sound sources - they were so magnetic, so curious and complex - that "vitality" was very clear and yet their actual nature was mysterious . . . all those things contributed to my work with electroacoustic media.

JY: How do you see the recording process as far as the acoustic sounds are concerned? Is it a way being able to transfer the sound into any space?

AL: Exactly. You know, I take it for granted! It's a transportation system - to transport sound from one site to another, and that dislocation of the sound from its original source to some other place is something I find very interesting. Sometimes I think I'm able to work with that imaginatively, sometimes it's an element that simply interests me but I don't think I realise it imaginatively, but that dislocation always interests me.

JY: What were the influences for you on that work - I was wondering about Pauline Oliveros and John Cage?

AL: Not Pauline then, she was later, when I was thinking about sound as a healing source and sound as a form of nourishment and beginning to work out pieces like the Humming piece in England, she was working on the Sonic Meditations in the States and we were both publishing in Source magazine, so we got in touch and recognised that we were working along similar pathways. I badly needed that sort of confirmatory input from someone at that point because the English scene was turning in directions which were not my directions and I was running out of people to talk to, in a way, and Pauline was that for me!

Cage was a very, very strong influence really early on probably dating back to 1962 or 1963 - especially his idea of letting sound be itself, observe it, follow it, track it, just let it be. Also the value of the unexpected, and musical language as a polemic, a personal communication, a reflection of the mind of its creator. Musical language is, in a way, capable of obscuring the characteristics of sound. For example in Atmosphères by Ligeti the whole orchestra is producing one texture (which is an absolutely beautiful texture) but all the details of that texture are losing their individuality. As well, the overall texture is humanly created and maybe in a way, to me, sounds which are either inadvertently created by human beings - not intended as music - like breathing, or sounds which are not created by human beings are often more interesting.

JY: Instrumental music involves a kind of synthesis . . .

AL: Yes, and it serves other functions and other purposes than those that I'm often really interested in. Working with sound is my way of exploring the planet and my place in it, I'm not interested in my place being a matter of control or dominance over some little part of the world, but just sensing myself as a part of the fabric of the planet - no more prominent than any other part - somehow interdependent with all the other energies loose on the planet and trying to know those energies . . .

JY: . . . and the creative process is a way for you to try and stream into that kind of consciousness.

AL: Yes, sensing all the interdependence and interactivity of all those energies and processes which comprise the planet, that keep it live and contribute to what its life is . . . so, sounds that I create instrumentally are a lot less interesting to me (although I still do it occasionally) than the sounds of organic processes.

JY: Field-recording seems to be part of your whole way of life.

AL: Yes, right, and it's not particularly elaborate either, I mean, I love what John Cousins is doing with multiple microphoning<sup>54</sup>, using different characteristics of microphones. He's looking at the process involved in field-recording analytically, in a sense, and taking cognisance of it, utilising the fact that any one microphone's spectrum is going to have dips and peaks in various places and colour the sound. I ignore that! I take it as a given and very often just work with one microphone, usually cardioid and extremely close to the source.

JY: How do you make those kinds of decisions, of how to record a sound?

AL: Just listen . . . listen. I move the microphone into various positions and listen through headphones, but also listen to the site without microphone or headphones at first. They're pretty direct decisions, I don't go through any intellectual process it's really become quite instinctual . . . and pragmatic. But I do want to try John's [Cousins] idea, with lots of different sorts of microphones. The recordings are stunning in that piece, the presence is amazing and I'm very interested in lots of presence anyway!

JY: The out-of-phase stereo effect makes the sounds very concrete.

AL: Yes, and that's one of the things that interests me anyway, the way sound can be so immaterial and so concrete at the same time. Which is a paradox - so vivid and yet quite immaterial!

JY: What kind of process do you get involved in when you're combining sounds to make a form, say, in a piece like Tiger Balm, for example?

AL: It's hard to remember because that's too long ago! I really did dream that structure. You know how you can tell yourself to dream about something - I really would put myself to sleep at night telling myself I was going to dream about that piece and then I'd dream it - which was great - I've got to try it again sometime! But of my more recent work, I have a very short, three minute tape piece which has recently become incorporated into a set of songs for baritone, baritone saxophone and piano interior, the songs are called Night and Fog, the piece was originally called Remembering Auschwitz and then it became Shadowburn. The sounds are of: two rocks cracking together, one of them breaks; fire, [made] with a microphone very, very close to a hearthfire - lots of green wood, a lot of crackling and hissing - it's quite a strong recording of fire; some women's voices that I had recorded for a very different piece (an installation piece called

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<sup>54</sup> This is referring to the field-recordings used in Cousins' work Signs in the Vicinity of Memories (1988).

Conversations with the Ancestors back in the 1970's) and I took their speaking voices and put them through a very large EMT echo plate - many times - until they just activated the plate's natural resonance frequencies and came out as singing so to speak - sung tones coming out of what was originally speech; then I recorded several different grains, I poured rice and barley, different sounding grains from one whicker basket to another. The structure of the piece came out of visual imagery. [Starting with] the breaking open of rock and then inside the rock is this appalling "system" that the Nazi's created, walled in - break open the wall and there it is - the sounds are just direct symbols, there's nothing complex about the symbolism whatsoever. Then the image of the grains being [like] bones sifted. It's a sort of direct transposition of a set of visual images and very simple symbols. The rock is broken open and there's the fire and the voices within it, and ultimately it all sifts down to bones - finer and finer . . . so that was how that structure came around.

World Rhythms is almost a different structure every time I do it, it always starts the same way and ends the same way, because that works! What goes on inbetween is very much a matter of how "on the ball" I am that night and how attuned and alert I am.

JY: Those two ways of working are really quite different -the improvised performance and the concise structure -does that happen differently just with different materials?

AL: Yes, they really are different. I structure things differently from piece to piece according to the needs of each work. Conversations with the Ancestors is an installation and has a different structure again - with recordings of two old women talking about their lives, on tape with very little editing. One was a pioneer in social health work in Massachusetts and the other brought up a family. In the installation you sit in an armchair, put a pair of headphones on and you hear the women speaking. On the table beside you is a little album of photographs (taken from when they were children right through to when I taped them) as well something that they owned. In the case of the social worker it was a little box of shells from Normandy which she entrusted me with - she must have been from a fairly well-to-do family because her father had taken her to France when she was twelve, and the other woman gave me a little muffin tin that she had used for a lot of her life.

JY: It's great how people have those special objects - everybody has them!

AL: Yes - they're "spirit catchers"! Also in the piece were big black and white blow-ups photos of their faces that I took when I talked to them, colour photos of their hands, and a silk screen quote from each tape - just a short paragraph which seemed in some way to epitomise each woman - they were on cream muslin on the wall. You sit down and look at all these things and you can listen to the women on tape. The only editing of the tapes is for coughing or someone going out to make a cup of tea - that sort of thing. What's important about the structure, I guess, is the whole physical setup and its attempt to bring the person very close to

you in different ways - but in terms of the sound, it has its own structure - like in Spirit Catchers<sup>55</sup> just letting the sounds be.

Delta Run, the piece with Walter Wincher, the dying sculptor, took a long time to figure out and was one of the hardest works to do because the material was so close to death - he didn't say very much more before he died, so that material was very strong and very much his and his being. I tried all sorts of different things. I tried attaching lots of Michael Herr's dispatches - a series of journalistic pieces to did on the Vietnam War when he was there, which are very powerful - and lots of other sorts of materials. I'd try to make them adhere to the piece but they wouldn't stick, you know - in other words [I] tried to make it some sort of collage and that was absolutely wrong - it took me a couple of years to finally figure out that I had to let the phrasing and timing of Walter's thoughts create the phrasing and timing of the piece. I had long thought that I wanted to include some very ordinary "daily" sounds in the piece - I didn't want it to be a dramatic piece - I wanted the sense of "living" there. Also, we recorded [Walter] in the hospital which was noisy so there was noise on the tape, he had cancer of the throat so there was no way I could really filter that noise out without losing essential information, his voice was already not easy to follow - so filtering to get rid of the noise meant losing intelligibility - so I needed a sound to cover the noise. At the same time my own hope is that when you die you just get caught up in the forces of the planet, so to speak, of which wind is one for me. Wind sound was the perfect cover and also is [right for] my feelings or hopes for what death would be, so the wind comes from there and the interpolated running and building sounds are the "dailiness" of things and the physicality of living.

JY: The movement from distance to presence and away again as they pass is really strong.

AL: Yes, and they come back again, they keep recycling. You usually hear that person [jogging] pass three times before the piece goes on to the next section - giving a circularity. There is a lot of circularity in Delta Run. In the performance part of the piece there is a hoop which is made of wood, about four feet across, in two sections - just a flat plywood hoop. During the first 25 minutes of the piece (it lasts about 28 minutes) I raise the hoop very, very slowly while I'm sitting on a black cushion in front of a white projection screen wearing white with an orange sash (all of those simple, clear colours hang together somehow). I sit on my knees with one half of the hoop in each hand and I raise it very, very slowly - extremely slow movement - it's the sort of movement that you're not quite sure whether somebody's moved until you've suddenly realised later they're in a different

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<sup>55</sup> In Spirit Catchers (1974), by Annea Lockwood, four people bring to the performance an object which has special associations or memories for them. In performance they sit with the object and speak out aloud reminiscences triggered by the object (or "spirit catcher") they are holding. Each person is microphoned and amplified through a separate loudspeaker. The work is mixed live, with amplification levels of each person faded in and out by a fifth performer operating a mixing console. The work ends when all four people have come to the end of their reminiscences.

position. That came from watching Pauline Oliveros do a very different sort of piece with an oboist in which they were both doing karate moves very, very slowly - which was absolutely mesmerising. So the hoop is there [in Delta Run] to keep the audience focused with a certain intensity. The image and the symbolism of the hoop comes from reading about one of the Aboriginal tribes in Australia having a ritual of giving someone, at birth, a stick which is broken which you keep with you and never lose - then at death, the stick is joined again. That's the converse of our symbolism about death - and I like it - it's not a sundering - it's a joining, which is how I want to see it myself, hence also the use of the wind sound. At the very end of the work (there's a lovely phrase of Mahler's; "ewige blau" which means "eternal blue" - his concept of eternity - it keeps coming back in texts and Mahler's works, very German but very beautiful) that's a link image for me also, and at the end of Delta Run, when Walter finishes speaking, the hoop is joined (so that it becomes a complete circle) and right at that moment the stage lights go out and the performance area becomes filled with a very intense blue light - so all these things "piece together" from different sources.

JY: Have you had a fear of death?

AL: I'm sure, or I wouldn't have tried to do a piece about it - trying to realise what it is and even yet not quite being able to. That piece also came from an experience that I think was a great gift. I was with my mother when she died, which was back in 1973. It wasn't dramatic, she was in her mid-seventies, but what was very obvious about her death was that she chose it and that she constructed it and controlled. It didn't happen to her - it was hers. To see one could do that was a revelation for me - she hadn't been ill - I'd been with her for a month on a visit and we'd talked a lot about the family and tried to resolve various tensions and it was like the last movement of something, you know, it was a series of resolutions and so it was obvious that she was intending to do that. Then I flew off to the States and a day later I got a call that she was dying and had gone into hospital right away. She'd obviously decided to bring everything to an end and to see one could do that (it's not possible for everyone, some illnesses prevent that) but to see that it's a possibility nevertheless was a marvellous thing. I was very close to her, she'd been important to me all my life and it took me a while to accept that she was dead, in spite of having been with her when she died. I wanted to make a piece about it and so ten years later I managed to, but I still don't know what death is.

JY: It seems at my age you see death from the point of view of older people, parents and relatives.

AL: That sundering and absence? It was for me for a long time too . . . but what do you think about structure, where does your question come from?

JY: It comes from the concern for wanting materials to have their own life, and matching that with why they're being put together, or what's wanting to be said - to me that's a complicated problem.

AL: I sometimes think of myself of starting with a topic, in a sense, what I want a piece to be about, do you?

- JY: I start by recording sounds for a particular reason, a particular attraction that they have for me, usually because of what the sound source actually is, as well as the sound itself, so that often there's a kind of symbolism involved too. Trying to work with sounds at more than one level like that can be problematic for me.
- AL: So it's like you have to dig outwards from the sound itself to realise what that sound is going to be saying?
- JY: Often it means a long time working with sounds and listening to them, finding what's right for the sounds and for the piece and trying to work out the relationship between the event, place or feeling that was the actual recording and the playback of the sound later on in another space. There's always been something in the simple process of recording and playing back sounds which, for me, is amazing . . .
- AL: There is!
- JY: It comes for me a lot I think from early experiences with tape recorders, when I was very young making up "radio programmes" or putting stories on tape . . .
- AL: So we've come from different places with sounds then because, for me, I come from a question. World Rhythms comes from a question, "How can we perceive all those phenomena as interacting - how can we achieve that perception?", in Delta Run, "What is death?" and in Glass Concert, "What is sound?" - and you come from the sound itself, from the other end . . . ?
- JY: For a while I was concerned with a way of describing the subjective in the creative process as being an active or formative thing, as opposed to a more passive subjective "response".
- AL: Did you see one in a negative light?
- JY: In a way yes. For me, in working from an intuitive basis it seems relevant to sort out the difference between actual ideas and pure responses, because I have strong subjective responses to many things - many different kinds of music but not being "in" that style or area myself creatively - or responding to particular things, like "added ninth" chords for instance . . .
- AL: But not having the need to recreate that?
- JY: Yes, and I feel that in making and working with field-recordings there are receptive aspects involved in that . . .
- AL: It's not all within yourself, right? You're working with phenomena that are exterior and become interior.
- JY: Yes, and I think that while the whole process doesn't have to be centred around complete control or acoustical manipulation, that it feels for me to be a strongly creative and active experience.

AL: It doesn't have to be syntactic in the normal musical sense. It's syntactic inevitably, but not necessarily so abstractedly syntactical. Do you find that people understand the sounds you're using because they're familiar with them - that familiarity brings them close to people and means they are not obscure.

JY: On the whole, yes.

AL: I think that's a really nice thing about working in this area, a lot of the time we're working with signals that are familiar to people so we're not trapped in that problem of an obscure language, a highly abstract language that people have to figure their way into. Not that I had thought of it in those terms until someone said something like that to me once at a concert after World Rhythms and then it suddenly fell into place. I was so happy about that - such a wonderful discovery - not to be obscure! Not dealing with all those "filters" and "curtains" of understanding.

JY: By beginning with materials which are part of experience . .

AL: Yes, and commonly experienced materials, more or less, I suppose not everybody hears a pulsar by any means but many of the sounds I work with are commonly experienced by people.

JY: Do you think there is any kind of cross-cultural possibility in this way of working?

AL: I hope so. I haven't been lucky enough to play these pieces of mine to people from other cultures much, I haven't played them to Asian or African audiences for example, but I would like to, I'm very curious about that.

JY: Are you concerned very much in your work with the literal references of the recorded sounds you're using, such as the sound of a cat or a tiger or a woman, in Tiger Balm, for example?

AL: Oh, it's important to me, really. One of the things that, to me, is seductive about sounds is that this very immaterial substance conjures up "a cat" - a cat's purring conjures up "a cat" - with a real kind of concrete presence. When the cat coughs in Tiger Balm, everyone responds - I think it's the concreteness of the feeling "here is a cat" that people are responding to, so that link between the sound and its source is very much a part of the piece on one level - as it is in many of my pieces. I think "Musique Concrète" is a very nice term - a very real term! But quite apart from that, if I'm thinking of myself as working with phenomena then I like to work with the real phenomenon itself.

Working with the phenomenon itself is derived from the way the sound can have that sense [of the source] because it conjures up the other aspects of the phenomenon so vividly - physical weight, shape and presence, its smell, its colours and all those other synaesthetic aspects. I'm concerned with working very directly with the phenomena, so those links are very important.

JY: What about the feeling for context, - is a gallery context for playing a work different to a natural environmental context for the replay of a work?

AL: I try to control context, because it's a major part of the composition of a piece. I think composing with these sounds is already giving them a context and then the sort of physical space in which one is going to perform them is another level of context - like a Russian doll all growing out of one another, with layers and layers of context! People and personal experience is yet another contextual layer, it seems to me, over which one happily has no control whatsoever. Physical premises are really important in a pragmatic way - as a musician giving concerts here and there it's not always something you can control, sometimes it's very difficult, sometimes it's just right. So, for example, I had to do World Rhythms in Germany recently in a proscenium stage, I'd never agreed to do it on a proscenium stage before, but I didn't have any choice, and I wanted the gig, so I did it - and it was weird!

JY: With you in front of the audience?

AL: Right, and the speakers were all the way around, but still the mixing balances and so on were much, much harder to pick up on and I didn't feel close to the audience in the same way. I hope it isn't usually a "performance"; I hope that it's a sonic environment in a sense, and as soon as you have a proscenium stage you have a "performance" and there was no way around it.

JY: Very formal . . .

AL: "We are performers, you are audience". There was that division there, and there's a focus on where the sound is coming from, even if it's from speakers that are circumambient - I didn't like it and it was hard to do - so the context was plain wrong. It came right after a very dramatic, brilliant percussion concert in the same space and that was wrong too - it was a hell of a gig to pull off!

JY: How does it feel to mix, in real-time, works like World Rhythms or Spirit Catchers, what do you try to achieve?

AL: It's always seemed dicey to me to perform live like that. In working over an hour's period of time, which for me is relatively long, I'm never very sure that I'm going to be sufficiently relaxed inside myself to be able to switch off the situation: "OK, there's this tightrope to walk across tonight", and be totally into the sounds. That depends a little on what's just gone on before - when I've had a setup that's run right into the performance (you know, sometimes you have problems in setup and one just finishes maybe an hour or half an hour before the performance starts) it's very much harder to do under those circumstances than when I've had a good breathing space to collect myself.

Also, I've done World Rhythms a lot and I'm getting to know the materials too well now. At one point I made a list of the sound combinations I came up with in performances which I really liked together - which was fine for a little while until I began to rely on that list for evenings on which I was tired before I started to perform - at which point I'm not hearing properly (you know, I'm worried about "should I change the sounds now, does this feel like about the right amount of time . . . not sure"). So I think the state I'm in when I do the performance has a big effect on whether the piece is going to feel like an hour-long meditation, which is what [World Rhythms] should feel like at its best, or whether it's going to be

something else and not as good - so for me it's always a risky piece to do, which is fine - I mean I like the fact that the performance is risky. Delta Run is a risky piece because, while much of the work may be on tape, the movement is important: "am I going to be able to move that slowly for that long?" - without one hand suddenly inadvertently and involuntarily making a fast little movement, however small . . . I can rehearse and rehearse and rehearse and never be very sure of that in the end.

JY: Is timing quite important in that piece too?

AL: Yes, because the halves of the hoop are in certain positions at certain points in the tape, they have to be at those points by then and it takes "x" amount of time to move through one point to another and to turn my wrists very, very slowly, and how much tension or lack of tension to have in my arms is a matter of timing.

JY: I know what you mean about the excitement of performance - there is a rare sort of electricity as a work becomes realised, even with an activity like conducting, the giving out and receiving that can go on with players is a wonderful thing.

AL: Yes, and you're operating at your peak when things are good, you're really at full tilt with all of yourself, right? That's a wonderful feeling, and that kind of communication is a most amazing thing when it happens.

JY: Your whole self just becomes spirit, I think.

AL: Yes, finally, finally! It's all unified too, all moving in the same direction. One's in tune with oneself, it's a wonderful feeling.

JY: Do you think that performance is important for you because of that sensation?

AL: I'm sure. I've always said that I just enjoy performing but one is all spirit, it's true, and all in tune with oneself. That feeling is marvellous - I also have that feeling when I'm composing well, when things are just falling into place, it's the most exhilarating feeling in the world.

JY: And nothing else counts . . .

AL: Nothing, no, and nothing else quite reaches that peak or feeling either, at least not for me.

JY: How much has been added to your river archive since you were last here in 1984?

AL: Not too much, because I really do think that with the Hudson River installation<sup>56</sup> I found a way to work with rivers and water sounds which in terms of carrying out the project - the physical context in which I present the sounds and in terms of people's responses and conceptually - satisfied what I was looking for in working

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<sup>56</sup> A Sound Map of the Hudson River (1982).

with water sounds. I still work with them and I'm still fascinated by them but I haven't really added much to the river archive per se since then.

JY: The length of time and the continuity that the water sounds have in the space seems an important part of that work.

AL: Well, it comes from the idea that sound changes you, changes your body state and other aspects of your being and needs time to accomplish this. People like Pauline [Oliveros], La Monte Young and myself doing long pieces in the 1960's were exploring, in part, the phases of attention for the listener - of interest, boredom, and then the shutting down of the lexical mind and the opening up of the other functions of the brain, and that takes time. So we all learned that lesson if we wanted to deal with phenomena or acoustic situations in which the aim is for people to concentrate very much on the morphology of the sounds - we have to really give it time - we all learned that - long phrasing is important to the works of all those people.

JY: Is there any particular kind of sensation or experience that you'd like listeners of your works to undergo?

AL: I think I really hope that people are going to allow themselves to be enveloped by the sound and taken over by it - have it, in a sense, streamed through their bodies and be absorbed by it - because from out of that sensation are realisations, I think, about what sound is and what it does for one and how one can use it. That's a rather fervent hope always, that people will allow themselves to be carried off by the sound as it were - sort of suffused with it.

JY: Is part of your aim to encourage that kind of openness - that meditative approach?

AL: If one wants to encourage that sort of openness one has to "design" the piece, the context of the piece. For example, the way you're going to present it - the way you look and the way you move, and the way you use the space so as to encourage that sort of openness, I think there are ways to do it. The whole presentation of the piece needs to be thought out with that aim. One of my techniques for trying to encourage that sort of openness is, fairly frequently, to talk to the audience before I perform - so I make a direct communication with them first . .

JY: Like establishing a trust?

AL: Trying to set up some sort of "me-you-me" communication. Sometimes I would really like to just walk into the space, start the piece, say nothing - just do it you know - I don't very often though, that's different sort of projection.

JY: What about other performers in your works - in the performance of Tiger Balm with a dancer the other night<sup>57</sup> I personally felt that the gestures of the dancer were (for me) too dramatic for the piece - maybe it's just that I know the sounds of that piece on their own too well!

AL: I think I hear that piece with a greater focus on sensuality than Jennifer [Shennan] does and I would envisage it with less movement, sparer movement. I had thought of doing [that performance] myself and then couldn't think my way back into the way I had actually presented the movement when I had done it back in 1971, it was too long ago I couldn't think myself back into that framework - in fact, in retrospect, I couldn't have done in that space at the City Gallery what I did in London (when I first presented it) because there wasn't enough physical space to move around, and it wouldn't have worked. So the next thing was to turn the piece over to someone else's imagination (which was interesting because it's a very familiar piece) and that's what I did with Jennifer - I made some comments and so did she, but I basically let her be, and was intrigued to see what would come out of it, and I'm about to do the same thing in Auckland . . .

JY: It's good to be open to that . . .

AL: Yes, I don't know if I could do that with a recent piece, it has to be an old piece . . .

JY: Where you can let go?

AL: Yes, let go.

JY: How do you feel about the movement of technology, in electroacoustic music, what aspects interest you?

AL: I don't think it interests me per se - it's enormously useful and I need aspects of it. The fact that I just don't do wiring and don't know much about it bothers me, but not enough to learn how, because there's always someone around who can do it. Computer technology, I think is fun to play with. I haven't seen any use for it yet; other than that, I have very mixed feelings about it.

In the States I'm surrounded by people who know a lot about current technology, use it a great deal and are very turned on by it - in some cases it's the whole focus of a piece - not always, but when it is it doesn't interest me in the slightest. Some of my friends, through technology, are able to realise a concern which is emotionally very powerful, and the it really works for me. For a specific example, Richard Teitelbaum (who is a composer and a keyboard performer working a lot

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<sup>57</sup> Performance at the City Art Gallery, Wellington, New Zealand, Wednesday 3 August 1988, of Tiger Balm (1970) (with dance by Jennifer Shennan) and Spirit Catchers (1974).

with computers and was with Musica Elettronica Viva)<sup>58</sup> has recently been doing a series of pieces called The Golem Studies. The Golem is a Jewish myth - I don't think I'd even try to synthesise what it's about because my sense of it isn't complete but I think of it as a Frankenstein-like figure, although it's more than that - the concept of the Golem is an integral part of Jewish mythology, the created creature which takes on its own life and becomes prophetic in this case. Richard is consciously using technological tools as a metaphor for "the created" which runs away with itself and it works - it's very powerful - there's a lot of emotion streaming through that music because of his feelings about the Golem myth and his concern with it. The means epitomises the concept and it's a beautiful marriage of means and concept.

Another composer is Nicholas Collins who has done a piece with short wave radios, sampling FM stations extremely fast and mixing those tiny samples as sound blocks into pieces. The idea of doing that very rapid sampling of all sorts of styles (disco and rap and whatever else is currently around) is delightful, but beyond that the music doesn't move me - although he does have other pieces that move me.

Laurie Anderson's drum machine suit, made of the parts of failing drum machines, is a nice subversion of the obsession with technology, and the sleekness and the slickness of it - a very nice hit at that. But technology is getting so cheap every day and very pervasive - to such an extent that my students are feeling it and becoming bored with that aspect and looking for something more, which is great!

JY: Overemphasis on technology can maybe leave behind content and ideas?

AL: Yes, and there are other aspects too, which maybe John [Cousins] also feels. We grew up on analogue equipment and now it's digital - no big deal, you just learn some new things, however we also grew up in a way out of left-field, avant-garde, esoteric area where we were always struggling to get people to accept that electroacoustic music was music - and now electronics is everywhere it is music and people assume that it's music, and it's taking me a while to shift my head, I'm still out in left-field, but it's not because of the medium any more, it's because of the materials - the message not the medium. The medium is mainstream all of a sudden - and that's weird!

JY: How do you feel now about New Zealand and what does it mean for you to be back here?

AL: Well, [last week] in Christchurch, was a very beneficial week for me, talking with all of you people there - that we were able to talk back and forth, it seemed like there were no barriers to doing that - in Christchurch of all places which had seemed to me, in a way, like a city of barriers when I was growing up there. Things to overcome, you know, "I'm a girl", so it's "proper" to play the piano, "improbable" to be a composer - behavioural things, all sorts of barriers. Christchurch was a city where one didn't talk personally - where it wasn't cool for

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<sup>58</sup> This was a group of American composer-performers working together in Rome with live electronics, founded in 1966.

a woman to talk intellectually - that was not done, it was taboo. It was wonderful to find that I could actually do that there now - I had a sense of being home, you know? Wellington isn't home, I never lived here, although I've always had some friends in Wellington - it's a little removed from home, and yet it's New Zealand! So then I began to ask myself in the last week or so - "is New Zealand home, or is Christchurch and Arthur's Pass home . . . is it my childhood that's home, or is it the country?" - and I'm not quite sure. Also, New Zealand is going through such rapid change right now, I mean, I don't have any simple answer. One thing that happened that really surprised me enormously was that I suddenly got homesick for America last week - just momentarily for about half an hour - and I was incredulous because I never think of America as home!

JY: You don't?

AL: No, I never have and that was weird. It hasn't come back but it was so vivid and so intense for a moment or two.

Also, this past weekend up in Paekakariki, I've been reading a book on race and ethnicity which is shaking me up - I'm reading it precisely because I figure myself to be racist for sure, but I've never been able to see in what way, or been able to see evidence.

JY: Why is that?

AL: Well, I figure that being brought up in Christchurch with very little contact with Maori except coming up to the North Island to a friend's farm up in Te Kuiti, where the community was very racist, was bound to make me racist and I didn't remember thinking anything when I was an adolescent which would have contradicted that - so I figure that I am, but it's buried. The whole country seems to be going through that re-evaluation now, more and more intensely and I'm doing it too. That is shaking up my sense of what is New Zealand, which means what is home . . .

JY: Interesting that in New York where you live there is a far greater variety of racial and ethnic groups.

AL: But in a way the whole country doesn't seem to be as intensely involved with re-evaluating its attitudes on race as New Zealand is right now, by any means. There are sporadic cries of outrage about American racism in response to various incidents of violence, but if we were now in the civil rights movement back in the States, which I hope we will be again shortly, we would all be questioning our attitude to race much more intensely - the way many New Zealanders seem to be doing right now. So I'm also trying to catch up with some sort of responsibility as a New Zealander - "what are our attitudes?", "what needs to be changed?" and "what do I need to change personally in my own attitudes at this point?"

JY: Do you think your work with environmental materials relates to your origin as a New Zealander?

AL: Oh sure. It's directly related to growing up in Canterbury. Two summation images concerning the environment for me are; on the one hand, images of scree and erosion in the foothills in the lower part of the alps and what looked like erosion as a result of land practices and grazing practices - and how perverse that looked to me as a kid - when it seemed to me that back in the nineteenth century the British had known about erosion and grazing. When the highlands were so-called "cleared" of people and were replaced with sheep all sorts of erosion problems developed in Scotland, so it was known by the time the settlers came over here what sheep would do to a landscape, and still we put all those sheep on the hills and produced all those problems. So that seemed like a really perverse misuse of land. On the other hand, [there were] my father's stories (he was a mountaineer) of crossing rivers and having to always look upstream in case there was a real rush of water coming down - the danger of drowning and always having to be aware of that.

So the power of the rivers, our attempt to exert power on the land with its often detrimental results and the land's power over us - all of that made a big impression on me. My preoccupation with the land and its rhythms was a real, direct result of a childhood spent half near the Pacific and half in the mountains.

JY: You are able to continue that feeling in the States?

AL: Yes, because I spend summers in the mountains - nothing to do with being in New York and everything to do with being up in the Rockies in the summers! When I was in England I had no access to mountain country and I missed it, I couldn't afford it - there it takes money to get to Europe and I never had the money (I was really poor in England almost all the time) - so I missed that and it was missing from my work too, but came right back into my work as soon as I got to the States and got to mountain country again. I now see that in retrospect!

New Zealand is a continuing source of nourishment, and if it makes me come to terms with my own racism that's even more of a source of nourishment. I don't seem to be able to live here - I don't have any real explanation for that - I came up with this real "crackerbarrel" quote to Jack Body the other day that home is where you can't be . . . .

8.8 Interview with John Rimmer December 1987

(This interview was not conducted in person, John Rimmer responded on tape to written questions).

JOHN YOUNG: What led you to the electroacoustic medium and what have been the influences on you?

JOHN RIMMER: It must have been over twenty years ago now perhaps around the mid-1960's that I had two experiences in electronic music which more or less challenged my whole concept of music. The first of these was to hear some electronic music that Ron Tremain brought back from his leave - I think he was on study leave [from the University of Auckland] in 1963 and he brought back a recent publication from the Columbia-Princeton Electronic Music Centre. Now this was a very interesting recording because it was the first one from that centre and it was a cumulative one consisting of pieces that had been composed at that centre since it began in the early 1950's. So there were musique concrète pieces, and pieces that involved the RCA synthesiser and the one that really grabbed me most was a piece for violin and taped sounds. A piece called Gargoyles,<sup>59</sup> I can't even remember the composer but I remember the piece. It must have been something about the mixture of live, traditional instruments and electronic sounds that started something off. The other thing that happened around the mid-1960's was a talk I went to by Douglas Lilburn who came to Auckland and discussed his recent experiences in the medium. In particular he spoke about his work The Return and pointed out how he had recorded some of the sounds for that piece. I think that was an early classic in New Zealand electronic music and it was interesting to hear him talk about that, not really from the point of view of music, but rather from the point of view of the work being a "sound image" to a poem. Around the same time, mid-1960's, I began playing some of these electronic pieces to students at Westlake Boys High School where I was teaching. It was interesting to observe their reactions. I remember playing Henk Badings's Capriccio for violin and tape and the students were really rapt in this, they of course, brought "innocent ears" to this experience and found it very novel indeed. So with these two experiences coupled with the interesting reactions from students I began to want to know more about this very interesting, captivating medium. As I said at the beginning it was a challenge to me, it challenged everything about music that I had come to understand. So faced with this challenge I had two choices, either to not accept the challenge and simply compose conventional music (for conventional forms and instruments), or, respond to the challenge and try and find out more about it. I chose the latter and then looked around for ways of furthering my experience. It meant overseas study because there was no facility here to do this, certainly not in Auckland and not elsewhere in New Zealand at that time - although Lilburn was starting to set up his studio in Wellington - but it was early days there yet. Ron Tremain encouraged me to go to Toronto because in Toronto there was a very good studio - in fact in the mid-1960's it was considered to be the second best in the North American continent, second to Columbia-Princeton. So that's where I

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<sup>59</sup> Probably Gargoyles (1960) for violin and tape by Otto Luening.

went for a postgraduate study course in composition with the electronic music course as part of that. A number of experiences occurred there that have had quite a lasting effect on me. For instance, that's where I heard pieces for instruments and tape in particular the Synchronisms series of Mario Davidovsky, the Argentinean-American composer. I remember being captivated by the first Synchronism for flute and tape as well as other tape pieces . . . the challenge was starting to be met. I began working myself with the medium and I might say that I didn't know one end of a tape recorder from the other when I started - so I was thrown in the deep end - in a group of students who all had previous technical electronic experience and here I was from the deep south with virtually no experience at all. In those circumstances one tends to battle the medium and it's interesting the tussle that you have with it. I think it's good to have these tussles because when you fight against artistic things you come out usually with a very strong result.

To look at influences, which is the second part of your question, the influences have been varied. There's the influence of the actual medium itself and I think one of the major influences is the fact that the composer is confronted directly with the sound. So it's rather like sculpting, you're working directly with the materials and this can be a very enriching learning experience. I tend to think of a tape work as something that's starting anew each time I come to the medium. Every tape work for me is a new beginning - one learns an awful lot. That's not to say that there are not sounds that go from one piece to another but I like to more or less recharge my batteries each time I come to a new work. So the influence of the direct confrontation with the sound was important for me.

Another influence was the way in which the tape, or the electroacoustic medium, could be used in a variety of presentations. For instance, one could have a concerted version with, for example, very good quality sound in a particular sympathetic acoustic with very good listening environment - then one could combine that listening experience with other instruments or with mixed media or with music theatre. So there was a whole range of other experiences and therefore influences that began to make their impact on me. I think it's the mixed music approach that has been a lasting one and I think that's because as a performer myself I like the live performance - the sense of gesture in the live performance and to combine an instrument with the electronic medium is a very musical way of going about this kind of presentation. I know there is a recent trend that says, "instrument plus tape is really like instrument plus 'music-minus-one'". I think that's to degrade the medium. I prefer to not think of my tape sounds as 'music-minus-one', because they are an integral part of the piece. There are things on the tape which are not like instruments and even though they might move or pull the instrument towards them, nevertheless they are a complementary part of the piece, rather than just being an accompaniment which is what a 'music-minus-one' suggests. There's another criticism about tape and instrument pieces which is that the tape being "frozen" is always the same in every performance - why couldn't we have a situation where the tape could vary or the electronic sounds could vary? Right now we don't have the technology here in New Zealand for that, but I know of two instances in the United States where this is starting to happen and perhaps in a few years we'll be able to do that here in New Zealand. In other words we

need to have a computer that could sense the gestures and touch and attack of the instrumentalist and respond with the electronic music accordingly.

JY: What are the differences or similarities for you between conventional and electroacoustic media?

JR: On one hand I think the differences are vast, on the other hand sometimes the differences can be drawn together. A lot depends on the actual musical medium that you are composing for - there's a sense of appropriateness in every piece that one composes. So if you're writing a piece for solo violin there are going to be things there that have to be "violinistic". If you're doing a piece for trombone and electronic music there's always the tendency to want to have something "tromboney" about the tape part and perhaps to draw the instrument into the sound world of the electroacoustic medium. I think one of the most dangerous combinations and one that I've never been able to resolve for myself is where you have a large force of instruments -for instance an orchestra - and electronic music. Because the orchestral palette is so rich, it seems almost superfluous to match that with another rich body of sound from electronic music, so I've steered clear of large ensembles and electroacoustic music combinations. I know some composers have done some very successful pieces with that but more often than not, I begin to question whether it's appropriate for the orchestra to play gestures which are very electronically inspired, that almost go against the nature of the instruments. Again I come back to the sense of writing what is appropriate for each instrument. I know that some composers use very dense cluster-like or glissando-like textures and one could say, "all right, these have electronic counter-parts", but I think that's where it ends. I think that composers who use clusters and glissandi can still do them in an appropriate way for the instruments. I think it's a misnomer to say of one's orchestral music that "it sounds electronic." There may be similarities at a surface listening level.

As for similarities, I used to think there were many similarities but as I work more and more with instruments and tape I think the differences are the real things to work with. One can pull similarities from the instrument and the tape medium, tie things together, but ultimately it's the contrast between the two that's going to be a very powerful part of the piece. There's no denying the fact that in this kind of confrontation between the instrument or voice and loudspeakers, you can have a very dramatic situation where the tape music serves not only to contrast with the instrument but to highlight the poetic qualities of the instrument or voice.

JY: You have composed many works for a combination of conventional instrument(s) and tape especially in a series of works entitled Composition. What were you trying to achieve in that series and how do you feel now about the combination of media?

JR: I tended to follow my nose very much in that series, I didn't have an overall "aim" of what I wanted to achieve at the beginning. It was almost as if one piece led to the next and perhaps if I briefly describe some of the background to the series, how it began and how it continued, it might best answer your question.

The first piece, Composition 1 occurred in a rather curious way. I was studying horn with Eugene Rittich who was the principal horn in the Toronto Symphony Orchestra and I used to go for a fortnightly lesson to study privately with him. About half way through the year Eugene (who of course realised that I was there on a composition scholarship - he had got rather interested in what I was writing) asked me if I would consider writing a piece for horn and piano, in other words a sonata. So I thought, "yes I'd quite like to do that". The very next day I went to the weekly electronic class and Gustav Ciamaga who was in charge of that course knew that I was having horn lessons and he sensed my interest in the Davidovsky pieces for instrument and tape (the Synchronisms series that I referred to before). He said, "why don't you consider for your second project this year writing a piece for horn and tape?" So I said, "all right I'll consider that," and I started working on this piece for horn and tape. Each week I'd play part of the tape part to the class and occasionally I'd take along part of the score just to show them what was happening in the horn part. It was very much trial and error - I had no idea what to call this piece and in fact I finished it and not knowing what I was going to call it Ciamaga suggested the title Composition for horn and tape and that's what it became. I must have finished that piece about three quarters of the way through that course and then not long after I began to use some piano sounds that I had recorded. There was an old "honky tonk" piano in the corner of the studio and I became quite fascinated with some of the ways in which the piano sounds could be played backwards by splicing, so I used some of these sounds again and coupled with some other electronic sounds that I'd grappled with and come to know I started working on an ensemble work - the idea of several instruments with tape and that led to Composition 2. Now, there was something about Composition 1 that triggered off Composition 2. Composition 1 was a difficult one for me because the two sound worlds were quite different and even though there are little electronic fanfares to match horn fanfares the two media are quite different and it's only at the very end, almost the very last sound in the piece, that the horn and the tape come together - in fact the last pitch is the same in both. You hear the tape end on a concert E-flat and then a stopped note on the horn comes out on the same pitch - so the two come together there. In Composition 2 I decided that this would be the main idea of the piece that the two sound worlds would start poles apart and during the course of the piece would gradually come together, so that at the very end of the piece the instruments and the tape would be integrated. That was quite a nice idea to work with in the piece and it tended to generate a lot of the musical thinking in the work. Now another thing that was important for me that year happened with the other composer that I was working with - John Weinzwieg - and he had just written a very fascinating harp concerto. He showed us a lot of the techniques that had been formulated by Carlos Salzedo in the early 1920's and I got quite fascinated with these. We were allowed to go and experiment with a harp in one of the studios there, just to see what these sounds were like and this immediately set me going on the idea of a piece for harp and tape where the tape part would be predominantly a recording of the harp - with the live harp as well. That was something that I hadn't done in those first two pieces - the tape sounds in the first two pieces are not of the instruments themselves and while they may allude to the instruments they are not [derived from] the actual instrumental sounds. But in Composition 3 there are a few electronic ones, a few "Toronto-like" sounds that I brought back from there and that led naturally to Composition 3 in which I was trying to integrate the sounds of

the harp and the tape - so that the integration would be there right from the outset.

The next piece, for flute and electronic sounds had a rather wierd beginning because it started off as a piece for flute and pre-recorded piano. I went back to the "honky tonk" piano, changed a few sounds of the piano around - but the flute really didn't work alongside the piano and certainly my "transformed piano" didn't seem to want to work with the flute at all, so I abandoned it for a while and went on to the next piece - Composition 5 for percussion and tape. Of course I had done a lot of listening to Kontakte by Stockhausen and I think that work was a very strong influence on Composition 5. I found the tape medium fitted like a glove with percussion because the sound world of percussion and electronic music is not that far apart - the gestures in percussion music are very related to the gestures that you use in tape music and the sounds of non-pitched percussion are not that far away from all the kinds of electronic sounds that composers have liked to use. Kontakte is of course a classic in the way these two media can blend together. So it was a blending process, the integration process that I had tried in Composition 3, which came out in Composition 5. I might also say that Composition 3 like Composition 4 underwent several transformations before the finished product so that if you look chronologically at the series you find that Composition 5 was completed before numbers 3 and 4. In fact the series goes 1, 2, 5, 3, 4 - rather bizarre the way that turned out but that's one of these things that happens. I didn't want to change the numbering because that's how the ideas were formed. Then I went back to the flute piece, in that work I used a few of the piano sounds, I wrote one version and that was played and was recorded by Radio New Zealand. However I was never very happy with it so when I was on leave in 1979 in Toronto I went back to the old studio again and re-did the tape part, and completed this in 1980 back in Auckland. Composition 4 thus went through a number of revisions before the finished product, around 1980-81. I recorded some of the sounds of key-clicking on the flute - by then we had the Roland synthesiser so I was able to have a very good palette of analogue synthesiser sounds which I used with the flute part. Composition 6 for piano and tape again used recordings of the piano and that was a nice way of working as well. In Composition 7 [for bassoon and tape] I used recordings of bassoon, especially bassoon chords, with piano. Composition 8 used recordings of violin with live violin and in Composition 10 recordings of double bass. In Composition 9 there were recordings of the Dorian Choir and also the soprano Heather McDonald which are transformed so that one hardly notices that there are choir sounds any longer, but certainly the sound of pre-recorded voice can be heard towards the end of Composition 9.

Composition 10 I think is rather like a summation of the whole series because not only do the instrument and tape sounds appear poles apart at the beginning, they come together about two-thirds of the way through and then they change roles so the instrument becomes very "electronic" - there's a pickup on the bass (I became quite fascinated with electronic pickups on instruments) and the electronic sounds become more like the double bass - because, after all, they are largely pre-recordings of that instrument which have been heavily transformed. Then the transformation is taken away so the last few tape sounds are real double bass sounds, allowing the two media to actually change roles. Again, that's a very dramatic presentation a bit like two characters in a drama - they start off being

completely different, they come together and then they swap roles. So that's really how that series arose. There's quite an interesting article by Elizabeth Kerr in a recent Canzona<sup>60</sup> which is a very well written one, she had a lengthy interview with me, it's a very accurate article and one of the best I've ever had written about some of my pieces.

How do I feel now about the combination of the media? . . . I still think it's very strong. I think that what I said before about computerised versions of the electronic sounds is going to be a very useful possibility in the future. It's interesting that when I was in Vancouver at the computer music conference in 1985 some of the most powerful pieces were for live performer and electroacoustic media. I heard a fascinating piece called Cool Zephyrs for a valve instrument - an EVI - and a synthesiser. It's an instrument you may have come across in some of the advertising in Keyboard magazine, I think there's one put out by AKAI. It has a seven octave range, you either have a trumpet-like embouchure or you can blow it like a woodwind instrument and it controls MIDI data through into MIDI synthesiser, so you have all the nuances of the live performance but with electronic music coming out. Another one was electronic violin - an instrument devised by Max Mathews which is simply violin fingerboard with an electronic pickup giving the nuances of violin music - quasi-string sounds - but linked up with some synthetic material. Then another one where you have an electric drum, in which you move your hands over a drumskin and it triggers off electronic sounds. So those were the live pieces and instruments that I became quite interested in and I've toyed with the idea of getting an EVI myself. Maybe in a couple of years I'll pick one up when I go away next time, it certainly would be a fascinating instrument to play. But I still think the combination of instruments and the electronic medium is a very strong and a very rich one and one which I think has got almost infinitesimal possibilities. I think it all boils down to the live performance of electronic music.

JY: To what extent has your work been influenced by environmental listening? Is there a specific environmental influence on your electroacoustic music?

JR: There are certain pieces where I've deliberately tried to use environmental sounds. I think there's probably a very strong environmental statement in Seaswell for trumpet and tape. Seaswell is outside the Composition series but, after I finished Composition 10 in 1977, that was followed more or less straight away by Soundweb for trombone (for Jim Fulkerson) in 1978 and in 1979 I wrote Seaswell for Gordon Webb. In the summer of 1978-79 I did some walks along a New Zealand walkway north of Auckland - Cape Rodney out by the Leigh Biology station. There's a very rugged coastline and a tremendous eastern swell pounding in on those rocks. Some days the sound of those waves was so intense . . . and the spray of the waves would hurtle right over the cliff face about a hundred feet up - huge waves - the sound of that was really impressive. Also on the same vacation we went to a bay not far away called Anchor Bay which had a very narrow entrance and then opened out into a wider bay and so the northerly swell

<sup>60</sup> Kerr, Elisabeth, "John Rimmer's Composition Series: Problems and Possibilities in Live Electronic Music". Canzona, v.8, n.27, March 1987, pp. 11-18.

came through this entrance and dumped these huge waves onto the beach - and I became quite fascinated by all the frequencies in this wave sound. Now that is the direct environmental image which led to Seaswell. It also led to some of the sonorities in the Viola Concerto because that was written around the same time. The huge energy in the sound of waves, and the rhythmic energy also which is very much a natural environmental thing. Some of the other tape pieces have this, there's a more recent tape piece called De Motu Naturae of 1985 (or the Motion of Nature) and there the natural environment is very much a rhythmic one. That rhythmic environment, the sense of rhythmic cycles is part of Tides for horn and electronic music and also spills over into Projections at Dawn for clarinet and tape. So those several works, Seaswell, the Viola Concerto, Tides, De Motu Naturae, Projections at Dawn and then the computer synthesised piece Fleeting Images have direct environmental influences. I should add that when I'm short of ideas, I walk out into the forest or along the seashore, and that really gets me going again. I've got a South Island trip coming up very soon with the family - we're taking a tape recorder along and there will be a couple of tramps where I'll have a tape recorder slung over my back with a microphone out in front. Rather than only just taking slides or visual record of the trip I want to take a sound record of this trip as well - so that may find its way into some piece in the future.

JY: How do you see the role of technology in electroacoustic music, is it an influence on the shaping of your ideas or simply a tool?

JR: I think it's a bit of both. I used to think that the electronic studio was simply another instrument - in that sense it's a tool. But I think it's more than that now because the latest computer technology means that you've got a very powerful instrument, there are things that you can do with computers that you really can't do with other instruments. I think immediately of some of the very recent sequencing programmes that are coming out. There are several that we're using at the Auckland University by Dr. T - a very interesting sequencing programme that really uses the strength of the computer - in other words long lists of events which can be got very easily, random choosing of events, not only pitch but duration and timbre. That part of computer music fascinates me. Incidentally, I used similar processes to that in Fleeting Images which I composed in Vancouver at Simon Fraser University because the whole crux of their computer generation was very similar. It was largely a sequence programme but a huge sequencer so you could designate say five hundred events and then the computer would simply generate a whole screen of events which you then went and did either note by note or event by event, or, you could do it randomly with given parameters - a given number of sounds, durations, entry delays, timbres and get the computer to generate the passage. It's a labour saving device but it's also one in which you can produce a texture very quickly. The whole notion of musical textures and also musical rhythms with the very fine [differentiation in] duration that you can get is one that I think computers are very good at doing - so it became an influence on shaping ideas because it leads to some very interesting formal things. For instance, in Dr. T you can have sequences that generate other sequences - you can build up a whole "tree" of sequences. You might have say, the "trunk" of the tree as a master sequence that triggers off the "branches" as they appear up the tree and the "branches", in turn, are sub-master sequences that trigger off say, the sequences of the "leaves". That's a very simplistic way of looking at it but I find the analogy

between a tree structure and what you think musically is a useful analogy. So that's a very interesting formal concept - sequences within sequences if you like. That would be something quite interesting to try with conventional media, by the way, to write an instrumental or vocal piece which does that very thing. So the technology can be very stimulating in that sense.

JY: Do you attempt to work at all with sound-images in electroacoustic music? Works such as Tides allude strongly to the natural sound of the sea, but also possesses much electronic treatment and analogues to these kinds of natural sounds - how do you see these literal/musical aspects within a work and what influence does it have on the form?

JR: I have been for some time interested in musical realism and I think there's a parallel with visual art. I'm always fascinated by the way visual artists get away with realism. But when one uses a realistic sound in music I think you have to work with that sound. For me the strongest musical expression is still in the realm of abstract music. While you might begin with an aspect of musical realism or a word or an image, it's what you do with that material en route to an abstract image - that's what's important for me, and that's what generates the piece. If it's a sound like the sea, it's what you can get from the sea and how you can turn the sound of the sea into music- abstract music - that's going to be a very interesting piece. I'm not content just to have words by themselves, with music. I like to turn the words "into music" if you like - or a real sound into music. If it's a bird call I like to play with the bird call so that after a while you're no longer aware that it's a bird call - it's transformed into something else. But the transformation process has taken one along the way. It's almost as if you're blindfolded and you're led down this path - you get to the end of the path and you take off the blindfold and you say, "yes, I know where I went along that path - I felt my way along there." Those are the sorts of things that I quite like to try.

As far as literal/musical aspects within a work are concerned I think I've tried to answer that - it's a hard question, but again I come back to the nature of music as an abstract, powerful medium which somehow transcends all literal connotations. While the piece may begin with literal connotations the piece moves from there towards abstract ones.

JY: Is symbolism in such sounds a part of your creative consciousness?

JR: I think it is part of my creative consciousness, but I'm not quite sure whether I can explain it. It's something that one feels and you do almost instinctively and I find it difficult talking about that kind of thing.

JY: Is field-recording a normal part of your work or creative process?

JR: It's not a normal part. I haven't done much field-recording. The recording I've done has been in my head - it's the consciousness of a very strong listening experience that I've had out there in the environment, that I've retained and then worked with in the studio. But I think that if I can get some good field-recordings on the South Island trip I may start to rethink this whole process.

JY: What might make you choose between a natural sampled sound or an electronically generated sound? How do you see the differences or similarities in working with them?

JR: I haven't used many sampled sounds yet, apart from early *musique concrète* pieces, recording old pianos and the like or recording instruments in the Composition series. I've yet to do a piece that's based on a sampled sound - but I'll get to it soon and for me it will be an update of early *musique concrète* experiences. One of the projects I had the graduate course in electronic music this year was to choose a number of sampled sounds and try and get an electronic counterpart then to work with those two. I think there's a lot of scope in that kind of process. Again, it's the embarking on a process of integration between the sampled sound and a more electronic one. You might, for instance, have a sampled bird call and then an electronic sound which is poles apart from that bird call, and you try and work or you mediate between the two. The mediating between a sampled sound and an electronic one which might be miles away is an interesting one and that's a kind of idea that one might set up for each piece . . . you try and work between them.

It's certain that the sampling techniques will be very, very powerful in the next few years. The thing that fascinates me about sampling is being able to use a natural sound as the stimulus for a piece.

When I was at Simon Fraser University, Barry Truax (who's in charge of the studio there) was actually working with a technique called "granular synthesis".<sup>61</sup> He took oboe sounds (very short oboe sounds) analysed them and then changed the attack and decay. Each of these oboe sounds he called a "granule". He did that many, many times a second and then added random elements to that sound, to the attack and decay, then started mixing different segments together so that from a little oboe sound he built a kind of shimmering texture of oboe-like sounds - so after a while you're not sure where the material came from. On the one hand it had the general timbre of the original sampled sound but it became something else, it became a whole series of grains, rather like an aural analogue of sand, each speck of sand being one of these sampled sounds. I'm hoping that when I get to North America in a couple of years that I might get to see what he's been doing, he was only just beginning to work on that synthesis technique when I was there - so no doubt he's implemented that as part of his POD synthesis technique. So, granular synthesis working with sampled sounds might be a very powerful technique to use in the future.

JY: Is there a New Zealand identity in music? How can electroacoustic music enhance or reflect New Zealand culture?

JR: I keep on changing my mind about that question. I find there are certain things about New Zealand music that make it different from other music but I really can't

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<sup>61</sup> See "International Computer Music Conference: Platypus, Granules, Kyma, Daton, & the DSP56001 in Your Future". In Keyboard, December 1987, pp. 24-25, for a description of Truax's "granular synthesis".

put my finger on it. It's a difficult one. I remember Gillian Whitehead coming back a few years ago, she had been in Europe for about ten years and she said, "you know there's something about the way in which you composers put sounds together that makes it different from European music," and when I asked, "what do you mean?" she said, "that's all I can say, it's a feeling thing." I remember too, Peter Sculthorpe coming here about ten years ago and talking about the way in which he had ten ways of making Australian music - and really it was ten ways of making Peter Sculthorpe! I know that Phillip Norman has grappled with this problem in his thesis on Douglas Lilburn. You always come back to the question: "Is it New Zealand, or is it that composer?" I think that there are composers who do their own things. There are things about that composer that makes them distinctive, but it's very difficult to say that there are things about that composer that gives them a particular national sound. I think there are strong processes of association and maybe it's those that give the nationalistic image to it. As far as electroacoustic music is concerned that can have a national flavour because if there's a very strong musical realism - an environmental sound, use of language, local texts or local sounds - that can have a direct influence, a direct quality on the actual piece and reflect the particular country. I think we're getting very conscious of what a New Zealand identity is and I think that we have, at the moment, a string of individual composers who are making very strong statements about themselves as composers - I don't know that we have a particular New Zealand identity. It doesn't worry me, I prefer to do my own thing. If it means re-creating an image that is "New Zealand", I'll do it, and in fact I often think that by going out to the environment and working particularly with environmental images, one is almost creating the culture, rather like the Maori design that uses the young fern leaf and builds a whole lot of patterns around that. It's quite obvious that the early designers looked at the fern leaf and they were so fascinated by the young, virulent growth of the fern leaf that they decided that would be their focus, so a whole lot of patterns emerge from that. Now, I'd like to think that what I do with sound is a bit like that. You take some particular sound that you're fascinated with and you work out with that. Then maybe in a few years time other people will say, "that comes from that particular part of the planet." That can work with some aspect of electroacoustic music. I don't think, however, that when you work purely in the realm of abstract music - abstract sound - that one can really implant a New Zealand identity. Again it's a difficult question and as I said before I continue to change my mind about this. I remember being interviewed very early on, I think it was around the time that my Symphony (1968) was played in New Zealand in 1970 and there was a small snippet on television and the interviewer said to me, "what is there about your music that makes it New Zealand?" I said to him, "what do you mean?" - that was the end of the interview.

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# **PART THREE**

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**ANALYSES OF SELECTED WORKS  
BY NEW ZEALAND COMPOSERS**

## ANALYSES OF SELECTED WORKS BY NEW ZEALAND COMPOSERS

### 1. Introduction

The works by New Zealand composers and artists discussed in the following analyses have been selected on the basis of their use of field-recordings as recognisable sign sounds. For this reason, not only purely electroacoustic works but also mixed media work in which sign sounds fulfil a significant role in the form have been included.

Methods of synopsis have been used which appeared appropriate to the nature of each work, being either: graphic score; verbal synopsis (with accurate timings); or verbal description of the materials and structure of works, and these are presented along with broader descriptions of formal and structural relationships. The basic approach to these analyses has been an attempt to discern ways in which the reference of sign sounds has contributed to, or has been manipulated towards, some kind of meaning and expression, and should be seen as a more detailed application of ideas and principles suggested in Chapter four of this study.

It should also be acknowledged that while verbal description, graphing and notation of the evolution and alterations in the materials of works such as these provides a useful means by which detailed observations can be made about structural and formal relationships, these analyses are intended to be consulted along with actual aural experience of the works concerned. For this reason cassette tapes have been prepared with relevant extracts from the works under discussion and these are referred to in the text of the analyses where appropriate. In addition, cassette tapes of the complete works are

included, so that an appreciation of these works as a whole is enabled.

The following equipment was used in the making of timings for the following works:

Otari MX5050 two-track stereo reel-to-reel tape recorder/reproducer;

Fanfares (Body) [copy of master tape]

Musik Dari Jalan (Body) [copy of master tape]

Christmasmusic (Cousins) [master tape]

Parade (Cousins) [master tape]

Tense Test (Cousins) [master tape]

Music for Limbs (Cree Brown) [copy of master tape]

Horizons (Harris) [copy of master tape]

You Must Remember This (Young) [master tape]

Rega Planar 3 turntable;

Soundscape with Lake and River (Lilburn) [commercially available record]

Tiger Balm (Lockwood) [commercially available record]

The Return (Lilburn) [commercially available record]

Nakamichi BX-300 stereo cassette deck;

Jangkrik Genggong (Body) [commercially available cassette]

Tascam 44 four-track quadraphonic reel-to-reel tape recorder/reproducer;

Signs in the Vicinity of Memories (Cousins) [copy of master tape]

Timings of works may vary slightly against the cassette tapes of complete works that are provided, due to the variability in playback speed of many cassette decks. Nevertheless, timings are provided in order to pinpoint clearly sections of works and particular events and sounds within them.

## 2. Analyses

### 2.1 The Return (1965) by Douglas Lilburn

Electroacoustic music on tape (sound image incorporating poetry by Alistair Campbell). Narrator: Tim Elliott, Maori voice: Mahi Potiki. Stereo.<sup>1</sup>

This is Douglas Lilburn's first major self-contained work in the electroacoustic medium and was realised on commission from the New Zealand Broadcasting Corporation in their Wellington Studios<sup>2</sup>.

The work is based around the rich imagery in the poem of the same name by New Zealand poet Alistair Campbell (born 1925) - and for this reason the work is described by Lilburn as a "sound image". Campbell's poem is mysterious and highly evocative, with images of; the meeting of mist, land and sea; metaphorical (almost hallucinatory) imagery of people as "gods of the middle world" (perhaps the world between land and mist); and an associated image of a Greek god with "the drowned Dionysus". Lilburn's sound image is in two main sections; the first, a narrative of purely sound-imagery based on that of the poem; the second including a recorded reading of Campbell's poem integrated with the sound image materials of the first section so that the sounds become fused with the actual verbal poetical imagery.

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<sup>1</sup> Originally a monaural work, The Return was electronically reprocessed for stereo effect with the 1984 re-issue of the work on record.

<sup>2</sup> In this Lilburn had technical assistance from Willi Gailer.

Sound sources used in the creation of the work are both natural and electronically generated - recordings of the sea, birdsong (including seagulls), vocal material consisting of Maori plant and animal names, electronically transformed cymbal-roll sounds, which at climax points are capped by a sweep across open piano strings with reverberation added, a sequence of "played" percussion instrument sounds (cymbals, gongs and bells), filtered white noise and a recorded reading of Campbell's The Return.

### Synopsis

0'00" Sea/mist imagery: filtered (narrow band-pass) white noise with gentle undulations in frequency and amplitude fades in.

(0'28") Sea sounds fade in (to low level).

(0'45") Gull sounds added.

(0'53") Long envelope (gradual attack and decay) of transformed cymbal sound (fades 1'06") - sea, white noise, gull sounds continue.

(1'07") Continuation of different levels of white sound - filtered noise, sea, transformed cymbal - into texture of overlapping envelopes and timbres.

(1'39") Layers of very narrow band-pass filtered white noise (with undulating frequency and amplitude) begins to emerge from overall texture (which fades out by 2'02") and continues into . . .

2'11" Gods' imagery: Birdsong (transposed downwards) emerge at low amplitude, gradually becoming more dense in texture. Filtered white noise (cf. 1'39") continues undulating in frequency and amplitude.

(2'55") Maori voice begins, mid-distance in stereo space (filtered white noise and birdsong continue).

(3'25") Maori voice moved forward in stereo space (more intimate).

(3'33") Filtered white sound fades out (birdsong continues) - choruses of birdsong triggered by voice, which begins to modulate (naturally) towards whispering.

(4'17") Maori voice whispers (very close presence), birdsong fades out.

(4'19") Reverberation added to voice.

(4'31") Birdsong re-emerges.

(4'35") Maori words sung and spoken.

(4'55") Maori voice in both "dry" and "reverberant" apparent space. Birdsong fades at 4'52", re-enters 5'00" reaching highest amplitude at 5'12" and pitch begins to modulate with exaggerated glissandi and (from 5'23") ring modulation.

(5'29"-5'36") Single envelope of transformed cymbal sound - gradual attack and decay - very low amplitude.

(5'34") Maori voice ring modulated (ring modulated birdsong continues).

(5'41"-5'51") Single envelope of transformed cymbal sound - gradual attack and decay low amplitude. Maori words now whispered and ring modulated - crescendo of ring modulated voice and birdsong. Voice and birdsong (ring modulated answer each other).

(6'01") Crescendo of transformed cymbal sound (voice and birdsong removed from texture) . . .

6'07" Dionysus imagery: "Cymbal, gong and bell" sequence repeats, gradually fading.

(6'35") Filtered white noise (narrow band-pass) begins to fade through "cymbal" sequence into . . .

7'09" Sea/mist imagery: "Cymbals" (Dionysus imagery) faded out, filtered white noise continues, with low amplitude sea and gull sounds (recalls opening sequence).

(7'35"-7'48") Crescendo of transformed cymbal sounds, followed by small crescendo of sea sounds (with gull sounds).

(7'57"-8'14") Crescendo of transformed cymbal sounds with feedback resonance added. Filtered white noise sounds continue out of this.

(8'20") Gull sounds very active (strongest presence).

(8'29") Climax crescendo of white sounds begins (several layers of transformed cymbal sounds, sea sounds) - climax at 8'49" - transformed cymbals fade out by 8'56", sea sounds continue. At 9'01" filtered white noise (narrow band-pass) added, sea sounds fade to low amplitude at 9'08".

9'25" POEM: Verse 1 begins. Sea sounds and filtered white noise continue at low level, underpinning narration (Verse 1 ends at 9'54").

(9'57") Crescendo of white sounds - sea, filtered white noise (transformed cymbals added at 10'00") filtered white noise fades by 10'30".

(10'31") Verse 2 begins, continues to Verse 3 at 10'56". Sea sounds continue underneath and cross fade out at 11'08" with fade in of birdsong (enters on cue of "beaks" in Verse 3).

(11'14") . . . "gods of the middle world . . . " from Verse 5 used as refrain (reverberation added to voice) - birdsong continues, pause in narration as . . .

(11'30") Maori voice re-enters (now transformed by alterations in analogue tape replay speed) - in both dry and reverberant apparent spaces. Layers of birdsong (with glissandi) continue. Maori words sung from 12'20" and faded out from 12'47" to 12'54".

(12'54") Verse 3 continues after . . . "gods of the middle world . . . " refrain (links back with 11'14"). Narration continues to first line of Verse 5 (. . . "gods of the middle world . . . ") to 13'59".

(13'50") Birdsong fades out.

(14'04") Envelopes of transformed cymbal sounds re-emerge.

(14'10") Verse 5 continues (from . . . "Face downward". . . ).

(14'21") "Cymbal, gong and bell" sequence emerges from transformed cymbal sound - cued by . . . "The drowned Dionysus" . . .

(14'33") Verse 5 and Verse 6 continue. Cymbal sequence fades out (at 15'00") on cue of ". . . The long awaited!"

(15'02") Sea/mist sound-imagery returns, several levels of filtered white noise (narrow band-pass), sea sounds.

(15'12") Verse 6 continues to end of poem (15'39") underpinned by sea sounds and filtered white noise - these crescendo at 15'41". Gull sounds added at 15'53".

(16'13") Two layers of filtered white noise (narrow band-pass) with undulating frequency and amplitude emerge through texture (sea and transformed cymbal sounds fade at 16'21") - filtered white noise continues to end (16'54").

A significant aspect of this work is the economy of sound sources used and the means by which these are handled in the evocation of the imagery in Campbell's poem. Overall, the work has a strongly meditative quality comprising many sounds with extended

envelopes with gradual changes and evolution of morphology, and simple static textures of Maori words and birdsong. The manipulation of the sounds is minimal, as the composer seeks to create very tangible links between the "sound image" and the poetic imagery.

In keeping with Campbell's poem, three main imageries are created in Lilburn's work: "Sea/mist" imagery, "gods" imagery and "Dionysus" imagery. The "sea/mist" imagery is conveyed with the combination of three different kinds of white-noise-type sound sources; electronically generated noise with narrow band-pass filtering applied to this, so as to create flow of undulating pitch and amplitude; sea surf sounds with their low frequency and convoluted morphologies; and transposed "rolled" cymbal sounds which emerge in extended, gradual envelopes. In addition to these sources recorded seagull cries are used. These provide a very direct contextualisation of the white noise sounds towards the signal interpretation of "sea/mist" imagery. Seagull cries also imply the imminence of the "headland", the first image in Campbell's poem. This is even more strongly implied at 8'20" with the very "close-up" gull sounds (ex. 1), as well as simply providing another level of morphology to these sections (as all the other sounds are of continuous evolution). In this way, the opening section can be seen as embodying both the images of distantly perceived mist and the presence of the headland. In the "gods" imagery, Lilburn has used transformed birdsong (transposed downwards), and a voice incanting Maori plant and animal names which are at various points spoken, whispered or sung. These have different placements within the stereo space - from very close-up and intimate, to mid-distance with reverberation added. Also in the second main section of the piece, these are presented in different transpositions of pitch and envelope (at 11'30") (ex. 2) which suggests a multitude of "middle world" voices especially in the context of the line from the poem: "Gods of the middle world". The "Dionysus" imagery is conveyed by means

of a sequence of "played" percussion instruments (cymbals, gongs and bells) with more regularised durational patterns as a kind of "fanfare", which is in both sections (at 6'07" and 14'21") initially very loud with strong presence, but which then gradually recedes in amplitude.

Of greatest importance in these groups of sound-images is the way in which certain materials are cross-referenced between different sections. The two sounds which are used in this way are the filtered white noise and the cymbal sounds. The first instance of this cross-reference begins at 1'39" where filtered white noise fades up through the texture (of sea and transformed cymbal sounds) and continues into the next section of "gods" imagery at 2'11" (following the fade out of the previous texture) where it is superimposed with the birdsong and vocal elements (ex. 3). The other sound element which is used across two different areas of imagery is the cymbal timbre (ex. 4), with its characteristic spectral makeup. It is used a good deal as a climactic element (in a transformed version of the rolled-cymbal morphology so that it becomes an envelope of slow crescendo/diminuendo of "metallic timbre"); as a third element of white noise in the sections of sea/mist imagery; and in the "Dionysus" fanfare imagery. In both sections of "Dionysus" imagery (at 6'07" and 14'33") the cymbal/gong/bell sequence emerges directly from the "abstract" cymbal envelope, there being far more of a tangible "played" quality about the cymbal sounds as they form part of the "processional" which makes up this imagery (ex. 5).

A further way in which sounds are modulated in order to attempt a unity of timbre in The Return is through the ring modulation (from 5'23" onwards) of the Maori voice and transformed birdsong. This process has two results; extending the richness of the sounds in a purely acoustical sense, and manipulating their spectral makeup such that it

blends well with that of the cymbal sounds. When, at 5'41" and 6'01", there are two envelopes of transformed cymbal sound the relationship between these transformed timbres is made apparent (ex. 6).

The ubiquity of sounds such as extended cymbal morphologies and the filtered white noise, and the adaptation of these elements into different aspects of the original poetic imagery, makes this "sound image" successful in terms of the flow of Campbell's poetic imageries. There is a kind of "zoom-in" effect as the poetic narrative moves from "mist low on the sea" to "the surf-loud beach" gradually focusing on human figures, "their heads finely shrunken to a skull", which become transformed - "their great eyes glowing, their rain-jewelled, leaf-green Bodies leaning and talking with the sea behind them" - into "gods of the middle world . . . " and, in a sudden twist of reference, to the Greek god Dionysus (who was associated with vegetation). This twist of reference, with Dionysus being "drowned" suggests a rejection of this European mythology in favour of the image of the "gods of the middle world". The transitions of sound imagery described above can be seen to reflect this melding of poetic imagery very well. The continuous strand of white noise (from 1'39") which links the first two main image-areas in the work acts as a focal point, a connecting thread which joins the shift in apparent "open" space of the sea/mist imagery to the more intimate space with Maori voice and quiet birdsong of the "gods" imagery. Similarly, at 6'07", the sudden entry of the cymbal/gong/bell sequence of the Dionysus imagery mirrors the sudden shift in reference of the poetry.

The use of a recorded reading of the actual poem in the second section of Lilburn's sound image allows for the purely sonic imagery of the first section to be made more concrete, and Lilburn's subtle use of the metaphorical image "gods of the middle

world" as a refrain with reverberation added (as at 11'14") allows the narrating voice to become abstracted from the continuity of the poem - seemingly in the same "world" of images as the Maori voice.

## 2.2 Tiger Balm (1970) by Annea Lockwood

Electroacoustic music on tape (also exists as a music theatre version)<sup>3</sup>. Stereo.

There are six recorded sound sources in this piece, a closely microphoned cat-purr, closely microphoned heartbeat sound, a medium distance recording of erotic non-verbal vocal utterances of a woman (recorded sounds of masturbation), a medium distance recording of the utterances of a tiger, and a distantly microphoned recording of a propeller driven aeroplane - all of which are used in the piece without studio transformations of spectra or morphology - and also sounds of a jews harp and a collection of gongs, both of which are transposed downwards one octave, using an analogue tape recorder, with the associated lengthening of morphological evolution. With the exception of the transformed gong sounds, each element in the piece is presented only once, and for an extended period - the durations of each sound are: cat - 5'02", heartbeat - 2'22", woman - 4'34", tiger - 3'58", aeroplane - 0'35", jews harp - 1'58", gongs - 4'19" and 5'03". There are never more than two separate sound elements simultaneously in Tiger Balm and for this reason the synopsis of the work is presented here as a graphic score.

Two important points of observation arise out of the nature of the sounds in this piece:

(1) the sign sounds (the cat, the heartbeat, the tiger, the woman and the aeroplane) are presented without any treatment of their morphology so that their sign reference is

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<sup>3</sup> The music theatre version has been documented in Source, n.9, (v.5, n.1), 1971, p. 48.

continually intact.

(2) the makeup of the sign references of each of the sounds is not complicated, the overall sign of "cat" or "tiger", for example, is not built up of smaller reference units into the main image - and the recordings are, in all cases, made from a consistently maintained perspective (microphone placement).

These factors, along with the limitation in the work to the superimposition of never more than two separate sounds at one time, allows the listener to enter into an intense focus of the natural internal details of the sounds themselves - their spectral content, morphology, gestural makeup and rhythmic shape. This is achieved without manipulation of the morphologies of the sounds (with the exception of the gongs and jews harp - and here the manipulation is minimal) - so that the details of morphology are, with attentive listening, able to be discerned due to the insistence of the sounds. In this way fluctuations or changes in the morphology of the sounds can be interpreted as significant events. When, for instance, the cat coughs (for example at 0'36", 1'32" or 3'06") the sound momentarily modulates in a way which is quite different to the overall "purr" morphology (ex. 7). The woman, tiger and jews harp sounds, however, move through broad phases of change and evolution in rhythmic and gestural morphology.

Each of the sounds has an intrinsic pattern of cycle and rhythm - the gongs and heartbeat have a strongly periodic makeup, the cat-purr the tiger and the woman sound are more erratic in their gestural morphology but as the sounds continue, larger sensations of natural cycle and rhythm are tangible. The jews harp sound is similar in this way, but is aided in the sensation of rhythm through the panning of the sound within the stereo space

(a process which also engenders, through the continued presence of the sound, a natural sense of rhythm in the initiation, motion and decay of the sound). The aeroplane has its gesture embodied in the spatial perception of the sound as one extended envelope which slowly pans across the stereo space. These natural links of rhythm and gestural evolution of the sounds is a factor in their unification within the work.

Natural relationships of morphology between the sounds is also of great significance to this piece - strong acoustical similarities of internal low-frequency modulation exist between the cat, tiger, aeroplane and jews harp sounds (**ex. 8 a,b,c,d; cat, tiger, aeroplane and jews harp sounds**). In the cases of the aeroplane and jews harp sounds, the morphological similarities between these and the other sounds in this example are most evident in the second half of the aeroplane's envelope (as the sound begins to decay) and, in the jews harp sound, with the lower pitched band of sound that modulates underneath the higher pitched band of shifting resonances (as induced by varying the size of the oral cavity with the playing of this instrument). The resonating qualities of the gong sounds with rapid shifts in high harmonic content also relates (rhythmically) to this characteristic - though not so directly because the spectral makeup is of more "pure" actual pitch. Again, because of the extended duration of the sounds without manipulation, these links can be tangibly perceived as the work progresses - insight into the acoustical makeup of the sounds is offered through both their extended presentation and the intrinsic links of morphology, rhythm or gesture between the sounds. The woman, tiger and jews harp sounds also link in the broad changes in their rhythmic makeup, having a variety of gestural patterns from extended envelopes to more rapid "enunciations" (**ex. 9 a and b; woman and jew harp sounds, and woman and tiger sounds**). Similarly, the cat-purr, heartbeat and gong sounds are linked through the general regularity of their rhythmic

structure - the cat and heartbeat sounds especially share morphologies which can be broken down into two complementary envelopes analogous to the sensation of "tension/relaxation" or "inhalation/exhalation" (ex. 10). In this way it can be seen that different morphological aspects of the same sounds are relevant to the way different groupings of sounds relate. In other words, the cat-purr sound, for example, relates to the heartbeat sound in terms of the rhythmic sensation of tension and relaxation, but also to the tiger sound in terms of low-frequency modulations of spectrum and morphology.

The spatial placement and activity of sounds within the stereo space in Tiger Balm is important to the form of the work and relationships between its materials. In general, there is a simplicity in the overall montage, due to the extended presentation of the sounds, the combination of never more than two elements simultaneously - and all but three of the sounds are static in the placement within the stereo space. The sounds which move in the stereo space are those of the jews harp, the aeroplane and the tiger. The jews harp is manipulated freely in the stereo space, emerging from the left, right or centre of the space and shifting within it as the sound evolves. Conversely, the aeroplane sound is recorded from a single distant perspective, but the sound moves from right to left across the stereo space - this being directly analogous to the perception of the object itself in real-time and, as such, the motion of the aeroplane sound is a documentation (from a given perspective) of the motion of the actual object (the aeroplane itself). The tiger sound is manipulated within the stereo space, the movement of the sound being from the right to the centre of the stereo space (after the first 1'08"), with a gap of 1" between, creating a sense not of a naturalistic motion of the tiger (as with the plane sound) but a direct cut between two discrete placements of the sound (ex. 11).

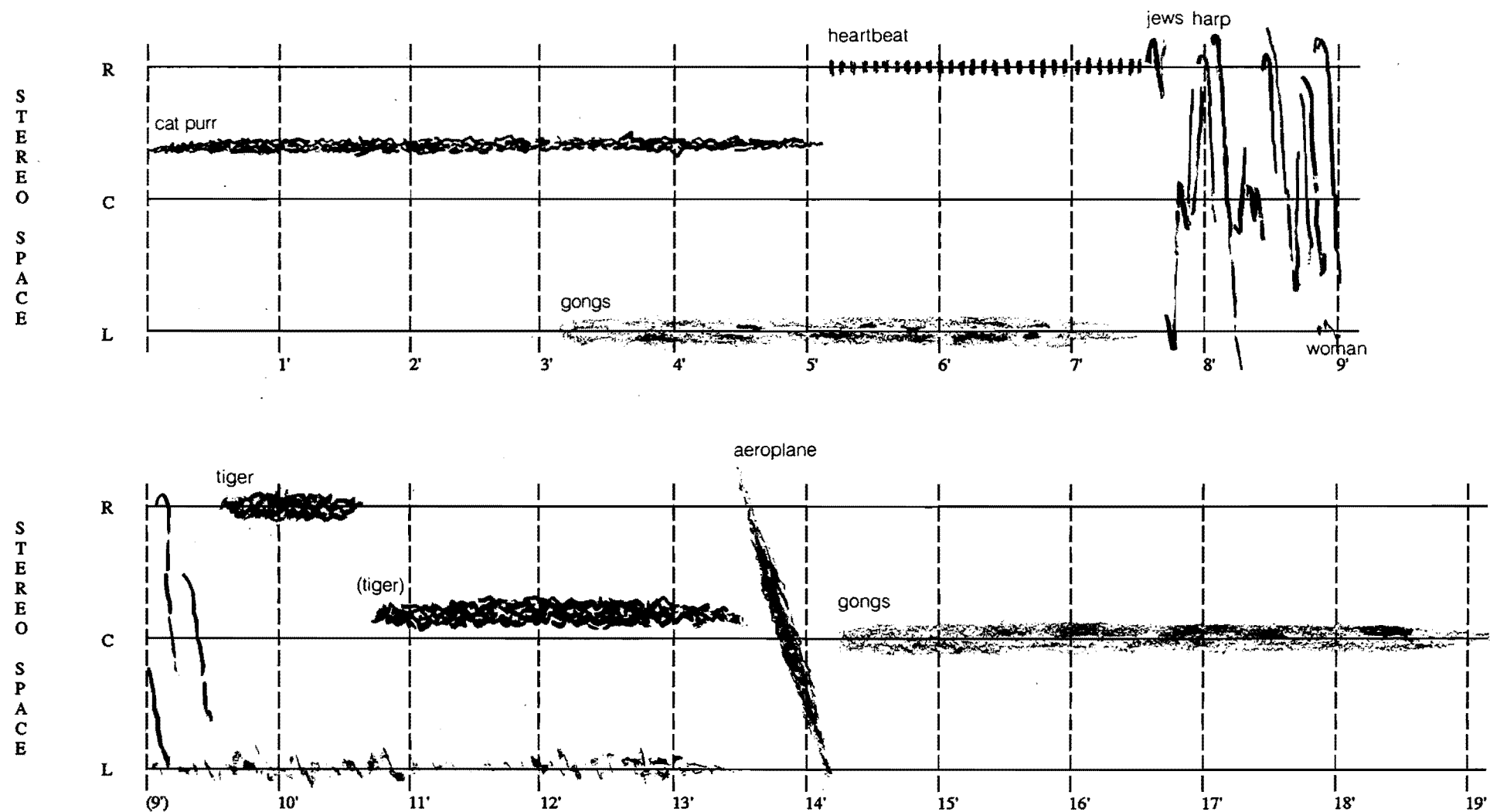
With these different types of spatial movement and placement of sounds in Tiger Balm, a sense of "natural" and "manipulated" sense of space is suggested. The extended presentation of most of the sounds in one position in the stereo space creates, when sounds do shift within it, a strong awareness in the listener of subtleties of spatial movement - especially in the shift of the tiger sound from the right to the centre of the space.

The role in this work of the sign reference of the sounds brings together in an overall sense, wider differentiation in the sense of scale of the sounds. Polarities between closely microphoned sounds, such as the cat-purr and the heartbeat with the distantly microphoned aeroplane sound, suggest more emotionally based polarities of internal and external sound worlds - the amplification and revelation of internal sounds and the observed natural motion of external ones. Such widely divergent sign references are unified by the natural morphological, rhythmic and gestural similarities between the sounds are revealed through the simple juxtaposition of the materials.

A particular potency can be found in the juxtaposition of the woman and tiger sounds. The two sounds which are presented on opposite sides of the stereo space (left and right respectively) - until the tiger sound is moved closer to the sound of the woman, in the centre of the space. The morphologies of each sound coalesce in a very natural way - both have a "breathing" quality and rhythmic patterns which have the impression of being related directly to the internal state of the being. However, further to this is the nature of the juxtaposition in terms of sign reference - of a potentially aggressive, wild animal with the intimate, gentle, erotic vocal gestures of the woman. Both suggest the embodiment of a sense of natural power - and this stems a great deal from the sensation

of each sound deriving directly from an uncontrived expression of internal states - in this way the interface of the two sounds suggests symbolic images of sensuality (ex. 12). The movement of the tiger sound across the stereo space makes more intense both the morphological and figurative relationships between the two sounds.

Tiger Balm brings together simultaneously a form derived from literal and abstract perceptions of sound - combinations of sounds for their morphological and signal properties in both direct juxtaposition and in broader links across the whole time scale of the work. Therefore, there is a link articulated between sounds with widely differing source references through the natural similarities of their morphological, gestural and spectral properties - similarities which the listener is given time to appreciate through the long periods of time for which the sounds are presented. What is demonstrated overall is that there exist innate acoustically-based links between this broad range of natural objects; that on the sensual level of sound, there is the possibility to regard these phenomena as having a broad unity.

Diagram 12: Tiger Balm: Temporal/Spatial Organisation.

### 2.3 Earthworks (1971) By Philip Dadson

Film documentation of simultaneous film and tape global performance work.<sup>4</sup>

This work involves the simultaneous documentation, on film (still and cinematic) and audio tape, of a brief segment of time (ten minutes from 1800 to 1810 hours Greenwich mean time) at different locations on Earth, on 23/24 September 1971 - the date depending on the longitude of the location - and being the autumnal and spring equinoxes for northern and southern hemispheres respectively. Fifteen Earth locations were initially intended for inclusion in the work, but only seven complete audio and film documentations were actually realised, and these comprise the final film document of Earthworks realised by Dadson. The locations and relative times are:

Rarotonga; latitude 21° 15' S, longitude 159° 46' W, altitude sea level. Private section, extending to beach. 0730 hours local time, 23 September 1971.

San Diego (West Coast, United States of America); latitude, 31° 45' N, 117° 07' W, altitude 85.34 m. Domestic interior. 1000 hours, local time, September 23, 1971.

Greenwich (Great Britain); latitude 51° 29' N, longitude 0°, altitude 47.15 m. Open parkland outside old Greenwich observatory. 1800 hours local time, 23 September, 1971.

Uppsala (Sweden); latitude 59° 51' N, longitude 37° 37' W, altitude 24.08 m. Boreal forest, 1900 hours local time, 23 September, 1971.

Bourke (New South Wales, Australia); latitude 30° 05' S, longitude 145° 90' E, altitude 110.03 m. Plain just out of Bourke. 0400 hours local time, 24 September, 1971.

New Zealand (Desert Road, volcanic plateau); latitude 39° 37' S, longitude 175° 44' E, altitude 1074.42 m. Open tussock-covered plateau. 0600 hours local time, 24 September, 1971.

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<sup>4</sup> The work has been substantially documented by Philip Dadson (including transcripts of audio tape materials) in New Art: Some Recent New Zealand Sculpture and Post-Object Art. Edited by Jim Allen and Wystan Curnow. Heinemann, Auckland, 1976, pp. [76-88].

Antarctica (Arrival Heights, Ross Island); latitude 77° 80' S, longitude 166° 80' E, altitude approximately 198.12 m. Frozen volcanic plateaux. 0600 hours, 24 September, 1971.

The entire work was conceived by Dadson as being in four parts: the sending of instructions to participants; the actual performance; the return of the recorded artifacts; and the assemblage of these into a film document. In this sense, the actual performance constitutes the events as they actually occurred, the documentary media of film and audio recording enabling the constituent parts of the work (with whatever events transpired at each location) to be melded into one extant object.

Each participant in Earthworks had a set of tasks to carry out over the ten minutes - these tasks being for each participant carefully structured - with indications as to the moment within the ten minute period at which particular observations should be made.<sup>5</sup> This comprised providing verbally, at the required moment (onto the audio recording): an official weather report for the area; observations of the immediate conditions of the environment (earth and air); ambient environmental sounds; tide, moon, sun and earth phases for that moment; confirmation of the time at regular intervals; and description of environmental features of the location. Each participant was asked to speak in their own language and that if there was a lot of information to provide, to speak quickly - while if there was little, to speak slowly. As well, the participants were requested to take around twelve still photographs of their location.

The New Zealand part of the performance for Earthworks was filmed continuously on colour movie film, with the camera (which was hand-held) moving in a circle around

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<sup>5</sup> See Ibid., p. [78].

the group of participants gradually viewing the 360-degree panorama of the location. The application of this process (the circular movement of the camera) suggests the circularity of the Earth's temporal cycle giving a constantly changing view of the location. This forms the basic visual narrative for the film document, which has spliced into it black and white still photographs taken by the participants in other locations, as well as colour still photographs of the New Zealand location. The soundtrack of the film is a direct, synchronous superimposition of all the audio tapes made at the seven locations. The soundtrack begins with introductory comments on tape made by some of the participants, before the actual synchronised documentations begin.

The audio content of the Earthworks film document is a particularly significant aspect of the work, as it forms a montage of field-recordings which were made at exactly the same segment of time at scattered points around the globe. The concept behind the montage is the fact that they are linked by the global view of each being part of the same continuum of time but registered from different Earth locations unifying the universal phenomenon of the experience of time. As such the work is a model of the individual realities which go on at any one time. The use of verbal descriptions as content in the field-recordings is important in that it enables the scenario to be very clearly outlined. It makes the audio content specific, both in making the environmental references explicit, but also, in providing the element of human presence, allows the work to focus on people's perception of the environment. The field-recordings are focused purely on sign content, their superimposition in the film document being simply of compression or a bringing together into close proximity of events which originally occurred at exactly the same moment in time.

Sound is especially important as a documenting medium in this sense as, by nature, it allows all the constituent parts to be combined as a whole and still be intelligible to a high degree - without modification of the content (unlike the visual aspect of the film which has been montaged with still shots into the continuous cinematic document). The superimposition of the audio content results in a kind of counterpointing of the constituent descriptions, some content being layered over other content, and some being clearly audible through areas of sparseness of information in the rest of the material. In relation to this, the cinematic document acts as a continuous central reference point, paralleled by the superimposed audio content and interjected by still images of other locations.

Earthworks, in creating a focus on the simple, direct observations and documentation of activities at individual points on the Earth at exactly the same moment in time across a vast scale, engenders momentous significance from the observance and description of actual events as they are fused into the context of the work. This makes comment on the nature of experience in real-time for individuals. That exactly the same observances and documentations occurred at exactly the same time over such vast distances in Earthworks articulates the nature of experience for all individuals - relative to each other - indicating the innate links between all phenomena through the relationship of people with their environment, and the simultaneity of events and realities which (remaining within the individual experience) we normally regard as mutually exclusive because of distance. This idea extends also to the nature of experience itself - that it goes on for other people in other places, despite our own preoccupation with the "now". The media of film and especially sound recording have been used in this documentation of the work to draw together the simultaneous, individual realities through each field-recording. This is expressive because it brings together elements of temporal simultaneity and

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transglobal distances, but on a vastly compressed scale.

#### 2.4 Christmasmusic (1973) by John Cousins

Electroacoustic music on tape. Stereo.

This work was realised using as its basis recordings made in a music class (a third-year composition option course)<sup>6</sup> taught by Cousins at the University of Canterbury. The approach taken in this course sprang from Cousins' desire to find (within the context of the study of music in the University) a way of allowing and encouraging an intuitive base for musical experience stemming from the subjective response of individuals, with this as the prime motivating force in both creative activity and more "formal" academic subjects. In part, this was initiated as a result of unsatisfactory class situations, in which a lack of motivation and general inertia amongst students was felt by Cousins to be the result of an inability to draw on their own subjective responses or to allow a deeply felt, emotional relationship with the phenomenon of music to be fundamental to their studies. Associated with this was the realisation that, in much conventional teaching, a dichotomy between objective theory and subjective experience has often been exacerbated, usually to the almost complete exclusion of the latter. As a result, Cousins determined to "establish the sensuality of the musical experience as the foundation of any musical activity"<sup>7</sup> -

Christmasmusic is a work which documents the beginnings of this.

The class of 1973 worked as a group, in "discussion" and "activity" situations - the

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<sup>6</sup> Background and continuation of this is dealt with in Wilby, Gary. *An Experience in Aesthetic Education: A Qualitative Description, Analysis and Evaluation*. M.A. Thesis, University of Canterbury, 1977.

<sup>7</sup> Quoted in *ibid.*, p. 10.

"teacher" taking on a role as another member of the group, without directing or setting up concrete objectives. The purpose was to initiate events and a state of mind which could lead to experiences of creative significance for the participants. The activity of the class began with simultaneous, independent "play" with found objects (although there was no such title for this activity at the time) each exploring any aspect of their materials and space (for example, sculptural, kinetic or acoustic) in a way which attempted to allow pre-cognitive formulations to be realised - as a way of bringing directly into operation intuitive and subjectively based attitudes towards their materials. This "play" activity required long periods of time (up to five or six hours) before the situation was played out. Cousins has described the kinds of processes that the group went through:

Initially we used our voices as a means of "discussing" our ideas, striving after a cognitive solution to our disagreements. Finally however, we broke through to a kind of primitivism, using our voices as a means of drawing our real selves out of the "personalities" we "presented" to one another.<sup>8</sup>

Tape recorders were used to document the group's activities and these became integrated into the activities themselves, using tape loops for recording and playback of material. The group worked independently in space (co-actively) using their own bodies and objects to demarcate locations of individual activity, but eventually realised a way of constructing a physical modular system (consisting of small wooden cubes with holes in each face and lengths of wooden dowelling) which could be interlocked to form constructions and also as a means of defining spatial locations. In this way, the

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<sup>8</sup> Cousins, John. Notes to Christmasmusic. In New Zealand Electronic Music. Accompanying booklet to Kiwi Records SLD44/SLD45/SLD46, 1975, p. 14.

participants could work, using and extending their own initial space until "meeting" with another participant, at which point interactions could occur. The group also worked with concrete poetry, taking a text and using that as the basis for extended group vocal improvisations. Tape loops became integrated sculpturally with the blocks and rods as well as multi-channel mixing for spatial manipulation of sounds in real-time. At the end of 1973, two public performances were given of the group's improvised activities.

Christmasmusic uses, as source material, recordings of discussions, improvisations and the construction of performance materials by the group - this material is used in both literal form in the piece as well as being subjected to morphological transformation in the creation of abstract textures. Also, "inside" piano sounds and fragments of recordings of orchestral and choral music (subjected to studio transformations) are used. As such, the work is an extended sound document of the transitions and experiences of the group.

### Synopsis

#### Section (1)

0'00" Long fade in of group discussion on the nature of "subjective" and "objective" definitions of experience (with reverberation added until 0'20", at which point the actual content of the discussion becomes clear).

(0'30") Transformed speech material superimposed (based on the phrase: "language is just a set of sounds and symbols") vocal origin of the material evident - initially low amplitude, in short, sparse "bursts" on both sides of the stereo space, evolving into increasingly complex morphologies, very loud with strong attack transients.

(0'48") Second layer of discussion added at lower amplitude.

(2'08") Three layers of discussion on "subjective/objective" superimposed. Including similar material at very low level in reverberant acoustic setting.

(2'40") Abstract "speech texture" (transformed speech sounds) establish as a foreground element, discussions continue at lower level in background, subsides again to . . .

(3'00") Discussion material again in foreground, transformed materials become more sparse.

(4'00") Abstract texture begins to build again.

(4'22") New iterative abstract sound added.

## Section (2)

4'27" Continuous abstract texture - transformed speech sounds (cf 0'30") penetrate this.

(4'59") Transformed speech sounds removed from texture, leaving gentler low-level iterative sound (fades at 5'07").

(5'02") Transformed "music" added to texture.

(5'43") New discussion fades in through transformed music ("spirituality" topic).

(6'15") Transformed inside piano sounds introduced (loud, foreground element) - discussion continues (low level), transformed music continues.

(6'59") Piano sounds fade out - discussion continues (transformed music texture continues at low level).

(7'29") Fragments of discussions continue in a variety of apparent acoustic settings (varying amounts of reverberation) and in different spatial placements, montaged with transformed music and vocal sounds.

(7'43" and 8'14") Transformed speech sounds (based on the phrase: "language is just a set of sounds and symbols") introduced at low amplitude with reverberation added.

(8'06") Abstract, iterative sound re-introduced.

(8'40") New pitched resonant sounds introduced.

(9'27") Transformed speech material added at moderately loud amplitude - texture becomes more dense, reaching climax at 11'16" (marked by introduction of garbled speech sounds, speeded up many times) continuous at first then breaking up into shorter envelopes.

## Section (3)

11'33" "Construction" scenario, sounds of hammering, sawing, sanding and conversation related to the task.

(11'59") Garbled speech sounds fade out with reverberation added.

(12'35") Transformed "music" fades up into background.

(12'39") Chanting voices fade up, fade out completely at 14'00" - construction sounds continue.

(14'10") Transformed "music" with chanting voices superimposed at very low level until . . .

(14'54") Text-sound poem (group improvisation) clearly audible - transformed "music" continues, construction sounds fade out. Poem fades into reverberant space at very low level from 16'45" to 17'03".

(16'20") Construction sounds fade in again (same as previous scenario) reaches "presence" from 16'45" continues to end at 17'36".

The form of this work attempts to map the psychological, emotional and experiential transitions undergone by Cousins and his class group. Central to the work in this sense is the literal use of "situational" documentary material (of discussion, improvised text-sound poetry and the making of performance materials by the group) which are "dramatised" through montage with transformed and abstract sound materials. The content of these recordings of group interactions and activities indicate something of the process of self-discovery undergone by the group - from the discussions on objective and subjective experience (opening material) (ex. 13), to spirituality and religion (from 5'43") (ex. 14), improvised text-sound poetry (at 12'39" and 14'54") and the group's construction of performance materials (from 11'33") (ex. 15). The content of the opening discussion is crucial in setting up the context for the whole work - the descriptions of objectivity and subjectivity epitomise the group's progress away from "theorising" towards actual experience. In these discussions it is clear that the arguments are not contrived, that people are initiating and reacting to ideas spontaneously.

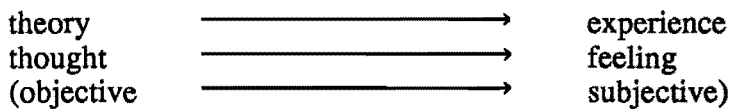
In general, this work can be thought of as existing on two planes - that of literal, documentary material (mostly through verbal content) and that of abstract sounds of

transformed vocal and instrumental sonorities as well as transformed excerpts of tonal music. The "tension" between these two basic elements is articulated from the beginning of the piece. The opening "scenario" of a philosophical discussion is progressively superimposed with transformed speech sounds (as "abstract" element) which becomes more and more prominent until (at 4'27") a continuous abstract texture evolves (ex. 16).

As such, the abstract sound-world might be thought of as analogous to the internal, emotional, "subjective" world which was gradually revealed through the activities of the group, while the literal material is more "objective" and directly obvious. In addition to the combination of two types of materials, the superimposition (from 0'48") of different segments of the discussion makes the texture of this element in itself more dense. The nature of the discussion can still be discerned - the verbal content can still be understood - but individual lines of argument are not easy to follow so much as it is possible to pick out "significant" phrases and words, allowing for a more "poetic" response to this material and suggesting the depth of expression attempted by the participants.

In the second main section, the abstract and literal sound elements are more interactive. The overall texture is underpinned by transformed extracts of tonal music and transformed "inside" piano sounds, through which the voices of the group (involved in discussion) emerge. From 6'15" recognisable voices and fragments of discussion in a range of spatial and apparent acoustic spaces are montaged with the abstract materials (ex. 17). In the third main section the "play" activities of the group are revealed. This is underpinned by a documentary recording of the group manufacturing performance materials (with sounds of sawing, hammering, sanding and conversation) and continues with extracts of improvised text-sound poetry (ex. 18). The tension between abstract and literal

elements initiated at the beginning of the work also functions in the third section. The construction scenario sounds (especially the sound of sanding wood) continues almost right throughout the section, but superimposed with other materials - transformed "music" (at 12'35") and text-sound poetry (at 12'39"). The construction sounds fade out with the addition of a recording of a group vocal improvisation (at 14'54") and re-emerge at 16'20". The mixing of a "mundane" group scenario of this kind with other abstract elements and improvisational activities of the group suggests the simultaneous existence of a number of forms of experience - the togetherness of the group in more than one level of communication. In this way the work attempts to embody the progress of the group's experiences; the transition from (objective) theorising to simultaneous improvisation and "play" (subjective), from "conventional" externalisations through verbal communication to activities which allowed pre-cognitive expression of the individuals - that is:



As such, the work forms into a continuous whole, with materials emerging, overlapping and receding. There is a great deal of recycling, re-juxtaposing and re-superimposing of the same materials - for example; the transformed vocal material based on the "language is just a set of sounds and symbols", which forms the main part of the abstract texture in the first section, is reintroduced into the second main section (from 7'43") as the texture of this section grows in complexity and intensity; the "iterative" sound which is characterised by motion within the stereo space (at 4'24" and 8'06"); and the extensive use of transformed extracts of tonal orchestral and choral music into slowly shifting harmonic textures.

Similarly, in the literal documentary material the recognisability of voices as distinct personalities across sections of Christmasmusic allows a strong sense of process and development to be perceived within the piece, as individuals can be discerned in more than one situation, in different interactions and speaking on different topics.

## 2.5 Horizons (1975) By Ross Harris

Electroacoustic music on tape (the stereo version of this originally quadraphonic work was used for this analysis).

Horizons was realised as an "accompanying" work to a mural by the New Zealand painter Michael Smither<sup>9</sup>, who commissioned the music from Harris. The piece uses natural and electronically produced sounds. The natural sources include water sounds recorded at Picton (in the South Island of New Zealand), birdsong, whalesong, the sounds of small bells and sounds made by a seashell mobile.

### Synopsis

0'00" Moderately loud electronic resonance, with gradual attack and decay (fades by 0'12").

0'06" Low level closely microphoned water sounds (with electronic echo added until 0'18").

(0'19") Birdsong, superimposed into chorus some transposed downwards (right channel).

(0'26") Electronic harmonic sound added pans continuously left to right.

(0'37") Electronic pulse sounds added (to 0'40").

(0'45") Downwards transposition of birdsong evident.

(0'51") Sporadic electronic pulses added.

(0'57") New, more complex iterative electronic sound added, moves continually around stereo space.

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<sup>9</sup> A foyer mural commissioned for the Shell BP and Todd Oil Services offices in New Plymouth.

(1'05") "Shell mobile" sounds fade in (cross fade with fade out of water sounds).

(1'10") Birdsong fades out - shell sounds and sustained electronic harmonics continue.

1'16" Electronic resonance (cf. 0'00") emerges (shell sounds fade out).

(1'24") Lower pitched pulsing sound added. Sustained harmonic sounds with shifts in resonance and difference tones continues, moves continually in stereo space.

(2'14") Crescendo of electronic sound - long envelopes of varying timbres and layers of harmonic content.

(2'35") Shift in harmonic sound (bell-like resonances) fades out by 2'46".

(4" silence)

2'51" Moderately soft electronic resonance (with wide spectrum attack and pitched non-harmonic resonances). From 3'06" this is underpinned by quiet glissandi of electronic sounds, with sporadic low-pitched electronic drones - harmonic richness created through "beating" of difference tones.

From 3'13" low level attack/resonance electronic sounds in which the attack occurs on one side of the stereo space and quickly pans to the opposite side.

(3'50") Quiet glissando figures of electronic sound sporadically enter the texture.

(4'17") Sustained downwards glissando of harmonically rich electronic resonance resting (at 4'30") on sustained drone sound (with shifts in middle harmonic spectrum).

(4'40") Crescendo of harmonically rich sustained electronic sound underpinned by rapidly iterative noise-like sound - fades down from 4'55" with glissandi of electronic sounds.

(5'03") New, pulsing electronic resonance (rich in high frequency, pans continuously across stereo space) fades in - underlined by glissando identities - begins to subside in level at 5'22", harmonic spectrum thinning, leaving mid-range and high frequency harmonic content.

5'34" New transient, "resonant" electronic sounds and (low level) birdsong added - pulsing resonance begins to fade.

(5'42") Birdsong and resonant electronic sounds clear.

(5'47") Pulsing electronic resonance fades out. Birdsong, whalesong and resonant electronic sounds continue.

(6'02") Shell sounds added (very low level). Shell sounds alone from 6'36".

(6'50") Section fades out.

(5" silence).

6'55" Low level electronic sound (white noise filtered with narrow band-pass) - pans gently and continuously left to right in the stereo space.

(7'43") Further level of white sound (broader spectrum) begins to fade in - with envelopes of very gradual attack and decay (very low level) fades in louder at 8'01".

(8'23") electronic drone resonance fades in (panning left to right as its envelope evolves) to level of maximum presence at 8'38", then begins to fade.

(8'31") Second white sound (cf. 7'43") and electronic resonance overlap in moving progressively forward and receding in the stereo space in long envelopes analogous to those of waves.

(8'56") Mid-high frequency electronic resonance fades in, fades out by 9'28". Long, rhythmic envelopes of white sound continue moving across stereo space.

(9'04") White sound and resonance peak together in envelope.

(9'29") Low-pitched band of white sound added.

(9'35") Low-pitched electronic resonance (with internal "pulse") fades in continuously (cross-fade with fade-out of white sound envelopes). Reaches maximum level at 10'03" and subsequently begins to fade.

(10'02") Mid-range electronic drone (with high harmonic content) emerges - this sound has internal quasi-vocal quality and continues as a drone with shifting internal spectrum of harmonics.

(10'21") White noise envelopes re-emerge on each side of the stereo space (mid-distance perspective) fades out by 10'50".

(10'28") Small bell sounds fade in.

(11'18") Vocal quality of drone sound removed. Drone sound centres on single low pitch with shifting harmonic spectrum.

(11'39") Bell sounds fade up (highest level at 11'45" - very close presence) maintained until 11'53", fade out by 11'58" along with single-pitch drone (cf. 11'18").

(11'52") High pitched, natural harmonic resonances fade in to high level (by 11'55") with internal shifts in harmonic spectrum - fades from 12'03" to end (12'18").

The natural sounds in this work are generally perceived as very pure referents which act as foils to the electronically produced materials. The electronic sounds generally emerge in long, sustained "horizon-like" envelopes (although often with considerable internal detail of shifting harmonic content) which successfully suggests an horizon imagery; or as long envelopes of filtered white sound, which again are mimetic of sea sounds. The recorded water sounds, birdsong and whalesong have direct reference to their natural sources. The presentation of these sounds is very discreet, being at low amplitude, allowing them to function as broad environmental references (the whalesong to a somewhat lesser extent due to its very subtle use in the piece and its relative obscurity as a sign). Along with the shell mobile and bell sounds, these natural elements provide a contrasting kind of sonic element to the sustained electronic textures (with their more complex and less regular morphologies). In the case of the shell, bell and water sounds, these have a more intimate, direct sense of presence, while the layered texture of birdsong has the sensation of a wider, more expansive spatial reference.

The most significant level of meaning attempted by the composer in this work is the shaping of electronic sounds at certain points in order to emulate characteristics of the natural sounds - in other words presenting a (natural) sound source with electronic analogues. From 5'34", whalesong and "matching" electronic sounds are combined, along with birdsong at low amplitude and (at the end of this section) with sounds from a seashell mobile (ex. 19). From 2'51" the gentle glissandi of electronic sounds is mimetic of the undulating pitch of whalesong (ex. 20). In these cases the referent/anologue link is

made between the materials extant in the work. Conversely the use of long envelopes of white sound which suggest the morphology and spectrum of waves breaking on a shore carries a reference outside of the piece itself (ex. 21). As well, there is manipulation of some natural sounds so that they are more easily related to electronic sources, such as the echo added to the water sounds (at 0'06") which gives greater regularity to the morphology (ex. 22), and the downwards transposition of some bird calls, which gives these sounds more resonant and extended envelopes. From 6'02" there is careful matching of the apparent pitch centres of contributory sound sources at this point.

A relatively subtle difference in the handling of the electronic and natural sounds in this piece is the use of the stereo space. The natural sounds are basically static within the stereo space while the electronic sounds are almost always moving within the stereo space, with attacks initiating on one side of the space and their resonances moving across it, or with continual gentle panning of sounds (notably from 7'43" where two levels of electronic sound, filtered white noise and a drone with more centred pitch, pan across the stereo space and increase in amplitude which suggests a circular approaching and receding motion). The "overlapping" motion within the stereo space of these shifting patterns of filtered white noise and drone sounds is probably the most intense section of this piece (ex. 23).

The natural sounds in Horizons themselves have, in some cases, shared characteristics of morphology - the water and sea shell mobile sounds have similar qualities of attack transient, while the birdsong and bell sounds have similar "ringing" qualities of resonance.

Overall, the form of the work can be seen to evolve through the increasing complexity and internal movement of harmonic content of the electronic textures along with subtle use of environmental referents - water, birdsong and whalesong. The penultimate electronic drone resonance is made harmonically richer with the addition of recorded (sung) vocal sounds to the texture as well as closely microphoned, low amplitude bell sounds (ex. 24). The natural sound elements provide added textural and morphological dimension and/or specific environmental references, but the two sound worlds (of natural and electronic sources) are carefully matched, so that the work in its largest sense might be thought of as a series of continually shifting streams of abstract sound with points of close focus (the natural sounds).

## 2.6 World Rhythms (1975) by Annea Lockwood

Electroacoustic music on tape (mixed live in performance) with live performance ritual.

The electroacoustic part of this work consists of ten channels of recorded, untreated environmental sounds (from diverse sources) which are mixed live in performance (through adjustment of the output level of each channel) through ten channels of amplification each feeding a separate loudspeaker and these being distributed throughout the performance space. Speaker placement for each performance is made to suit the characteristics of the particular space, but designed so that the audience is encircled by loudspeakers - some of which might be on or above floor level.

The sound sources for each channel are:

- (1) Radio signals emitted by a pulsar
- (2) Earthquakes
- (3) Sounds of volcanoes
- (4) Geysers and mud pools
- (5) River sounds
- (6) Peepers (frogs)
- (7) Fire and calls of crows
- (8) A storm on a lake
- (9) Water lapping on the shore of a lake
- (10) Human breathing

In mixing these sounds live, the composer intends for there not to be consciously contrived or formalised juxtapositions and superimpositions of the materials, but rather, a more unconsciously realised "path" through the overall network of sounds and possibilities. In this way the length of the work as well as the combinations of sounds is open (from between 30 to 70 minutes) depending on how long the intuitively structured performance is sustained. In this respect, the role of the second performer in playing a large suspended gong is significant. The gong player strikes the instrument at intervals determined by an internal (and personal) sense of rhythm of attack and decay (as a kind of bio-rhythm) - made extant by each striking of the gong. The player relaxes into a state of feeling a natural cycle of action and repose (this determining when it is necessary to strike the gong). As an instrument, the gong itself also produces an acoustic sensation which parallels this kind of meditative process, having (once sounded) an extended natural envelope of resonance and decay. This aspect of the piece is tempered by the presence of an overall environment of the ten channels of natural sound, with their varying timbral, durational, amplitude and spectral characteristics. In relation to this, the feeling for broad stretches of inner rhythmic cycle aimed for by the gong player is an indicator of the potential to find in the environmental sounds and their combinations, different levels and scales of rhythmic motion and activity. The playing of the gong provides, as a ritual element, a model of the attitude brought to bear by the composer on the recorded environmental sounds which constitute World Rhythms - that the natural sounds are recognised as sounds "external" to the physiology of the individual, but in this piece their presentation in extended cycles and gradually shifting juxtapositions provides the opportunity for the sounds to be brought right inside the sensibility of the person, so that they feel as though they are a part of the individual. In this sense the particular combination of environmental sounds in the work is successful; the spatial separation of

the loudspeakers allows each sound to be identified in a concrete way with a particular part of the space, yet there is a natural sense of periodicity and evolution in time which allows a unity to be felt between the disparate elements. The different sounds can, with relaxed listening be felt to "occupy" a different part of the body - the closely microphoned human breathing sounds partly facilitates this, as a focus on that sound may induce an awareness of one's own breathing cycle. Sounds like those of the earthquakes, volcanoes and geysers are so strong and loud (large speakers are required to properly reproduce these) that they induce a sympathetic resonance from the listener's body, while the pulsar sound - which is iterative, with subtly shifting harmonic spectrum - may create the sensation of a more frenetic rhythmic pattern with an associated listening response. Against this, the gently evolving water sounds of waves lapping the shore of a lake seem to engender broader but subtly varying patterns of rhythm. With all of this the spatial aspect of the work reinforces the impression of cycle and rhythm - and the fact that the sounds are not re-orientated within the space is important here. Each identity of sound emerges and may mix with other sounds (or not), subsides and re-emerges, depending on the mix, so that the spatial perception of sounds in conjunction with the real-time mixing of the sounds allows broad cycles of the juxtapositions and superimpositions to be perceived (ex. 25).

The varying scales and proximities of the sound sources in this work and their bringing together into one location is a strongly expressive element in World Rhythms. The range of sounds, from the normally imperceptible sound from outer space (the pulsar) to the sound which is inseparable from human presence (breathing) are brought together in direct interface in this work - the sound of the pulsar facilitated by radio reception, the sound of breathing amplified many times above its normal amplitude. In this aspect of

the work, the role of the sounds as signs is critically important. That they have not been abstracted into other identities so that their makeup can be manipulated morphologically underlines the idea of bringing together into the one event and space a multiplicity of natural sound objects, whose overall unity lies in the perception of them as natural phenomena. The bringing together of these elements in World Rhythms enables them to complement (through morphological matching) or mask (through dissimilarity of amplitude and harmonic spectrum) each other, in a web of relocated environmental sounds.

2.7 Musik Dari Jalan [Street Music] (1976) by Jack Body

Electroacoustic music on tape. Stereo.

The basis of this work is field-recordings made in Indonesia<sup>10</sup> of street musicians and street sellers whose vocal cries and instrumental mottos contribute to the vibrant sonic atmospheres which are presented in this work. Musik Dari Jalan is concerned essentially with the setting up of polarised "levels" of real and abstract spaces - the real spaces being those of literally presented field-recordings, while the abstract spaces are created through the extrapolation of "musical" elements from the field: calls and instrumental mottos of street sellers. For example, a gong or bell which is struck to advertise the selling of ice cream or a plate struck with a spoon in a rhythmic pattern which begins slowly and becomes faster (the motto of a soup seller) and individual or groups of street musicians (such as a "one man band" playing bamboo resonators, heard near the end of the work).

Synopsis

0'00" Abstract, layered vocally derived texture with shifting patterns of filtering.

0'25" Voices (street cries) isolated in abstract "unreal" space (six separate call identities) - cuts directly out of previous abstract texture.

2'21" Street cry from abstract space (cry of "Es" - seller of ice cream) suddenly in context of real space of the street. Ambient sounds - talking, footsteps, traffic, overall "dry" outdoor acoustic.

(2'49") Bell sound with cart in foreground.

(3'02") Fade in of continuous abstract "harmonic" sound (links into envelope of passing automobile sound at 3'05" and appears to grow from it; harmonic sound fades out at 3'15" and in again at 3'22", continues to 4'06").

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<sup>10</sup> Actually made by ethnomusicologist Allan Thomas in 1974.

(3'18") Guiro sound appears to be in street space but continues to crescendo (along with continuous harmonic sound) until it is well forward in the stereo space and the street sound fades (at 3'40").

3'40" Fade-out of street sound leaves abstract "instrumental" space; percussive gestures derived from three identities - guiro, bell (from 2'49") and the tapping sound of the soup seller's rhythm are layered and juxtaposed.

(4'06") Harmonic sound cut, percussion sounds continue, and form into more complex rhythms until . . .

(5'13") Percussion sounds suddenly layered in blur of sound, which dissipates into . . .

5'45" Street sounds re-introduced with a mid-distance perspective. Gamelan sounds mid-background. Also undulating harmonic sound (again superimposed over passing car sound). "Played" percussion sounds continue.

6'04" Cut to closer perspective of street sounds - footsteps, traffic, voices - instrumental sounds continue, now appearing to be "in" the street ambience. The "abstract" level continues to be present with bursts of densely layered percussion sounds (cf. 5'13").

(6'15") Gamelan sounds in background.

(7'45") Following cadence in gamelan music voices, laughter to end (8'06").

Overall, the work can be divided into four basic sections. The first (0'00" - 2'20") being made up of abstracted vocal material, acting as a kind of introduction; the second (2'21" - 3'39") being the first section of literal street sound; the third (3'40" - 5'44") in which instrumental sounds are abstracted; and a final section (5'45" - 8'06") in which the street sounds are presented again, with (at 7'45") a focus on natural sounding voices - with conversation and laughter.

The levels of "real" and "abstract" space are made clear by the composer in several ways, especially through links made with the presence of the same recognisable sound elements in both real and abstract spaces. This includes the isolation of sound identities

from the street context, such as the introductory vocal section (from 0'25") in which the cries of street sellers exist suspended in a reverberant space with no other incidental sounds (ex. 26). At 2'21" one cry in particular continues out of the abstract space and is suddenly placed (or "contextualised") in the real space of the street ambience (with an atmosphere created by the dry outdoor acoustic and the numerous incidental sounds of footsteps, traffic and conversation). Critical to this is the fact that the street sound is introduced a moment before the street cry is heard again from within the street context. This is a subtle manipulation of expectation for, briefly, the impression is that the street sound is itself purely a successive juxtaposition with the abstract space, but the appearance of the street cry within the street space a moment later allows the idea of transference of context to be more completely and powerfully grasped (ex. 27). This can be seen as a way of focusing the listening experience for an audience. By isolating the vocal cries and working them into a musical collage, their motivic characters can be easily discerned, and when they are subsequently heard in the context of the street, a new awareness of their qualities may result. The inverse of this process occurs later in the work in a transition from street space to abstract space when (at 3'18") a guiro sound can be heard as if in the ambience of the street sound but appears to rise out of the street ambience, becoming louder and louder, until (at 3'40") the street sound fades and the guiro sound continues (in close focus) in a new reverberant "abstract" space superimposed and juxtaposed with other percussion sounds and motifs. Abstract space is suggested by a complete absence of contextual sounds and a reverberant acoustic setting in which the closely microphoned percussion sounds are placed. The only "added" element which is used in this work to underpin the sensation of real and abstracted spaces is a continuous sound built up of natural harmonics. This is used at 3'02" in the shift from real to abstract space and later at 5'45" in the re-introduction of the real ambience of the street. The function of this

element is that, because it is a sound which is not present in the literal recordings, is disembodied from the image of reality projected by the recordings - it is by nature an "abstract" sound as it is not drawn from any reality (unlike the street cries and percussion motives which are isolated from "context" and replaced in abstract space). As such, this abstract element is an aural "key" to the process of contextual shift from "real" to "abstract" and subsequently back to "real" within this piece. This and the crescendo of guiro sound (cf. 3'18") combine to underline the sensation of the transformation from "real" to "abstract" space (ex. 28).

Also notable in this abstract section, are two other street seller motives, that of a soupseller, with a bowl being struck continually - slowly at first, then speeding up - which can be heard in abstract space (for example, at 3'44") and subsequently in the ambience of the street (for example, at 6'40"); and the bell sound of an ice cream seller which is heard in close proximity within the recording perspective of the street ambience (at 2'49") and re-appears in the abstract space at 3'48". Another street cry in particular is heard consistently throughout Musik Dari Jalan in both abstract and real spaces - a cry which is heard between 2'00" and 2'20" in the abstract space of the street cries and subsequently at 3'20", 6'19" and 6'34" - all in the real street space (ex. 29 a and b).

Morphological transformation of sounds is also used in this work as a further extension of the sensation of abstract space, derived from the sounds intrinsic to the original street field-recordings. The very beginning of the work, for example, consists of an abstract texture derived from multiple layerings of voices (also with filtering) and from this abstract texture the recognisable voices emerge, but in an abstract space. Also (at 5'13") percussion sounds are subjected to the same treatment, layered until they become a

blur of continuous sound, which subsequently melds back into the literal street sound, along with the "harmonic" sound (ex. 30).

This forms (from 5'13") a kind of climax to the central abstract space section of the work and, when the street sounds re-enter the piece (5'45"), bursts of the layered, transformed sound continue through the texture (from 6'04") (ex. 31). Different categories of vocal material also suggest different levels at which communication is taking place - from the "musical" repeated motifs of the street sellers as advertisement of their wares, to the casual conversation and laughter at the end of the work (7'45") which further suggests the human context of the street as part of the Indonesian society (ex. 32). In the context of a New Zealand audience, the way in which these vocal elements are heard is a general one, due to the unintelligibility of the actual meaning of the words (a level of meaning which is denied the non-Indonesian speaking person). Because of this, the gestural, morphological and timbral qualities of the sound become placed in a more "musical" focus. The cries of street sellers are signals but, without knowledge of the language, become motivic in a musical sense even though, through the processes and relationships of context evident in the piece, one may be aware of the general role of the sound in the society. Likewise, the casual speech and laughter at the end of the work is heard in a general way by the non-Indonesian speaking listener - as a social/interactional level of communication.

From here we can see how the overall concept of shifts between literal and abstract functions within Musik Dari Jalan, in terms of both apparent space and treatments of materials - that sounds are lifted from the context of the street soundscape (which is presented literally as such in the work) and placed in "abstract" space where their

qualitative aspects can be more fully exploited, as well as the further dimension of actual morphological treatment of sounds stemming from the possibilities of the electroacoustic medium. In this way the listening attention is focused at both levels: the morphological, and the relevant kind of acoustic space and contextual setting in which the sounds are heard, such that the question: "is it real or abstract?" arises. Ultimately this can be regarded as a process allowing the intrinsic musicality of all the street sounds and the richness of the Javanese soundscape to be more fully appreciated.

## 2.8 Soundscape With Lake and River (1979) by Douglas Lilburn

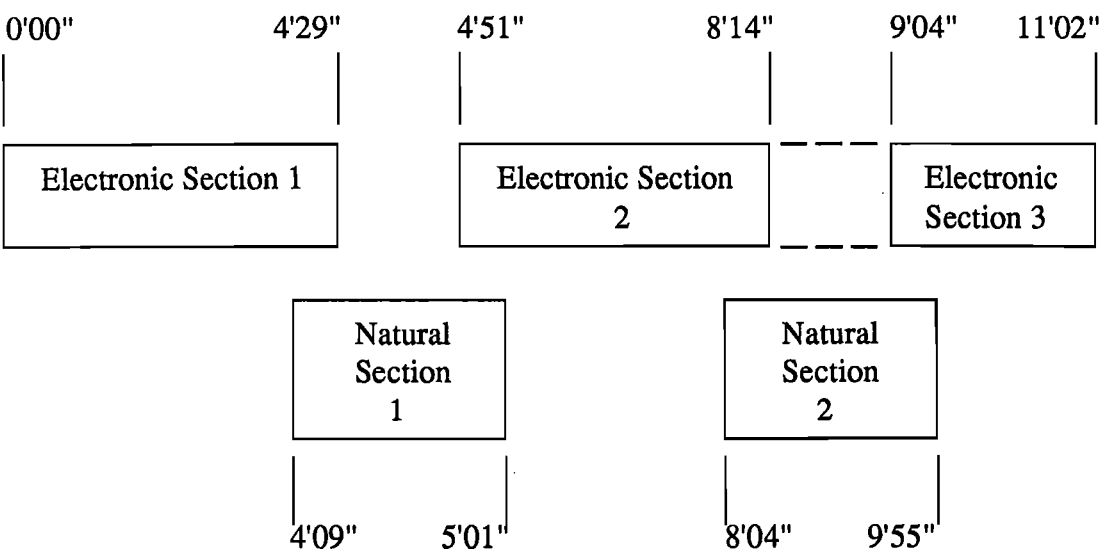
Electroacoustic music on tape. Stereo.

In this work, composer Douglas Lilburn has used distinctly polarised elements of literally presented field-recordings of lake and river sounds (from Lake Taupo in the North Island of New Zealand) juxtaposed with sections made up of abstract electronic sounds generated by an analogue voltage-control synthesiser.

There are three "electronic" sections to this work and between each of these is a section of recorded natural sound (firstly lake then river sounds). The field-recordings are not subjected to morphological treatments and, in the overall structure, act as clear transitions between the sections of electronic soundscape. In this way, the polarity of electronic and synthetic sounds becomes the structural basis of the piece, the form being based on clear juxtapositions.

The overall structural plan of the work is illustrated below, with timings. There are varying degrees of overlap between each successive section, and these are given more detailed consideration later. The dotted lines between electronic sections 2 and 3 indicate that sporadic electronic sounds are integrated into the texture between these two sections.

Diagram 13: Soundscape with Lake and River: Structural Plan



The clear contrast between the field-recordings and the electronic sounds is relevant in different ways. The field-recordings - as natural sounds - are presented in this work unedited and untreated. Their rhythmic patterns and spectral makeup stem from concrete events - waves and water movement. As uncontrived sound elements they are simply lifted from their environmental origins. The electronic sounds are synthetic and, while not bound by a rigid sense of meter, are clearly controlled and paced. An overall sense of rhythmic structure in these sections is achieved largely through recurrent identities of timbre and envelope which allow patterns of duration and pitch to be grasped.

The makeup of each section in the Soundscape with Lake and River deserves description as this contributes to the overall logic and continuity of the work. Timings have been supplied for the transitions into and out of the sections of natural sound in order to emphasise the significance of the rhythmic sensation involved in these transitions

through the pacing of each cross-fade. The constancy and strongly cyclic feeling of the sounds in this piece sets up a form in which the slow, gentle shifts in texture (from synthetic to literal sounds) allows considerable subtlety of manipulation. When, for example, at the end of the second natural sound section, the river sound is "cut off" abruptly, rather than being faded down completely into the final electronic section, a very subtle break is made within the expectation of the listener as prior to this the sections of natural sound have faded in or out completely smoothly.

#### (1) First Electronic Sound Section

This is comprised of two basic identities; pulse figures (staccato motif) and sustained sounds which often have an unsteady vibrato and tend towards the character of drones. The electronic sounds in this piece are generally of clear discrete pitch, and in this section layers of sounds with varying pitch centres and timbral colour are layered. The overall sensation of rhythm created by variations in intensity of amplitude and pitch centre in these electronic sounds are significant in this section - through increases and decreases in amplitude and movement around a central pitch the electronic sounds are manipulated towards an anticipation of the water morphologies in the second section. This is especially noticeable near the end of this section (at 3'50") where the electronic sounds seem to anticipate the rhythm of the wave break morphology of the natural sounds.

#### (2) First Natural Sound Section

Lake sound - strongly recognisable wave morphologies. These sounds are faded into a position well forward in the stereo space at a level which gives them considerable

presence, and subsequently faded out relatively quickly. The process of "fade-in"/"presence"/"fade-out" also creates a feeling of overall gestural rhythm. Essentially, this results from the fact that this basic manipulation of the sound (of amplitude) is a directly tangible one - giving a sense of evolution and envelope to the reference sound. The timing of this is of significance in the sense of flow and movement (ex. 33). These timings are illustrated below:

|                                                                                                                                                                                                                                                                      |                                                                                   |                |                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------|
| <div style="text-align: center;"> <div style="border-top: 1px solid black; width: 100%; margin-bottom: 5px;"></div>           Duration 52"         </div> <div style="text-align: center;">(from beginning of fade in to the end of fade out of natural sound)</div> |                                                                                   |                |                                                                         |
| Natural Sounds:                                                                                                                                                                                                                                                      | Fade in over 26"                                                                  | Presence (14") | Fade out over 12"                                                       |
| Electronic Sounds:<br>(Continuing from first section)                                                                                                                                                                                                                | Continue for 16"<br>after start of fade in of natural sounds;<br>fade out over 4" |                | 40" after first fade in of natural sound fades in over 5" to full level |

### (3) Second Electronic Sound Section

This fades in on the same pitch centres as the end of the previous electronic section, creating a sense of continuity - seemingly taking over where the previous section left off. The sounds here are more strident than in the first section, the sustained figures are still present, though with richer harmonic content. The erratic vibrato of the previous section has now become a more even tremolando. The pulse figures are also used, but their pitch levels fluctuate with the rhythm rather than being at the same level with each attack. Gradually these take on a more resonant quality and seem almost to suggest a

kind of electronic birdsong.

(4) Second Natural Sound Section

River sound (running water) with peripheral birdsong.

A broader environmental reference is put forward here than in the section of lake sound, the presence of birdsong creating a wider contextual reference than the moderately closely microphoned river sound alone. This section of field-recording is faded in over a much longer period than that of the previous natural sound section and reaches a very high level of presence resulting in a section of considerable intensity - this produces a kind of "zoom-in" effect, from wide-angle to telephoto. This fades out again to a low level (as the final electronic section begins) until it is abruptly truncated.

Duration 1'51"  
(Second Natural sound Section)

|                                                                 |                                                         |                                                                       |                          |                |
|-----------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------------|--------------------------|----------------|
| Natural Sound:                                                  | Fade in (continual)                                     | Strongest presence reached at 46"<br>Slight drop in presence from 47" | Fade out begins at 1'05" | Sudden cut off |
| High-pitched electronic pulses continue sporadically throughout |                                                         |                                                                       |                          |                |
| Electronic Sound:                                               | Fades out over 11" after first fade in of natural sound | Fades in again at 1'00"                                               |                          |                |

Throughout this section, short, resonant electronic "impulse" sounds are sporadically heard as a background element. They are not of sufficient substance to function as a true mediation between electronic and natural sound sources, but are easily related (because of their spectra and morphology) to the birdsong present in the field-recording (ex. 34). These sounds are carried through into the last, purely electronic section of the work.

#### (5) Third Electronic Sound Section

This section begins on the same relative pitch as the end of the previous electronic section, linking the two together. As in the other sections comprised of purely electronic sounds, there are two basic identities of material in this section - the pulse figures which now have a more resonant quality (with a sharp attack transient) and the sustained pitches which are on two clearly defined levels - firstly, pitched sounds with envelopes of about 2" duration (less sustained than in previous sections and with fewer combinations of different pitch bases) and these outline simple intervallic relationships (perfect fourth and major third) and secondly, at a lower amplitude, sustained drones of electronic sound which are rich with "difference tones" and are subtly varied.

In terms of the complete work, the electronic sections in Soundscape with Lake and River have a considerable sense of textural and musical evolution - two basic identities function throughout each, electronic pulses and sustained harmonic material often with difference tones and resulting harmonic richness. These are consistent identities which are present throughout the electronic sections of the work, being progressively transformed in timbre, pitch and harmonic content throughout the piece. These sections link strongly because of the basic orientation around discrete pitch, and a strong unity is achieved

between the progression from one electronic section to the next through continuity of pitch. The sections of lake and river sound act as a polarity to the electronic material, both in terms of their sources as natural rather than synthetic elements but also because of the rich spectral content of the water sounds. In this way the electronic and natural sound sections can be regarded as representing polarities of discrete pitch and noise spectra. In terms of form, the natural sounds act very much as pivotal or parenthetical elements - transitory points between the sections of electronic sound. Lilburn himself has put forward his view of the formal function of these sounds:

The lake and the river are both literal from recorded experience, but they are used here as pivots in the form of the work, making what might seem transitions from afternoon to evening, from night to morning. The work owes something to the spaciousness, the distant small sounds, the slowly changing horizons, the moods and colours of Lake Taupo.<sup>11</sup>

Within the "soundscape" itself the relationship of the two sound worlds is essentially enigmatic, through the direct juxtaposition of fundamentally different sound sources. Although, as has been mentioned, some of the electronic sounds in the work can be related to morphological aspects of the natural sounds, this should be seen as a general moulding of rhythmic inflection (as is suggested clearly in the last sentence of Lilburn's quoted statement above) - rather than an attempt at a direct mimesis. The electronic sections form a slowly evolving, unified musical argument through which "windows" of graphic reference are opened and this underlines one of the most important conclusions that can be made about this work: that it is essentially an expression of rhythm and the

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<sup>11</sup> Lilburn, Douglas. Note to Soundscape with Lake and River. Kiwi Records, SLD-59, 1980.

nature of rhythm between polarities of sound sources. The juxtaposition of electronic and natural sound sources in this work embodies the notion that rhythm (the forward movement or flow) is a musical property of composing with such divergent sound materials. This is true of all sounds - whether electronically generated or captured from the environment through field-recording - in both broad, overall patterns of each section (such as the pacing of the fading in and out of the natural sounds and the motivic and pitch links which carry through the electronic sections) and the morphological patterns of the constituent sounds themselves: individual (lake) waves, birdsong, running water and electronically generated "motifs". As a result, by the end of this work a unity can be felt between the two disparate (electronic and environmental) sound worlds. So, while the juxtaposition of these engenders a strong sense of enigma due to the polarity of materials as literal and synthetic sounds, this receives no further resolution within the work itself. Rather, by simply stating the enigma, by means of a structure based on successive juxtapositions, the composer allows a sense of "mediation" to be formed within the imagination of the listener in a very powerful way.

## 2.9 Fanfares (1981) by Jack Body

Electroacoustic music on tape. Stereo.

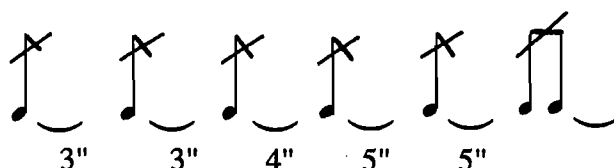
This work uses, as its basis, four field-recordings made in Java and nearby Madura of the playing of musical instruments by Indonesian street-sellers. These were sellers of products for children and the instruments are used to attract them.

The first recording in the work is of a "reed-trumpet" (a metal funnel with a single metal reed) played by an ice-cream seller in Yogyakarta, the instrument made by the player himself. The second recording is of a two-string fiddle (played with a bow) which includes a coconut shell resonator and a seashell bridge, played by a seller of ready-made "arum manis" or candy floss. This recording was made in Bangkalan, Madura. The third recording is that of another candy floss seller who played, with his hands, the carefully tuned outer pockets of the metal bin in which he carried the candy floss. The lid of the bin (which had a duller sound) was also struck as a cadence sound. The final field-recording is from a seller of children's "rebana" (bottomless bowl-shaped drums) made of clay and brown paper. The seller has a set of "adult" rebana (made of wood and leather) played with a beater and mounted on a wooden frame carried over the shoulders, which also carried the paper and clay drums. The piece involves presentation of these four recordings juxtaposed with transformations of each of the sounds created through extended layering of the sound sources so that a "blurring" of the characteristic timbre of each sound is the result. Transposition of these sounds also enables the composer to extend the frequency spectrum of these treatments. A notable feature of this work is the clear relationships that can be perceived between each sound and its transformation.

Synopsis

- 0'00" Playing of reed-trumpet (interspersed with the player's laughter - also captured in field-recording). Closely microphoned recording.
- 0'34" Reed-trumpet sounds are layered and appear in different areas of the stereo space. (Slight lowering of amplitude suggests distancing in space of the layering process).
- (0'54") "Blur of treated reed-trumpet sounds begin to fade in (with layered close-up reed-trumpet sounds continuing) treated sound gradually fades up.
- 1'57" Close-up reed-trumpet sounds cease, treated sound continues.
- (2'20") Strong increase in amplitude of treated sound.
- 3'37" Sudden cut to sound of two-string fiddle; discernable sound of the instrument along with a "blurred" treatment of the sound.
- (3'56") Treated fiddle sound begins to fade.
- 4'19" Two-string fiddle field-recording continues alone. Closely microphoned recording.
- 5'07" New treated sound (blurred metal drum sound) begins to fade in (very obvious by 5'33") underneath fiddle recording.
- (5'50") Fiddle sound begins to fade - with reverberation added to the sound as it fades. By 6'10" the blurred metal drum transformation well in the foreground.
- 6'30" Fiddle sound faded completely and treated metal drum sounds pan rapidly across the stereo space with dramatic increases and decreases in amplitude.
- 8'28" Actual metal drum sound faded in, treated sound fades to lower amplitude but continues to co-exist with untreated sound.
- (8'55") Metal drum recording (closely microphoned) with transformed sound only in Left Channel.
- 9'06" Metal drum sound cut off and new transformed sound (of drums made of wood and leather) begins.
- (9'45") Downward "bursts" of transformed sound - at 10'18" on both channels simultaneously leads to presentation of untreated recording.
- 10'27" Field-recording of wood and leather drums being played (closely microphoned) with voices of observers and incidental traffic sounds.

11'30" Coda of isolated drum strokes (with reverberation added) cuts off field-recording. Between 11'30" and 11'52" there are five single attacks and one double stroke at the very end of the work:



Basically, in Fanfares, the composer sets up a form in which field-recordings can be presented as one level of "literal" sound and treatments of these sound sources as a second level of "abstract" sound. That the transformed instrumental sounds can be linked quite clearly to the timbre of the actual sound sources is critical in the achievement of this - the transformed sounds, in being derived from the instrumental sounds, act as an extension (by electroacoustic means) of the musicality of the field-recordings, and as a continuum of sound which both links and frames the literal field-recordings.

In the beginning of the work, the initial presentation of a literal recording (complete with the self-conscious laughter of the performer) which is gradually expanded into a transformation of the sound, acts as an "exposition" of the basic idea of the piece. The literal recording is presented and then fragments of this opening "fanfare" are superimposed in a kind of antiphonal effect, yielding to a very dense, extended treatment of the sound, with the reed-trumpet sounds transposed several octaves creating a "blur" of sound, the timbre of which clearly bears its source in the initial reed-trumpet field-recording (ex. 35). Following this, the treatments of each of the other field-recordings precede the literal presentation of the actual source, allowing the field-recordings to "emerge" from the abstracted sounds. The process becomes more obvious as the work

continues - the section based on the two-string fiddle, for example, (beginning at 3'37") begins with the sound of the single fiddle discernable through the "blurred" treatment of its sound (ex. 36) with the literal fiddle sound itself emerging from this treatment.

Notable too, is that each section of transformed instrumental sound grows more and more active, with greater use of the morphological possibilities of the sounds generated, as well as movement of sounds within the stereo space. Of the two transformed drum sounds for example, the section derived from the metal drum sounds involves considerable panning across the stereo space, along with strong surges in amplitude (at 6'30") from which the metal drum sounds themselves emerge (ex. 37), while the wood and leather derived drum sound grows into a series of downwards cascading "bursts" of sound (at 9'45") again with the source of the transformed sound subsequently emerging (ex. 38). In this way, by successive manipulation of the shaping and activity of the transformed materials, they emerge as a controlled musical argument in their own right and, as we have already mentioned, a morphological extension of the innate qualities of the original materials.

A clear contrast is set up through these processes of "real" and "surreal" spaces and soundscapes. This is aided at certain points in the work in the use of reverberation on sounds which have previously only existed in the "dry" acoustic of the literal field-recordings. At 5'50" the two-string fiddle sound has reverberation added to it as it fades into the next section of transformed sound. This gives the sensation of the instrumental recording which was presented as "reality", disappearing into the surreal soundscape of the transformation. In the "coda" of the work, too, isolated drum strokes (at 11'30") suddenly appear to exist in a reverberant space (ex. 39 a and b). It is the contrast between the two kinds of space, dry and reverberant, which contributes to the sensation of real and surreal. Each of the main presentations of the literal field-recordings is in a dry space

which sets up the context of dry space as "naturalistic space".

The coda to this work can be seen, then, as a simple recognisable element from the final field-recording which is "projected" into a more abstract or "imaginary" kind of space by means of the addition of reverberation.

Also contributing to the perception of the sections of literal field-recordings as natural space is the vivid quality of the recordings and the incidental sounds very evident in two of the recordings. In the first recording of the reed-trumpet nervous laughter can clearly be heard in between the played phrases and in the final recording of the seller of wood and leather drums voices of nearby people are clearly in the foreground, as well as passing traffic (especially at 11'27"). Such aspects of content allow these sections to be perceived as material drawn directly from the field, giving them a quality of natural presence, so that the contrast within the work of actual untreated recordings and the morphological manipulations of those sounds as an "abstract" element is achieved; with the field-recordings framed and linked by sound treatments abstracted from the field-recordings themselves. As such, in Fanfares, the composer has taken field samples of the Indonesian street soundscape, and extended their morphological shapes and patterns into abstract sound "frames" for the literal materials. In perceiving the relationships between the literal and abstract elements (that is, the original sound and its treatment) the listener may be made aware, through this process, of the composer's own appreciation and responses to the "found musics" in the field-recordings.

### 2.10 Parade (1981) by John Cousins

Electroacoustic music on tape. Stereo.

This work is built from letter tapes sent home to New Zealand by the composer when on an extended trip to North America in 1972/73. The recorded material revolves around Cousins' descriptions of events and experiences on that trip and his encounters with aspects of American culture - and a good deal of the work involves the literal presentation of these letter tapes (which when they were made, were not intended for use in a work). There is a sensation of the artist "thinking out aloud", often describing experiences as they occur (in a kind of commentary) with the sounds of the environments and events. Because the source recordings were made on a small, very early model portable cassette recorder (without noise reduction) even the untreated content has a slightly veiled quality. The material includes: a description by Cousins of a hotel room, a friend's apartment, eating a hot dog, getting into a broken bed, Cousins' thoughts while on an aeroplane heading for Honolulu (with a description of the purchase of the portable tape recorder used to make the recordings), descriptions of American Football, Ice Hockey and on-location descriptions of a football trophy parade. As well, there are field-recordings of the parade itself, with crowd sounds, band music and a steam organ, a television commentary of a match (recorded in the ambience of a living room) an outdoor field-recording of a fundamentalist Christian preacher sounds of a carillon (recorded at Berkeley Campus, University of California) and readings of letters sent to Cousins by people he visited while in North America (these were studio-made specifically for the piece and are referred to in the synopsis at 9'18" and 10'26").

Parade attempts to present something of the sensations of the artist in his experience of American culture.

### Synopsis

- (1) 0'00" Cousins on plane talking about heading for Honolulu.  
(4" silence)
- 0'22" Description of apartment/superimposed with description of American football and recording of Cousins sneezing. Analogue tape recorder head reverberation added to some parts of the recordings, material shifting in and out of this treatment.  
(2" silence)
- (2) 1'25" Tape recorder switching "on" sound. American football description.  
(1'39") Tape recorder switching "off" sound.
- 1'40" Low-amplitude montage of street sounds (parade) and outdoor preacher; sensation of distance from sounds (high frequency filtering).
- 1'53" Literal presentation of outdoor preacher field-recordings.
- 2'16" Tape recorder switching "on" sound. Sneeze recording and monologue.  
(2'28") Tape recorder switching "off" sound.  
(8" silence)
- (3) 2'36" Cousins' description of getting into bed/superimposed with description of hotel (from 2'51") and carillon sounds.  
(3'16") Street sounds (with street musicians) fade in, descriptions continue.  
(3'24") Stream of layered voices (reading letters).  
(4'05") Complex abstract sound fades up to very high level and very dense texture. (Subsides slightly at 4'42"). Vocal material can be heard through this texture.  
(5'15") Preacher recording emerges through fading abstract texture and subsequently fades out (5'23" to 5'29").

- 5'29" Tape recorder switching "on" sound. Ice hockey description.
- (5'44") Tape recorder switching "off" sound.
- (4" silence)
- (4) 5'49" Abstract texture, voices heard through it - Cousins' description of a "palomino horse", also carillon sounds. Fluctuation of tape speeds, tape echo, high frequency filtering - "interjections" of garbled, speeded up vocal sounds.
- (from 7'04") Clearer fragments of palomino horse description emerge from continuing abstract texture.
- (7'09") Further layer of parade sounds added.
- (7'34") Garbled vocal sounds become more intense.
- (8'17") Texture subsides rapidly.
- (8'18") Low-amplitude montage of fragments of American football description, preacher and parade band; sensation of distance from sounds (high frequency filtering) (cf. 1'40").
- 8'28" Cousins on plane - description of purchase of portable tape recorder on trip.
- (3" silence)
- (5) 8'56" Steam organ from parade (fades out between 9'17" and 9'19").
- (8'59") Parade ambience fades in (bass drum sound, children's voices).
- 9'18" Cousins' description of eating hot dog (slight fade from end of previous section) - continuous monologue, but with small gaps edited between phrases allowing a stream of layered and filtered letter readings to come through texture. (By 9'40" letter content clear - submerged by parade band sounds at 10'00").
- 9'56" Rapid fade in of parade band field-recording (by 10'06" hot dog description fades out).
- 10'26" Cadence of band music cross fades out under superimposed high pitched white-noise-like electronic sound (letter readings continue through this for 10") - electronic sound fades out by 10'48".
- (3" silence)
- (6) 10'51" Tape recorder switching "on" sound. American football description.

(11'10") Field-recordings of football commentary from television broadcast - domestic sounds in background (unintelligible speech and exclamations, sounds of cupboard doors)/superimposed over parade band bass drum sound.

(11'46") Parade field-recording added (texture becomes very dense). Letter-tape descriptive material (from previous sections) also added.

(11'56" - 11'59") Child's voice from parade crowd in close perspective. Montage of parade sounds from different perspectives continues - underpinned by bass drum sounds, complex morphological manipulations of sounds and surges of crowd sound from recording of game from television. Cousins' presence still tangible (at 12'12" phrase "yeah, too right" of distinctly New Zealand utterance).

(12'30" onwards) Overall texture thins and previously presented vocal material (letter-tape descriptions) emerges through parade ambience and bass drum sounds - descriptions of apartment, horses, getting into bed and outdoor preacher. Vocal fragments continue to become more sparse and lower in amplitude.

13'29" Bass drum sound alone - edited so as to produce erratic beat pattern, drops in pitch in stages, until by 13'56" it is so low as to be virtually inaudible and without clear attack - cuts out at 14'07".

In Parade, the listener is presented with a series of views of particular experiences of the artist in North America and the impact of that culture on the individual. While the basic materials (the field-recordings) are documentary, the morphological transformations of these materials (which, in combination with literally presented field-recordings, characterises this work) allows for the dramatisation and comment on the content of the field-recordings. Layers of real and surreal space are built up in this work through the juxtaposition and superimposition of recorded events and the treatment of sounds so that, while their original source reference is often clear, the sounds are non-literal and form extended musical underlinings of the emotional content of the field-recordings; that is, the cultural and human observations as they are made by Cousins - the descriptions of fanatically followed sports (especially through the excitement of the parade) the dirty hotel

room, the sense of nervous anticipation in the travel and the campus preacher whose message is vociferously political as well as spiritual.

The descriptions made by Cousins of events and experiences are central to the whole of Parade. The continual presence throughout the work of these commentaries forms into a persona element, which is present in the both literal scenarios of the field-recordings and the sections of montage and acoustic manipulation. This notion of persona embodies both the starting point of the cultural experiences (documented in the letter tapes) and the continued presence of Cousins' voice through the sections of musical dramatisation. The persona in Parade provides a unity throughout the work providing a consistency of content throughout, because of the nature of the material as commentary and description from a personal basis, as well as the ubiquity of the material - the same material being present in several sections. Levels of reality are constructed in Parade through both morphological manipulations of material and particular juxtapositions and combinations of materials. In the first section, for instance, with the presentation (at 0'22") of the descriptions of an apartment, American football and a humorous sneezing episode, the descriptions are overlapped and, at certain points, have simple tape head delay added. These simple sound transformations (the superimposition of descriptions and the manipulation of their position in the stereo space) have the effect of unfocusing the sense of documented reality (ex. 40). The presence of the same fragments of material throughout the work in varying textures contributes to the sensation of observations made and recorded, then replayed or remembered - each tinged with the depth of subsequent experiences. If we regard this in terms of the presence of persona in the work, the superimposition of vocal material becomes a key factor in the expression of an analogy for related experience and emotional reaction. For example, the third section (at 2'36") begins

with a literal field-recording of Cousins getting into a broken bed while describing this. Subsequently, other elements are superimposed over this - Cousins' description of the hotel, street sounds (with street musicians), a filtered vocal texture derived from readings of letters and eventually a complex abstract sound derived from voltage control synthesiser treatments of the materials, all of which subsides (at 5'15") revealing the recording of the campus preacher (" . . . I've got news for you sir, that you're a victim, a slave, a political guinea pig . . . ") (ex. 41). This successive layering of materials, beginning with a literal presentation of a simple, mundane event allows the listener to associate greater emotional significance and depth with the material and its content. The gradual addition of apparent realities to the scenario of the starting point to create superimpositions functions as an analogy for objective "reality" and subjective "emotions", that is, what is apparent and what is felt. The gradual onset of abstract textures in this section further underlines this analogy, with the notion of literal and musical soundscapes.

The consistency of material in this piece is a major factor in the success of this way of forming materials. Phrases and scenarios from Cousins' descriptions are recurrent throughout the work - and many of these can be discerned within a variety of textures and juxtapositions from the full "presence" of literally presented material to barely perceptible elements in textures involving morphological manipulation of materials. At 1'39" a low-amplitude, filtered montage of sounds which at that point have yet to be presented in literal form (the parade and the preacher) emerges - this montage has a dreamlike quality which in juxtaposition with the previous material gives the sensation of a surreal space. At 1'53" the preacher recording is presented in literal form and, as a juxtaposition with its existence in the previous montage, suggests a sharp, sudden shift in perspective -from "surreal" to "real". This process of the same documentary material being placed in

different juxtapositions and superimpositions with other materials and sound treatments in different sections of the work is a constant feature of Parade, and is particularly notable in the last section of the piece (ex. 42). Here, the preacher, apartment description, hotel description and palomino horse description are embedded in the texture. Hearing these materials in a variety of contexts and juxtapositions (especially as "foreground" or "background") relates to the intrinsic nature of the field-recordings as being verbally related and described "in situ" experiences. As such, the appearance of material in more than one context in the piece itself might be thought of as an articulation of the sensation of these materials as "direct experience", "memory" or "feeling".

The idea of documented realities is suggested in Parade with the use of tape recorder sounds (switching off and on), the switching sounds being contextual clues to the existence in the work of sounds captured directly from the field and re-set in the new context of the work, but in relation to the "abstract" contexts generated by the layered textures created from transformed materials. At the beginning and end of the second main section of the work, literal field-recordings of American football and a sneeze respectively, are bracketed by tape recorder switching sounds (at 1'25" and 2'16"). That the first switching sounds occurs after a short silence is critical, as this allows the tape "on" sign (at 1'25") to be detached from the previous material. The tape recorder "on" sound and the directness of the material which follows gives (in all cases) a sense of immediacy and presence, supporting the natural integrity of the recorded fragment (ex. 43 a and b). This is supported later in the work with mention of the purchase of a tape recorder (while on the trip) (ex. 43 c), and this also relates to the very opening section of the piece - part of a letter tape recorded on an aeroplane when the composer first left New Zealand (ex. 43 d). Further use of the bracketing of material with tape recorder sounds is at the end of

the third section (in the description of ice hockey at 5'29") and, at the very start of the final section (at 10'51" - introducing the American football description) where the tape recorder only switches "on" and does not switch "off" - this is significant in that the final section of the work is texturally the most complex, comprising a montage of many different apparent perspectives of the sound of the parade itself as well as previously heard materials. In this way, there is a final ambiguity in the kind of space in which the tape recorder sounds appear to exist - with the tape recorder sounds not switching off again, the implication is that there has been an actual merging of the real and surreal levels within the work.

The overall formal evolution of Parade is of a series of six vignettes in which there is gradual increase in textural complexity with layering and distortions of the realities that are presented. Each of the literal field-recordings presented at some stage in the work is also embedded within complex textures derived from morphological treatment of the materials, including use of a voltage controlled synthesiser to meld electronically generated timbres with the morphological characteristics of the field-recordings. The montage content of each successive section becomes increasingly dense, with the presence of the football cup parade also becoming increasingly present until, in the final section, the sensation of being "inside" the parade itself is convincingly conveyed with rapid changes in the apparent recording perspective in many layers of tape collage, as well as recapitulating material that comprises much of the content of previous sections. Throughout this final section is the bass drum sound of a parade band, emerging at the end as a single line of sound abstracted from the parade ambience (the bass drum sound is a unifying element underpinning the whole of section six), which gradually is lowered in pitch until it fades completely (ex. 44).

Parade, as a whole, can be seen to be functioning as a metaphor for the parade image: the onset of the parade (and the associated "fanaticism") being paralleled by the "emotional commentary" provided by the manipulations of content within the work - a variety of juxtapositions and superimpositions of the materials and morphologically manipulated sounds.

### 2.11 Music for Limbs (1981) by Chris Cree Brown

Electroacoustic music on tape. Stereo. Realised for dance work, Suspicion, performed by the Limbs Dance Company, choreographed by Chris Jannides.

This work employs five basic sound sources. In the original choreography each sound element had a separate dancer associated with it.

(1) Balloon sounds were made with an ordinary child's party balloon, blown up and with the air gradually released through the squeezed neck of the balloon so as to make a high pitched squeal. This sound is subjected to studio transformations, especially downward transpositions of pitch and envelope elongation (through tape recorder speed changes). As well, a "live" balloon sound is used, produced by stretching the neck of a balloon apart so that when blown into, it makes an erratic, high-pitched scream sound - this is then released (with the balloon now blown up) into the performance space. In the original dance work this was done by the dancer associated with the balloon, but in concert performances is executed by a performer situated in the audience - and is also expected even with an audience of one!

(2) A woman's voice involving the recitation and singing of a series of phrases based around the sentence, "smoke gets in your eyes".

(3) Electronic sounds generated by an analogue voltage controlled synthesiser.

(4) Field-recordings of machinery at the container port in Wellington harbour.

- (5) A field-recording of a pipe band (playing "Scotland the Brave").

### Synopsis

#### Section:

- (1) 0'00" Extended, low pitched undulating balloon envelope.  
(First single envelope lasts 2'04")  
  
(1'58") entry of second balloon envelope  
  
(3'12") balloon sounds become more "breathy"
- (2) 3'32" Electronic sound (repeated bell-like timbre, major third)  
(Balloon sounds continue sporadically throughout in shorter envelopes)  
  
(3'47") more complex electronic sound, builds in layers until 5'03"
- (3) 5'04" Balloon sounds alone, shorter envelopes of around 5" duration.
- (4) 6'42" Voice section begins: (left channel)  
"smoke smoke smoke smoke smoke  
smoke smoke smoke smoke eyes  
smoke smoke smoke your smoke  
smoke smoke smoke your eyes  
smoke smoke in smoke smoke  
smoke smoke in smoke eyes  
smoke smoke in your smoke  
smoke smoke in your eyes  
smoke gets smoke smoke smoke  
smoke gets smoke smoke eyes  
smoke gets smoke your smoke  
smoke gets smoke your eyes  
smoke gets in smoke smoke  
smoke gets in smoke eyes  
smoke gets in your smoke  
smoke gets in your eyes"
- (6'50") layers of vocal material enter right channel along with voltage control treated balloon sound - very low pitch with envelope derived from rhythm of the vocal material - continues to end of vocal section.

Vocal material develops into a series of gestures of the same material, recorded and also sung (sung upwards glissando on "eyes" and downwards on "your") as well as the child-like motif:



at 7'40"

(7'54") Spoken phrase - "the more you think about it the harder it's going to get" (same woman's voice) and low, treated balloon sound cuts off with end of phrase.

(5) 7'57" Balloon sounds, very vocal in quality and very "breathy" attack and decay interspersed with silences between envelopes.

(6) 9'17" Machinery sounds cut off balloon sounds (right channel).

(9'33") High screaming, "painful" balloon sounds in centre of stereo space enter over machinery sounds - also underpinned by very low balloon "pedal sound".

Machinery sounds pan quickly across stereo space.

(10'14") Balloon scream is ring modulated.

(7) 10'25" Pipe band sound (machinery sounds cut)

(10'33") pipe band gradually speeded up pitch and envelope.

(10'38") sustained balloon "chorus" built up underneath pipe band sound.

(10'51") pipe band suddenly back to normal pitch and speed, fades out at 10'56" - balloon chord continues.

(11'02") pipe band sounds re-appears slightly speeded up - faded out at 11'21".

(Balloon chorus has continued throughout, "voices" gradually removed until 11'27" when a single looped pitch remains until 11'42").

(8) 11'45" After 3" silence a very low pitched balloon sound appears and a complex harmony of layers of balloon sound of gradually higher pitch (until a scream is reached) is built up. This gives the impression of all the previously heard balloon transpositions being sounded together.

(This harmonic section is built up twice in succession: 12'02" low sounds, 12'08" high sounds - peak level at 12'30" and 12'38" mid-range sounds, 12'49" low sounds, 12'51" high sounds - gradually faded out until 13'24" when the live balloon is cued - this is continued for 6 to 8 seconds in performance, followed by a short, anticipatory silence until the entry of the next sound (at 13'34") when the balloon, now filled with air, is released into the performance space.

(9) 13'34" High-pitched, bell-like electronic sounds (from section 2)

(13'40") Groups of short balloon envelopes - average 3" - with downwards pitch movement.

(14'40") electronic sounds fade out - balloon envelopes continue throughout.

(15'33") woman's voice; "the more you think about it the harder it's going to get" - cuts off balloon sounds.

The form of this work rests strongly on two main aspects: the continuity of the identity of the transformed balloon sounds throughout; and the juxtaposition of these with other sound identities, which is characterised by a powerful absurdity. The transformed balloon sounds have a strong sense of existence as a kind of persona. The sounds in themselves (which bear resemblance to whalesong) are strongly characteristic of animate beings, with a plaintive vocal quality, very natural undulations of pitch which suggest vocal utterances which might relate to internal states, and "breathy" attacks and decays to many of the envelopes - which links strongly to an animate vocal and respiratory system (ex. 45). The central presence of these sounds in Music for Limbs as they are juxtaposed (both consecutively and simultaneously) with other sound elements creates a sense of the "balloon persona" passing through a series of "events" or soundscapes (the electronic sounds, the voice, the machinery and the pipe band). In addition to this, the balloon sounds alter as the piece progresses (the durations are initially of very long envelopes with gliding fluctuations of pitch and amplitude intensity and, as the work continues, shorter

envelopes emerge with higher transpositions of the basic sound) - seemingly in reaction to the sounds they encounter.

The absurdity of the juxtapositions which characterises this work is largely brought about through the sign reference of the sounds. The machinery sounds are clearly recognisable as heavy, motorised objects and the "reaction" of the balloon persona to these is one of pain and torment. The vocal section itself consists of an absurd series of permutations of the enigmatic phrase "smoke gets in your eyes", as is the treatment of the bagpipe band recording which is gradually speeded up in both tempo and pitch (on a variable speed tape recorder). It is the incongruity of context of the sign reference of these sounds which creates an overall surrealism in this work, through the absurdity of the juxtapositions. In contrast, the purely abstract, non-referential electronic sounds act only as a "morphological pattern" element in the work.

The way in which the balloon persona sounds "react" to these sounds is of great importance in this work. When the electronic sounds enter the piece (at 3'32") the balloon sounds become higher in pitch and shorter in duration and appear to be attempting to emulate the fluttering electronic sounds - possibly even attempting to "converse" with them. While the electronic sounds become more and more frequent and of greater velocity the balloon sound settles into a continued repeat of the same gesture downwards "sigh" gesture - as if "giving up" on communication on the same level as the electronic sounds (ex. 46). When the woman's voice enters the piece, the balloon sound becomes very low - its envelope modulated by voltage control processing in a rhythm derived from the vocal patter with which it is superimposed (ex. 47). This morphological patterning also suggests the balloon persona is attempting to emulate the voice, in its own way,

something which it cannot achieve. The reaction of the balloon persona to the machinery sounds embodies a broader, symbolic meaning. The sounds of the machinery which initially are presented only in the right channel of the stereo space are met by "screaming" balloon sounds, and then is also panned across to the left side of the stereo space, so that the machinery appears to encircle the balloon persona. In this way the simple, natural existence of the balloon persona is directly threatened by the symbol of the machine (ex. 48). The buildup of the balloon sounds into a painful chorus at this point in the work also involves the ring modulation of these sounds (obvious at 10'14") and this treatment of the sound creates a definite acoustic link with the sound of the pipe band, and it is at this point in the work that balloon sounds do actually achieve a strong emulation of another of the elements in the work (ex. 49). While the bending or glissando of pitch is an integral and characteristic aspect of the balloon "persona" sound, at certain points this also applies to the electronic, vocal and pipe band sounds (from 3'47", 6'50" and 10'33" respectively), although it is only with the pipe band sound that there is a clearly identifiable "match" with the transformed balloon sound. In achieving this match, the balloon sounds become grouped into layers of "stratified" clusters of pitch, as well as building into choruses of drones which appear to emulate the bagpipes (ex. 50).

The live balloon sound (at 13'24") adds a theatrical dimension to this work, but also provides the clue to the source of the balloon "persona" sound. In relation to the continual use throughout the work of the transformed balloon sound as "persona" the live balloon sound (in its theatrical presence as an element which can not only be heard, but seen) is in itself an absurd juxtaposition, producing a powerful interaction (via theatre) between the transformed sounds which establish themselves as a persona throughout the work, and what is essentially a new level of sign reference in the live balloon - as this

functions at a visual as well as sonic level.

In overall terms, Music for Limbs suggests strong symbolic images of innocence against change, with the progress and development of the "balloon persona" through a series of different sound worlds - as the persona seemingly interacts with and reacts to these. The clear impression is created of the balloon sound attempting to "speak" in the same way as the electronic sounds, the voice and the bagpipes (being finally successful with the latter) and reacting, with what appears to be pain, to the sounds of machinery. In relation to this, the short spoken phrase which occurs at the end of the voice section and at the end of the work is relevant; "the more you think about it the harder it's going to get" - which might be metaphorically linked to the juxtaposition of the balloon sounds and the other elements in the piece, as the initial solitary state of the balloon persona is transformed by the end of the work as a result of its encounters and attempts at communication. Therefore, while on a purely acoustic level, the continual section-by-section transformation of the morphology of the balloon sound is clearly evident (eventually forming into quite dense groupings of short envelopes with downward glissandi of pitch) (ex. 51) the "catalyst" for this is embodied in the broad narrative of the piece, with the idea of the balloon "persona" reacting to the sounds it encounters.

## 2.12 Sound Map of the Hudson River (1982) By Annea Lockwood

Audio-visual installation, originally installed at the Hudson River Museum, New York, 23 January - 6 March 1983; also at the National Gallery of New Zealand, Wellington, for the Asia Pacific Festival, December 1984. The descriptions in this analysis are based on the New Zealand installation.

This work consists of field-recordings from nineteen individual locations along the 400 kilometre length of the Hudson River, from Lake Tear of the Clouds in the Adirondack mountains (the source of the river - out of which it is actually called the Opalescent River), to the outlet of the Hudson in Lower New York Harbour. The duration of the entire work is two hours but, as an installation, is repeated continuously throughout the day.<sup>12</sup>

The installation itself comprises three basic elements:

(1) The field-recordings from the nineteen locations, which are replayed into a gallery space via two loudspeakers mounted high on one wall. The individual segments are montaged directly together and form a two-hour stream of continuous sound. The nineteen individual locations with approximate durations are:

- (1) Lake Tear of the Clouds, 19 June, 1982, 2 p.m., (3 minutes).
- (2) Feldspar Brook: a tributary of the Hudson, 19 June, 1982, 12 noon, (5 minutes).

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<sup>12</sup> A description of the original installation can be found in Ear magazine, v.8, n.3, 1987, p. 32.

- (3) Calamity Brook: a tributary of the Hudson, 18 June, 1982, 1 p.m., (9 minutes 45 seconds).
- (4) Lower Twin Brook: a tributary of the Hudson, 5 June, 1982, 12 noon, (5 minutes).
- (5) Opalescent River: a tributary of the Hudson, 5 June, 1982, 10.30 a.m., (4 minutes 45 seconds).
- (6) Hudson River at Mount Marcy, 5 June, 1982, 8 a.m., (4 minutes 30 seconds).
- (7) Confluence of the Hudson and Indian Rivers, 22 October, 1982, 11 a.m., (4 minutes).
- (8) Blue Ledge: The Gorge, 22 October, 1982, 5 p.m., (3 minutes).
- (9) North River, 2 May, 1982, 7.30 p.m., (4 minutes 45 seconds).
- (10) The Glen, 2 May, 1982, 12 noon, (3 Minutes 35 seconds).
- (11) Confluence of the Patterson Brook and the Hudson River, 2 May, 1982, 6 a.m./1 May, 1982, 6 p.m., (11 minutes 40 seconds).
- (12) Luzerne 1 May, 1982, 3 p.m., (1 minute 12 seconds).
- (13) Stuyvestant, 23 May, 1982, 6 a.m., (11 minutes 20 seconds).
- (14) Staatsburg (the marina at Norris Park), 26 April, 1982, 6 a.m., (7 minutes 30 seconds).
- (15) Garrison, 31 October, 1982, 5 a.m./9 May, 1982, 6 a.m., (15 minutes 20 seconds).
- (16) Iona Island and Marsh, 17 April, 1982, 5.30 a.m., and 12 September, 1982, 7.30 a.m., (5 minutes 43 seconds).
- (17) Twombly Landing, 14 May, 1982, 6 a.m., (5 minutes 35 seconds).
- (18) Englewood Brook Falls, 19 October, 1982, 7 a.m., (5 minutes 5 seconds).
- (19) Great Kills Beach, Staten Island, 5 December, 1982, 7 a.m., (8 minutes).

(2) A pictorial map of the Hudson River on the wall opposite the loudspeakers - approximately 2.5 metres long and 1 metre high. Below the map each of the recording

locations is listed successively from left to right - as well each location has the date and time at which each recording from that place was made. Of these, locations one and locations seven to nineteen have a line drawn from the name of the location to the actual place on the map at which the recording was made. The exceptions to this are locations two to six which are all recordings of tributary streams to the Hudson River itself. A clock is mounted on the wall above the map and the purpose of this is to allow any person entering the space at any time to discern the originating location of the sounds being played into the space at that time. To enable this, below the name of each location is a series of times which states when (in real-time) the sounds from any location will begin. In this way, by referring to the clock and map, the sounds in the space can be identified with the relevant area on the map.

(3) Cassette recordings of interviews with people who have lived near or on the river, worked on it or fished on it, all of whom have a close relationship with the Hudson in some way. These are anecdotal - some are moving (in the descriptions of floods) others humorous (in the description of the size of the insects). This part of the work is available in the installation for audition through headphones only - there are two pairs of headphones with two chairs placed between the two main loudspeakers in the space.

In addition to these elements, photographs of some (but not all) of the separate locations were mounted on the wall around the large map.

The field-recordings from each location vary in length from just over one minute (Luzerne) to just over fifteen minutes (Garrison - two recordings from that location are used). At times the shift from one location to another is almost imperceptible, at other

times more noticeable. While most of the recordings focus with a close microphone on the sounds of water movement alone, others have a wider perspective including the song and activity of birdlife on the river, the distant sound of a train or rafts creaking against a jetty. The field-recordings sketch the journey of the river as a series of nineteen fixed "points" - the aural transition from one location to the next interfaces localities which are great distances apart, presenting the implication of the distance between each. The continuity and close scrutiny of water sounds in this work allows the natural, detailed morphological patterns of the water sounds to be absorbed and focused on by the listener. The continual presence of varying water morphologies tends to induce a meditative but acute listening experience of the shifting rhythmic and spectral evolution of the sounds themselves. While the field-recordings function continually as sign sounds, the continual presence of water morphologies allows the sounds to be appreciated purely for their acoustical qualities.

The function of the map is significant as the sense of progression in the journey of the river is underlined visually, with the physical distance between each location being suggested. The map also provides a strong articulation of the sign reference of the sounds - informing us that the recordings are to be listened to in the context of the progression of the river. However, the relationship of the sounds to the map must not be considered a completely analogous one, for the field-recordings are themselves intact in time-scale and morphology, while the map is purely a representation of the physicality of the area. This is the aspect of the integration of the aural and visual elements which achieves in their juxtaposition a significant expression - that the scale of distance and time (as they are presented between the field recordings and the map) are not in direct proportion. The map allows a sense of large distances between the locations to be suggested - but in sound the

locations are put forward as pure aural documents. Each of these documents is a point along the Hudson's path, but compressed into an unceasing flow of sound. Further to this, the identification of each part of the soundtrack with its map location is important in allowing the sense of progression to be articulated with an actual context. A unity in this work derives then, not only from the continual presence of water morphologies, but also from the sense of progressive revelation of the rivers path from its source to the sea.

The material on headphones provides a second "level" of meaning to the sound map, as a human, personal element - a way of communicating the relationship between the river and the people affected by it. From this extends a strong social and ecological message: the power and life force of the river as an object to be valued and preserved for its role in the lives of people.

2.13 Rain From the Moon (1984) by Colleen Anstey

Multi-media performance installation. Performed at the Red Metro Gallery, for Art in Dunedin Festival, Dunedin, New Zealand, May, 1984.

In this work, artist Colleen Anstey combined media of audio recording, film, performance ritual and sculpture. The idea for the work extended from a series of interviews with women that Anstey recorded. Initially these interviews were about onions, which grew into the topic of kitchens and from this sprang content concerning the roles of "mother" and "father", especially in relation to domestic spaces and the recollections these women had concerning the roles of their parents in the kitchen.

The work was performed in a long, corridor-like space, with the elements in a pre-determined fixed relationship. From one end of the space a very powerful light was directed at a white screen at the opposite end of the space. Also, onto the screen, was projected a film image which was washed out by the light. Directly in front of the screen, a Revox A77 reel-to-reel tape recorder was set up and the performance began with the artist at that end of the space, facing the tape recorder.

The performer (the artist herself) was dressed in yellow overalls and had slung over her back (rifle-fashion) a manuka stick (as tall as herself), onto which at one end was attached a "cocoon" made of polyurethaned plastic wrap. In the work the performer acted as a catalyst for the exposition and interaction of the materials through her movement through the space. This consisted of pulling a length of magnetic tape across the head assembly of the tape recorder - holding the very end of the tape and walking backwards

towards the static light source (the motorised tape transport was not engaged, but the machine was switched on and set in "cue" mode so that the tape was brought in contact with the replay head) which allowed material pre-recorded on the tape to be revealed. This material consisted of a fragment taken from an interview with a woman talking about her relationship with her father when she was a child - his inability to communicate with her and his gifts of money as an attempt at recompense. The length of magnetic tape comprised several repetitions of this material, and it was necessary for the performer to move as evenly as possible and as close as possible to the recorded speed of the tape (9.5 cm/second) so that the spoken material would be revealed as intelligibly as possible - that is, the aim was to reproduce the sounds in a way as close as possible to the normal playback of the machine. As the performer moved further and further from the starting point (and the tape became longer) the steady speed became more and more difficult to control, with small distortions of vocal envelope resulting. This temporal aspect is important, as the movement of the performer through the space (as a "journey") integrated the simultaneous initiation of both sound and sculpture. As more and more tape was drawn from the machine it became more difficult for the performer to control, suggesting a greater emphasis on the movement and process - that is, rather than the continued movement generating simple repetitions of material it created a tension. The playback was auditioned in the space via four loudspeakers, one in each corner so that the space was filled with the sound.

During this process, the performer's movement towards the static light source caused her shadow to be cast onto the screen, growing larger and larger as she progressed towards the light source. This growing area of "shadow" revealed within its outline the image projected onto the screen by the film projector, which was that of an onion being

chopped up with a knife. Finally, when the performer reached the end of the space and the entire length of audio tape unwound, the tape was gathered together and placed in the "cocoon" attached to the manuka stick, this was placed upright at the end of the space with the light while film image continued to be projected and the performance was complete.

This work is notable for the integration of all the functional elements into the form, that the movement of the performer acts as a catalyst for natural evolution and alterations in the relationships of the materials:

(1) The enlargement of the shadow (as a result of movement towards the light) allowing the film image to be seen.

(2) The movement itself is prompted by the necessity of revealing intelligibly the spoken material and is controlled by the necessity for the performer to move as evenly as possible at the pre-determined speed of 9.5 cm/second (this itself being determined by the practical capabilities of the tape recorder).

The use of sound in this way focused on the performer's movement as process, not only in that the drawing of the magnetic tape through the machine is directly tangible in a sculptural sense, but also that as a live, humanly controlled process the progression from moment to moment is prone to the fallibility of the performer - small irregularities in movement resulting in distortion of the vocal envelopes of the message.

In this way the difficulties encountered by the performer in maintaining even speed

of tape travel as the tape became longer underline the tension inherent in the distancing process, intensifying that process, and distortions in the vocal morphology are integrated as a direct effect of the cause or motivation of the sound. Fundamental to this, however, is the nature of the language material as a sign element - that alterations in morphology are perceived as such because of the intrinsic recognisability of the voice. The decision that the voice should be recognisable as sign determines the careful, continuous movement of the performer. Because this is difficult to achieve, it means that small distortions in the message through inconsistencies in tape travel result in morphological treatment of the sounds, but ones which stem from a clearly discernable process - the process of tape transport itself. This can be seen as a circular embodiment of cause and effect in the work - movement carries sound and the sound determines the control of movement.

The movement itself is of symbolic importance in this work as a distancing, objectifying process with a goal (the light source). Here the film image plays a crucial role - gradually it is revealed as a visual sign (the chopping of an onion) as well as being the point of departure for the "journey" through the space. As the movement progressed the starting place is, in direct proportion to the increase in distance between performer and screen, linked to the emergence of a concrete visual image - but is irrevocably being left behind (the tape had to be constantly kept taut for the continuation of the sound - suggesting a process which, once begun, had to be continued). That it is a backwards journey is also of significance, for the performer remains able to see the emerging film image all the time while moving away from it, and the further away the performer moves from the screen, the larger the visible image becomes (with the enlargement of the shadow). This is the strongest embodiment of the journey as an objective one, that the further from the start the more clearly the image can be seen, not only by the audience,

but by the performer as well.

The onion chopping image also takes on a symbolism in the context of this work as process of revealing and exposing, and it links strongly to the drawing out of the magnetic tape as a process of revealing.

The manuka stick, worn by the performer throughout the journey must be seen in terms of its final static sculptural role. That the performer carries the stick signifies a relationship between the stick, the performer and the tape itself. As an object the manuka stick goes through the same journey as the performer, but its final function is not made clear until the end of the work - as the holder of the gathered-in magnetic tape, left standing, at the end of the process.

Finally, we must consider the role of the actual verbal content in relation to the overall symbolism of the work. What is offered from this portion of interview is an insight into that woman's experience of her father's love for her, and in relation to this the distancing process of the journey - that such difficulties in simple expressions are being left behind - and that in that process there are realisations at more than one level. The symbol of the onion, for example, is revealed more and more as a whole image in the shadow of the performer, while the tape content (which is repeated) undergoes a decay - underlining the difficulty inherent in the simple expression of love as it is described by the woman in the interview.

The title of this work, too, is symbolic, taken from an oriental proverb - that "rain from the moon" is an impossible phenomenon - and in this context can be seen as a

resignation that in certain situations and personality types, genuine expressions of love are a reflection of the impossibility suggested by the title.

2.14 You Must Remember This (1984) by John Young

Electroacoustic music on tape. Stereo.

This piece is based around field-recordings from the domestic environment; centring, in particular, on interactions between people in which spoken content is important. The materials used include: recordings of domestic kitchen scenarios of people doing the dishes (washing up); conversation between two people; sounds of doors opening and closing; clock sounds, transformed by downwards transposition of several octaves; transformed sounds of whistling (transposed and ring modulated); water sounds recorded on a rocky volcanic shoreline; sounds made by metal cutlery and pots and pans (the cutlery dropped in bundles repeatedly on the floor and a stack of pots and pans shaken continuously) which were transformed through voltage control of envelope and harmonic spectrum and layered into dense, abstract "metallic" textures.

Synopsis

- 0'00"-1'45" First "doing dishes" kitchen scenario, sounds of crockery and cutlery, casual conversation.
- 1'47" Cutlery sounds transformed into abstract texture, with much spatial (panning) motion of sounds.
- (4'52") texture begins to subside in amplitude, low pitched "rumble" morphology extends out of this (fades out at 5'51").
- 5'52" Door opens and closes.
- 6'00" Conversation recording.
- 6'34" Door (sound transposed down one octave) opens and closes (to 6'46").
- 6'50"-7'20" Conversation continues.

- (7" silence)
- 7'28" Water sounds fade in.
- (8'14") Mix of layered voices (filtered) emerges at low amplitude, gradually increasing in amplitude. Water sounds continue. Transformed clock sounds gradually fade in. Excerpts of conversations heard through texture, especially "china cabinet" references from first kitchen scenario.
- (9'55") Water sounds very prominent.
- 10'36"-10'45" Conversation continues, cuts directly out of previous "mix" section.
- 10'46" Transformed clock sound heard in several layers of transposed pitch and duration.
- (11'38") Transformed clock sound "regularises" onto one level of pitch and duration, with slight panning motion between left and right sides of the stereo space.
- (12'15") Transformed whistling sounds (actually of the tune "As Time Goes By") transposed downwards and ring modulated fades in over continuing clock sounds.
- (12'57"-14'11") Second kitchen scenario of "doing dishes" - cutlery and crockery sounds (fragment of conversation heard at the end of this sequence), with sporadic quick panning across stereo space of dense layered vocal texture. (At 13'29" tune "As Time Goes By" can be heard whistled within the kitchen ambience) - transformed clock and whistling sounds continue.
- (14'32") Conversation continues, transformed clock and whistling sounds cross-fade out gradually (to 14'54"). The complete fade out of this sound is masked by background music present in the conversation recording.
- 15'26" Door opens, "revealing" barely perceptible conversation, and closes.
- 15'35"-16'02" Conversation continues.
- (16'04"-16'14") Conversation material isolated (a "word" and a "phrase").
- 16'15"-16'21" Door opens, "revealing" more discernable speech than that in the previous similar sequence.
- 16'24" Transformed pot and cutlery sounds, layered into dense, continuous abstract texture.
- (19'22") Cutlery sounds removed from texture.

(20'25") Transformed pot sounds begin to fade with gradual pan to right channel - fading out completely at 21'11".

20'56"-22'39" Third "doing dishes" kitchen scenario cross-fades in over abstract sound (sound of cutlery from the kitchen ambience seemingly emerges out of the abstract metallic sounds), sounds of crockery and cutlery, casual conversation.

22'40"-22'43" Door opening sound.

The idea for this piece was to present portions of documentary field-recordings of domestic situations, with "kitchen" (doing-the-dishes) and "conversation" scenarios, and to articulate these with potent sign sounds and abstract textures derived from transformations of natural sounds.

The spoken content of the situational recordings is very important to the piece and contributed much to the motivation for the composition of the work. This content revolves around observations made about time and the way in which people feel the effect of time, expressed through topics of conversation which relate in a straightforward and genuinely felt way to the overall theme of time.

The dialogue in the first "kitchen" recording, for instance, is rich with content to do with time - beginning with the following spoken content: "How long? . . . I don't know . . . fifteen years? . . . probably . . ." It is never clear just what has initiated this dialogue, but it is clear that the discussion is concerned with time and remembering. More of the dialogue in this section continues with a flow of personal associations and reminiscences. The mention of a "china cabinet", for example, gives rise to a memory - "and I remember John as a very small boy coming to me and saying . . ." As such, this first section initiates the idea of time in the piece, and in the context of a domestic task

(doing-the-dishes) an activity which is a kind of household "ritual" (ex. 52).

The third "kitchen" scenario has spoken content which is even more directly concerned with the feelings associated with time: "it's amazing though, isn't it, how quickly time goes? . . . time goes by . . . but the song says time goes by so slowly . . . " The intention was that, in being placed at the end of the work, this section should "mirror" the first, while also providing new and more obvious focus on the time idea. In the central part of the piece, a further field-recording of "doing-the-dishes" is presented (12'57" - 14'11") as part of the central sound-mix part of the piece. This portion, because the sounds of cutlery and crockery are so recognisable, continues the reference to the domestic environment - forming a clear link to the opening material. There is no significant verbal content in this portion of field-recording, but at 13'29" the tune of the song "As Time Goes By" can be heard whistled (and for a short time, sung) in the kitchen space. This was an integral part of the field-recording and was not superimposed by mixing, and forms another reference to the time idea - this being supported in the title - which is taken from the first line of the song (ex. 53).

The sounds of doors opening and closing used in the piece function in different ways at different points. Initially, they act as transitions from one section of material to another. The door sound which follows immediately after the first section of abstract "metallic" sound (at 5'52") is notable in this respect, functioning as a sign of domestic reference which re-initiates the idea of the domestic scenario (of the first section) and this is confirmed by the "conversation" recording that follows (ex. 54). The next door sound (at 6'34"), which is transposed downwards one octave to give a more "intimate" sensation of the sign through the slower evolution of the morphology, occurs between two portions

of the same "conversation" recording. As such, in terms of the structure, it is much more enigmatic. This door is obviously not part of the same "reality" as the conversation (with quite a different ambience present in the door sound), and is a punctuating or articulating element between two sections of the same "conversation" material (ex. 55). This juxtaposition may be seen to suggest a symbolic implication for the door sound, that a "literal" recording (the conversation) is punctuated with a sign which is recognisable, but incongruous, implies that the door is a metaphor for emotional "space" which is implicit to the genuine expressions of feelings with regard to time. The potential of the door sign sound to effect a transitional or symbolic role derives from the cultural role of the "door" in relation to the domestic environment as being capable of "opening" or "closing" interior space.

The door sounds near the end of the central part of the piece are not so enigmatic, they link into the literal material in that voices can be heard, quite softly behind them, so that rather than doors opening and closing on "silence" the door sounds integrate more into the "ordinary presence" sounds of the domestic interior. The door sound at the very end of the piece opens, but does not close (unlike all the other door sounds) and this leaves the work open-ended - as there is expectation involved in the door sign. "Opening" is balanced by "closing" and as the final sound in the piece, this door sound remains somewhat enigmatic (ex. 56).

The central part of You Must Remember This is an extended mix of various elements, underpinned by the transformed clock sound - several octaves of downwards transposition of this being layered. This section begins at 7'28" and is initiated by closely microphoned water sounds, which increase in amplitude and "presence". Gradually, a

dense mix of layered and filtered (unintelligible) spoken material and the transformed clock sounds are added to this, with short phrase of spoken material clearly audible through the texture at various points. The transformed clock sound is subsequently heard isolated, and at 11'38" pans gently across the stereo space, suggesting the motion of a giant pendulum. At 12'15" this sound is overlayed with the transformation of whistling (ex. 57) and leads to a point where a recording of "doing the dishes" can be heard in the midst of the texture.

The two sections of abstract "metallic" sound are intended to function as large "poles" which enclose the central part of the work. Although the "metallic" quality of sound allows them to be related in a very general way to the sounds of cutlery, pots and pans in the "kitchen" recordings (this is suggested at 20'56", when the sound of cutlery in the context of the kitchen recording is superimposed with the fade out of the second abstract section) (ex. 58) they remain essentially abstract elements, with considerable complexity in morphology, harmonic spectra and spatial movement (the latter mainly in the first of these sections) (ex. 59). These two abstract sections are of long duration so as to allow them to take on their own structural significance, or perhaps to be felt as separate "worlds". Their extended duration and continuity can be considered to engender a feeling of "timelessness", which is especially potent in relation to the continual discussion of time in the conversation field-recordings.

All of the sounds used to articulate the sections of "kitchen" and "conversation" recording are intended to imply the existence of a level of feeling beyond what is immediately perceptible in the content of the field-recordings - in other words, to attempt an underlining of the emotional importance of the sentiments which are expressed verbally.

### 2.15 Tense Test (1985) by John Cousins

Electroacoustic music on tape. Stereo.

The making of this work stemmed from a recorded interview made with the composer by art critic Lita Barrie, a fragment of this interview - in which the male role in society is addressed - being used throughout the work. The portion of the interview used in Tense Test consists of a question, an answer and a follow-up question, and throughout the piece the process of question and answer is continued in the attempt to fully define the nature of the answer in both objective and subjective terms - to discover the actual nature of what has been said, and the motives behind the statements.

The work is in two main sections. The first consists of a "conversational" discussion on the fragment taken from the original interview, but at several levels (always with the same actual voice - that of Cousins himself - but in different parts of the stereo space, suggesting a multiplicity of personalities) sometimes discussing the actual interview, sometimes apparently re-examining previously recorded discussions about the interview. The second section consists of a greater variety of sound sources but, as in the first section, these centre on the re-examination of the interview and matters related to it. Material here includes field-recordings of Cousins "thinking out aloud" about the original interview answer while mowing the lawns, digging in the garden and having a shower, a field-recording of a family at the beach along with water sounds, a telephone-call-and-answer sequence, tape recorder transport mechanism sounds and non-verbal vocal sounds. In addition to these reference elements, the second section is characterised by morphological transformation of sounds, often into abstract textures, which provide an

emotional "underlining" to the scenario of the literal sounds to dramatise the documentary basis of the work's content. A good deal of the first section of the piece has been directly transcribed for the purposes of this analysis, as this allows for a very clear understanding of the lines of argument and questioning followed (in first, second or third person reference) and the shifts in emphasis and topic that occur because the way in which the process of examination and re-examination is put forward in the first section of Tense Test informs the nature of the rest of the piece.

### Synopsis

#### Section 1

In this section, all voices are those of the same person, except the voice of the interviewer in the original interview. Apparent generations of analogue tape are indicated by the abbreviations G.1, G.2 and so on, where G.1 indicates first or "original" generation tape.

0'00" [Right Channel] [G.1 until otherwise indicated]: "Now, what about his answer? You notice that . . . um . . . as she's finishing the question you can hear him in the background going hmm, hmm, sort of . . . um . . . um . . . agreeing."

(6" silence)

[Left channel]: "and you're immediately acceding, saying 'yes, it is, it is'."

[R]: "Yes I am because I think I agree with her. I certainly agreed with her then . . . whether in fact I . . . I . . . agree now, I'm not certain."

[L]: "Why aren't you certain?"

(7" silence)

[R]: "He's going hmm, yes, hmm, in . . . in . . . the background and then immediately comes in with . . ."

[L]: ". . . he comes in with 'it is, it is', yes . . . that's right."

(6" silence)

[R]: "How do you feel about that now? Do you feel . . . that you are saying something . . . um . . . that you . . . that you still believe now?"

[L]: "Well . . . I'm not sure that I do. I think it's a, ah . . . it could be . . . could I have a look at the transcript please?"

[R]: "Yes, here it is here."

(Sound of papers being passed right to left across stereo space).

[L]: "I say . . . (sigh) . . . "

(5" silence)

[R]: "As she's speaking, he's obviously . . . empathising with what she's saying and agreeing with it."

(3" silence)

[L]: "Well how do you feel now about what she's saying . . . ? Do you still feel that that's a very male thing, because you say there 'it is, it is' . . . uh . . . you agree . . . "

(5" silence)

[R]: "Do you feel that she's leading you there?"

(4" silence)

2'13"

[L]: "Notice he . . . he hesitates there . . . I think that probably means that he's uncertain about what to say."

[R]: "Yeah, I agree with that. It's . . . he seems to have a characteristic of um . . . you know . . . getting into his stride and then not knowing where to go next . . . and he then hesitates slightly . . . um . . . before . . . um . . . going on . . . sometimes, ah, it seems to me . . . um . . . in a ra . . . ah . . . quite different direction to the one that he was on before he hesitated."

[L]: "Yes, that's quite true, and there are a number of hesitations in his answer . . . "

(8" silence)

[R]: "Well . . . I don't think I agree that sort of um . . . in such a clear cut way."

[L]: "Wh . . . why not . . . what . . . what's more complicated about it now for you?"

(6" silence)

[R]: "Do you think that . . . em . . . empathising with the basic information that he's been given in the question affects his answer?"

[L]: "Well, it must affect his answer, you know . . . I mean, ah . . . he . . . he . . . he's, he's he's he's agreeing (laughter) and then looks around for information to support his . . . his . . . his agreeing."

3'43"

[R]: "There he goes again you see . . . thinking about what to say next, wondering . . . wondering where the argument's going to take him . . ."

[L]: "I think that's right . . . ah . . . although it's extremely difficult to know isn't it?"

(4" silence)

[R]: "Well . . . um . . . I think . . . I've . . . haven't really thought about it properly when I'm answering . . . or I'm thinking about something else."

(4" silence)

4'15"

[L]: "Um . . . well, it's difficult to know whether, when he does eventually go on . . . whether he goes on for the right reasons, because he's found a sense, or whether he goes on the see if he's going to find a sense."

4'30"

[R]: "And you say, 'yes, it is, it is' and then you say why, and then you say it's a tragedy . . . why are you . . . less sure now?"

[L]: "I'm not being carried along by . . . um . . . a sense of empathy, perhaps, that was present."

[R]: "Interesting how he um . . . ah . . . goes the whole hog . . . ! Um, he's terribly sort of . . . um . . . ah . . . tragic (laughter) - isn't he?"

[L]: "Yes, he . . . he . . . he seems to be ah . . . ah . . . overdoing it a bit I . . . I . . . I sort of feel."

5'08"

Sound of cassette recorder switching off.

[R]: "Now, the first thing I'd like to talk about is . . . ah . . . the tone, the tone that that . . . ah . . . person in the discussion has towards the original tape recording."

[L]: "Yeah, to me um, it seems quite sarcastic, almost throwaway . . . ah . . . as though the intensity of . . . ah . . . response that the person shows in the interview is being sort of . . . um . . . run down in some way."

5'42"

[Stereo centre] [G.4]: "Yes, he . . . he . . . he seems to be . . . um . . . ah

... overdoing it a bit I ... I ... I sort of feel ... um ... but I wonder if um ... ah ... I, I'd like your ... ah ... opinions on ... um ... ah ... the ... the que ... "

Sound of cassette recorder switching off.

[L] [G.1]: "Well ... I ... I don't think he's overdoing it at all really. I think ... um ... you know, the ... ah ... the way in which he uses the word tragedy is interesting."

[R]: "Yes, it is, because he doesn't say just straight tragedy, does he? He says the 'sort of' tragedy, does he not?"

[L]: "Yes, I think so ... ah ... let's just go back and check that ... "

Sound of cassette recorder rewinding and set in 'play' mode.

6'18" [Stereo centre, voice of interviewer]: "Those sorts of divisions and ... and ... emphasis and concentration, that's a very male thing isn't it ... ? I mean ... sort of intellectual divorced and sep ... "

6'26" [Stereo centre] [G.3]: "Let me just stop there for a minute, that's ... that's the actual interview, the original interview ... um ... that they're ... that they're discussing ... um ... and the content of that obviously is important, I'll just go back and ... ah ... we can listen to that ... the opening of that question again."

Sound of cassette recorder rewinding and set in 'play' mode.

[Stereo centre, original interviewer]: "Those sorts of divisions and ... and ... emphasis and concentration, that's a very male thing isn't it ... ? I mean ... sort of intellectual divorced and separated off and not integrating with internal ... "

[Interviewee] "It is, it is, because the thing that you do as a man, often, is separate from your liv ... your living experience ... and ... ah ... I think that's one of the enormous sort of ... tragedies of being a man ... "

7'07" Sound of cassette recorder switched "off".

[Stereo centre] [G.3]:

"Ah ... that's the first place I'd like to stop ...  
and I'd really like your opinion on ...  
on the tone ... "

7'12" [L] [G.2]: "Oh, sorry, but ... um ... can you, can you stop the tape for a minute ... (sound of cassette recorder put into 'stop' mode) look ... um

... I think you better go back and ... I'm confused about who's ... who's ... who's wanting the tape to be stopped ... is that the person who's ... ah ... talking about the ... the ... the ... the original person's attitude towards tragedies, or the other person?"

[C] [G.2]: "Well, let's go back and ... um ... listen to the whole thing without the interruption and see if it makes sense. I'll go right back to the original ... um ... statement."

7'39"

Sound of tape recorder set in 'play' mode.

[L] [G.4]: "Don't stop the tape, don't stop the tape."

[C] [G.4]: "Ah ... that's the first place I'd like to stop ... [G.3] and, I'd really like your opinion on the ... on the tone of the person there ... um ... when he's talking about the ... the ... the way in which ... um ... ah ... the interviewee is talking, you know, he says ... um ... he's ... he's ... he's really ... ah ... terribly tragic ... it ... it feels like a put-down to me."

[C] [G.3]: "Now you see that's ... that ... "

[C] [G.2]: "It does to me too ... um ... I must say it ... it ... ah ... it's almost as though he's throwing off and ... and, and, and ... almost patronising the ... the ... ah ... the way in which that ... ah ... the person was talking ... um ... ah, it didn't sound ... um ... as though ... "

[R] [G.3]: "Ah yes, there's the other person ... "

[C] [G.3]: "Yeah sure (sound of cassette recorder switching "off") ... what's ... what's bothering you?"

[R] [G.3]: "Can you stop the tape for a minute?"

[R] [G.3]: "I'd like to know ... ah ... the he, now he ... when he says 'he's almost throwing off' ... "

[L] [G.3]: "Let's just go back and listen again ... "

8'36"

Sound of cassette recorder rewinding and set in "play" mode.

[C] [G.2]: "... Almost patronising the ... the, ah ... the way in which that ... th ... the person was talking ... um ... ah ... it didn't sound ... um ... as though he was overdoing it to me ... um ... I wonder if we could just go back and listen to that again ... "

[C] [G.3]: "Yeah, OK ... "

[C, original interview]:

"... intellectual, divorced and separated off and not integrating with internal ... "

[R] [G.3]: "This is the original tape, right?"

[C] [G.3]: "Yeah, that's right, this is the original one."

"It is, it is, because the thing that you do as a man, often, is separate from your liv ... your living experience ... and ... ah ... I think that's one of the enormous sort of ... "

[L] [G.4]: "Well, what do you want us to say about this?"

(sound of cassette recorder set in 'stop' mode).

[C] [G.3]: (9'10") "Well, I want you to look at the things that are being said by the people discussing the tape and give me your opinion about them ... "

(from 9'10" a subsidiary level of layered, garbled speech sounds and tape recorder switching sounds fades in).

[R] [G.2]: "Stop the tape ... that's the interpretation ... um ... and now we're going to get the response, right?"

[L] [G.2]: "Yeah, hopefully we will ... "

9'26"

From this point onwards, layers of persona discussion, question and answer become layered and mixed up such that it becomes impossible to discern which "people" are listening to which tape and who is responding to which questions except that the examination of content has focused on the hesitations in speech of the original interviewee (first discussed at 2'13" in this section). All the layers of "tense" and persona (including fragments of the original interview) that were initially presented sequentially, become superimposed, and the overall texture becomes increasingly dense. Tape recorder rewind sounds are supplanted in this section with streams of "high speed", garbled speech and tape recorder switching sounds grow into a

continuous texture.

11'18" Intelligible voice emerges (tape recorder switching and rewind sounds still present at low level).

[L] [G.1]: "No . . . the hesitation isn't important at all, what we need to be listening to is the interpretation . . . it's the interpretation that the commentator made, that's the important thing . . ."

[R] [G.2]: "Will you let the tape run | just let it . . . "

C) [G.1]: " . . . stop the tape . . . "

11'27" Room ambience (pause 8") [C] [G.1] "We'll . . . have to go back and listen again . . . "

11'38" Cassette rewind sound (fades out over 12" to end of section 11'51").

## Section 2

0'00" Downwards transposition of tape recorder switching sound (loud, metallic mechanical sound with strong attack transient) - immediately followed by:

[Right channel]: Recording of person (original interviewee) in shower continuing discussion over interview (to 0'21"): ". . . what he means really is he himself feels . . . certain things . . . he feels a sense of loss . . . not 'men'".

[Left channel]: Recording of same person digging and thinking out aloud ". . . that's really what it's about . . . " (to 0'11") followed by tape recorder rewind sound (with garbled speech sounds) then sound of tape recorder switched "off".

(0'14") Abstract, low-pitched rumble sound emerges and continues to increase in amplitude and resonance throughout this section. Sounds of tape recorders switching "off" and "on" continues, with analogue tape editing sounds and 'room' presence of editing process.

(0'22") Tape recorder rewind sound - following from right channel "shower" recording.

(0'36") Downwards transposition of hand-lawnmower sound grows underneath abstract texture.

0'40" Telephone call sequence: Telephone picked up and number dialled (on rotary dial telephone) - voice (of original interviewee) says: "Could I speak to John please . . . yeah . . . you there . . . are you there . . . look, could you tell me what are

those difficulties or those tragedies as you call them - of being male."

(1'14") Close-up dialling sound interspersed with question "hello". Abstract resonant texture continues to rise into foreground.

(1'27") Telephone dialling sound drops in pitch in slow glissando until it merges with abstract texture, the inner morphology of which appears to extend from lawnmower sound.

(1'35") Literal lawnmower sound emerges through abstract texture, with original interviewee making comments (while mowing the lawn) ". . . what he says is just bullshit, just bullshit . . . just complete bullshit. There doesn't seem to be any kind of real sense to it when you take it apart . . . I mean, when you really take it apart and look at it closely, there's nothing there . . . just nothing there at all . . . "

(Low-pitched "lawnmower" morphology fades by 2'07" with sensation of this melting into the ambience of the lawnmower field-recording).

(2'07") Sound of lawnmower being put away.

(2'13") Low-pitched, undulating resonance re-emerges mixed with downwards transposition of lawnmower sound (transformed lawnmower sound faded out at 2'23", resonance sound continues).

(2'16") Fragment of speech from context of first section, "yeah, you see, that's interesting because I', . . . I'm . . . I', searching for the right response to a question and I say the tragedy is . . . um . . . " (faded out at 2'28").

(2'39") Throat-clearing sound (low amplitude) initiates section in which original recordings of questions appear with new answers - begins with telephone call answer (cf.0'40") "I don't think so . . . you'd have to ask him.").

2'50" Original recordings of interview questions begins. (Interviewer on right channel, interviewee on left channel) with new answers juxtaposed - continues to 4'20" (all this section continues to be underpinned by low-pitched resonance).

(2'59") Throat-clearing sound (low amplitude).

(3'40") Throat-clearing sound (close proximity).

(4'20") Questions with new answers begin to overlap (becoming simultaneous).

(4'30") Crescendo of abstract resonance begins (questions and answers begin to fade out slowly).

(4'40") Throat-clearing sound at low amplitude becomes increasingly more frequent.

(5'18") Throat-clearing sounds overlapped (questions and answers faded out).

5'24" Cassette rewind sounds emerge - loud, from both sides of the stereo space - strong transients and tape transport sounds (morphology resembles that of lawnmower blades). Throat-clearing modulates (naturally) into "painful" grunt (voice layered in transpositions lower than original). Vocal and tape recorder sounds pan across stereo space.

(6'19") Narrow band-pass filtered voice added to texture (low amplitude) - "hello, hello."

(6'20") Rhythm of tape recorder and voice "grunt" sounds becomes more frenetic, intense and louder. Stream of barely intelligible narrow band-pass filtered speech sounds bleed through texture - answers to questions and telephone call questions and responses.

(6'55" - 7'06") Tape recorder transport sounds suggest morphology of lawnmower sound.

(7'07") Tape recorder sounds transposed upwards (and speeded up) transforming into high-pitched bursts of noise sound. Vocal "pain" sounds become more extended (naturally) - developing into chorus of painful cries. Stream of narrow band-pass filtered vocal material perceptible but unintelligible.

7'15" Bursts of noise sound become increasingly quicker and higher in pitch. Underpinned by midrange resonance from 7'19" - 7'31" - stream of filtered speech continues.

(7'29") Vocal "pain" sounds fade out.

(7'36") Noise sound drops slightly in pitch. Below this texture voice of original interviewee (not the original recording) says fragment of answer to interview question (in slightly resonant apparent space): ". . . the thing you do as a man, often, is separate from your living experience. I think that's one of the enormous tragedies of being a man."

(7'40") Individual transients in noise sound begin to stream together into a more continuous morphology and begin to undulate in pitch and amplitude.

(7'47" - 7'53") Long, "pain" voice envelopes emerge (mid-distance).

(7'57" - 8'06") Answer to interview question (cf. version at 7'36") with slight "feedback" resonance.

(8'21" - 8'32") Answer with more feedback.

(8'30") Noise texture begins to subside.

(8'37") Mid-range, undulating resonance underpins texture.

(8'44") Noise-sound relates more closely to lawnmower texture.

(8'46" - 8'57") Repeat of answer to interview question, with greater feedback resonance.

(9'11" - 9'22") Pure feedback resonance of answer (only broad rhythm of vocal phrase perceptible). "Lawnmower" morphology and abstract midrange resonance continue.

(9'35" - 9'46") Repeat of feedback resonance derived from voice - and again at 9'57" - 10'08". Abstract resonant sound fades, "lawnmower" sound fades out by 10'42".

(10'21" - 10'32") Feedback resonance of voice with amplified mid-range. Sound of telephone ringing emerges through this - telephone sound fades up until 10'45" when phone is answered (by voice of original interviewee). "Yes . . . speaking . . . I don't know, you'll have to ask him." (Sound of phone hung up at 10'55").

(10'46") Gentle water sound begins to fade in - water sound alone 10'56" - 11'17".

11'18" Voices of family group at beach emerge (adult/child interactions of environmental observations) - fades out at 11'47". [The reference to a "freshwater" crayfish being the only slightly incongruous element.]

Water sounds continue to fade out slowly (with very faint seagull sounds) to 13'01".

Central to this entire work are the attempts to very precisely define what was said and why it was said in the original interview with regard to the male role in society, leading to an overall examination of the content and intent revealed through continual processes of question, answer and statement.

In the first section, these processes are clearly operating, as layers of opinion are built up, but rather than focusing solely on the original question and answer itself, the examination of statements that are put forward become drawn outwards so that the questioning process is applied back on itself - leading ultimately to a loss of intelligibility,

the content of the discussion begins to focus on one point (the hesitations in speech of the original interview answer) which is of little actual relevance to the central issue. Several levels within the discussion emerge as the listener becomes aware that there is more than one "group" of people studying the issue, and that some appear to be in real-time while others are recorded on tape, having their opinions of the original interview discussed and criticised. That the voices are all that of the same person (the original interviewee - Cousins himself) provides a consistent persona throughout and makes this a clearly autobiographical work, in that the same person is involved in studying and talking about the issues at more than one level and from different points of view. The clues to the levels within the structure of this first section of Tense Test are made clear in the content of the dialogues with the pronouns used by the participants in the discussion, whether referring to statements made by "me", "you" or "him". The mixing of the pronoun references is present from the beginning of the work, so that the existence of the discussion at more than one level is immediately part of the work. However, initially the fragments of discussion at different levels are separated by short silences (indicated in the synopsis) and these aid the listener in comprehending the disjointed nature of the argument.

At 3'43" is the first incidence of the non-existence of silences between relevant fragments, (when a statement is made - on the right channel - which comments directly on the previous statement, in the third person: "there he goes again . . . "). From 4'15" onwards, the silences are omitted altogether, as statements and questions, sometimes which belong together and at other times which are incongruous become juxtaposed (for example, at 4'30" a question directed at the original interviewee: ". . . you say 'it is, it is' . . . " follows a statement made about the original in the third person ". . . whether he goes on

for the right reasons . . . "). These aspects of content make clear in the first section of Tense Test whether two independent points of view are focusing on the issue, or that the original interviewee is re-examining the answer he gave in the interview. The sense of "conversation" in this process is enhanced by the separation of voices on each side of the stereo space and later, as the argument becomes more complex, with the centre of the stereo space as well.

As well as this, further layers of tense are established in the work, by creating a scenario in which it becomes clear that what is being discussed is not only the original interview, but also tape recordings of discussions about the original interview - exactly how many layers in this process there actually are remains ambiguous, but from 9'26" onwards it is clear that there are many (that is, tapes of discussions of discussions of tapes) - and this leads to the apparent frenzy of confusion as to who is commenting on what in the latter part of this first section. This process is first made extant at 5'08" where (following the sound of a tape recorder switching "off" the speaker says: "Now, the first thing I'd like to talk about is . . . ") indicating for the first time in the piece that the manipulations of various tenses through juxtapositions of phrases with incongruous pronoun references is to be interpreted not in an abstract sense, but in a tangible sense - that is, that the reasons for the existence of all the different references and levels of discussion is that these have all been recorded for the purposes of discussion and comment, so that it is not just a matter of the discussion of the original interview, but how and why the interview is being discussed. From 7'07" the voices became layered over each other more and more as the scenario of people listening to a tape and making comments while it is replaying becomes more and more clearly articulated, the scenario being openly stated at 9'10" with " . . . I want you to look at the things that are being

said by the people discussing the tape and give me your opinion about them." This is a phrase which, while clearly articulating the multiplicity of personas and temporal "layers" in this section, indicates an impossible task, as these layers subsequently become increasingly difficult to separate from each other. So, while the process of layering of apparent temporal realities is made more explicit, the layering becomes increasingly complex (ex. 60).

Obvious increases in analogue tape generation are included extending from the scenario of examination of discussions about the original interview, and discussion about the discussions of the original interview. Acoustically, the suggestion of tape generation is clear through the increase in tape background hiss and loss of high frequency in recordings. In addition, the process of tape "audition" is contextualised with the sound of a cassette tape recorder transport mechanisms - as the "tape" is replayed, stopped and rewound, and by the explicit verbal reference to "the tape" (the first such reference being after 5'08" with mention of "the original tape recording").

A crucial point in the first section of this piece, where the concepts of congruity/incongruity of response through pronoun reference and tape generation are fused together is at 5'42" where the statement (abridged): "Yes . . . he seems to be overdoing it a bit . . . " makes perfect contextual sense as a response to the previous comment (being semantically congruous) but is obviously several analogue tape generations removed from the previous comment, clearly making it temporally incongruous. As well, the voice is the first to be placed in stereo centre, this re-orientation of placement reinforcing the sensation of this comment coming from a separate reality. The context of this comment (at 5'42") is subsequently made clear as "recorded" by the sound of a tape recorder switching "off"

and the continuation of the discussion with comment on the content of the "recorded" statement ("Well . . . I . . . I don't think he's overdoing it at all really . . . ") (ex. 61).

From 9'26" in this first section the layering of tenses, references and apparent reality become superimposed to the point of an absurdity. The tape recorder sounds which had previously been a contextual sign for the replay of "recorded" material take on a significance of their own, and can be seen as a symbol of the notion of review and discussion of the recorded document, as the means by which this process is achieved as well as (through the layering of many tape recorder transport sounds into a continuous texture) an indication that things have become out of control for the "people" discussing the tapes. At the very end of this section, the tape recorder rewind sound (at 11'38" - the context of rewind for this sound is established for this sound by the phrase ". . . we'll have to go back and listen again . . . ") acts as both a point of departure from the first section and as a lead into the second section of the piece (ex. 62).

The second main section of Tense Test is characterised by:

(1) The continuation of the process of question/answer and statement in relation to the subject matter of the original interview fragment, but in a variety of "real" situations and;

(2) The morphological treatment of many of the sounds often exploiting natural morphological similarities of sounds in the work, using tape transformation techniques to effect transfiguration of sign references.

In the continuation of the interview subject matter, this section relies heavily on the overall context established in the previous section - the processes of question and re-examination, resulting in a deepened awareness of the implications of the statements in the original interview but also, ultimately, a new awareness of the integrity and concision of the original answer to the question.

While the content is again concerned with what is being said and how (so that the aspect of speech and intelligibility of the comments made is still crucially important) but the scenarios are now wide in reference, with comments made (still by the same person) in the context of everyday tasks - in the shower, digging the garden (ex. 63), mowing the lawns (ex. 64) and over the telephone (ex. 65). The sign content of these recordings therefore exists on two levels, the verbal content (the comments that are made) and the situational sounds themselves which indicate the activities being carried out while the comments are made. The embedding of these graphic recordings in an overall texture of sounds derived often from morphological treatment of sounds from these field-recordings suggests a kind of surrealism, so that the content and context of the work become swept into a much larger and more universal expressive commentary. This indicates that the content and intent of the kinds of statement discussed with regard to the interview are of concern to the interviewee even in the course of mundane domestic activity and not just in the sphere of concentrated objective analysis (as is epitomised in the first section).

The transformation of sounds in this section fulfils two functions: firstly, that of allowing a more emotional, subjective "commentary" on the subject matter of the piece to develop and secondly, that of allowing for melding and transfiguration of sign sounds, by exploiting morphological similarities between them. In the first case, a significant

structural element in the second section of this work is the almost continual presence of a continuous, undulating, abstract texture which moves forward and recedes in the stereo space underlining the emotional content of this section.

The almost continuous presence in this section of sustained abstract sounds which underpin the main narrative also is used by the composer as a kind of "bedrock" texture into which some of the sign sounds are blended or transformed, for example the lawnmower sound from 0'36", the telephone dialling sound at 1'27" and the tape recorder sounds from 6'55". In terms of the form, this suggests direct links between the emotional commentary material (the abstract textures) and the sign sounds - which are key referents to the situations from which they originated - indicating connection between the external, "candid" context of the scenarios in the field-recordings and the internal "expressive" context of the abstract sounds. Another specific example of this kind of process occurs at the very beginning of the second section where the first sound heard is the switching "on" sound of a tape recorder transposed downwards with the associated elongation of morphology. This suggests a more "internal" sensation of the tape recorder's sound and can be seen to initiate a more internal or subjective phase in the overall content of the piece.

The manipulation of morphologies in Tense Test centres at various points on three key sign sounds in the work, the lawnmower, the telephone and the tape recorder. The sound of the lawnmower, telephone dial and tape recorder transport mechanism (switching "off" and "on", edited and overlayed into a continuous texture) are all manipulated, especially with changes of playback speed and the associated transpositions of pitch on analogue tape recorders, to sound remarkably alike. For example, at 1'27" the telephone

dialling sound gradually drops in pitch until it merges with transformed lawnmower sounds (ex. 66), at 5'24" the cassette tape recorder sounds are organised so that they begin to take on not only spectral characteristics similar to those of the lawnmower, but also a gestural morphology (or "phrasing") not unlike that of the literal lawnmower sound (ex. 67) (created by the starting and stopping of the lawnmower as the lawns are being cut, cf. 1'35"). However, what allows the "cassette mechanism" sign to remain distinct from complete similarity to the "lawnmower" sign is the high-pitched continuous "tape-running" sound which can be heard in this section through the attack transients of the morphology. Speech sounds are also manipulated in such a way as to allow a melding of one morphology into another, from 7'36" a recording of the answer to an interview question is repeated seven times, each with more "feedback", so that the phrase becomes more and more resonant, gradually taking on a more "grainy" quality from which (at 10'21") the telephone ringing sound seems to emerge (ex. 68).

These kinds of processes in Tense Test give the work a unity not only at the subject-matter, content level (stemming from the topic of the interview) but also at a purely acoustic level, in that the morphologies of the sounds are involved in a discourse which is relevant only to that aspect of the sounds. Nevertheless, it is significant that these manipulations of morphology are also linked at the level of actual, concrete meaning through the references to the situations presented in the field-recordings.

Three of the key sign sounds which are subjected to morphological transformation in this work can be seen to have particular symbolic implications extending from their reference. The tape recorder as a symbol of the tape medium itself, the means by which the original interview and the subsequent scrutiny of it is documented; the lawnmower as a

"work" symbol (a domestic task) as well as a process in which an exterior surface is cut away; the phone as a strong communication symbol, but communication which is enabled through bodily separation and thus being "acousmatic" in nature. This suggests that the phone call sequence in the second section is a "model" of the verbal processes in the first section, but transposed into the actual scenario of "the phone call" as a further extension of the question/answer pattern of the interview. That the telephone question occurs at the beginning of the second section (0'40") from the "caller's" perspective and is not "answered" until near the end of the section (at 10'45") creates a sensation of a disembodiment in time of the question/answer process. Disembodiment of question and answer is also suggested from 2'50" where original interview questions are heard repeated several times with new answers supplied by the interviewee.

The morphological similarity of the tape recorder and lawnmower sounds, along with their associated symbolisms (described above) contribute to a powerful "pain" imagery in the centre of the second section of Tense Test. From 2'59" throat-clearing sounds are introduced into the texture, becoming increasingly frequent and overlaid, when (at 5'24") the tape recorder transport sounds suddenly emerge, very loud, on both sides of the stereo space. When this happens, the throat-clearing sounds modulate into more extended "grunt" morphologies which suggest "pain" (seemingly in reaction to the sounds with which they are superimposed) while simultaneously, the tape recorder sounds transform to become increasingly similar to the lawnmower morphology (by 6'55") (ex. 69). This kind of transfiguration of the signs "tape recorder" and "lawnmower" in the context of the "pain" utterances of the voice, suggest the anguish and turmoil undergone by the subject in the process of coming to terms with implications of the original interview question and answer and indicate a metaphorical link between the two machines "tape recorder" and

"lawnmower". In this way the symbol of the tape recorder as a means of scrutiny and deepening of understanding can be felt as being linked to the more physical "cutting" symbolism of the lawnmower.

At the very end of the piece a field-recording of a family group at the beach is used as a postlude to the work, underpinned by water sounds of gentle wave movement. The verbal content in this postlude refers only to the experience of the beach location, by the children and adults (one of whom is Cousins) together and as such contributes to the form of this work as a positive statement of simple togetherness - the subject matter and location being far removed from the content of the rest of the piece, but linked by, the presence of the composer in this final scenario (ex. 70). The water sounds themselves which have been placed underneath the recording of the family interaction, while alluding to the abstract resonances which underline much of the second section (in the continuity and undulation of their morphology), provide acoustic relief from the intensely loud feedback sounds which precede the final phone call sequence, and act as a contextual element for the beach locality.

2.16 Jangkrik Genggong (1986) by Jack Body

Electroacoustic music on tape. Stereo.

This work involves the melding together and presentation of six individual field-recordings of Javanese street musicians (some solo, some in groups) performing the same Javanese song "Jangkrik Genggong" ("Genggong Cricket").<sup>13</sup> The first version of the song is performed by a gamelan ensemble with voices, and this is followed by two versions of "Jangkrik Genggong" in kroncong style - voice with guitar accompaniment, sung first by a woman, then a man - a style which may be connected with Portuguese influence in Indonesia from the sixteenth century. The fourth version of the song is that of a woman singing, accompanying herself on a kentrung (a large tambourine from East Java). The final two versions are in dangdut style (a popular style) - the first of these sung by two women, one playing a soap-box zither (comprising three large rubber bands stretched over a wooden box) and the other a ukulele, while the final field-recording is of a larger ensemble of singers, guitars and percussion instruments in an "up-tempo", syncopated version of "Jangkrik Genggong".

The work falls into two main sections, in the first section fragments of vocal and instrumental sound are montaged and subjected to subtle manipulations of pitch and meter, and in the second main section excerpts from each of the six versions of "Jangkrik Genggong" are presented as literal field-recordings, but melded together with abstract

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<sup>13</sup> The words of each version of the song are printed in English translation (by Wahyono Sukarno) in the accompanying notes to Jack Body's Suara: Environmental Music of Java. Hibiscus Records, TCHL3-113, Wellington, 1986.

sounds.

### Synopsis

0'00" "Atmosphere" sounds (insects, frogs, water)

(0'19")Gong-like sound (gamelan element)

(0'50")Gamelan sounds

(1'05")More instrumental sounds enter texture

(1'35")First vocal sound "Jangkrik" motif (minor 3rd). Texture continues to evolve, layering of different voices with different key centres (atmosphere sounds cut from Right channel at 2'00" from Left channel at 2'03")

(3'00")Guitar sounds fade into zither sound at 3'06"

(3'20")Shift in instrumental sounds to simpler, more close-up texture - zither, percussion

(3'30")Gamelan ensemble clearly heard

(3'43") Layered voices "Jangkrik Genggong" motif (with manipulated pitch and tempi)

(4'24")Gamelan sounds fade, and new chorus of "Jangkrik Genggong" motive introduced (D tonic)

(5'30")Transposing chord (fades out by 5'44")  
- emerges out of densely layered vocal and instrumental texture

5'37" Version 1 of "Jangkrik Genggong" - Gamelan with chorus (F tonic)

(6'17")"Intermediate" transposing chord (G tonic)

(6'26")Reverberation added to gamelan sound

(6'33")Transposing chord (fades out by 6'43")

6'37" Version 2 of "Jangkrik Genggong"  
- woman with guitar (F-sharp tonic)  
- fades out by 7'20"

Versions 2 and 3  
overlap in the chorus,  
with superimposition  
of different tempi

7'08" Version 3 of "Jangkrik Genggong"  
- man with guitar (F-sharp tonic)

(7'38") Layered percussion texture based on Kentrung timbre of version 4 fades in and continues until the presentation of version 4 itself (at 8'19") where it is an integral part of the field-recording.

(7'56") Intermediary section extending from previous field-recording - casual talk, laughter; superimposed instrumental sounds continue (with overlaying of meters).

8'19" Version 4 of "Jangkrik Genggong"  
- woman singing with kentrung  
accompaniment - kentrung sound  
emerges from layered percussion  
texture (D flat-tonic)

Versions 4 and  
5 overlap in  
the chorus.

8'43" Version 5 of "Jangkrik Genggong"  
- two women singing and playing  
zither and ukulele (D-flat tonic)  
- fades out by 9'30"

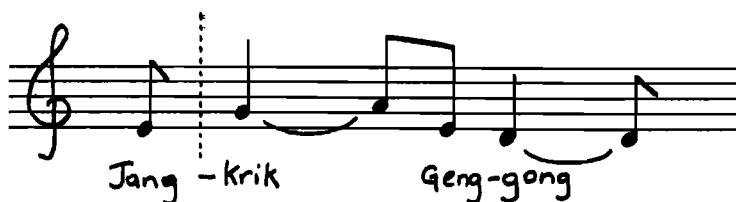
(9'20" to 9'44") Transposing chord fades in and out under voices  
(percussion sounds continue)

9'40" Version 6 of "Jangkrik Genggong" - ensemble of guitars, drums and voice (E-flat tonic).

Ends with final cadence of song with reverberation added (at 10'20").

The first half of this work (up to the presentation of the first actual version of "Jangkrik Genggong" by the gamelan (at 5'37") functions as an extended introduction - with material derived from the individual versions of the song which are presented in sequence in the second half of the piece. The "atmosphere" sounds at the beginning of Jangkrik Genggong form a kind of environmental "starting point" from which the "musical" sounds emerge, firstly the gamelan sounds (and that initiated by the sound of the large gong) (ex. 71) followed by voices and other features which characterise the subsequent versions of the song, for example, the guitar (of versions 2 and 3) at 3'00", the soapbox zither (of version 5) at 3'20" and the chorus (of version 5) which emerges at 4'24" (ex. 72). This introductory section is characterised by the buildup of textures

through the collage of materials; voices and instruments, with varying rhythmic patterns, timbres and tonalities. The layering of tonalities is especially important with respect to the vocal materials, as all of the vocal sounds in this first half of the work are extracted from the chorus of "Jangkrik Genggong" with the following pitch pattern:



The layering of voices singing this motif (initially fragmented, then complete) in different keys and tempi draws directly on the nature of the field-recordings themselves - that they are of different styles (with varying tempo, rhythm and accompaniment) and tonalities. In this first main section the disparity of tonality and tempo between vocal identities is further emphasised through the simultaneous speeding up of envelope and the raising of pitch of some of the "Jangkrik Genggong" motifs.

In the second main section of the work (from 5'37") the joining together of the six field-recordings is achieved in two ways. Firstly, either the versions are simply overlaid such as the transition from versions 2 to 3 (ex. 73), and 4 to 5 (ex. 74), where in the chorus of "Jangkrik Genggong" the refrains are simply cross-faded; or, between versions 3 and 4, where in version 4 (the woman singing with *kenstrung*) the tambourine sound emerges from the previous instrumentally-based texture (along with voices) (ex. 75). Secondly, an abstract "transposing chord" which glissandos from one key centre to another is used to achieve a transition from versions 1 to 2 and versions 5 to 6, and is also used as a transition from the end of the first main section of the work (which

has built up into a constant metrical repetition of the "Jangkrik Genggong" chorus motif) into the presentation of the first version of the song by the gamelan. The effect of this transposing chord is to suspend momentarily the "presence" of each field-recording, and strengthen the mediation between the field-recordings that it joins. For example, in the use of the transposing chord between versions 5 and 6 the rise in pitch of the chord is simultaneously underpinned by the fade in of the quick tempo of the final field-recording, providing a considerable increase in rhythmic momentum in the shift from a D-flat tonic to an E-flat tonic and the relative tempo which shifts from 126 beats per minute to 200 beats per minute (ex. 76). The morphologies of the transposing chords are not consistent, some have a resonant, gong-like quality while others have continual but iterative "strum-like" quality.

The use of reverberation added to sounds is also of note in this work. At 6'26" the gamelan ensemble sound has reverberation added to it, giving the impression of another more distant space into which the sounds have moved (ex. 77) - and at the end of the work, where the final chord of the last version of "Jangkrik Genggong" has reverberation added which adds a resonance to the final sound in the work and similarly suggests the existence of another space into which the listener might be projected.

Overall, Jangkrik Genggong provides an insight into the world of Javanese street music, not just through the presentation in the work of the segments of "found music", but through the montage of varying stylistic approaches, seen through the effect of these on the one song - from the traditional village gamelan ensemble, to the European-influenced styles involving guitar. The use of literal field-recordings by the composer in Jangkrik Genggong, with the presence of incidental sounds such as talking and laughter, have been

used in this work to enable a sense of the urban reality in which the music-making which is recorded takes place. In particular, the end of the third version of "Jangkrik Genggong" which subsides into conversation and laughter (7'56") provides a clue to the human context from which the field-recordings are drawn. In the second main section, portions of each version of the song are heard as literally presented field-recordings, melded together with pivot chords and textural extensions of the materials. In the first section is a montage of short motifs and fragments of the tune combined in a surreal acoustic space, which may suggest to the listener the overall musical vibrancy of the Javanese streets, in which the recordings were made.

2.17 Black and White (1987) by Chris Cree Brown

Orchestra and electroacoustic music on tape. Quadraphonic.

This work is concerned with the 1981 Springbok (South African) rugby football team tour to New Zealand, an event which, due to the huge importance placed on rugby football in both those countries and the social and political implications for any country of sporting contact with South Africa (because of the system of Apartheid), brought about major conflicts in New Zealand society. This exposed basic differences in attitudes between New Zealanders, ostensibly in reaction to the question of whether South African sporting bodies should be boycotted, but also embracing deeper issues embodied in New Zealand society itself - the right of individuals to have contact with whom they choose, but especially, in relation to the racist basis of many South African laws - the matter of the relevance of this in sporting contact, as well as basic questions to do with the racial attitudes of New Zealanders and the extent to which New Zealand people were prepared to recognise the plight of Black people in South Africa and in turn perhaps recognise the bi-cultural of their own New Zealand society. For some, the moral responsibility to the Black African people was to be put ahead of "the game", while for others, the right to go ahead with "the game" was not related to any political or moral responsibility. Black and White attempts not to be deliberately "pro" or "anti" the tour but to demonstrate the divisions in New Zealand society that those events of 1981 produced - in this way the piece concentrates on the tour as an issue - and the conflicts and divisions brought to the surface within New Zealand society as a result.

The electroacoustic material consists of the following:

- Two prayers by an anti-tour Bishop of Christchurch; at rehearsal letters [A3] and [T] respectively.
- Two versions of the hymn "Jesus Loves the Little Children" sung by two different children's choirs; at [A4] and [T2] respectively.
- Helicopter sounds (projected into the performance space via loudspeakers mounted above the audience); at [F] and [H16] respectively.
- Rugby match sounds with commentator and/or crowd sounds; at [G8], [G13], [H16] and in the tape section after [I17]. Also a match reporter in a helicopter at [H16].
- Chants of protesters "One, two, three, four we don't want your racist tour . . ." (after [I17]), a radio announcer giving a commentary on a scene in which protesters broke onto the field before a match and prevented play (after [I17]).
- A post-match argument between two people as to the truth of the events of a clash between police and protesters (after [I17]).
- "God Defend New Zealand", a field-recording made before a match of the music played over a park public address system (at [J]).
- An All Black Haka, pre-match field-recording, (after [J]).
- An anti-tour Maori speaker addressing a group of people (after [J]).
- Television New Zealand "News Theme" (before [L]).
- Protester/police conflict sounds including police speaking over megaphones issuing instructions, screams, protest chants, sounds of protest violence (beginning 4 bars after [L]).
- A demonstration leader addressing a crowd following a protest riot, over megaphone (at [N]).
- Atmosphere sounds of a crowd of people observing a minutes silence (before [O]).
- Post-match interview with a pro-tour rugby supporter (4 bars after [Q]).
- Pub sounds (at [R] and [T3] to end) the latter including composer's own comment as voice-over.
- Scream of "Fuck the 'Boks", on tape at [F] and screamed live during performance at 6 bars after [S].

Within the tape material for this work the polarity of the scale of conflict and opinion over the 1981 Tour is presented - from statements by individuals (ex. 78 a and b), and an argument between two people (ex. 79) to full scale mass demonstration and physical violence (ex. 80).

Orchestral motifs comprise material derived from "Jesus Loves the Little Children", "Amandla" and a four-note quartertone chord which carries across much of the work, (see Example 6).

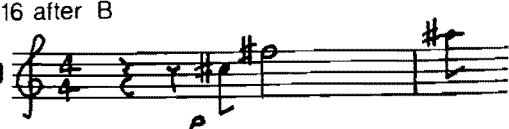
The basic unity in this work is brought about by the topic of the Springbok Tour and all the events which surrounded it, and is an important factor in the impact of the sounds as signs. The field-recordings used not only document specific events, but events which embodied a cultural issue - this makes their presence in the work very powerful and reflects the sensations of the events of the tour very strongly, providing in the work a strong cultural meaning. The helicopter sounds, for example, which are projected into the performance space from above the audience are clearly recognisable as sign, but exert a menacing presence over the first half of the work. The use of the helicopter sounds in Black and White stems from their use by police to monitor protester movements, and as such reflects a sign sound which was strongly associated with the events of the tour (ex. 81 a and b).

Example 6: Musical motifs in Black and White

From "Amandla":

11 after C pp

Xylo.  16 after B

Ob. 1 

21 after B

Cl. 1 

9 after C

B.Cl. 

From "Jesus Loves the Little Children" (motif from "... red and yellow, black and white, all are precious ..."):

11 after C

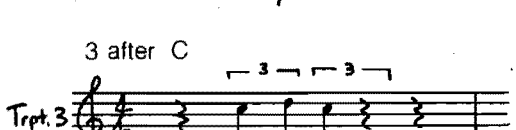
Cl. 2 

C

Temp, CB (pizz.) 

CB (pizz.)

3 after C

Trpt. 3 

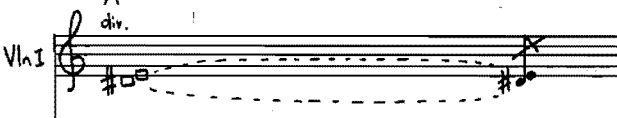
7 after C

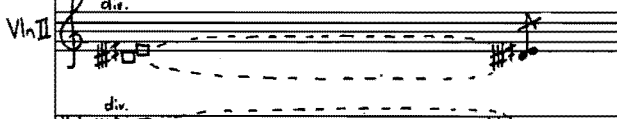
Vln. Solo 

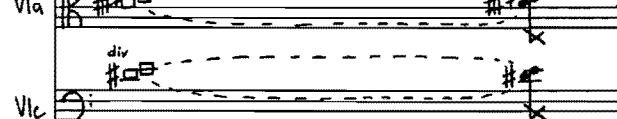
1/4-tone cluster:

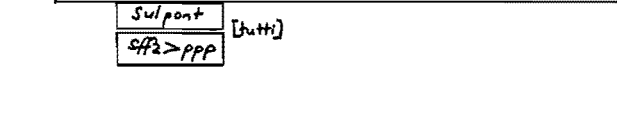
A

div.

Vln I 

Vln II 

Vla 

Vlc 

Sul pont sfz > ppp [utti]

The overall structural plan of Black and White is that of a free arch form, with similar material in the introduction and coda with a large central section at the core of which is a major "conflict" section graphically presenting sounds of clashes between pro-tour and anti-tour factions as well as police and the sounds of helicopters (ex. 82). As the structural plan shows, the overall form in this piece follows a kind of dramatisation, with political comments setting up the nature of the whole issue as "black and white" ("for or against") arguments, the game, the protest pressure, the conflict and the "post-match" resolution. Embracing this central section are an introduction and coda which emerge and fade into the tuning up of the orchestra respectively. The introduction and coda are also linked by the prayer and hymn - the introduction prayer being one for strength in facing the issue as if it was about to occur, and in the coda, a different "post-tour" prayer of reflection. The hymn, Jesus Loves the Little Children is presented in separate recordings of two different choirs of children - the first a group of trained choristers (this recording played back through the main stereo pair of loudspeakers set in front of the orchestra) and the second by an untrained group of children (this recording played back through the second stereo pair of loudspeakers mounted above the audience). The coda also includes a recording of the composer's own comments on the issue.

The form of the work extends largely out of the interactions between tape and orchestra, with reflections of content in an almost theatrical way between the two. This allows the construction of two essential levels within the work - the recorded "documentary" role of the tape which is comprised largely of field-recordings and other sign sound elements and the musical "performance" role of the orchestra, which is in some instances completely abstract and removed from interaction with the tape (especially the "explosion" gestures at [I] and [T]) (ex. 83 a and b), and in other cases as a kind of

complementary or "mimicking" element (as in the brass glissandi and pedal notes superimposed over the pub sounds at [R]) (ex. 84) or in the direct mirroring of taped sounds (in the sequence after [J] with "God Defend New Zealand" the "Haka" and the "Television News Theme") (ex. 85).

### Links Between Tape and Orchestra

"One, two, three, four" chant:

Tape - in documentary role in field-recordings of protests this chant is a strong sign element, over megaphones.

Orchestra - used at percussion motif, especially at the start of the work (out of the tune-up).

"Amandla" chant:

Tape - call and response chant in field-recordings of pre-match demonstrations (after [I]).

Orchestra - motifs used in introduction (solo horn at [A2] and [A4], in montage from [B] to [F] and from [P] with full orchestra responding to the horn call).

"Jesus Loves the Little Children":

Tape - in the introduction and coda sung by two different children's choirs, each time following the Bishop's prayer. The words contain the title of the work, "Red and yellow, black and white, all are precious in His sight". Making the link between the abstract concept of black and white as skin colours, and the previously described nature of the "Tour issue" for New Zealanders as a matter of "yes" or "no", "right" or "wrong" - "black" or "white".

Orchestra - used as motivic identity in montage with "Amandla" motif in the introduction, and in the central part of the work as an orchestral piano fragment (at [F3], [G10] triggering off woodwind/brass gestures, and at 11 bars after [M]).

Referee's whistle

- at [G] and [G13] a link is made between the triggering of the tape and the live performance of the orchestra as the whistle is synchronised with the sound of a rugby match - the whistle seemingly "cueing" the presentation of action, analogous to the use of the whistle in the game as a command to start and stop. This suggests a link between the two realities of orchestra and tape. Subsequently, the whistle sounds

are "abstracted" into the orchestral texture of the major conflict section - and here the link with tape is associated with the use of whistles in protester/police clashes.

"God Defend New Zealand"

Orchestra - (at [J]) vivid "performance" presence suddenly cuts out on syllable before the lyric "love" ("in the bonds of love we meet"), only violin 1 sustains high "B".

Tape - emerges from orchestral phrase. This is a field-recording of "God Defend" played over a football ground public address system before a rugby match - within the orchestral writing "God Defend" is also used as a motivic element at 7 bars after [D] (piccolo) and at [S] (in woodwind).

All Black "Haka"

Tape - field-recording of pre-match Haka by All Black rugby team emerges from "God Defend" recording from football ground.

Orchestra - imitation of Haka rhythm in percussion and "col legno" strings (at [K]).

(Both the All Black Haka and the field-recording of "God Defend" are followed by the characteristic enormous surge of cheering from the New Zealand football crowd - creating a powerful sense of atmosphere within the piece).

Television News Theme

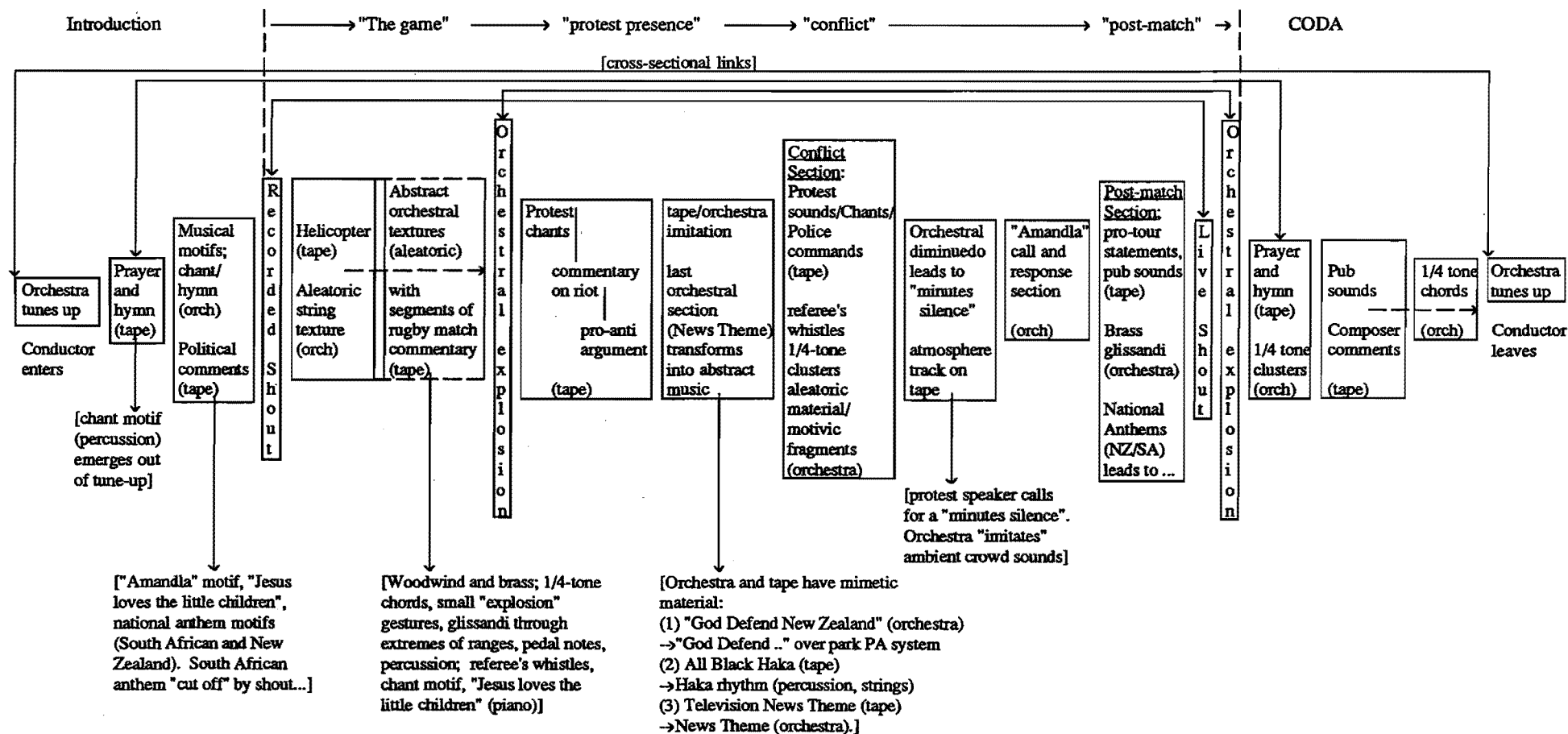
Tape - follows immediately from orchestral "Haka"; News Theme followed by news report of protest violence.

Orchestra - cuts in over new report at [L] and subsides into abstract orchestral texture which underpins major conflict section.

Recorded scream/ live scream

- each of these screams of the phrase "Fuck off 'Boks" is triggered by the emergence of the South African National Anthem. Stems from the performed/recorded nature of the elements in the work. The live scream bringing the protest message into the "now" of the performance. The performed/recorded polarity of this same single gesture further underlines the crucial factor in the work of "live" and "documented" levels of reality.

Diagram 14: Black and White: Structural Plan.



The above description of links between electroacoustic and orchestral material in Black and White demonstrate the way in which "mirrors" of content have been constructed by the composer. Rather than being purely gestural or identity relationships between "tape" and "performance" elements the nature of the content as sign sounds recorded from the field of actual events, allows a deeper significance to be embodied in this mirroring process - that levels of "reality" are set up - the reality of the orchestra as a body of players in real-time, but at a musical level, and the documented reality of the tape, presenting graphic record of actual events. In these ways the orchestra is called upon to parody the "reality" the tape material, support it, control it or obey it. These two polarised levels serve to articulate the graphic, literal nature of the field-recordings.

In the places so far discussed, the orchestra and tape suggest separate realities, through the juxtaposition of the two. The only section in Black and White where the two realities actually coincide and merge is in the central portion of the work after [N] where in a post-protest conflict field-recording a public speaker asks for a minute's silence in respect for those who were injured in the protests against the tour. At this point the minute's silence called for becomes an actual part of the piece - there is an atmosphere track on tape (with a "silent crowd" ambience of people shuffling and whispering) and the orchestra too, becomes silent (save for a few "shuffling" interjections of solo instruments) (ex. 86). At this point, then, the orchestra, tape and audience become part of the same apparent reality - and as such this is a crucial point in the work.

In an overall sense the concept of mirrors of content is further carried out in this work through the arch-like structure and the episodic handling of material. "Pivotal" points in the central part of the work are the recorded and live scream of "Fuck off

'Boks", and the abstract orchestral "explosion" gesture (at [I] and [T]) in which each instrumentalist plays (without synchronisation) a separate phrase which begins as fast as possible with a rapid blur of notes and subsides gradually into individual, very short pitches either descending or ascending to the extremes of the instrument. The recorded shout and live shout embody, in a theatrical sense, the notion of "documented" and "real-time" events as discussed earlier. When the shout occurs "live" the content is suddenly brought into the real-time of the performance, and could be seen to show the continued relevance of the whole "division" issue for New Zealand society. The introduction and coda to the work also share common material; the prayer, the hymn and the tuning up of the orchestra so that these act as parentheses for the main body of the piece in which conflicts and divisions are exposed. The tuning up at the beginning and ending of the work is also open to a metaphorical interpretation. Inclusion of this as part of the work allows the performance to emerge from and merge back into an image of "mundane" real-time and this suggests the effect of the tour in its dividing of New Zealand society - that the issue raised deeply felt opposed stances from a country in which people normally act as "mates" to the point of violent confrontation and then, when the event was over, the normality of the society resumed, with differences still present but submerged. Black and White attempts, through the issue of the 1981 Springbok Tour, to expose the myth that New Zealanders are a big happy family, without problems, attempting to reveal that issue through the single most significant cultural symbol of Rugby not in a negative sense, as the composer's own recorded statement at the end of the work demonstrates - but as key to the growth and enrichment of New Zealand culture.

The 1981 Springbok Tour caused huge divisions to be violently unleashed - embracing attitudes towards racism, religion, law and order and personal freedom of

association. This was such a powerful catalyst for these divisions because it brought together two fundamentally potent forces for many New Zealanders - Rugby and Racism. The nature of the issue and the polarities of viewpoint which ensued are encapsulated in the title, "black and white" as a symbol of skin colour and as a symbol of disparity of opinion.

### 2.18 Signs in the Vicinity of Memories (1988) by John Cousins

Electroacoustic music on tape. Four channel quadraphonic.

This work consists of two sets of basic material; recordings of ordinary activities within a domestic interior and studio-recorded reminiscences of significant childhood and adolescent experiences recounted by the composer. The domestic field-recordings (which constitute the "signs" referred to in the title) were made with an extensive setup of transducers, with up to ten channels of air and contact microphones, mixed down into stereo recordings. This allows very intimate reference details of the sounds which constitute the various scenarios to be very clearly etched in the recordings (for example, the sound of the foil cap being replaced on a milk bottle) as well as magnifying acoustical details of morphology and spectra. The "memories" are integrated with the signs at certain points in the work and, while this is essentially a stereo piece, four channels of sound are used for the replay of the memories - with the rear pair of loudspeakers providing greater spatial "depth" to the sound.

The first and third memories recount early experiences of sexuality, the second memory describes childhood discovery of interesting old objects under a house and the fourth memory describes adolescent experience of gender-role differentiation.

#### Synopsis

0'00"-0'30" Casement Window: begins directly with sound of window being opened (without initial ambience) revealing outside ambience - sounds of traffic and wind/leaves - followed by closing sound, no ambience following this.

(24" silence)

0'55"-3'35" Drinking Tea: begins with sharp "crockery" sound (spoon striking cup?) followed by sounds of; person moving around in interior space, milk swished around in bottle (1'14"), ambiguous crockery sounds (1'26"), milk poured into cup (1'49"), milk stirred into tea? (1'55"), sugar spooned out of bowl (2'06"), tea stirred (2'17"), followed by tapping of spoon on cup, foil cap placed back on milk bottle (2'34"), sipping tea - closely microphoned on throat with exhalation sounds (from 2'40").

First memory (2'44"-3'33") "We swam naked . . ." - begins after sipping sounds start (these continue throughout the section). Section ends with closely microphoned sound of a spoon rattling in a cup.

(29" silence)

4'04"-5'03" Handwashing: begins with quick fade in of room ambience (background sounds of outside traffic - these remain barely perceptible throughout the section), tap turned on (4'15"), basin filled tap turned off (4'32"), hands soaped (4'35") - very closely microphoned with out-of-phase stereo effect, plug pulled from basin (4'54"), fade out of water running down plughole with reverberation added.

(22" silence)

5'25"-10'05" Kitchen scenario/tea making: begins with mundane kitchen activity, inspecific sounds of human movement within the space, tap turned on (vessel filled with water), thumping of cupboard doors, external traffic ambience. Sounds of crockery (6'00"), paper rustling sounds (6'30") of food being unwrapped?, sound of jug beginning to boil (6'34"), food placed on plate (7'04").

Second memory (8'07"-8'40") "There were all sorts of amazing things under the house . . ." (begins part-way through sound of jug beginning to boil), kitchen ambience continues. At the end of this memory is the sound of the jug actually boiling, sound of jug cord taken out (9'19"), boiling water poured into a cup (9'26"), followed by ambient kitchen sounds (objects placed on bench, cutlery and crockery sounds, taps turned on and off) fades out from ambience.

(25" silence)

10'40"-12'21" Toilet Flush (four channels): long continuous envelope with noise-like harmonic spectrum (initiated by sharp transient of flush mechanism), gradual decay - fades naturally to sound of dripping water, external traffic sounds in background.

(44" silence)

13'05"-21'44" Bath Sequence: begins immediately with sound of water run from taps - two taps (hot and cold?) intermittently turned on and off - water mixed sporadically by hand. Taps turned off at 16'17". . .

Third memory begins - divided into five segments -

(i) (16'18"-16'48") "I was kissing her . . .". Bathing sounds continue, person getting into bath, sounds of water movement, outside traffic sounds in distance.

(17'36") Sound of leaking tap dripping water superimposed.

(ii) (17'44"-18'10") "Suddenly she started to hit me . . .". Bathing sounds and dripping water sounds continue.

(18'20") New leaking tap sound added.

(iii) (18'28"-18'40") "Once, she told me about . . .".

(18'43") Further leaking tap sound added. Water movement in bathing sounds becomes more active.

(19'54") Plug pulled from bath.

(iv) (20'04"-20'19") "I don't really remember a lot about it . . .". Sounds of dripping water continues (at reduced level). Sound of water draining from bath continues to decay naturally followed by . . .

(v) (21'13"-21'34") "When we'd finished . . .". Sound of dripping water continues (with reverberation added) fading out to end of section (at 21'44").

(59" silence)

22'39'-24'22" Tap (leaking tap dripping): Slow fade in over 15" to full amplitude (closely microphoned with reverberation added). Two main sound "layers"; sparse sounds of water droplets (left channel only) and continuous "fizzing" sound of leaking tap (left and right channels). Sounds fade out quickly at 24'10" - slight sense of room ambience remains until 24'22".

(45" silence)

25'07"-27'44" Shaving: begins with "snap" of electric razor switched "on", shaving begins, recorded mid-distance perspective.

Fourth memory (25'30"-25'56") "Sometimes we'd surf at night . . .". Shaving sounds continue, with sporadic coughing sounds, distant traffic sounds.

(26'37") Shaving sound increased gradually to very high amplitude, sporadic coughing sounds - section ends after sound of razor switched "off".

(32" silence)

28'16"-28'47" Casement Window: opened and then closed revealing exterior ambience, no interior ambience before opening or after closing sounds.

The detailed way in which the field-recordings in this piece have been made (with several channels of air and contact microphones close to individual sound sources as well as capturing overall spatial ambience) allows these recordings to function on two levels. Firstly, as sign sounds, in which the content of the recordings documents domestic scenarios - the detailed microphone technique enabling small, individual sounds which contribute to the overall scenario to be made more explicit than with a solitary pair of ambience microphones, with a resulting emphasis on the acoustic details of the scenarios that are presented. Secondly, they function as recordings which focus closely on the natural morphological and spectral makeup of the sounds made by the various activities. Sounds such as that of a leaking tap (at 22'39") (ex. 87) and a toilet flush (at 10'40") (ex. 88) have been recorded with microphones extremely close to the sound source and are amplified greatly on replay.

The sign sounds strongly suggest an interior domestic space, not only through the domestic tasks and objects which constitute the content of the recordings, but also in the prevalence of background traffic sounds which are a strong indicator of the presence of the "exterior" urban environment. In addition to this, the window opening and closing sound which occurs at the beginning and end of the piece is a crucial sign in the articulation of the sensation of "interior" and "exterior". The window is opened to reveal an "outside" ambience - the sounds of traffic and leaves blown by the wind - and is then closed. Of significance here is that there is no "interior" ambience prior to, or following, the window opening sounds, so that the sensation of interior space is implied and that of exterior space is stated (the sound of the window itself being a symbol for the interface of interior and exterior environments) (ex. 89). For the rest of the work, however, this sensation is reversed - the other sign sounds constitute the statement of the interior and the implication

of the exterior. In this sense the traffic, as an indicator of exterior space, takes on a significance in terms of the whole work as it can frequently be heard as a background element in the field recordings.

In the sections of sign sounds, all the domestic activities appear to be carried out by a single person - there are no interactions between people in the field-recordings - and this, along with the strongly "interior" nature of the setting, contributes to the sense of a solitary and claustrophobic existence, such as in the second section which consists of the sounds of tea-making by one person (ex. 90).

The juxtaposition of the sign sounds with the memories can be considered enigmatic as the content of the two types of material - on the one hand mundane domestic activity, and on the other hand very personal reminiscences of childhood and adolescent experiences of places and aspects of sexuality - are not overtly linked. Rather than direct metaphorical relationships existing between the memories and specific signs, there is a more general symbolism suggested through the combination of elements whose content typifies internalised states or sensations. The combination of the two is potent because of the sense of alienation that they both engender - the field-recordings for their scenarios as domestic internal space which is "real", and the memories for the private nature of their content as one person recording the experience of significant events which suggest an "emotional" space. The first, third and fourth memories deal with situations in which there are feeling of alienation recounted by the composer. The replay of the memory material through four channels helps to separate this material from the field-recordings and this is assisted by the addition of reverberation to the voice - detaching it from the scenario of the domestic sounds with a disembodied, dreamlike quality.

The central section of the work is the "bath sequence" (at 13'05"-21'44") which incorporates the third memory. The "bath" scenario is contextualised initially with the sound of water being run from two taps and following this the third memory is introduced. The memory in this section is divided into five shorter sections, gradually revealing an account of an early sexual experience, and between each of these, the bathing sounds (of water movement) with quiet outside traffic sounds continue. As well as this, a second sign sound of a leaking tap has been added between the first three sections of memory (at 17'36", 18'20" and 18'43") (ex. 91). This sound does not contribute to the overall "bath" scenario of this section, but acts as a tension element, creating gradual increases in textural complexity - this, along with the splitting up of sections of the memory makes the narrative more dramatic. The verbal narrative is revealed gradually and underlined by growth and evolution of the natural sounds. A strong sense of climax is reached as the water sounds of the bathing recording become more and more active and increase in amplitude, leading to the fourth part of this memory - which contains the most intensely personal statement of the work: ". . . she'd done it first with somebody else, but she'd known me for years and years and years". The tension is sustained following this, with the loud resonance of water draining from the bath (ex. 92). Overall, this section displays strong integration of the temporal progression of the two sound elements of "signs" and "memories".

The separation of the constituent sections of Signs in the Vicinity of Memories with long periods of silence allows each scenario to take on the feeling of a self-contained icon, showing some facet of domestic existence. As well, there are links between these individual sections as similar sounds appear in different contexts. For example, the sound of the leaking tap which is used in the bath sequence as an element to underline tension is

presented by itself as a closely focused sign in the next section (at 22'39"). Water sounds, particularly running water, is a consistent reference in this work in the tea drinking, handwashing, toilet flushing, bathing, tap and kitchen scenarios.

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## APPENDIX

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Canadian Music Educator. Canadian Music Educators Association, Toronto.

Canterbury Series: Studies in Music Education. Music Department, University of Canterbury, Christchurch, New Zealand.

Canzona. Composers Association of New Zealand, Wellington, New Zealand.

Columbia Forum. Columbia University, New York.

Contact. Distributed by Philip Martin Music Books, 22 Huntingdon Road, York.

Cultures. Unesco Press [United Nations Educational, Scientific and Cultural Organisation], Paris.

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- LILBURN, Douglas. Three Inscapes (1972). Kiwi Records, SLD-44, Wellington, 1975.
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- SMALLEY, Denis. The Pulses of Time (1979). UEA Recordings, UEA 81063, University of East Anglia, Norwich, 1981.
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XENAKIS, Iannis. Concret P-HII (1968). (New version.) Nonesuch, H-71246, New York, [undated].

XENAKIS, Iannis. Diamorphoses II (1968). (New version.) Nonesuch, H-71246, New York [undated].

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YOUNG, John. Collage (1982). Nota Bene, NB 4B 22, Christchurch, 1983.

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|                     |        |                                                                                    |
|---------------------|--------|------------------------------------------------------------------------------------|
| Abbreviations used: | EMSAU  | Electronic Music Studio, University of Auckland. Auckland, New Zealand.            |
|                     | EMSCU  | Electroacoustic Music Studio, University of Canterbury. Christchurch, New Zealand. |
|                     | VUWEMS | Victoria University Wellington Electronic Music Studio. Wellington, New Zealand.   |

## 5. Select Discography of New Zealand Electroacoustic Music

### 5.1 Electroacoustic Music on tape

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BODY, Jack. Musik Dari Jalan (1976). Kiwi Records, SLD-54, Wellington, 1977;  
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BODY, Jack. Fanfares (1981). In Suara: Environmental Music of Java. Hibiscus  
Records, TCHLS-113, Wellington, 1987, [cassette only].

BODY, Jack. Jangkrik Genggong (1986). In Suara: Environmental Music of Java.  
Hibiscus Records, TCHLS-113, Wellington, 1987, [cassette only].

BODY, Jack. Musik Anak-Anak (1978). In Suara: Environmental Music of Java.  
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COUSINS, John. Sleep Exposure: A Sound Document (1979). EMI PRA 9001, National  
Art Gallery, Wellington, 1979; Nota Bene, NB 4022, Christchurch, 1983.

COUSINS, John. Edit for Pauline (1983). Nota Bene, NB 4C 23, Christchurch, 1983,  
(version for tape only).

COUSINS, John. Parade (1982). Nota Bene, NB 4C 23, Christchurch, 1983.

COUSINS, John. Wouldn't You Say? (1978). Nota Bene, NB 4B 22, Christchurch, 1983.

- COUSINS, John. YgudUh (1975). Poesie Sonore Internationale, k7 n.2/10007, ed. Jean-Michel Place. [undated].
- CREE BROWN, Chris. Street (1979). Nota Bene, NB 4B 22, Christchurch, 1983.
- FISHER, Matthew. City Concrete [1982]. In Sonic Boom. Cassette produced for Sonic Circus '87, Wellington, New Zealand, 1987.
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- HARRIS, Ross. Poem (1970). Kiwi Records, SLD-45, Wellington, 1975.
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- LILBURN, Douglas. Poem in Time of War (1968). Kiwi Records, SLD-44, Wellington, 1975.
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- LILBURN, Douglas. Three Inscapes (1972). Kiwi Records, SLD-44, Wellington, 1975.
- LILBURN, Douglas. Carousel (1976). Kiwi Records, SLD-54, Wellington, 1977.
- LILBURN, Douglas. Two Toronto Pieces (1969). EMI PRA 9001, National Art Gallery, Wellington, 1979.

- LILBURN, Douglas. Of Time and Nostalgia (1977). Kiwi Records, SLD-59, Wellington, 1980.
- LILBURN, Douglas. Soundscape with Lake and River (1979). Kiwi Records, SLD-59, Wellington, 1980.
- LILBURN, Douglas. Tryptych (1977). Kiwi Records, SLD-59, Wellington, 1980.
- LILBURN, Douglas. Winterset (1976). Kiwi Records, SLD-59, Wellington, 1980.
- LILBURN, Douglas. The Return (1965). Kiwi Records, SLD-68, Wellington, 1984.
- LOCKWOOD, Annea. World Rhythms (1975). 1750 Arch Records, S-1765, Berkeley, California, 1977.
- LOCKWOOD, Annea. Tiger Balm (1970). Opus One Records, Number 70, New York, [undated]; shorter [earlier] version of this work published in Source, n.9, (v.5, n.1), 1971.
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- MCDONALD, Ian. Kea Country (1973). Kiwi Records, SLD-45, Wellington, 1975.
- OFFICER, Bronwyn. Solstice (1983). In Sonic Boom. Cassette produced for Sonic Circus '87, Wellington, New Zealand, 1987.
- RIMMER, John. Homage to Paganini (1974). Kiwi Records, SLD-45, Wellington, 1975.
- RIMMER, John. White Island (1974). Kiwi Records, SLD-45, Wellington, 1975.
- RIMMER, John. Where Sea Meets Sky I (1975). Kiwi Records, SLD-54, Wellington, 1977.
- RIMMER, John. Colder Far Than Snow (1976). Kiwi Records, SLD-62, Wellington, 1982.

RIMMER, John. Poi (1979). Kiwi Records, SLD-62, Wellington, 1982.

RIMMER, John. Fleeting Images (1986). Cultures Electroniques 2, Le Chant du Monde, LDC 2780 44/45, CM202, 1987.

SMALLEY, Denis. Pentes (1974). UEA Recordings, UEA 81063, University of East Anglia, Norwich, 1981.

SMALLEY, Denis. The Pulses of Time (1979). UEA Recordings, UEA 81063, University of East Anglia, Norwich, 1981.

SMALLEY, Denis. Vortex (1983). UEA Recordings, UEA 84099, University of East Anglia, Norwich, 1984.

VERCOE, Barry. Synthesism (1969-70). Nonesuch, H-71245, New York.

WILBY, Gary. Inchbonnie Soundscape (1976). In Tape Works: Gary Wilby. [Wellington, New Zealand], 1984.

YOUNG, John. Collage (1982). Nota Bene, NB 4B 22, Christchurch, 1983.

## 5.2 Electroacoustic Music on tape with live performance, or live performance realised with electroacoustic media.

BODY, Jack. Vox Populi (1981). For choir with tape. National Youth Choir of New Zealand, Guy E. Jansen -conductor. Kiwi Records, SLC-169, Wellington, 1981.

HARRIS, Ross and BESSER, Jonathan. [FREE RADICALS]. Free Radicals (Album). South Indies, SOIN 9122, Wellington, 1987.

RIMMER, John. Composition 5 (1971). For percussion and electronic sounds . Music Players 70 - percussion. Kiwi Records, SLD-26, Wellington, 1971.

RIMMER, John. Composition 3 (1973). For harp and electronic sounds. Rebecca Harris - harp. Kiwi Records, SLD-45, Wellington, 1975.

- RIMMER, John. Composition 2 (1969). For woodwind quintet and electronic sounds. Concertante Ensemble - woodwind quintet. Kiwi Records, SLD-61, Wellington, 1980. [Originally issued on Kiwi Records, SLD-30, Wellington, 1972].
- RIMMER, John. Visions I (1975). For chorus and tape. Auckland Dorian Choir, Peter Godfrey - conductor. Kiwi Records, SLD-56, Wellington, 1980.
- RIMMER, John. Composition 6 (1972). For piano and electronic sounds. Barry Margan - piano. Kiwi Records, SLD-62, Wellington, 1982.
- RIMMER, John. Composition 9 (1976). For soprano and electronic sounds. Heather McDonald - soprano. Kiwi Records, SLD-62, Wellington, 1982.
- RIMMER, John. Soundweb (1978). For trombone, tape delay and electronic music. James Fulkerson - trombone. Kiwi Records, SLD-62, Wellington, 1982.
- SMALLEY, Denis. Chanson de Geste (1978). For amplified voices and instruments. Carol Plantamura - voice, and ensemble, UEA Recordings, UEA 81063, University of East Anglia, Norwich, 1981.